

THE ESTABLISHMENT OF A FACULTY OF AGRICULTURE IN PIETERMARITZBURG, 1934-1949

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Introduction

The limited but expanding literature on the history of scientific research and the conquest of livestock and crop diseases in South Africa has hitherto been characterised by a pronounced emphasis on developments in the Cape. Notable exceptions have been some studies focusing on aspects of agricultural activity in the Transvaal, including veterinary training and research undertaken at Onderstepoort. Relatively little attention has been given to what is today the KwaZulu-Natal region, apart from a longstanding interest in the fortunes of the sugar industry, the expansion of wattle production and the conservation of indigenous game. The establishment of faculties of agriculture was an important further step towards the institutionalisation and sophistication of scientific research in that sector of the national economy. The first three of South Africa's university faculties of agriculture experienced long gestation periods. The oldest, at Stellenbosch, had its origins in the Agriculture Department which started in 1887 with five students at the Victoria College. It was removed in 1898 to Elsenburg and formally established in 1918 as a full faculty at the new University of Stellenbosch. The second, in Pretoria, began with the agricultural science courses taught from 1907/08 at the Frankenwald estate north of Johannesburg as part of the Transvaal University College. It began to take shape from 1916 at what, in 1930, formally became the University of Pretoria. The third agricultural faculty, established in 1949 in Pietermaritzburg, was the outcome of a prolonged campaign on the part of educational and other public figures in the Natal-Zululand region.¹⁸⁵

¹⁸⁵ With particular reference to scientific developments at the Cape, see William Beinart, "Vets, viruses and environmentalism at the Cape", in *Ecology and Empire: Environmental History of Settler Societies*, eds. Tom Griffiths and Libby Robin (Edinburgh: Keele University Press, 1997), 87-101; William Beinart, *The Rise of Conservation in South Africa: Settlers, Livestock, and the Environment 1770-1950* (New York: Oxford

Foundations

The need for agricultural research and the dissemination of knowledge about local farming conditions was recognised nearly a century earlier. In its draft Rules of 17 June 1851, the newly-formed Natal Society included among its professed areas of interest “the physical capabilities” of the region, its “peculiarities of climate and soil” and the effective agricultural and commercial exploitation of its resources. During its early years the Society organised appropriate lectures and encouraged farmers to contribute information “on Agriculture and other subjects of general utility”. In pursuit of these educational objectives, the Natal Society Library was launched as well as an embryonic museum collection which was subsequently to form the basis for the Natal Government Museum opened in November 1904. A variety of research and teaching collaborations were to follow between that institution and the local Natal University College, founded six years later, though these were only formalised in a Memorandum of Agreement signed in February 2003.¹⁸⁶

University Press, 2003) and Saul Dubow, *A Commonwealth of Knowledge: Science, Sensibility and White South Africa, 1820-2000* (Oxford and Cape Town: Oxford University Press and Double Storey Books, 2006). See also Karen Brown and Daniel Gilfoyle, “Introduction: Livestock Diseases and Veterinary Science in Southern Africa”, *South African Historical Journal* 58, 2007, 2-16. For agriculturally-related scientific research in the Transvaal see for example, Shaun Milton, “The Transvaal beef frontier: environment, markets and the ideology of development, 1902-1942”, in Griffiths and Robin *Ecology and Empire*, 199-212 and K. Brown, “Tropical Medicine and Animal Diseases: Onderstepoort and the Development of Veterinary Science in South Africa 1908-1950”, *Journal of Southern African Studies*, 31, no.3, September 2005, 513-29. For studies on sugar in the KwaZulu-Natal region see Peter Richardson, “The Natal Sugar Industry: An Interpretative Essay, 1849-1905”, *The Journal of African History* 23, 1982, 515-27 and Paul M. Dickinson, “The South African sugar industry, 1910 - 1940”, in *Receded Tides of Empire: Aspects of the Economic and Social History of Natal and Zululand since 1910*, eds. Bill Guest and John Sellers (Pietermaritzburg: Natal University Press, 1994), 157-75. On wattle production see Harald Witt, “‘Clothing the Once-Bare Hills of Natal’: The Origin and Development of Wattle growing in Natal, 1860-1960”, *South African Historical Journal* 53, 2005, 99-122. On game conservation see B. Ellis, “Game Conservation in Zululand 1824-1947”, *Natalia*, 23/24, 1993/94, 27-43 and S. Brooks, “‘Ropes of Sand’: Soldier-settlers and Nagana in Zululand”, in *White Farms Black Labor: The State and Agrarian Change in Southern Africa, 1910-50*, eds. Alan Jeeves and Jonathan Crush (Oxford: James Currey, 1997), 243-64. Information on the University of Stellenbosch and on the University of Pretoria was found at <http://www.ifr.sun.ac.za/images/pdf> and at http://www.geocities.com/bona_spes/TUCe.html. A cursory account of the University of Natal’s Faculty of Agriculture to 1965 can be found in E.H. Brookes, *A History of the University of Natal* (Pietermaritzburg: University of Natal Press, 1966), 94-101.

¹⁸⁶ Alan Paton Centre (APC), University of KwaZulu-Natal, Pietermaritzburg, Natal Society Minute Books, 1. See in particular, Minutes 20 May 1851, 12 July 1853 and 18 July 1854; APC, U.E.M. Judd, “A History of the Natal Society” (Typescript, 1972); Jewel Koopman, “The Natal Society 1851-1998” (M. Information Studies, University of Natal Pietermaritzburg, 1998); Shirley Brooks, “The Mausoleum Challenged: An exploration of the democratic museum idea and its application in colonial Natal, with particular reference to the Natal Museum, Pietermaritzburg 1851-1904” (BA Hons, University of Natal Pietermaritzburg, 1986); Bill Guest, *A Century of Science and Service: The Natal Museum in a changing South Africa 1904-2004* (Pietermaritzburg: Natal Museum, 2006), 2-19, 259.

