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## BAGANDA MERCHANT VENTURERS

By A. T. MATSON

When explorers and missionaries first arrived in Buganda they noted the natural ability and receptiveness of the people to European ideas, and contrasted these attributes with the listlessness, conservatism and suspicion which they had encountered among tribes on the Nile and Tanganyika routes. After the opening of the Masai route, these observations were confirmed by Company officers and government officials. By the end of the 19th century, the readiness of the Baganda to adopt European ways in religion, education, crafts and material culture prompted Sir Harry Johnston and Sir Charles Eliot to compare the imitiveness of the Baganda to that shown by the Japanese.<sup>1</sup>

The imitative faculty, which was further developed among the Baganda leaders by their association with Protestant and Catholic missionaries, was exhibited in one field of human endeavour which has passed almost unnoticed: their attempt to participate in the caravan trade with the coast. This enterprising venture has probably been forgotten because it was maintained for only about a year, and eventually ended in failure. It took place during the interregnum between Commissioner Berkeley's departure from Buganda in February 1899 and Johnston's arrival at the capital in December of the same year. During this period the government was in the hands of Colonel Ternan, who was fully occupied in his professional military capacity with the concluding stages of the operations against the mutineers and rebel kings, and with administrative plans for the reorganisation of the armed forces, and the production of foodstuffs to ration the sepoys in Buganda and the Baganda troops in the Eastern Province. Moreover, the unaccustomed burdens of administrative office caused the Acting Commissioner to become irascible when he was asked to give his attention to what he considered to be unimportant matters, especially when applications for advice and assistance were couched in the scriptural language affected by the mission-trained Baganda leaders. It is not surprising, therefore, that his despatches contain no references to the efforts of the Baganda to open up direct trading relations with the coast. Johnston would probably have viewed the matter in a different light, but after the Special Commissioner arrived in Buganda he and the Baganda leaders were absorbed in negotiations for the Agreement and had little time for other considerations.

Berkeley, who was a former consular official with considerable experience in the commercial field, had encouraged private enterprise to open up the Masai route in 1896. These efforts had failed but had brought home to Berkeley the dangers and difficulties of the caravan trade. In view of these past setbacks, it is unlikely that Berkeley would have urged the Baganda leaders to enter the hazardous caravan business, especially as he was concerned throughout his period of office to discourage activities which might lead to demands on the Protectorate's inadequate military resources. He was particularly keen to avoid embroilments with tribes on the lines of communication, such as were likely

to arise in Masailand and Nandi if poorly equipped caravans tried to loot food from people near the Uganda Road, in the manner practised by Baganda caravans in the western parts of the country. Nevertheless, although the overworked Commissioner was a very sick man long before he left Entebbe in February 1899, Berkeley did show some interest in the Baganda venture during the final stages of preparation, and gave the pioneer caravan a letter of introduction to officers at the roadside stations.

The Baganda leaders apparently initiated the scheme on their own accord, but it is not certain what encouragement they were given by George Wilson, the Sub-Commissioner at Kampala, or by Dr. Mackinnon, the Director of Uganda Transport. The latter reported to Berkeley in September 1898 that the government's transport service had failed owing to cattle disease, the reluctance of porters to engage for the through trip to Buganda and the bad state of Sclater's Road. Supplies were running short in Kampala and none could be brought up on the German route, which had been closed for three months because of drought and famine. When Hobley reported that transport arrangements in the Eastern Province were in danger of breaking down unless trade goods were sent urgently to Mumias, an Entebbe official minuted: "We must do our best at once, whatever that may amount to; Uganda Transport cannot help; must come from here".<sup>2</sup> Mackinnon was at his wit's end, and possibly suggested that the Baganda should be encouraged to enter the caravan business as soon as the restoration of settled conditions enabled traders to move about without fear of molestation. It is more likely, however, that the Baganda leaders themselves decided to compete in what they mistakenly believed to be a lucrative business, and that government help was not forthcoming until they had made clear their intentions to persevere with the enterprise. The missionaries, too, could hardly have suggested a project which would cause large numbers of their adherents to be absent from their homes and families for several months, and which would not only bring the porters in contact with the predominantly heathen or Muslim occupants of the road stations, but also expose them to the 'pernicious influence' of the Swahilis at the coast.<sup>3</sup>

The eagerness of the promoters to participate in the Mombasa caravan trade was not altogether surprising, as the Baganda had been engaged in long distance trading operations since the late eighteenth century. These activities had taken trading parties to the southern shores of Lake Victoria and Baganda canoemen to the Kavirondo Gulf. The Mombasa caravans were a natural extension of customary trading practices, when the tapping of new markets was made possible after the Pax Britannica had ensured the safety of the Masai route. It was equally natural that the royal monopoly, which the Kabaka had traditionally exercised over the caravan trade, should be operated by the Regents and leading chiefs during the minority of Daudi Chua.<sup>4</sup> The venture was a considerable act of faith and courage: none of the other tribes on the Uganda Road, except the Kamba and Taita, had previously sent caravans to trade in Mombasa; and neither of these tribes from the East Africa Protectorate had ever organised caravans on the scale of the Baganda expeditions.<sup>5</sup>

It is difficult to establish from contemporary sources how the Baganda caravans were formed and financed, what articles were traded and what incidents occurred during the long journey to the coast and back to Kampala. This is partly owing to the surprisingly limited impact which the caravans made on officials and missionaries, and partly to the confused nature of some of the information that was recorded. There are discrepancies and omissions in diaries, letters and reports concerning the names of the leaders, the number

of porters and loads, and the direction in which the caravans were going. Much confusion is also caused by the customary practice of recording a party under the owner's name, whether he was personally leading the caravan or not. There are many gaps in official records, but probably some of these could be filled with the help of Station Cash Books, the Kagwa Papers, the Entebbe Secretariat Archives, the archives of the former Buganda Residency, and the recollections of men whose fathers made the journey to Mombasa.<sup>6</sup>

The project was first mooted in June 1898, when Mika Sematimba was ordered by the Katikiro to go to Zanzibar to sell ivory for the infant Kabaka, and "to buy such things as he is supposed to want for his household". The party was to follow the route taken by earlier Baganda visitors to the coast, and Archdeacon Walker proposed writing letters to ensure Mika a friendly reception at the road stations in German East Africa. The Archdeacon also planned to give his friend, the Makamba, a tent and other comforts for the journey.<sup>7</sup> But June 1898 was an unpropitious time for the projected journey, owing to the closure of the German route and the demands made on the Baganda in connection with the chase after Mwanga, Kabarega and the remnant of mutineers. The road through the British sphere was also virtually closed to all but military traffic and supply caravans for the Uganda Relief Force. The transport system was breaking under the strain, caravans were blocked at roadside stations and food resources were unable to meet the extraordinary demands made upon them. To make matters worse, Berkeley was anxious to send the 27 B.L.I. sepoy's back to the coast and had ordered the huge quantity of food needed for their return to be stock-piled along the route. Moreover, the Kakamega and Nandi were attacking parties on Sclater's Road, Jackson had recommended a punitive expedition against the latter tribe, and Masailand was in ferment owing to a resumption of hostilities between Lenana and Sendeyu. Berkeley proposed in July to visit Busoga, Kavirondo and Nandi in order to investigate the disquiet in these districts and the collapse of the transport system, but he was unable to leave Entebbe until mid-September. The situation deteriorated still further in October 1898, when the unpunished Nandi again attacked parties on Sclater's Road, and the rebels cut up Hannyngton's patrol in Bunyoro and threatened Buganda.<sup>8</sup>

In view of all these factors, the Katikiro had no choice but to postpone the Kabaka's expedition to Zanzibar. The scheme was revived in December 1898, when the security situation had improved, disquiet along Sclater's Road had been allayed, and the departure of the Indian Regiment deferred until March 1899. In the interval between June and December the project had become changed in character and widened in scope. It had grown from a small private party travelling through German East Africa to Zanzibar on the Kabaka's behalf to a considerable commercial expedition, through the British sphere to Mombasa, financed by the Regents and chiefs. Mika was retained as leader, but the accountancy arrangements were presumably taken out of the hands of Yusufu Mukasa, the Kabaka's storekeeper, and committed to a nominee of the Uganda Trader's Association.<sup>9</sup> The choice of leader was a good one as Mika, "the most English of the Baganda", had been Mutesa's storekeeper and had acted as Mubaka to bring in explorers and missionaries to Mwanga's capital, and to command trading expeditions to the Arabs on the southern shores of the lake. He was one of a party of thirty Baganda whom Mutesa had sent in 1882 to Zanzibar with a gift of ivory for the Sultan; and ten years later he had accompanied Archdeacon Walker to England. Neither of these journeys took him through the British sphere, but his experience of

long distance travelling made him an obvious choice for leadership of the first Baganda caravan on the Masai route.<sup>10</sup>

