Anti-Erosion Policies in the Mountain Areas of Lesotho: the South African Connection

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SUMMARY

Commercial agriculture in the dry interior of South Africa is heavily reliant upon irrigation water from the Orange River. Most of this vital water does not fall as rain on South African soil but as rain and snow in the mountains of Lesotho. At various times over the past century fears have been expressed over the impact of soil erosion in the mountain areas of Lesotho on South African water resources. These fears have, on occasion, been translated into political pressure on Lesotho to implement anti-erosion policies such as grazing control in the mountain areas.

This paper concentrates on the first period of anti-erosion policies in the mountain areas of Lesotho in the late 1940s and early 1950s, and examines the importance of South African pressures to the adoption of these policies. During this period the issue of soil erosion became an important element in the debate about the transfer of the High Commission Territories (Lesotho, Swaziland and Botswana) to South African control and an issue that caused a great deal of concern amongst Lesotho’s colonial officials. The subsequent development of an apartheid ideology changed the nature of South African demands in relation to the transfer of the High Commission Territories, and the issue of soil erosion rapidly dropped from the political agenda. The rise and fall of soil erosion as an issue of concern in this period had more to do with internal South African politics than it did with the reality of environmental conditions in the mountain areas of Lesotho.

INTRODUCTION

The blue mountain ranges of Basutoland, towering upwards fold upon fold hold the key to South Africa: the abundant waters that make her greatest and many of her lesser rivers and give life to plants, animals and humans. (Palmer 1945: 3)
Commercial agriculture in the dry interior of South Africa is heavily reliant upon irrigation water from the Orange River. Most of this vital water does not fall as rain on South African soil but as rain and snow in the mountains of Lesotho. South Africa’s biggest river, the Orange River (known as the Senqu in Lesotho) receives the majority of its flow from headwaters and tributaries in the Lesotho mountains. At various times over the past century fears have been expressed over the impact of soil erosion in the mountain areas of Lesotho on South African water resources. These fears have, on occasion, been translated into political pressure on Lesotho to implement anti-erosion policies in the mountain areas. In this paper I argue that the enactment of policy designed to control soil erosion in the years 1947–1956 had little, or nothing, to do with the reality of environmental conditions in the mountains and everything to do with the changing attitudes towards African occupied land amongst white South African politicians.

International disputes over water resources are commonplace and have received much attention from politicians, academics and the media. In the Middle East, for example, many commentators have made alarmist predictions pointing to water disputes as the most likely cause of future conflict in the region, while in South Asia there is a long running debate about the impact of soil erosion in the Himalayas on the hydrology of the Ganges Valley (Chapman and Thompson 1995; Ives and Messerli 1989). South African/Lesotho water relations have received surprisingly little attention, even with the construction of the massive Highlands Water Project. One reason for this has obviously been that South Africa’s ability to influence Lesotho’s politics has been so overwhelming that dispute seems impossible. Indeed some commentators on water resources get around the issue by simply pretending Lesotho does not exist.

Lesotho’s reputation as a country suffering from severe soil erosion is well established. There have been reports predicting imminent environmental collapse since early this century (Showers 1989). The finger of blame for this erosion crisis has almost always been pointed at poor farming techniques in the lowlands and valleys and at over-grazing on the mountain pastures. Policies designed to combat soil erosion have included the building of contour ridges and other engineering interventions, grazing control, the control of agricultural expansion, the centralisation of villages and policies to encourage reductions in livestock numbers.

The evidence to suggest that high stocking rates in the mountain areas of Lesotho have caused problems for South African water management on the Orange River is, at best, shaky. The necessary long-term detailed hydrological data on the Orange River within Lesotho do not exist even today and certainly did not exist in the 1940s and 50s: Chakela (1973: 14) comments that the almost total lack of hydrological data for the 1935–1970 period is one of the most striking aspects of the literature on soil and water conservation in Lesotho. Two officially sanctioned surveys of siltation in the Orange River inside Lesotho were
ANTI-EROSION POLICIES IN LESOTHO

carried out in the 1950s but the techniques used for determining the rate of siltation appear to have been confined merely to observation. Furthermore neither survey involved the sort of long term data collection necessary to determine the impact of grazing on the levels of silt in the river (i.e. data covering a number of seasons and over a number of years). More recent research on soil erosion in Lesotho has tended to concentrate on the naturally highly erodable sandstone soils of the lowlands and foothills and not on the mountain basalt soils (Singh 1994; Stromquist 1990; Chakela 1981).

Nevertheless, international disputes, or indeed agreements, over the causes of environmental problems are not reliant upon strong evidence. The limited factual basis to knowledge of most environmental issues and the enormous scope for collision between conflicting value systems means that it is often not the issue itself which steers the debate but the preconceptions that different proponents bring to it (Chapman 1994: 225). In order to understand why the colonial authorities in Lesotho came under pressure from the South African state to institute anti-erosion policies it is important to understand not only the political dynamics of the relationship but also to place the events within the context of colonial ideas about the African environment. It is important to trace the way in which these ideas intersected with wider views about African society and how they developed over time. Crucial to this story about the rise and fall of one environmental policy were the changing ideas about African occupation of land that went hand-in-hand with the rise of an apartheid ideology.

EARLY FEARS OF THE IMPACT OF SOIL EROSION

Fears about increased rates of human induced soil erosion in the lowlands of Lesotho have existed since the mid-nineteenth century (Wilcocks 1901, Showers 1989). Specific concerns over the impact of erosion in the mountain areas on the hydrology of South African rivers are more recent; the first evidence of these concerns is a report by A.W. Heywood written in 1908. Heywood, an official in the Cape Forestry Department, was approached by the Basutoland authorities to write a report on forestry. In the report he expressed concerns over the impact of soil erosion in the mountains for the hydrology of South African rivers and advocated the widespread planting of trees not simply as an economic development policy but also to ‘regulate and restrain the flow of water’ from the steep mountain slopes (Heywood 1908: 10). Heywood’s ideas were taken up a few years later by K.A. Carlson, the Conservator of Forests in the Orange Free State, in a paper presented at the 1913 South African Irrigation Congress in Outshoorn (Carlson 1913). Carlson argued that South Africa should fund the establishment of a huge forest reserve across the central ranges of the Drakensbergs (within Lesotho) which he argued would act as a huge reservoir and regulate the flow of the Orange River. While his arguments concerning the problem that erosion in
Lesotho could cause irrigation projects in South Africa appeared to be accepted by the other delegates, his proposals were treated with scepticism; there were a number of comments suggesting he was more concerned with enhancing his department’s influence than anything else.