Two other significant foundations for potential future collaboration were laid at the turn of the century. In 1898 Natal's colonial government established the Allerton Veterinary Laboratory in Pietermaritzburg in response to the outbreak of rinderpest. It subsequently became an adjunct of Onderstepoort and a national monument. In 1902 a government agricultural research station was founded at Cedara. This was part of a broader post Anglo-Boer War policy to develop the agricultural sector in southern Africa through the introduction of scientific farming methods. These were based on research emanating from university faculties of agriculture abroad which, it was hoped, would be implemented and adapted in ways appropriate to regional conditions by institutions like Cedara.¹⁸⁷ At least one local farmer, Joseph Baynes, was already applying progressive farming techniques to develop his property at Nelsrust, near Pietermaritzburg, into a model estate. "Baynesfield", as it became known, comprised approximately 24,000 acres with a variety of altitude, soil and pasture conditions. In common with many other nineteenth century colonial farmers Baynes experimented with several crops before specialising in ranching and dairying. Following his death, childless, in 1925, the "Baynesfield" Estate was administered by a Trust whose function in part was to promote agricultural research. In this way yet another potential cornerstone was laid for development in that field and for collaboration with a local faculty of agriculture.¹⁸⁸

The establishment of that facility still lay far in the future. Such a proposal did not feature at all in the protracted negotiations which preceded the establishment of the Natal University College in 1910, though the first eight chairs created did represent a careful balance between the humanities and the sciences. In 1909 an article in *The Natal Witness* responded to the proposal that "holiday courses" in Agriculture might be given as funds became available by arguing that "in a country like ours, agriculture should be made the subject of a *chair* of its own and not be relegated to mere holiday courses". As early as 1928 John William Bews, Professor of Geology and Botany from 1910 at the Natal University College and its first Principal (1930-1938), envisaged the creation of a Faculty of Agriculture

¹⁸⁷ Bill Guest, "The new economy", in *Natal and Zululand from earliest times to 1910: A new history*, eds. Andrew Duminy and Bill Guest (Pietermaritzburg: University of Natal Press and Shuter & Shooter, 1989), 317-18.

¹⁸⁸ Information on Allerton was found at <http://www.pmb-midlands.kzn.org.za/pmb-midlands/about/16html> See also R.O. Pearse, *Joseph Baynes, Pioneer* (Pietermaritzburg: Shuter & Shooter, 1981); Guest, "The new economy", 317-18.

on the campus in Pietermaritzburg and of a Medical School in Durban. In that year he persuaded a crucial meeting of wavering delegates from both centres that a dual-campus university for the two cities was indeed viable but his ambitions for the development of these two new faculties had to be held in abeyance while the University College struggled to establish Arts and Science and to balance the competing expectations of both urban centres in this regard. Born in 1884 in the Orkneys, Bews had the benefit of a broad education before graduating in 1907 with a B.Sc. from the University of Edinburgh, majoring in Botany. After lecturing briefly at Manchester and Edinburgh, he spent the rest of his academic career in Natal, except for a twenty-month interlude in Newcastle-on-Tyne which served to convince him that his future really did lay in southern Africa. On arrival in Pietermaritzburg Bews immediately found a local research interest (see 'The vegetation of Natal', published in the *Annals of Natal* Vol. 2, 1912) and was awarded a doctorate in Edinburgh for his work on the ecology of the Natal midlands. In the following year he published 'An ecological survey of the midlands of Natal, with particular reference to the Pietermaritzburg district' in the *Annals of Natal*. By the 1920s Bews had firmly established his international reputation as a scientist, his interest in Botany having been thoroughly subsumed into an all-embracing study of ecology. This was reflected both in his teaching and extensive publications on the fascinating environment in which he found himself. These confirm his broadening scientific interest and explain his enthusiasm for the establishment of a Faculty of Agriculture in the region. Among the more notable of his thirty papers and books were *The Grasses and Grasslands of South Africa* (1918), *An Introduction to the Flora of Natal and Zululand* (1921), *Plant Forms and their Evolution in South Africa* (1925), and his most acclaimed *The World's Grasses-their differentiation, distribution, economics and ecology* (1929). During the 1930s he went on to produce *Human Ecology* (1935) for which his friend General J.C. Smuts wrote a foreword, and *Life as a Whole* (1937), both of which clearly expressed the extension of his ecological interests to human society and to the philosophy of holism with which Smuts was associated.¹⁸⁹

¹⁸⁹ *The Natal Witness*, 14 June 1909, quoted in Brookes, *University of Natal*, 1-13, 31, 36-9, 40, 94; L.W. Kruger and C.J. Beyers, eds., *Dictionary of South African Biography, III* (Cape Town: Human Sciences Research Council, 1977), 63-4; G.W. Gale, *John William Bews: A Memoir* (Pietermaritzburg, University of Natal Press, 1954).

By the mid-1930s Bews had become convinced of the need for a local Faculty of Agriculture. Since the establishment of a College of Agriculture and Forestry there in 1905, Cedara had been providing invaluable practical training for farmers but there was a growing demand for more locally-focused research and better qualified research workers. This emerged at what proved to be a seminal meeting on 19 June 1934 between a delegation of University College staff members led by Bews and Cedara staff headed by their Principal Dr John Fisher. The event was almost certainly arranged by these kindred spirits, for Fisher, like Bews, was deeply interested in the local environment and had already established himself as an expert on grasses, especially *kikuyu*. Just three years younger, he had acquired diplomas in Agriculture and Dairying in his native Lancashire before graduating from the University of Edinburgh two years after Bews (1909) with a B.Sc. in Agriculture. He had immediately started teaching Biology at Cedara and, after a brief stint in 1916 as Vice-Principal at Elsenburg, had commenced a thirty year career as Cedara's head. In that capacity he dedicated himself to providing the sound training for which the College was renowned and to guiding its research into the improvement of pastures and livestock. In 1936 the University of South Africa, through its constituent Natal University College, awarded him an honorary doctorate for his service to local farming and, in particular, his research on cultivated pastures. He subsequently went on to publish *Farming-practical and scientific* (1949) and *Agricultural science for secondary and high schools* (1951).