Mika's party was evidently intended merely to explore the possibilities of the Mombasa market and to purchase goods, but not to carry them back to Kampala. Only 37 men accompanied the Makamba when he reported at Ravine on 26 December 1898, and handed Martin, Berkeley's letter to all road stations asking them to help Mika Sematimba, "a chief of some importance who is going on a venture that may have a very considerable influence on the commercial development of the country". In addition to this characteristically optimistic introduction from the Commissioner, Mika also carried a number of Uganda Government promissory notes negotiable at Mombasa for a total sum of Rs. 20,000. It had originally been intended that Mika should take rupees to the coast, as well as the Kabaka's ivory, but this was evidently considered too dangerous a proceeding. Walker was anxious lest the Indian merchants would treat Mika "like a sheep with lots of good wool on its back", so he wrote to his friends in Mombasa asking them to help the Baganda leader with his purchases.<sup>11</sup>

So far as is known no difficulties were experienced on the journey to the coast, nor in purchasing trade goods at Mombasa. When the transactions were completed, Mika sent up men in March 1899 asking the Association to organise a caravan to fetch the goods. A large number of porters were quickly assembled with Alexander Mukasa as leader, and George Wilson sent a circular letter to all road stations on 30 March 1899 asking them to assist the Baganda chiefs' caravan which was leaving that day for "direct trade with the coast". No further details are given in official records but Wilson wrote in a private letter: "A little incident may be touched upon as reassuring—the chiefs have 600 porters engaged on their own account in direct trade with the coast, involving a risk of Rs. 45,000, or £3,000". This would have been a very large caravan, which would almost certainly have attracted comment merely on account of its size. The men mentioned by Wilson probably included those engaged in collecting food for the porters before Mukasa's caravan left Kampala, and possibly the members of other caravans as well. It is very doubtful whether as many as 600 porters made the journey to the coast under one leader. Two caravans passed through Ravine in April and May, either or both of which may have been Mukasa's. The first was a 'Waganda caravan' which arrived from Uganda on 27 April 1899; the second 'a private Uganda caravan', with 11 tusks of ivory (on which dues and duty had been paid at Kampala), which reported at Ravine a week later.<sup>12</sup>

Much more information was recorded about the next Baganda caravan to pass through Ravine. This came from the coast and was probably Mika's pioneer party, with possibly some porters who had been engaged at road stations and railhead or transferred from Mukasa's caravan. The Ravine Station Diary records that on 29 May 1899 "the Katikiro's caravan sent for food—starving"; and that three days later a messenger came in from the Molo River to ask for more food. There is no record that food was sent on either occasion but mailmen, who left for Naivasha soon after the messages were received, presumably took supplies to the stricken porters. Entries for 4 June 1899 record that "a Uganda caravan under the leadership of Kata Kitisamla and Mika Simbakata [*sic*] arrived exhausted and demanded food". Mohamed Bakar was prepared to supply the caravan with flour at one rupee a pound, but Martin "with his usual forethought and aptitude" refused, saying half a rupee was enough. Martin's ruling was accepted by the trader, a receipt for Rs. 764½ was signed

for 1,529 lb. of food, and "a letter explaining the case was sent by one PLATT to the MIGHTY WILSON". The following January a cheque was received at Ravine from Kampala for Rs. 766, which was paid to Mohamed Bakar "for food supplied to Mika Sematimba and William Grant".<sup>13</sup>

Mika 'Simbakata' was possibly merely a careless error on Platt's part, but although the food supplied by Bakar was subsequently charged to Mika Sematimba, it is by no means certain that the latter was at Ravine in June 1899. The starving caravan was probably the advance contingent of the main party from the coast, which Capt. Gorges claimed was led into Naivasha by Mika on 23 July 1899. The advance contingent was also possibly the caravan under Headman Andrew, which Major Martyr supplied with 20 loads (say 1,200 lb.) of Adamji Alibhai's *mtama* flour at the Kavirondo Bridge (presumably the River Isioka) about the 12th June, or seven days after the Katikiro's caravan left Ravine.<sup>14</sup> Andrew's party might also have been the caravan whose arrival with fifteen men and eight loads was reported by F. W. Isaac, the Transport Officer at Kampala, on 1 August 1899. This caravan was said to have taken thirty men from Kampala for the journey to Kikuyu, where the porters were rested while the headman went to Mombasa with two companions to buy cloth and other trade goods. Sixteen of the porters died of dysentery at Kikuyu, so replacements to carry the trade goods to Kampala were recruited from Baganda at Fort Smith. During the homeward journey one man was left on the road between Naivasha and Ravine without food, and three porters who contracted dysentery after leaving Kikuyu disappeared on the Mau crossing.<sup>15</sup> The amount of food supplied to 'Simbakata' at Ravine, and possibly by Martyr in Kavirondo, was however evidently intended for a caravan larger than that reported by Isaac, so the two may have been separate ventures.

Official records throw some doubt on whether Mika was in charge of the starving caravan at Ravine in June. From the missionary evidence available, it also seems likely that Mika pushed on ahead of the porters, or possibly he may have returned to Kampala by the German route. The Rev. G. K. Baskerville noted in his Journal on 12 March 1899 that "Mika Sematimba was sent to the coast to purchase goods for the King, and is on his way back"; and Walker mentioned in a letter dated 20 June 1899 that Mika had recently returned from Mombasa. Unfortunately neither source indicates the route taken, nor describes the goods Mika had with him and the casualties suffered by his comrades.<sup>16</sup>

In the period between Mukasa's departure for the coast in March 1899 and the return of the first party to reach Kampala in the following June or July, caravan traffic on the Uganda Road received a severe and tragic setback. This was caused by the heavy mortality among the Basoga and Baganda porters who had taken the Indian Regiment down to railhead under William Grant, and among their comrades in the large caravans organised by Wallace, Gemmill and other private contractors.<sup>17</sup> As a result of the losses suffered by these caravans and the spread of dysentery along the Uganda Road, George Wilson urged that Dr. Mackinnon should be instructed to stop the loads of trade goods bought for the Baganda chiefs' commercial enterprises at Mombasa, since further porter casualties would jeopardise the continuance of the transport system. If the loads could not be held at the coast or stored at railhead, he suggested they should be detained at Naivasha until a caravan could be sent to collect them after the epidemic had subsided. He estimated that about 400 loads would be affected by this action in caravans supervised by Chasama, Butalagi and Mika Sematimba.<sup>18</sup> When Ternan received these representations,

the embargo on the employment of Basoga porters in government, contract and trading caravans proceeding east of Mumias was extended to the Baganda.<sup>19</sup> Mackinnon was instructed to hold the trade goods at Mombasa or railhead, and the road stations were asked to help the Baganda chiefs' caravans, whose porters were reported to have suffered heavy casualties, and to store their loads. Archdeacon Walker questioned the legality of the embargo, and also queried the government's right under the recently published Porters' Regulations to insist on the registration of porters in caravans organised by Baganda Chiefs. Objections to the embargo were rebutted, but after considerable delay a concession was granted allowing four domestic servants to travel with a Baganda chief without payment of the registration fee. As a result of Walker's representations and persistence, Mika and Ham Mukasa were refunded 18 and 12 rupees respectively for servants who had journeyed to the coast.<sup>20</sup>

In the meantime one of the earlier caravans had arrived back at Naivasha from the coast on 23 July 1899. Gorges took charge of 40 loads of trade goods from the caravan's leaders, Mika Sematima [*sic*], because a large number of the porters were incapacitated by sickness. No arrangements had been made to provision the caravan even as far as Ravine, where supplies were not often obtainable, so Gorges bought 1,220 lb. of food from Somali traders to meet the porters' needs. When this was reported to Entebbe, an official queried whether the caravan really belonged to Apolo Katikiro as the latter had paid for his men's food at Kampala.<sup>21</sup> The caravan proceeded on its homeward journey, but its arrival at Ravine is not recorded by name in the Station Diary. There is, however, an entry for 2 August 1899 that two caravans arrived at Ravine, but these are not identified by name and no indication is given as to the direction in which they were travelling. What is certain is that Mika was not on the Uganda Road at the time, so it must be assumed that Gorges entered his name in the Naivasha log-book from the caravan's papers.

