

https://dspace.org/

# The great rinderpest epidemic in Natal and Zululand: A case study of ecological break-down and economic collapse

**Ballard, Charles**

**1983-04**
http://hdl.handle.net/10539/8415

Downloaded from a DSpace repository. https://dspace.org/

UNIVERSITY OF THE WITWATERSRAND

A F R I C A N  S T U D I E S  I N S T I T U T E

African Studies Seminar Paper
to be presented in RW
4.00pm APRIL 1983

Title: The Great Rinderpest Epidemic in Natal and Zululand: A Case Study of Ecological Break-Down and Economic Collapse.

by: Charles Ballard

No. 129

UNIVERSITY OF THE WITWATERSRAND

AFRICAN STUDIES INSTITUTE

African Studies Seminar Paper
to be presented at Seminar in
RW 319 at 4.00 pm on Monday,
the 18th April 1983.

---

# THE GREAT RINDERPEST EPIDEMIC IN NATAL AND ZULULAND: A CASE STUDY OF ECOLOGICAL BREAK-DOWN AND ECONOMIC COLLAPSE

*by Charles Ballard*

The 1890s and early 1900s were difficult years for many agricultural communities throughout much of the African continent, particularly the eastern and southern regions. The causes of the severe crop and stock losses among farmers, and the attendant social and political repercussions that followed in the wake of destruction, are squarely attributable to a cluster of unprecedented natural disasters. The African continent, from Somaliland in the north to the Cape Province in the south, reeled under the devastating effects of first, a locust plague, then the dreaded cattle epidemics of rinderpest and East Coast Fever. These afflictions were cruelly punctuated by a series of prolonged and searing droughts that further cripped agriculturalists.[1] The natural disasters of the 1890s and 1900s have been pointed to as important "re-inforcing factors" that contributed to the decline of southern African peasant communities.[2] In the German colony of Tanganyika rinderpest is claimed to have broken the "economic backbone of many of the most prosperous and advanced communities" and "initiated the breakdown of a long-established ecological balance and placed nature again at an advantage.[3] The repercussions of the rinderpest epidemic on Natal and Zululand were no less severe as an examination of the more explicit political and socio-economic responses of black and white communities reveals.

Before 1895 Natal and Zululand had, naturally, been beset by drought and stock disease. Between 1860 and 1895 a general drought occurred throughout the region on average every six years.[4] 1878 and 1881 stand out as particularly bad drought years and the sugar and maize crops were cut by as much as half.[5] American maize was imported to feed Africans on the verge of starvation in several "Native Locations" in 1881.[6] Parapatetic white traders introduced bovine pleuro-pneumonia or lungsickness into Natal and Zululand in the mid-1850s and this killed thousands of cattle in Natal and especially Zululand. A renewed flareup began in 1872 and it wiped out approximately half of the cattle in the Zulu Kingdom alone.[7] Horsesickness was an almost perennial scourge of the equine population and blue tongue took a heavy toll of sheep among farmers in the 1860s and 1870s.[8] There were no serious insect infestations in colonial Natal and Zululand before 1895 save for a small swarm of locusts which touched down briefly near Durban in 1851.[9]

Apart from the normal cyclical adversities of drought, flooding and occasional stock disease, nineteenth century Natal and Zululand had generally favourable and predictable climatic and ecological conditions for agricultural development. Both the black and

OFFICIAL ESTIMATES OF MAIZE AND SORGHUM PRODUCTION AMONGST AFRICANS IN NATAL FOR 1895 AND 1896

| Divisions | *Maize - 1895 | (Muids)*** 1896 | % decline | Sorghum - 1895 | (Muids) 1896 | % decline |
|---|---|---|---|---|---|---|
| IXOPO | 65 572 | 1 511 | 97.7 | 26 265 | 510 | 98.1 |
| UPPER UMKOMANZI | 102 875 | 3 720 | 96.4 | 30 000 | 2 150 | 92.9 |
| IPOLELA | 28 920 | 4 020 | 86.1 | 25 956 | 5 720 | 78.0 |
| MAPAMULO | 57 375 | 10 000 | 82.6 | 30 605 | 8 000 | 73.9 |
| KRANTZKOP | 20 085 | 5 000 | 75.2 | 43 934 | 10 000 | 77.3 |
| ALFRED | 28 152 | 7 000 | 75.2 | 22 810 | 4 500 | 80.3 |
| ESTCOURT | 36 504 | 11 353 | 68.9 | 25 939 | 8 288 | 68.1 |
| UMGENI | 23 283 | 7 742 | 66.8 | 19 884 | 2 500 | 87.5 |
| INANDA | 4 500 | 1 526 | 66.1 | 2 160 | 1 032 | 52.3 |
| NEWCASTLE | 30 500 | 10 978 | 64.1 | 17 889 | 5 469 | 69.5 |
| LOWER TUGELA | 10 150 | 3 745 | 63.2 | 8 439 | 3 120 | 63.1 |
| NDWEDWE | 21 668 | 8 000 | 63.1 | 12 186 | 12 000 | 1.6 |
| UMSINGA | 59 928 | 25 000 | 58.3 | 14 982 | 40 000 | (+166.9) |
| UMVOTI | 27 425 | 13 000 | 52.6 | 14 410 | 13 000 | 9.8 |
| KLIP RIVER | 23 093 | 11 254 | 51.3 | 43 121 | 12 121 | 71.9 |
| LOWER UMZIMKULU | 18 000 | 10 000 | 44.5 | 7 000 | 5 000 | 28.6 |
| ALEXANDRA | 4 550 | 2 800 | 38.5 | 12 400 | 12 360 | 0.4 |
| IMPENDHLE | 8 000 | 5 500 | 31.2 | 4 000 | 3 735 | 6.7 |
| NEW HANOVER | 6 395 | 5 800 | 9.4 | 4 155 | 3 740 | 10.0 |
| DUNDEE | 26 530 | 26 250 | 1.0 | 23 030 | 21 228 | 7.9 |
| WEENEN | 47 250 | 47 250 | - | 25 600 | 25 600 | - |
| UMLAZI | 5 662 | 5 835 | (+3.0) | 3 551 | 3 364 | 5.3 |
| UPPER TUGELA | 3 596 | 4 450 | (+23.0) | 3 200 | 2 435 | 24.0 |
| LIONS RIVER | 7 991 | 12 030 | (+50.0) | 2 016 | 773 | 61.7 |

* Maize was the more important crop for Africans and it is used to determine the sequence of ranking in the table.

** Those Divisions above the dotted line suffered what were considered substantial crop losses of 30 per cent or more and those Divisions below the dotted line suffered little or no crop losses of less than 30 percent.