These two reports were produced towards the end of the period when dessicationist ideas dominated environmental concerns in the Cape (Grove 1987). Over the next couple of decades concerns about lack of forest cover were replaced by concerns over the state of the mountain pastures. During the 1920s the Basutoland authorities had begun to introduce policies aimed at increasing the profitability of the livestock sector (Phororo 1979; Quinlan 1995). One of the perceived problems with the livestock industry in Lesotho was the state of the mountain pastures and from the early 1930s onwards there was an increasing emphasis on the issue of overgrazing.8

Russell Thornton9 was especially important in defining the fears of the Basutoland authorities over pasture deterioration. His 1931 report on Lesotho’s mountain rangeland argued that some of the best sheep pasture in southern Africa was being senselessly destroyed by ‘wanton vandalism’ (Thornton 1931). He believed that high stocking rates were leading to the area’s climax community of ‘wonderful rooigras’ (dominated by Themeda triandra) being overgrazed. This was allowing invasion by the inedible plant succession of ‘bitter Karoo bush’ (Chrysocoma tennifolia) and a significant decrease in the nutritional value of the pasture. Furthermore the ‘bitter Karoo bush’ did not provide good ground coverage and was therefore accelerating the process of soil erosion. It is beyond the scope of this paper to assess the validity of Thornton’s theory of pasture deterioration; but it is worth noting that the area covered by ‘bitter Karoo bush’ in 1936 was calculated at 13% of the mountain area (Staples and Hudson 1938: 13) compared with 12.4% of the whole country in 1987 (Land Conservation and Range Development Project figures quoted by Swallow, Brokken, Motsamai, Sopeng and Storey 1987: 20). Even if you make the dubious assumption that there was absolutely no ‘bitter Karoo bush’ in the lowlands in 1938, as Swallow et al. (1987) do, this only represents an increase of 4.3% of the total land area covered by the unpalatable species over 50 years of stocking rates at a level almost double that recommended by Thornton (see figure 1). Furthermore recent ecological theories of African rangelands have rejected the concepts of climax communities and the primacy of grazing pressure as the main controlling factor (see Behnke, Scoones and Kerven 1993).

Thornton’s primary interest was in the development of a profitable commercial (peasant) livestock sector (Milton 1994: 14) and he did not comment on the implications of pasture deterioration for South African hydrology. Nevertheless his explanation of pasture deterioration in the mountains was later to become the ecological justification for South African complaints about soil erosion in the Lesotho mountains. Thornton’s analysis was taken up by Staples and Hudson in their 1938 Ecological Survey, in which the links to South African hydrology
were made explicit, though not analysed in any systematic manner. Staples and Hudson (1938) pointed to population increase as the key to the problem of overgrazing: as grazing land became scarce in the lowlands livestock owners were moving their stock to the mountain pastures and causing overgrazing. Their conclusions have been repeated in just about every subsequent report, article or book mentioning the mountain environment (for example Department of Agriculture 1949: 27-33; Shedrick 1954: 48; Smit 1967: 6-9; FAO/World Bank 1975: 5-6; Swallow, Brokken, Motsamai, Sopeng and Storey 1987: 20) and can perhaps fit the currently popular concept of a ‘narrative’ for intervention (Roe 1991, Roe 1995, Leach and Mearns 1996).

POST-WAR SOUTH AFRICAN FEARS AND THE BRITISH RESPONSE

Since the early twentieth century the importance of Lesotho’s mountains for South African water resources had been recognised by many commentators on the mountain environment. In 1933 the issue had been raised by J.C. Smuts during discussion about transfer and the Pim Commission reiterated the economic importance of these water resources:

The conservation of the rainfall in the soil is of importance not only locally but also to the countryside lying across its borders to the south and west, because it affects the flow of the two main rivers, the Orange and its tributary, the Caledon. (Pim 1935: 135)
Nevertheless in the pre-war period the issue did not seem to raise much political interest on either side. South African press response to the Pim Commission inspired anti-erosion works carried out in the lowlands during the late thirties and early forties were, on the whole, complimentary (see Showers 1989 and Showers and Malahlaha 1992 for details of these projects). The *Johannesburg Star*, for example, twice reported on the success of Lesotho’s anti-erosion works, stating that they could provide a model for South Africa.\(^{10}\)

In the mid-1940s South Africa experienced a huge increase in fears about the impact of soil erosion. The 1944 tour of Dr H.H. Bennett, head of the USA Soil Conservation Service, did much to raise South African (white) public interest in the issue and the newly formed National Veld Trust gave itself the mission of taking his message to the country. The interest created by Bennett’s visit carried through into the South African Parliament and aided the promulgation of the 1946 Soil Conservation Act.

During his tour of South Africa Bennett also paid a visit to Lesotho to investigate the anti-erosion works begun in the 1930s. To the great pleasure of the Basutoland administration Bennett was very complimentary about their work and in an article in *Veld Trust News* suggested that South Africa should follow their example (National Veld Trust 1944: 3). The Basutoland authorities made much of this ringing endorsement from the man one official described as ‘the greatest soil conservationist of all’\(^{11}\) and quoted his words in the Agriculture Department’s *Annual Report* (Department of Agriculture 1945: 2).

Just over a year later, however, they received a much less complimentary assessment in another article in the *Veld Trust News*, written after a trip through Lesotho by a party of Veld Trust officials (Palmer 1945; see also Van Rensburg and Palmer 1946: 61). While the piece again praised the anti-erosion work carried out in the lowlands, it expressed grave concern that the issue of soil erosion in Lesotho’s mountains was not being addressed. They argued that soil erosion in these areas, caused mainly by over-grazing, could have disastrous consequences for the flow of the many South African rivers that had their head waters in the Lesotho mountains.