When the caravan (or news of its plight) reached Kampala, Dowse and Vincent offered to bring on the goods left at Naivasha for Rs. 42 a load. The Baganda chiefs agreed to this quotation in August 1899, but told Wilson they had no specie to pay the transport contractors, and asked if they could sell produce and trade goods to the government in order to raise the money. Ternan agreed but refused to accept any responsibility for the negotiations with Dowse and Vincent.<sup>22</sup> The following month Grant, who had taken over from Wilson at Kampala, was approached by the Katikiro's Lingwanya [*sic*] for a government advance of Rs. 5,460 to pay Indian contractors to transport 210 loads from Kikuyu to Mumias. The Katikiro's agent promised the advance would be repaid when the consignment was sold in Kampala, if the government was not prepared to accept trade goods to the value of the money advanced. Grant added that the traders had no coast bills to enable them to estimate the value of their wares, and Ternan refused to sanction the advance.<sup>23</sup> The Katikiro was also asking at this time for help in bringing up dhow builders and shipwrights' tools from the coast at a cost of Rs. 7,740. Jackson thought the Regents could not afford to embark on such costly undertakings, and although Wilson pointed out that the dhow would be the property of the Buganda Government, Ternan rejected the application in a petulant minute in which he declared that he could not be bothered with Biblical effusions from the Katikiros.<sup>24</sup> The Acting Commissioner, who was preparing for the arrival of Sir Harry Johnston, was evidently not prepared to encourage, nor to get financially involved in, the Baganda leaders' commercial enterprises.

Meanwhile the embargo on Baganda caravans beyond Mumias still

stood. But before it had been imposed, Apolo Kagwa had been preparing another caravan for the coast. The Katikiro asked Isaac for compensation for 60 loads of food which had been purchased in Buddu for this venture, but Boyle, the Assistant Accountant, rejected any claim for losses sustained as a result of the embargo<sup>25</sup>. The embargo also apparently discouraged Kakungulu from using a thousand rupees from the reward which he had earned in connection with Kabarega's capture, for the purposes of a trading expedition to Mombasa. Kakungulu was becoming deeply involved in Busoga and Bukedi at the time and seemingly found other uses for his money. But Andrea Luwandaga, who had been similarly rewarded for his part in Mwanga's capture, possibly took a caravan to the coast on his own account or in partnership with Kakungulu.<sup>26</sup>

Wilson, who was acting for Ternan while the Commandant was away on a military inspection tour, asked the District Officer at Kampala in August 1899 to help the Baganda to organize a commercial expedition to the coast. It is not certain, however, whether this instruction, which contravened the embargo, was allowed to stand when Ternan returned to re-assume command.<sup>27</sup> No such expedition is mentioned as having passed through Ravine, but it may have been one of the many unspecified caravans which are recorded in the Station Diary for August and September 1899. Wilson's intervention in the dhow building controversy, together with the fact that his August instruction was issued regardless of the embargo and Ternan's patent antipathy towards the Regents' aspirations, suggest that the OC Kampala may have been partly responsible for initiating the pilot project in December 1898 and Mukasa's caravan in March 1899.

In August 1899 a caravan which was said to belong to Ham Mukasa arrived at Naivasha from the coast under Headman Andrea; and about a fortnight later an unspecified Baganda caravan passed through Ravine on the way to Kampala.<sup>28</sup> This was presumably either part of the caravan which Alexander Mukasa had taken down at the end of March 1899, or the venture sponsored by Andrea Luwandaga. It fared no better than its predecessors despite the help it received from district officers at Naivasha and Ravine. Gorges reported that when the caravan arrived at the former station it was in a helpless condition, without enough fit men to carry the loads and with insufficient food for the return journey. A number of men were left at the station to recuperate, and several loads were taken into store as many of the Baganda who continued with the caravan were not strong enough to act as porters. Gorges had some difficulty in getting even the able-bodied men to proceed to Kampala, owing to their feeling of helplessness and the headman's lack of control. "In view of past experience and mortality", Gorges asked that Baganda porters and caravans should be prohibited from making the long journey to the coast.<sup>29</sup>

Once again the question arose of bringing up the loads left by earlier caravans and those detained at Naivasha in August 1899. In October the Katikiro suggested the trade goods should be handed over to the government at Mumias to pay for the transport charges, but Boyle contended it was the Regents' responsibility to pay the transporters in kind. The Accountant's ruling was supported by Ternan, who also declined to buy the goods on the grounds that the Mumias store was well-stocked. The Acting Commissioner offered an alternative suggestion that the contractors should be paid with some of the uncashed government cheques held by the Baganda, if none of the wholesale merchants would take the goods off their hands.<sup>30</sup> The fate of the goods is un-

known, but they were possibly taken on to Kampala by caravans belonging to Mika Sematimba and the Katikiro which passed through Ravine on the 13th and 25th of October respectively.<sup>31</sup> It is unlikely that either of these caravans had sufficient spare carrying power to cope with extra loads, and the detained trade goods were probably brought up by special caravans in the New Year. Archibald Brown, the Kisumu Transport Officer, notified Entebbe in February 1900 that Baganda canoes had arrived to collect "the chiefs' loads", and that the canoe men intended to wait at the port until the goods arrived<sup>32</sup>.

Archdeacon Walker's version of the removal of the detained loads differs from the account given in official records. He claimed that about 900 of the porters, who were sent to Kikuyu to fetch the trade goods, died of dysentery and starvation, so that 600 loads had to be left behind.<sup>33</sup> Walker stated that the normal government charge for porters left at road stations was one rupee a day and for loads was half a rupee a month. He thought these charges could hardly be levied on the Baganda caravans because Mika had gone to the coast "very much at his [the Commissioner's] suggestion". When the chiefs were told that other Baganda would not be allowed to go down and fetch the loads, they asked the government for advice and were persuaded to make a contract with some English traders. While these negotiations dragged out in Buganda, the custodians of the loads at Kikuyu acted on their own initiative and signed a contract with some Indian traders to deliver the loads to Kampala. The latter arrangement, which was made a month before the contract signed by the Baganda chiefs, was concluded without the knowledge of the Kampala signatories. When the English traders were "still close to Uganda" on the way down to fulfil their contract, they seized the loads from the Indians' caravan which they met on the road.<sup>34</sup>

The chiefs were faced with the problem of finding the money to pay both contractors, but the Katikiro insisted that the Indians should be paid the amount promised under their contract in full. The Baganda were urged by their spiritual adviser to follow normal commercial practice in such cases, by paying what they could to the Indians and giving them an IOU for the balance, with a promise to pay in six months' time after the goods had been sold at a profit. The chiefs preferred to follow St. Paul's injunction to "owe no man anything". They insisted on paying the total amount at once, and raised the Rs. 9,000 they needed to complete the payment by accepting the government's offer to buy the loads of *amerikani*. This course was taken, although it meant selling the goods at a lower rate than *amerikani* had ever previously fetched on the Kampala market. The transaction involved the vendors in a loss of ten rupees on every bale, with the result that Ham Mukasa and the Katikiro alone lost 120 and 300 rupees respectively. Walker censured the government, which he considered was "responsible to a large extent for the whole mess", but was gratified at the sense of honour displayed by the Baganda leaders. The Archdeacon seemingly approached Collinson to ascertain whether the second contract was binding in view of the first, but received little comfort from the Consular Judge. The latter also pointed out that as the second contract omitted to state the exact location of the goods, no action would lie for a reduction of the transport charges, even though both parties thought the loads would be carried from railhead at Kikuyu. Walker contrasted the Baganda chiefs' attitude over honouring the two contracts with that of the English traders, who ought not to have "pressed their legal right to do a morally unjust act".<sup>35</sup>