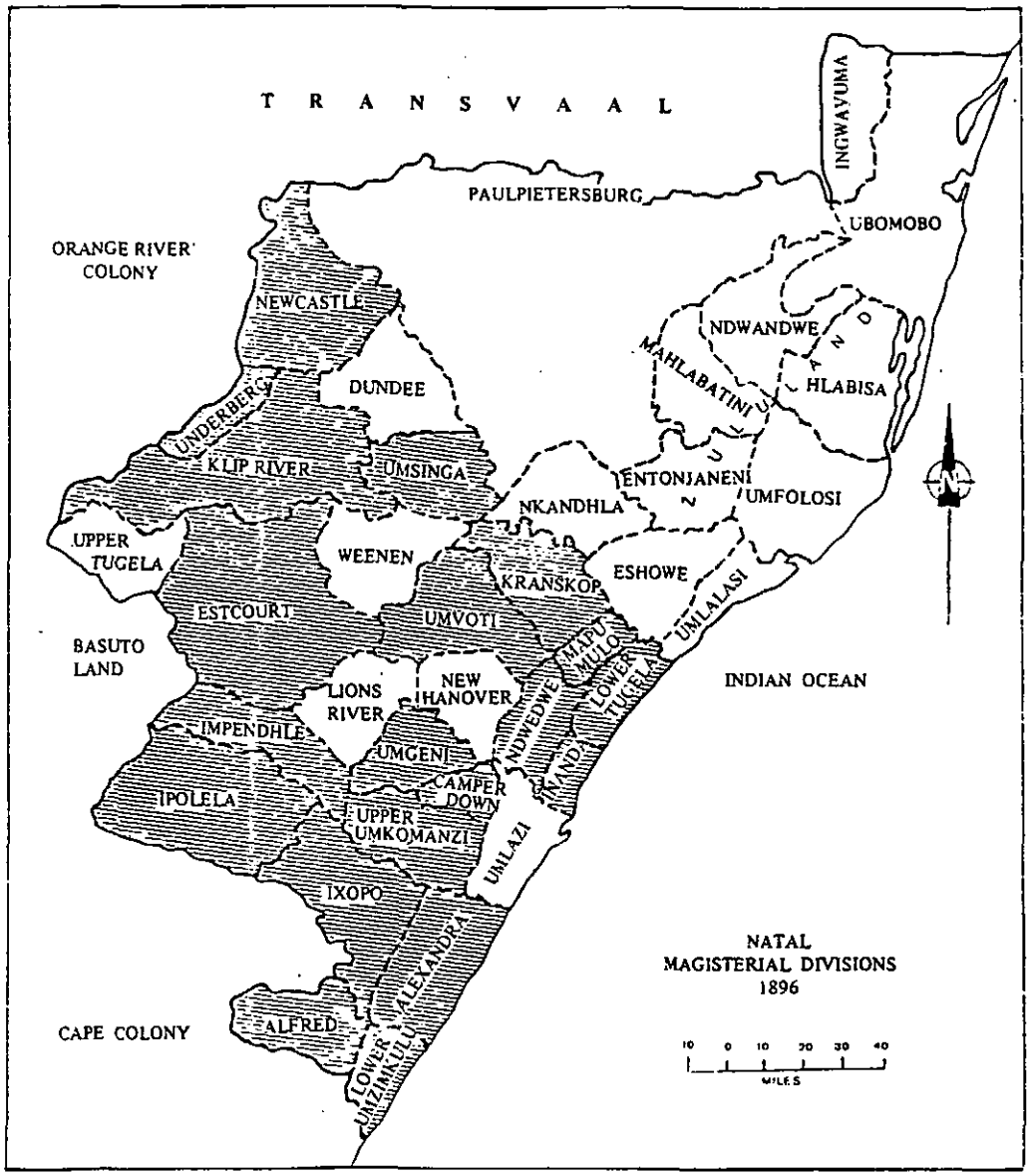
*** The *muid* was a standard dry measure in Natal and is equivalent to 196 English pounds.

white farming communities had, it seems, been successful in the management of their agricultural systems. Until the mid-1890s there had been no major environmental crisis or series of crises capable of destroying the stock and cropping systems of large sections of the population.

Between 1860 and 1895 the white farming community had developed a diversified system based on the production of major export staples such as sugar, wattle, wool, tea, coffee and ostrich feathers. Maize and other breadstuffs were not profitable crops for white farmers before the 1900s because of their inability to compete with foreign grain in both the import and export markets, and because the major consumers of maize, the African population, grew enough to meet their subsistence needs.[10]

During the mid-and late nineteenth century, Natal's black farmers had quite successfully adapted their pre-colonial subsistence crop staples of maize and sorghum to meet the new demands and wants generated by an emergent capitalist political economy. Black peasants found that they could continue to grow their narrow range of food crops to satisfy their basic subsistence requirements, and, at the same time, produce surpluses of maize and sorghum for sale on the local markets in order to pay their Hut Taxes, their rents, if they were tenants on white-owned lands, and their purchases of manufactured items.[11] In addition to their over-reliance on two grain crops, black peasants had developed a cattle complex upon which the foundations of their storeable wealth and social system largely rested.[12] Before 1895 no natural disasters of sufficient magnitude had tested the merits of either the black or white agricultural systems. The appearance of locusts in 1895-96, the forerunner to rinderpest, showed up the weaknesses of the narrow base of black agriculture in a pitiless light, compared to the more diversified and politically stronger white farming sector.

Vast swarms of red locusts (Nomadacris Septumfascinata Serville) swept out of north-eastern Africa onto the coastal belt of Natal and Zululand as early as August 1895 and stripped bare the fields of sugar cane and mealies.[13] For twelve long months "immense clouds of them swept over the land in all directions, sometimes so vast as to render dimmer the light of the sun".[14] The locust swarms of 1894 and 1895 severely cut sugar production. Surgar exports fell from a total of 121 721 cwt in 1895 to 36 123 cwt in 1896.[15] The locust plague bore down most heavily on peasant communities. The weaknesses attributable to a narrow-based cropping system was realised during the locust infestations. The destruction of large portions of the subsistence crops of maize and sorghum led predictably to widespread malnutrition, indebtedness, increased labour migrancy and starvation among women, children and the elderly (see Table I). The magnitude of the distress among blacks is apparent in the fact that eighteen out of twenty-six of Natal's Magisterial Divisions suffered heavy crop losses of thirty to ninety-five percent (see Map). The Black population in these eighteen Divisions was estimated at 432 973 or nearly seventy-six percent of the total African population in Natal.[16] Black peasants had little or no political power and thus received none of the services or benefits provided to white farmers in combatting the pernicious insects.[17] The 1896 Locust Plague was the first in a wave of natural calamities to hit the region and it weakened the peasantry materially and psychologically and made them more vulnerable to the scourge of Rinderpest. The Commissioner of Agriculture summarised the tribulations of Natal's farmers in his annual report and hinted that a worse catastrophe was imminent in 1897:




The Colony of Natal 1896

Divisions that suffered substantial- 30 percent or more staple crop losses due to locusts.

* Zululand was not incorporated into Natal until 1897; thus the areas of locust devastation are only approximate as Government record keeping was not as precise for Zululand as for Natal proper.

> . . . the past year was, from an agricultural point of view, fraught with many disasters and losses, arising chiefly from drought and the ravages of locusts. To these drawbacks has to be added the dread of an outbreak of rinderpest, from which the Cape Colony and the adjoining Republics have been and still are suffering serious losses.[18]

Rinderpest was defined as 'an accurate contagious virus disease of ruminants and swine, characterized by diarrhoea, nasal and lacrimal discharge and by ulceration of the mucous membrane of the mouth'.[19] The Natal government authorities and the general public were alerted to the devastating effects of rinderpest in the Boer Republics, Rhodesia and the Cape Colony well in advance of its actual arrival in Natal and Zululand. In early May 1896 rinderpest broke out among trek oxen on the Harrismith town-lands on the Natal-Free State border.[20] White farmers, concerned over rinderpest entering Natal and infecting their cattle, attended the Rinderpest Conference in Pietermaritzburg in May 1896 and were informed by Natal's Chief Veterinary Surgeon that "no remedies have yet proved of any use . . ."[21] Many a hardened farmer must have paled when the Chief Veterinary Surgeon described the symptoms and the horrible death of cattle stricken by rinderpest:

> Experience soon guides the eye and ear, and the broken-winded cough and the discharge of tears from angry-looking eyes are at once noticed. As the disease runs on, the animal becomes dull and disinclined to rise from the ground - some of the beasts may be constipated, passing hard pellets of yellow-grey clay - but most will be affected by a watery and foeted diarrhoea, often tinged with blood. The temperature is very high, and the breathing laboured, . . . ropey saliva hangs round the mouth and nostrils . . . As the temperature fulls, the animal becomes semi-comotose and weaker, muscles quiver incessantly, moaning and gulping increase, and about six days after an attack commences the beast dies . . .[22]

Pressure mounted on the Natal Government to make preparations for preventing the disease from entering the colony through rinderpest infected livestock, hides, clothing and people passing from the Orange Free State, the South African Republic and Zululand. In a special meeting of the Natal Farmers Conference in May 1896 a resolution was passed "to ask that the borders might be closed".[23] The Natal Government responded with a "General Plan for Meeting the Dangers of Rinderpest". The main provisions of the plan were the following:

> A fence is in course of erection from the extreme northern point of the Colony along the north-eastern boundary towards the mouth of the Tugela. An inner fence will be constructed as soon as possible so as to establish a neutral zone between the two fences.
>
> Each border will be closed against all traffic the moment that this extreme step is warranted by the spread of the disease in the neighbouring territory.
>
> The best protection against the spread of the disease is the immediate repair of all existing fences, and the fencing of all farms not already

> fenced, and the making of inside paddocks.
>
> The Government will consider favourably all applications for loans to be used in erecting fences as a protection against Rinderpest.
>
> Four Veterinary Surgeons may be expected in the Colony . . . to assist the head of the Veterinary Department in his duties.
>
> Steps are being taken to explain to the natives the character of the disease, and to secure their aid and assistance in the necessary precautions on location lands.[24]

The Natal government ordered the Commissioner of Agriculture to undertake the fencing off of the boudries between Natal and the Transvaal, the Free State and Zululand as a measure to prevent infected cattle from entering the colony. By June 1897 around 535 miles of fence had been erected on Natal's borders at an average cost of 80 per mile.[25] Natal's Department of Agriculture employed 883 men to serve in the campaign against rinderpest. Natal was divided into 21 districts manned by 21 Inspectors, 127 European guards and 679 African levies. The Europeans were armed with carbines and all employees both black and white were sworn in as Special Constables with the authority to quarantine infected herds, to shoot diseased animals if necessary and to arrest those persons guilty of contravening quarantine restrictions by bringing cattle across the border into Natal. The government also ordered the mountain passes between Natal and Basutoland to be dynamited so as to make them impassable to cattle and oxwagons.[26] The Natal government spent 176 715 on fences, disinfecting stations, and employees' salaries in its bid to prevent rinderpest from entering the Colony.[27]

A heavy burden of responsibility fell on the Department of the Secretary for Native Affairs, (SNA), when the task of controlling rinderpest in the numerous African Reserves or "Locations" was handed over to the SNA by an already over-loaded Department of Agriculture.[28] The Secretary for Native Affairs, Frederick Moor, did not see the immediate urgency of alarming the Colony's black population over rinderpest because the epidemic had not penetrated beyond the Transvaal and Northern Orange Free State in early 1896. The *Times of Natal* (Durban) reflected the fears of many white settlers that the co-operation and assistance of Africans was essential if the rinderpest was to be kept out of the locations: the editorial appealed that "no time should, therefore, be lost in fully acquainting the natives of the nature of the disease, and of the measures it may be necessary to take for its suppression".[29] Two days later the SNA sent the Colonial Secretary a directive for dissemination to the Resident Magistrates and to the Locations:

> I think it will be well if you will cause the Natives, generally, to be told through the Magistrates, that there is a bad cattle disease in the Transvaal, and the Government has stopped all cattle from coming into Transvaal. Natives near the Transvaal border should also be told that they are expected to give immediate notice to the Magistrate or Police if they hear of any cattle attempting to cross the Transvaal boundary.[30]

Many whites in Natal harboured the conviction that if rinderpest broke out amongst the half-million or more African-owned cattle then it would spread disastrously fast if not checked by the wholesale putting-down or "stamping out" of diseased beasts and even those that were healthy but had come into contact with rinderpest. The Colonial Veterinary Surgeon (CVS) advised the SNA to warn Africans that stamping out may be resorted to, but that "much of their opposition would be overcome, especially if compensation were given".[31] The SNA did not agree fully with the CVS and was hesitant to unduly alarm African stock-keepers of so extreme a measure as "stamping out" as it might foment disturbances - something that was always dreaded by a security and economy minded SNA. The *Natal Witness* was critical of the SNA's 'soft-line' on the stamping out issue and warned its readers that "what there is reason to fear is a degree of tenderness for the Native that will bring ruin to the white man".[32]

The SNA moved slowly and cautiously in broaching the subject of rinderpest among Africans. It was not until 18 September 1896 that Moor directed R.O. Samuelson, the Under-Secretary for Native Affairs (USNA) to proceed to the Umsinga, Krantzkop and Mapumulo Divisions where he would meet the Chiefs and Headmen and . . . "Tell them that the cattle plague, known as rinderpest, is steadily advancing southwards and that it has reached the northern ports of the Transvaal and Barkly West, . . . Explain to them the nature of the disease, and tell them of the havoc it has done where it has broken out." The SNA was also called upon by the Department of Agriculture to instruct Africans living near the Colony's borders to give their labour to the Government's scheme for "the conveyance of fencing materials and other requisites to the Border and in the erection of the fence". Although blacks were drafted into state service, they were to be "remunerated by the Government for their services".[33] The "Border tribes" most affected by the SNA's anti-rinderpest campaign were the Amaqamvu under Chief Kula, the Amabomvu under Chiefs Mawele and Homoi, the Amakabela under Chief Gayede, the Amangcolosi under Chief Hlangabeza, the Amacele under Chief Geveza, the Hohoza under Chief Mkonto and the Amazulu under Chief Timuni.[34]

Before the SNA made its plans for preventing entry of rinderpest into the locations public, the colony's newspapers criticised the SNA for its failure to inform the white public of its policy towards the Locations. Moor was ridiculed for his uninformative administration:

> The greatest anxiety has prevailed to know the intentions of the Government in regard of Locations, of the treatment of native cattle, and the liberty of natives to roam the country at their own pleasure, or the next thing to it . . . The Secretary for Native Affairs maintained an inflexible silence, but that Minister works on the principle of not letting his left hand know what his right is about.[35]

In 1896 the decimation of cattle by rinderpest in the Transvaal and the Free State was already having disastrous consequences for transport riders from Natal. Thousands of whites and even more blacks were engaged in the haulage of goods by ox-wagon between Natal and Witwatersrand gold fields. Many transport riders had a sizeable investment bound up in wagons, harnesses and trained oxen.[36] The rinderpest epidemic brought almost complete chaos and paupery to Natal transport riders unlucky enough to be stranded on the cold winter veldt of the interior with a lifetime's investment in oxen destroyed in as little as thirty hours. The Government of the South African Republic resorted to stamping out measures and black transport riders from Natal complained bitterly that the Transvaalers shot their cattle whether they were infected with rinder-

pest or not. A Natal African, Joseph Gumede, bitterly denounced the Government for not providing assistance to their transport riders disabled and hungry in the Transvaal:

> . . . what great trouble some of my brethren are now in, with no chance of help from those our noble Queen depends on to help and do justice to us poor natives in Natal? . . . when we find all we have worked very hard for, in the shape of a span of oxen and wagon, got through many years of patient toil, and now are cast adrift in a foreign state where it is so cold that our cattle will die, then we feel it is time to appeal for justice at the hands of our good Government, to help us with the Transvaal Government first, and afterwards to give us a place to quarantine our cattle, until . . . our cattle are free from all disease.[37]

The Natal Government, in its bid to quarantine the colony from infected cattle and goods in the interior Republics placed a further obstacle in the path of destitute white and black transport riders by sealing off the main roads from the Transvaal and Free State in late May 1896.[38] Transport riders with healthy teams of oxen were largely prevented from returning because it was feared, quite correctly, that they may be carriers of rinderpest. Thus, until the discovery of a fairly effective method of immunizing livestock in mid 1897, tens of thousands of transport oxen were sacrificed in vain efforts to stamp-out rinderpest. The destruction of much of Natal's ox-drawn transport system represented extremely heavy capital losses for most transport riders. It meant an even more serious loss of income for black peasants who had been either fully engaged in transport riding or combined it with farming and itinerant trading. Joseph Gumede pointed to the hardships facing the stranded and hungry blacks in the Transvaal, and the economic strains that relief efforts placed on an increasingly impoverished peasantry:

> . . . Up to the present we have spent most of our earnings in buying food at exhorbitant prices, and we will not be able to hold on much longer, for we have now to send our crops by train to keep our boys alive at the wagons. This will be the last straw, for it will mean starvation in the near future.[39]

During the latter months of 1896 the SNA made further contingencies for the isolation of African Locations should rinderpest break out. The Resident Magistrates were directed to "appoint certain Chiefs and Headmen in the Locations as Supervisors in connection with the prevention of the introduction and spread of Rinderpest". The SNA placed the African supervisors under the Magistrate's control and the Government remunerated them at the "rate of £ 3 per month". The SNA spelled out the duties of the supervisors to the Magistrates. They were to "supervise the cattle of the members" of their tribes and to isolate and tie up any beast that showed signs of sickness. The Chiefs were also ordered to "see that no cattle cross the proclaimed cordons, and to report . . . any cattle which may have been brought into the Location in breach of the cordon regulations".[40] The SNA proclaimed further its intentions of quarantining all Locations in the colony should rinderpest threaten:

> If the rinderpest does break out in the Location no cattle will be permitted to be moved from infected area, but the area will be isolated. The driving of cattle from any part of a Location in which an out-

> break has taken place to any other locality will be prohibited, whether such cattle are infected or not. All movements of oxen or cattle of any kind will be forbidden.[41]

The news that the Natal public awaited with dread occurred on 16 January 1897 when it was reported in the colony's press that an assistant veterinary surgeon "discovered a suspicious case of cattle disease on a farm a few miles from Dundee". On the 17th Natal's Principal Veterinary Surgeon, the Commissioner of Agriculture and the Minister of Agriculture visited the farm and diagnosed the case as "undoubtedly rinderpest."[42] Although the Dundee outbreak was the first reported case of rinderpest in Natal, it was later confirmed that the disease had broken out earlier among trek-oxen at Ladysmith, but that its presence was "not reported for a considerable time".[43]

In spite of the effort and money expended by the Natal authorities on controlling the spread of rinderpest, this proved to be completely ineffectual. There were a host of factors which ensured the spread of the dread disease. Most significant is the fact that a large number of whites and blacks were active in transport riding and their trek oxen carried rinderpest across the Natal border from the already infected Transvaal, Free State and Cape Colony. The livelihood of transport riders depended on moving goods and they often found ways to slip past the border guards and the disinfecting stations without being detected.[44] White and black public opinion in Natal blamed the Natal Government for the outbreak of rinderpest because of the failure of the Natal authorities to close the borders of the Free State and Transvaal before infected trek-oxen had crossed over into the colony. A lack of control over transport riders by the Government was pointed out as the reason for Ladysmith outbreak:

> Until the information that rinderpest had broken out in the Colony was received here on the 18th (July) hundreds of tons of forage and farm produce were brought to Ladysmith from Harrismith, from an area in which the disease was spreading in every direction, and sent right and left over the Colony.[45]

The Natal Government's policy of setting-up "disinfecting stations" to fumigate people and goods entering Natal at the main border posts proved to be both controversial and inadequate. At Charlestown, on the borders of the Transvaal, white railway passengers were "bundled off" the train to a government disinfecting station where they were "fumigated" with a light solvent spray of bacterial disinfectant. The main flaw of this system was that while people, and the clothing they happened to be wearing, were fumigated, "the clothes and belongings in the compartments"[46] were not, thus goods and other baggage most probably carried the highly contagious rinderpest virus into Natal.

Africans returning from the Transvaal received contemptible treatment as they were unceremoniously stripped and queued for fumigation. Africans complained bitterly at being stripped and having their clothes soaked with the disinfectant and then having to don them while still in a wet and cold state. The SNA pointed out the health hazards of such insensitive procedures to the Commissioner of Agriculture, whose Department was in charge of the disinfecting stations at Charlestown:

> It has come to my notice that natives at Charlestown have their clothes drenched in some disinfectant fluid and that they have to put them on again before they are dry and have to wear them till they

> dry on their bodies.
>
> The cold weather is setting in now and this procedure is fraught with danger to the natives concerned. Washing and drenching clothes should be avoided and some other means of disinfectant should be adopted if possible.[47]

The Commissioner of Agriculture, C.B. Lloyd, complied with the SNA's suggestions and ordered the Charlestown station "to stop all clothing being returned to natives in a damp condition and . . . to make arrangements by which the clothing could be quickly and effectively dried".[48] When questioned by the local press on the supposed controversy and effectiveness of the fumigation of Africans at Charlestown, the Secretary for Native Affairs played down the complaints and attempted to assuage his settler critics with the assurance that "every batch of natives disinfected has been told the reason for the operation, has been warned about the disease, and told of its dangerous character".[49]

Another criticism hurled at the Natal Government over its handling of the rinderpest epidemic was a lack of preparedness and foresight in the fencing of the borders of the colony. White farmers, many of them members of the influential Natal Farmers Conference, charged the Department of Agriculture of not having taken steps soon enough to ensure that there were stores of imported fencing materials adequate to meet the needs of the Government's ambitious programme and, at the same time, cater to the demands of white farmers anxious to fence their own farms and paddocks. Approximately 7 889 tons of barbed wire and other fencing materials valued at 72 271 were imported into the colony from Britain and the United States during 1896,[50] but it was not enough to meet the rocketing demands. Material shortages, frustrating delays and exorbitant prices underlined the complaints of many disgruntled farmers:

> In May (1896) a special meeting of the Conference passed resolutions requesting that the borders of the Colony might be fenced. The fencing was not started until August, and, no preparation having been made to obtain material, the market here was rushed and all supplies bought up by the Government, thus sending up the cost of materials and preventing many farmers from fencing their lands for many months.[51]

What stunned the Natal authorities most of all was the breath-taking rapidity with which rinderpest spread all over the colony seemingly at once. The Commissioner of Agriculture wrote in amazement that "when, however, the disease appeared, it did so almost simultaneously over two-thirds of the Colony".[52] Of the twenty-six magisterial divisions in the colony, twenty-four were infected with rinderpest between 16 July and 30 October 1897 as the following figures reveal:

OUTBREAK OF RINDERPEST IN NATAL

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| July 16 | - | July 31 | - | 9 | Magisterial | Divisions | Affected |
| " 31 | - | August 12 | - | 6 | " | " | " |
| August 12 | - | August 31 | - | 3 | " | " | " |
| " 31 | - | September 20 | - | 6 | " | " | " |
| September 20 | - | October 30 | - | 1 | " | " | " |

All observers of the 1897 Rinderpest epidemic are unanimous in their opinions that cattle losses to the dread disease were more than twice as severe among blacks as among whites. The Commissioner of Agriculture stated in his annual report for 1897 that . . .

