Institute of Development Management

MOGOBANE DAM AND IRRIGATION SCHEME

BY

FRANK V. TAYLOR

STUDIES IN DEVELOPMENT MANAGEMENT

NO. 1

Botswana
Lesotho
Swaziland
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The Institute of Development Management has sponsored a series of studies in Development Management. These have a two-fold purpose; first, to provide much needed additional materials based on local experience for use in IDM training courses and seminars; and second, to assist members of the IDM and others concerned in analysing development policies and program and their implementation.

This study of the Mogobane Dam and Irrigation Scheme is the first in the series to be issued. It was begun in 1975 for the IDM by Mr. Frank W. Taylor of Gabane, Botswana under the direction of Dr. S.E.G. Peterson. The study was completed in 1976.

The author assumes full responsibility for the contents of the study. Provided acknowledgement is made part or all of the study may be reproduced.

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Director
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Early in 1936 Chief Seboko of the Bamalete approached the colonial administration for help in the construction of a dam in the hills near Mogobane for the purpose of watering cattle. The area was inspected by the Director of Public Works who found a suitable site for a very substantial dam by the Territory's standard. The Chief agreed to supply oxen and regiments of tribesmen to work on the construction under the supervision of a Public Works Department (PWD) officer. The administration undertook to pay the labourers 6 pence per day plus rations and teams of 16 oxen with a leader and driver the sum of 7/6 d. per day. Wagons also were hired to move sand, stone and shale for the dam wall.

Work on the site started in September and progressed favourably for a while but soon there came the first of several delays. On the first very cold morning difficulty was experienced in getting the labourers to start work. Three days later there was a dispute over the mealiemeal rations issued to the labourers and the chief had to be called to arbitrate. A short while later one week's hold up was experienced because 7,500 oxen in the area, including those working on the site, could not work due to inoculations. One month later the superintendent reported better progress with the dam after several of the lazy natives were dispensed with. He estimated that it would take another 2½ months to complete the work. The following week he paid off more "useless" workers and advised the Director of Public Works that the previous month's wages were unpaid due to money shortage in Gaborone. He also reported that labour was drifting off to ploughing as the rains had come.

In mid-November floods struck the partly completed dam, passing 6 feet over the wall causing serious damage. The superintendent decided to work round the clock, including weekends, in order to complete the dam before more damage could be caused and, at the same time, have it partly filled for the first season's crop. The chief was asked for more men and up to 10 teams of oxen but none were forthcoming as the ploughing season by this time was in full swing.
The Administration was forced to purchase 150 head of cattle and also had to contribute further men and machinery to expedite the work. A Consulting Engineer from Johannesburg visited the site and agreed that utmost pressure should be exerted to get the dam completed by working continuously day and night "at top speed". The DPW arranged for a policeman to be stationed at the dam (no reason given) until it was completed in mid January of 1937.

In February the Resident Commissioner advised the High Commissioner that, "By the erection of the Mogobane Dam, a lake estimated to contain over three hundred million gallons of water has been created and that numbers of duck and waterfowl hitherto rarely encountered in the Southern Protectorate are beginning to appear. Determined efforts already have been made by some of the local inhabitants to exterminate the more edible waterfowl, as they arrive. The lake promises to become a popular local resort for picnic and bathing parties and I think it is desirable that the area should for the time being, be declared a bird sanctuary. The Chief of the Bamalete raises no objection and I accordingly enclose for Your Excellency's consideration, a draft Notice for publication in the Gazette if approved."

The Notice stated that all game birds which included geese, duck and guineafowl, were protected within a 4 mile radius of the Dam. The High Commissioner agreed to the proposal. The Chief was instructed to inform the tribe of the regulations and also to advise the Headman at Mogobane.

Chief Seboko died shortly after the dam was completed in 1937 and he was succeeded by Acting Chief Ketshwerebothata Ikaneng who was regent for the next 7 years during the minority of Chief Mokgosi. Chief Ketshwerebothata was regarded as a "weak" chief by the then Resident Commissioner but within a few years he had a reputation of being "efficient, willing and helpful" as testified by later District Commissioners.

At the end of 1938 Thornton, the Agricultural Advisor to the High Commissioner for the High Commission Territories (Bechuanaland Protectorate, Basutoland and Swaziland), visited the Mogobane Dam and realized its potential as a substantial irrigation scheme. In a letter to the High Commissioner in Pretoria, copied to the Resident Commissioner for Bechuanaland Protectorate in Mafeking, he proposed that a substantial irrigation scheme be set up at Mogobane and that it be operated as a tribal scheme.
The proposal was accepted in principle but for various reasons, to be discussed later, the construction of the scheme did not start till 1943.

During these intervening years, there were a number of developments which, added to the recent history in the Territory, were to have a significant bearing on future developments of the proposed scheme.

For some time the tribesmen had a growing sense of suspicion and frustration with the Administration, in particular with the Agricultural Department with which they had most contact. Some of the suspicion had its roots in tribal conservatism and the dominance by Europeans in the administration, with memories of the Boers and the continuing attempts of the South African Government to incorporate Bechuanaland Protectorate into the Union of South Africa. Much of the so-called tribal development was a result of imposed ideas and arbitrary decisions by the Administration in spite of the official policy of consultation. Frustration often was caused by this lack of consultation, or even when it had taken place, there would be subsequent changes from the original decisions, frequently without further consultation.

The Batswana sensed a feeling of no confidence by the Administration in their being able to conduct themselves in a changing world. The attitudes of the Administration, Chiefs and leading tribesmen may be seen in some of the examples given below.

In February 1938, at the meeting of the Native Advisory Council the Resident Commissioner presented a Memorandum on Water Development which mainly dealt with dam construction and borehole drilling. He said:

Government has no wish to force a water development program on any tribe............ The chiefs and tribesmen must realise that Government will not undertake any development work unless it is assured of the full co-operation and willing assistance of the tribe ............ Where I find this assistance and co-operation are not forthcoming, I shall have no hesitation in ordering the immediate cessation of development work in the Reserve concerned." To which Chief Tshekedi replied:

"I may be wrong, but it seems the responsibility will be on the Chief's shoulders.
We are prepared to co-operate with anyone sent by the Government to help us, but we also consider that we should be helped and advised, and that is where I suggest that in connection with this matter of water, the heads of the various Departments, whether it be the head of the Agricultural Department or the head of the Public Works Department before they start with their work, should invite us to discuss with them where and how these schemes should be carried on. They should not only consult with us, but after consulting, they should put down in writing the procedure which will be adopted in connection with each particular scheme. In this way, we will know how to utilize these boreholes (and dams) and the water found in them. That is all I wish to say."

At this same meeting, the members voiced their strong dislike of the term "Native" and wished it to be struck out of all Laws and Ordinances. The Resident Commissioner had no Objection to changing the name of the Native Advisory Council to the "African Advisory Council but he said that it would be "too difficult" to change the name in all laws, etc.

Some of the members of the Council were frank about their people's shortcomings as is instanced by the remarks of Dr. Molema at a meeting in 1940 when the Resident Commissioner had spoken about the lack of co-operation by the tribes in producing grain on "War Lands" in support of the War Effort in each tribal area. Dr. Molema said:

"You took us to task, Sir, in reference to our agricultural activities. You spoke of our backwardness on account of our conservatism, apathy and ignorance. Well, it is a pity but it is true. But we have to realise that this apathy, this ignorance and conservation are part of a vicious circle and part of our poverty, and poor people usually are ignorant people, and one thing, you might say, breeds another. We can only ask, Sir, .......... that you bear patiently with us."

Details of the "War Effort" and its virtual total failure are described in Appendix II.
CHAPTER 2

PLANNING AND LAND PREPARATION

As mentioned earlier, the proposal for an irrigation scheme at Mogobane was first put forward towards the end of 1938 when the Agricultural Adviser wrote to the High Commissioner and recommended "the development and establishment at the earliest possible date of the irrigation of 500 acres of land below the Mogobane Dam for the immediate use by natives". With regard to preparation of such a project he stated.

"In submitting a project, several important factors must be borne in mind and clearly shown:

(i) The objects to be achieved.
(ii) The period of time through which the project will operate.
(iii) The approximate annual cost and total cost.
(iv) How the execution of the project will fit into the existing organisation from the Government's point of view in regard to staff facilities and future financial responsibilities.
(v) Further, how the project will fit into the life and responsibilities of the community after the period of introduction and Government's responsibility to the project has wholly or partly elapsed."

Before any effective steps could be taken to follow up these proposals, the Second World War broke out and all development funds were frozen on orders from London. It was not till May 1941 that the situation changed. The Secretary of State for the Colonies sent a dispatch to the High Commissioner emphasising "the obligation to raise the standard of living of all those classes in Colonial Empire whose standard is at present below the minimum that can be regarded as adequate and imperative duty of doing all that is practically possible to fulfil this obligation even during the war. Schemes under the Colonial Development and Welfare Act, as well as similar schemes which may be financed from local funds, should therefore not be entirely held up, and you may proceed on the basis that I shall be very willing to give sympathetic consideration to any schemes under the Act which can be undertaken without extensive use of manpower or material resources from outside the territory under your administration".
In October of that year the Annual Resident Commissioners' Conference took place under the chairmanship of the High Commissioner. The Agricultural Adviser proposed that as part of the War Effort and the need for increased agricultural production, irrigation schemes should be attached to the Hogobana and Bathcen dams. The proposal was accepted in principle and it was resolved that the dams and their consequential irrigation schemes shall be completed. The Resident Commissioners then expressed their concern at the serious lack of experienced technical officers in their administrations and it was resolved that authority be sought from the Secretary of State to allow higher salaries to be offered in order to attract better qualified officers. It was also noted that funds for agricultural work should not be curtailed even during war time.

The proposals and resolutions were forwarded to the Secretary of State in London who replied to the High Commissioner as follows:

"My Lord,

With reference to my predecessor's despatch No. 17 of the 17th January, I have the honour to inform your Lordship that the detailed questions discussed at our conference with the Resident Commissioners last October have now been considered in consultation with the Colonial Office. The following comments will, I hope be of assistance to you.

As regards food production, it is agreed that it would be short-sighted policy to cut down expenditure on agriculture during wartime and this would be entirely contrary to the policy adopted in Colonial Dependencies. In view of the obvious importance of water supplies in the Bechuanaland Protectorate and Swaziland, it is hoped that so far as possible water surveys etc. can be proceeded with during the war. The observations on the possibilities of irrigation in the Bechuanaland Protectorate have been noted with special interest. It is observed that some difficulty has been experienced in obtaining qualified technical officers and that it is suggested that this is partly due to the fact that the scale of pay in the High Commission Territories has not kept pace with the recent increase of scales in the Union (of South Africa). This is a point which you will no doubt be considering. I generally entirely concur with the view which you expressed at the meeting that, as a matter

1. The Resident Commissioners from Bechuanaland Protectorate, Swaziland and Bosotoland.

2. The Bathoen Dam is situated about 50 miles by road south west of Mogobane."
of principle, the European staff should consist of a few better paid and better qualified men, the less skilled tasks being undertaken by increased native staff.

I have the honour to be,

My Lord,

Your Lordship's most obedient, humble servant,

(Signed) C.R. ATTLEE.

HIGH COMMISSIONER
THE RIGHT HONOURABLE
LORD HARLECH, G.G.M.G.,
etc., etc., etc.

On his return from the Resident Commissioners' Conference, the Resident Commissioner issued the following directive to the Government Secretary:

"Development Schemes to be undertaken immediately:

The utilization of the Mogobane and Kanye Dams to irrigate land for suitable crops. Please write to the Agricultural Adviser and say that I should like him to visit us in January to advise about the irrigation projects and assist in the preparation of the estimates of cost, and ask him to suggest a date. The DPW should meanwhile have any necessary maps with contours or levels prepared."

The Agricultural Advisor replied that he would arrive in mid January, 1942, and stated,

"I am also anxious to discuss with His Honour the question of future agricultural development, using the term "Agriculture" in its broadest sense. The point I wish to get at is what the goal will be towards which we will work to ensure the greatest measure of prosperity which can be attained for the people under the climatic conditions which apply to most of the inhabited area of the protectorate. For a long time past I have expended a great deal of thought on the Protectorate and know that it is difficult to find a solution to the economic problem which faces us. There is no doubt that a great deal of work has been accomplished and it seems to me that the time has arrived when we must consider what we expect to achieve finally in the shape of a completely planned agricultural economy for the people."

The Agricultural Advisor then suggested either of two systems for the irrigation schemes: the Russian Collective system or individual tenure of plots. The Government Secretary commented, "I do not think either scheme as proposed would suit our condition. I do think that we work the lands on a sort of commission basis, i.e.
cultivators taking a portion of the crop and the rest going to the tribal granaries. Citrus orchards might be established by paid labour." The Resident Commissioner said he preferred individual tenure and recommended "the planting of a minimum number of fruit trees and a proportion of specified crops". Plots would have to be set aside for demonstration and to raise fodder for the school dairy.

At the end of December 1941, a new DC was appointed to Gaborone and he was delegated to present preliminary proposals for the irrigation scheme to the Bamalete. At a Tribal Kgotla he gave a general outline of the proposals and explained that a "very small ground" would be required and that it would be fenced. The following extracts are taken from his rough notes made at that meeting:

Gei Will Government take the grain?
DC No
Sekgane Government has made many promises and not carried them out. We gave land for the Dull Camp being told we would get lands elsewhere. Where is it? War Lands¹; we were told it was tribal land and now we are told it is a War Land. I am afraid Government will take the lands at Mogobane from us.

Chief Re: Sekgane's statement. He expressed the views expressed by the Bamalete the other day. He was right. We gave the farm² on the distinct understanding that we would get a share of the Bangwaketsi Reserve. MacKenzie³ told us clearly that we would get other land. Clark⁴ corroborated. Later MacKenzie said the opposite. These things should be recorded in writing. I personally have no objection to the irrigation scheme at Mogobane.

Mokgona Size of land to be irrigated must be defined. Limits of fence must be defined in presence of Chief, etc

Raditshatsana I agree with message read out by the Chief. Khale was taken from us on understanding we would get other land. We have lost the use of that farm. Pegs have been put in recently (by the surveyor at Mogobane)..... the work is in hand and yet you come and ask us to agree to irrigation.

¹War Lands were tribal lands set apart for cultivation of crops to support the territory's war effort. Refer Appendix II for details.
²Khale Farm was tribal land but given to Administration for setting up St. Joseph's College, a secondary school. The Tribe claims that the administration promised to give them additional land for loan of Khale.
³MacKenzie was the previous DC.
⁴Clark was the Resident Commissioner.
Lesang: There was only one fault — Mackenzie. We don’t know how to express ourselves.

Chepete: I was very glad to hear that water is to be used for irrigation to help us all. I agree about irrigation.

Kgosibadiba: The statement read by the Chief represents our views. I agree with irrigation as long as cattle have access to the water. We want vegetables.

Bothole: Irrigation will be an education to us — and profitable.

Conclusion: Tribe agrees to accept proposal. Must be agreement.

There is no record of any minutes of the Kgotla meeting being circulated by the D C.

The Chief, some of his headmen and the D C then visited the Dam to allocate the area for the Scheme. It was agreed that it should extend as far as a place called Ralemfara. Shortly afterwards the Agricultural Advisor arrived in the Territory and, together with the Resident Commissioner, the D C and the Chief, visited the dam and then discussed the various possibilities for the development of the Scheme. Afterwards draft proposals were drawn up by the Department of Agriculture and sent to the D C who was asked to discuss them with the Tribe. The proposals were:

1. That 500 acres of irrigable land be divided into one acre plots.
2. That irrigation should only take place for 6 months each year, viz., from September 1 to March 31.
3. That staple foods only are to be grown: maize, sorghum, beans, etc.
4. That the Certificate of Occupancy will lay down conditions of annual rental and crop rotation as directed by the Agricultural Department and that the land is to be cultivated in a proper and husbandlike manner.
5. Plots must be allocated by the Native Administration for demonstration and seed purposes.
6. Failure to learn or use proper methods will involve termination of occupancy.
7. Livestock will be prohibited in the area.
8. Any balance of land not taken up by individuals will be cultivated by the Native Administration, expenditure being met by revenue accruing to the Native Treasury.
9. All capital works will be done and paid for by the PWD.

10. The Native Administration will be responsible for all costs of maintenance and for the conduct and administration of the scheme under the guidance of the Agriculture Department.

11. Tribesmen presently cultivating within the scheme area should be allocated sufficient irrigated land to ensure they reap each year the same amount of grain as they would have reaped from their existing land in a good year.

12. It is anticipated that in the first year a large portion of the irrigated land will have to be cultivated by the Native Authority as sufficient applications will not be forthcoming. Since it is unlikely that the Tribe will undertake clearing and ploughing, this would have to be done by individual plot holders within a specific period, and by labour paid by the Native Authority.

It was almost one month later that the D C presented these proposals to the Tribe at a Kgoltla meeting at Ramotswa with about 100 people present. The proceedings of the meeting were recorded by the D C's rough notes, extracts of which are given below:

D C: "Problems of poor agriculture and men going to the mines leaving burden on women and children. Therefore, people weak and undernourished. 50% of the men between 20 and 40 (years old) were rejected from the Pioneer Corps because of poor physique. You have copied the white man in the past; his clothes, wagon, education, treasury, courts, currency, etc. A wise man follows the success of others, therefore, you should follow irrigation in South Africa. You will get 10-12 bags per acre of corn off irrigated land. You will have more food, better food, be healthier people and be wealthy. The men will return from the mines and you will be a bigger and united tribe. You should be able to raise enough grain for yourselves and all be rich."

1. The African Auxiliary Pioneer Corps was established in 1941 as part of the drive to raise 14,000 native recruits in the High Commission Territories of Bechuanaland, Basutoland and Swaziland, to be used for sweat work behind the allied lines. In order to increase recruitment for the AAPC, the recruitment of miners for the South African mines was temporarily suspended. The pay was about two shillings per day.
The Chief then spoke to the Tribe about a recent meeting he had with the Resident Commissioner at Mogobane when the Resident Commissioner indicated that more land would be required to be put under irrigation. 500 plots of 1 acre each was needed. He said that he had told the Resident Commissioner that there were not 500 Bamalete to take up the 500 plots but the Resident Commissioner had replied that the Native Authority must work the plots not taken up by members of the Tribe and went on to say that it was not Government's intention to take more land but to help the Tribe. The Resident Commissioner had said the water must be used for the benefit of all and there was sufficient water for irrigation and the watering of cattle. The Resident Commissioner had then asked the Chief for his views but the Chief replied that he needed time to consult with the Tribe, which he now was doing.

An analysis of the D C's record of the meeting reveals that of the 100 people present only 13 voiced their opinion, the most outspoken person being the head of a family having "half a dozen" lands in the proposed irrigation area. He wanted to be assured of alternative lands being allocated and asked if these would be cleared for him. No firm answer was recorded.

Seven of the speakers expressed concern about the 17 people who had lands in the area and whether there was any alternative available for them as the reserve was a very small one. One of the speakers said he would only give up his land in the irrigation area if the tribe agreed to the scheme. The Chief said that if the Tribe accepted the scheme they would have to give up their lands and could get irrigated plots where one acre would yield more than a "big land" which depended on rain.

Five speakers gave support to the scheme though some of them qualified their support by mentioning difficulties.

Three speakers were concerned about the payment of rent for the plots as the tribemen's commitment already included Tax, Tribal Levy, War Levy, fees for dipping and vaccination, etc.

Two speakers thought there was not enough water for all the irrigation and another two suggested that the irrigation scheme start in a small way.

Two speakers expressed concern that the original boundary had been extended. The Chief replied that originally the tribe had given both sides of the valley to as far as Relemfana but now the government decided that it wanted only one side of this valley to be irrigated and that the new boundary extended to Ramonogeng.
Several speakers were against the traditional bush fences as they were "an endless source of trouble" and one person suggested that 1/- levy be imposed on all Bamalete men to meet the expense of a proper fence.

At the end of the discussions the D C asked the tribe for their decision. The Tribe agreed to the proposal provided that those who lost their lands be given lands elsewhere. They also wanted the area to be fenced and they wanted to know what the rent would be. The Chief closed the meeting by asking all interested tribesmen who wanted plots to give their names to him.

After the meeting the D C prepared a memorandum on the meeting which he sent to the Government Secretary and the Chief Agricultural Officer. It included the following statement:

"It was evident that a very considerable body of the Tribe realises the benefits to be derived from the scheme and even in the first year there should be a good many applications for plots".

"Whether the Chief could allot other lands (to those evicted) is doubtful, but I do not think this point will give rise to any difficulties".

"................. several speakers went so far as to suggest a 1/- levy to bring fencing material".

(The D C failed to transcribe the following points from his rough notes into his memorandum:

(i) That the Tribe agreed to the proposal "provided that those who lose their lands are given their lands elsewhere" as recommended in his original notes.

(ii) No mention was made of the Tribe's misgivings and doubts about giving more land, etc.)

After reading the above memorandum, the Government Secretary suggested that a 5/- annual rent per plot shall be sufficient. The Director of Public Works said it would cost £100 for 4 miles of fencing, but one month later he modified this estimate to £320 due to war costs and therefore recommended a thorn fence.

In March 194?, a "Memorandum on Development Plans in Bechuanaland" was circulated. The Memorandum noted that the Dam was completed under the pre-war development programme and that once the capital costs of bringing the water to the land had been met, the proposed irrigation scheme would be self supporting. It also mentioned a similar and smaller irrigation scheme was planned for the Bathoen dam in Kanye.
In the same month at a meeting of the European Advisory Council the Resident Commissioner estimated that it would take 2 or 3 years to win the African population over to the new ideas. He strongly recommended that only food crops be grown and fodder not be considered for several years.

At the end of April 1942, the Government Secretary wrote to the South African Department of Agriculture to ask whether they could send an expert to make a report on the proposed Mogobane and Bathoen Schemes regarding practical and technical details. The South African authorities were very short staffed but they managed to send their Chief Construction Engineer at the beginning of June. Ten days after his arrival, he presented a detailed technical report with recommendations, some of which were:

(i) That an experienced man would be required to peg out the canal system;

(ii) That he strongly recommended against the use of unlined channels and furrows (which had been planned by the Agricultural Department) as these caused heavy losses through seepage, and required heavy maintenance, etc.

(iii) That an experienced man would be required to supervise the lining of the canals;

(iv) That there was an "unlimited area of good sandy soils" for irrigation;

(v) That raising of the dam wall should be considered as the catchment area was believed to exceed 35 square miles. He recommended that the catchment area be measured accurately and if it were 35 sq. miles then it would allow for a very considerable area to be under irrigation;

(vi) That it was an outstanding site which should have the best use made of it.

As a result of this Report it was agreed that the services of suitably experienced personnel be obtained to peg out the channel system and to line it with cement.

Meanwhile the Resident Commissioner wrote to the Agricultural Advisor stating that he was "uneasy about the high working costs of the Bathoen and Mogobane Irrigation Schemes compared with the return from them," and asking if he could get "the working costs of a similar scheme in the Union (of South Africa) for comparison purposes." The Agricultural Advisor made enquiries but replied that no satisfactory figures were available.
At about this time it was decided that it would be unrealistic to put 500 acres under irrigation for half the year but rather to put a reduced acreage under irrigation for a full year. This decision had the general concurrence of all the administrative officials concerned, but there was some confusion as to what acreage was agreed upon. The Resident Commissioner referred to 230 acres on some occasions and 250 on others while the Chief Agricultural Officer referred to 300 acres. After several months of confusion it was finally agreed that it should be 300 acres.

It was not till the middle of July 1942 that it was realised that there was no-one in the Agricultural Department who had any irrigation experience, and so the High Commissioner was asked if an additional Agricultural Officer with suitable experience could be recruited. The staff at that time consisted of one Agricultural Officer and two Dairy Officers. One month later, the Agricultural Adviser wrote to the High Commissioner suggesting that some Agricultural Demonstrators should go to South Africa for training. Neither of these proposals was agreed to and there is no record of any reasons being given for this decision.

During September, two engineers arrived to survey the site in preparation for drawing up plans for the channels, etc. At the end of October the Resident Commissioner asked the D C what progress the tribe had made in clearing the lands to be irrigated. "If no start has been made, you are to consult with the Chief and endeavour to secure tribal labour to make an immediate start." The D C visited the Chief, who was surprised to hear that the tribal labour was expected to do the work of clearing. He had understood that individual plot holders would clear the plots as stated by the Resident Commissioner in January 1942. The Chief added that it would be impossible to supply labour at this time as some men were clearing lands for another Government scheme and at any rate the ploughing season was starting. The D C advised the Resident Commissioner of the Chief's views and added that it was improbable that there would be any irrigation that season.

The Resident Commissioner replied in a memo on the 13th of November, "that plot holders who have elected to hold such plots should begin to clear them in readiness for planting of crops. If individual plot holders do not clear their plots within a specified period and if the tribe do not undertake the clearing and ploughing of all land, other means will have to be devised, but it is not desired that more money than necessary be spent from tribal funds since it simply creates an extra burden for the Native Treasury".

Three days later the Resident Commissioner cancelled his directive in the above memo and stated that "the work of clearing the land
will be paid for out of a loan to the Native Treasury and will be supervised by the Agricultural Department”.

This change of plan was brought about because it was realised that the cost of preparing the land might be too much of a strain on the Native Treasury, so a decision was made to lend £2000 to the Tribe. A Loan Agreement was drawn up which stated that the money was to be used for clearing and ploughing 500 acres including all furrows, ditches, etc., other than the main channel which would be paid for and constructed by the PWD. The construction of all ditches, furrows, etc., (other than the main channel) would be carried out by the Tribe under the supervision of the Agricultural Department. Government would reserve the right to purchase any plant and equipment for completing the work out of this money, and all such plant and equipment would remain the property of the tribe but on completion may be sold back to the Government (if they require it) thus reducing the loan. No interest would be payable on the loan, and repayments would commence at the end of the third year after the works had been completed, or sooner if the Tribe so decided.

On the 14th of December 1942, the Loan Agreement was agreed to and signed by the Chief after discussion of it at the Kgotla. Four months later the Chief received his copy of the Agreement.

The Resident Commissioner proposed that the Chief Agricultural Officer (CAO) "be in charge of the £2000 but will spend it in consultation with the DC and the Chief". However the Government Secretary suggested, "that it would be more suitable for the DC to control payments and keep accounts as it is the DC who should watch the interests of the Tribe. He is on the spot and can make all payments, etc. The CAO has sufficient other financial commitments on his hands. We should not risk the dissatisfaction of the Tribe afterwards".

But the Resident Commissioner disagreed and directed that the arrangements should not be altered as "advantages outweigh disadvantages". This was a decision he was to regret in the coming months. Subsequently the Chief Agricultural Officer confirmed that he would be in charge of the £2000 but added he would use his discretion without consulting the others for urgent purchases up to £25. He said the Chief agreed to this arrangement. At a late stage it was agreed that daily labour would be paid by the DC's Office in Gaborone, on vouchers drawn by the Regional Agricultural Officer (RAO) and charged to the Tribal account.
As bush clearing on the Scheme was not being undertaken by the Tribe, the Resident Commissioner arranged for a company of African Auxiliary Pioneer Corps (AAPC) to be sent to Mogobane to do the clearing. The D was instructed by the Resident Commissioner to meet the AAPC on their arrival at the dam together with the Chief and the AO when decisions would be made concerning the purchase of tools and equipment to clear the land. The Chief was a bit upset as he had no fore-knowledge of this arrangement but he agreed that the AAPC should do the clearing as there were no tribesmen available to do the work. The Agricultural Department agreed to supply a tractor and plough and other such heavy equipment as might be required for ploughing, levelling and cultivation on condition that repairs, replacements and fuel costs were met by the Tribal Administration.