Meanwhile Mika Sematimba, who had gone down by the German route in September or October 1899, was in Mombasa, where the widower courted and married an English-speaking, Frere Town mission girl, Elizabeth. Mika presented himself on 13 February 1900 to the C.M.S. party under the Rev. A. B. Lloyd, with whom the married couple travelled back to Buganda. The caravan left Mombasa on 23 February 1900 and arrived at Kampala on the last day of March, three weeks after the Buganda Agreement had been signed, but before the negotiations for the distribution of land had been completed.<sup>36</sup> Mika may have been concerned during the journey with clearing the loads left at the roadside stations by the Baganda trading caravans but, if he did so, this interesting piece of intelligence was not considered worthy of mention by any of the missionaries with whom he travelled.<sup>37</sup>

The Katikiro's caravan which passed through Ravine in October 1899 was apparently the last Baganda trading party to make the through trip from Mombasa to Kampala. By then the Regents and chiefs had learned some of the difficulties associated with long distance trading expeditions by the hard way, and had revised their notions concerning the benefits to be gained from the caravan trade with the coast. The Association's profits from its commercial enterprises must have been small, and not at all commensurate with the capital which had been placed at risk for a lengthy period of time. Moreover the government, which had made no special efforts to encourage the promoters or to extricate them when they got into difficulties, hardened its attitude towards Baganda participation in the coastal trade. This presumably was partly because Ternan did not want to become involved in unnecessary complications on his lines of communication, and partly because the outcome of the pioneer ventures had demonstrated that the Baganda chiefs were engaging in a form of enterprise for which they displayed no particular aptitude, and which had caused a great deal of suffering to the Association's porters. Another consideration that weighed heavily with the government was the recrudescence of hostility among the Nandi. This not only threatened the safe passage of caravans along the Uganda Road, but was also likely to disrupt transport operations while the marauding tribesmen were being punished. The Ravine, Kipture and Mumias garrisons were too weak to provide escorts for caravans through the disturbed districts, and an attack on the vulnerable Baganda trading parties could have expedited a collision between the government and the Nandi. In addition to the deteriorating security position in the Eastern Province, outbreaks of smallpox in most of the road districts discouraged long distance travelling. The Porters' Regulations provided another bar to the continuance of the Association's activities. Provisions regarding clothing, food supplies and care of the sick, as well as the requirements concerning registration fees for porters and deposits as a security for the payment of wages made the organisation of large caravans a much more difficult and costly, undertaking than it had been when the pioneer parties journeyed to the coast.<sup>38</sup>

As the Uganda Railway approached the eastern boundary of the Protectorate towards the end of 1899, a growing number of Indian traders and private contractors were competing for the Kampala market. Allidina Visram was expanding the business established by his fellow Khoja, Sewa Haji, and a number of British, German and Italian firms were opening stores in Buganda, and stocking them with goods which were generally brought up by the German route.<sup>39</sup> Although their competitors were unable to meet all the demands of the market, the Baganda leaders possibly realised that the profits to be expected from trading operations would decrease as goods became more plentiful.

Moreover, the Regents and principal chiefs had important domestic matters to claim their attention. The Special Commissioner was on his way to the capital to reorganise the government, and after negotiations for the Buganda Agreement were initiated shortly after Johnston's arrival in December 1899, Apolo Kagwa and his colleagues were too busy to concern themselves with speculative trading ventures. Indeed even before the Agreement negotiations began, the Katikiro's thoughts were already turning to another and more local form of commercial undertaking. This was the construction and employment of dhows for the lake transshipment trade, in which he hoped to be able to compete with Boustead, Ridley and the German traders on more favourable terms than in the caravan business.<sup>40</sup>

It is difficult from the confused and contradictory accounts outlined above to present a full and accurate picture of the Baganda trading caravans. The number of porters said to have been engaged in single ventures varies from 30 to 600. From other evidence such as the food supplied and the loads left on the road, it seems that the average strength of the caravans was probably between 200 and 400 men, a large proportion of whom would have been food carriers. Most of the promoters and caravan leaders were Christians of the Protestant persuasion. They came from families holding official positions in the Baganda hierarchy, and thus were able to enlist their followers as porters for the Mombasa caravans. Since there were thousands of muzzle-loaders in Buganda, as well as a number of precision weapons which had been captured from the Sudanese during the mutiny operations, there was no difficulty in providing arms for the porters' protection. There is no evidence, however, that the caravans had to use their armament to defend themselves against attacks from hostile tribesmen.

The capital raised by the Association's members was seemingly almost entirely in rupees. Buganda produce was too bulky and perishable to be worth transporting 700 miles to the coast, and even ivory, the sole commodity which repaid the cost of carriage, was apparently only used as an exchange medium on one occasion. It is unlikely that other caravans carried ivory, since its passage down the road was invariably recorded in station diaries, even when (as in this case) duty had been paid in Kampala. Some of the caravan leaders may have carried a few of the uncashed government cheques which were held by a number of Baganda at the time, as well as letters to the Sub-Commissioner, Dr. Mackinnon, Boustead, Ridley and other merchants at the coast, asking for credit facilities so that purchases could be debited against the Association's assets in Kampala. At the beginning of 1899 there were little more than Rs. 150,000 in the Protectorate. Most of these were used for the payment of government staff and troops, but cowries were generally used for the payment of casual labourers. Specie was beginning to circulate more freely and was gradually replacing trade goods as the medium for trading operations in Kampala and Entebbe. The Baganda leaders were being encouraged to accept rupees for produce transactions, and for the wages paid to their followers who undertook temporary government employment as porters, labourers and canoemen. The chiefs apparently retained a proportion of the wages paid to the men they provided for these services, and a number of Baganda leaders had also been given presents in rupees. But judging from Jackson's comments on the dhow-building venture, and the pleas for government help in providing money to pay the transport charges for the loads left on the road, it seems the Association's members did not hold enough rupees to finance the coastal caravans from their own currency resources.<sup>41</sup> The project started a year too

soon in this respect, as the principal beneficiaries under the Buganda Agreement gained control of an exceptional amount of currency, when the official salaries and land distribution provisions in the Agreement became effective.<sup>42</sup>

Little is known about the goods which Mika and his colleagues bought from the Mombasa merchants, except that cloth was one of the items brought back to Kampala. There was a ready market for this commodity in Buganda, as well as some demand for high-priced 'novelties' from a small number of the richest people. Trade in arms and ammunition was forbidden, and the market for cowries was becoming saturated, with the result that their value was decreasing rapidly. Beads and wire, the other staples of the caravan trade, had lost their appeal to the Baganda, so it seems that the bulk of the Association's loads must have been made up of serviceable and fancy cloths.<sup>43</sup> This supposition is borne out by the difficulties experienced by the caravan leaders in disposing of their wares and in paying for food at the road stations in Mau and Kavirondo. Traders operating in these areas, and others like Mohomed Bakar and the Naivasha Somalis who traded with tribes to the north of the Uganda Road, had no use for cloth because their transactions were carried out principally with beads, wire and cowries. The incidents at Ravine and Naivasha suggest that the Baganda caravans carried none of the commodities that were acceptable to the people and traders between Kikuyu and the lake. Apart from the *amerikani* purchases made by the government, nothing has been recorded about the method of disposal of the loads that eventually reached Kampala. Some items may have been bought in lots by merchant firms or the government, while others were possibly "sent out" (to use Walker's phrase) to be sold in small parcels through Baganda retail traders. The *amerikani* loads appear to have been the property of individual Association members, but some of the other goods may have been sold in consignments and the proceeds shared in proportion to the capital put up by the various promoters.