Fisher's concern for improved teaching and research in Natal was already evident at the June 1934 meeting when he pointed to the absence of any post-diploma agricultural education in the high rainfall eastern region of the country which was comparable to that provided in other parts of the Union. He stressed that "mere practical training" was insufficient in an age when "more scientific knowledge" was essential to make smaller farms profitable. He advocated closer co-operation between the University College and Cedara in the training of agricultural teachers and argued that his institution should be allowed to provide higher level education than the current diploma in agriculture. At the meeting it was agreed that the "unilingualism" which characterised agricultural education in Stellenbosch and Pretoria needed an English-medium complement in Natal, that the agricultural training provided should be appropriate to a much wider range of employment opportunities than those offered in government service, and that some co-operative arrangement should be

formulated “in the public interest” between Cedara and the Natal University College in order to address “local problems” that could not effectively be resolved elsewhere under other climatic conditions.

The difficulties referred to were associated with various agricultural activities in three broad bioclimatic zones within the region. By the 1930s sugar was well-established as the dominant crop in the Natal-Zululand coastal lowlands, which rose to approximately 400 metres above sea level. During the latter half of the nineteenth century a combination of insufficient capital, expertise and local markets, coupled with insects and disease, had conspired to prevent arrowroot, indigo, tobacco, cotton, coffee and tea from becoming the major coastal staples that the region desperately needed. Since 1911 the area under sugar-cane cultivation had increased nearly fourfold and production more than sevenfold, with the result that it was contributing approximately ten per cent of the gross value of South Africa’s agricultural output and the country was rapidly becoming a net exporter rather than importer of the product. In the Natal midlands’ mist belt, stretching roughly from Ixopo to Greytown, rising between 900 and 1400 metres and enjoying annual rainfall of 800 to 1600 millimetres, wattle (*Australian acacias*) had become prominent. This crop had initially been introduced during the mid-nineteenth century to meet the local demand for building materials and firewood and to soften the bare inland landscape but the international demand for the tannin content of wattle bark, and subsequently wattle extract, had promoted a major export staple during the late nineteenth and early twentieth centuries. During the 1920s wattle products actually outstripped sugar as a foreign exchange earner and emerged as South Africa’s fourth largest export. Wattle export earnings continued to increase during the 1930s and 1940s and only began to lose momentum in the following decade. Mixed farming (cattle, sheep, maize, fodder crops and vegetables) declined significantly in the midlands as more land was brought under wattle cultivation but continued to predominate in the upper reaches of the province, which constituted its third broad bioclimatic zone at an altitude of 1400 to 1950 metres. The wattle and sugar industries established their own research institutes (in 1947 and 1949 respectively) but there were numerous other “local problems”, as Fisher termed them, to attract the attention of agricultural scientists and their students. These did not yet include the difficulties faced by Indian market gardeners and by subsistence farmers in the overcrowded and under-resourced black reserve areas. They were related more specifically to the efforts of

white commercial farmers to produce subtropical fruits along the coastline, as well as to their dairy-farming, cattle, sheep and poultry breeding activities, and to soil conservation, pasture management and crop production in the midlands and northern districts. The challenges faced were by no means all unique to the region, which had also contended with a variety of scourges that were widespread in southern Africa, not least the livestock diseases rinderpest, east coast fever, bouvine lungsickness and glanders.¹⁹⁰

Fisher subsequently elaborated on some of the points he had made at the June 1934 meeting in a detailed memorandum. He again emphasised the urgent need for a more advanced level of agricultural research and teaching in Natal-Zululand, arguing that, in the modern world, “anyone who lays claim to being considered a skilled farmer should be professionally as well-equipped as a professional engineer”. He prefaced his remarks by illustrating Cedara’s capacity to provide the advanced research and tuition needed with reference to the College’s recent experimental successes in grazing and milk production. Fisher argued that graduates in agriculture should no longer regard themselves simply as prospective employees in specialised government service posts. Proposals in Natal to introduce more agriculture into school curricula would create a demand for suitably qualified teachers while in business and industry there was also a growing need for “a wider acquaintance with scientific agriculture”. He expressed confidence that the initial expenses involved in establishing a Faculty of Agriculture in Natal would be “very small” as the “main item in costs – a suitably situated, well-stocked farm within easy reach of the Natal University College – is already provided for” (in the form of Cedara). He did envisage some subsequent expenditure as the final years of study were introduced, such as a bacteriological laboratory to support dairy science, a couple more lecturers, a librarian and further library facilities. Fisher suggested that the staff at the Allerton Laboratory might be allowed to teach

¹⁹⁰ University of KwaZulu-Natal Archives (UKZNA) Malherbe Papers (MP), STP 6/10/1 Notes of a Meeting at Natal University College, 19 June 1934; Information on the Cedara College of Agriculture and Forestry was found at <http://www.agriculture.kzntl.gov.za/portal/Colleges/Cedara/HistoryofCedaraCollege>; Kruger and Beyers, *Dictionary of South African Biography*, III, 296-7; Richardson, “Natal Sugar Industry,” 515-27; Dickinson, “South African Sugar Industry,” 157-75; Harald Witt, “Wattle Growing in Natal, 1860-1960,” 99-122; Charles Ballard and Guiseppe Lenta, “The complex nature of agriculture in colonial Natal: 1860-1909”, in *Enterprise and Exploitation in a Victorian Colon : Aspects of the Economic and Social History of Colonial Natal*, eds. Bill Guest and John Sellers (Pietermaritzburg: University of Natal Press, 1985), 121-49; Guest, “The new economy”, 317. See also D. Gilfoyle, “Veterinary Research and the African Rinderpest Epizootic: The Cape Colony, 1896-1898”, *Journal of Southern African Studies*, 29,1, 2003, 133-54; C. van Onselen, “Reactions to Rinderpest in Southern Africa 1896-1897”, *Journal of Southern African Studies*, 13, 3, 1972, 473-88; P.F. Craneveld, *Science and Empire: East Coast Fever in Rhodesia and the Transvaal* (Cambridge: Cambridge University Press, 1991).

whatever veterinary science courses were included in the curriculum, in the same way as Onderstepoort assisted the Faculty of Agriculture in Pretoria. A fully-fledged school of veterinary science in that mould was really much more than could be hoped for but not a Faculty of Agriculture.¹⁹¹