The mountain areas were described as the ‘sponge of South Africa’ collecting and slowly releasing water, but the effects of rapid soil erosion meant that ‘the sponge... [was] slowly being squeezed dry’(Palmer 1945: 9). They expressed particular concern for the high mountain area of the north west that forms the watershed of the Tugela and Orange River basins. Here they observed:

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mountain sides with great patches of bare rock glittering in the sun where chunks and layers of the mountain had slipped away and [we] were reminded that an eroded mountain loses in time, along with its soil and vegetation, the power to attract and hold water. (Palmer 1945: 5)
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The article argued that the mountain areas were until recently uninhabited and that the deterioration had been rapid, largely taking place since about 1915; and that the only solution was the ‘most prompt, widespread and drastic limitation
of stock and agriculture in the mountains’ (Palmer 1945: 17). There was a clear implication (though not explicitly stated) that the human population of the area also needed to be removed.

The criticisms expressed in the article were supported in a private letter from a Basutoland civil servant which was circulated around the Dominion Office. This letter and the article were treated very seriously by the Dominion Office, and it was felt that;

a great deal of difficulty seems to have been caused in the Union especially by exaggerated or misleading statements in the article.

Dominion Office concerns about the implications of the criticisms were essentially two fold. Firstly they felt that the criticisms made it more difficult for them to go to the Treasury for further Colonial Development and Welfare (CD&W) funds for anti-erosion work in the three High Commission Territories. Secondly, and most importantly, they were concerned that the South African government, or more probably the Nationalist opposition, would use the alleged impacts of soil erosion in Lesotho as a bargaining chip to pressurise the British into transferring the administration of the High Commission Territories to Union control.

In March 1945 the Basutoland administration had applied for a free grant from the CD&W fund in order to continue the anti-erosion work it had started in the lowland areas during the 1930s. In the climate of postwar austerity the Dominion Office was cautious about applying to the Treasury for further funds for development projects that could come in for criticism. Though there were no adverse public criticisms of the lowland contour bank schemes, indeed most reports were highly complimentary, the Dominion Office had recently received a critical briefing from G. Brown, a district officer from Kenya, who had been sent to investigate the scheme. The file minutes on the briefing record that Brown was ‘clearly not in the least impressed by what he saw in Basutoland’ and that ‘he appeared to think that Basutoland was looking on the provision of contour bunds as an end in itself’. With the addition of public concerns about erosion in the mountains, the Dominion Office decided to delay the application for further CD&W funds.

It is unclear whether the Basutoland government was completely aware of the reason for the Dominion Office delaying the application. A telegram was drafted explaining to the High Commissioner the reason for the delay, but before it could be sent the Dominion Office had reversed its decision. In correspondence from the Basutoland Agricultural Department and in a meeting with Charles Arden Clarke, the retiring Resident Commissioner, at the Dominion Office in September 1945, the situation in the mountain areas was increasingly emphasised. It seems highly likely that the Basutoland government became aware of the need to be seen to institute some sort of anti-erosion work in the mountains if they were going to ensure further funds.
The meetings with Arden Clarke and correspondence from the Basutoland Department of Agriculture reassured the Dominion Office that the Basutoland authorities were aware of the sensitive nature of the issue of soil erosion in the mountains. Evelyn Baring, the newly appointed High Commissioner, supported the Basutoland authorities, telling the Dominion Office that ‘the authorities are fully alive to the seriousness of erosion in the mountain areas’. In late 1945 the Dominion Office agreed to recommend the application for further Colonial Development and Welfare funds to the Treasury, but the implication was that the Basutoland authorities had to implement some sort of soil conservation scheme in the mountain grazing areas.

Though the question of transferring the three High Commission Territories to Union control had not been explicitly on the political agenda since the 1939 decision to delay the publication of a memorandum on the terms for transfer and the publication of report of the Joint Advisory Conference (Spence 1964), it was a constant factor in British-South African relations. Indeed in 1946 the British half expected South Africa to renew their formal application for transfer and the Dominion Office prepared a draft White Paper for this eventuality.

British policies towards South Africa in the immediate post war era always had half an eye towards their impact on domestic South African politics and great trouble was taken to avoid giving the National Party any political capital to use against Smuts’s United Party. Smuts was viewed as the supreme statesman and held in exceptionally high regard, bordering on hero worship, and the British were extraordinarily keen to maintain good relations with him. The political relationship with Smuts was reinforced via a close personal friendship between him and the British High Commissioner, Evelyn Baring (Douglas-Home 1978). Though the new Labour administration were generally less pro-Union than their predecessors, they were keen to keep issues where public opinion dictated they should take a contrary line to that of Smuts’s United Party off the political agenda. One such issue was the incorporation of the three High Commission Territories into South Africa.

Unfortunately for the British the Veld Trust News article sparked off a far wider interest in Lesotho’s mountain environment in South Africa. These concerns were not simply confined to water and soil experts. During the debates about the new South African Soil Conservation Bill, that were taking place in early 1946, the issue of soil erosion in Lesotho was raised on a number of occasioning. H.H. Johnson, the MP for Port-Elizabeth-North, for example, told the House:

In the Basutoland mountains there are sources of supply which feed the streams and rivers of the Union of South Africa... I would like to know how the Minister and his department propose to deal with those sources, because... it is no good playing with soil erosion. It is no good restoring a patch here and a patch there, unless we restore the streams that provide the necessary water that is going to make things grow in this country. (Union of South Africa 1946: 8309)
A Nationalist MP, J.N. Le Roux, speaking in the same debate, specifically chastised the British government for not preventing soil erosion in the mountains (Union of South Africa 1946: 8330).

While Smuts appeared to be happy to leave the issue of transferring the administration of the High Commission Territories in abeyance for the time being he was also aware that success on the issue would be popular with the white South African electorate. On the other hand Smuts was keen not to alienate the British, especially as he was looking for their support in the United Nations over the incorporation of Namibia. He raised the issue of soil erosion in the mountains of Lesotho in private discussions with Baring on a couple of occasions but, in contrast to 1933, he held back from public criticism.

The potential political capital to be made out of South African claims of neglect underscored all the discussion between Basutoland officials in Maseru, the High Commissioners office in Pretoria/Cape Town and the Dominion Office in London. In the mid 1940s transfer was at the front of all British official’s minds when the issue of soil erosion in Lesotho was being discussed. All were agreed that the best way to counter South African claims over the damage caused by soil erosion in the mountains was for the Basutoland authorities to attempt to combat the perceived threat.