The Chief suggested that any land ready for planting by the end of January should be put down to sorghum or maize, and land got ready after that date to be prepared for wheat. The Chief Agricultural Officer reported that the Chief, "desired that the Agricultural Department should grow, reap and sell the sorghum or maize crop, any profits to go to the Tribal Administration. He is also considering whether or not the initial wheat crop should not be similarly dealt with".

At the end of the AAFC's second week at Mogobane the Chief Agricultural Officer reported to the Government Secretary that they had cleared approximately 160 acres and estimated that all 300 acres would be cleared by the end of February. The ploughing and levelling of the cleared land was being done under the direct supervision of Wande, the RAD.

The Agricultural Department's 1942 Annual Report stated that "the clearing work........ has been finished and ploughing commenced. It is proposed to plant 100 acres of wheat in 1943. The Tribal Administration will cultivate the land on an approved rotation of crops under the direction of this Department. The Tribe is employing two African Agricultural Demonstrators who will also be directed by this Department".

In January 1943 the Resident Commissioner sent a minute to the Government Secretary, with copies to the DC and Chief Agricultural Officer. He stated that he considered the delay in developing all 500 acres for the tribesmen to be advantageous.

"As it is unlikely that natives without any previous experience of irrigation........ will immediately take up plots. They will first require to see what the advantages of cultivation by irrigation are".
"In order to develop the plot as quickly as possible and get a return I consider it desirable that during the first year the cultivation should be undertaken tribally under the direction of the Agricultural Department and that in successive years natives should be encouraged to take up plots on their own account. (The question as to whether one acre is sufficiently big requires further investigation. I myself do not consider an acre is enough)."

"The African Auxiliary Pioneer Corps have been able to supply labour to clear the land and an area of approximately 200 acres has been cleared by them. This represents a considerable saving in labour. A further 30 acres will be cleared under the direction of the Chief Agricultural Officer."

"The Chief Agricultural Officer has now submitted plans for the planting of crops tribally on these 230 acres, to which I agree in principle. It must be remembered, however, that a sum of money estimated roughly at £450 will be required to cement the furrows during the first year. The Chief Agricultural Officer should discuss immediately the new proposals with the Chief and District Commissioner and if they are agreed they should be submitted to the Agricultural Advisor to the High Commissioner for observations."

This is the first indication that all 300 acres had not been cleared. The Government Secretary asked the Director of Public Works to check up on the acreage to establish the true situation. It was then found that in fact only 125 acres had been cleared.

At the end of January there was a meeting at Mogobane Dam.
At the end of June 1943, the Agricultural Adviser replied to the Resident Commissioner's memo of the previous month, stating that he definitely did not recommend two crops per year for individual holders "as it would be very difficult for Africans to succeed, let alone European farmers". However he concluded the letter by saying that he was most anxious that two summer crops be taken off the land in the first season "as this will impress the people, but it must only be attempted if we are sure of making a success, otherwise we will receive a setback as far as the prestige of the scheme is concerned in the eyes of the people".

In the middle of August a meeting was held to discuss policies and development plans at the Mogobane and Bathoed Irrigation Schemes. Present were the Resident Commissioner, the Agricultural Advisor, the Chief Agricultural Officer, the DC's of Gaborone and Lobatse, Chiefs Ikaneng and Bathoeng, and one or two others. The following conclusions were reached concerning the Mogobene Irrigation Scheme:

1. Two crops a year should be sown on the land.
2. To begin with tractors will be used but in time these will be replaced by good spans of tribally-owned oxen.
3. Aims:
   (i) to demonstrate the feasibility of growing crops under irrigation, and
   (ii) to get an adequate financial return from the operations.
4. Fruit trees will be planted later when the scheme is established.
5. A shed and three huts will be erected at the Scheme. The huts will be for the Agricultural Officer (AO) who was to be in charge of the Scheme.
6. A tractor and grader will be purchased and hired to the Tribe for the clearing and levelling of the area to be irrigated.

At the end of September the Resident Commissioner sent a memo to the Government Secretary, copied to the Chief Agricultural Officer and Director of Public Works, summing up the work to be done and the funds still available in the Tribal Treasury. Inter alia he stated that:

"300 acres originally to be cleared, of which
125 acres have been cleared.
175 acres still to be cleared.

1 His full title was Agricultural and Livestock Officer as his duties covered both spheres of operations."
"Of the £2000 loan to the Bamalete approximately £1200 remains, for planting of crops etc., of this £500 is required leaving a balance of £700."

"The clearing and levelling will be undertaken by the Public Works Department when the tractor and grader arrive, and the work charged against the balance of £700. Such charges will as far as possible include depreciation costs of the tractor and grader."

It was proposed to purchase a tractor to be used on the Mogobane and Bathcen schemes and other irrigation projects.

The Director of Public Works replied that he wished to put it on record that the PWD could not complete the clearing, levelling and preparation for £700. The £2000 loan was for clearing and levelling the 300 acres and therefore requested that the £1200 be transferred to the PWD as originally agreed to with the Chief Agricultural Officer. The Resident Commissioner refused the request and advised both the Director of Public Works and the Chief Agricultural Officer that under no circumstances were the allocations to be overspent without his permission. The Director of Public Works agreed to keep a careful record of expenses.

The Tribal Administration agreed to erect the large storage shed and three huts for the AO at Mogobane, at a total cost of £200. Permission had to be sought through the Resident Commissioner to the High Commissioner for this expenditure as it had not been in the original estimates of the Scheme. This was in September but permission to use the funds was not given for two months by which time the AO, a Hollander by the name of A.P. Bydendyk, was appointed.

Bydendyk had been working for the PWD on the preparation of the land for the Scheme and, as he had some agricultural knowledge and the Agricultural Department was short-staffed, it was decided that he should also act as the AO while continuing to be in the PWD.

By April of the following year (1944) neither the shed nor the huts for Bydendyk had been erected. When the Government Secretary wrote to the DC in this regard he replied that there had been certain difficulties such as obtaining timber for rafters but "steps have been taken to have the building erected as soon as possible". On the same day he placed orders for the poles. The huts were finally completed in July 1944. Bydendyk had assumed duty at Mogobane in November 1943 at which time the Government Secretary advised the DC that bydendyk's duties included the supervision of clearing, levelling and engineering construction and at the same time, under the guidance of the Agricultural Department, to supervise agricultural operations which would include the instruction of the
Department's Agricultural Demonstrator. He added that,
"It is considered that it would be adequate for Byndendyk to give
1 – 2 hours a day to agricultural operations. A second Demonstrator
may be stationed at Mogobane if necessary."

Meanwhile another difficulty was being experienced in the
development of the site; the Chief complained that the newly surveyed
300 acre site extended beyond the agreed upon boundary, and
investigation revealed that in fact the original boundary did not
enclose 300 acres as had been estimated, with a result that the
boundary had been extended further down the valley. The DC was
delegated to clarify the position with the Chief and get his
agreement to the new boundary. However, the Chief was very unhappy
about the situation and raised the following objections: –

(a) Two cultivated lands fell into the new area;
(b) that if the lands were taken over, it would not be possible
to allocate alternative lands in the vicinity; and
(c) that he was worried that those people who were evicted would
raise constant complaints.

In spite of these objections, the DC managed to put sufficient
pressure on the Chief that he reluctantly agreed to evict the people
so that the entire 300 acres could be incorporated into the scheme.

In September, 1943 about 65 acres were put under maize and it was
planned to put another 30 to 50 acres under potatoes and wheat in
February to April of the following year. By the end of October it
was found that much of the maize had not come up owing to the
"rawness of the soil" and 25 acres needed to be re-planted with a
quick growing variety, and some blank spaces were planted with
cowpeas. A further 4 acres were planted under cowpeas and 8 under
potatoes. Eight date palms and a small patch of oziers (for fodder)
also were established. In late October the Resident Commissioner was
having second thoughts about the irrigation scheme and wrote to the
Agricultural Advisor,

"There is one thing, however, about which I am not at all easy in
mind and that is irrigation, I am not aware what experience you
personally have had in this form of cultivation but it is quite
clear that nobody in the Protectorate knows very much about it, and
as you will not be able to spend very much time with us I feel we
should obtain all the possible information before we begin".

There were heavy rains in November which resulted in 7 of the 8 acres
of potatoes being waterlogged and destroyed. A second planting of
potatoes was made in February 1944 although the RAO admitted that it
was too late to plant and there would be no crop. A frost in April
wiped out the entire crop and caused the Resident Commissioner to
remark, “When it is known that frost can be expected in April or May was it not very unwise to plant potatoes in March?”

At this time the following estimates for the Mogobane scheme for 1944/45 were circulated:

Expenditure

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of producing wheat</td>
<td>£ 611</td>
</tr>
<tr>
<td>Cost of producing maize</td>
<td>302</td>
</tr>
<tr>
<td>Cost of producing potatoes</td>
<td>346</td>
</tr>
<tr>
<td>Cost of producing cowpeas</td>
<td>64</td>
</tr>
<tr>
<td>Two Demonstrators</td>
<td>90</td>
</tr>
<tr>
<td>Establishing Fruit Trees</td>
<td>100</td>
</tr>
</tbody>
</table>

£ 1213

Revenue

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>£ 900</td>
</tr>
<tr>
<td>Maize</td>
<td>338</td>
</tr>
<tr>
<td>Potatoes</td>
<td>450</td>
</tr>
<tr>
<td>Cowpeas</td>
<td>100</td>
</tr>
</tbody>
</table>

£ 1788

Early in January 1944 the Resident Commissioner advised the DC that, “It is proposed to carry out an experiment in Basin Irrigation just below the present irrigation scheme. The Chief will have to be consulted in due course about the use of the land.” This scheme was to be a pilot scheme to investigate the possibility of controlling flash floods for irrigation purposes. The DC managed to persuade the Chief to allocate land for this, and as time went by the scheme had many critics. After it had been in operation for several years it was closed down as it was found to be impractical.

Early in March the Resident Commissioner was informed that the Bangwaketse Tribal Treasury had overspent £900 on the Bathoen Dam without the necessary authority. On hearing this the Resident Commissioner caused quite a flurry amongst the officials concerned, including the Chief Agricultural Officer.

1A type of irrigation used in the Middle East. Floodwaters are trapped in a shallow valley and then the land planted as the waters subside.
Later in the month the Chief Agricultural Officer advised the DC and Director of Public Works of the Mogobane expenditure up to 23rd March, which was £972. While drawing up the Statement of Expenditure it was noticed that the AO had ordered certain items without the Chief Agricultural Officer's or DC's permission and this resulted in the following strong reminders from the Chief Agricultural Officer to the AO's at Mogobane and Kanye:

1. I would inform you that under no condition should expenditure on either the Mogobane or Bathoen Dam Irrigation Schemes be undertaken except in consultation with the respective District Commissioners.

2. No orders will be placed by the Chief Agricultural Officer unless the order, when forwarded by the relative local officer, bears the District Commissioner's counter signature.

3. Officers will be personally surcharged with any expenditure which is incurred and does not conform with these instructions.

4. Kindly acknowledge receipt.

When the Director of Public Works studied his copy of the Statement of Expenditure at the Mogobane Scheme he noticed that there had been considerable over-expenditure by the Chief Agricultural Officer and immediately wrote to the Government Secretary through the Financial Secretary the following letter:

"I have seen a financial statement by the Chief Agricultural Officer, dated 23rd March, with regard to expenditure against the Bamalete Loan for clearing and preparation of land for irrigation at Mogobane.

2. The position disclosed is, briefly, as follows:

Balance available at end of 1942/43 £1,228.15.
Expended during 1944 (up to 23rd March) 972.7.11
Outstanding expenditure for March 1944 104.19.9 1,077.7-

£ 211.7.

3. "In file 2042 II, page 206, the sum of £500 was allocated to the Chief Agricultural Officer and £700 to the Public Works Department, out of the then estimated balance of £1,200."

4. "It seems, therefore, that the Chief Agricultural Officer has overspent his allocation of £500 by an amount of £577.7.8. (over 100% excess) leaving only £211.7.5. instead of £700 for the Public Works Department."
5. "The Public Works Department expenditure to date is approximately £120 and I am reporting the matter as it is obvious that there will be a heavy excess if further work is undertaken."

6. "In view of His Honour's instructions I am stopping all further work in connection with clearing."

It took another two months for this information to filter through to the Government Secretary who immediately asked the Chief Agricultural Officer "to please submit a detailed statement of expenditure incurred by your Department (governing the Mogobane Irrigation Scheme) up to 31st March 1944, against the sum allocated to you for crops, etc." The Chief Agricultural Officer failed to reply, and reminders were sent in May and June.

The Government Secretary asked the DC for his comments on the expenditure and asked for details of revenue from the scheme in order to assess the true position.

The Resident Commissioner did not find out about the over-expenditure till early July (almost 3 months after it was first noticed) when he immediately sent the following memo the the Government Secretary:

"Am I to understand that in spite of the arrangements come to on the instruction I gave that £500 should be used for crops, a sum of £1128 has been spent instead? This sounds like a repetition of the Kanye Irrigation Scheme debacle. Please ask the CAO as well as the DC for an explanation."

The DC replied with the following memo:

"According to figures furnished by the Chief Agricultural Officer, the following is the position:

<table>
<thead>
<tr>
<th>Expenditure</th>
<th>Amount (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1942/43</td>
<td>692.6.4d.</td>
</tr>
<tr>
<td>1943/44</td>
<td>1128.18.6d.</td>
</tr>
<tr>
<td></td>
<td>£1821.4.10d.</td>
</tr>
<tr>
<td>Amount of Loan</td>
<td>2000. 0. 0d.</td>
</tr>
<tr>
<td>Balance</td>
<td>178.15.2d.</td>
</tr>
</tbody>
</table>

2. "An amount of £66.8.4. in respect of fertiliser was wrongly debited to the Mogobane Scheme and when the adjustment has been made the balance available will be £245.3.6d."

3. "I have not been consulted by the Chief Agricultural Officer regarding the expenditure on the scheme from the loan of £2000 and there is nothing on record in my file that either of my predecessors were consulted during the period 1st April to 31st
December, 1943.

4. "I have requested the Chief Agriculture Officer to furnish the explanation called for by His Honour, I regret that I am unable to furnish any further information".

Finally in July the CAO replied to the Government Secretary's outstanding queries in a detailed memo showing how the expenditure was incurred and then ended by stating:

"I cannot find any record of any instructions from His Honour that the sum of £500 should not be exceeded for crop production. There was an understanding that if money had been required for the grader and leveller that some other way of financing expenditure in excess of this amount would have to be found."

The Resident Commissioner had the Chief Agricultural Officer's letter passed on to him and communicated to the Government Secretary as follows:

"I regard the CAO's explanation of the over-expenditure as being quite inadequate and am not satisfied with it. In the meeting held in my office on the 12th August, 1943, at which various officers, including Mr. Thornton and the CAO, were present the question of finance was discussed. Paragraph 7 contains a record of this discussion. It was suggested in the first instance that a tractor and grader should be bought for £700 to be provided from the Loan to the Bamalete. After further consideration it was decided that these units should be bought with Government funds, but that a sum of £700, to be paid from the balance of the Loan which amounted to £1,200, would be required for clearing operations. There was apparently some misunderstanding between the CAO and the DPW on this point and I took the trouble next month (on 28.9.43) to explain the matter still further to the CAO and the DPW, both of whom were furnished with a copy of the notes of both meetings. The CAO states that he had no record of the note of the latter meeting. It is quite clear from page 204 that he received a copy of the note while still in my office. Send him another copy, please. I cannot see the slightest excuse for any misunderstanding of the arrangement reached, which was that £500 would be utilised by the CAO for the final preparation of the ground and the planting of crops, and £700 would be utilised by the DPW for the clearing, etc., of the rest of the ground."
4. I called upon both the CAO and the DC for an explanation of the over-expenditure of the amount allocated for the planting of crops. The DC states in paragraph 3 page 255 that he had not been consulted by the CAO regarding expenditure on the scheme, and there is nothing on record in his files that either of his predecessors were consulted during the period 1st April to 31st December, 1943. A copy of this memorandum should be sent to the CAO if he had not already had it. If this statement is correct, why have the DC and Chief not been consulted and why did the DC not insist on consultation? In case it may be urged that it was not known that such consultation should have taken place, the CAO's attention should be called to my minute at page 78 and paragraph 3 (b) of his own memorandum on page 87. While it is clear that the CAO in person cannot always consult the District Commissioner and Chief, there seems to be no adequate reason why the Agricultural Officer who is in charge of Mogobane should not have done so on his behalf.

5. I desire an early explanation from the CAO of the points raised above so that I may consider what further steps may be taken in what would appear to be the deliberate disregard of my instructions."

The Government Secretary duly wrote to the Chief Agricultural Officer as instructed and at the same time wrote to the DC as follows:

"I am directed by the Resident Commissioner to enclose for your information and necessary action a copy of a note by His Honour regarding the over-expenditure on this scheme. You should state whether you were consulted by the Agricultural Officer and, if not, why you did not insist on consultation. It is understood that an arrangement was reached under which no expenditure in excess of £25 would be incurred without the authority of the District Commissioner and the Native Administration. Has this adhered to, and were you furnished with statements of expenditure from time to time? If not, you should say when you received the last statement indicating the financial position of the money available for the scheme."

This enquiry started a flow of acrimonious recriminations between the DC and Chief Agricultural Officer. First the DC stated that

"(i) During the period 1st January (1944) to 31st March I was not consulted regarding expenditure from the loan of £2000."
"(ii) As regards the period April to December, 1943, I am not in a position to say whether either of my predecessors was consulted verbally. There is certainly nothing on record in my files to show they were consulted."

"(iii) I notice in these statements certain items are shown as 'Paid by DC'. These payments were not made through this office nor, so far as I can ascertain, were the payments actually made by the District Commissioners concerned."

The Chief Agricultural Officer was shown the above memo and at the same time asked to reply to the points raised by the Resident Commissioner. In his reply to the Government Secretary the Chief Agricultural Officer stated that

(i) He had never received any instructions from the Resident Commissioner concerning a limit to his expenditure on the Scheme;

(ii) "Regarding consultation (with the DC)...... I can express nothing but contempt for the equivocations contained (in his memo)". A detailed list of present and past DC's was then given;

(iii) "I take strong exception to the District Commissioner's statement that he had not been consulted regarding expenditure, and can only state that if there is nothing on the file records at Gaborones regarding such consultations it would appear that the matter is one requiring more the Government Secretary's attention than for comments from me."

The DC received a copy of the above memo and reacted with the following memo to the Government Secretary:-

(i) "The Chief Agricultural Officer has made a most offensive statement in........his memorandum under reference which I beg to request he be instructed to withdraw unreservedly. If he does not withdraw the statement I reserve the right to express officially my opinion of his conduct in this matter."

(ii) "As regards the question of responsibility for the over-expenditure on the scheme, I would urge that a meeting of the officers concerned be arranged
where I have little doubt the whole position would be clarified."

(iii) The DC then showed that the CAO's detailed list of consultations with the present DC were on matters totally unconnected with the matter of expenditure.

The Government Secretary replied to the DC that the disagreement with the Chief Agricultural Officer should be dropped as it served "no good purpose". He added that the DC evidently 'was not fully informed' with regard to the amount of consultation between his office and the Agricultural Department. He accepted the DC's proposal that the DC together with members of the Agricultural Department and Treasury staff should go through all the documents relating to expenditures to see if any allocation could be adjusted.

A similar letter was sent to the Chief Agricultural Officer. Subsequently only a minor adjustment of £29 was made.

The Government Secretary noted that the Chief Agricultural Officer "had rather ran away with things", and he felt as he had felt "in the case of the excessive expenditure at Kanye (Bathoen Dam) more vigilance on the part of the District Commissioner might have brought the position to notice sooner".
Meanwhile there were a number of developments with regard the progress of the Scheme. In April 1944 the DC wrote to the Government Secretary requesting permission to set up a small committee appointed by the Chief to deal in consultation with the AO with all questions regarding policy and management of affairs at Mogobane. Prior to the appointment of the AO the RAO had, in the main, simply gone ahead on his own, making decisions as to what to plant and when to plant, with the result that very little interest had been shown in the Scheme by the Tribe. The DC reported that at a recent Tribal meeting to discuss the estimates, speakers referred to the Scheme as a "Government Project".

In a memorandum to the Resident Commissioner, the Government Secretary recommended the DC's proposals, but added, "a committee would be useful to discuss details, but policy will have to come from your Honour". The Resident Commissioner concurred. A draft of the constitution of the Committee was drawn up and presented to the Resident commissioner who approved it subject to a few minor alterations. The following clauses were included in its constitution:

"(i) The name of Committee shall be the Bamalete Irrigation Scheme's Management Committee.

(ii) The Committee shall consist of 8 members as follows:

(a) The DC, or his representative who shall be chairman;
(b) The AO in charge of the Scheme;
(c) The Chief of the Bamalete or his deputy;
(d) Four members of the Tribe elected in Kgotsa;
(e) The Agricultural Demonstrator who shall be Secretary.

(iii) Proper minutes shall be kept and copies be distributed to the Resident Commissioner, the CAO, the District Commissioner, the Chief and the Native (Tribal) Administration.

(iv) The functions of the Committee are advisory and for the purpose of submitting recommendations to the CAO on matters of policy, management and finance."
The increasing lack of interest and suspicion of the Tribe was the cause of much concern to members of the African Advisory Council. Their Tribal Agricultural Production Committee (of which the Chief Agricultural Officer was Chairman) visited the Scheme in April, 1944, and put forward the following Report to the African Advisory Council.

MOGOBANE IRRIGATION SCHEME

"The Committee inspected the Mogobane Irrigation Scheme and expressed great interest in this undertaking."

"There was discussion on the Scheme and comments were made on the apparent lack of interest of the Tribe, its suspicion of the dispossession of certain landholders and fears of further dispossession if the scheme grows. The Committee also noted that no Tribal labour had been employed on the Scheme and that every bit of the work had been paid for."

"THE CHAIRMAN put forward for discussion a suggestion, which was contrary to his earlier belief, that in order to allay the suspicions of the Tribe and as a partial solution to the Chief's land problem, some people, particularly those dispossessed of their lands, be allowed to take up holdings in the Scheme."

"CHIEF TSHEKEDI thought that at present such people would not submit to being told when to plough and what to sow. He thought that an agricultural school to educate the young Bamalete would prove useful in this new venture. It was suggested that for efficient control the full time services of a competent officer were required at the scheme."

"The Committee is of the opinion

THAT, after observing the development at Mogobane it wishes to consider further the future of the Scheme and its repercussions on the life of the Tribe. The Committee is very disturbed at the reaction of the Tribe to this scheme and requests that His Honour permit the Committee to consider the problem further."

1 Advisory to the Resident Commissioner. Refer to Appendix 1 for details.

2 The CAO, ex officio.
I think - I hope, anyhow - that you feel that I am trying to work in full co-operation with you, and yet, I often have a feeling of frustration because I think I have reached full agreement with you over some particular policy, but later there is a complete change round on your part. There is a suggestion that in matters of this sort the Government is trying to impose its will on the people against their wishes. Now, the sooner we get rid of that feeling the better. If you do not want water you need not have it. If you do want it, I am willing to discuss with you the methods of development, but I do ask you for frankness. I am trusting you and I want you to trust me. If you do not agree with the principles of cultivation under irrigation, say so. If you do not want any particular form of water development - say so. Do not let us prepare an application for money for some particular scheme and then turn it down. With your local knowledge of the Territory it is obvious that you have very strong and possibly sound views, and you certainly have a right to express an opinion on any measure which is intended for the good of the people. That I never object to. What I do object to is to be told one thing one time and another thing another time; to feel that there is something being held back, that I am not being trusted; to feel that the reason which has been given me is probably not the real one. Now, in regard to irrigation, which I notice the Council considers marks an epoch in the history of the Territory, I have on several occasions, publicly and privately, tried to explain that there may be far-reaching implications when this system is introduced. I have pointed out, for example that it may alter the habits of the people; a cultivator and his family may have to remain near his plot throughout the year and not spend some time at the village and some time at the lands. I have stressed that cultivation under irrigation is a highly expert process. The results can be quite remarkable in regard to the amount of produce grown, the times of the year at which it is produced and its quality; but, the damage that can be done to the land unless the most careful methods are employed, can be devastating. Therefore, certain principles must be observed if land is to be cultivated under irrigation. They must be - you cannot escape this - they must be observed, otherwise irrigation should not be touched. There must be a proper rotation of crops; there must be suitable manuring; and there must be a proper water service. Now understand most clearly these conditions cannot be departed from in any scheme that the Government sponsors, and, if they are likely to be
departed from, we do not have cultivation under irrigation. If these conditions are observed your lands can go on indefinitely, as they have on the banks of the Nile for the last three or four thousand years, if not the land will be ruined in a very few years.

"Now realise that this means the imposition of certain regulations. People who take up plots have got to observe an approved rotation of crops, they have got to fertilise, and they have got to obey the advice of the water bailiff under expert advice as to the amount of water they put on their lands."

"The Bathoen Dam is, in my opinion, too small for individual plots - plots to be held by individuals. The Mogobane Dam can even now accommodate a number of people, and the scheme is capable of extension and can in time accommodate many more. Chief Ikaneng and the Bamalete will no doubt remember that Mr. Thornton\(^1\), who has had wide experience in irrigation matters and has been able to draw on the vast knowledge of the world, drew up a scheme for settling people on the Mogobane Dam. The scheme proposed was in the alternative either 3-acre plots or 1\(\frac{1}{2}\)-acre plots according to whether a summer crop only was to be grown, or a double crop each year. That plan is capable of being altered. Plots can be increased and various alterations can be made to suit local feeling and local conditions. The plan was discussed on several occasions, but was abandoned for the reasons which I gave at the beginning of this talk - because of the ignorance of the people of this system of agriculture and because of a certain amount of suspicion. I come back to where I started. It was then agreed that this scheme should be run tribally so that the people might see how it was done. It would serve as a demonstration to them; they might see what was being done, and they might, in the course of time, wish to go in for that system of agriculture themselves."

"It is in a matter like this that I have the feeling of frustration to which I referred. The Government is accused of not taking any active steps to interest the people. Is that correct? I would ask you to think a little more about that statement. If you have any suggestions as to what more the Government can do I shall be pleased to hear them. The Chief

\(^1\) The Agricultural Adviser
of the Bangwaketsi is taking a most active part in the running of his scheme and it is certainly the Government's wish that the Bamalete Native Authority should do the same at Mogobane. If they do not do so, Government can scarcely be blamed for it."

"Now, gentlemen, I have talked at some length on the subject of water development and on the methods which I feel we ought to employ in order to introduce new schemes of development into the country. I want you to understand that I ask for the frankest and fullest co-operation in the consideration of any measure which we might hope to introduce. For my part I am prepared to give you that."