> that there are many cases where European farmers have lost practically all their cattle is unfortunately too true, and the owners deserve every consideration, but from what information is accessible at present, the losses throughout the Colony in herds belonging to Europeans will be about 40 per cent, and in those belonging to natives 90 per cent.[54]

Reports of appalling losses in cattle from rinderpest poured in from all over Natal and Zululand. The Magistrate of the Klip River Division calculated that 20 108 head of stock had died from the epidemic and that "the mortality may be fairly set down at 90 per cent amongst stock belonging to natives, and about 65 per cent amongst stock belonging to Europeans". Once wealthy Chief Bande, the Magistrate said, was the greatest loser, the mortality amongst his head amounting to 760 head. "This man has now 29 head of cattle only, and from being one of the most opulent natives in the neighbourhood, is now comparatively poor".[55]

In the latter months of 1897 the bile and serum methods for inoculating cattle were produced in South Africa and distributed to farmers.[56] Many black peasants believed that the white man had introduced the rinderpest epidemic and they had little or no faith in inoculation. The *Natal Witness* reported the disturbed and resentful mood of Africans towards whites in the sugarbelt Divisions of Lower Tugela and Inanda:

> We are told . . . that the natives regard the advent of rinderpest as entirely the fault of the white man. "He brought the disease from a distance for the purpose of inoculation, and so kills, not only his own cattle, but also that of the natives". The latter are sulky, disgusted, bewildered. The informant thinks, however, that there is no chance of a rising, seeing the natives are without firearms.[57]

The Africans had much justification in being bewildered and angry at whites and the officials of the Department of Agriculture and the SNA in particular who carried the anti-rinderpest campaign. Before the serum inoculation method proved successful, the Rinderpest Commissioners, Magistrates and Special Constables simply resorted to the wholesale shooting of African cattle in the Locations which had been in contact with rinderpest but were still healthy. This was cause for many angry complaints. When the new serum method was implemented in late July of 1897 the SNA quickly authorised the discontinuation of "stamping out". Moor attempted to ease tensions between the rinderpest officers and the Africans in the epidemic ravaged Upper Tugela Divisions by calling a halt to the cattle killings:

> Please inform Ncwadi and Mnyamana without delay, that, owing to the numerous cases of Rinderpest which have already occurred in the Klip River and Dundee Divisions, the Government has resolved that there shall be no more killing of cattle, but that inoculation shall be resorted to in preference.[58]

The SNA was drafted into providing the bulk of inoculation services for "Location"

Africans by an overworked Department of Agriculture. The SNA instructed all the Resident Magistrates to "Please suggest the names of two suitable persons in Your Division whom you can recommend to be instructed in inoculation, in connection with Rinderpest, with a view to their being able to assist such natives as may desire to adopt this course".[59] The Secretary for Native Affairs told the press that "I am getting the best men I can to assist the Natives with inoculation where they desire it". Moor stated further that his Department had "advertised asking the missionaries to assist the natives on their stations, and we are willing to supply them with all the necessary instruments".[60]

Black peasants were suspicious of inoculation, at first, because of the indifferent and even dire results of the imperfect bile inoculation method. Bile inoculation involved the inoculation of healthy and supposedly rinderpest-free stock with bile from an infected animal. The result being that the injected beast would through the bile catalyst and after a brief illness symptomatic of rinderpest, either recover and be immunized or it would succumb and die. The SNA inoculators had many disappointing results from the bile method and many Africans became resistant to its use when they saw some of their cattle dying from the procedure.[61]

In September 1897 the serum inoculation method was introduced into Natal from the Transvaal where it had proved far superior to the bile method in the immunization of healthy cattle and in the curing of diseased animals. The process involved simply, the inoculation of healthy stock with 100 c.c. of blood from the fortunate few animals which had survived the rinderpest and were thus immunized or "salted".[62] Cattle that were already suffering from symptoms of the plague were given a more potent dosage of between two and three hundred c.c. of "salted" blood. An eighty to ninety percent success rate had been achieved among herds in the northern Cape and the Transvaal.[63] By mid-October 1897 the rinderpest officials were busy with serum inoculation throughout much of the Colony. The SNA discontinued the bile method of inoculation "owing to the results proving generally unsatisfactory".[64] The SNA allocated the modest sum of 2 000 for expenditure entailed in the supply of serum, instruments and the employment of nine inoculation officers throughout most of the colony's Locations.[65] Although the SNA "let it be known among natives that the Government is ready and willing to render them all assistance as regards the inoculating of their stock",[66] the rinderpest plague had already done most of its deadly work among the cattle population of Natal. A further complication delayed the inoculation of cattle because of the great scarcity of "salted" cattle from which the precious serum was processed. By late October 1897 the SNA just requested African stock-keepers to "be careful to preserve cattle which have recovered from the disease, because it is from such that the serum, which will save sick cattle and immunize those not diseased, can be obtained . . ." Of course, the plague had, by October 1897, already killed the majority of African cattle.

The mixed responses of impoverished and restless Africans to inoculation was a source of controversy within the Colony. White settlers and officials blamed African resistance to inoculation on superstitious taboos inherent to their traditional culture. Africans had only themselves to blame for the high mortality rate amongst their herds - a theme echoed by many official observers. "This terrible scourge",[67] wrote the Magistrate of the New Hanover Division, "has completely devastated the herds of cattle belonging to natives; the result, undoubtedly of the unwillingness on the natives' part to resort to inoculation before the disease had attacked their cattle".[68] However, the Magistrate of the Upper Tugela Division revealed in his report how the precious serum was distributed to inoculate "European cattle, while the intermediate native cattle were left to their fate". This discriminatory policy "gave the natives a good cause for com-

plaint, and of which they will always make the most".[69] It is more than likely that many Africans, especially those living in remote areas of the colony, never gained access to the rinderpest serum while white farmers had a distinctive advantage in communications with the Government veterinary services.[70] In addition to the inadequate and unequal anti-rinderpest measures taken by the Government, the Africans' system of land tenure and usage in Colonial Natal put them at a further disadvantage as they grazed their cattle together on large communal pastures and this fanned rinderpest through their herds much faster than through white-owned cattle which were separated into smaller herds on individual farms, further distances apart.