During 1946 the Basutoland authorities began to formulate a policy designed to do just that. Given the financial constraints on the Basutoland authorities any scheme had to be simple and cheap. In April 1947 it was agreed that all cattle post grazing areas in the two main mountain wards (Mokhotlong and Qacha’s Nek) below the 9,000 foot contour line, where it was thought invasion of ‘bitter Karoo bush’ was most severe, would be closed to all livestock, and herders were to be instructed to move their livestock to the higher pastures. This policy was reported as a great success in subsequent Department of Agriculture Annual Reports. The Basutoland authorities, the High Commissioner and the Dominion Office (renamed the Commonwealth Relations Office in July 1947) were all pleased with the closure policy and felt it would silence any South African criticism. Indeed it received a number of press reports that compared the policy favourably with what was taking place in South Africa. The Friend, for example, reported that:

In the highlands, where the Orange rises, no less than 1,400 square miles – an eighth of all Basutoland – have been totally closed to grazing till the Red Grass (themeda) carpets them again... The Basuto custom of tribal veld-sparing has been immensely extended by progressive chiefs on technical advice. I have seen mountain sides dangerously eroded and covered only by the bitter Karoo-bush after many years misuse growing golden red with red grass again after only two years of enforced rest from stocking. I have also flown across Cathkin Peak into Natal and seen exactly the same problems on the native lands on the Ladysmith side of the border with one depressing difference: there was practically no reclamation work in sight.
The Basutoland authorities must have been particularly heartened by a positive report in the *VeldTrust* magazine:

With the support of progressive chiefs, who enforce the system in their own courts and receive the proceeds of the fines, Mr P.A. Bowmaker...is carrying through a programme designed to stabilise all the mountain slopes of Basutoland by 1956. More than 1,400 square miles – about an eighth of the territory – have been already removed from grazing, so that the rooigras may grow again and oust the bitter Karoo. (Bond 1951: 23)

Nobody, not even the Veld Trust, commented on the fact that the closure policy involved moving all the livestock out of the valleys onto the watershed areas that Palmer (1945) (in contrast to Staples and Hudson 1938) had identified as having the worst soil erosion problems and being the greatest risk to the free flow of South African rivers.

**THE NATIONAL PARTY AND RENEWED PRESSURE**

Despite the positive press reports the Commonwealth Relations Office did not feel complacent about the issue for long. Their fears were renewed with the victory of the Nationalists in the South African election and Malan’s demand that the British address the issue of transfer. In London the Labour government could no longer simply avoid the problem and try to keep it off the political agenda. The victory of the Nationalists also hardened opposition to plans for transfer in both the High Commission Territories and Britain. Groups such as the Anti-Slavery Society, the Fabian Colonial Bureau and the Society of Friends actively lobbied the Commonwealth Relations Office to prevent any moves towards transfer.

In mid 1949 the High Commissioner’s office began to warn the Commonwealth Relations Office that Malan was likely to formally request transfer in the very near future and soil erosion in the mountains of Lesotho would be one of the central issues. In August Baring reported a conversation with a senior Union official in which he was told:

that the Union Government definitely intend to demand the transfer of the High Commission Territories in the near future...[He] said that a particular point would be made of the condition of the catchment area of the Orange River.

In response to this possibility the Commonwealth Relations Office asked the High Commissioner office to compile a briefing on various issues likely to arise in connection with the transfer issue. Much of the section on Lesotho was taken up by a discussion of soil erosion; the policy of closing areas of grazing was reported to be a success but the need for further action was stressed. In the subsequent years three basic approaches to dealing with potential criticism were attempted: firstly to introduce policies to reduce the total livestock population,
secondly to obtain independent support for the closure policy and thirdly to explore the possibility of technical solutions to prevent siltation of South African rivers.

During the 1949 Basutoland National Congress the colonial authorities placed great pressure on the Basotho chiefs to implement livestock culling policies (Basutoland National Council 1949: 166-168). While members of the National Council rarely expressed any opposition to grazing control policies, there was almost unanimous opposition to compulsory culling even from chiefs, such as Theko Makhaola from Qacha’s Nek, who claimed to actively support the closure policy. Given that many members of the council were themselves large livestock owners this was hardly surprising.

After heavy pressure from the Resident Commissioner the 1949 Council did agree to recommend the introduction of a scheme to reduce the goat population by twenty five percent over a five year period. Goats were regarded by the British as ‘public enemy number one’ and the administration made much of the National Council’s acceptance of the proposal. The scheme was exceptionally liberal when compared with culling schemes in South Africa or Southern Rhodesia, and was essentially voluntary. The Basutoland administration had recognised for many years that it had little chance of imposing a compulsory culling scheme:

The unrest and ill feeling which such a course would cause would prejudice the success of all other progressive measures which the Government may intend to introduce during the next few years.

Any ideas for a compulsory plan were surely shelved in the aftermath of the 1950 Witzieshoek uprising just across the northern border of Lesotho. Even the limited culling scheme agreed to by the National Council was, however, more than the Basutoland authorities could really manage and no attempt was ever made to actually implement the programme.

As well as the plans for a goat culling programme the Basutoland authorities decided that they needed some independent support for their closure policy. In December 1949 they commissioned Illtyd Pole Evans to investigate the two main mountain districts of Mokhotlong and Qacha’s Nek. Pole Evans, a central figure in African colonial ecology (Scoones 1996), had been Director of the South African Botanical Survey until his retirement in 1939 and was well connected with high level South African figures. Like Baring he was a personal friend of Smuts and all three of them used to spend holidays at the Dongola Game Reserve run by Pole Evans (Douglas-Home 1978: 207). The Basutoland authorities approached Pole Evans expressly because they hoped he would support their policies. P. A. Bowmaker, the Department of Agricultural official responsible for administering the closure plan, wondered whether:

Dr Pole-Evans might be informed confidentially that the object of his invitation is to provide the Basutoland Government with an “outside” report which can be used to
refute statements which appear in the press from time to time about the state of the cover in the Basutoland mountains, as compared perhaps with what is happening in the native reserves in the Union.31

Pole Evans’ reputation and connection with Baring may have made him an obvious choice but, if the Basutoland authorities were keen to impress the Nationalist government, he was not the best man for the job. During 1949 Pole Evans suffered frequent and personal criticisms in the South African parliament over his running of the Dongola Game Reserve. J.G. Strijdom, then Minister of Irrigation and Lands, wanted to break up Dongola (on the outskirts of his Waterberg constituency) and open it to new settler farmers but Pole Evans fought hard to resist (Union of South Africa 1949: 3371; Carruthers 1992). Though Smuts spoke up in Pole-Evans’ defence, classing him ‘with the very highest and most able public servants we have had in this country’ (Union of South Africa 1949: 3765), the Basutoland authorities had chosen a man with much reduced influence vis-à-vis the South African government.