Shortly thereafter the newly-formed Bamalete Irrigation Scheme Management Committee met under the Chairmanship of the DC.

In the Minutes the following matters were recorded:

1. The Maize crop was poorly planted as the ground was uneven. Harvesting and thrashing had started and it was estimated that 300 bags would be reaped. Difficulties were being experienced in marketing as it was yellow maize which was not popular food amongst the tribesmen. In order to counter any adverse reaction of the Tribe, the Agricultural Department agreed to purchase all the maize. No accurate records of costs had been kept but the RAO tabulated estimates which showed that the cost of production would just be covered by the sales. The Chief expressed his concern as the Tribe required profits in order to repay the £2000 loan. The Chairman concurred and impressed this fact on the RAO and it was stated that "the scheme must be run on economic lines and experiments involving expense should be avoided. One way in which the Chief and the Tribe would assist in running the scheme economically was to see that labour, etc., was forthcoming as cheaply as possible."

It was agreed that white maize would be planted in future.

2. It was reported that the first potato crop was flooded by heavy rains and was a total failure. Another crop was planted in March but had been destroyed by frost.

3. The RAO produced a detailed rotation programme for year-round production starting in November, 1944 and planned to last to August, 1948. Blocks of land would lie fallow every two years for a period of nine months.
4. Experiments were currently underway with the use of varying quantities of manure and superphosphate.

5. It was noted that rice was being successfully grown in N'gamiland and it was agreed that this crop be tried at Mogobane.

6. It was proposed that it may be of great benefit if the Committee visit the Bathoen Dam and Irrigation Project to exchange views and also to invite those in charge there to visit Mogobane.

7. The RAO proposed "that as a reward of good service and to stimulate interest in the crops now being planted, each permanent labourer, eight in number and the two Agricultural Demonstrators should be given a bag of yellow mealies". This was unanimously approved.

In a covering letter circulated with the Minutes the DC suggested that a full-time agricultural officer be engaged on the Scheme, as Bydendyk "no longer assists and the RAO is too busy". Following up the latter comment, the Government Secretary, wrote to the DC:

"I am directed by the Resident Commissioner to request you to state whether the report is correct that Mr. Bydendyk informed you that he refused to carry on the Agricultural work at Mogobane? It is alleged that the statement was made in the presence of the RAO."

The DC replied in the following memo:

"I do not think that Mr. Bydendyk used the word 'refused'. As far as I can recollect he informed me that he was no longer supervising the Agricultural work at Mogobane as he did not agree with the RAO's ideas as to how agricultural work should be performed."

The Chief Agricultural Officer was brought into the picture and he wrote to the Government Secretary admitting that "it is absolutely necessary to appoint a full time officer at Mogobane. It was not known that Mr. Bydendyk no longer assisted in the work at Mogobane and your observations on this would be appreciated."

The Assistant Government Secretary visited Mogobane with the RAO and then reported to the Government Secretary "that it was clear that there was very little supervision and the work was not good."

1 Maize or Corn.
The Resident Commissioner then asked the Government Secretary to find out through the Director of Public Works what the problem with Bydendyk was about. He also asked "how it is proposed to market the wheat as I understand that the Kanye scheme has experienced some difficulty in this regard."

Concerning the gift of maize to the Agricultural Demonstrators, mentioned in the Scheme's Management Committee Minutes, he stated, "The emoluments of officers regularly employed, especially on a scale, should not be increased by honoraria (free gifts). They are supposed to give of their best without inducement. As regards labourers, if it is considered expedient, they can be engaged on the understanding that they will receive, say, a bag of mielies in addition to their pay if they perform good work for so many months. But this must be taken into account when fixing their rate."

A few days later in mid-July the RAO wrote to the Chief Agricultural Officer giving his Report for May which included the following comments:

1. "The Chief circumstance is that during the month of May, a large part of my time was taken up with wheat planting at Mogobane, as Mr. Bydendyk had refused to be of any assistance."

2. "From now onwards constant inspection of wheat at Mogobane is necessary, to decide whether the wheat is growing too fast and has to be harrowed, and when and where irrigation is necessary, the last factor being of increasing importance as the hot weather approaches."

3. "The Demonstrator at Mogobane has not the experience required to decide when to irrigate and to what extent. Over irrigation is as harmful as under irrigation."

4. "I can assure you, Sir, that unless I have suitable assistance at Mogobane, it will be impossible for me to supervise my other work in a satisfactory manner, and in any case when the wheat at Mogobane has to be reaped I will have to spend a considerable time there."

5. "The position is most unsatisfactory. Work as one may it is not possible to exercise any reasonable degree of real direction and supervision over so many scattered undertakings, and the results from further development merely result in overall worse standards of performance."
6. "I must submit, therefore that either some qualified assistance be provided to help keep going the various projects, or alternatively that you will indicate which may be curtailed or abandoned."

The Chief Agricultural Officer then wrote to the Government Secretary requesting that the RAO's position be put to the Resident Commissioner with a view to quick provision of more assistance, keeping in mind the "change of direction and control"1 of the Agricultural Department.

The Chief Agricultural Officer also replied in another memo to the outstanding queries with regard to his Department and the Mogobane Scheme. Concerning the wheat crop the Chief Agricultural Officer admitted that it was difficult to market in the territory but there was no difficulty in marketing it in South Africa. He added that "as wheat has a high nutritive value, it would be policy to teach people to eat it." The Chief Agricultural Officer went on to admit that the granting of honoraria to the Demonstrators was fundamentally wrong but justified it because the Demonstrators were now employed by the Tribe which gave no cost of living allowance. Concerning Bydendyk he had the following to say:

"Revenue from Mogobane would have been considerably higher had the season not been so abnormal and had reasonable supervision been available. It was not possible for Mr. Wande (RAO) to devote a great deal of time to Mogobane, and he reports, and from my various visits I think there is substance in these reports, that Mr. Bydendyk's services have not been satisfactory in respect of the Agricultural side of the work. That this point would better have been brought to a head at an earlier stage is true, but Mr. Wande, under the very difficult arrangement existing has endeavoured to establish a better relationship with Mr. Bydendyk, rather than bring further deterioration into a situation which was impossible, and with all due respects, I submit unworkable, from the start.

"I submit a report from Mr. Wande on the need for immediate further technical assistance for Mogobane and the failure of the present arrangements whereby Mr. Bydendyk is supposed to provide certain assistance."

1The Departments of Agriculture and Veterinary Services were about to be amalgamated under one Director.
The Resident Commissioner read the CAO's memo and commented to the Government Secretary on the matter of honoraria:

"Am I to understand that honoraria have already been to the Demonstrators? If it was known that the payment of honoraria was fundamentally wrong, no action should have been taken on this matter until approval of the principle had been received from me."

Concerning Bydendyk and the application for a qualified officer to be stationed at Mogobane, the Resident Commissioner directed that:

"Mr. Bydendyk will devote the whole of his time to agricultural operations there. He will now be entirely under the Chief Agricultural Officer."

In the meantime the newly formed Bamalete Irrigation Scheme Management Committee made a visit to the Bathoen Dam Irrigation Scheme in order to study the relatively more successful project and to exchange ideas. The DC made the following comments in his Report covering the visit:

1. "The great advantage of having the ground properly prepared for crop production under irrigation i.e. subdivisions of the land into beds watered by properly constructed lands and furrows. At Mogobane irrigation under the present conditions presents many difficulties;"

2. "The proximity of the scheme to the seat of the Native Authority and the consequent advantages."

3. "The great advantage of having a residential Agricultural Officer in immediate charge of the Scheme. I was very impressed with the AO's keenness and complete grasp of all matters connected with the scheme including one of the most important, finance."

A few days later the senior staff members of the Bathoen Irrigation Scheme paid a reciprocal visit to Mogobane which the DC also reported on. He wrote,

"The main impression was that the present temporary scheme was operating under considerable disadvantages, owing to lack of machinery, labour, and above all, preliminary levelling and layout of furrows. Ultimately, however the Scheme has great promise......."

Towards the end of August 1944 the Chief Agricultural Officer sent a memo to the Government Secretary outlining the difficulties experienced on the Scheme during the first
season’s cropping and then put forward proposals on the future of the Scheme in the light of this experience. He listed the following as the more important adverse factors encountered which resu_ led in poor crops.

(a) Flood-water  
(b) Soil of poor physical structure  
(c) Shale outcrops  
(d) Waterlogging  
(e) Soil erosion

Flood-water seriously affected some 13 blocks of irrigation land and the cost to control the floods and resulting high water table would be prohibitive. A further 9 blocks consisted of exposed potclay or were covered with only a few inches of topsoil. Crops grown on these blocks give very poor yields. An uninterrupted shale ridge extended through a substantial area and was practically unproductive while patchy outcrops were found elsewhere. The water-logging existed in the lower lands for one to three weeks after floods thus making crop production along this margin a “hazardous undertaking”. The soil erosion was caused by the steel gradient of the land above and below the temporary canal. Storm water from the land above the canal washed considerable quantities of sand into the canal, blocking it and causing the walls to be breached. Irrigation also caused some soil erosion in the steeper areas.

The Chief Agricultural Officer then made a number of proposals the most important of which are outlined below:-

1. That the area affected by flooding, erosion and poor soils (about 70 acres) be put under fodder crops.
2. That the loss of this area to rowcrop production should be compensated for by extending the area downstream as these soils are flatter and of better physical structure. 40 acres were already cleared in this area and the CAO proposed that these be put under crops as soon as possible. Finally he pointed out that the PWD engineer had indicated that it would be more economical to clear, terrace and cultivate 100 acres on the downstream side of the present scheme as the land was flatter there.
The Resident Commissioner had a discussion with the PWD Engineer, the RAO and the AO concerning the Chief Educational Officer's proposals. It was agreed that they be accepted in principle and that the Director of Public Works and the RAO work out costs of clearing and preparing the rest of the land. Finally the RAO was directed to inform the DC and Chief of the decisions taken.

At the end of August 1944 the Resident Commissioner presented a Report to the High Commissioner on matters in the Territory, and concerning the Bathoen and Mogobane Irrigation Schemes he had the following to say:

"The Chief (Bathoen) and the tribe have taken a close interest in the irrigation scheme at Kanye, and have co-operated wholeheartedly in the operations which have been carried out under direction of officers of the Agricultural Department. At Mogobane, on the other hand, there is still a good deal of suspicion on the part of the Chief and the Tribe regarding this new undertaking and this, in the absence of a progressive Chief such as Chief Bathoen, will probably take some time to dispel."

The following month the Tribal Agricultural Production Committee met. Chief Tshekedi took the floor and recalled that at the previous meeting it had been recorded that the Committee "was very disturbed at the reaction of the Tribe to the Mogobane Irrigation Scheme and it requested that His Honor permit it to consider the matter further."

After visiting the Scheme he had the impression that the Government was conducting the Scheme for the people rather than with the people. It was conceivable that the Bamalete were suspicious that the Scheme was an out and out Government Scheme. He went on to say that the Scheme had failed to attract adult Bamalete and therefore the youth should be encouraged to participate. He suggested that youths between 16 and 20 years of age receive training in agriculture and animal husbandry while at the same time providing labour for the Scheme. After completion they might take up plots on their own account and by this example encourage other tribesmen to take part in the Scheme.

Another member of the Committee, Mr. Ellenbeger, who was once the DC in Gaborone, supported the proposal and added that if the goodwill of the parents could be gained, they would not put their children against the Scheme. He said he understood that in the original memorandum of the Mogobane Scheme there were strict rules
concerning the ownership of plots on the Scheme which "disturbed the people greatly". The Chairman (the Chief Agricultural Officer) interrupted to say that the proposals originally put forward to the Tribe were suggestions only. Ellenbeger continued and suggested that someone who knew the Tribe well and had the confidence of the Tribe, should spend a whole day talking to them, and he considered that this person could then find out what was in the minds of the Bamalete with regard to the Scheme.

After some discussion it was agreed that Chief Tshekedi's proposals appeared to be practical and recommended them for the Resident Commissioner's consideration.
During the past decade there had been a great deal of suspicion and even outright antagonism and bitterness among both the tribesmen and the European farmers against the Agricultural Department. This was basically caused by unpopular livestock regulations and the strong personality clashes between the Chief Agricultural Officer and his peers in the Government Service. The Resident Commissioner recognised the need to place the Agricultural and Veterinary Departments under one head but due to the strong personality of the Chief Agricultural Officer this could not be done unless he were removed from office. For reasons best known to himself the Resident Commissioner did not take any action till the middle of 1944 by which time the credibility of the Agricultural Department had reached an all-time low. The credibility of the Department with the tribes was steadily deteriorating and suspicion was increasingly turning into unco-operativeness. A Director of Agriculture and Livestock Services was appointed, with the Heads of Department known as Principal Agricultural Officer and Principal Veterinary Officer. The contentious Chief Agricultural Officer resigned from Government Service.

In November 1944 Mr. Parish was appointed to the new post of Director of Livestock and Agricultural Services (also known as the Director of Agriculture or the DLAS). Before settling into his office he went on a two week familiarization tour of the whole country accompanied by the Agricultural Advisor to the High Commissioner. At Mogobane they met with the DC and the Chief when the whole scheme was thoroughly discussed. The following notes were recorded by the Director of Agriculture.

1. It was agreed that the ultimate object was to divide the land at Mogobane into individual plots.

2. To achieve this it was proposed that for a start ten Bamalete youths of about 18 years or more be enrolled as learner workers. Each successive year ten or more would be enrolled depending on training resources.

3. It was recorded that the Chief had arranged for four boys who had just taken Std. VI examinations to be enrolled and he undertook to try to find six more, though he was advised that it was not necessary for boys to have schooling.
4. The boys would be known as Learner Workers during the course of two years.

5. A certificate would be awarded at the end of the course.

6. Pay would be 15/- per month first year and £1 per month in second year, plus rations.

7. Training would be done by the Agricultural Department.

8. Graduates would be allotted 3 acres in which to settle.

9. Funds for this expenditure were available in the £2000 loan.

10. It was not clear what funds were to be utilised to install the distributory furrows.

GENERAL

It was emphasised that the success of the whole scheme depended almost entirely on the efficiency of the Agriculture Department.

The above proposals were later discussed with the Resident Commissioner who agreed that they should be a basis of discussion with the Tribe. The Resident Commissioner advised that the distributing furrows would be paid for out of a Government grant of £5000. New estimates to get the Scheme operating were called for.

On completion of the tour, the Agricultural Advisor sent the following Report to the Government Secretary covering the Bathoen and Mogobane Schemes:

"Both Mr. Parish and I feel that the Kanye irrigation scheme has reached a stage in the present management that might be described as out of the teething stage; in other words this project bids fair to be a great success. At Mogobane the picture is entirely different, but the position there was very fully discussed with His Honour, and with the changes now made in management it is possible that success may attend this venture in future. If success is to be achieved constant supervision will be necessary and the local officer in charge, Mr. Bydendyk, will have to improve considerably in his outlook and from the disciplinary point of view. As Mr. Parish is fully aware of the position I have no doubt that he will see that the Project is carried out according to his ideas and not in accordance with the whims and fancies of the local resident officer."
The Director of Agriculture also sent the Government Secretary a report of his tour and in it he discussed the shortage of suitably qualified Agricultural Officers. He stated that he has instructed Bydendyk that henceforth he was under the supervision and control of the Principal Agricultural Officer. Finally, he proposed a two year Learner Workers' Course for ten young Bamalete on the Mogobane Irrigation Scheme. The Government Secretary forwarded the above report to the Resident Commissioner with the following comments:

"Mr. Parish's comments regarding responsibility for a poor state of affairs are what I have felt for many months. From my own observation an impossible position has been put right.

The two year learner scheme needs much planning. A proper school with quarters, staff, stock implements, etc. has got to be established and someone has got to pay for it all. It wants a good deal more than this done by way of full discussion."

The Resident Commissioner replied with the following comment

"An interesting report which I will discuss with you as the DLAS will be too occupied with general administrative problems, policy, etc. to give much personal attention to actual execution of changes."

The DC also sent in his report of the meeting at Mogobane between the Director of Agriculture, the Chief and himself. The salient points of his report included:

1. "It was agreed that the existing system should continue for present i.e. land being farmed by Native Administration for benefit of the Tribe."

2. "To do this successfully, it is necessary for additional equipment to be obtained and the following are considered the minimum requirements: 20 oxen and trekgear, one plough and cultivator and a trailer."

3. "Mogobane School to have its plot to be run independently of the main scheme."

4. "It was not clear what funds were to be utilised to install the distributory irrigation furrows."

5. "It was emphasised that the success of the scheme relied almost entirely on the efficiency of the agriculture supervision."

The above matters later were discussed at a meeting with the Resident Commissioner who said that the furrows would be installed from the Colonial Development Fund grant of £5000.
The RAO was instructed to go through the Mogobane estimates with the Director of Agriculture after they had been revised and to submit them to the DC. The meeting was of the opinion that the Bamalete Tribe should not be required to pay the first instalment of the refund of the £2000 loan until two years after crop production had begun. The DC stated that if the refund instalments on the loan were suspended for 2 years, the oxen and trek gear, plough and cultivator could be purchased from (Tribal) Treasury Funds during the next financial year. The Resident Commissioner then instructed the DC to prepare and submit the estimates accordingly.

At the end of 1944 there was a meeting of the Tribal Agricultural Production Committee at which the following Minute was recorded:

"The Resident Commissioner has expressed the view that in a meeting His Honour had with the District Commissioner and the Chief it was felt that suspicion was fast disappearing and that the Tribe was beginning to take a real interest in what was happening."

The Agricultural Department published the following item in their 1944 Annual Report:

"Mogobane: The development of the irrigation scheme at Mogobane is not complete, but crop production is proceeding under a temporary system. Owing to the heavy rains early in the year flooding occurred and the potato and bean crops failed on this account. The maize crop yielded 309 bags. Sixty-two acres have been planted to wheat. The oziers and date palms are growing."

The Report omitted to mention that 257 bags of wheat and 5 bags of cowpeas had been harvested. The Resident Commissioner had the following comments to add to the above Annual Report which was sent to the High Commissioner:

"......notable progress has been made in stimulating the interest of the Native Authorities and in gaining their co-operation. The Principal Agricultural Officer,...... should, when adequate staff is obtained after the war, find the field ripe for development."

"Expectations of material progress at the Mogobane irrigation scheme were disappointed, but owing to the many difficulties encountered, not the least of which was shortage of staff, this was not surprising. One very satisfactory development can be reported, and that is the complete change of heart and outlook of the Bamalete towards the Scheme. They are now showing a keen interest in the project into which the DC has successfully drawn them."
In January, 1945, the Director of Agriculture went on another familiarization tour of the country, meeting with each of the tribal chiefs. In his memo to the Government Secretary following the tour he mentioned that, "By various chiefs I was counselled to have patience and proceed slowly and to make certain that my desires or requirements were fully understood before misjudging. Such helpful advice was welcomed." He went on to discuss the Mogobane Irrigation Scheme and strongly recommended that the annual estimates for the scheme should be drawn up by his Department.

The Government Secretary passed on the memo to the Resident Commissioner, adding the comment, "The DC cannot be excluded from control. If any items appear in the Bamalete Tribal Estimates in respect of Mogobane it is the DC's right to know what is going on. If the Agricultural Department runs the Scheme independently it is nevertheless in his District. Dual control is unsatisfactory in many ways but that is one of the features of native administration."

The Resident Commissioner suggested the Director of Agriculture familiarise himself with the history of the Mogobane Scheme, and added,

"It is essential that the Bamalete should be made to feel that they are helping to run the Scheme - that they are, in fact, doing so, under the expert guidance of the Director of Agriculture and his officers. They prepare their estimates and they must be taught to spend their money properly. Similarly, the original loan of £2000 was made to the Bamalete Tribe. While the operations to be financed by this amount were being carried out the CAO was to control the spending of it in consultation with the DC and Chief. That consultation was not at all good as subsequent events proved. The fact is that the DC and Chief on the one hand and the Agricultural Department on the other must work in the closest collaboration."

The Director of Agriculture accepted the position and agreed that his department should participate in the preparation of the estimates.
It was found that to clear the balance of 135 acres for irrigation more funds would be required; it was also realised that the Irrigation Scheme was not sufficiently developed to allow the Tribe to start repayment of the £2000 loan. Therefore the Government sent a detailed memo\(^1\) to the High Commission giving a broad outline of the history of the Scheme to date, detailing the difficulties and set-backs experienced in turning the Scheme into a viable proposition. He then requested that the first repayment of the loan by the Tribe be deferred and that a grant be made for the completion of the Scheme.

The High Commissioner supported the proposals and forwarded them to London for ratification which was duly given with the proviso that the balance of the £2000 loan first be utilised in the clearing operations. On the 27th of March, 1945 the High Commissioner’s office telegraphed acceptance of the proposals to the Government Secretary. However, it was not till two months later that the Government Secretary realised that the telegram had not been answered, neither had the Director of Agriculture, the Director of Public Works nor the DC been advised of its contents. Telegrams were immediately despatched to the people concerned advising them of the grant and that the expenditure was to be under the joint control of the Director of Agriculture and the Director of Public Works.

At the beginning of March the DC submitted the Revised Estimates for 1944/45 and the Estimates for 1945/46 to the Director of Agriculture. In summary they were as follows:

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<td>Wages and Production Costs</td>
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After discussion they were accepted and forwarded to the Government Secretary with the following memo by the Director of Agriculture:

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\(^1\)Refer to Appendix 3 for full text of the memo.
Herewith Revised Estimates of Mogobane Irrigation Scheme submitted by the District Commissioner, Gaborones, after discussion here on the 26th February with him and the Agricultural Officer concerned. As will be realised, with the water in the Mogobane dam being below the level of the temporary outlet during the past summer for an appreciable period just when it was most badly needed, all estimates of revenue to date bear no relation to the anticipation. In the circumstances, in so far as the revenue is concerned, the figures possess token value only. The present estimates may also be thrown overboard by the unprecedented rains - according to reports - last weekend.

Meanwhile the poplar plantation had been slowly developing since its inception in 1940 when 10 acres of marginal land not suitable for irrigation next to the Irrigation Scheme had been allocated by the Tribe and fenced in. By March 1945 about 6 acres had been planted and were growing well, but the Tribe had shown little interest in the plantation and there were complaints about the Tribe's lack of co-operation in tending to the weeds, clearing the bush, etc. The Forestry Officer brought pressure to bear on the Chief in having it weeded and, after some difficulty, succeeded. At the same time he tried to persuade the Chief to demarcate another 50 acres for plantation development as the Tribe would earn good revenue from the plantation and also obtain poles for hut construction. The Chief agreed in principle but did not want to make a final decision until after seeing the proposed boundaries. Before the meeting took place the Forestry Officer sent a memorandum to the DC justifying the expansion of the plantation.

Knowing Bydendyk to be strongly against any extension of the plantation, the DC sent him a copy of the Forestry Officer's memo and asked for comments. His comments were soon forthcoming and openly questioned the basic policy and priorities of the proposals. Basically he questioned whether the Tribe, with a great land shortage (both grazing and arable), should have marginal land developed for forestry rather than for fodder crops. The comments were passed on to the Forestry Officer just before the planned meeting at Mogobane to demarcate the 50 acre extension.

The meeting took place with the Chief, the young Chief-Designate (Mokgosi), the DC, Forestry Officer, the RAO and Bydendyk being present.
After a long discussion the Acting Chief and Mokgosi came to the conclusion that they could not agree to the proposed extension on the grounds that the Tribe was already very short of grazing land; the Irrigation Scheme had absorbed 300 acres of grazing and arable land and it would not be in the interests of the tribe to reduce the area available to communal grazing by a further 50 acres for the poplar plantation extension.

It was pointed out that the land the Forestry Officer had in mind was unfit for grazing unless it were cleared, and unsuitable for crop production because it was subject to periodical inundation by flood water.

The Acting Chief and Mokgosi, however, maintained that the land could be cleared and utilised to much better advantage by the growing of fodder crops and requested that this matter receive the attention of the Agricultural Department.

The DC and Forestry Officer noted the close similarity of the arguments expressed by the Acting Chief and Mokgosi to those in Bydendyk's letter. A detailed report was made on the matter to the Government Secretary and in due course Bydendyk was carpeted for "disloyalty to Government and his Department for suggesting to the Native Authority a policy which is in conflict with that approved by Government." However, Bydendyk's influence remained and for the next two years the Tribe refused to allow any further extension of the poplar plantation.

The 1944/45 rainy season was proving to be a poor one and caused some concern. In December there was only enough water to irrigate 10 acres and by February there was no water left for irrigation. However, good rains fell shortly thereafter filling the dam and fortunately the crops were not seriously affected by the drought.

By October the Director of Public Works reported that the PWD had cleared 135 acres of bush at a cost of only £335 from the allocation of £1,460, leaving a balance of £1,125 which was to be used for clearing and levelling under the supervision of Bydendyk. Most of the canal system was completed and the Director estimated that "large area should be under production this season". The Resident Commissioner expressed his appreciation of the speed, efficiency and savings affected by the PWD's work at Mogobane.

In the middle of the clearing operation a South African soil expert was engaged to make a detailed study of all the soils in the irrigable area and to make recommendations concerning their use. Several months later he submitted a very detailed technical
report but it mainly concerned analyses and contained few recommendations. He stated that 700 acres were suitable for irrigation but both the loam and clayey soils would need to have fertilizers added.

It was found that cattle were causing serious damage to the main canal's lining and the Director of Public Works suggested that the whole area should be fenced, particularly as crops were about to be planted. He estimated that the cost would be £450. The suggestion was not taken up for several months and when it finally was undertaken the Principal Agricultural Officer found himself having to erect it as "none of the staff know the correct procedure".

The Director of Agriculture's Annual Report for 1945 stated that "For various reasons work on the Mogobane Scheme was held up but towards the end of 1945 further development work was undertaken. Forty acres are now developed and planted to maize and a further twenty acres are under development. It is hoped to have the whole of the second area, i.e. the 160 acres cleared, levelled and fully developed by May 1946."

The Mogobane Irrigation Scheme's financial statement for 1944/45 was put before the Tribal Agricultural Production Committee, and it showed an excess of expenditure over revenue of £431. In explanation the Principal Agricultural Officer stated that, "The potential of Mogobane's production depends on the arrival of the heavy tractor (ordered two years ago)." After further discussions the Committee recorded, "that work on the Irrigation Scheme is satisfactory."

Towards the end of February, 1946 the DC sent a telegram to the Resident Commissioner requesting an urgent meeting with the Director of Agriculture, the Principal Agricultural Officer, the Chief and himself, "to consider present situation and make plans for future development. Imperative meeting takes place earliest."

The Director of Agriculture replied that the Government Officers were all very busy and that there was "no immediate need for any meeting other than to promote the interest of the Tribe, Chief, etc. etc., in the scheme...... It may be that a meeting is warranted, but until the purpose of the meeting is defined there appears no urgent need other than as indicated above." During the next two years there is no record of any meeting having been convened to discuss the future development of the Scheme. All business was done by correspondence between the Government
Officers involved. The Tribe was not brought into the discussion until decisions had been made at a higher level.