The rinderpest epidemic precipitated a major economic crisis for black peasant agriculture in Natal. With 80 to 90 percent of their cattle dead many Africans who depended on transport riding for their livelihood became destitute almost overnight and had to seek jobs in the towns and mines. More seriously, a growing neglect of cultivation occurred in many areas due to "Rinderpest having swept off all native oxen". The Magistrate of the Mapumulo Division noted somberly that "there will be no oxen to plough with at the next planting season".[74] Rinderpest impoverished many hundreds of black peasant tenants living on white farms throughout Natal and either drove them off the land or made them more indebted to their white landlords. The Magistrate of the Ixopo Division recorded the plight of rent-paying peasants. "The losses of cattle from rinderpest have been truly distressing . . . and I fancy the Europeans will find it necessary to reduce the high rents paid by many native tenants.[72] Other white observers believed rinderpest to be a mixed blessing for the loss of cattle would in future force more and more black peasants off the land into wage labour. Such hopes were expressed by the ambivalent Magistrate of the New Hanover Division:

> It is to be hoped that the losses sustained by the natives will ultimately awaken the men to the necessity there exists for developing habits of industry . . . Up to the present, however, no thought appears to be by them on the future and their time seems to be spent chiefly in drinking beer and in breaking heads at faction fights, the latter being always the result of the former.[73]

One of the firmest indicators that black peasants had suffered much larger quantitative losses in cattle from rinderpest was born out in the statistics showing the total amount of stock owned by blacks and whites. In 1896 blacks owned an estimated 494 402 cattle and whites 242 165. The 1898 totals reveal a startling plunge in the number of cattle held by blacks - 75 842 head - as opposed to whites who owned 155 456 head.[74] In fact, for the first time in the colony's history whites owned more cattle than blacks (see graph). It took blacks nearly eight years (1905) to recoup their losses to the point where their herds equalled the 1896 figure. White farmers suffered less from the 1897 rinderpest epidemic than blacks and they reaped high profits by selling stock to Africans anxious to buy "salted"or rinderpest free oxen for ploughing, transport-riding and *ilobola.* In 1898 the Magistrate of the Umvoti Division remarked that "the value of cattle has risen at 100 ".[75] The demands for cattle rose enormously due to the losses incurred through rinderpest and the Anglo-Boer War, 1899-1901. The farmers who had stock for sale must have been gleeful as they saw the average price of salted cattle in Natal and Zululand treble and even quadruple between 1895 and 1905:

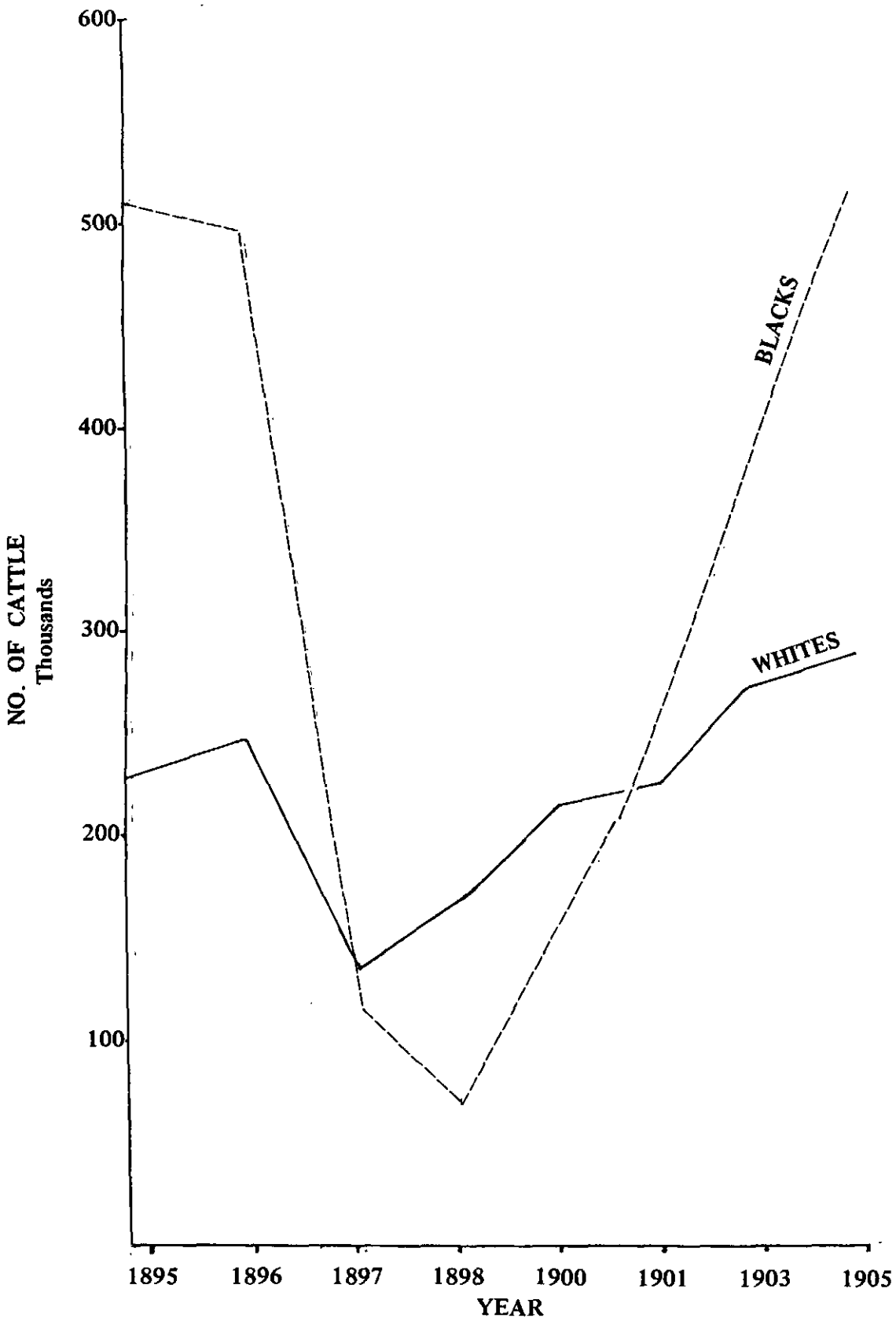
AVERAGE PRICE OF CATTLE IN NATAL AND ZULULAND

| YEAR | WHITE-OWNED CATTLE | BLACK-OWNED CATTLE |
|---|---|---|
| 1895 | 5 | 5 |
| 1896 | 6 | 6 |
| 1897 | 7 | 7 |
| 1898 | 13 | 13 |
| 1900 | 20 | 20 |
| 1901 | 16 | 16 |
| 1903 | 17 | 13 |
| 1905 | 15 | 9[76] |

While a few white farmers reaped huge profits from the sale of cattle, the rinderpest epidemic had an overall detrimental effect on the regional economy. Consumers of red meat and dairy products had to pay between 33 and 50 per cent more for these foods. Natal faced a real shortage of red meat during 1897 and 1898 as a result of rinderpest. This necessitated a much larger importation of chilled/preserved meats and dairy produce from Australia, North America and Argentina from 1897 until at least 1903-04.[77] Rinderpest, in effect, opened up the colony's doors to cheaper imports of basic foodstuffs and Natal's trade deficit with its trading partners rose significantly during these years.[78] So alarming was the flood of imported meat and dairy products into the colony that representatives of the white farming sector in the Legislative Assembly made strident appeals for protective tariffs to be levied against imported meat. One Legislator assailed the "unholy compact" entered into by the colony's butchers and meat importers whereby half of their meat supplies would be bought from overseas producers on long term (five year) contracts.[79]

The rinderpest epidemic seriously disrupted the socio-economic norms that had evolved around the cattle-complex of northern Nguni societies. The wiping-out of nearly ninety percent of all African-owned cattle from rinderpest not only destroyed black transport riding and the chief sources of storeable wealth, it threw the entire social system out of kilter. A most fundamental social institution, marriage, was thrown into disarray because of insufficient cattle to meet the normal commitments of *ilobola* or bridewealth that most men were required to give to their prospective fathers-in-law. Marriages were postponed for lack of "*lobola cattle*". Black social discontent, particularly among the marriageable young people manifested itself in the decade following the rinderpest plague.[80] Even more serious, were the effects that rinderpest had on the nutritional levels of many blacks who depended, in large part, on the system of *ukusisa*, the custom whereby men wealthy in cattle would loan beasts to poorer relatives or clients who then were permitted to consume all the milk and to eat beasts that had died in exchange for tending their patron's herds. *Ukusisa* was impeded largely by the Natal Government's directive to Resident Magistrates and Rinderpest Officers to "Warn the natives to be on their guard against the movement of cattle from place to place within the Colony and to be very careful not to receive cattle for "sisa" purposes.[81] The social and economic institutions of the African cattle-complex in Natal demanded a large degree of geographic mobility in order to function. The mandatory but erratic quarantine of all cattle in Natal to their respective farms and locations did little or nothing in preventing the spread of the epidmic. But, the restrictions on mobility had much more

CATTLE POPULATION - NATAL & ZULULAND 1895 - 1905



harmful repercussions for the socially extended and economically interdependent institutions that formed the core of the cattle-complex in Natal's communities.