A Faculty Proposed – And Delayed

There was some uncertainty as to whether the proposal should be broached with the Union Ministry of Education or of Agriculture but, in January 1935, after Fisher's Memorandum had been forwarded to the latter, it was rejected. The point was made that, although agricultural conditions did indeed vary in different parts of the country, agricultural training at university level involved imparting "basic scientific principles" which were "fundamentally the same irrespective of the centre at which these are taught". The need for higher agricultural training therefore had to be considered on a national rather than a regional basis. The findings of the 1921 Committee on Agricultural Education to the effect that the training of degree-level agricultural students should be restricted to the University of Stellenbosch and the Transvaal University College were deemed still appropriate in view of the fact that those two facilities had not yet been utilised to their full capacity. It was also argued that Cedara's "important function" of training future farmers and providing extension services would be "seriously curtailed", necessitating the provision of another School of Agriculture in Natal, if it were to take on the additional task of teaching to degree level, appointing additional staff and incurring further expenditure. The Department of Agriculture did give the assurance that it was "not unmindful of the claims of the Natal University College to a Faculty of Agriculture" and that these would be given "due consideration" when "population and conditions" warranted it.¹⁹²

Conditions were already changing as local public interest in the issue increased. A sub-committee of the Pietermaritzburg City Council had met with Natal University College

¹⁹¹ UKZNA MP, STP 6/10/1 J Fisher Memorandum "Natal University College and the School of Agriculture, Cedara: Proposed new Faculty of Agriculture for Natal", 13 September 1934.

¹⁹² UKZNA MP, STP 6/10/1 Secretary for Agriculture and Forestry to Acting Registrar, Natal University College, 23 January 1935; Union Government Blue Book (U.G. No. 26-1922) Report of 1921 "Committee on Agricultural Education".

representatives in November 1934 to discuss the establishment of such a Faculty and in July 1935 the Natal Provincial Executive Committee, prompted by similar discussions, raised the matter with the national Department of Education. It repeated the arguments presented in Fisher's Memorandum, adding to it a plea for the provision of agriculturally-related courses in English and pointing to the urgency to train black as well as white students in this field. The Ministry was unmoved, ignoring the reference to black educational needs and contending that the issue of medium of instruction did not provide "sufficient justification for duplicating the facilities for higher agricultural training".¹⁹³ By August 1936 the Minister of Agriculture had decided that the idea was, after all, worth investigating more fully, appointing a three-man Departmental Committee comprising I.P.J. du Plessis, the Principal of Glen School of Agriculture (chairman), J.W. Bews of the Natal University College and Professor J.C. Ross, Dean of the Faculty of Agriculture, University of Pretoria. Fisher submitted another long Memorandum on behalf of Cedara, elaborating upon his earlier arguments in support of more sophisticated training for the region's prospective farmers and for those teachers who wanted to work in rural schools with an emphasis on agriculture.¹⁹⁴ The Committee duly reported in mid-October 1936. It concluded that the facilities at Cedara could indeed serve as the basis for a Faculty of Agriculture at the Natal University College but that additional staff, buildings and equipment would be necessary if existing functions were also to be maintained. These would amount, conservatively, to £34,500 in initial capital expenditure in addition to the current annual £20,000 to run Cedara as a College of Agriculture. These estimates were supported by pointing out that the already established "School-Faculty combination" at Elsenburg- Stellenbosch cost £54,000 a year to maintain.¹⁹⁵

These calculations were, nevertheless, more than sufficient to delay the development of Natal's Faculty of Agriculture even further. Public support for the proposal continued to gather momentum, with the Natal Agricultural Union and the East Griqualand Farmers' Congress both passing resolutions in support of it.¹⁹⁶ During the 1938 parliamentary session

¹⁹³ UKZNA MP, STP 6/10/1 J. McGibbon, Town Clerk Pietermaritzburg to Registrar, Natal University College, 7 March 1935, Natal Provincial Secretary to Union Secretary for Education, 26 July 1935, Natal Acting Superintendent of Education to Registrar, Natal University College, 29 October 1935.

¹⁹⁴ UKZNA MP, STP 6/10/1 Secretary for Agriculture and Forestry to Principal, Natal University College, 6 August 1936 and Fisher Memorandum "The Rural Teacher and Agricultural Education", September 1936.

¹⁹⁵ UKZNA MP, STP 6/10/1 J.C. Ross, J.W. Bews and I.P.J. du Plessis (Chairman), Report "Faculty of Agriculture: Natal University College", 14 October 1936.

¹⁹⁶ UKZNA MP, STP 6/10/1 J.J. Botha, Natal Agricultural Union to Principal, Natal University College, 19 March 1938 and Principal, Natal University College to Botha, Natal Agricultural Union, 22 March 1938, H.C.

F.N. Broome, M.P. for Pietermaritzburg District, organised a deputation of Eastern Transvaal, Eastern Cape and Natal parliamentarians to stress the need for a Faculty of Agriculture that would serve the eastern region of South Africa upon the Departments of Agriculture and Education. Broome's document to that effect, signed by all members of the deputation, was supported by memoranda from Fisher and R.B. Denison, the new Principal (1938-1944) of the Natal University College. It was too little avail, for the Minister of Agriculture, Colonel W.R. Collins, responded that "owing to financial stringency" the Finance Ministry was unable to include this item in the current estimates "but hoped for better luck next session".¹⁹⁷ While Government continued to prevaricate the Pietermaritzburg City Council again took the initiative by convening a meeting of various local public bodies to approve a resolution in support of establishing the envisaged Faculty "without any undue delay". As a demonstration of broad local enthusiasm it was decided that the resolution would be presented to the then Deputy Prime Minister, General J.C. Smuts, and to the Minister of Agriculture when they visited the Royal Show in Pietermaritzburg.¹⁹⁸ This strategy did not have the desired effect but, undeterred, the need for further agricultural education in Natal continued to be regularly highlighted in the local press. In an April 1943 editorial *The Natal Witness* argued that a "Chair" of Agriculture at the Natal University College:

would do much to remove agricultural education and research from the Department of Agriculture and political influences. ...Agricultural research and education should be taken out of the hands of the department, and given the freedom so necessary if the future of farming in this country is to be developed along modern scientific lines.