In the middle of February, 1946, Bydendyk found himself in trouble again with his senior officers. This time he had gone off for a week's leave (and taken two days extra). During his absence the Dairy Officer in Lobatse, Jack Chase, took over his duties. Chase discovered that there were no records of equipment on the site and investigations revealed that a certain amount was unaccounted for. On his return, Bydendyk was confronted with the matter but his replies were unsatisfactory and he finally was dismissed from Government service.

After Bydendyk's dismissal .... Titlestad was appointed his successor but he could not take up the appointment for three months. In the meantime the Principal Agricultural Officer agreed to supervise the Scheme in the absence of any AO but he found that he had taken on more than he realised as he had to act as foreman for the staff, mechanic to repair the machinery and fencer to repair damaged fencing and erect new fencing. It would seem that he was rather daunted by the amount of work involved and the lack of skilled and semi-skilled personnel in the Department. He wrote to the Director of Agriculture suggesting that all the projects of the Department "be defined" and that attention be concentrated on these and, in consequence, the dropping of other "superfluous" projects. There is no record of this matter being taken up by the Director of Agriculture.

In September, 1946, the DC circulated the statement of Revenue and Expenditure of the Scheme covering the period 1st July 1945 to 30th June 1946 which is shown below in summary:

<table>
<thead>
<tr>
<th>Revenue</th>
<th>Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>£202.6.2</td>
<td>£454.19.11</td>
</tr>
</tbody>
</table>

Note 1. Estimated yield from dry maize crop when threshed 300 bags value £525.

2. In addition to the above ordinary expenditure £31.11.10 was spent on equipment and £230 on the purchase of 20 oxen.

In the memo circulated with the above Revenue and Expenditure Account the DC stated, "Great credit is due to the Principal Agricultural Officer and Mr. Chase, Dairy Officer, for the present satisfactory state of affairs at Mogobane and I think the Bamalete should at last begin to realize the value of the Irrigation Scheme."
The DC then wrote to the Government Secretary requesting a further postponement of repayment of the £2000 loan for an additional two years. He showed that from 1944 to 1946 the Tribe had subsidised the scheme by £757. "For a small Tribe such as the Bamalete this represents a very large outlay and as a result the Tribe has been obliged to abandon or postpone other schemes of development, with the inevitable further result of increasing the Tribes feeling against the scheme. The present position at Mogobane shows a vast improvement".

The Principal Agricultural Officer supported the proposed deferred payment of the loan and suggested that the reasonable profit expected on the coming season's harvests should be utilised for purchasing much needed equipment to "enable immediate expansion to take place at a considerable lower cost of production.... Lack of implements for planting, cultivating and harvesting have been (the Department of Agriculture's) chief concern". To which the Director of Agriculture added, "Progress in respect of development and production has been seriously handicapped by the personnel, and it would be unwise and unfair to the tribe concerned if charged with additional cost resulting therefrom. i.e. when not their fault."

Before processing the application for deferral of the loan repayments (which ultimately was accepted by the Dominion's Office, London) the Resident Commissioner visited Mogobane where he was disturbed at the very uneven germination and growth of the wheat crop. The Director of Agriculture was asked to report on the reason for this. The Director visited the Scheme at the first opportunity and then replied that the lands were improperly prepared and in some high places the rich top soil had been removed to fill the hollows. In spite of the poor conditions of the wheat he considered it to be satisfactory and, "provided growth continue normally, some 400 to 500 bags of wheat should be harvested from the 87 acres now under wheat, plus the Basin area."

He reported that there were, in addition to the 87 acres under wheat, 1 1/3 acres under peas and 17 acres under Basin Irrigation Experiment, that an area of 60 acres was in preparation for sowing with maize, approximating therefore to 170 acres. This constituted practically the whole of the "Second Stage" which had
now been fenced. Beyond clearing no steps had yet been taken in respect of the "First Stage" area.

The Director of Agriculture noted that the wages of the workers consisted only of cash and no food. One of the workers who had been there for 4 years complained that 1/9d. per day was not enough to support himself and his family which included four children. The Director of Agriculture recommended to the DC that rations consisting of meal and meat to the equivalent of 3d. per day be given to the labourer. He concluded his Report to the Resident Commissioner by saying,

"I was glad to feel, as a result of my visit, that the Mogobane Scheme is now definitely on the up-grade and being conducted in a way to command the confidence of the Chief of the Bamalete. The credit it is realised is due initially to Mr. Chase having been employed there and tackling the work in a vigorous businesslike manner, his footsteps being followed by his successor, Mr. Titlestad. This officer is methodically minded, appreciates the value of records and sketches and, it is believed, well fitted for the post he occupies."

Titlestad was to prove to be a persevering Agricultural Officer who remained with the Scheme for the next 12 years.

At about this time (September 1946) considerable concern was being expressed at the difficulty in obtaining dependable Tribal labour for the Scheme. The possibility of employing labourers from another tribe was rejected for tribal reasons. An alternative suggestion, which received backing from the Resident Commissioner, was for prison labour to be employed on the farm but this proposal was turned down by the High Commissioner who said,

"It would be inadvisable to establish a Detention Camp at Mogobane before we are quite sure that members of the Tribe will not take up plots. The introduction of prison labour might give a wrong impression to the people and thus militate against the chances of taking up plots. As it is, it will take four to five years to prove the Scheme and to convince the doubting Bamalete that they can raise two crops each year."

1See map of site in Appendix 4.
"The District Commissioner at Gaborones should be asked whether there appears to be any interest in the Irrigation Scheme apart from its usefulness as a Revenue producing project for the Native Administration. It is just as well for Government's idea on the subject to be conveyed to the Tribe, i.e. that the Scheme is for the advancement of production by members of the Tribe themselves.

The DC replied that,

"Until the Scheme was properly laid out, little interest was shown in it by members of the Tribe. In spite of efforts to induce them to interest themselves in it, there was a tendency to regard it as a Government project. It was not even regarded as a useful revenue producing scheme as for the first two years after the Tribe assumed financial responsibility, expenditure exceeded revenue."

"Latterly there has been an awakening of interest, and no opportunity is lost of continuing to impress on the Chief and Tribe the great possibilities of the Scheme and the advantages to be gained from it."

The DC then prepared the revised Estimates for 1946/47 and the Estimates for 1947/48 in conjunction with the Tribe and the Agricultural Department. These he sent to the Government Secretary with a covering memo which read in part,

"The Estimates for 1947/48 show an appreciable increase due to the development of the scheme and although Capital Expenditure will amount to £950, it is estimated that there will be a surplus of revenue over expenditure of £300. Whether the figure of estimated revenue will be reached will naturally depend on the success of the crops and the market prices, and it is very necessary to allow a margin to cover unforeseen contingencies."

**REVISED ESTIMATES: REVENUE AND EXPENDITURE**

**1946-47**

**EXPENDITURE**

Wages, crop production, repairs, contingencies

£1125

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1 Refer to Appendix 4 for details of the expenditure
Capital Expenditure: Building and Equipment

\[
\begin{array}{lcr}
\text{410} & \hline \\
\end{array}
\]
\[\text{\textbf{£1535}}\]

\[
\begin{array}{lcr}
\text{REVENUE} & \hline \\
\end{array}
\]

Sale of crops

\[\text{\textbf{£1230}}\]

\[
\begin{array}{lcr}
\text{ESTIMATES: REVENUE AND EXPENDITURE} & \hline \\
\end{array}
\]

\[
\begin{array}{lcr}
1947-48 & \hline \\
\end{array}
\]

\[
\begin{array}{lcr}
\text{EXPENDITURE} & \hline \\
\end{array}
\]

Recurrent Expenditure

\[\text{\textbf{£2350}}\]

Capital Expenditure: Buildings and Equipment

\[\text{\textbf{950}}\]

\[\text{\textbf{£3300}}\]

\[
\begin{array}{lcr}
\text{REVENUE} & \hline \\
\end{array}
\]

Sale of crops

\[\text{\textbf{£3600}}\]

The Acting Resident Commissioner considered the 1947/48 Estimates "too extravagant" and asked the Director of Agriculture for his comments. The Director's reply is given below:

Ref. LA,334/111
EP/MGC.

13th December, 1946

The Government Secretary,

copy to P.A.O.

\[
\begin{array}{lcr}
\text{Subject: Bamalete Native Treasury Estimates -} & \hline \\
\text{Mogobane Irrigation Scheme} & \hline \\
\end{array}
\]

Reference: Page 481 of your file No. 4041/1 11

With reference to His Honour’s instructions, it should be borne in mind that production under this scheme is only now commencing, the experience of most irrigation schemes being that a period of some four to five or more years must elapse before full production is reached. In this case, as you are aware, the attainment of this object was seriously retarded by the incompetency of and the wrong advice given by the officer in charge at a vulnerable period of development, viz. Mr. P.A. Bydendyk. Had the present personnel been in charge from the commencement, the scheme would now be in full production.
2. Concerning the estimates, it is not considered that they are excessive: the Scheme is very poorly supplied with equipment and for optimum production items additional to those given in the estimates now being considered will have to be provided. During the harvesting just completed the need was felt of a wheat harvester, selfbinder or reaper, in descending order of value and cost. The area to be planted with wheat in the future would obviously justify the capital expenditure involved in the purchase of this equipment, facilitating the harvesting. For this reason the wheat was cut by a mower, which must have resulted in appreciable waste.

3. The revenue also is conservative and should be exceeded provided the present price remains. It is based, in so far as the wheat is concerned, on the return for the current season. When the soil is properly ameliorated the yield will be higher than the 5 bags per acre obtained this season.

4. With regard to the tractor, unless the assurance can be given that the Public Works Department tractor will be available when desired, the continuance of the present arrangement cannot be recommended, i.e. with the area under cultivation the Scheme will be justified in having its own tractor. At the present time e.g. a tractor is urgently needed to prepare the land for planting before the end of the current month, but the tractor is not now at Mogobane and cannot be obtained, the road to Kanye being considered to be preferent.

5. Concerning the "contingencies £250", this is less than 10% of the expenditure and, since this is for an agricultural project, the allowance cannot be considered to be high. In farming it is the unexpected that cannot be provided for that happens commonly and for which provision should thus be made.

6. The capital expenditure - also very necessary for any permanent production - to provide quarters for the labourers, must be available. Experience shows that, if success is to be attained, any agricultural operations have to be performed when the conditions are favourable and cannot be delayed or great losses are likely to ensue; hence the labour required for Mogobane must be housed at Mogobane, if production is to be at the optimum. The necessity for overalls, gum boots, etc. for the irrigators needs no comment; the Director of Medical Services has unfortunately established that the labourers at Mogobane are infested with bilharzia.

1 Evidently the tractor was being used by the PWD in the construction of the new road to Kanye.
7. The actual expenditure may prove to be less than the estimates while the revenue should, if the conditions are right, exceed the estimates.

(signed)

DIRECTOR OF LIVESTOCK & AGR. SERVICES
A new Resident Commissioner took office at this stage (November, 1946) and when he had studied the relevant documents he instructed the Government Secretary to advise the DC that "the position of this (Bamalete) Treasury seems to His Honour a most precarious one. It can be wrecked by failure to produce a crop at Mogobane and the proposed expenditure, not only at Mogobane, but in other directions, is most alarming. It should be borne in mind that a loan of £2000 owing to the Government is still outstanding. His Honour considers that unless we go carefully, Mogobane will prove too heavy a burden for the Bamalete."

In his Annual Report for 1946, the DC stated that, "considerable development has taken place. The Scheme now covers a developed area of approximately 200 acres as compared with 40 acres at the beginning of the year. Owing to the acute shortage of food in the area, £200 of green maize was sold to the Tribe. 276 bags of maize were reaped and sold to the tribesmen.

"During the winter an area of 87½ acres was planted under wheat and yielded 375 bags. The low yield may be attributed to the fact that a large part of this area is on old lands which have been ploughed for over 20 years and which in some cases were worn out. Severe losses were also caused by birds."

"A considerable amount of investigation still requires to be done to improve production on the Scheme but its future appears, nevertheless, to be assured. The Chief and members of the tribe are no longer opposed to the Scheme, and are taking an increasing interest in it, particularly as it has been the means of helping the tribe over a period of severe food shortage. Moreover from the economic point of view, there is every prospect that the Scheme will not only be self-supporting, but that it will provide funds for further agricultural development in the district."

Early in the New Year of 1947 the new Resident Commissioner visited the Kanye and Mogobane irrigation schemes and on his return he sent the following memo to the Government Secretary:

"I saw and admired the dams at Kanye and Mogobane. They are splendid affairs and the schemes which depend on them are run by devoted and hard-working men. But it occurred to me when looking at them and on having the schemes explained to me, that they are evolving in vacuo. As far as I can ascertain, each scheme employs..."
a certain number of African labourers and pays dividends to the
Native Treasury. But, there does not seem to me to be any direct
or even indirect benefit to the individual native who helped to
build them. No individual native cultivator irrigates his land
from them, nor is such a development likely in the near future.

The indirect benefit which I should expect to accrue from a scheme
of this nature would be that the native on seeing the splendid
results achieved by the dam in the matter of crops, would
immediately go home and build a dam himself. But these projects
are so vast that to expect a native to be inspired by them would
be like expecting a middle west farmer to improve his housing by
looking at the Empire State Building! He would simply shrug his
shoulders and realise that the thing is beyond his capacity.

I should therefore like your comments on how these magnificent
works could be put to more direct practical use as regards
instructing the native and bringing him into some irrigation scheme
himself.

The last paragraph of the Resident Commissioner's memo brought
forward only one practical suggestion, that of having a "Course of
Instruction on Irrigation" at Mogobane which would be given to
tribesmen from anywhere in the country. Letters were sent to all
the DC's enquiring about the possibility of candidates from their
areas but the only reply came from one DC who produced two "most
unsuitable" candidates.

Both the Director of Agriculture and the Principal Agricultural
Officer were strongly opposed both to the proposed Course of
Instruction and to the allocation of plots to individual tribesmen.
They wrote to the Government Secretary as follows:

"(1) that production farming is a new art in so far as the
Bechuanaland Protectorate is concerned and much demonstration and
experience would be necessary before a success could be made of an
area sav of 3 morgen\textsuperscript{1} under irrigation by the African;"

"(2) it is an accepted economic theorem that the surplus
production or output of any farming project is greater if
conducted as one organisation rather than as a number of small
farms. At the present time the need in this particular Reserve is
for the increase of food production, particularly in respect of the

\textsuperscript{1} 1 morgen = 2 1/8 acres.
insufficient area available for arable lands (as well as veld for grazing);

"(3) to allocate the area to individual Africans would deprive the Tribe of a source of revenue sorely needed at the present stage, both for the development of the Reserve and to repay the loan necessary for the development of this scheme;"

"(4) only a fraction of the people could be allocated irrigation holdings and, as indicated above, for many years to come this could not be recommended with any certainty of sufficient knowledge and experience to permit of successful crop production under irrigation."

The Director of Agriculture admitted that he had favoured the proposal when he first took up his post in 1944 but "further observations in the Protectorate have justified a reversal of my views on this matter."

The Resident Commissioner did not fully agree with the Director of Agriculture and considered that a start in individual participation would have to be made sometime. In a memo to the Director of Agriculture he asked,

"Are we after production or instruction with these dams? It is true that this year the prime desideratum is production but in a good year would it not be better to ignore immediate production and lay foundations for greater production in the future? Is revenue sorely needed just now? and are not the ultimate possibilities also to be considered? I agree that for the present we should put the scheme on the ice, since we must not interrupt any productive efforts, but it must not be shelved permanently as suggested."

The Director of Agriculture replied with the following memo:

Ref. LA334 111
EP/OGC

17th March, 1947.

The Government Secretary,

copy to P.A.O. Mahalapye

Subject: Mogobane Irrigation Scheme

Reference: Page 52 of your file No. 1042/5 attached

As stated the position is that, if production is the primary object, irrigation should be conducted on a large scale basis, since irrigation is a new art in the Bechuanaland Protectorate and
practically unknown to the African, appreciable time should elapse before individual holdings could be recommended.

2. In respect of the revenue-producing aspect two factors are of importance:

(a) owing to the unfortunate start made due to various causes, the capital to be paid off through production is appreciable and £2000 had to be loaned to the Bamalete for the purpose of development. The condition of this loan was that it be repaid over a period of ten years. It is felt that, until repayment of this loan is well on its way, all efforts must be directed towards maximum production. Any proposal towards settlement would be unfair to the Tribe and, as previously indicated, until production possibilities of valuable food on a large scale have been demonstrated, settlement could not be recommended by the Department;

(b) The acquisition of confidence in the possibilities of irrigation is still a primary object in so far as this Scheme is concerned. Further, the Scheme has been and still is handicapped by an insufficiency of equipment for the acquirement of which the necessary capital has hitherto not been available. Revenue, therefore, must for some time be devoted to the purchase of the necessary equipment to permit of the production being as efficient as possible. Furthermore, the settlement would add several hundred oxen to the animals on the already overgrazed adjoining veld.

3. Replying to the queries seriatim

(a) Until by good farming the capital costs are well on the way to liquidation, it is felt that individual farming or settlement could not be recommended. As previously indicated irrigation farming requires skill and the Bechuanaland Protectorate will be unable to rely on the tradition of generations of irrigation farming. While Fort Cox in the Union teaches irrigation farming, the possession of a Fort Cox Diploma could hardly be required of the candidates for the Mogobane irrigation holdings when allocated. If these prospective holders commence without previous experience failure is assured. In the circumstances it is recommended that if and when facilities for training are to be offered, prospective applicants for holdings acquire experience at Mogobane for some two years before being allocated areas to cultivate.
(b) as indicated above production is necessary both in respect of the present emergency food shortages as well as to pay off the outstanding amount on this Scheme. The subdivision of the Irrigation Scheme into 3 or 4 acre plots might benefit some fifty to sixty individuals at the expense of the Tribe. A high percentage of failures is anticipated; the Tribe would thus derive little benefit from the Scheme after having sacrificed over 300 acres of the best grazing in the new Reserve;

(c) it is recommended that the view of the District Commissioner concerned be obtained. It is felt that, if the Tribe realised what the settlement scheme entails from the various angles, very strong opposition might be encountered;

(d) the supervision of the activities of plot holders would necessitate an increase in staff.

(signed)

DIRECTOR OF LIVESTOCK AND AGRICULTURAL SERVICES

The Government Secretary commented that "the original scheme, which was accepted by the Bamalete, provided for 500 x 1 acre plots; a few of these were to be demonstration plots and the remainder were to be taken up by the people. Today the Bamalete appear to be completely out of it."

The Resident Commissioner then spelt out to the Government Secretary what was to be his policy with regard to the Irrigation Scheme and other "schemes" in the Protectorate. The text is given below:

"G.S.

I discussed this matter with Mr. Lawrenson (DC). It appears that the Bamalete are, and always have been, suspicious of the scheme, thinking that it is a lever for gradual encroachment on their land, which is nonsense. Nevertheless I feel that the scheme has very little value in the long run unless it induces the local people to better methods of cultivation. As a revenue/food producing scheme it is no doubt a very sound proposition, especially at the present time when we need all the food we can get. But as against the revenue aspect must be set the fact that we are paying for and tying down a valuable officer who might be employed in spreading the light in a wider sphere.

You are aware that in a country with comparatively elementary conditions of life, I am against "schemes" that are not calculated quickly to improve the general condition of the bulk of
the inhabitants. While I appreciate that all such schemes have a certain value, in that they give us information, I feel that conditions for the general run of the population are so bad that the people are in no position to use such information. I should prefer that our men, rather than be anchored to a place like Mogobane, (essentially a specialist scheme) should be on constant tour throughout the country, in close collaboration with, if not in subordination to, the District Administration, improving water supplies, demonstrating better farming and animal husbandry methods to individuals, and so on. Unless therefore the Mogobane scheme is calculated to induce the Bamalete in the long run to imitate Mr. Titlestad, I am of the view that an officer of his abilities would be better employed in a peripatetic, instructional role.

Mogobane is in its infancy and I am prepared to let it run for a few years longer. But, as I have minuted elsewhere it is unlikely that I shall long permit two officers to run Kanye and Mogobane, and if, as I hope, we get a track smoothed down between the two places, Mr. Titlestad will ultimately have to be prepared to run both,

A.S. 5/4/47

The Government Secretary circulated the contents of the above memo to the Director of Agriculture and the Principal Agricultural Officer but there is no record of its having been sent to the DC.

Two months later on instruction from the Resident Commissioner the Government Secretary sent the following memo to the Director of Agriculture to be used as a basis for proposals and discussions at the forthcoming African Advisory Council.

"IRRIGATION AT KANYE AND MOGOBANE"

The irrigation scheme at Mogobane and Kanye have been running for some years. The following conclusions can now be drawn:

The total area under cultivation at Kanye is 52 acres and Mogobane 340 acres.

Only one or two acres could be allocated to each farmer; and, unless he is a skilled and experienced man in the difficult are of irrigation farming, he would be unable to make good use of the plot.

Until a number of African farmers acquire the skill - which they will do in the years to come - control by Government and the Native Administrations is essential.
At present the Irrigation schemes are run by the Agricultural Department. The profits go to the Bangwaketse and Bamalete Tribal Treasuries. We are now seeking the best way of handing over the running of the irrigation plots to the Bangwaketse and Bamalete Tribal Administrations who must assume all expenses.

The Government Secretary suggested that the Director of Agriculture study the original proposals under which the Tribe accepted the Scheme. However, the Director of Agriculture was not prepared to go along with the Resident Commissioner's proposals and replied as follows:

Subject: Irrigation: Mogobane & Kanye Schemes

With reference to the request to submit proposals for discussion at the forthcoming African Advisory Council meeting, as previously stated, the Department considers it unwise to allot separate holdings to Africans on either of those two schemes, until much greater knowledge of and familiarity with irrigation farming in the Bechuanaland Protectorate has been gained. As previously stated, irrigation is a new art in so far as the Bechuanaland Protectorate is concerned and the experience the world over has fully demonstrated that failure can be expected unless knowledge, skill and experience are possessed by the individual concerned.

2. In Southern Africa in the Union, it has been considered necessary, — in a country that has been engaged in irrigation for over a century, — for the would-be irrigation farmers on Government schemes (European) to work as probationers under full direction and control in respect of their farming operations before they can be allotted plots.

3. In our other neighbour, namely Southern Rhodesia, farm training for Africans desiring to take up holdings is being provided, and the principle has been adopted that plots will only be alienated to Africans who had some farming experience or tuition. During the training, the tuition is free, but a charge of £3 is made to cover the cost of board and lodgings for the 10 months period of the course on the assumption that the students during training would produce the bulk of their own grain requirements.
4. Experience of the Department at both Kanye and Mogobane is such that it is unable to recommend irrigation by individual farmers for some years to come. If some training scheme could be adopted in the echuanal and Protectorate comparable to that in the neighbouring territories, the period would be shortened.

5. In any case, until much more experience of irrigation farming has been gained in the Protectorate, land in neither of these two Schemes should be allotted to Africans, but each should be worked collectively by the Tribe with paid labour, until the operators have gained sufficient knowledge and experience of irrigation farming.

6. In respect of the Mogobane Scheme, until the land commanded by the Dam has all been developed, i.e. levelled, planted under crop etc, the services of the Agricultural and Livestock Officer in charge could hardly legitimately be diverted elsewhere.

7. When the irrigable land has all been developed an appreciable percentage, say, fifty per cent or more of the time of the Agricultural and Livestock Officer should be available for advisory service in the relative Reserve, though smaller and in the case of the Kanye Dam, since the area of Mogobane is so much larger than the Bathoen Dam scheme.

8. As indicated above the Resident Commissioner's proposal hardly meets the views of the Department.

9. If the principles elucidated above are approved by you, the note for presentation to the African Advisory Council could be drafted in this Office.

(signed)

DIRECTOR OF LIVESTOCK AND AGRICULTURAL SERVICES

copies to: The Principal Agricultural Officer
The Principal Veterinary Officer
The Agricultural and Livestock Officer, Kanye.

Two weeks later, the Director of Agriculture modified his attitude to a certain extent and presented some notes on the Mogobane Scheme for discussion at the next African Advisory Council Meeting.

The notes gave details of the crops harvested over the past two seasons, and it was noted that only 200 of the 300 acres were prepared for irrigation. The memo ended with the following four points:

1. Until the full three hundred acres has been developed in the so-called "Second Stage Area", it is considered that the Scheme should be continued as at present i.e. for the purpose of enabling the Tribe to pay off the loan of some £2000 incurred in the
establishment of the Scheme.

2. When this area has been developed and more experience of irrigation farming has been gained by the Bamalete, consideration could be given to the Tribe running the Scheme collectively, and gradually allotting small areas to be leased to the Tribesmen, depending on the conditions, competency, implements, etc., being necessary qualifications for eligibility.

3. The equipment at present available at Mogobane is wholly insufficient for most efficient production.

4. Now that the revenue is exceeding the expenditure annually by an appreciable amount, the equipment should be brought up to the requirement.

(Signed)

DIRECTOR OF LIVESTOCK AND AGRICULTURAL SERVICES
At this stage a closer look will be taken at Titlestad's management during the 12 years he was the AO in charge of the Scheme.

As mentioned earlier, in May 1946 Titlestad was posted as the AO to the Scheme where he was to remain till 1957. He was a Norwegian who had spent some years working on a farm in Zululand where he became fluent in the language before going to Botswana to join the Agricultural Department. He was married and had two children during his stay at Mogobane.

When he took up the post at Mogobane he found that the people could understand his Zulu with a result that he never learned to speak Setswana although he could understand it. The only time he spoke English at work was to Moganu, the Agricultural Demonstrator, with whom he was to develop a close working relationship, each having great respect for the other. The workers gave Titlestad the name of "Dingaan", who was a famous Zulu Chief.

He had a great deal of patience and an easy going manner with the farm workers and during the 12 years he was there, there was no significant dispute with the workers, nor did he find them to be "unreliable" or "lazy" as they were to be referred to by some of the subsequent Agricultural Officers stationed at the Scheme.

Titlestad made a point of employing handicapped people on the Scheme as they had even less chance of obtaining normal employment than the rest of the Tribe. Among those he employed several were lame, some were T.B. sufferers and one was deaf and dumb.

In 1946 Titlestad, using his personal funds, sent a Tribesman to a South African agricultural school to study for a diploma with the ultimate objective that he become Moganu's assistant. However, when he returned on completion of his course two years later he went to work for the Department of Agriculture which had "better prospects."

He evolved an unusual system of piece work which proved to be both very popular and practical. First thing every morning he and Moganu would discuss the work for that day and reach an agreement on the jobs to be completed that day. Moganu would then allocate the work amongst the staff, stating that when so many plots had been irrigated or so much land ploughed the workers on that job may stop work for the day. This resulted in the staff working at a fast pace to finish the day's job allocation early so as to allow them to attend to personal matters such as tending to their own
agricultural lands and livestock or going to a traditional beer party. There were about 15 staff members in this category.

The other category of workers employed on the Scheme were occasional workers hired for specific jobs such as manuring, weeding, cultivating and harvesting. They were paid on a piece-work basis, e.g. 1/- per worker for each load of manure collected and unloaded, or 1/6 for each plot of wheat harvested. In some cases the occasional workers, usually women, brought their children along to work with them as a team when harvesting wheat, and in such instances a family could earn 15/- or more per day. At times there were up to 100 occasional workers employed.