The Natal colonial government had, like the government of the Free State, Transvaal and the Cape Colony, failed spectacularly in its efforts to prevent or contain rinderpest. As the epidemic gathered in intensity throughout 1897, the general public, both black as well as white, condemned the Department of Agriculture and the SNA for the inadequacy of the measures taken to combat the plague, and for the delays that invariably occurred in their implementation.[82] At the half-yearly meeting of the influential Natal Farmers' Conference in October 1897, settlers discontent with the Government's handling of the cattle disease was voiced in a resolution "that this Conference requests the Government to appoint a Commission to enquire how rinderpest got into the Colony and how it spread, and, why the 'excellent stringent measures' adopted collapsed". The Natal Government presented an inconclusive report which placed the blame on the enormity of the epidemic and the inability of any human agency to contain its spread and destructive capacity before serum inoculation was introduced. *The Natal Witness* probably summed up the feelings of many white farmers and even more black peasants when it concluded that "nearly every step the Government has taken has been forced upon them. Attempt after attempt has been made to keep them up to the mark, but they have all failed".[83] In its official utterances, the Natal Government went to great lengths to minimise any charges of unpreparedness and inefficiency. African discontent, and suffering as a result of rinderpest, was expediently ignored to the point where the British Governor of Natal made the absurd pronouncement that it gave him "much pleasure to bear testimony to the patient and cheerful way in which the Native population have borne their severe losses through rinderpest and locusts".[84]

There was most certainly a psychological dimension to the rinderpest plague. A number of Divisional Magistrates commented on the streak of fatalism which seemed to manifest itself in the African population.[85] Two disastrous years of locusts, severe drought and rinderpest, respectively, had destroyed much of the staple subsistence crops and nearly all the livestock wealth possessed by Africans. These unprecedented calamities probably appeared insurmountable and the "sulky" and "restless" nature attributed to blacks by white observers was probably an expression of resignation and acquiescence to forces that were totally beyond the powers of black peasants to resist. The death of thousands of cattle in 1897 meant that thousands of tons of meat had to be disposed of fairly quickly. The reported outbreak of food-poisoning among blacks in the Transvaal who had eaten cattle that had died from rinderpest prompted the SNA to issue a warning to Africans that "cattle dying from rinderpest should at once be burned, and no portion thereof should be used for food".[86] Africans ignored the warnings, which, in any case, turned out to be incorrect, and ate diseased animals in feasting and beer-drinking that went on for days. The horrible realities of rinderpest must have hung as a depressing cloud over the Natal countryside. Many white farmers and black peasants stood by helpless as they watched their cattle die an agonised death. Equally depressing, the landscape was littered with the putrefying carcasses of dead animals. One observer of the plague recalled a hideous and never-to-be-forgotten sight near Greytown:

> Cattle died in thousands, and as all sick animals made for water, streams were soon choked with rotting carcasses. The stench was terrific, and the bushes fringing the small streams flowing down the Greytown Hill were covered with a canopy of blue bottle flies in millions.

> Natal was heavily stocked with cattle at the time, and the losses were terrific.[87]

## CONCLUSION

The 'Great Rinderpest' epidemic of the 1890s was far and away the most traumatic and devastating of the ecological disasters visited on southern and eastern Africa in recent times. In Natal and Zululand rinderpest largely destroyed the transport riding business, sent prices of draught oxen and red meat soaring and opened the door to a flood of imported meat products. The rinderpest epidemic was the lynch-pin in the wave of natural calamities that collectively produced an ecological breakdown sufficient to end abruptly the relatively long period of environmental stability that had existed throughout the second half of the nineteenth century.

The structural and institutional distinctions that existed between the black and white farming sectors were sharpened further as a result of rinderpest. The fact that black peasants in Natal were hit hardest by the vicissitudes of nature around the turn of the century was due to the narrow base of their farming operations and the resultant over-reliance on the two staple crops of maize and sorghum. These crops were particularly vulnerable to the combined hazards of protracted drought and locusts. The rinderpest epidemic of 1897 and later East Coast Fever after the turn of the century depleted African cattle herds by as much as ninety percent. The devastation wrought by stock disease seriously undermined the very economic and social foundations of rural black society which relied heavily on cattle for transport riding, ploughing, capital accumulation and *ilobola* or bridewealth. Natal's black farmers were also at a marked disadvantage when compared to their white counterparts for they did not enjoy equal access to the colony's veterinary and agricultural support services.

The environmental calamities of the late nineteenth and early twentieth centuries has important implications for any analysis of the rise and fall in the fortunes of Natal's peasantry. The dramatic decline in peasant crop productions and in the numbers of their cattle occurred at exactly the time when climatological and epidemiological forces combined to upset the rhythm of peasant society.

--------oooOooo--------

NOTES

1. The theme of environmental calamities and social and economic change in Natal around the turn of the 19th century was the topic of an earlier paper: C. Ballard, "Pestilence and the Peasantry: The Holocaust in Natal 1895 - 1907" (unpublished paper given at the second biennial conference of the Economic History Society of South Africa, July 1982).

2. Several works which have emphasized the influences of environmental factors on rural communities in southern Africa are:

   C. M. de Kiewiet, *History of South Africa: Social and Economic* (London, 1941), p. 189; M. Wilson & L. Thompson (eds.), *The Oxford History of South Africa* Vol. II (Oxford, 1971); Chapter III, Francis Wilson, "Farming 1866 - 1966", pp. 115 - 116, and Charles Van Onselen, "Reactions to Rinderpest in South Africa 1896 - 1897", *Journal of African History,* XIII, 3 (1972), pp. 473 - 488.

3. Helge Kjekshus, *Ecology Control and Economic Development in East African History: The Case of Tanganyika 1850 - 1950* (London, 1977), pp. 126 - 127.

4. De Kiewiet, *History of South Africa: Social and Economic,* p. 189.

5. *Natal (Departmental) Blue Books,* Magistrates' Reports, 1878, 1879 and 1881; and *Natal (Statistical) Blue Books,* Returns for Agriculture, Vols. 29-1878, 30-1879 and 32-1881.

6. *Natal (Departmental) Blue Book,* Magistrates' Reports, 1881.

7. Charles Ballard, "The Role of Trade and Hunter-Traders in the Political Economy of Natal and Zululand 1824 - 1880", *African Economic History,* No. 10, (1981).

8. A. F. Hattersley, *The British Settlement of Natal* (Cambridge, 1950), pp. 270 - 272.

9. *Natal Mercury*, 3 May, 1895.

10. C. Ballard and G. Lenta, "The Role of the Peasantry in the Agricultural Economy of Colonial Natal 1844 - 1909: A Reassessment", (unpublished paper given at the Southern African Studies Seminar, University of Natal, Pietermaritzburg, 8 June 1982).