The failure to master the technique of organising caravans, with due regard for the welfare of the porters, caused a deal of adverse comment from government officials. The shortcomings of the sponsors and caravan leaders in this respect were not peculiar to the Baganda. On the contrary, frequently since the days of the Company, complaints had been made about the inhumane treatment of porters by trading firms, European contractors and Indian traders, as well as by mission and government caravan leaders. Regulations were drawn up to safeguard the porters' welfare, and district officers at road stations did what they could to see that tolerable standards were observed. But abuses continued and cases often came to light of sick men being abandoned, caravans straggling along without proper supervision and porters dying in scores from hunger and disease.<sup>44</sup> A few inveterate wrong-doers like Gemmill were warned off and several other caravan leaders were fined or imprisoned. Between 14 January and 22 February 1899 three Indian trading caravans arrived at Ravine in a starving condition and had to be fed at government expense. One of the leaders was fined Rs. 500 and another was imprisoned for four months. When the Baganda parties arrived at Ravine and Naivasha in a similarly destitute condition, the district officers were fortunately able to arrange for provisions for the remainder of the journey to be bought on credit. The Baganda thus avoided the punishment that was meted out to the Indians, and were also excused for disregarding the government order requiring all caravans to provide themselves with enough food at Fort Smith to see them through to Mumias.<sup>45</sup>

The difficulties of supplying caravans on the Mombasa route, which were

probably not fully realised by the Association's officers in Kampala, was one of the principal reasons for the failure of the Baganda caravans. The venture was launched at a particularly unpropitious time, since the whole of the East Africa Protectorate was in the grip of a crippling famine. This not only made it almost impossible for caravans to replenish their food bags on the road and to stock up at Fort Smith for the foodless stretch to Kakamega, but also forced up the prices of what little food there was to be had.<sup>46</sup> Keen competition for the available food supplies came from the government, which had great difficulties in victualling Naivasha, Ravine and Kipture, as well as from private contractors and the commissariat officers of the railway survey and construction gangs. The Baganda found themselves at a disadvantage compared with their competitors in this field, as the latter had the time and means to send parties into distant producing areas, access to which was denied to caravans passing rapidly along the Uganda Road. The section between Fort Smith and Kakamega was particularly difficult for the Baganda to negotiate, because the conditions they found there were vastly different from what they were accustomed to in districts nearer their homes. It was customary for Baganda armies and traders to be provided with food in districts where the Kabaka's name was respected, or where the obligations of blood-brotherhood could be invoked, and to live off the country in more distant regions.<sup>47</sup> None of these practices could be followed on the road between Fort Smith and Kavirondo, where it would have been foolhardy for the Baganda to have tried to loot from the Masai or the Nandi and their Kalenjin kinsmen. Not only would none of these tribes sell food to caravans (and not often to the government), but their country was unsuitable for the cultivation of bananas, sweet potatoes and other traditional Baganda crops. The absence of customary foodstuffs from the porters' diet had a lowering effect on stamina and morale, while the consumption of badly-cooked grain often resulted in prostration from intestinal disturbance.<sup>48</sup>

The lack of experience which caused miscalculations regarding the caravans' food supplies also probably placed the Baganda at a disadvantage in their dealings with the Mombasa merchants. There is certainly a suspicion that Mika and his colleagues were badly advised about the type of trade goods that would be needed for the return journey. Inability to cope with unforeseen difficulties owing to inexperience was particularly exhibited by some of the caravan leaders, who not only failed to control the porters but also omitted to take adequate measures to ensure their welfare. The leaders' failure to overcome the problems of caravan organisation and supervision, and to keep up the porters' morale in trying conditions was not altogether surprising. Although the Baganda had considerable experience of long distance travelling, and some of the Association's porters may even have visited Mombasa, these journeys had hitherto been undertaken in much different circumstances, and often in caravans commanded by Europeans or seasoned coastal traders. An Arab trader and Archeacon Walker had taken the much-travelled Mika to Zanzibar, but even he had no experience of coping with problems that were peculiar to the Masai route.

Another factor contributing to the failure of the venture was the small amount of help which the Association received from missionaries and government officials. It is true that Walker went to some pains to help his friend, Mika, and afterwards championed the Association's cause when its members ran into difficulties. But there is no evidence that other missionaries of either persuasion showed any interest in the trading ventures, and it can only be assumed that Mika received some guidance from the Mombasa brethren about

trading practices, prices and pitfalls. Some assistance was given in the initial stages by Berkeley and possibly Wilson in Buganda, and two of the caravans were extricated from a difficult position by district officers at Naivasha and Ravine. But the impression remains that the Association persevered with its programme with little more than perfunctory backing from the administration and, towards the closing stages, in despite of the Acting Commissioner's petulant indifference. Ternan's attitude was understandable in the circumstances, but his reluctance to commit the government was in sharp contrast to the readiness with which help had been forthcoming for other traders who tried to open up the Masai route and to lighten the burden on the overtaxed transport system. Commissioner Colvile backed Muxworth's settlement and transport scheme in 1894; and Berkeley had helped a number of traders including Andrew Dick, who was even paid in advance for the goods he had contracted to deliver, so that he could finance a chain of stores and transport posts on the Uganda Road. There is also a suspicion that Boustead, Ridley & Co. were offered preferential rates as an inducement for them to use the Masai route, and other traders such as Spears and Mayes were promised government contracts to enable them to set up transport businesses of their own.<sup>49</sup> These exceptional and risky expedients, which successive commissioners considered justifiable because of the chaotic state of Uganda transport, all involved much larger sums of money than the amount which Ternan refused to advance to the Baganda traders so that their loads could be brought up to Kampala and sold.

It is not surprising in the circumstances that the Baganda Association failed, and that its efforts to enter the Mombasa-Kampala caravan trade met with the same fate as most of its predecessors and contemporaries. Smith, Mackenzie & Co., which had pioneered the trade in 1893, was forced to give up after trying for five years to make it a paying proposition; and Boustead, Ridley & Co.; the other large European coastal firm which entered the field shortly after its principal competitor, also suffered heavy losses, and only kept going by concentrating on the lake transshipment trade and the German route while waiting for the railway to make the Mombasa route more attractive.<sup>50</sup> Similar setbacks were encountered by two other experienced trading organisations, the Italian Company and Mohamed Bawker & Co., both of which not only lost considerable sums but were also heavily penalised for failing to carry out their government contracts. Although substantial profits were made for a short time by European and Indian contractors during the Uganda Mutiny Relief Operations in 1898, a score or so of the smaller private traders had been forced to abandon their businesses after running into debt or getting into trouble with the Protectorate authorities. Commissioner Berkeley had done his utmost to encourage private enterprise on the Mombasa route but all his efforts had come to naught, and he was forced to concede that the German route held out the best prospects for traders and transporters until the Uganda Railway "rectified matters".<sup>51</sup> Thus, the failure of the Baganda Merchant Adventurers was but one item among the many similarly unfortunate episodes which make up the catalogue of setbacks and disasters connected with the development of the Masai route as a trading highway.

The Association's attempt to succeed where others had failed was nevertheless a brave effort, and the perseverance of its members after initial setbacks, and without much positive assistance from missionary or government sources, was a praiseworthy exhibition of pertinacity and independence. The 'commercial enterprises' may seem to have been foolhardy undertakings in view of the Association's inadequate resources of capital, business knowledge,

caravan experience and leadership, but the abandonment of the project after less than a year's trial showed that the Baganda leaders were prepared to admit and to learn from their own mistakes.<sup>52</sup>