Furthermore, despite their best efforts to fix the result, Pole Evans’s report contained, amongst the general praise, a number of potentially damaging criticisms of the Basutoland authorities. Most importantly Pole Evans reported that the closure policy was not a solution to the problem in itself:

The question ... arises – Is the work now being done enough? Does it provide a permanent solution? The answer is “No”. Something more than reclamation of the natural pasture by resting is required. (Pole Evans 1950)

The Basutoland Agriculture Department were concerned about these criticisms and, despite the fact that Pole Evans’s complimentary comments were used in the 1950 Annual Report, his report was not circulated to other members of the administration.32 The Basutoland authorities seemed to be somewhat dissatisfied with the results of the report and Bowmaker complained that:

My impression of Dr Pole Evans, which is backed up by his report, is that he is so much of a lover of nature and pure botanist that he does not really grasp the practical side or means of getting things put right.33

To make things worse they also felt that Pole Evans ‘did not let us off lightly over his fee’.34

With increasing South African pressure over transfer, the failure of the goat reduction policy and only mixed support from Pole Evans, the British turned to more technical solutions to the problem of siltation from erosion in the mountains: the construction of water storage systems within Lesotho. For the British these plans had two major advantages: firstly they were a clear counter to the accusations that they were doing nothing to develop the resources of the country and, secondly, a series of dams would capture any siltation and result in a clearer flow of water into the Union.
The possibility of large scale water development schemes on the Orange River had been discussed for many years in South Africa. But a perennial problem was the heavy silt content of the river which would significantly reduce the life-span of any dam. The finger of blame for the silt content was pointed at the Basotho and the British administration, the obvious implication being that the Imperial government was holding back South African economic development. Some within the Basutoland administration began to discuss the possibility of large scale water development of their own as a way of countering these South African complaints. In April 1947 Gideon Pott, the District Commissioner of Teyateyaneng, wrote a long letter to the Government Secretary in Maseru detailing proposals for a large dam in Quthing district. While Pott outlined some economic advantages of the dam he essentially saw it as having a political role:

Politically I am of the opinion that it would do Basutoland a lot of good in its relations with the Union. It would show them we are willing to co-operate and assist them to combat erosion and to help them irrigate needy Union areas, and thus forestall them in the same way as we have done with anti-erosion work. There would be less talk about incorporation in the Union as we would no longer be a stumbling block to some of their more progressive and very necessary schemes.35

Pott’s proposal received a warm welcome from other members of the administration but no action was taken until late 1949 when Hawkins, Jeffares and Green, a Johannesburg based civil engineering firm were contracted to write a preliminary report on the practicality of constructing a large dam. Their assessment, handed to the Resident Commissioner after a visit to the area in November 1949, included both good and bad news for the Basutoland administration: they believed that there was too much silt in the Orange where it flowed through Quting for a dam to be sustainable but they also argued that most of this silt came from the lower Orange valley below the divide between the basalt and sandstone based soils. They argued that water development schemes would be possible in the upper reaches of the Orange and its tributaries, especially the Malibamatso but any developments on the lower reaches of the river should be delayed “until such a time as the silt problem has found a solution”.36

Given the positive reports about low levels of siltation from the northern mountains the Basutoland administration were keen to have a full report on the proposals and the High Commissioner applied to the Commonwealth Relations Office for £2,500 from the CD&W Fund.37 With the Union Parliament frequently debating the possibility of water development schemes on the Orange within South Africa during February and March 1950, the Basutoland administration and the High Commissioner felt an even greater need for new ammunition. Their fears appeared to have been vindicated when Strijdom, the Minister for Irrigation, deflected demands for new projects by pointing towards Lesotho:
The water of the Orange River, coming from Basutoland, where there is a tremendous amount of soil erosion and from other places, contains so much silt that if one were to construct a catchment dam on the river, such a dam would eventually meet the same fate as the dams in the Fish River valley, and for practical purposes it would also silt up and we would find ourselves in a worse position than we are in today.(Union of South Africa 1950: 3362)

In May 1950 the High Commissioner pressurised the Commonwealth Relations Office into releasing funding for the survey. In a telegram to Patrick Gordon-Walker, the Secretary of State, he pointed out that the survey in itself would help counter South African criticisms even if the project was never constructed. He was particularly keen for the survey to take place at the same time the Directorate of Colonial Surveys were also involved in mapping the country.38

The High Commissioner is particularly anxious that survey should start without delay, both for intrinsic advantage and to anticipate criticism from Union Government who, in supporting case for transfer of territories, are likely to allege that catchment area of Orange river which is of major importance to the Union has deteriorated through neglect, and that we do not even possess accurate information about the area or its potential. Colonial Survey Unit is currently engaged in photography of Territory, preliminary to accurate mapping. If hydrographic survey was also begun now we should be in a good position later this year to demonstrate that we are energetically accumulating data which will enable us to preserve and use natural resources of Basutoland to common advantage. In short a scheme or schemes may result but politically we must have information.39

The political necessity of the survey had also been made explicit in the application for CD&W funds:

This survey is required to ... obtain the necessary data to anticipate criticism from the Union government, who in support of their case for the transfer of the High Commission Territories are likely to allege that the catchment area of the Orange River...has deteriorated through neglect.40

In mid-1950 the CD&W released the funds and a more comprehensive survey was undertaken. The High Commissioner and the Commonwealth Relations Office were encouraged by the report, delivered to them in December 1950, and Baring advised that ‘there is a very real possibility of the development of a big combined scheme of water storage’.41

Armed with this report the Commonwealth Relations Office felt much more comfortable about their Secretary of State’s upcoming meeting with Union officials during his tour of southern African in early 1951. In Gordon-Walker’s briefing before the trip the political importance of storage scheme as way of deflecting any criticism was made clear:
With storage in the mountains of Basutoland the flow [of the Orange River] would become even, the conditions for irrigation in the Union would improve and the edge would be taken off the comments on erosion in the Basutoland mountains.\textsuperscript{42}

In February 1951 Gordon-Walker meet with J.G. Strijdom, the Union minister in charge of irrigation. As expected Strijdom ‘complained of the extent of erosion in the Basutoland mountains and the quantity of silt in the waters of the Orange River’. In reply Gordon Walker mentioned the plans for the construction of a large dam on the Orange.\textsuperscript{43}

The Commonwealth Relations Office, however, were wary of releasing too many details about the scheme. By keeping plans vague they probably hoped that they could avoid answering difficult questions, especially as there was a major problem that needed to be overcome if the calculations of profitability were going to make any sense at all. The only way that the dam could possibly make any return on the investment was by selling electricity or water direct to South Africa. Without a South African commitment to buy the electricity or water the necessary funds could not be approved by the Treasury. During the first half of 1951 Baring discussed the details of the plans with Strijdom and Union officials to try to gauge their reaction and determine if they would be willing to make such a commitment.