It insisted further that the curriculum in all the province's rural schools should have "an agricultural bias", which would only become feasible if the local University College was endowed with the requested "Chair" to assist in overcoming the current scarcity of suitably

Edward Smith, Secretary East Griqualand Farmers' Congress to Secretary, Natal University College, 25 April 1939.

¹⁹⁷ UKZNA MP, STP 6/10/1 W.A. Deane to J.H. Farrant, 20 April 1939, Fisher Memorandum "Faculty of Agriculture: Natal University College and Cedara", 21 March 1939 and R.B. Denison Memorandum "The Proposed Faculty of Agriculture at the Natal University College", n.d.

¹⁹⁸ UKZNA MP, STP 6/10/1 McGibbon, Town Clerk, Pietermaritzburg to Denison, Principal Natal University College 19 May, 7 June and 17 June 1939, enclosing "Resolution to be submitted to the Deputy Prime Minister (General the Hon. J.C. Smuts) and the Minister of Agriculture (Colonel W.R. Collins), 17 June 1939.

qualified teachers.¹⁹⁹ This point was reiterated by a deputation from the Natal Agricultural Union when it met with Denison in December 1943. He concurred that the Union and local private donors could not be expected to provide much financial support for the proposed Faculty and that Government would have to bear the expense, as it did at Onderstepoort-Pretoria and Elsenburg-Stellenbosch. He nevertheless insisted that it should be given a further indication of costs and anticipated student numbers, undertaking to consult Fisher, in his capacity as Principal at Cedara, in this connection.²⁰⁰ The latter put his now extensive experience in preparing memoranda on the subject to good effect and wasted no time in completing his report on 5 January 1944. In it he revived his and Denison's previous arguments, envisaging a Faculty of Agriculture that would draw upon the combined resources of the Natal University College in Pietermaritzburg, the Agricultural College at Cedara and the 24,000 acre "Baynesfield" Estate left in trust to advance the cause of agricultural research and education. His estimates of costs were substantially higher than those put forward by the 1936 Departmental Committee: £50,000 in initial capital expenditure and £11,000 for annual maintenance. In Parliament Pietermaritzburg MPs R.M. Fawcett and Colonel O.L. Shearer took up the cudgels, gaining a sympathetic ally in J.G.N. Strauss, the then Minister of Agriculture in the war-time Smuts Government. *Natal Witness* editorials supported Fawcett in urging the relevant public bodies to join forces again in demanding a Faculty of Agriculture at the Natal University College so that it could offer adequate training for returning soldiers and meet the peculiar needs of the region's farming community. The *Witness* repeated Denison's point that "the crux of the matter is finance" and that Government needed to be given some indication as to the extent of local support it could expect in that regard. It called upon the Pietermaritzburg City Council to vote a substantial increase to its small annual grant to the campus, pointing out that while it had provided the original Scottsville site for that institution the latter generated approximately £600 a year in rates as well as an incalculable amount of staff and student expenditure in the City. The *Witness* further declared that the town had hitherto "done disgracefully little" for the University College and that it now faced "a very real danger" of losing this valuable asset to the "strong forces" which were urging its complete removal to Durban as soon as it

¹⁹⁹ UKZNA MP, STP 6/10/1 Farrant to Denison, 25 April 1940; UKZNA MP BIO P3/2/1 *The Natal Witness*, 2 April 1943.

²⁰⁰ UKZNA MP, STP 6/10/1 Summary of Discussion between Natal Agricultural Union Deputation and Principal Natal University College, 8 December 1943.

acquired its status as a fully-fledged university independent of the University of South Africa. A Faculty of Agriculture, it contended, would strengthen the City's status as an educational centre and might help to maintain it as a university town.²⁰¹

The imminent attainment of full university status and the perceived threat that the institution might be concentrated entirely in Durban became major distractions from the campaign to realise the Faculty for Pietermaritzburg. Nevertheless, influential voices off-campus continued to give their support to the cause. In the Natal Provincial Council Captain B.H. Henwood proposed a motion in favour of establishing such a Faculty and Shearer organised a deputation of all United Party Members of Parliament, including the current Minister of the Interior, Senator C.F. Clarkson, to impress upon the Minister of Agriculture the urgency of providing that facility. Strauss reiterated his earlier sympathy for the proposal, indicating that he would request the Minister of Finance to include it on the supplementary estimates but conceding that it would be difficult to change his Department's earlier recommendation against its establishment.²⁰²

E.G. Malherbe Takes the Initiative

On 26 July 1945 Strauss conferred with the directors of the "Baynesfield" Estate and the following day met a large deputation of public representatives in the Pietermaritzburg City Council Chamber, led by Shearer, which was unanimous in its support for the establishment of the Faculty. Dr. E.G. Malherbe, newly-appointed Principal of the Natal University College (1945-1965), expressed his confidence in the triple foundation upon which it could be built - Cedara, "Baynesfield" and the University College. These, he contended, were "assets" probably far in excess of those available to South Africa's other agricultural faculties when they were established. He did caution that a new faculty would "cost quite a bit of money", necessitating the creation of more than one academic chair. He pointed out that the Faculty of Agriculture in Stellenbosch had no less than twelve professors and twenty lecturers while that in Pretoria had a complement of fifteen professors and seven lecturers,

²⁰¹ UKZNA MP, BIO P3/2/1 *The Natal Witness*, 4 April and 11 September 1944; Brookes, *University of Natal*, 94.