## NOTES

1. Lugard, F. D. *Rise of our East African Empire*, vol. I. 478; Portal, *Africa* 2(1894), FO2/60. Johnston, *Africa* 7(1901), p. 16; Eliot, *Africa* 6(1903), p. 11; cf. Roscoe, *The Baganda*, p. 365.
2. Mackinnon-Com(missioner) 26-9-98 FOCP 7159/177. Hobley-Com 29-10-98 Entebbe Secretariat Archives (ESA) A/4/13
3. E.g. Baskerville's Journal 1-8 Mar. 1899: "Government caravan service is taking many Christians—pray for them"; Tucker, A. R., *Eighteen years in Uganda and East Africa*, vol. 2 p. 216.
4. Oliver, R. and Mathew, G. *History of East Africa*, vol. I. pp. 190-191 and 205.
5. Guillain, M. *Voyage a la côte orientale d'Afrique* vol. 3. pp. 211-217; Krapf, J. *Travels and missionary labours*, p. 144. Austin, H. *With Macdonald in Uganda*, p. 253, notes he was joined in January 1899 by a party of Kavirondo, who "were anxious to proceed to the coast"; they may have been traders.
6. The caravans are not mentioned in E. A. P. and Uganda Railway reports, nor in Hall's and Ainsworth's Diaries and Letters. The Station Cash Books and Kagwa Papers are at Makerere.
7. Walker, L. G. W. 19-6-98, 7-7-98, Walker Papers (C.M.S. Archives). I am very much indebted to Dr. J. Rowe for all the references to the Walker Papers.
8. See Matson, A. T., *Nandi resistance to British rule*, Chs. 15 and 16.
9. In June 1898 Walker stated that an "inferior man" (to Mika) could have gone to the coast and done the work there. Walker—T. D. S. 18-8-98; Grant-Com 28-9-99 ESA A/4/21.
10. Rowe, J. Mika Sematimba (*Uganda J.* 28., 1964, p. 179; Richards, A. I. *Changing structure of a Ganda village*. Mika presumably returned from England with Walker, who arrived at Zanzibar on 5-7-93 and travelled to Uganda by the German route.
11. This account differs from Rowe's version, *op. cit.* pp. 195-6. The sum to be expended scarcely warrants Walker's description of "toys" for the goods Mika was to buy. Ravine Station Diary (RSD). Walker—B. W. 14-12-98 and to F. Baylis (C.M.S. Africa Secretary) 31-3-99.
12. Circular 30-3-99 in Buganda Residency Archives (BRA); Wilson—? Clement Hill 30-3-99 in Lugard Papers. If Walker is correct in saying (*see* p. 8. note 33) that 900 porters died at Kikuyu, the down caravan must have mustered between one and two thousand men. From Walker's statement about the refund to Ham Mukasa (*see* p. 6) and the latter's losses (*see* p. 8), Alexander was presumably a relative of Ham; or the caravan may have been led by Ham himself.
13. Platt, whose letter has not been found, was not the sort of official to take pains over recording African names correctly. For Grant, *see* p. 5 RSD 25 & 26-1-1900
14. Gorges—Com 25-7-99 ESA A/4/19; *see* p. 6 Martyr—Com 19-6-99 (the day he arrived at Ravine) ESA A/4/19; RSD.
15. Wilson—Com 1-8-99, Isaac—Com 1-8-99 ESA A/4/19; this caravan, which looks as if it might have been Mika's pioneer party, probably arrived before 1-8-99, the date on which Isaac's appointment began. Two sick porters from "the Katikiro's caravan" arrived at Ravine on 10-7-99 and were put in hospital until 22-7-99, when the RSD notes "Mika Simba's two men" left for Uganda.
16. If Mika left Ravine on 5-6-99, he could scarcely have arrived at Kampala shortly before 20-6-99
17. *See* ESA A/4/17-19-24/1,; FOCP 7401/129/144 etc.
18. Wilson—Com 20-6-99 ESA A/4/17. If Chasama was Stoke's former employee, he was an experienced traveller on the German route. Mika's inclusion suggests his return was not known to the OC Kampala.
19. Circulars in ESA A/5/6 19-6-99 (Basoga), 24-6-99 (Baganda).
20. Ternan-Mackinnon 23-6-99 ESA A/5/6. Walker & Collinson—Com 16-7-99 ESA A/4/24; Ternan-OC Uganda 18-9-99 ESA A/5/7; Walker—B.W.W. 16-10-99; Porters' Regs. dated 25-6-99 in ESA A/5/6 but not published till 8-7-99. Porters' Regs. were issued by Zanzibar (Oct. 1894), I.B.E.A. Co. (Dec. 1894) and E.A.P. (May 1896), but were thought unnecessary in Uganda where nearly all the porters leaving Kampala were either in return caravans or time expired men. Only a few government and mission parties contained Uganda porters until May 1898, when Gemmill began recruiting in Busoga and Buganda. Hobley drafted some local regulations on 26-5-98 (ESA A/4/11), an

- expanded version of which was sent to the Foreign Office by Berkeley on 7-12-98). Neither Berkeley nor Ternan's drafts (7-12-98 and 25-6-99) were approved and it was not until 1-9-99 that Porters' Regs. were issued by the Foreign Office (FOCP 7402/88).
21. Gorges—Com 25-7-99 ESA A/4/19; *see* note 29.
  22. Wilson—Com 23-8-99 ESA A/4/19.
  23. Grant—Com 28-9-99 ESA A/4/21.
  24. Wilson—Com 26 and 29-9-99 ESA A/4/21.
  25. Isaac-Boyle 22-7-99 BRA.
  26. Wilson—Accountant 1-6-99 (BRA) asking for a cheque for Rs. 1,000 from Kakungulu's reward of £200; *see* Petero Bagenda's biography in *Munno* 1932-1934. Wilson-Lugard 18-4-99 in Lugard Papers; Taylor, J. A. *Growth of the Church in Buganda*, p. 266.
  27. Wilson-OCS Kampala 1-8-99 BRA.
  28. Ternan-Gorges 10-8-99 ESA A/5/7; RSD 27-8-99.
  29. Gorges—Com 4-11-99 ESA A/4/19; its position in the file and the proposal for an embargo suggest the despatch may have been wrongly dated; *see* note 21.
  30. Wilson—Com 3-10-99 ESA A/4/21; Ternan to Sub-Com Uganda 7-10-99 ESA A/5/7.
  31. RSD. Johnston arrived at Naivasha on 8-10-99 and Ravine on 30-10-99 but he did not mention the Baganda caravans.
  32. Brown—Com 26-2-1900 ESA A/4/25; the canoes' departure for Buganda is not recorded in the Port Ugowe Diary.
  33. Casualties among Baganda and Basoga porters in Grant, Wallace, Gemmill, Gibbons and Vincent's caravans were carefully recorded (and condemned) by road station officers in the E.A.P. and Uganda. None of these accounts mentions 900 deaths from starvation and dysentery in the Association's caravans, and Walker may have been referring to the total number of Baganda lost in all the caravans listed above. If 900 men had died in the Association's parties alone, it seems strange this was not reported by E.A.P. officers who were keenly aware of the effects of a dysentery epidemic in their districts. Uganda road station accounts reveal nothing like the scale of casualties suggested by Walker; *see* note 12.
  34. The Indians were presumably approaching the confines of Baganda when the loads were seized; Dowse passed through Ravine on 20-4-99 and again on 9-11-99 (RSD).
  35. Walker—H.H.W. 23-7-99; Walker—T.D.S. 6-11-99.
  36. Walker—I.W. 3-11-99. It is not clear why Mika thought his land allotment was prejudiced because of his absence when the Agreement was signed; *see* Rowe *op. cit.* and Richards, *op. cit.*
  37. Miss Glass' Diary, C.M.S. Archives G 3 A7/02/54 1900 (a); item 46 (8-3-00) of Miss Allen's water-colours in the Royal Commonwealth Library depicts Chief Mika under a white umbrella.
  38. *See* note 20. Ternan—Foreign Office 1-6-99 FOCP 7402/38; ESA A/5/5.
  39. At the end of 1898 railhead was at Muani (mile 237) and by 31-12-99 it was nearing the Kedong escarpment (mile 363). Matson, A. T., Sewa Haji, *Tanganyika Notes and Records* 65 1966, p. 91.
  40. *See* p. 10. Baganda-owned dhows were operating on the lake in 1900.
  41. Wilson—OC Troops 24-1-99 BRA; Pordage—Deputy Com 14-8-00 ESA A/8/1. *See* pp. 4, 6, 7.
  42. Low, D. A., *Buganda and British overrule*, p. 143.
  43. Powesland, P. G., *Economic policy and labour*, p. 2.
  44. *See* p. 5 Oscar Smith's caravan crawled into Ravine in dribs and drabs over a period of four days in May 1899 (RSD). 45 RSD. *See* BN
  45. RSD. *See* p. 12.
  46. Matson, A. T., Famine in the Nineties, *Kenya Weekly News* 18 August 1961.
  47. Mair, L. P., *An African people in the twentieth century*, pp. 72 and 130.
  48. Scarcity of bananas etc. prevented the useful employment of Baganda troops east of the Sio River.
  49. Berkeley's note 13-3-97 in ESA A/4/8; Jackson—Com 18-6-98 ESA A/4/11; Hobley—Com 12-7-98 ESA A/4/11; Boustead, Ridley & Co. Com Aug. to Oct. 1899 ESA A/6/7,
  50. *History of Smith, Mackenzie and Co. Ltd.*, Ch XI. Johnston H. *Uganda Protectorate*, vol. 1. p. 293.
  51. Minute by Berkeley (in London) to Ternan—Foreign Office 25-9-99, F02/204.
  52. The grounds upon which the chiefs took their stand about honouring their word suggests their acceptance of Christianity was more deeply rooted and disinterested than some of their critics have implied.