The Union government were not keen on discussing the British plans in public. Indeed on a number of occasions Strijdom denied in the Union Parliament that any discussions had taken place. Nevertheless the Commonwealth Relations Office must have felt satisfied with their approach. In March 1951 J.A. Cull the, MP for Port Elizabeth North, told the Union Parliament that ‘they are going to turn the upper portion of the Orange River into another Tennessee Valley’ (Union of South Africa 1951: 8606). Furthermore Baring’s assessment in May 1950 that the technical survey of the Orange and the Colonial Survey Unit’s activities would be seen as part of the same process seems to have been remarkably accurate. Cull continued:

\begin{quote}
We ... know that the British Government sent out quite a large number of experts to survey the Basutoland area, the sources of the Orange River. I understand that there were 70 experts and that they spent the best part of a year there. They surveyed all the potentialities and possibilities of the Orange River in respect of irrigation, cultivation of land, conserving of water, and the production of electricity by hydro-electric means... I would like to know from the Hon. Minister whether he or his Department has been approached to give advice or assistance, and if not, whether he or his department will take steps to find out what the plans of the British government are in regard to the scheme.\textsuperscript{(Union of South Africa 1951: 8606)}
\end{quote}

Reports had also appeared in the press that negotiations were taking place and that a deal could be struck. The \textit{Star}, for example, reported in December 1951 that Strijdom had hinted they might do a deal with Britain over storage dams in...
Lesotho. Negotiations about the scheme were difficult, however, and in many ways neither side had much to gain from the development schemes. The British could not call on the large amounts of capital needed for the project and, as mentioned above, needed the South African market for irrigation water and electricity to get any return on their investment. There were also obvious reasons why the South Africans would want to avoid going into major joint development projects with the British colonial authorities; not least because it would be a de facto recognition of British sovereignty over the territory. By the middle of 1952 the scheme was more or less shelved. Nevertheless the survey and proposals had essentially fulfilled their function of deflecting criticism of the Basutoland authorities’ management of the mountain environment.

CHANGING PRECONCEPTIONS OF AFRICAN OCCUPATION OF LAND

After the early 1950s South African complaints about the impact of soil erosion in the Lesotho mountains began to decrease. This was clearly linked with a gradual decrease in the strength of demands for the transfer of the three High Commission Territories and changing perceptions of African occupation of land amongst white South African politicians.

During the mid 1940s to early 1950s South African criticism of the Basutoland government reflected the belief that the mountains were only recently populated and that this was the root of the problem. Most reports stated that the mountains were not populated prior to the settling of Batloka people in the 1870s; the genocide committed against the San population of the mountain area by the early British and Cape colonial governments was totally ignored. A number of commentators, including both Pole Evans and Palmer, argued that the area was not actually suited to any human habitation. This view was supported by at least one Basutoland official who believed that ‘the inescapable conclusion [is] that depopulation is really the only solution’45. Many of the complaints coming from South Africa at this time included statements along the lines that soil erosion could not be prevented without massive, or even total, depopulation of the mountain area. In February 1952 the Chief Secretary to the High Commissioners Office reported that the general ‘opinion in the Union holds that these mountains... should be evacuated’.46

These calls fitted in with more widespread demands for the removal of African population from watersheds frequently made during the late 1940s and early 1950s. In May 1951, for example, S.P. Le Roux, the Minister for Agriculture, told Parliament:

One would like to see the Native population removed from the mountainous areas, from the catchment areas of rivers, to more flat country. (Union of South Africa 1951: 7318).47
The calls for the removal of Africans from environmentally sensitive areas tallied with more general views of the African reserves. Prior to the 1950s many Afrikaner Nationalists, especially those representing commercial farming districts, were keen to see a break-up of the reserve system. Not only did they have their eyes on the remaining African land but crucially they were keen on ensuring a plentiful supply of African labour which they believed was tied up in the peasant sector of the reserves. This is not to say that they wished to see the total dismantling of the reserve system but their instinct was to call for the alienation of land when it appeared to be in their economic, or political, interest.

After the early 1950s, as the apartheid ideology was crystallised, Nationalist politicians no longer called for further land alienation. Strijdom, the most vehement critic of British environmental policy in the three High Commission Territories, provides a significant example of the shift in opinion. In March 1951 Baring recorded that, during a meeting to discuss the proposals for the Orange River dam, Strijdom

\[m\]ade it clear that his own belief is that in order to save the waters of the most important river in southern Africa it will one day be necessary to remove Natives not only from the mountains of Basutoland but also apparently from the lowlands. When pressed by me he admitted that much could be done to reduce soil erosion but he did not believe that it could be eliminated as long as there was a large Native population in Basutoland. I have often felt that this was the view of the Nationalist leaders.

Just five years later Strijdom, by then Prime Minister, expressed a very different attitude. Rather than calling for the removal of the African population from Lesotho he complained about that the British policy of allowing the settlement of whites in the three High Commission Territories did ‘not fit into the Union pattern’.

The influential Tomlinson Commission report (1956) envisaged that Lesotho, Botswana and Swaziland would form three of the ‘cultural-historical cores’ of the African population. The incorporation of these three High Commission Territories was seen as being essential to the success of the policy of ‘total separation’. Obviously under a ‘total segregation’ apartheid state the population of Lesotho would be expected to increase and, therefore, complaints about overcrowding in Lesotho did not tally. Significantly one of the Commission’s proposals rejected by H.F. Verwoerd, the Secretary of State for Native Affairs, (and the man often described as the architect of apartheid) was the proposal for the establishment of freehold tenure in the reserves. Verwoerd stressed the importance of maintaining ‘traditional’ African communal land tenure; the very thing that was (and is still) so often blamed for causing poor farming techniques and overgrazing.