All salaries and wages, with the exception of Titlestad's salary, were fixed and paid by the Tribe. Daily paid male labourers received 2/- per day when Titlestad started work at the Scheme and over the next 11 years this amount was raised to 3/- per day. Daily paid female labourers received only half the above amounts. After the first year's employment, the labourer would receive an increment of 3 pence per day. If a worker broke his service he would be re-employed at the commencing wage rate. No rations were issued and quarters were not provided.

After Titlestad had been on the Scheme for some time, it was found that a number of labourers were making complaints and false reports to the Chief about conditions on the Scheme. This caused considerable inconvenience as Titlestad and Maganu often had to travel 15 miles to the Chief at Ramotswa to sort these matters out. As a result of this, Maganu with Titlestad's agreement, formed a Workers' Committee to settle disputes and other labour problems that cropped up from time to time. Maganu considered it essential that if one group had a complaint the other two groups should also be involved in the discussion through the Committee which comprised of three men besides himself: the handyman, the irrigation foreman and a labourer. The handyman and irrigation foreman represented the men working under them while the labourer represented all the other labourers on the Scheme. Maganu made a point of reporting to Titlestad the results of the Committee meetings. Serious complaints could be passed on to the Chief by the Committee if it was considered necessary. The Committee worked very effectively until Maganu left the Scheme after which it was discontinued.

One tribeman was trained by Titlestad to service and maintain all the farm machinery and, when the tractor arrived, to be the tractor driver as well. He was well trained and took his work seriously.
During Titlestad's period of office at the Scheme there were few major breakdowns of machinery and equipment. He would allow no-one to touch "his" tractor except Titlestad and Maganu.

Titlestad also trained two foremen, one to be in charge of irrigation and the other to be in charge of the women whose main duties were seeding and harvesting.

About the time when the first crops were ready for harvesting there was a noticeable amount of theft of crops and on Maganu's advice Titlestad hired a number of guards to look after the crops, especially the green maize and tools which were inclined to disappear. The Chief warned that strong measures would be taken against those who stole the produce of the Tribe. However, green maize was too tempting for the small boys in the village and very soon a number were caught and presented to the Tribal Council which sentenced them to a thrashing by their parents in public. A few incidents like this soon cut down the theft of maize.

On another occasion about 50 half naked young men who were undergoing initiation in the nearby hills, swept down on the farm causing the women labourers to flee and helped themselves freely to the green maize crop. Titlestad arrived on the scene with a shotgun which he fired into the air. This caused some to drop to the ground in terror while others fled, including one who ran 15 miles to Ramotswa to report to the Chief that some of the boys had been killed (he saw them fall to the ground). The Chief hurried to the Scheme but roared with laughter when he found out what had happened. He warned the initiates that they deserved the fright as they were "stealing tribal money".

One morning it was noticed that some freshly harvested shocks of wheat had been removed from the fields and the thieves had left a trail of wheat stalks all the way to their huts where a number of women were found threshing it. The women were surrounded by the farm labourers and carted off to the Tribal Council which sentenced them to a thrashing. One of the women, a relative of the Chief, was given a few extra lashes as "she should have known better than to act as she did". Thereafter the theft of crops became negligible.

Titlestad asked the Chief to speak to the people about stealing the drinking water from a tank outside his farmhouse. The drinking water was brought all the way from Lobatse as the local boreholes had a dangerously high level of fluoride. The Chief assembled the local population and said that he had given a gun
to Titlestad "to shoot anyone who stol his water" (the gun really was given to shoot birds) and thereafter no more water was stolen. Theft of other goods also diminished but on the rare occasions it occurred it was quickly and effectively dealt with, sometimes in a rather unconventional manner.

Once a number of picks and spades disappeared and, on the advice of Maganu, all the workers were told that unless the missing tools were returned within 24 hours the local witchdoctor would be called in to trace the culprit. The following day the missing tools reappeared in the tool shed.

On another occasion Titlestad found that a certain spanner was missing and he blamed Maganu for its loss as he was certain that Maganu was the last person to have used it. However, Maganu emphatically denied having used it and was most upset. The next morning Titlestad discovered the spanner in his truck - where he suddenly remembered he had left it - but he was too embarrassed to admit his mistake to Maganu so he contrived that the spanner be "found" in the storeroom. But before the spanner re-appeared Maganu approached Titlestad and told him that the previous evening he had gone to the local witchdoctor to find out what had happened to the spanner. The witchdoctor had thrown the bones and then said that someone had the spanner but was afraid to admit it but he would return the spanner soon. In due course the spanner turned up but Titlestad never had the courage to admit his guilt to Maganu.

Chief Mokgosi took a very active interest in agriculture and, with the guidance of Titlestad, gradually increased his own agricultural operations till he was employing over 200 people to harvest his crops. On the advice of Titlestad he purchased a tractor and other implements, which the Director of Agriculture was reported to be very much against as he considered that tractors were too expensive for Batswana farmers to use. Chief Mokgosi subsequently became the first Motswana Chief to become a Master Farmer.

During his first few months of working on the Scheme Titlestad experienced a number of misunderstandings with the staff with regard to their responsibilities, working hours and remuneration which caused him to draw up a comprehensive set of Rules and Regulations. These were delineated in detail for each category of employee and covered all aspects of their work, including conditions of employment such as increments, sick leave, special leave and protective clothing. Disputes of "complaints against
labourers" would be heard by a Board consisting of the Officer-in-Charge, the Agricultural Demonstrator and a Foreman. The Board had the power to dismiss labourers and/or to refer the case to the Tribal authorities for further action.

All the staff on the Scheme were called together and given a copy of the Rules and Regulations which Maganu explained in detail till they were clearly understood. Thereafter Titlestad experienced virtually no further misunderstandings with the staff and very few staff were dismissed during his twelve years at the Scheme.

Once there was a bit of difficulty between Titlestad and the Chief. Titlestad had employed a tractor driver who happened to be a member of the Watchtower sect and therefore refused to pay any taxes. The Chief told Titlestad to dismiss the individual which he failed to do immediately due to pressure of work in developing the agricultural extension service in the District. The Chief mistook this for flagrant refusal to obey the order and angry words were exchanged in Kgolata though within a short while the matter blew over - except for the tractor driver who lost his job and was sentenced to corporal punishment in the Chief's customary court. After receiving his punishment his raw and bleeding back was treated by Titlestad's wife.

There were a handful of members of the sect in Mogobane and the DC asked Titlestad to remove all Watchtower literature that came in the mail (Titlestad acted as unofficial Postmaster for the village) but he refused to be involved in such practices.

The Watchtower sect refused to recognise secular government and all that it entailed. The Colonial Government of this period actively encouraged the Chiefs to deal strongly with members of the sect who could be tried in the Chief's customary court for civil disobedience and sentenced to corporal punishment. The sect did not flourish.
CHAPTER 10
TITLESTAD (CONT'D)

Of all the crops grown on the Scheme, only three have been grown consistently from the beginning: maize, beans and sorghum, all of which are staple foods of the Tribe. Of the three maize proved to be the major income earner as irrigated maize can produce green maize up to six weeks before the local crops with a result that there always was a substantial demand which yielded good profits. The balance of the maize, usually about 600 bags, was sold locally or used to replenish the Tribal grain reserves in times of drought.

It was found that it did not pay to grow sorghum under irrigation but, being a tribal staple food, it was considered necessary to grow it under dryland conditions, not to replenish the Tribal reserves but rather for seed purposes and to be sold to the Tribe.

The largest crop of non-staple food grown on the Scheme was wheat which averaged about 400 bags per season but this crop was discontinued in the early sixties due to low yields. Up till then most of the crop was exported though some Mogobane villagers had developed a taste for it by preparing it in the form of a porridge.

A limited variety of vegetables such as cabbage, tomatoes, pumpkins, watermelons and onions were grown for selling in the nearby towns.

Potatoes were a crop which sometimes produced good yields and sometimes virtually nothing. The cause of the latter was usually frost (planted too late) or waterlogging (ground improperly levelled and prepared). It was not to be till 1975 that improved seed potato varieties and better prepared land allowed consistently successful crops to be harvested.

Onions could be a very favourable crop to grow as there were times when the prices became very high indeed, though at times the price could drop to below the cost of production. Titlestad grew the first crop of onions in 1954, a large variety which produced an excellent crop of almost 20 tons. All of the onions were sent to the Johannesburg Market but there were no buyers as the onions were "too large". Eventually they were sold to some mine compounds at a price just above cost. The following year a smaller variety was planted on a slightly greater acreage producing about 20 tons again. This time the market price was so low that costs again were barely covered.
Linseed was grown very profitably during the mid 50's but after several changes in Agricultural Officers the crop was discontinued. Lucerne was the only fodder crop to be grown successfully. When it was first planted, however, 80 acres were sown which proved to be a problem to harvest and market as there was not sufficient capital to buy a baler.

In 1956 an experimental 10 acre area was planted under cotton and the crop proved to be the best quality yet produced in Southern Africa. A premium price was paid for it and guarantees were given to purchase all cotton produced at a premium price provided the quality remained the same.

Cotton then was seen to be the crop which would make big profits for the Scheme and plans were made to have a large scale planting in the next season. The Tribesmen were encouraged to grow cotton on lands around the dam but not on the Scheme itself. They were promised good financial rewards.

However the next cotton harvest was a virtual total failure as there was a high infestation of boil worm and other pests. There was not sufficient capital to purchase dusting machines. After a lot of difficulty, DDT was purchased and had to be applied by dusting it on plants from perforated bags, but it was too late and too insufficient to save the crop.

The Tribesmen made no further attempts to grow cotton and all the cotton crops on the Scheme for the following three years failed due to insect, hail and waterlogging. Thereafter, cotton growing was discontinued.

Experimental orchards of date palm and oranges were planted in the early 1950's but they were neglected after Titlestad left and by 1975 only a few orange trees were left standing. Between the years after Titlestad left the Scheme in 1957 and when the Botswana Development Corporation took over in 1974, very little further experimentation is recorded as having been done.

Some two years before Titlestad arrived at the Scheme the Forestry Officer persuaded the Chief to allow a poplar plantation to be started on about 10 acres but this was not expanded for several years, as Bydendyk, the first Agricultural Officer at the Scheme, was implacably against the plantation and persuaded the Chief that the plantation would utilise valuable grazing land.
The Tribe began to appreciate the value of the poplar plantation after the first thinnings which produced straight poles that were ideal for hut building and cost only a couple of shillings each. The Chief allowed the plantation to be expanded a further 20 acres during Titlestad's period in office.

The Forestry Officer, who was based in Kanye, employed a permanent staff of about 5 tribesmen to maintain the poplar plantation. For reasons best known to himself he employed several tribesmen who had been fired by Titlestad and Maganu for being "lazy" workers on the Scheme. Modibedi, who was foreman in charge of the plantation, had a hand in the recruitment of these men with a result that a certain amount of bad feeling developed between Titlestad and Maganu on the one hand and Modibedi on the other.

In 1953 Titlestad received a letter advising him that responsibility for the plantation had been transferred from the Forestry Department to the Department of Agriculture. He immediately called a meeting of all the plantation workers and dismissed all but Modibedi, which caused a certain amount of consternation. Shortly after this Modibedi started acting strangely and he accused Maganu of witchcraft. He said Maganu was seen to spit a spell on his (Modibedi's) house and also claimed that Maganu arranged for a witchdoctor to send a cobra into his house to bite him. Unfortunately the snake did not attack him and escaped. Maganu denied any involvement in witchcraft but Modibedi's mental condition deteriorated until he finally left the Scheme.

In a discussion with the case writer Titlestad claimed that from 1953 to 1957 the plantation was better managed than it had been when under supervision of the Forestry Officer, and it brought in a substantial amount of revenue to the Tribe. However, after Titlestad's departure in 1957 the plantation deteriorated through neglect, and since 1974 when the Scheme was taken over by the Botswana Development Corporation, the plantation has been totally ignored.

Both these methods are traditional means of dealing with one's enemies. The spitting is usually done in the following manner: a witchdoctor provides certain herbs which are chewed and then spat at the door or in the yard of the person to be bewitched. A curse usually is uttered at the same time.
The marketing of produce from the Scheme was the responsibility of the Agricultural Officer posted at Mogobane. The Tribe set the policy for the marketing of produce: firstly as the Scheme was the Tribe’s, it was to be run for the benefit of the Tribe and it was, therefore, decided that Tribesmen may purchase the produce at about 20% below regular market price. This policy was adhered to till the Scheme became insolvent and was taken over by the Ministry of Agriculture in 1969.

On a few occasions non-tribesmen traders purchased quantities of produce from the Scheme, usually maize, using a tribesman as a "front" but such deals were soon exposed by fellow tribesmen.

The basic method of marketing evolved by Titlestad continued for about 20 years but its efficiency was to deteriorate after his departure in 1957. In the early years there were very limited sales at the Scheme itself, although as time went by more hawkers and traders came to the Scheme to purchase their supplies. The local villagers bought very little except for green maize. Once a week an ox-wagon load of produce was sent to Lobatse and Ramotswa and this was increased to twice a week during the green maize season. Titlestad made a point of sending two or three samples of the first fruits of each crop free of charge to the Chief who would then announce to the Tribe that such-and-such a crop was available for purchase.

Titlestad delegated the responsibility for the marketing and handling of cash to Maganu, who proved to be most conscientious. All loads of produce leaving the Scheme had to be checked and, in the case of the Scheme’s weekly sales trips, the returned goods plus cash reconciled against what had been taken.

The efficiency of Maganu’s tight control became evident when Titlestad’s successors assumed much of the responsibility for handling the cash, checking the loads of produce and overseeing the men guarding the crops in the fields. One Agricultural Officer was suspected of improper use of cash while others were somewhat lax in the control of sales and checking the guards at night, with a result there was a marked reduction in cash income. In later years it was said that on occasions certain prominent tribesmen would drive up with their trucks and demand that they be loaded with maize (uncounted) saying that they would pay "when it had been sold".
The local Indian trader in Mogobane told the case writer that the relative lack of control by each successive Agricultural Officer after Titlestad's departure became evident by the amount of cash the workers on the Scheme had to spend in his shop. At times they had "excessive" amounts of money to spend, mainly on flashy clothes. For example, in 1957 the trader purchased over 150 more bags of maize from the villagers than he usually did in a good season and an inspection of the maize revealed that much of it was the hybrid variety which was grown solely on the Scheme.

During Titlestad's twelve years on the Scheme, he managed to retain a good working relationship between the various parties involved in or having interests in the Scheme: the Resident Commissioner, the DC, the Director of Agriculture, the Principal Agricultural Officer and the Chief.

Most of the above Administrative Officers considered it necessary to be concerned with the development of the Scheme and as each officer was transferred to the area, each new one would try to influence the work on the Scheme. Some of the people concerned had only a rudimentary knowledge of agriculture (e.g. DC's) or, in the case of agriculturalists, no practical knowledge of irrigation. Some were inclined to regard the Scheme as an experimental centre (e.g. the planting of date palms "because they make a lot of money elsewhere in Africa") while others considered that it should be an agricultural training centre (several abortive attempts were made). Through all this Titlestad managed to steer a path which kept the Scheme running profitably, using all the meagre profits for badly needed capital improvements.

On a few occasions he clashed with the Principal Agricultural Officer with regard to what crops should be planted but on the whole he managed to get his way.

The Chief took a close interest in the affairs of the Irrigation Scheme and had the greatest respect for Titlestad's ability. Titlestad on his part kept the Chief informed of progress at the Scheme and always consulted with the Chief before planting. Invariably the Chief accepted Titlestad's recommendations, though often not without questions or suggestions.

The Agricultural Officer's responsibilities included a monthly report to the Director of Agriculture with copies to the Chief and the DC. It also was his responsibility to draw up the Annual Estimates in conjunction with the DC which were then verified by the Agricultural Department.
Titlestad ensured that Maganu was kept fully in the picture with regard to decisions reached and forward planning. As time went by Maganu took over more and more responsibility for the day-to-day running of the Scheme which allowed Titlestad to build up agricultural extension service that he had instituted on his own initiative in the District. From the early 1950's Maganu was left in charge of the Scheme much of the time. Titlestad would draw up the programme for a week or more with Maganu and then leave him to it, monitoring it whenever necessary.

A clerk was employed to assume responsibility for maintaining all the records of the Scheme, and to do the bookkeeping under the supervision of Maganu.

By 1954 Titlestad has sufficient confidence in Maganu to increase his outside work by undertaking the supervision of the Experimental Station in Lobatse about 25 miles from Mogobane. The Scheme continued to run smoothly under this system, and Maganu managed to maintain the operation of the Scheme on a profitable basis.

Early in 1956 after the new Resident Commissioner visited the Scheme he asked the Government Secretary to write the following memorandum to the Divisional Commissioner South, concerning his doubts about the Scheme:

**SAVINGRAM**

FROM: THE GOVERNMENT SECRETARY, MAFEKING

TO: THE DIVISIONAL COMMISSIONER, SOUTH R.P. Fawcus

No. 2042 IV (Date) 7th February, 1956

After a recent visit to Mogobane the Resident Commissioner expressed some doubts as to basic conception of the tribal farming project.

2. It is understood that in the beginning the aim was to set aside an area where food could be grown cheaply for purchase by the Bamalete people. Recently, however, the emphasis has changed and efforts are now being made to turn it into a profit-making concern, Government and the Native Administration are, however, subsidising the scheme in a substantial way.

3. At present expenditure and revenue pass through the Tribal Treasury accounts and it is understood that the Chief is afraid they will lose control if this system is changed. Nevertheless it is important if the scheme is to be run as a profit-making concern, that proper farm accounts should be kept.
4. The Resident Commissioner would be grateful if you would call a meeting of the Director of Agriculture, District Commissioner, Gaborone, Treasurer, Auditor and any of the Tribal Authorities who you consider should attend to discuss:

(a) The system of accounting at Mogobane, which should if possible be re-organized with effect from the 1st April, 1956, and

(b) the future of the scheme

The Director of Agriculture is asked to arrange for Mr. Titlestad to attend also.

5. The possible course appears to be as follows:

(a) to continue with the present policy of running the farm as profit-making;

(b) to lay down the whole area to matchwood poplars;

(c) to cut the area up into irrigated holdings for allocation to suitable members of the Tribe who might be required to pay rents to the Native Treasury;

(d) to allow the area to revert to the Tribe.

6. Grateful if you will examine the various possibilities and submit your proposals on the future of the scheme.

A copy of the above Memorandum was sent to Titlestad via the Director of Agriculture, who asked for his comments. Titlestad replied that the Scheme was not being subsidised and to prove his point he extracted figures from the schemes financial statements over the past 9 years. These revealed that the total expenditure had been £22894 of which £4161 was capital expenditure. The total revenue was £23477. Besides building, equipment, fences, etc. and about 200 acres developed for irrigation and 50 for dryland farming, there was also 14½ acres of poplars, some citrus trees and 34 trek oxen. Titlestad pointed out that it would be a "financial loss" to grow poplars under irrigation. He also noted that:

1. To cut the Scheme up into irrigable holdings for allocation to members of the Tribe, would require more supervision (Government?) than is required under the present policy. Only a few members would benefit. This gain is now had by the Tribal members employed by the Scheme.
2. "To hand the area over at present to tribal planning and supervision would result in a failure within a few years.

In August 1958, Titlestad's activities in the District kept him from Mogobane for much of the time and the Director of Agriculture stipulated that while the Scheme should remain under Titlestad's control, it should be supervised by the Agricultural Officer based in Lobatse. In effect this required that the Lobatse Officer visited the Scheme about once a week.

A few months later it was decided to transfer Titlestad permanently by which time he had been on the Scheme for 12 years. Before leaving Titlestad ensured that all the loose ends were tied up and on his suggestion the Tribe promoted Moganu to Agricultural Advisor though his duties would remain very much the same as when he worked under Titlestad.
The new Agricultural Officer was a young Hollander who, it turned out, had no irrigation experience. He disliked the job, did not enjoy "living in the bush" and could not work with the staff on the Scheme. A member of the staff described him as being difficult, lazy, office-bound and having little concern about security or general efficiency. He gave very little direction to Maganu and had little contact with the workers. He could speak no Setswana and most evenings and weekends found him in Lobatse visiting the Nurses' Home.

After he had been at the Scheme a few months the Principal Agricultural Officer instructed him to carry out a fertilizer experiment on 12 experimental plots of equal size, having one control plot, but the results were dubious as the control plot had better yields than the 12 experimental plots. An investigation revealed that some of the plots were larger than others.

One year after his posting to the Scheme he was asked to resign or be dismissed. The next Agricultural Officer was Coetzee, a young Africaans-speaking South African, who also did not have much irrigation experience. As there had been some misunderstanding as to what Maganu's responsibilities were, the DC and the senior Agricultural Officer, together with Coetzee, drew up "Rules and Regulations For Officers concerned with Mogobane Scheme" some of which are given below.

AGRICULTURAL LIVESTOCK OFFICER

1. He shall have access to all records and revenue collected at Mogobane.
2. He shall be entirely responsible for the Tribal Advance account.

AGRICULTURAL ADVISOR

1. He shall sit with the Agricultural Livestock Officer and a scheme Foreman as a member of the Board of Appeal available to employees on the scheme dissatisfied with dismal
2. He shall, with the District Commissioner and a member of the Agricultural Department, provide annual estimates for submission to the Tribal Finance Committee.
3. He shall be responsible for the equipment and sales of crops but no actual expenditure or sale of crops will be carried out without the agreement of the Agricultural Livestock Officer, Mogobane.

4. He shall be responsible for the collection of revenue and in this capacity he shall have access to revenue books on the Scheme and cash collected.

In spite of these Rules and Regulations, Coetzee insisted on attending to some of the cash sales, which upset Maganu. Maganu found it difficult to balance the cash against vegetables produced; moreover he considered Coetzee’s action to be a reflection on his capabilities. This caused the relationship between Maganu and Coetzee to deteriorate which in turn, communicated itself to the workers who were feeling sore that Coetzee had altered the work schedule from the daily piecework system to a regular 8 hour day. There was a noticeable drop in work output, less attention given to repairs and maintenance of machinery, and the incidence of theft started to increase.

At the end of 1959 the Director of Public Works reported to the Director of Agriculture that the outlet to the Dam outlet was damaged through neglect (siphons had to be installed to get the water out of the dam into the canal), that the canals were badly overgrown, large quantities of silt and stone in the canals, and there were many broken canal joints, wires, bridges, etc. He noted that cattle were seriously damaging the lining of the canal and suggested that fences be erected along both sides of the canal to protect it. There is no record of immediate steps being taken to rectify the faults listed above.

It was at about this time that Maganu broke his arm when he had a bad fall from a trailer. Unfortunately the bones were badly set and he never regained full use of his arm. In 1962 the Divisional Commissioner South met Maganu at the Scheme, saw his crippled arm and recommended that he claim compensation from the Tribe (his employer) as he assured Maganu that the Administration could allocate funds to the Tribe to meet this claim. Maganu followed his advice and compensation was agreed upon. Before it was paid out the new, and somewhat unpopular, DC advised the Chief that Maganu could only claim compensation if he were so incapacitated that he could not continue work, which meant that if he wished to claim the compensation he would have to resign. When this was put to Maganu he was upset, but on considering his deteriorating
relationship with Coetzee he decided to accept the compensation and resign.

Subsequent to Mganu’s departure, the workers found working directly under Coetzee to be difficult and their work input reportedly showed a marked decrease. They found Coetzee’s (South African) attitude to be objectionable and they felt he somehow was responsible for Mganu’s departure (they were aware of the difficulties between the two men). As far as the case writer has been able to ascertain the relationship between the workers and the management never recovered the same level of co-operation and mutual respect that had been evident during Titlestad’s period of office.

During Titlestad’s 12 years at the Scheme he had managed to make a very moderate profit in most years and it was estimated that "the capital value of the improved 180 acres irrigation plus 43 acres of dryland and other fixed assets amount to at least £3500 after repaying the £2000 loan". However in the period immediately after Titlestad’s departure, namely, January, 1959, to December 31, 1961, the profitability took a nosedive and by the end of this period there was an accumulated loss of R5 388 (£2694)1.

Early in 1962 a meeting was held between the Tribe and members of the Department of Agriculture to discuss the future of the Scheme. It was agreed that the Scheme was severely under-capitalised and that funds should be sought to alleviate the situation, though no specific proposals were agreed to in this connection. It was also agreed that the policy of the Scheme should be to make a profit rather than to supplement the Tribe’s food supplies, and in order to achieve this more attention would have to be given to cash crops (e.g. lucerne), a fertilizer programme introduced and the labour force would have to be reduced, employing only fit labourers.

It was revealed that there were no records available on the cost of production and income from each crop, though it was noted that Titlestad had kept detailed costings on all the crops produced during his 12 years at the Scheme. Some months after he left the Scheme a Treasury official removed the records together with the other papers. Repeated enquiries by the Agricultural Department failed to trace these records. No comparable records had been kept by the Agricultural Officers who succeeded Titlestad.

1In 1961 the currency changed from pounds sterling to rand £1-0-0 = R2 00
When the adverse financial situation at Mogobane was brought to the attention of the Director of Agriculture, he immediately ordered an enquiry and requested recommendations to rectify the situation. The Principal Agricultural Officer headed the enquiry and prepared the following report:

**THE DIRECTOR OF AGRICULTURE**

30th May, 1962

**AN ENQUIRY INTO THE OPERATION OF THE MOGOBANE IRRIGATION SCHEME**

1. **General**

In accordance with your instructions I visited Mogobane on the 10th and 11th April to carry out an enquiry into the operation of the Irrigation Scheme, and to try and discover why the scheme was not showing more profit and in some years even making a loss.

In this connection the most important point to bear in mind is that from the time that the scheme was started, until very recently, it was not intended that it should do more than pay its way. The objects of the scheme were stated to be to safeguard the Bamalete Tribe from famine in bad seasons, and provide employment for members of the tribe, particularly those who were unable to obtain other employment.

As a result of this policy there has been an emphasis on the production of food crops, notably maize in summer and wheat in winter, without regard to their profitability under irrigation, and it has been necessary to employ a large labour force, because many were unable to perform a full day's work.

Another factor which has caused to reduce the profits of the scheme has been that, in times of shortage, produce has been sold to members of the tribe at subsidised prices.

With the scheme being expected to pay for its own development and being run regardless of profit it has in the past been very definitely under capitalised and has not been running at full efficiency. An example of this has been that, with only 1 tractor, it has often not been possible to take advantage of the right condition for carrying out cultural operations, and there have been delays in, for example, planting or weeding. This has resulted in reduced yields and also caused to reduce the profits.
The same has also applied to the use of fertilizers and insecticidal sprays, which for the purpose of keeping costs as low as possible have not been applied. This again has resulted in reduced yields and profits.

There is no doubt that the scheme has achieved its original purpose, but it has placed a burden on the Tribe Treasury. As a result the policy has now been changed, and it has been agreed that in future it should supply the tribe with revenue rather than supplement food supplies.

In line with this policy the labour force has been reduced, and only fully effective labourers employed, more emphasis placed on cash crops and a fertilizer programme introduced. It is likely that this change in policy will result in increased annual expenditure and probably initially in increased capital expenditure. However once the scheme is running at full efficiency this increased expenditure will be more than fully covered by the greatly increased revenue.