#### Acknowledgement

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52. The Church and the Cosmos 1005

## THE INCIDENT AT NYAKISHENYI, 1917

By F. S. BRAZIER

Among men commonly remembered in Kigezi before the coming of the Europeans is a Mukiga<sup>1</sup> prophet called Nyakairima, who foretold the country's occupation by Europeans and the cataclysmic upheavals that would be its accompaniment. "Houses shall walk; Ropes shall connect one corner of the earth to the other end. Your country shall be ravaged by men with white skins. Granaries shall collide with one another. You will build with earth; you will thatch with earth"<sup>2</sup>. So went part of this prophecy of calamity. No greater enthusiasm for prospective Bakiga-European relations was expressed by early European travellers either. Major R. G. T. Bright of the Anglo-Congolese Boundary Commission (1907) wrote of the Bakiga: "It is difficult to get to know these people, as on the appearance of a white man every native fled to the hills carrying any property that could be quickly collected."<sup>3</sup> This initial disenchantment was deepened by the apparent lack of a recognisable system of government. In place of institutions of the kind so admired among the Baganda, superstition and witchcraft appeared paramount among the Bakiga. "They have no chiefs, but managed their affairs by families. A sect of witchdoctresses, which calls itself Niawingi (*sic*) has obtained great influence in the more remote districts. This power is unfortunately hostile to European influence and is mainly used to stir up strife."<sup>4</sup> This Nyabingi<sup>5</sup> cult seems to have been equated by early European travellers and administrators with hostility to European rule. Its ramifications, secrecy and looseness of organisation made it difficult to control. Colonel E. M. Jack illustrated the administrative problem, somewhat flippantly, when he said. "The curious thing is that the fact that possession by the spirit gives no immunity from capture or from death does not seem to affect the prestige of the spirit at all. When one of those who is possessed of Nyabingi is captured or killed it makes no difference to Nyabingi or to the natives; she simply nips off and inhabits someone else and carries on as usual, this makes the problem very difficult."<sup>6</sup> With the lack of any suitable indigenous political organisation as an administrative foundation, coupled with the unfriendliness of the Bakiga, institutionalised in a spirit cult, it is perhaps not surprising that the British turned once again to the Baganda as agents of imperialism.<sup>7</sup>

The first Muganda Agent in Kigezi, Joana Sebalijja, established himself at Nyarushanje in northeast Rukiga in 1910.<sup>8</sup> Nyarushanje lay on the edge of the area under dispute between the British and Congolese Governments<sup>9</sup> and on the route from Mbarara to 'Mfumbiro'<sup>10</sup> before Kabale became the district headquarters in 1914.<sup>11</sup> In addition, Nyarushanje was one of the first agricultural areas reached after the cattle country of Kajara and therefore perhaps more attractive to the Baganda. Sebalijja moved to Mpalo in 1912,<sup>12</sup> leaving Nyarushanje in the hands of a Muganda Agent, Abdulla Mwanika who from 1914 was living at Nyakishenyi.<sup>13</sup>

The administration was in a very rudimentary state when the 1914-1918 War broke out. The consequent dislocation of the administration might not have mattered if Kigezi had not been a war front.<sup>14</sup> British administrators were necessarily pre-occupied with the security of the borders rather than with the problems of establishing a system of government for Kigezi. The Baganda Agents consequently had greater freedom of action than might have been tolerated in peacetime. Indeed, the demands for food and portage for the military made extraordinary measures necessary if quotas were to be met. Rukiga, being the area most closely administered, probably supplied the bulk of food and porters. How the norms were achieved is not stated but there is the revealing comment for 1915 that "local Chiefs are now less averse from providing their quota of labour and do not need armed threats as before,"<sup>15</sup> which at least indicates that compliance was not entirely voluntary. In the following year Sebalijja again "successfully supplied all the military requirements in the way of foodstuffs and porters; thanks largely to his efforts the Belgian battalions and some thousand of military loads were transported from Kigezi to Kamwezi entirely by local porters."<sup>16</sup> Not only were the Baganda able to meet military needs, they were responsible also for civil administration, as the Annual Report for 1916-17 states "The actual management of the native administration machine is in the hands of Baganda Agents . . ." In the District Annual Report 1916-17 Sebalijja's loyal co-operation was commended, as was the "laudable enterprise" of Abdullah Namunye in dealing with border areas.

At the end of the war, however, the administration of the Baganda, judged by methods as well as results, was not seen in quite such a favourable light, although full recognition was given for their efficiency and devotion to duty. The District Commissioner in 1920, Captain J. E. T. Philipps outlined the unsatisfactory nature of having the Baganda as agents of British administration.

"The District has been almost entirely in the hands of the Baganda (who have steadily increased) since its opening. The mediums of communication between the Government and the local population have been Baganda interpreters. The language used has been Luganda, though heretofore Agents have always to employ Kiswahili in personal intercourse with officers—i.e. both being on terms of equality in using a medium of speech which was not their own.

The compulsory use of Luganda has been the most material influence in misleading the indigenous population as to the Government's attitude towards alien (Baganda) customs and misleading the Baganda as to their own position in the country. In short, I cannot but consider its employment in this District to be a distinct political error.

The local population has been submerged, incoherent and voiceless. Their attitude, needs and aspirations have only reached the Government indirectly coloured by Baganda intermediaries—who have been from time to time confuted by volcanic upheavals arising from the resentment of the people who they have, perhaps unconsciously, misrepresented.

Although strongly supported in execution of their legitimate duties, the small but noisy Baganda oligarchy loses no opportunity of expressing displeasure and annoyance at the firm check kept upon their continual attempts to impose their language and customs upon the incoherent masses of the population.

It is not pretended that the service rendered by alien Agents have not been of real value to the Government.

A tribute is due to the intelligent and capable work performed by them

in this District, but their overbearing and domineering attitude to the local populations has without doubt been the direct cause of 90% of so-called local 'rebellions' in a country where European Government has never been personally unpopular."<sup>17</sup>

An examination of the Nyakishenyi rebellion<sup>18</sup> of August 1917 provides an opportunity for assessing the causes of at least one so-called 'rebellion' and for observing the interplay between Kikiga resistance, Kiganda domination and European suzerainty.

At dawn on Sunday August 1917, a horde of Bakiga attacked the Gombolola headquarters at Nyakishenyi. They burnt most of the buildings and the clusters of huts in the immediate vicinity which were occupied by government employees, followers of the Baganda, and their families. By all accounts, the attack came as a complete surprise. At the subsequent trial of some of the rebels, the Agent Abdulla Mwanika described what happened.

"On the 12th August in the early morning Hamsini came and said 'The Bakiga are killing people and burning houses'. I saw five hordes of Bakiga coming to my compound. They were only a few yards away; they were shouting and saying 'We don't want you here. The Nabingi has ordered us to kill you or drive you away.' They included all of us in the term 'you' which was used in the plural. They cried out 'Kabale is burnt'. I shot the man I just heard shouting out the above words. Seeing the rebels in large number, I withdrew into the fence. The house near my house was burnt and the Lukiko house was on fire and as I heard a lot of people had been killed outside I thought we had better all get inside together; the Bakiga set fire to the fence of my compound. This was about 6.30 a.m. or a little after. The side of the fence was burnt and my askari Kasimbazi was speared. The wife of my man Sulimani, by name Merajuma, was speared there; she died. This was inside the fence. A boy Malisa was also killed there. Afterwards, about 1.30 p.m. Kisiagali came and rescued us; he came with forty people and fought the rebels . . . ."<sup>19</sup>

Abdulla Mwanika was lucky to escape. When the door of his house was broken down, he climbed out of the window (which earned him the nickname Dirisa<sup>20</sup>) and managed to scramble onto the roof of his house where he was rescued (as he described) by a loyal Mukiga chief, Kisiagali who came with his men and escorted Mwanika and his entourage to safety in his kraal.