While pressure for transfer of the High Commission Territories did not stop in the mid-1950s, complaints about soil erosion in official correspondence between London and Pretoria did suddenly disappear. For example, there is not
a single mention of the erosion issue in lengthy correspondence over a five year period, starting in 1955, concerning the feasibility of another reservoir scheme in the upper reaches of the Orange. Similarly press reports about proposed schemes on the South African stretches of the Orange River no longer pointed the finger of blame for the high silt content of the river at either the Basotho or the British. With South African pressure off, the need for anti-erosion policies in the mountains of Lesotho no longer had a political angle and the Commonwealth Relation Office’s interest in the issue quickly waned. The soil erosion specialists in the Basutoland administration obviously continued to take an interest but their mission no longer seemed as politically vital.

CONCLUSION

Could the reason references to soil erosion ceased in the mid-1950s simply be because the policies had succeeded? Oral history carried out in Mokhotlong in mid-1995 indicates that the closure policy was never actually implemented, despite the official reports of success (see Driver 1998). The reports of better pasture quality in the early 1950s may simply be a reflection of better rainfall figures in this period (see figure 2). Even if the findings of the oral history are rejected, it is clear that any gains from the closure policy were not maintained.

In October 1960 the Department of Agriculture circulated a memorandum on grazing control to all the District Councils in the country. The memorandum included recommendations for the establishment of grazing control schemes in Lesotho, based upon the principles outlined by Hudson and Staples in 1938 and very similar to the schemes that were apparently such a success between 1947 and 1955. What is striking is that no mention at all is made of the previous schemes. The problems of ‘bitter Karoo bush’ encroachment and soil erosion leading to siltation describe in the text are precisely those that the previous schemes had supposedly solved so successfully. By now however the issue was no longer on any political agenda and only attracted attention from professional soil erosion and livestock experts.

Given that South African pressure had such an important impact on British colonial anti-erosion policy in Lesotho a second obvious question is: Were South African fears about the impact of soil erosion well founded or simply invented in order to gain political leverage in the transfer debate? Certainly some of the South African reports were far-fetched: Palmer’s (1945) contention that erosion in Lesotho could threaten the flow of the Tugela is preposterous, as its source is only a few hundred metres inside Lesotho’s border. The short answer is that we simply do not know the real rates of erosion in the mountains of Lesotho during this period and we certainly can not say how much of this was caused by high stocking rates. As this paper has made clear any assessment of soil erosion rates based on the incidence of statements of concern could be highly misleading.
FIGURE 2. Percentage deviation above/below long term mean for annual precipitation (mm) at Mokhotlong Camp (2200m), 1930/1–1993/4

(Mean = 596 mm)
What is clear is that the rise of concern about the mountain environment of Lesotho in the period between 1945 and c.1952 had little, or nothing, to do with the reality of pasture deterioration and everything to do with the issue of transferring the administration of the three High Commission Territories. This issue, in turn, was largely determined by developments in internal South African politics. An acknowledgment of the political nature of environmental policy is at the heart of both environmental history and political ecology; what is perhaps not as commonly recognised is the manner in which the nitty-gritty of political wrangling can impact on the extent of ecological fears. This case study tracking the rise and fall of one ecological crisis clearly indicates how environmental concerns may have very little to do with changes in the physical environment.

NOTES

1 Through out this paper I use the SeSotho name, Lesotho, to refer to the geographical area of the present-day nation state, rather than the colonial name, Basutoland. When referring to the colonial administration, however, I use the colonial term Basutoland. A version of this paper was first presented at the African Studies Association Conference, University of Lancaster, Sept. 1994.

2 Lesotho contributes a Mean Annual Run-off of 4,750 million m$^3$ to the flow of the Orange River compared with 2,240 million m$^3$ from South Africa (Conley 1995).

3 See Beschorner (1993) for a realistic assessment of the strategic risk of conflict over water resources in the Middle East.

4 See for example the Reader’s Digest Atlas (1984), pages 20-21 (‘Water in a dry land’) which show six water resource maps, four of which include both Lesotho and Swaziland within the Republic and one which includes Swaziland but excludes Lesotho. The only map to show the correct international boundaries is the ‘% of farmland under irrigation’ map. See also a map in Coetzee and Cooper (1991: 131) titled ‘South Africa’s main rivers’ which shows no international boundaries and a number of rivers that are certainly not ‘South Africa’s’.

5 Unlike in South Africa’s ‘homelands’ or Zimbabwe’s Communal Areas, the government has never attempted forcible culling of livestock.

6 In 1949/50 Green and Germond of Hawkins, Jefferies and Green Civil Engineers, Johannesburg carried out a survey, funded by the Colonial Welfare and Development Scheme, of possible sites to build a dam in the lower reaches of the Orange River inside Lesotho. Unfortunately only their summary report is contained in the relevant LNA file (335/1). Shand (1956) did a further survey of water resources in connection with the proposed construction of a large-scale damming programme.

7 The evidence for this is unclear. While forests do indeed even out seasonal flows of water trees are also major users of water. This is a major area of disagreement in the debate about soil erosion and siltation in the Himalayas. As both Heywood (1908) and Carlson (1913) recognised the mountains of Lesotho were probably never well wooded.

8 This did not mean, however, that calls for afforestation totally vanished. In 1933, for example, the Union Prime Minister, J.C. Smuts, raised the issue in a memorandum calling
for the transfer of the Territories to Union control sent to the Secretary of State for Dominion Affairs in London (Union of South Africa 1952: 35).

9 Between 1923 and 1929 Thornton had been Director of the Union Department of Agriculture’s Division of Animal and Field Husbandry; he was then appointed Director of the Native Affairs Department Agriculture Division, and then in 1934 he became the Agriculture Advisor for the three High Commission Territories until his retirement in 1942. He was a central character in the development of ideas about environmental decline in both the reserves and on the ‘white’ farms of South Africa, as well as in the three High Commission Territories (see Milton 1994; Beinart 1984; Beinart 1989; Rich 1980).

10 16 and 23 November 1944, cuttings in PRO DO35/1180/Y950/3.