²⁰² UKZNA MP, BIO P3/2/1 *The Natal Witness*, 16 April and 17 and 25 May 1945, 4, 5 and 11 June 1945.

not counting the veterinary staff at Onderstepoort. However, Natal University College could provide the necessary basic sciences: chemistry, botany, physics and zoology, while after the first year of training Cedara could be utilised if its resources were further developed. Research at the two institutions would have to be integrated for the regional and national benefit and the research potential of “Baynesfield” further explored. J.S. Marwick, chairman of the Board of Trustees of the “Baynesfield” Estate, indicated its “willingness to co-operate in the enterprise” and pledged £3000 towards the launch of a public appeal for financial support. Minister Strauss confirmed that the proposal would indeed involve considerable expenditure and that a committee should be formed to establish what contributions the various interested parties would be willing to make and how much would be expected from Government so that he could inform the Cabinet.²⁰³

The committee, chaired by Malherbe, who now emerged as the chief protagonist of the cause, was duly drawn from the various representatives at the meeting. It was, in the *Natal Mercury’s* estimation, “a big step forward”. Malherbe’s war-time service as Director of Census and Statistics (1939-45), Director of Army Educational Services (1941-45) and Director of Military Intelligence (1942-45) gave him influential connections in the Smuts post-war Union Government, not least with the Prime Minister himself, whose close acquaintanceship through family friendship was already several years old. As a former Director of Educational and Social Research (1929-39) Malherbe was also well aware of current policy to provide training opportunities for ex-servicemen in the face of a serious post-war shortage of expertise in a variety of fields. These included agriculture, for which there were also ambitious developmental plans. Malherbe succeeded in attracting support from the province’s sugar and wattle industries and made numerous weekend trips to various rural centres to appeal for support for the Natal University College’s general expansion scheme. There was some local concern that while the cost of the new Faculty should be borne primarily by the Department of Agriculture, “it would most certainly lose its independence under such an arrangement”. Malherbe, meanwhile, pointed out that the £21,000 a year currently spent by Government on Cedara was by far the lowest outlay on the Union’s leading agricultural institutions, and that another £24,000 would be needed to run a

²⁰³ UKZNA MP, Press Cuttings 1942-48 SP 6/12/1-15 *The Natal Witness*, 4 June, 27 and 28 July 1945, *The Natal Mercury*, 27 and 28 July 1945.

fully-fledged Faculty of Agriculture as well as between £75,000 and £100,000 in capital expenditure on buildings and other facilities.²⁰⁴

Following a meeting with the Minister of Education J.H. Hofmeyr, and Shearer, Smuts agreed to set aside part of the Oribi Military Hospital on the outskirts of Pietermaritzburg as a university residence for between 200 and 300 ex-servicemen. Before the end of 1945 the conversion of the barracks into 200 single rooms as well as sixteen flats for married students had started and the necessary furniture was ordered. This was seen as an interim measure prior to the completion of a proposed £120,000 men's hostel to be built on land recently granted by the Pietermaritzburg City Council near the site of Epworth School. On 26 November 1945 Malherbe, now fully in charge of the whole scheme, announced that the projected Faculty of Agriculture would also be erected on this site and not at Cedara as previously envisaged. Experimental work would continue to be conducted at the latter and later possibly at "Baynesfield" as the soil at the Epworth site was poor. Cedara would continue to offer its diploma courses, with its work being enriched by the input of the professors employed at the envisaged new Faculty. Building plans for the latter were already being drawn, though the estimated initial capital expenditure had risen to £161,000 and annual maintenance expenditure to £38,000. This, Malherbe argued, compared favourably with Stellenbosch's £63,000 a year and Pretoria's approximately £103,000 a year if one included the latter's veterinary dimension. He cautioned that even if Government was to grant immediate approval for the new Faculty it would not be able to open its doors before the end of 1946. The shortage of readily-available qualified staff was another challenge, though preliminary enquiries had elicited some favourable responses from South African researchers currently working abroad.²⁰⁵

The Faculty of Agriculture Approved and Financed

In February 1946 Malherbe was at last able to announce that on the 11th inst. Government had approved the establishment of a Faculty of Agriculture at the Natal University College.

²⁰⁴ UKZNA MP, BIO P3/2/1 *The Natal Witness*, 3 August, 15 September and 5 November 1945, *The Natal Mercury*, 28 July and 17 September 1945; UKZNA MP, Press Cuttings 1942-48 SP 6/12/1-15 *The Farmer*, 21 September 1945; UKZNA MP, BIO P3/2/3 *The Natal Daily News*, 6 March 1954; Brookes, *University of Natal*, 58.

²⁰⁵ UKZNA MP, BIO P3/2/1 *The Natal Witness*, 3 August, 18 September, 5 and 27 November 1945, *The Natal Mercury*, 17 September 1945.

Further, that it was prepared to finance the construction of an agricultural science block at an estimated cost of between £100,000 and £150,000 as well as estimated annual running expenses of between £30,000 and £35,000. These allocations were conditional upon the University College sharing with Government the estimated £40,000 cost of providing new residential accommodation for agricultural students and the estimated £70,000 expenditure involved in extending the existing biological science block to meet their requirements. This meant, as Malherbe indicated, that the public would have to demonstrate that it really wanted such a facility, to which Grey University College in Bloemfontein (founded in 1904) also aspired (and, as the University of the Orange Free State, subsequently acquired in 1958). The Natal University College's £55,000 shortfall would have to be met by public donations. Student fees covered only one-third of current annual running costs and the salary bill would have to be increased by £20,000 to provide teaching staff for agricultural students.

The local press called upon the Natal Provincial Council, larger municipalities and private donors to respond and highlighted the enthusiasm which Malherbe had already aroused for this cause in the province's white farming communities. *The Mercury* suggested, hopefully, that Government's unwillingness to meet all the costs was "a blessing in disguise" because it would "ensure that the new Faculty will enjoy freedom of action and decision instead of being tied to the apron strings of the Department of Agriculture", as was the case with existing agricultural faculties. *The Witness* expressed regret that Government's conditional allocation of funds "prevents the immediate establishment of the Faculty" but considered it appropriate that the local public should contribute towards "providing facilities which promise to be so beneficial to the economic life of the Province". It suggested, more cautiously than the *Mercury*, that the relationship between the Department of Agriculture and the nation's faculties of agriculture should now be "modified". Instead of close ministerial control, as in the past, to the extent "that they might almost be regarded as Departmental stations" such institutions, it argued, should be free of "administrative" and "political" influences by being situated in an academic atmosphere in which "scientific research workers are guided by one consideration alone: the advancement of learning".²⁰⁶