2. Cost of Production

It has not been possible from the records available to arrive at the costs of production of the individual crops. This is unfortunate for it would be highly desirable to be able to discover which crops were being produced at a profit and which at a loss.

I was informed that books giving this information were at one time kept, but that they had been removed. I recommend that these books be returned and that in future accurate costs for each crop be kept. This should be quite possible with a full time clerk attached to the scheme.

The estimates for 1962 give a figure of R6,800 as the expected expenditure, not including special expenditure, and this makes the overall production cost per acre R30, over the 228 acres under crops.

Although this figure gives as to the return that should be expected from a crop it is not entirely satisfactory, during the year, in some cases only one, and there are also perennial crops, (sic) and the figure of R25 is used for annual crops this should be a fair guide to profitability.

3. Crops

A. Summer Crops

(i) Maize. This crop has been and still is the major summer crop grown. Very poor results have been obtained with average yields at only 7 bags per acre and therefore cash returns at only
The fact that the scheme has in the past relied to a great extent on maize to bring in revenue has largely been responsible for the low cash returns that have been obtained. The main trouble has been of poor germination and the resulting poor stands, for the plants that are present grow well and carry good cobs. This poor germination is particularly noticeable in years when there is insufficient rain to enable pre-planting cultivations to be carried out or to germinate the seed. Under these conditions, two irrigations have to be carried out for ploughing and to germinate the seed and, as much of the soil at Mogobane caps very badly after irrigation, the shoot is unable to break through the surface.

This tendency to cap is less marked on the loam and sandy loam soils, of which there are said to be some 40 acres. It is therefore recommended that in the future maize production be confined to these soils, and that different cultivation methods, such as ridging, be tried to see if they result in better germination.

It is essential that maize yields be improved considerably if the crop is to continue to be grown. If they cannot be, then serious consideration should be given to cutting out maize production altogether.

(ii) Cotton. Because of the trouble experienced from insect pests the policy has been to grow the crop for 3 years and then leave a gap of 4 years before growing it again. In these days when sprays or dusts for dealing with all cotton pests are readily available and reasonably cheap, such a system of cropping is quite unnecessary. This is particularly the case, as the worst pest is said to be American bollworm, which can be completely controlled by DDT, one of the cheapest insecticides. All other pests can be controlled with Sevin, the price of which has recently been considerably reduced.

If the crop is fertilized according to its requirements and sprayed regularly it should be possible to produce 2,000 lbs. of seed cotton per acre. At an estimated price of 5 cents per lbs. this would give a cash return of R100, a very much greater return than it would ever be possible to obtain with maize.

\footnote{It was subsequently noted that this figure did not include the sale of green maize which can double the cash return provided that little theft takes place.}
It is therefore recommended that at least 20 acres of cotton be grown on the scheme every year, and that a regular programme of spraying and fertilizing be adopted.

(iv) Beans. This crop is used mainly as a green manure. In view of the fact that following this practice means that some of the land on the scheme is non productive every summer, its value is questionable. There is no evidence either way to show that green manuring is or is not necessary, and if it were possible to do so it would be preferable to maintain fertility with kraal manure. If however it is considered desirable to continue green manuring then it is recommended that a crop such as hemp, which provides a large bulk of green material for ploughing in, be used instead of beans.

B. Winter Crops

(i) Wheat. This has been the major winter crop and, as with maize, disappointing results have been obtained from it. Yields have been in the region of only 5 bags to the acre, which at a price of R5 per bag, gives a cash return of only R25 per acre. It is difficult to say why results from wheat have been so disappointing, but it is possibly because the crop has received only very small dressings of fertilizer. These dressings have been increased for the present crop and it will be interesting to see what results are obtained.

However, if wheat is to be grown it is essential that better yields be obtained, and every effort should therefore be made to try and discover the reasons why such poor results have been achieved so far, and to put this right.

(ii) Linseed. This promises to be one of the most lucrative winter crops, and it fetches R18 per bag and yields 3 bags per acre. Only 7 acres of linseed have been sown in the present season as compared with 120 acres of wheat, but I did not discover the reason for this. Should there be no insuperable difficulties in doing so, it is recommended that the acreage under linseed be increased at the expense of that under wheat.

C. Permanent Crops

(i) Lucerne. Once established this crop gives 6 cuts per year, each yielding approximately 1 ton of hay. This hay is sold for R17 per ton for the best quality and R7 for the poorer quality, with the average being about R14. Lucerne therefore gives a gross annual return of R84.
Using the figure of R30, as being the cost of production, gives an annual profit from the crop of R54, but as lucerne requires much less labour for its production, than the other crops grown on the scheme, it is much cheaper to produce, and the annual profit from it is estimated to be in the region of R70 per acre.

The policy is to expand the amount of land under this crop up to a maximum of about 70 acres, but difficulty is being experienced in achieving this expansion, because seed has been almost impossible to obtain. Every effort should be made to overcome this difficulty, by tapping every possible source of supply, because lucerne can and should be the main revenue earner for the scheme.

(ii) **Poplars.** Approximately 30 acres of poplar trees have been planted on land that is not used for irrigation, because it is subject to seasonal flooding, and these provide a very useful supplementary income for the tribe from land that could not be used for any other purpose.

The trees are felled after 15 years and sold to match factories in South Africa and Rhodesia. A yield of approximately 100 tons per acre is obtained which realises R680. As all the establishment and maintenance costs are covered from the sale of thinnings, for hut poles or for wood wool, this figure represents pure profit.

I believe that all land suitable for poplars, within the boundaries of the scheme, has now been planted up, but there is land outside the scheme which is said to be suitable.

It is therefore recommended that the Tribal Authorities be persuaded to allow poplars to be planted on this land. Planting should be carried out in such a manner so that 1 block would be felled every year, and provide an annual income.

D. **Dryland Crops**

(i) **Sorghum.** There are some 48 acres of land on the scheme, which cannot be irrigated, and the main crop grown on this land is sorghum. Although the revenue from it is small, if this land is to be used at all, sorghum is the crop most suited to the conditions. Care should be taken, however, to ensure that dryland production does not conflict with the production of irrigated crops, which should receive the first priority.

(ii) **Beans.** This crop is used as a rotation crop with sorghum and generally ploughed in.
(iii) **Sunflowers.** This crop has not been grown on dryland at Mogobane, but it is recommended that it be tried particularly as it is doubtful if there is any justification for growing the crop under irrigation.

4. **Crop Rotation and Maintenance of Fertility.**

There appears to have been no laid down cropping programme at Mogobane and crop rotation has been on a purely ad hoc basis. Land has been winter fallowed when it has not been possible to plant a winter crop, and there has been no regular sequence of green manuring. In addition manure application has depended on supplies being available in sufficient quantities, but this is understandable because manure is not produced on the scheme and has to be bought.

It is therefore, recommended that a regular crop rotation be introduced.

5. **Cattle.**

As mentioned earlier all the manure required for the Mogobane Irrigation Scheme has to be bought from outside, and it is therefore suggested that consideration be given to introducing cattle, which could supply this manure.

No attempt should be made to breed at Mogobane, but young store cattle should be bought in and fattened, using the crop residues, which at present go to waste, and also the lower quality lucerne hay. Under this system these cattle will not only provide the manure essential to the scheme, but will also bring in extra revenue.

**Accounts**

I must admit to be rather mystified by the method of accounting for the scheme, because the estimates and the profit and loss account seem to bear little relation to one another. I would prefer to see the latter set out more in the manner as the former, with actual expenditure, on the various items, being listed and balanced against actual income from the sale of crops. This however is because the profit and loss account does not convey much to me, and I appreciate that no alternative method may be acceptable.

The estimates as they stand, however, do not present a correct picture of the profitability of the scheme. For instance the estimates for 1962 show half the cost of a tractor, and the
whole cost of a lucerne shed charged against one year, whereas all that should be charged is depreciation.

From examination of recent records I have not been able to discover what the figure for accumulated deficit, shown in the estimates, represents for it is not shown as a liability in the statement of affairs. I am assuming therefore that it is included in the Bamalete loan as this appears to vary from year to year, and if this is the case then it is more than fully covered by assets and does not represent a loss.

As stated I found the accounts very confusing and therefore recommend that someone competent be detailed to look into both the method of accounting and method of estimating and try and produce something more easily understandable.

I also recommend that the accounts for the Mogobane Irrigation Scheme be kept separate from the Tribal accounts, so that when the scheme makes a profit this can be put into a reserve fund, so that losses can be covered when these occur. I notice at present that when losses are made these are carried forward to the following year, but any profits that are made are not. Once the reserve fund had built up sufficiently repayments of the loan would be made.

Conclusions

I estimate that once the scheme is running at full capacity, and provided that no natural hazards such as the drying out of the dam occur, it should be possible to produce a revenue of at least R12,000 per year from the sale of crops and livestock. When poplars are felled and sold this revenue will be considered greater.

The annual recurrent expenditure to produce this revenue would not be greater than R10,000 and would more likely to be in the region of R8,000, so the profit would be from R2,000 to R4,000.

I therefore recommend that the Tribe should continue to finance the scheme for having borne the losses they should be given the opportunity of reaping the gains.

B.L. BATWELL

1The subsidy provided by the Tribal Administration to cover each year's deficits. It was not a loan.
The above Report was circulated amongst various Administration Officers but not to the Tribe, and the only evident practical development that came of it was that the accounting system was more streamlined.

Meanwhile attempts were made by Coetzee to obtain a lucerne baler in order to develop this cash crop to its fullest potential. As there was no capital available he managed to negotiate a deal with a trader in Lobatse in which the Scheme agreed to purchase a R1200 baler from him and would pay with an agreed amount of lucerne bales. After several months of delivering lucerne to the trader it transpired that neither the Scheme nor the trader had kept any tally of the bales supplied. It took some time to sort this matter out to everyone's satisfaction.

For some years the Department of Agriculture had not distributed any Annual Reports but in 1963 the new Director of Agriculture reinstituted the practice. Concerning the Scheme, in his 1962/63 Report he stated that,

"In the year under review a small loss was made mainly due to breakdowns of old-worn-out machinery which there are not funds to replace. The Tribe unfortunately cannot be persuaded that if they put more capital into the scheme it will be a real money-making concern, and are reluctant to do so when they see losses continuing. A contributory factor to the losses however is that produce is sold to members of the Bamalete Tribe at below value......"

The Annual Report for the following year was virtually the same. In spite of the 1963/64 rains being poor and the dam not filling till the end of the year, the Scheme managed to make a small profit in the financial year ending December, 1964. This encouraged the tribe to have more confidence in Coetzee and he managed to get the tribe to agree to put the Scheme on a businesslike footing for which a plan was drawn up for an estimated total expenditure of R18,000 and revenue of R30,000 per year. Loans would have to be raised but he persuaded the Tribe that with such fat profits the Tribe could repay them within two years.

The Tribe failed to raise any loans through the Administration as it was considered that the proposals were unrealistic. The Tribe felt let down at the turn of events.
In 1964, a young English Agricultural Officer, Tony Challis replaced Coetzee at Mogobane. Challis found the Scheme to be very run down as the upkeep of the canals, furrows, silt trays, fences, etc., had been almost totally neglected. Much of the machinery was in a bad state of repair and a considerable amount of money would be required to get the Scheme on the right footing. All his pleas to the Tribe fell on deaf ears as the Administration’s credibility with the Tribe had reached an all-time low. The Tribe was not prepared "to throw good money after the bad".

In 1965 a young Afrikaans-speaking South African Jerry Snyman, replaced Challis. He was a hard worker and during the next four years made every effort to make the Scheme profitable with the limited means at his disposal. He involved himself in the community, learned to speak Setswana and was always ready to offer a helping hand for those in need. Within a year he was held in high regard by the people of Mogobane, and he retained that regard during the four years of his posting at the Scheme.

Shortly after Snyman moved to Mogobane a meeting was convened in the Bamalete Tribal office to discuss the future of the scheme as the state of affairs at the Scheme was causing grave concern. Below is a copy of the Minutes of the Meeting, held on 30 August, 1965. The meeting was chaired by Mr. Taylor, the Agricultural Officer. Both Challis and Snyman were present. Present were members of the Agricultural Department, the Chief and leading members of the Tribe, including Maganu.

It was agreed that the scheme at present, is unsatisfactory in that it is not functioning efficiently and is not economically viable.

The Chairman put it to the meeting that there are four alternatives.

(a) to continue as at present, suffering losses, with eventual disintegration inevitable.

(b) to cut losses and close the scheme now.

(c) to raise money to repair structures, level fields, construct drains, and purchase equipment and to run it as a business concern with the object of making a profit for the tribe.
(d) to raise money as in (c) but to put it into 4½ to 5-acre tenancies starting with 8 tenants on 37 acres as a pilot scheme.

"It was pointed out that it would probably be easier to raise the necessary funds under scheme (d) than under scheme (c) and that under scheme (d) there would be a known income from water rates whilst under scheme (d) the income would vary with crop yields and markets from year to year."

"The meeting was quite clear that alternatives (a) and (b) were not desirable and that money should be raised and the scheme made viable. Scheme (d) was considered but it was felt that the success of the Scheme should be assured before tenants are installed, particularly with regard to water availability."

"It was agreed that, as a first step, scheme (c) should be instigated and to do it the Chairman with Messrs Challis and Snyman would draw up detailed estimates to cover the years to the full repayment of any loan, which estimates would be passed to the Bamalete Tribal Authority for consideration. Thereafter application for finance should be made to Oxfam and if not forthcoming to the National Development Bank then, the scheme should be run as a successful commercial venture and to do so a "below the line" form of accounting be introduced."

The case writer could find no trace of the estimates under Scheme (c) ever being prepared or sent to funding agencies. Snyman started the new accounting system in December 1966, and thereafter presented detailed monthly accounts to the Chief, Council, DC and Department of Agriculture.

The Department of Agriculture's 1965/66 Annual Report stated that:

"Over the last two years attempts have been made to put the Scheme on a proper economic and managerial footing but the future of the Scheme is still in doubt."

"In 1965/66 the dam filled in the season. Farming operations however, were hampered by the lack of proper equipment, the late rains which caused waterlogging and the lack of people to work on the Scheme. Much of the work normally done by machine had to be done by hand or, as in the case of manuring, neglected. The poplar trees yielded well and about 80 tons of logs were sent to Johannesburg to be made into matches. Lucerne is one of the more
dependable crops but it was dogged by breakdowns and expensive repairs to machinery and in the end did not make a profit. The sorghum grew well but had to be thrashed by hand and made a loss of R300 on 24 acres. Vegetables were a paying proposition despite transport and marketing difficulties, a good variety of vegetables were planted and a worthwhile profit made. Maize was the really money spinner, 49 acres were planted at a cost of R330 - high because of watchmen to stop pilfering - and produced a revenue of R962 from the green cobs. The cotton suffered from drowning in the heavy February rains and was not really a success due to lack of fertiliser - bad relations with the supplier due to unpaid bills - 20 acres finally survived and produced 29 bales of first grade cotton. Pests were a difficulty as the February rains made spraying a physical impossibility and a great deal of crop was lost to American Bollworms."

By the end of 1965, the Scheme's accounts reflected a small profit, mainly due to income derived from the sale of poplar logs.

In September 1966, Bechuanaland Protectorate gained its independence and became the Republic of Botswana. There were a number of major changes in Administration: a Central Government was set up with Local Government infrastructure in what had been each Tribal Reserve. The Local Government Administration in the Bamalete Reserve became known as the South East District Council with elected Councillors, who took effective control of all matters which had been handled by the Tribal office, which included the Mogobane Irrigation Scheme.

The transfer of the Irrigation Scheme from the Tribe to the Council was discussed at a special Kgotla meeting at Ramotswa. A number of speakers expressed their fear that this was a ruse for Government to expropriate the Scheme from them. Others were not happy about tribesmen from other tribes who were living in the newly drawn District boundary "having a share" in the Scheme. After some discussion the people were persuaded to accept that the District Council would be responsible for the Scheme.

Strictly speaking the Mogobane Irrigation Scheme now was the responsibility of the District Council. However, the strong Tribal attachment to the Scheme meant that any major decisions regarding the Scheme and information regarding its development always was put to the Kgotla as well as to the Council.
Snyman found it very difficult to find anyone to give much thought to the problems of the Scheme as most people who were members of the Scheme Committee (which hardly ever met anyway) were deeply involved in the changeover from Tribal Administration to Local Government Administration. In April, 1966 he had written to the Tribal Treasurer (later to be the Council Treasurer) requesting that an urgent meeting be called to discuss the present situation of the Scheme and to draw up the next season's programme.

In August he wrote again explaining that the new season had already started and no meeting had been called. He stated that there was no fertilizer, no mower or baler for the lucerne, only one tractor was working and the trailer was beyond repair which meant that no produce or manure could be transported.

The Treasurer was also experiencing problems as he did not have the funds to continue supporting the Scheme, nor could he meet current financial obligations with the result that he was under pressure from a number of creditors who were threatening court action. Somehow he managed to stall for time and paid them off over an extended period.

About this time the Ipelegeng Programme - "Food for work" - was started throughout the country to combat prevailing drought conditions. People were put to work on the Mogobane Scheme which saved the Council a certain amount of money but not sufficient to significantly relieve the situation.

The Scheme operated at a net loss of almost R2,000 for the year ending December 31, 1966, a rather difficult year as mentioned in the Ministry of Agriculture's Annual Report:

**Mogobane Irrigation Scheme 1966/67**

"This was a disastrous year for the scheme. With 35 inches of rain and little drainage, cultivation was at times impossible; the crops suffered from wet feet and many of them yellowed and died. Weeds became a major problem, and there was very little that could be done about it."
There continued to be considerable concern about the future of the Scheme among both the Council and the Ministry of Agriculture.

A few meetings were held but they produced little of consequence as everyone realised that without capital the Scheme could not continue to operate, that it was under capitalized and that the management (supplied by Government in the form of the Agricultural Officer) was not very efficient. The Tribe relied heavily on Government to make a success of the Scheme and knew of no way around the problem of liquidity. The Ministry of Agriculture made initial enquiries about raising a loan or grant to obtain the necessary capital to put the Scheme on a sound footing but initial results were not very promising.

The Ministry was reluctant to see the Scheme close down especially as everyone agreed that it had a very substantial production potential and could be a centre for agricultural training. The idea of taking the Scheme over from the Tribe was discussed within the Ministry and it soon was generally agreed that this would be the best way of operating the Scheme. A proposal was made that a soft loan be raised from Oxfam which had shown interest when tentatively approached on the subject.

It was realised that as it was a Tribe Scheme it was essential that the Tribe continue to derive some benefits from it and these benefits would have to be worked out. The suggestion was tentatively discussed with the Chief whose reaction was somewhat dubious. He reluctantly agreed that it might be the only answer but added that the Tribe would have to make the decision.

Finally in January, 1967, Coetzee was instructed to write to the Chief and District Council that the Ministry would like to officially take over the Mogobane Irrigation Scheme as from April 1, 1967, and to kindly ask the Chief and Councillors to agree to this proposal.

In March a Kgotla meeting was called to discuss the matter.

The Ministry of Agriculture offered to take over the Irrigation Scheme for 5 years and run it as a private company with Council holding two of the five shares issued. It was further proposed that at the end of 5 years the Council would receive the Scheme back as a profitably run operation including all improvements.
Among the tribesmen there was a fear of "expropriation" by Government and there was much discussion mainly revolving around suspicion that Government was planning to take their land. After several hours the final decision was unanimous, that the Tribe would not hand the Scheme over. When this decision was communicated to the Ministry it was viewed very seriously and it was decided that pressure should be brought to bear on the Tribe to get it to change its mind. After some negotiations it arranged that the Minister himself would speak at a specially convened Kgotla meeting.

In order to bring more pressure to bear on the Council the Agricultural Officer reported to the Council that no machinery whatsoever was operational at Mogobane, including the tractor, and there was no means of threshing the wheat. Further, the dam was badly silted up and should be cleared if it were to store sufficient water for year-round irrigation.

During this period there was considerable confusion concerning with whom the Government should negotiate. Strictly speaking it should have been with the Council (most but not all Councillors were Bamalete), but the Tribe still regarded the Scheme as theirs and not the Council's. The minister of Agriculture, in this instance, spoke at the Kgotla but ultimately the final discussion and decisions were made at the Council Chambers, though not without some hard feelings on the part of the tribesmen. Some subsequent meetings concerning the Scheme were held at the Chief's Kgotla.

When the Minister of Agriculture spoke at the Kgotla he said that,

"It is the aim of the Government to wage a war against hunger among the people of Botswana; to develop among the youth of Botswana a liking for farming and to teach them scientific ways of farming. On account of a lack of money from the Bamalete Treasury to sustain the development of the Scheme, the Scheme was somewhat delayed. It is for this reason that the Botswana Government felt it necessary to take over the Scheme. For the Scheme to be started again a sum of £10,000 (R20,000) is needed. A committee needs to be elected to see to the day to day running of the Scheme, and the money that will be raised from the Scheme will be used for the maintenance of the Scheme and any surplus will go into the Tribal Treasury. It should be clearly understood that Government is not going to take any money accruing from the Scheme. If we are agreed on this issue, what needs to be done is to sign an agreement empowering us to run the Scheme."
During the discussion that followed, a number of speakers expressed a fear that Government was trying to deprive them of Tribal Land. Others felt uncertain about the whole situation. After considerable discussion which entailed another Kgolola meeting, the Tribe finally agreed to let the Government take over the Scheme for 5 years.

One week later the Permanent Secretary to the Ministry of Agriculture visited the Chief to confirm the details of the decisions reached and to define the basis of the Agreement between the Tribe and Government. To ensure there were no misunderstandings, he wrote the following letter to the Chief on his return to Gaborone.

Dear Sir,

You will recall that I met you on the 3rd May in your office at Ramotswa and that Messrs. I. Mokgotsi and Motsumi were present. You reported that the Bamalete Tribe were agreeable to hand over the Mogobane Irrigation Scheme to Government for a period of five years, on the following conditions:

(a) That the Dam should be cleaned out as soon as possible and that in any event, the Scheme should not be handed back to the Tribe by Government with the Dam in its existing condition.

(b) That the main irrigation canal and furrows should be repaired.

(c) That the two tractors, the thresher, the baler and trailer be handed back to the Tribe after five years in good condition (the thresher, baler and trailer at present being decrepit and probably irreparable).

(d) That the fertility of the soil should be maintained and improved.

(e) That a Committee be formed appointed by the Regent to keep a watching brief over the Scheme.

(f) That the existing labour on the Scheme to be retained and dismissals to take place only after the Committee has been consulted.

(g) That the actual land should be returned to the Tribe.

1 Tribal elders.
2 Chief.
(h) That after the five years no outstanding debts be passed on to the Tribe unless the Tribe specifically agreed to accept these debts.

(i) That a small percentage of the profits of the Scheme be paid into a Development fund to be used for Development at Mogobane.

(j) That a small percentage of the profits should be paid to the revenue of the District Council.

(k) That all the above should be incorporated in a written agreement to be signed by the Regent of the Bamalete and the Minister of Agriculture.

Will you please confirm that is an accurate record of the decisions taken by the Kgotla.

Yours faithfully,

Permanent Secretary,
MINISTRY OF AGRICULTURE

The Chief acknowledged that the letter reflected an accurate record of the discussions held in his office and requested that the Agreement be drawn up and signed as soon as possible.

After five months of waiting for the Agreement to be drawn up, the Council sent a delegation to the Director of Agriculture to find out what was causing the delay as the deficit of the Scheme was increasing alarmingly and currently stood at R3 400. They told the Director of Agriculture that the Council could not continue to operate the Scheme. The Director replied that the delay was caused by the Attorney General's Office which had not yet drawn up the legal document. He stated that Government could not help them meet the deficit but suggested that the sale of crops presently standing should clear the deficit, and, in order to relieve the pressure on the Tribe still further, he agreed that his Ministry would pay all labour employed on the Scheme. (He did this in the expectation that the Oxfam funds would materialise within a month or two). By the end of 1967, the Scheme was facing a deficit of R4 090.

By May 1968, the legal Agreement still had not been drawn up and the application for a loan from Oxfam was still under negotiation (the requirement in the meantime had jumped from R20,000 to R39,000). This caused the Director of Agriculture some concern as the Ministry had paid out R2 189 for wages and R280 for diesel, besides having used the Ministry's tractor and farming equipment
on the Scheme. There was no indication as to when the Agreement might be finalised nor when Oxfam might give the loan. The Director of Agriculture then directed that all revenue from crop sales on the Scheme should revert to Government in order to offset the wages. For political reasons it was considered that the Scheme should not be temporarily closed down, even though the loan and Agreement were not yet finalised.

Fortunately for the District Council the revenue from crop sales which they received from December 1967 to May 1968 just about covered their accumulated deficit on the Scheme.

At this stage Snyman was transferred and Beavers replaced him as Agricultural Officer at Mogobane, where he was to remain till after the Ministry took over the Scheme. He had virtually no practical experience in irrigation farming.

In August 1968 the first draft of the Agreement appeared and was circulated among the interested parties for comments. The Tribe accepted the Agreement as it was based on the conditions agreed to in April of the previous year. However, someone in Agriculture suddenly realised that the Agreement would not be compatible with the R39 000 Oxfam loan which was all but finalised at that stage: it was to be, 12 year "soft" loan to be used to repair and improve upon the existing facilities, to purchase capital equipment and to develop and expand the irrigable area. It would not be possible to complete this in the 5 year lease period in the Agreement, nor could the Ministry guarantee repayment of the loan if it were not entirely under their control for the 12 year repayment period.

A few weeks later a Kgotla meeting was called at which the Permanent Secretary, accompanied by the Deputy Director of Agriculture, addressed the meeting. He told the Tribe that Government wanted to get the Scheme properly developed and viable. Oxfam had offered a R39 000 loan to do the necessary development but this had to be paid back over 12 years. Therefore, they requested that Government be allowed to run the Scheme for this period with surplus revenue being paid into the Bamalete Treasury. Government proposed that a Mogobane Scheme Management Board be set up with two members being nominated by the Tribe and four by the Ministry of Agriculture. He assured the Tribe that "the Ministry's nominees will be experts and not anyone from a different tribe" and probably would include the Director of Agriculture and his Deputy Director. They also assured the Bamalete that Government did not intend depriving the Bamalete of any part of their already
small Reserve.

The Chief explained to the tribesmen that the Council could not continue running the Scheme at a loss, and in order to make profits much money would have to be invested in repairing the dam, fences, canals etc., as well as buying new machinery. Only Government could do this and the Agreement with Government would ensure that at the end of 12 years the Scheme would be handed back to the Tribe as a profitable enterprise. Some of the tribesmen then spoke about their suspicion and distrust of Government taking over their land but at the end of the meeting the Tribe finally agreed to hand the Scheme to the Management Board for a period of 12 years.

Four months later, in February 1969, there was a meeting of the Senior Bamalete Tribesmen who elected Paragwane (the Clerk of the Scheme) and Makgweng (the salesman at the Scheme) to be the two Tribal representatives on the Management Board and advised the Director of Agriculture accordingly. The Director of Agriculture then requested a meeting with the Senior Bamalete Tribesmen at which he stated that he was not satisfied with the nominees, and only if the Tribe insisted would he accept them. The Tribesmen decided not to alter their nominations but added that they reserved the right to change the nominees over the 12 year period. Four months later the Assistant Minister of Agriculture met the Senior Tribesmen to state that the Cabinet would not accept the two tribal nominees as it was "improper for Board Members to be employees." The Senior Tribesmen then nominated Z. Mokgosi, a Councillor and Sub-Chief, together with K. Kobue, Vice-Chairman of the Council, to be Board members. These nominees were acceptable to the Government.