11 P. Duncan to M. Roberts 2 October 1944, Patrick Duncan Archives, University of York, DU5-81/10.

12 T. Fraser to Lord Harlech [recently retired High Commissioner] 28 July 1945, PRO DO35/1180/Y950/3.

13 Minute dated 14 March 1946 on PRO DO35/1180/Y950/3.

14 Applications for Colonial Development and Welfare funds, PRO DO35/1187/Y1136/23.

15 Minute from Roddan on discussion with G. Brown, Application for Free Grant to Finance Anti-erosion Measures in Basutoland, PRO DO35/1180/Y950/4.

16 See file notes on PRO DO35/1180/Y950/3 & 4.

17 Minutes on meeting between Arden-Clarke and C.W. Lawrence at the Dominion Office, 13 September 1945, PRO DO35/1180/Y950/3.

18 Baring’s comments on a letter from the Basutoland Resident Commissioner to the High Commissioners Office, circulated to the Dominion Office, PRO DO35/11880/Y950/3.


20 Baring wrote a long memo to Addison, the Secretary of State for Dominion Affairs, on 13 April 1946 dealing with the fact that Smuts was coming under pressure from the Nationalists over the issue, PRO DO35/1172/Y/706/11.

21 Baring to Machtig, 25 February 1946, PRO DO35/1180/Y950/5.

22 Despite the official reports of success oral history carried out in April-May 1995 indicates that the policies were never actually implemented, at least not in Mokhotlong district (Driver 1998).

23 The Friend 27 March 1949.

24 Formerly the Veld Trust News.

25 See for example Submission from a Deputation on the High Commission Territories to the Commonwealth Relations Office, 14 November 1949, in Patrick Duncan papers, University of York, Basutoland Miscellany, DU 7.3.

26 Letter from Evelyn Baring to Sir Cecil Syers, 26 August 1949, Administration: future of High Commission Territories, PRO DO119/1442.

27 A collection of notes on various aspects of the administration of the High Commission Territories likely to arise in connection with transfer, prepared by the High Commissioners Office, Pretoria, 7 December 1949, PRO DO 35/4330.

28 The main complaint by members of the National Council over livestock policy was that white traders were not made to abide by the grazing regulations.

29 J. Howard, Notes on a visit to Transkei, Ciskei and Basutoland, January 1950, in his papers, Rhodes House, Oxford, MSS Afr. s.787.

30 DC, Butha Buthe to Government Secretary, Maseru, 15 September 1947, Limitation of Stock, LNA 2526.
THACKWRAY DRIVER

Bowmaker (Principal Agricultural Officer) to King (Director of Livestock and Agricultural Services) 28 December 1949, Grazing in the Mountains, LNA 2476/II.

File notes from King and Forsyth Thompson, c. May 1950, Grazing in the Mountains LNA 2476/II.

Bowmaker’s comments on Pole-Evans report, Grazing in the Mountains LNA 2476/II.

Forsyth Thompson to Baring, 24th June 1950, Grazing in the Mountains LNA 2476/II.

DC, Teyateyaneng to Government Secretary, Maseru, 14 April 1947, Orange River, Flood Control, Hydro-electric Power etc. LNA 335/1.

H.H. Green, “Notes on Basutoland, 5th December 1949” Orange River, Flood Control, Hydro-electric Power etc. LNA 335/1.

LNA 335/1 and PRO DO35/4061

The Basutoland authorities had originally turned down an offer to be included in the large aerial survey of colonial territories started in 1946, but in mid 1949, when the High Commissioner became concerned that the mountain soil erosion issue would be used by Malan, they approached the Directorate asking to be surveyed as soon as possible, see Clarke (Chief Secretary, High Commissioners Office) to G.J. Humphries (Directorate of Colonial Surveys), 30 August 1949, Administration: Future of the High Commission Territories, PRO DO 119/1442.

Telegram from High Commissioner’s Office to Secretary of State for Commonwealth Relations, 1 May 1950, Orange River, Flood Control, Hydro-electric Power etc. LNA 335/1

Application for a Grant from the Colonial Development and Welfare Fund of £2,500 for a survey of the Orange River in order to investigate its hydro-electric and irrigation possibilities, [c. Feb. 1950] Orange River, Flood Control, Hydro-electric Power etc. LNA 335/1

Baring to Baxter 2 December 1950, Basutoland: Orange River Hydro-electric and irrigation project, PRO DO 35/4061.

Note for discussion with Secretary of State, 1-2 January 1951, Basutoland: Orange River hydro-electric and irrigation project DO35/4061

Baring to Baxter 19 February 1951, Basutoland: Orange River Hydro-electric and irrigation project, PRO DO 35/4061.

See for example speech by Stijdom on 5 June 1951 (Union of South Africa 1951: 8629).

See Basutoland: Orange River Hydro-electric and irrigation project, PRO DO 35/4061.

Tom Fraser to Lord Harlech 28 July 1945 PRO DO35/1180/Y950/3.

Notes on visit by Turnbull to Basutoland, February 1952, PRO DO35/4014.

Similar statements in Parliament were also made by Abrahamson (MP for Drakensberg) (Union of South Africa-1948: 1767), Mitchell (Natal South Coast) (Union of South Africa 1948: 2108) and Henwood (Pietermaritzburg) (Union of South Africa 1948: 6120).

See Posel (1991) and Bonner, Delius and Posel (1993) for the development of apartheid ideology in this era.

Baring to Baxter 16 March 1951, Basutoland: Orange River hydo-electric and irrigation project, PRO DO35/4061.

Note of conversation between Strijdom (Prime Minister of the Union of South Africa) and Louw (Minister of Finance and External Affairs) and Sir Anthony Eden (Prime Minister of the United Kingdom) and the Earl of Home (Secretary of State for Commonwealth Relations) at 10 Downing Street on 19 June 1956, Transfer – Discussions with Strijdom 1956, PRO DO35/4329.

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See for example cuttings from the Diamond Field Advertiser, 16 October 1957 to 18 May 1965 in Orange River Scheme, KAB 3/KIM-4/1/183-039.

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ARCHIVES

KAB – Cape Town Depository, South African National Archive (Cape Town, South Africa)
LNA – Lesotho National Archive (Roma, Lesotho)
N.B.: As the archive has not been catalogued beyond the early 1930s file references are to the original departmental record.
PRO – Public Records Office (Kew, U.K.)
SAB – South African National Archive (Pretoria, South Africa)

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