11. C. Bundy, *The Rise and Fall of the South African Peasantry* (London, 1979) Chapter 6, pp. 165 - 196.

12. Shula Marks, *Reluctant Rebellion, the 1906 - 1908 Disturbances in Natal* (Oxford, 1970), p. 129.

13. *Debates of the Legislative Assembly of the Colony of Natal,* Fifth Session of the

First Parilament, 1897, Vol. 25, J. L. Hulett, Member for Victoria County, 4 May 1897.

14. James Stuart, *A History of the Zulu Rebellion* (London, 1913), pp. 92 - 98.

15. *Natal (Statistical) Blue Book,* Imports and Exports, Vols. 45-1896, 46-1896.

16. Statistics taken from *The Department of Native Affairs, Blue Book on Native Affairs,* Resident Magistrate's Reports, 1896.

17. C. Ballard, "A 'Year of Scarcity': The 1896 Locust Plague in Natal" (unpublished paper, University of Natal, Durban 1982).

18. *Debates of the Legislative Assembly,* Fifth Session of the First Parliament, 1897, Vol. 25, J. Hulett, Member for Victoria County, 4 May 1897.

19. Kjekshus, *Ecology Control and Economic Development,* p. 126. The description of rinderpest symptoms comes from The Kenya Veterinary Services.

20. *(Departmental) Blue Book,* Annual Report of the Commissioner of Agriculture for the year 1896, p. H-141.

21. *Natal Witness,* 6 May 1896.

22. *Ibid.*

23. *Ibid.,* 27 July 1897.

24. *Natal Government Gazette,* 21 September 1896. Government Notice No. 528, 1896.

25. *Natal (Departmental) Blue Book,* Annual Report of the Commissioner of Agriculture for the year 1896, p. H-141.

26. *Ibid.,* p. H-142.

27. *Ibid.,* Annual Report of the Commissioner of Agriculture for the Year 1897, p. H-162.

28. Secretary for Native Affairs Papers (SNA), Pietermaritzburg Depot of the South African Archives, 1/1/258, 2206/1897. Samuelson's Report to the Natal Legislative Assembly, 12 October 1897.

29. *Times of Natal,* 22 April 1896.

30. SNA 1/1/219, 561/1896, SNA to Colonial Secretary, 24 April 1896.

31. *Times of Natal,* 22 April 1896.

32. *Natal Witness,* 7 October 1896.

33. *Natal Government Gazette*, 15 October 1896. Government Notice No. 576, 1896.

34. *Ibid.*

35. *Natal Witness*, 17 October 1896.

36. Bundy, *Rise and Fall*, Chapter 6.

37. *Natal Witness*, 29 May 1896.

38. *Ibid.*, 27 July 1897.

39. *Natal Witness*, 29 May 1896.

40. SNA 1/1/232, 1843/1896. Confidential Minute, USNA to Resident Magistrates of Umsinga, Weenen, Umvoti, Krantzkop and Mapamulo Divisions, 7 November 1896.

41. *Natal Government Gazette*, 15 October 1896. Government Notice No. 576, 1896.

42. *Natal Witness*, 19 July 1897.

43. *Ibid.*, 27 July 1897.

44. *Natal (Departmental) Blue Book*, Annual Report of the Commissioner of Agriculture for the year 1897, pp. H-161-162.

45. *Natal Witness*, 27 July 1897.

46. *Ibid.*, 23 March 1897.

47. SNA 1/1/244, 862/1897 SNA to Minister of Agriculture, 12 May 1897.

48. *Ibid.*, Commissioner of Agriculture to Minister of Agriculture, 13 May 1897.

49. *Natal Witness*, 19 August 1897.

50. *Natal (Statistical) Blue Book*, Imports and Exports, 1896.

51. *Natal Witness*, 27 July 1897.

52. *Natal (Departmental) Blue Book*, Annual Report of the Commissioner of Agriculture for the year 1897, pp. H-160-161.

53. *Ibid.*, p. H-159.

54. *Ibid.*, p. H-162.

55. *Ibid.*, Annual Report of the Magistrate of Klip River Division, 1897, p. B-86.

56. SNA 1/1/254, 1809/1897. Johannesburg Agent for SNA to SNA, instructions for rinderpest inoculation, 31 August 1897.

57. *Natal Witness*, 13 October 1897.

58. SNA 1/1/249, 1338/1897. SNA to Resident Magistrate, Upper Tugela Division, 23 July 1897.

59. SNA 1/1/150, 1451/1897. Circular No. 10, 1897, Rinderpest Inoculation, SNA to all Resident Magistrates, 4 August 1897.

60. *Natal Witness*, 19 August 1897.

61. SNA 1/1/252, 1677/1897. SNA to Resident Magistrate, Ipolela Division.

62. SNA 1/1/254, 1809/1897. Johannesburg Agent for SNA to SNA, instructions for rinderpest inoculation, 31 August 1897.

63. *Natal Witness*, 7 May 1897.

64. SNA 1/1/258, 2206/1897. Samuelson's report to the Natal Legislative Assembly, 12 October 1897.

65. *Ibid.*

66. SNA 1/1/252, 1677/1897. SNA to Resident Magistrate, Ipolela Division, 12 August 1897.

67. *Natal (Departmental) Blue Book*, Annual Report of the Magistrate of the New Hanover Division, 1897, p. B-22.

68. *Ibid.*

69. *Ibid.*, Annual Report of the Magistrate of Upper Tugela Division 1897, p. B-10.

70. *Ibid.*, Annual Report of the Commissioner of Agriculture for the year 1897, pp. H.162-164.

71. *Ibid.*, Annual Report of the Magistrate of Mapumulo Division 1879, p. B-34.

72. *Ibid.*, Annual Report of the Magistrate of Ixopo Division 1897, p. B-42.

73. *Ibid.*, Annual Report of the Magistrate of New Hanover Division 1897, p. B-22.

74. *Natal (Statistical) Blue Book*, Annual Report of the Magistrate of Umvoti Division 1898, p. B-6.

75. *Natal (Departmental) Blue Book*, Annual Report of the Magistrate of Umvoti

Division 1898, p. B-6.

76. *Natal (Statistical) Blue Book,* Returns on Average Prices and Wages, Vols. 45-1895, 46-1896, 47-1897, 48-1898, 50-1900, 51-1901, 53-1903, 55-1905.

77. *Ibid.*, Imports and Exports, Vols. 47-1897, 48-1898, 50-1900, 51-1901, 52-1902, 53-1903.

78. *Ibid.*

79. *Debates fo the Legislative Assembly,* First Session of the Second Parliament, November 24, 1897 to January 11, 1898. Vol. 26, "Imporation of Live Stock, Produce, and Meat", pp. 83-88.

80. Stuart, *The Zulu Rebellion,* pp. 92-98.

81. SNA 1/1/249, 1351/1897. Circular No. 7, 1897. SNA to all Resident Magistrates, 27 July 1897.

82. *Natal Witness,* 27 July 1897.

83. *Ibid.*, 2 December 1897.

84. *Debates of the Legislative Assembly,* Vol. 28, 1899.

85. Many Magistrates reported that Africans were taking a fatalistic attitude towards their accumulated tribulations.

86. SNA 1/1/249, 1351/1897. Circular No. 7, 1897. SNA to all Resident Magistrates, 27 July 1897.

87. H. C. Lugg, *A Natal Family Looks Back.* (Pietermaritzburg, 1976), p. 78.