In the following month, August 1969, Mogobane Irrigation (Pty) Limited was formed. The Directors were recorded as R. Harrison (the Director of Agriculture), B. Batwell (the Assistant Director of Agriculture), P. Weare (the Senior Agricultural Officer), Z. Mokgosi and K. Kobue. Five shares were issued, three were vested in Government and one each in the names of Mokgosi and Kobue.

Mogobane Irrigation (MI) formally took over the Scheme including all the staff, numbering about 25, of whom 2 had worked for over 20 years on the Scheme, 6 for over 10 years and 7 for over 5 years.
The Ministry of Agriculture proposed to recruit a manager for MI or, failing that, to allocate a capable Agricultural Officer to run it. In the four years they were to run the farm no suitably qualified or experienced person managed the Scheme. Beavers, the Agricultural Officer-in-Charge of the Scheme before the take-over became the "Manager" after the take-over but it was decided to transfer him as he was having difficulties with the labourers and it was considered that a Moiswana Agricultural Officer, Moagi, might be more suitable in that situation.

Moagi remained at the Scheme for the next 3 years although he had no experience in irrigation farming, was a poor administrator and, it was said, drank too much.
No agricultural work was done during the first year after the Company took over the Scheme, other than harvesting the previous season’s crops. Most of the year was spent in removing the silt from the dam, raising its wall, repairing canals, silt traps, etc., as well as levelling the land to prevent waterlogging during heavy rains.

In November 1970, when the first Annual Accounts were presented to the Board of Directors, they were concerned at the "excessively high" labour costs. A letter was written to the District Council stating that "we feel that if the Company is to survive it will be necessary to make cuts in our permanent labour force in the very near future", and went on to request that the services of six "old, sick and lazy" workers be terminated. The Council duly agreed to the request.

The repair work continued into the second year during which time the first crops were planted under the Mogobane Irrigation (Pty) Ltd. (MI) regime. The crop for this year (1971) and the next two years were very disappointing for a number of reasons: mismanagement, poor marketing, planting too early or too late, waterlogging (ground not properly levelled), hail, frost, machinery breaking down, pests and theft. The Indian trader in Mogobane noted once again certain of the employees on the Scheme had a lot more money to spend which he guessed did not relate to their wages.

By September 1973, the Directors finally realised there were only enough funds to keep MI solvent for a few more months and that there was not the slightest possibility of making the Scheme viable, let alone recovering any funds to repay the Oxfam loan. The Ministry of Agriculture approached the Botswana Development Corporation(BDC) to ask if they could take over the Scheme as the Ministry was having "management problems": BDC officers inspected the Scheme and saw disappointingly little in the way of crops under cultivation except for about 10 acres of onions which seemed to be a promising crop.

Botswana Development Corporation is wholly owned by the government of Botswana. "Its focus of activity (is) the promotion of business investments within Botswana which are economically beneficial to the country as a whole, either by itself or in association with technical and financial partners." (5th Annual Report) It is active in all sectors of the economy.
There was a considerable amount of what had been valuable machinery lying around the farm in a bad state of repair. A hammermill, which evidently had never been used, was completely hidden in the overgrowth of grass. Some important parts were missing from it. The canals and silt traps were badly damaged in several places — or else filled with rocks. Most fences were damaged or flattened. The storeroom held a few handtools, fertilizer bags and other odds and ends with a possible total value of about R100.

The BDC officers were not impressed with what they saw but they agreed that the Scheme should have potential, especially as Botswana imported most of its vegetables and large quantities of grains. The Ministry wanted BDC to take over their shareholding in MI and shoulder responsibility for the Oxfam loan, but BDC would have none of this and would only agree to form another company which would lease the Scheme from MI while adhering to the Agreement reached between the tribe (Council) and MI except that the lease period should be extended to 15 years. BDC made it quite plain that in fact they would rather not have anything to do with the Scheme but were only becoming involved because it was politic to do so. The Ministry of Agriculture reluctantly accepted BDC's terms but the matter of responsibility for the Oxfam loan was passed on to the Cabinet which, eighteen months later, finally agreed that Government should accept responsibility for its repayment.

Mokgosi, one of the Tribal Directors of MI, told the case writer that none of the above negotiations were mentioned to the Tribal Directors of MI until agreement had been reached with BDC. This caused some consternation within the Tribe as they considered they should have been consulted in the early stages of negotiations instead of being asked to ratify the Agreement. A special Kgotla meeting was called for BDC to put forward its proposals.

The Kgotla was told that BDC would make the Scheme succeed as "they had enough money to do it". It was stated that BDC would form its own company, which would lease the Scheme from MI. This meant that the whole original Agreement between the Tribe and MI would be honoured but there would be a clause in the lease Agreement between MI and BDC allowing MI to terminate the lease if it considered that BDC was not developing the Scheme "in a right and proper manner". BDC on the other hand would only agree to becoming involved if the 12 year lease of the Scheme to MI
were extended 15 years as 4 years already had been "wasted".

The BDC spokesman stated that everyone knew about the problems of the past and how the irrigation scheme had failed but now BDC was going to make it succeed - tribesmen could earn good wages, there would be plenty of food and everyone would be happy, etc., etc. Also, when the Scheme would be finally handed back to the Tribe it would be a flourishing, well developed project.

The Tribe saw this proposal as yet more erosion of their ownership of their Scheme ("expropriation by Government" as more than one tribesman saw it.) The people were not satisfied with the state of affairs and doubted if BDC could succeed where the Ministry had failed. They also complained that the Ministry had not kept the Council informed of the Company's problems nor discussed the possibility of BDC's participation. They felt there had been a general lack of consultation. When all the questions had been answered an old man stood up and told the people how in the late 1930's he could remember when the irrigation Scheme was first put to the Tribe under this selfsame tree where the Kgotla now was meeting - except that the tree had been smaller then - and the Tribe was told by the District Commissioner how they would grow a lot of crops even in drought years, have plenty of food, be rich, and everyone would be happy. Nothing came of their promises because Government failed to get the Scheme going properly. Then in the 1940's the Tribe was asked to give more land to the irrigation Scheme as they would grow lots of crops, have plenty of food, etc., etc. However, this too did not come about and in 1969, after many years of poor harvests and little activity, the Agricultural Department said they would run the farm as a private company with the Tribe as partners. Everyone would have plenty of food, be rich, etc., etc. Again it failed. Now BDC came with the old story. The old man concluded by saying that he just wanted to remind the people of the history of the farm and he wished BDC every success.

The final outcome of the Kgotla meeting was that the Tribe reluctantly agreed to MI subletting the Scheme to BDC's company with a three year extension to the original lease Agreement.

In November 1973 the proposal was discussed by the South East District Council which strongly urged that the following steps be taken as soon as possible in order to expedite this project:
i) That Mokgosi and Kobue transfer their shares in MI to the District Council.

ii) That the District Council appoint two representatives for its interest in the Company.

iii) That a lease agreement be drawn up.

The take over was planned for January 1st, 1974, but there were numerous delays, the main one being the preparation of a formal agreement between MI and FDC.

Meanwhile MI continued to run the Scheme and the activities on the farm continued in a desultry fashion. The marketing of produce received almost no attention with a result that the 10 acres of prime onions were allowed to go to seed - it was suggested that there was no money to buy pockets to pack them in, and "at any rate it probably would be difficult to market such a large quantity". It was estimated that the harvest could have been about 4,000 pockets. The case writer researched the prices ruling at the Johannesburg Market for the period when the onions have been harvested and found that the prices fluctuated between 70 cents and R1.59 per pocket. Railage would have cost 12 cents per pocket, to which should be added 10 cents for the cost of each empty pocket. Direct production costs were estimated to be R100 per acre.

While this was going on BDC formed the Farm Development Company (Pty) Ltd. BDC held two-thirds of the share, the balance being held by two white investors from Rhodesia and South Africa. The investors categorically stated that they wanted no Bamalete Tribesmen on the Board of Directors as FDC was to be run as a commercial operation without any pandering to Tribal needs. Other than those included in the lease agreement. BDC concurred.

A farm manager, Roy Eagan, was hired. Eagan was an experienced farmer who had, as he put it, been trained "the hard way"; he received his technical training on occasional courses at agricultural colleges in the U.K. but gained most of his experience by working on farms where he was taught that "taking an hour off work was like putting your hand in the till". He was an extremely hard worker, dedicated to the land and an expert in irrigation and dryland farming. He had emigrated to Rhodesia after the war where he became one of the foremost seed production farmers.
Eagan had it impressed on him that he was coming into a difficult situation caused by the previous management which had allowed various malpractices to develop unchecked. He was told that as this originally was a tribal project only tribesmen might be employed.

January 1st came and went and the lease agreement still had not been drawn up. It was considered that FDC could not take over the Scheme until the lease had been signed. As a result Eagan was having to sit around twiddling his thumbs. Eventually it was agreed that he and his wife might settle into the empty farm house before FDC officially took over the farm. As he could not yet take over the management, he spent the next couple of months repairing some of the machinery and offering advice where he thought it was needed. In general his advice was ignored - he was told by the foreman and the other workers that they were not under him.

During this period of waiting for FDC to take over, Eagan observed the management and general running of the farm. There was the foreman who did not like to take his helpful advice which was inclined to highlight shortfalls in management, therefore requiring further work input by the foreman and others. There was the clerk whose duties were obscure over and above record keeping and handling the cash - he usually started work half an hour late in the morning and left half an hour early in the afternoon. A storeman and his assistant were in charge of the stores which consisted mainly of hand tools, some fertilizer bags and other odds and ends, with a possible total value of R100. He noted that the combined wages of the storeman and his assistant came to over R60 per month. No one seemed to be responsible for a considerable amount of valuable machinery much of which was in a bad state of disrepair and left lying around the farm.

Another member of the staff was the irrigation controller whose sole duty, it seemed, was to open the water supply into the canal in the morning and then turn it off in the afternoon. Finally there was one tractor driver and about nine labourers, making a total of 14 staff altogether. Eagan was rather mystified when, at the end of the month, over 40 people turned up to receive their pay cheque. When he queried the extra numbers he was told they were working "elsewhere on the farm". He never managed to find out where "elsewhere" was because as far as he was aware he had been around all of the farm and not seen any evidence of them.
Eagan observed that a considerable amount of water was wasted everyday not only through the state of disrepair of the lining of the 5 mile canal but also through having to fill the whole canal with water (which took 4½ hours) before any arrived at the land to be irrigated. The water was turned off at the dam only when work stopped in the afternoon with a result that tens of thousands of gallons ran to waste every working day and caused a marsh to form at the end of the canal.

The farm was situated along the bottom of a valley with tribesmen living on either side of it. When people on one side wished to visit the other side they just crossed through the farm which caused considerable damage to the fences. Sometimes they took their cattle through as well, in which case the fence had to be flattened or cut when they came to the one meter deep canal they would fill it with rocks to allow the cattle to cross over. There were a few bridges across the canal but these did not seem to be conveniently placed for those crossing the valley. Fences were also damaged by neighbours collecting water for themselves and by herdsmen watering their cattle whose hooves caused considerable damage to the lining of the canal.

The working hours on the farm were the same as for all government employees, namely from 7.30 a.m. to 4.30 p.m., but Eagan noticed few workers who actually worked the full stretch. The wages paid were based on industrial rates.
By June 1974 the lease Agreement still had not been drawn up and the shareholders of FDC, brought pressure to bear on the Ministry of Agriculture to allow FDC to take over effective control of the Scheme. The Ministry finally agreed to this, assuming the lease would soon be finalised. In the same month members of the Ministry and BDC met the staff at the Scheme to advise them of the immediate changes in management. Because of the past history of the farm BDC wanted to create a good impression from the start and so offered to take on all present employees with promises of increased wages as time went by (although BDC was not very happy with the industrial wages then being paid). Altogether thirteen people signed on.

Eagan implemented the development programme which had been drawn up in the light of his experience during the previous few months at the farm. Top priority was given to repair and replacement of machinery and equipment, re-organisation of work schedule and disciplinary controls. Within a short time there were a number of staff dismissals, in particular those of the Clerk and the two storemen. There were complaints about this in the Kgotla and one of the Tribal Directors of MI claimed that he was told the retrenchment was only temporary and the Clerk and Storemen would be re-employed when the Scheme became fully operational.

In order to save money Eagan carried out most of the repair work himself and he was proud that he had managed to get one twelve-year-old tractor operational after rebuilding it from front to back, cannabalising another tractor in the process. The cost had been about R800 whereas the cost of a new tractor of the same model was R5000. He complained about the availability and high cost of spares which he personally had to collect from Mafeking 125 km from the farm, as he could not rely on the railways to drop the parcels off at his nearest siding. Parcels overshot his siding and it took many weeks to recover them. Another fifteen-year-old tractor was made operational but Eagan soon discovered that neither of these two tractors could be relied on to be operational all the time. On his recommendation a new and more powerful tractor was purchased but this did not relieve the pressure as it was soon found that all three tractors were required to cope with the amount of land then under irrigation. This situation would deteriorate if the acreage under irrigation were to be increased from the present 82 acres to 115 acres. He
already was experiencing serious difficulties cultivating 82 acres with the unreliable tractors.

Eagan patched the leaky canal and repaired the broken-down fences to keep the cattle out while putting in a number of styles to allow the people to climb over the fence without damaging it. The fences were mostly in a very bad state, being many years old and having rotten posts and rusty wires in places. Within a few weeks of repair, Eagan again found the fences damaged or cut down in many places. He therefore ceased to continue the repair work. The pastures also were not immune to having their fences cut at night by people who let their cattle in to graze, and by day Eagan had to lock the gate to his home and garden if he and his family went out, otherwise cattle and goats would be let in to graze in his vegetable garden.

Eagan considered the possibility of refencing the entire farm and having watering alcoves in the fence to allow cattle and people access to the canal in selected places. But he eventually decided against this, partly for financial reasons and partly because he was not convinced that the new fences would not be cut.

Eagan thought about putting the fenced pastures to use under a fodder rotation programme but he was afraid of uncontrolled fence cutting - so he left the pastures idle.

The wastage of time, water and maintenance costs of the five mile irrigation canal was of much concern to Eagan. He estimated that an eight inch pipeline laid in the canal with wheelvalve at the exit would cost R3500. An alternative to this would be to instal five reservoirs at strategic points along the length of the canal to hold the surplus water for pumping out first thing in the morning. The cost of these reservoirs would be in the region of R300 each. Eagan decided that the latter alternative would be both practical and cheap to implement.

In planning the re-organisation of work schedules Eagan realised that the usual 24 hour irrigation regime would be too difficult to implement with a work force which was used to working civil servants' hours. He already had tried to change the hours to the "usual" 10 hour farm workers' day, including some weekend work, but overwhelming opposition to the proposals caused them to be dropped. Eagan then tried a new approach: he would have two shifts on a 13 hour total irrigation - the first shift
starting at 6.00 a.m. till 12.30 p.m. and next from 12.30 to 7.00 p.m. As most of the irrigation would take place during the summer months with long day-light hours, he foresaw little difficulty, especially with the proposed shorter working hours. The new programme was carefully explained to those involved and all seemed to accept the proposals as satisfactory. The new regime was to start the following Monday. Monday came and the first shift turned up and worked till 12.30 p.m. shortly after which only two members of the afternoon shift turned up - drunk. The first shift had gone home and Eagan was forced to organise some of the other farm labour to complete the irrigation that day. The next day was a repeat performance by which stage he gave up in disgust and dropped all plans of flood irrigation. He installed an expensive but efficient overhead sprinkler irrigation system which cost R3500 as an initial investment. The system was connected to a powerful pump which drew water directly out of the canal. He planned to extend the sprinkler system to the new lands he was opening up, altering the pipe layout and adding more sprinklers in order to rely on even fewer labourers.

Eagan found the labour force to be extremely unstable compared with what he was used to in Rhodesia. He said they were "poor quality and unreliable, due mainly to lack of interest; they have no wish to improve their lot. They work only to augment their income earned from their holdings".

After the first rains came in October numbers of men and women labourers disappeared without warning. Enquiries revealed that it was the traditional ploughing time. Later they were to disappear again when the time came to harvest their crops. Another disrupting factor was the annual initiation ceremony for young men which lasted for two months, usually July and August. Besides losing many young men for this period, he also lost some of the women who were required to organise parts of the ceremony.

As it was the exception rather than the rule for labourers to work five consecutive days in a week, Eagan tried several incentives to increase punctuality and productivity. On cold winter mornings when work should start at 7.30 a.m. many workers arrived at 3.00 a.m. so Eagan considered supplying a hot mug of coffee or tea at 7.15 a.m. as an incentive for them to start work on time; but then he gave consideration to all their standing around during the day and thought that it was not worth implementing after all.

Two incentives towards regular attendance were tried but neither seemed to have any effect. One was to offer 3 kg. of maize meal
for every five consecutive days worked, and the other was a cash bonus for working two consecutive weeks without missing a day. Neither system showed any positive reaction from the workers and were discontinued.

In order to regularise the employment of staff and their conditions of employment, etc., Eagan drew up Contracts of Service but after a while he discontinued these as in practice they became worthless bits of paper because the terms were totally ignored by the employees.

Eagan told the case writer, "I have become tired of shouting my head off at people coming late and going home early, and now am resigned to the situation".

When the farm had been managed by the State Agricultural Department, the staff had taken off every public holiday of which there were about twelve per year. Roy reduced the number of holidays for the farm workers to six. This aroused considerable discontent amongst the workers, but they ultimately accepted the change.

There were two matters which Eagan felt very sore about but had been unable to change. Firstly, the staff would not work on the first Saturday after receiving their monthly pay — but they demanded to be paid for that day in any case. And secondly, on the Saturdays they did work, they demanded to be paid a full day’s wage, though they worked for only four hours. They said this was the way they always had been paid. Eagan gave in on these two points because he considered that unless he gave way on a few things he soon would have no labour.

Eagan found that cultivation by mules was more efficient than with a tractor because tractor drivers did not always align the harrows to travel between the plants with the result that entire rows of plants were ripped up instead of weeds.

One day the tractor driver said he could not continue to work under the foreman, and if the foreman was not fired he would resign. Although Eagan had been planning to fire the foreman, he did not like an employee "holding a pistol to his head" so he fired the tractor driver instead. Later he fired the foreman after which the tractor driver re-applied for his old post, and was accepted.

Of the original thirteen staff only six remained employed on the farm after one year. The permanent labour force had stabilised at fourteen with a temporary labour force of up to fifty during harvesting periods.
Eagan gained the impression that the tribesmen continued to regard the farm as being theirs - which it had been in earlier years - and during the maize harvest some leading members of the Tribe would drive up with a truck and ask for it to be filled with uncounted numbers of green maize cobs. When Eagan asked what about paying for the cobs, they said they would pay after selling them. Eagan refused to allow this and insisted on the cobs being counted and paid for before being taken away, which caused a certain amount of ill-feeling and on a number of occasions no sale was concluded. It was discovered that quantities of green maize were being stolen so Eagan hired guards to look after the maize crops at night and over weekends. When he finally harvested the maize, his yield around the outside of the field was double that on the inside. The expected yield per acre had been 20 to 25 bags but when the harvest was completed, it was found to average only 7 bags per acre.

One day at the end of the maize harvest Eagan met the local trader who revealed that although the past rainy season had been relatively poor he had purchased 150 more bags of maize than he normally did. Eagan asked to see the maize and inspection of a number of bags showed they contained kernels of the type of hybrid maize which he had grown under irrigation - they were distinctly different from the maize kernels usually grown in the area. Eagan then knew where his maize crop had disappeared to but he did not follow the matter up as he felt that he had enough problems on his hands without having court cases.

In January 1975 the first potato crop was harvested and found to be good, yielding about 1000 pockets of high grade disease-free potatoes. It was decided to sell them as seed potatoes since that would command a price of 50% higher than market potatoes. A Zambian buyer was found for the entire harvest which was duly prepared for shipment. Just when the shipment was ready for despatch the Zambian buyer cancelled the order as he had just received a consignment of seed potatoes from a Botswana farmer-trader (but, it transpired, grown in South Africa) which were badly diseased and had to be dumped. The Zambian buyer refused to take the potatoes unless the necessary disease-free certificate could be produced. Enquiries with the Botswana Ministry of Agriculture revealed that although they had the qualified officers to carry out the necessary inspection, there was no legislation to allow them to issue the certificate.

Representatives to the buyer that the potatoes were disease-free met with no response so Eagan hurriedly tried to sell the potatoes in the nearby towns. He succeeded in selling only about 400 pockets and
gave the rest away. When the case writer asked Eagan why he had not tried to sell the potatoes elsewhere, for example, on the Johannesburg Market, he replied that he had been strongly advised never to sell produce, especially potatoes, on the Johannesburg Market as it was capricious, prices often were below cost, and he may even have to pay for someone to dispose of his produce if no buyer were found. The case writer then investigated the ruling prices for Grade I medium on the Johannesburg Market which were found to be as follows:

- December 1974: R1.75
- January 1975: R1.34
- February 1975: R1.45

If the potatoes had been sold as uncertified (that they were disease-free) seed potatoes a price of R3.00 per pocket could have been obtained from a leading seed merchant in Johannesburg.

Enquiries revealed that the railage on 600 pockets of potatoes to Johannesburg would have cost R72.00.

The groundnut crop was very satisfactory producing over 100 bags of nuts per acre. The nuts were a large red-skinned variety which were unknown on the South African market and difficulty was experienced in marketing them. A trial consignment of unshelled nuts was sent to a large confectionery firm in Johannesburg but their comments had not been very favourable: "too much sand and too many twigs in the bags". Also the moisture content of the nuts was allegedly too high. However, the firm would consider taking the whole crop at R10 per bag which Eagan was not very keen to do as he was convinced he could receive R15 per bag. While he was trying other outlets for the groundnuts, another buyer from the same confectionery firm approached him as the previous buyer had fallen sick. He offered R20 per bag and was prepared to draw up a five-year contract to buy Eagan's entire production. Eagan then realised that his judgement on the value of the nuts was not wrong after all and he was prepared to enter an agreement with the firm.

After completing the groundnut and maize harvests, there was a substantial quantity of highly nutritious groundnut hay and maize husks which Eagan tried to sell to local cattle owners for fattening purposes. The concept of feeding cattle in this manner was new to the local farmers and as none was prepared to pay R1.50 per bag of milled hay, Eagan was considering burning it just to get it out of the way.
Eagan found marketing to be rather difficult, firstly because the market in the two nearby towns was so small, second because of competition by South African dealers who delivered a wide range of fruit and vegetables direct to the shops and third because he did not like to have people bargain with him for his produce. He told the case writer that he knew the quality and value of his produce and if any shopkeeper tried to bargain with him he would tell them to "stick it" and never try to sell it to him again. He had been supplying the Co-operative Shop in Gaborone with 20 to 30 pockets of potatoes per week for several months but one day in November 1974, when he asked the Co-op Manager how many potatoes he required, the Manager replied that he had a consignment from South Africa and would not need any that day. Eagan left but did not call on the manager again. In February 1975 the Co-op Manager drove to the farm (70 km away) with a truck to ask if he had any potatoes. Eagan said yes and immediately put the price up by 10 cents a pocket. Thereafter Eagan continued to sell 20 to 30 pockets a week to the Co-op for several months until one day the Co-op Manager said that he had enough on hand that day because he had received a large shipment from South Africa. Eagan again did not bother to return to the Co-op.

One year after the FDC takeover not one of the people retrenched had been reinstated and, the Tribal Director of MI claimed, the wife of the present manager had taken over the Clerk's job. He claimed that there was much dissatisfaction about employment on the Scheme and that there were "many people who would like work there". Eagan, on the other hand, had complained that he could not find enough workers.

By June 1975, members of the Tribe became rather concerned at the lack of information with regard to the formal take over of the Scheme by BDC. Technically the Scheme was still under MI but in practice it had been managed by BDC for one year without any agreement being finalised. Their concern was communicated to BDC who, one week later, organized a tour of the Scheme for the Chief, the two tribal Directors of MI, the Council Chairman and various Councillors. After the tour the proposed lease was discussed. BDC officers said that the terms of the lease were "still being reviewed by Government."

Shortly afterwards the case writer interviewed Mokgotsi, one of the Directors of MI, about the current situation. He said that there had been no further developments with regard to the lease agreement. When asked what he knew about the shareholders and directors of FDC, he said that he understood that BDC was the sole shareholder and that two tribal MI Directors would be on the Board of FDC, though "this had not been finalised".
The case writer then visited BDC and spoke to Mike Tiller who was the officer responsible for the project. When asked about the lease agreement, Tiller said that it had not been drawn up as there were "problems" which had to be finalised with the Ministry of Agriculture, but he added that BDC was dragging its feet over the lease as "things were not going too well" on the Scheme.

At the end of the first twelve months of farming FDC prepared a Profit and Loss Account which showed a R20,000 loss on the turnover of R35,000. In spite of the substantial loss it was anticipated that the labour, marketing and other problems would be overcome and better results would be achieved in the following year.

Eagan then prepared an analysis of the most successful crops he had grown in order to assess the priorities for the new season's planting. He drew up the following table using what he considered to be conservative estimates for yield per acre and estimated selling prices.

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Yield per acre</th>
<th>selling price</th>
<th>Revenue per acre</th>
<th>Direct cost per acre</th>
<th>Return per acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maize</td>
<td>35 bags</td>
<td>R 5.00</td>
<td>R175.00</td>
<td>R 80.00</td>
<td>R 95.00</td>
</tr>
<tr>
<td>Groundnuts</td>
<td>20 bags</td>
<td>R15.00</td>
<td>R300.00</td>
<td>R125.00</td>
<td>R175.00</td>
</tr>
<tr>
<td>Potatoes</td>
<td>450 pocs.</td>
<td>R 1.50</td>
<td>R675.00</td>
<td>R300.00</td>
<td>R375.00</td>
</tr>
</tbody>
</table>

Eagan then summarised his thoughts on the crops listed in the table as well as others which he had grown on the farm or knew about:

**Maize.** The return per acre was low when compared with the other crops but it was the only crop where the floor price was guaranteed. The crop could lend itself to mechanisation if grown on a large scale but steps would have to be taken against theft while the maize was green.

**Groundnuts.** The yield per acre was very favourable but the problem was the uncertain market.

**Potatoes.** This crop would produce a most favourable return if it could be marketed satisfactorily. Eagan considered that he could grow potatoes almost throughout the year which should solve his local marketing problem. If labour was troublesome he could harvest them mechanically.

¹Not including overheads, e.g. Manager's salary, depreciation, etc.
Onions. Eagan knew that the farm had produced an excellent onion crop under the previous management but from the acres grown nothing had been harvested due to marketing problems. He was not very keen to have the same experience.

Soya Beans. An experimental crop had been fairly successful, producing about five bags per acre, but due to the unreliable labour, a harvester would have to be purchased – an expense which could not be justified. Eagan thought that marketing also could be a problem.