²⁰⁶ UKZNA MP, BIO P 3/2/1 *The Natal Witness*, 20 and 22 February 1946, *The Natal Mercury*, 19 and 20 February 1946, *The Natal Daily News*, 19 February 1946; UKZNA MP, Press Cuttings 1942-48 SP 6/12/1-15 *The Farmer*, 22 February 1946; UKZNA File H5/1/1 University of Natal Development Foundation 1928-50, 18; Information on the University of the Orange Free State found at <http://www.kea.uovs.ac.za/faculties/content.php?id.HistoricalSketch>

On 26 February 1946 male students began moving into the converted facilities at Oribi Military Hospital even though some rooms were without doors and floor mats and were awaiting the teak furniture acquired from the War Disposal Board. Married quarters were still being completed but the facility was already fully staffed under the supervision of Dr. R.L. Rosenberg as warden and army trucks were available to provide transport to the Scottsville campus on a regular basis. On the same day (26 February) the White Paper on Agricultural Policy presented to the House of Assembly in Cape Town formally announced the establishment of South Africa's third Faculty of Agriculture. Shearer revealed that it was intended to appoint professors in the fields of dairying, animal husbandry, field husbandry, pasture research, entomology, horticulture, biochemistry, agricultural engineering, agricultural economics and genetics, with a senior professional officer in charge of biometry.²⁰⁷

The White Paper stressed the need for more agricultural research and commensurate expenditure in the post-war era, thereby illuminating the broader context in which the new agricultural faculty had been approved. In May 1946 Dr. Philip, Director of Research for the South African Wattle Growers' Union, announced that plans for the establishment of a wattle research institute adjacent to the new Faculty of Agriculture were already at an advanced stage. The Wattle Growers had agreed to contribute £12,500 of the estimated £25,000 in costs while Government had increased its initial offer of £7,500 to £10,000 and building would start within two months if the shortfall could be found as the plans had already been drawn. The former were also willing to contribute £14,500 a year in maintenance costs for the first three years and the latter a maximum of £5,000.²⁰⁸ Bridging the financial gap in order to launch the new Faculty in all its dimensions became one of Malherbe's major pre-occupations. In February, after some dissension, the Pietermaritzburg City Council granted the Natal University College £10,000, with the possibility of as much to follow in 1947, though the money was not specifically earmarked for the new Faculty. At a meeting in Estcourt Malherbe suggested that a hundred communities in the province should each raise £1,000 a year in memory of those who had fallen during World War II. Fund-raising for the Faculty soon became enveloped in the broader campaign to achieve full university status for

²⁰⁷ UKZNA MP, BIO P3/2/1 *The Natal Witness*, 27 February and 4 April 1946, *The Natal Daily News*, 27 February 1946.

²⁰⁸ UKZNA MP, BIO P3/2/1 *The Natal Witness*, 8 August 1946, *The Natal Mercury*, 16 and 17 May 1946.

the Natal University College and to strengthen this with significant indications of local support in the form of public donations. Some modest contributions were earmarked specifically for financing the new Faculty of Agriculture: £26-5 shillings from the Lion's River District Dairy Farmers' Association, £100 as the first of an intended annual grant from the Pietermaritzburg Milk Interests Association, and a promised fund-raising drive by the Richmond Farmers' Association.²⁰⁹

The Faculty Established and Staffed

On 9 March 1946 Malherbe informed the Department of Agriculture that the Natal University College undertook to accommodate all agricultural students and to cater for their initial instruction in basic science by extending its existing laboratory facilities. He also gave the assurance that courses would be taught in both Afrikaans and English, modifying earlier demands for a unilingual English-medium Faculty. The Department, in return, undertook to finance the new Faculty building in its entirety and to meet the annual running expenses. The plan of the building was formally accepted and in September 1946 the Natal University College Senate and Council approved the appointment of the Faculty's first Dean. Unfortunately, no salary had been provided for him in the 1946 Budget so he could only assume the post on 1 April 1947.²¹⁰

It remains uncertain to what extent Malherbe himself was responsible for identifying an appropriate individual, a fellow-Free Stater, for the crucial role of launching the new Faculty of Agriculture. In accepting the Deanship Dr. A.R. (Rabie) Saunders also simultaneously became Professor of Genetics and Director of the Natal Agricultural Research Institute, established in conjunction with the new Faculty. The latter post gave Saunders responsibility for all agricultural research in Natal, except for sugar. His earlier career reflected the necessary energy and versatility which these tasks demanded of him. Born and educated at Boshoff in the Orange Free State, Saunders completed an Arts degree, majoring in Classics and Philosophy at Grey University College in Bloemfontein before

²⁰⁹ UKZNA MP, BIO P3/2/1 *The Natal Witness*, 13 and 16 February, 26 March 1946, *The Natal Mercury*, 13 February 1946; UZNA MP, Press Cuttings 1942-48 SP 6/12/1-15 *The Farmer*, 15 March 1946.

²¹⁰ UKZNA MP, BIO P3/2/1 *The Natal Witness*, 8 August 1946 and 17 April 1947; Brookes, *University of Natal*, 95-6.

being sent by the Department of Agriculture to study Agronomy in the USA. He returned with qualifications in Agronomy, Genetics and Plant Pathology after completing Honours and M.Sc. degrees at Kansas State College and the University of Wisconsin. In 1925 the Department of Agriculture appointed him research agronomist at the Potchefstroom College of Agriculture and in 1933 the University of Pretoria awarded him a D.Sc. (Agriculture) for his research on *Striga lutea* Lour., the “witchweed”. He was invited back to the USA to advise on the control of that parasite before enlisting in the South African armed forces during World War II and being assigned to special duties as Deputy-Director of Food Production. In October 1945 he was appointed Assistant Director for Agricultural Education and Research and spent more time in the USA studying the organisation of agricultural research and training before assuming his triple appointment in Pietermaritzburg. By then he had already published prolifically and was recognised as South Africa’s “leading plant breeder” whose achievements included the production of a non-shattering soybean, an upright cowpea and so-called “Potchefstroom Pearl maize”.²¹¹

It was an inspired appointment but initially Saunders was a Dean without a Faculty and without an office on campus. The estimates for the new Faculty building were approved in May 1947 but tenders were not called for until December 1949, due to numerous delays. Saunders and his clerk, R.L. Colenbrander, were allocated rooms in town at the regional headquarters of the Division of Soil Conservation and Extension Services. Not surprisingly, under the circumstances, he placed his initial emphasis upon the Directorship of the new Natal Agricultural Research Institute, publicising the “wide programme of research” upon which it intended to embark into the problems peculiar to the eastern region of southern Africa. This post subsequently became the Directorship of the Natal Region in the Department of Agriculture. In 1947 the first batch of 54 agricultural students were accepted, though Saunders did not see them until they had completed their basic first-year courses in the Faculty of Science. In October 1947, in anticipation of their promotion to second-year level, the Natal University College accepted his proposal that the new Faculty of Agriculture

²¹¹ UKZNA BIO S18 6/1/1 Saunders, Dr. A.R.; *NUX* no. 9, 1946; Natal University College (NUC) Senex Minutes, 12 April 1948, 2; University of Natal (UN) Senate Minutes, 2 April 1949, 2; UKZNA G.B. Laurence, “The Department of Animal Science and Poultry Science- The First Five Years: 1948-1953 Reminiscences” (Typescript, 1974), 5; UKZNA H.I. Behrmann, “The Department of Agricultural Economics, University of Natal, 1948 to 1975- Origins of the Department, 1947 and 1948” (Typescript, 1976), 2; Brookes, *University of Natal*, 95.

should comprise twelve departments and Government approved the creation of 25 posts to enlarge Saunders' initial staff of one administrative clerk. Applications closed on 25 October and the first appointees were announced in February 1948.²¹²

At that stage, although under the academic control of the Natal University College, the Faculty of Agriculture was actually still part of the Natal Agricultural Research Institute and therefore under Saunders' authority in his capacity as Director of the Natal Region. So too was Cedara College, the region's various experimental stations and its conservation and extension services. As such it was financed by the Union Department of Agriculture, subsequently known as the Department of Agricultural Technical Services.²¹³ In terms of the 1948 Agreement (amended in 1963) between the Minister of Agriculture and the Natal University College, staff members were appointed by consultation between the two. As was the case with South Africa's other two agricultural faculties, all staff appointments had to be approved by the Public Service Commission and any confidential documents received from that quarter relating to appointments could be considered only by a special committee of the Faculty Board. Staff members were both officers of the Department of Agricultural Technical Services and of the University College, and were therefore in various respects subject to the regulations of both. Unlike the University College's other faculties, in Agriculture all staff members had to be bilingual (Afrikaans and English). After the preliminary year of study instruction was given in both official languages "on a basis of equality", the language used in any particular course being at the discretion of the instructor concerned, subject to Faculty approval. Whenever possible, lectures in a particular course were given in one language and practical instruction in the other. Unilingual students were encouraged to register for the University's special language courses, as appropriate, in their first year of preliminary science studies but were free to use English or Afrikaans when writing their examinations.²¹⁴

²¹² UKZNA NUC Senex Minutes, 9 December 1947, 1, 12 April 1948, 3 and 3 December 1948, 2-3; UKZNA UN Senex Minutes, 25 March 1949, 4-5; UKZNA NUC Senate Minutes, 22 November 1948, 1; UKZNA UN Senate Minutes, 21 April 1950, 3; UKZNA MP, BIO 3/2/1 *The Natal Witness*, 17 April, 24 June and 11 September 1947; *The Natal Mercury*, 13 October 1947; Brookes, *University of Natal*, 95-6.

²¹³ UKZNA UN Senex Minutes, 28 April 1949, 7-8; UKZNA UN Faculty of Agriculture Board Minutes (FABM), 21 July 1953, Attachment, 1; Behrmann, "Agricultural Economics", 1.

²¹⁴ UKZNA UN Senex Minutes, 27 October 1950, 9-10; UKZNA UN FABM, 21 July 1953, Attachment, 6; Brookes, *University of Natal*, 97.

By the end of 1948 the Faculty had appointed eleven members to its academic staff, excluding Saunders himself, and had attracted 86 students. Its initial staff complement, some of them quite unknown in South Africa's still small academic world, subsequently proved to be an impressive teaching and research team which attracted students from all over South Africa and its neighbouring states. By 1948 the Faculty was, in practice, already functioning but technically, as far as the Natal University College was concerned, Saunders and his colleagues were still members of the Faculty of Science. The University of South Africa, of which the Natal University College was a constituent part, did not have a Faculty of Agriculture under whose academic umbrella they might otherwise have fallen. The Faculty of Agriculture therefore only came into official existence on 15 March 1949, when the University of Natal was recognised as an institution in its own right, independent of the University of South Africa.²¹⁵ But, contrary to earlier expectations, full administrative independence from the Union Department of Agricultural Technical Services only came about in January 1976.²¹⁶

Conclusion

From the mid-1930s a number of prominent individuals, supported by the institutions and associations which they represented, participated in the initial efforts to establish a Faculty of Agriculture in or near Pietermaritzburg. Among these was John Fisher, Principal at Cedara, J.W. Bews and R.B. Denison, successive Principals of the Natal University College, parliamentarians F.N. Broome, R.M. Fawcett and O.L. Shearer, several sympathetic members of the Natal Provincial Council and of the Pietermaritzburg City Council, as well as leaders of the Natal Agricultural Union and other white farmers' organisations. It was the arrival in 1945 of a new, politically well-connected Natal University College Principal, E.G. Malherbe, which brought their efforts to fruition. He was able to take advantage of the changing post-war economic climate with regard to educational and agricultural development to launch the longed-for Faculty on reasonably favourable financial if not administrative

²¹⁵ UKZNA- File H1/3/1-17 Guy Dubbeld, "A Chronology of the University of Natal" (Typescript n.d.); UKZNA *Natal University College Magazine 1949 Commemoration Number*, 102; UKZNA File H1/3/1 S.A. Hulme (Dean), "The Faculty of Agriculture", 14 February 1967, 3-6.

²¹⁶ UKZNA UN FABM, 4 February 1976, 690 and 7 April 1976, 3.

terms. But, contrary to local expectations, full independence for the Faculty from the Union Department of Agricultural Technical Services only came about nearly three decades after its establishment.