Canadian Red Wonder Beans. A fairly successful crop of these beans was grown but no satisfactory markets could be found.

After considering the pros and cons of the above crops he decided to specialise in only two crops while continuing to experiment with others. Eagan considered that the two crops should be maize and potatoes, his basic reason being that both crops could be farmed with a high degree of mechanisation. In any case the planned expansion of the irrigated lands from 82 to 115 acres would only be possible with mechanisation as he felt labour could not be relied on. Maize could be marketed without any difficulty while he considered that potatoes had a good chance of finding markets if he produced them throughout the year.

Eagan calculated that he could put 120 acres under irrigation and, with mechanisation, would require a permanent staff of only six people. Farming on this system should yield net annual profit of not less than R8000.

Eagan realised that a successful irrigation farm depended on most of the staff having a thorough practical knowledge of irrigation. The only way he could see this happening was for about five Batswana to go to an agricultural college to gain the theoretical knowledge and then have the practical experience of working on a small but successful irrigation farm before taking up duties on the Scheme. Then "after five years the farm should be a proper success".

Eagan put forward the proposed plans for training and the cultivation of crops to his Board of Directors. At the same time he reluctantly advised them that he would not renew his two year contract as he had come to the conclusion that he did not have the right temperament for working with the local labour.

The Board of Directors accepted the wisdom behind Eagan's resignation and advertised for a manager who preferably had farmed successfully in Botswana for a number of years and could speak the language of the
Within two months Eagan advised the Director of FDC that he had changed his mind and would be prepared to renew his contract. The Board of Directors agreed to keep him on particularly as the farming operations, coupled with marketing, had taken a definite turn for the better.

As the 1974 maize crop had suffered such severe depredations from theft, Eagan decided to take strong measures to prevent a repeat performance in the 1975 season. Besides the employment of guards in the fields, he refused to sell green mealies to any villagers in the valley. He reasoned that if anyone in the village were seen with green maize, it could only have been stolen from the farm as the local (non-irrigated) maize would not mature till the end of January at the earliest.

This decision caused much indignation amongst the Bamalete living in the valley as such a rule had never been made in the 30 year history of the Scheme. Green mealies are a much appreciated delicacy and many people usually bought mealies in bulk from the Scheme to sell at 100% profit in the townships, thereby earning cash to pay for school fees, etc.

The matter was brought up at a Kgotla meeting where many people were bitter about the situation. It was agreed that Eagan be summoned to a special Kgotla meeting a few days hence to explain himself. A "Botswana Daily News" reporter had attended the earlier meeting and then interviewed Eagan who was reported to have said he "did not sell maize to people from Bamalete area because if he did so, they would steal maize from the farm and claim to have bought it. He said the Minister of Agriculture........ was fully aware of that". Eagan said almost exactly the same words concerning the Bamalete and theft to the case writer who visited him just before he attended the Kgotla meeting to which he had been summoned.

Eagan duly attended the specially convened Kgotla Meeting to explain the new measure. At the meeting, which was attended by about 300 tribesmen, many speakers spoke about the Scheme being a Tribal one and that it was there for the benefit of the Tribe even if they had to pay for the produce. Eagan replied by quoting statistics: In December 1974 and January 1975 he had sold green mealies worth a total of R194 whereas the sales for December 1975 and half of January 1976 had totalled almost R3000 from the same acreage of land. He considered that these statistics justified his decision

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1 Corn-on-the-cob
not to sell green mealies to the people in the valley. Councillor Moganu (who had been the Agricultural Demonstrator on the Scheme from 1944 to 1967) said that when such far reaching decisions are made they should be discussed with the Tribe before being implemented. After some further discussions Eagan agreed to retract his ruling on the sale of green mealies.

On the day after the Kgotla Meeting the "Botswana Daily News" published the news item in which Eagan was quoted as saying that he would not sell maize because the Bamalete would steal maize, etc. This report incensed a number of tribesmen who took the matter to the Kgotla as they considered that Eagan was saying all Bamalete were thieves.

Mr. Molefe, a Tribal Elder and Council Secretary, tried to defend Eagan, for whom he had a lot of respect as a hardworking and dedicated farmer, by suggesting that the "Daily News" often misquoted people and caused trouble. At the time of writing the matter was still sub judice in the Kgotla.
LOCAL GOVERNMENT IN BECHUANALAND PROTECTORATE/BOTSWANA

In 1885 the British Government somewhat reluctantly assumed the protection of Bechuanaland as international events in Southern Africa at the time forced their hand. The British Government undertook to protect and administer the country until the Protectorate became self governing in 1966 when the new Government changed the Territory's name to Botswana.

The capital of Bechuanaland Protectorate originally was in Vryberg about 200 km. south of the border but in 1896 it was moved to Mafeking which is 25 km. south of the border. It was not till Independence that the capital was moved to Gaborone.

The central administration consisted of the Resident Commissioner who was assisted by a Government Secretary and a small Secretariat, and a number of departments, each with its head. The Resident Commissioner, the Secretariat and the department heads (e.g. Agriculture, Veterinary, etc.) were based in Mafeking. The Resident Commissioner was subordinate to the High Commissioner for the United Kingdom in South Africa, who also was High Commissioner for Bechuanaland, Basutoland, and Swaziland. The High Commissioner was based both in Pretoria and Cape Town, about 450 km. and 1400 km. from Mafeking respectively. He was the legislating authority though certain powers in this respect were delegated to the Resident Commissioner.

The Resident Commissioner was advised in his conduct of the affairs of the Protectorate by an European Advisory Council and by an African Advisory Council, over both of which he presided.

The European Advisory Council consisted of 8 members, elected by enrolled voters, and met in Mafeking twice a year. The African Advisory Council consisted of 36 members who were chiefs, headmen and tribal elders. This Council met once a year in Lobatse and

---

1. This note is based on material originally prepared by Mr. E. Brian Egner, for many years a DC under the Colonial Administration from 1958 to 1966, who also served the Botswana government from 1966—75 until his retirement in 1975.

2. When the South African Parliament was in session he moved with his Secretariat to Cape Town.
invariably was an occasion for frank debates in which the Administra-
tion often came in for criticism.

The District Commissioners (DC's) also met once a year at a
class in Mafeking to discuss their common problems with the
Resident Commissioner. The DC's were the main tool for indirect
rule as applied in Bechuanaland.

Bechuanaland was divided into 10 districts, six of which were tribal
reserves while four were in non-tribal territory. A DC was placed
in charge of each district where he lived in the tribal capital,
with the exception of the DC of Gaborone who lived in a government
reserve near the railway but outside the area of the Bamalete and
Batlokwa tribes which came within his district. At each district
headquarters there were a number of departmental Officers and
Protectorate Police.

The day-to-day administration of the African population was in the
hands of traditional and hereditary Native Authorities. The Tribal
Administrations obtained their finances by a rebate from the central
Government of 35% of the basic Native Tax. They also taxed the
tribesmen on property or income, and they collected rents on trading
stores, etc.
In colonial days, the DC was the principal representative of the Central Govt. in his district. Because of lack of communications, funds, staff etc., he was trusted and expected to govern his district, making virtually all day-to-day decisions on his own initiative, and operating under only the broadest of policy/guidelines from his headquarters. It was a completely decentralised system, where the motto was "trust the man on the spot".

Until the early 1960's the convention persisted that even the Resident Commissioner "requested" the DC's permission to pay a visit to his district. At least from the early 1930's the entire responsibility for law and order, administration of justice, of human life, and property, internal security, social and economic development, and political relationships between groups in the society was borne by district commissioners, directly in the State Land districts (towns of Lobatse and Francistown, Ghanzi district, Kgalagadi district and Chobe district) and more or less indirectly in the tribal areas, depending on the character of the chief and tribal administration.

Initiative and leadership in e.g. school and dam or road building could come either from the chief, the DC or (especially in education and health development) the local missionary.

But the free regimental labour or cash levies on tribesmen required to implement such development projects were normally exacted from the people by the chiefs, whose popularity sometimes suffered as a result, even though they were often acting under direct pressure from the DC, who stayed in the background when such "tribal" matters as forced labour or development levies were being criticised, thereby preserving his own reputation for benevolent impartiality.

This gentle manipulation of the chiefs by the colonial authorities under the system known as "indirect rule" had at least partially discredited the chieftainship as an institution by the time Independence came, thereby rendering it a fairly easy matter for the new national government to take over the powers of the chieftainship.
The new national government found a completely decentralised system of administration when it took over in 1966. This system was still almost entirely run by authoritarian expatriates who were used to exercising real political power. Many of them were quite unable to give up overnight the decision-making prerogatives which now properly belonged to the elected representatives of the people.

Inevitably, and rationally, the national government, whose first priority task was to establish its own rule, set in train a thorough process of centralising all decision-making in Gaborone. This meant demolishing the power of the District Administration transferring the most able DC’s to Gaborone, stripping the districts of "resource personnel", and, simultaneously, taking away the powers of the chiefs, through whom the colonial District Administration had exerted its powers.

By 1970 the centralising moves which were initiated in 1966 had achieved their purpose of firmly establishing the new national government in control of the machinery of government.

By 1970 it also became obvious that whilst centralisation had achieved its political purpose, it was bringing many administrative inefficiencies in its train.

The districts, which had once been the place for the ambitious man who wanted to build a career, had now become a backwater; the District Administration was stripped of power, without competent personnel, and morale was at its lowest ebb.

The same situation existed in all other departments of Government—the district level officers had been stripped of decision-making power; decisions demanding detailed local knowledge were being taken by personnel stationed in Gaborone; the best officers from the districts had been brought in to swell the ever-growing headquarters staff; and morale in the districts had fallen about as low as it could get.

To sum up the 1970 situation, most of the real power and most of the able administrators were concentrated in Gaborone. Apart from the Office of the President, which concentrated upon co-ordinating the activities of the various centralised ministries in Gaborone, financial power over the allocation of resources was held by the totally centralised and largely expatriate-manned Ministry of Finance and Development Planning, which at that time...
did not have a single planning officer or senior administrator who had served outside the capital.

Having established its full control over the machinery of government by 1970, the BDP\(^1\) Government quickly turned its attentions toward remedying the inefficiencies of centralisation, which had been reflected in a growing discontent on the part of the rural people, who had in fact been receiving less than their share of attention from the truncated district-level civil service since independence.

The adoption of an active policy of rural development in the early 1970's meant in fact the end of the era of excessive centralisation and a partial return to a decentralised system where real and important decisions would again be taken at the district level.

In 1970 a Presidential Circular defined the role of the post-independence District Commissioner:

- The DC remains the principal representative of Government in the district on all policy matters.
- As Chairman of the District Development Committee he is responsible for the effective implementation of national and district development plans, including local authority plans.
- He is also responsible for the efficient conduct of public business and for the Coordination of departmental activities.
- And he is responsible for the maintenance of law and order including the implementation of laws, circulars and instructions.

Whilst the DC still retains a multitude of statutory functions (e.g. liquor licences, inquests, marriage) and still in most districts has a full load of judicial work, the emphasis since 1970 has definitely been on his role as an agent of change, the coordinator and activator of all development work in his district. He has been assisted since 1971 by a District Officer (Development) normally an economist (posts still filled by expatriate volunteers), who acts as full-time secretary of the District Development Committee (DDC).

\(^{1}\)Botswana Democratic Party.
The success of the DDC system in increasing rural development expenditures through better planning at the district level is illustrated by these figures of district council capital development expenditures since 1971:

<table>
<thead>
<tr>
<th>Year ended</th>
<th>31.3.72</th>
<th>60,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>31.3.73</td>
<td>240,000</td>
</tr>
<tr>
<td></td>
<td>31.3.74</td>
<td>1,000,000</td>
</tr>
<tr>
<td></td>
<td>31.3.75</td>
<td>6,000,000</td>
</tr>
<tr>
<td></td>
<td>31.3.76</td>
<td>6,000,000 (est)</td>
</tr>
</tbody>
</table>

i.e. a hundredfold increase in three years.
PRE-INDEPENDENCE

Commonwealth Office (London)

Secretariat Staff

High Commissioner for the United Kingdom in South Africa and also for Bechuanaland Protectorate Swaziland & Basutoland (Pretoria/Cape Town)

Agricultural Advisor

Secretariat Staff

Resident Commissioner Bechuanaland Protectorate (Mafeking)

African Advisory Council

European Advisory Council

Other Advisory Staff

Other Professional Heads of Department (Mafeking)

Director of Public Works (Mafeking)

Director of Agriculture (Mafeking)

Divisional Commissioner South (Lobatse)

Divisional Commissioner North (Francistown)

District Commissioner (Gaborone)

Other DC’s in the South

District Commissioners in the North

Chief & Tribal Administration (Ramatswa)

Chiefs & Tribal Administrations in the South

Chiefs & Tribal Administrations in the North
The "War Effort" was part of the Colonial Administration's drive to greater productivity to support the British Empire's involvement in the Second World War.

In September 1940, Bechuanaland's "War Effort" was taking shape. The Resident Commissioner toured the country talking at the Kgotlas of all tribes, where he stated that in order to help the War Effort (i) people must be made to plough and plant more land; (ii) men should go to work in South Africa to produce more gold; and (iii) physically fit men should be ready for call up.

The Chief Agricultural Officer wrote to the Government Secretary outlining the Agricultural effort:
The Government Secretary,
MAFEKING

Subject : AGRICULTURAL WAR EFFORT - BECHUANALAND PROTECTORATE.

and your urgent letter of 14.9.40.

I beg to inform you that the agreed agricultural effort in this Territory is briefly as under:

(1) That the communities in the best grain growing areas are ploughing special "War Lands" to increase grain supplies which might be used:
(a) to feed the armies of the North and so help the war effort,
(b) be added to the tribal grain reserves, or;
(c) be sold and the proceeds of such sales used for whatever purpose the tribe might decide upon.

(2) Such additional ploughed areas are to be located so as not to dislocate family life. It is thought better to have a whole lot of special "War Lands" scattered throughout each reserve, so that no matter how the rains fall at least some of these lands will benefit, than to attempt the cultivation of larger areas situated at only a few centres.

(3) At each centre it is contemplated that the ploughing and planting will be done by a mass effort from all cultivators, whose own holdings are situated near to where each particular "War Land" is. The weeding, thinning, cultivation, bird scaring and so forth will be done by rotation of family groups, each being responsible for a few days' work. The harvesting and threshing will be a collective effort similar to the ploughing and planting. Where necessary, seed will be obtained by purchase by means of an advance from the tribal treasury. In some areas where suitable seed is not now available it has been arranged that the Chief Agricultural Officer will obtain this at cost from other areas.

(4) Government is making available all agricultural demonstrators possible, who will act under the Chief as general organiser of the effort. The idea being to get some degree of improved effort from the multitude rather than a perfected return from a few.

(5) The growth of kaffir corn, millet and beans is in most areas being undertaken, since these grains are far more likely to crop than maize, and it is believed are more suitable for rations for the Northern African soldiery.

Russell England

CHIEF AGRICULTURAL OFFICER.
Two months after instigating the War Lands programme, the CAO reported to the Resident Commissioner: "All tribes are giving the scheme their full support, and there is no reason to believe that our aim will not be achieved, and that once achieved, will not continue to increase to the future benefit of the agriculture of the Territory".

In the meantime, the Chiefs asked if the Administration would guarantee to purchase all the surplus grain that would be produced on the war Land. The request was referred to the High Commissioner who refused to give any such guarantee, saying that the grain would have to be sold through "normal channels", viz., traders and any Administration Departments which may require it, e.g. prisons or hospitals.

Within six months it was clear that the War Lands programme was a virtual total failure throughout the country. The official reasons given were that the people were lazy, unmotivated, too busy with their own lands, nobody delegated to look after the weeding, bird scaring and harvesting, etc. The CAO proposed to the Resident Commissioner that the men and women be "strictly regimented" in the different tribal areas to work on the War Lands and added, "it is believed that if this plan were carried out the production from War Lands will be greatly increased." When the Chiefs heard about the proposals they rejected it out of hand.

The Administration continued to put pressure on the tribes to prepare sufficient War Lands for the next season but though the Chiefs showed some co-operation, the people showed a marked lack of enthusiasm. The Bamalete decided not to cultivate any War Lands but rather that for each male adult one bag of grain be donated to the tribal grain reserves, a proposal which was accepted by the Administration and a number of other tribes followed suit.
SIR,

I am directed by the Resident Commissioner to refer to my letter No. 2042 of 28th October, 1942, enclosing a draft of an Agreement with the Bamalete Tribe for a loan of £2000 for the purpose of clearing, stumping, ploughing and levelling the land at the Mogobane Dam, which was to be brought under irrigation.

2. The question of the additional funds required for the purpose of installing concrete irrigation canals, channels and distributaries was dealt with in my letter No. 2042 of 2nd April, 1943, and connected correspondence.

3. The work of clearing was put in hand in 1942 and 135 acres were cleared of timber, of which 95 were stumped, very roughly levelled and ploughed. It became clear, however, that hand-clearing, particularly stumping, was slow and very expensive, and that without mechanical assistance it would be uneconomical to continue with this method. It was proposed therefore that a tractor and grader required by the Public Works Department for the canals should be utilised for this purpose and the services charged to the Bamalete loan, thus the work could be carried out expeditiously and efficiently and the necessary levelling, which was a big undertaking, could be completed before the Public Works Department started installing the canals, etc.

4. There has been considerable delay in obtaining the tractor and grader (see my letter No 175/3 of 7th January, 1944, and connected correspondence ending with High Commissioner's despatch No. 6809 of 27th September, 1944) and the implements have not arrived even yet. In the meantime permission was granted, owing to the serious food position, for a temporary irrigation scheme costing £250 (see paragraph 16, etc., of my letter No. 2042 of 2nd April, 1943). This scheme was installed and crops were planted in 1943 and Loan funds utilised for the purpose of preparing the ground for the crops, and ultimately for planting and reaping. It was anticipated at the time that the implements and cattle, etc., of the Agricultural Department would be available and that certain expenditure would be required on labour and manure, etc., leaving a sufficient balance to cover the hire of the tractor for the clearing and stumping and final levelling. It was found necessary, however, to augment the implements loaned by the Agricultural Department by the purchase of certain new implements and owing to the delay in receiving the tractor and grader it became necessary to make provision in the current year's estimates of the Tribal Treasury for continuing the agricultural activities of the scheme and to carry into this year's estimates some of the revenue derived from crops planted in the previous year with loan funds.

THE ADMINISTRATIVE SECRETARY
TO THE HIGH COMMISSIONER,
CAPE TOWN.
5. Experience of the year's working has also shown that, owing to liability to flooding, which it is difficult without considerable expenditure to stop, it will be necessary to abandon the intention of irrigating the 70 acres near the dam (out of the total of 300 acres) for the growing instead of fodder crops such as lucerne, pasture and hay grasses. Thus the area to be used for the production of grain and to be brought under regular irrigation will be 230 instead of 300 acres.

6. The picture therefore is as follows:

Cleared of timber and stumped and rough levelled .................. 165 acres
Residue ....................................... 135 acres

Expenditure:
On clearing, stumpimg and preparation of ground; purchase of oxen implements, etc. (development) ...... £ 1249:16:10
On the cultivation of crops (production) ................................. 620: 0: 0
Total costs ................................... 1869:16:10
Unspent Balance ................................ 130: 3: 2

2000: 0: 0.

Revenue received from crops
planted ......................................... 440: 6: 1
Unspent balance of loan ....................... 130: 3: 2
Oxen, implements, etc. on hand (purchased from sum of £1249:16:10 shown above for development) .............. 192:19: 4

Total Revenue, assets, etc. ... £ 763: 8: 7.

To this sum of £763:8:7, must be added a proportion of the estimated revenue from maize planted last year which will be received during this financial year and has been included in the Native Treasury Estimates for the current year, amounting to £338.

7. The Public Works Department and Agricultural Department have together estimated the amount of money which will be required to debush and stump the 135 remaining acres and to carry out the final levelling and terracing of the 230 acres. Each operation will cost £4 an acre making a total of £1,460.

8. Had the tractor and grader been available in the first instance it is clear that the loan of £2,000 would have been sufficient for the operations required, but as stated above, the clearing by hand has proved expensive and slow. Moreover, it was anticipated when the original scheme was drawn up that much of the clearing and ploughing would be done by individual plot holders (see pages 3 and 4 of Annexure A enclosed with Government Secretary's letter No. 2042/1 of 13th March, 1942).
Labour was to have been supplied by the Tribe, but after the officer in charge had tried for some weeks to cope with the work with seventeen children, the eldest of whom was not more than fifteen years, which was the best labour the Tribe could produce owing to absence of most of the men on the mines or in the African Pioneer Corps, it became clear that hired labour would have to be employed.

The money spent, however, on the operations which have hitherto been conducted must be regarded in the circumstances as having been usefully employed, not only on account of the actual food which has been produced but because it has been the means of encouraging the Tribe to take an interest in irrigation. Up to eight months ago the Tribe entertained a strong suspicion and dislike of the whole scheme. There has, however, been an improvement in recent months in their outlook, to which the preparation of the Estimates in full Kgota and explanations by the District Commissioner, Mr. Lawrenson, who has skillfully drawn the Tribe into the planning, have contributed not a little. The question remains as to how the final clearing and levelling should be financed.

Whilst it is true that the Tribe will ultimately benefit by the scheme it must be admitted that the Agricultural Department has learned valuable lessons from the scheme regarding the planting of crops under irrigation in local conditions and these will ultimately prove of value elsewhere in the Protectorate. It would not seem equitable to call on the Tribe to pay from their own resources for the experience which Government has gained. The experiment has had many set-backs. No officer of the Government has had much experience of irrigation, and consequently mistakes were made, heavy storms caused the flooding from the dam of much land under cultivation and a consequent loss of crops and adequate supervision by a short-staffed department with numerous other important duties demanding attention was a constant source of worry to the Principal Agricultural Officer. During the present drought the conditions have become equally difficult since the level of the water in the dam has fallen below the temporary outlet, and the permanent outlet (at the bottom of the wall) cannot be used until the permanent concrete canal is installed. This has been delayed by the failure to secure the services of a man qualified to do concrete work. Every effort is, however, being made to complete the permanent scheme as soon as possible.

Since the arrival of the Director of Livestock and Agricultural Services, who has had wide experience in irrigation, the whole system is being overhauled and there is every prospect of its being placed on a sound basis. In the circumstances it is suggested that, after deducting the value of the assets (cattle, etc.) namely, £192:19:4, and the unspent balance of the Loan, namely, £130:3:2 the rest of the money required to complete the scheme may be met by a free grant from the Colonial Development and Welfare fund.

In order that the Bamalete may place their operations on a sounder basis, in accordance with advice given by the Director of Livestock and Agricultural Services, they have requested that the repayment of the first and second instalments (of £200 this year and £200 next year) may be deferred. The re-organisation will involve the purchase of some oxen and additional plant, and His Honour strongly supports the request.
**APPENDIX 4**

**BAMALTE NATIVE ADMINISTRATION:**

**MOGOBANE IRRIGATION SCHEME**

Estimates 1947 - 1948

**EXPENDITURE**

### SALARIES

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Agric. Demonstator £10 per month</td>
<td>120</td>
</tr>
<tr>
<td>2 Night Guards, 1 Day Guard, 2 herds £2.6/-p.m.</td>
<td>138</td>
</tr>
<tr>
<td>1 Learner Demonstrator £1.6/- p.m. &amp; 15/- rations</td>
<td>24</td>
</tr>
</tbody>
</table>

### CROP PRODUCTION:

**Wheat 160 acres:** To be planted May/June 1947
- Ploughing, Irrigation, Cultivation & Planting: 160
- Seed Fertilisers and Manures: ... (325)
- Reaping and Threshing Irrigation: ... (300)
- Additional labour, bird scarers, etc: 40 (825)

**Maize 160 acres:** To be planted Dec/January 1948
- Ploughing, Irrigation, Cultivation & Planting: 175
- Seed Fertilisers and Manures: ... (230)
- Irrigation, cultivation, reaping & threshing: 320
- Additional labour, bird scarers, etc: 40 (765)

### Miscellaneous:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 acres green maize</td>
<td>25</td>
</tr>
<tr>
<td>2 acres potatoes</td>
<td>40</td>
</tr>
<tr>
<td>2 acres pumpkins</td>
<td>8</td>
</tr>
<tr>
<td>1 acre monkey nuts</td>
<td>10</td>
</tr>
<tr>
<td>10 acre headlands kaffir corn</td>
<td>45</td>
</tr>
</tbody>
</table>

### Contingencies:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance of irrigation furrows</td>
<td>250</td>
</tr>
</tbody>
</table>

### CAPITAL EXPENDITURE

**Buildings:**
- Mealie crib & threshing floor £30
- Extension of Produce Shed 100
- Labourers quarters 200 (330)

**Equipment:**
- Kaffir corn a mealie thresher £60
- 1 Double furrow plough 30
- 2 Single furrow ploughs 30
- 1 Tractor ... (450)
- 12 overalls, 12 gum boots, 12 overcoats 50 (620)

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance of irrigation furrows</td>
<td>100</td>
</tr>
</tbody>
</table>

**Summary of Expenditure**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries</td>
<td>282</td>
</tr>
<tr>
<td>Crop Production</td>
<td>825</td>
</tr>
<tr>
<td>maize</td>
<td>765</td>
</tr>
<tr>
<td>miscellaneous</td>
<td>128</td>
</tr>
<tr>
<td>Contingencies</td>
<td>250</td>
</tr>
<tr>
<td>Maintenance of irrigation furrows</td>
<td>100</td>
</tr>
<tr>
<td>Capital Expenditure</td>
<td>950</td>
</tr>
</tbody>
</table>

Total: £3300
**BAMALETE NATIVE ADMINISTRATION:**

**MOGOBANE IRRIGATION SCHEME**

**Estimates 1947 – 48**

**REVENUE.**

<table>
<thead>
<tr>
<th>Crop</th>
<th>Acres</th>
<th>Bags @ Per Bag</th>
<th>Revenue (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maize Crop 1946/47</td>
<td>160</td>
<td>25/-</td>
<td>£ 2,000</td>
</tr>
<tr>
<td>Wheat Crop 1947</td>
<td>160</td>
<td>35/-</td>
<td>1,400</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td></td>
<td></td>
<td>200</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>£ 3,600</strong></td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Full Form</td>
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<td></td>
</tr>
<tr>
<td>--------------</td>
<td>-----------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AAPC</td>
<td>Auxiliary African Pioneer Corps.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARC</td>
<td>Assistant Resident Commissioner</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AO or A &amp; LO</td>
<td>Agricultural &amp; Livestock Officer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAO</td>
<td>Chief Agricultural Officer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DA</td>
<td>District Administration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DC</td>
<td>District Commissioner</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DLAS</td>
<td>Director of Livestock and Agricultural Services; also known as the Director of Agriculture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DPW</td>
<td>Director of Public Works</td>
<td></td>
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<tr>
<td>GS</td>
<td>Government Secretary</td>
<td></td>
<td></td>
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<tr>
<td>HC</td>
<td>High Commissioner</td>
<td></td>
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<tr>
<td>PAO</td>
<td>Principal Agricultural Officer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PWD</td>
<td>Public Works Department</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RC</td>
<td>Resident Commissioner</td>
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</tbody>
</table>
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