Other witnesses added further vivid touches to the actual fighting. The Musigere<sup>21</sup> of Abdulla, Musa Wavamuno, a Muganda, said, "After burning a number of houses I heard some of the Bakiga crying out 'We've come to pay tax.' But I saw no money in their hands, only spears and other weapons,"<sup>22</sup> an eloquent if amusing illustration of grievances. The Muganda Muslim school-teacher only just survived to tell his tale,

"I went outside and saw Bakiga coming and shouting. They were blowing trumpets. I called Abdulla Magulumangu and told him to run to the Agent's place. There were Bakiga in the way. We went to Nakahima's house. There were four men, three women and two children inside, all Baganda. We closed the door and the Bakiga said 'If there is any Mukiga in this house let him go out.' There was no Mukiga there. They set fire to the front door. We remained within. They set fire to the backdoor. We went outside. We scattered. I went with Hassani towards the camp, the Bakiga followed us to the river. I was speared on the thigh. I fell down, and a second time I was speared on the back of the head . . . . They took my clothes from me and left me. I heard Hassani being speared, I did not see it. I saw Bakiga coming

and saying, 'let us kill him (meaning Hassani) entirely.' I did not see the corpse. I couldn't stand up. They left me naked, for dead. I heard the Bakiga saying 'let us go and rob the *Mbuga*.' They went away. I was lying in that place for two nights before I was found. I couldn't move."<sup>23</sup>

In all, sixty three 'Baganda' were killed, although thirty one of these were Banyaruguru, four were Banyankole and one was a Muhororo.<sup>24</sup> More than half were women and children. The killing of dependants was particularly remarked upon as it was contrary to Kikiga custom; more usual was the abduction of women and children as slaves or wives after success in battle.<sup>25</sup> As to property, sixty four houses belonging to the 'Baganda' were burnt and much property was looted or destroyed. Government losses amounted to the burning of the Agent's house and enclosure, the Lukiko and most of its contents including five Poll Tax registers, case books of the Lukiko Court and five books of Poll Tax tickets. Also destroyed were the C.M.S. Church and the mosque, though the European camp was left untouched.<sup>26</sup>

Initial assistance for the Baganda came from the Bakiga themselves and in particular from Kisiagali who rescued the hard pressed Mwanika from his exposed perch on the ridge of his house. However, Baganda from other gombololas hearing of the attack began to arrive in the afternoon to reinforce those of Nyakishenyi who were challenging the rebels.

The Muganda Agent of Kinkizi, Sulimani Ntagamalala, and of Kumba, Zambatisi Jutte, arrived in time to assist Kisiagali in warding off an attack on his compound. The Acting District Commissioner, J. M. M. McDougall heard about the affray at 10.30 p.m. on the Sunday night when he was given a note from Mwanika addressed to Sebalijja "I am telling you that the whole of my area has rebelled. They have killed many people. They have also burnt my Gombolola Headquarters. We the survivors are besieged in my *Kisakati*."<sup>27</sup> The same night twenty two police, accompanied by Dr. Webb, a Medical Officer from Kampala, who happened to be in Kabale, left for Nyakishenyi. McDougall and E. E. Filleul, Assistant District Commissioner, left next morning on their motor-cycles. However, the party did not arrive in Nyakishenyi until the Tuesday morning, "after losing the way more than once" in the dark of Monday night. The Acting District Commissioner then "organised a plan of campaign which lasted five days."<sup>28</sup>

The reassertion of British authority was quite thorough. Over one thousand rounds of ammunition were expended. 479 head of cattle and 764 sheep and goats were rounded up to be given as rewards to loyal chiefs, to recompense those who had suffered at the hands of the rebels or to be retained as a political fine, as "after the wholesale massacre etc, indulged in by the rebels, the return of any proportion of the spoils is unthinkable and would have a disastrous effect." Twenty two prisoners were sent back to Kabale. Officially, casualties among the rebels were put at one hundred.<sup>29</sup> It is of course difficult to establish the truth as to the numbers killed and the amount of food and booty carried off. It is likely that the zeal of the Baganda in avenging the death of their fellows and the eagerness of all and sundry to pillage what they could, must make the official figures an under-estimation.

The pacification of Nyakishenyi is well remembered for it caused a major social upheaval. It is interesting to note (although great significance must not be attached to it) that on the Kigezi tourist map prepared by the Department of Lands and Surveys<sup>30</sup> the symbol marking a place of historical interest is not placed at Nyakishenyi but some miles to the northeast by the Rubabu river. It was here that many of the Bakiga fled to get away from the police,

the Baganda and their auxiliaries. At the river, which marks the boundary between Rukiga and Rujumbura counties, they met the armed men of Makobore,<sup>31</sup> traditional enemies of the Bakiga. A great slaughter took place. Many of those killed were members of the Abashaaki clan. They had been the inhabitants of Nyakishenyi for many years. Some of the clan had been driven out of Nyakishenyi earlier by the Abachuchu clan, the majority clan, and had moved to Rujumbura. Those killed at Rubabu were fleeing for shelter among the fellow clansmen in Rujumbura. An eloquent testimony to the expulsion of the Abashaaki lies in the Rukiga Saza Tour Book for 1937<sup>32</sup> where there is only one Mushaaki recorded as a taxpayer in the gombolola of Nyakishenyi. The Abacucu who took the greatest part in the fighting were more fortunate. Many found refuge in the *muruka* administered by Kisiagali, who had rescued Abdulla Mwanika. As Kisiagali was a Mucucu, he was prepared to protect his fellow clansmen. In this way some were saved from the worst ravages of the 'pacification'.<sup>33</sup>

The Acting District Commissioner regarded the incident "as a serious affair and in its results the most deadly I have known or heard of in this district". When it came to analysing the causes of the disturbance, he named two main ones; resistance to foreign rule and the machinations of Nyabingi. "Widespread investigations support the belief that the rebellion was an attempt by a section of the residents in Nyakishenyi to free themselves from European rule and to restore former conditions of independence and absence of obligations in the shape of Poll Tax and labour".<sup>34</sup> The rebellion was "engineered by a 'Nabingi'<sup>35</sup> or witchdoctor named Kaigirwa . . . .<sup>36</sup>" and "Ndochibiri<sup>37</sup> . . . . is believed to have entrusted Kaigirwa with the task of fomenting mischief in Nakishenyi". The Acting D.C. absolved the Baganda of all blame and wrote "No facts to support any charge of misdoings or unfair treatment against the Agent or his followers, have come to light".<sup>38</sup> One can be sceptical about this view at any rate, as Capt. J. E. T. Philipps wrote in the Kigezi District Annual Report for 1919-20, "the people's attitude, needs and aspirations have only reached the Government indirectly coloured by Baganda intermediaries." An illustration of this sifting process by an interested party is Sebalijja's introductory remark to his collection of evidence from the rebels. "Six out of 160 men told me the exact cause".<sup>39</sup> After allowing for this bias one is able to reconstruct something of the causes and effects of the incident at Nyakishenyi. As a general assessment, the Acting D.C. was right in saying that objection to foreign rule and the hostile influence of Nyabingi were the main causes of the rebellion. Numerous witnesses testified to the effect that they attacked " . . . . thinking that Abdulla and the Europeans will go back where they came from, so we will be independent as we were before. . . we killed his men and burnt his *kisakati* . . . . we looted all their properties that was the cause (*sic*) because we wanted to be free from paying tax, not to work on the road, *kasanza* and other various work."<sup>40</sup> This was the view of the common man. The leaders also promised the rule of Nyabingi in place of foreign tyranny.<sup>41</sup> Of the two, Nyabingi came to be regarded by the Administration as the primary cause. The more awkward question of objection to foreign rule was evaded by putting the blame in the long run on the Baganda, although they were absolved of responsibility at the time. Captain Philipps considered that the Baganda's "overbearing and domineering attitude to the local populations have without doubt been the direct cause of more than 90% of so-called rebellions in a country where European Government has never been personally unpopular".<sup>42</sup> Once the Baganda could be superceded or controlled, the big menace to

colonial rule would only be Nyabingi. Nyabingi, then, was regarded by the British as the embodiment of most opposition in Kigezi, as can be seen by the monotonous repetition of rumours of incipient revolt during the 1920's. In fact, the part played by Nyabingi at Nyakishenyi, although very real and important, may well have been a support rather than initiation of revolt. In that the Nyakishenyi incident was a most memorable and influential example of Nyabingi participation in civil disturbance, it may have aroused fears concerning Nyabingi out of proportion to its potential for effective implementation of resistance to colonial rule.

The most prominent Nyabingi adherent in Nyakishenyi in 1917 was Luhemba. It is likely that he had strong connections with Ntokiibiri as some say Luhemba was living with Kaigirwa, the Nyabingi priestess, alleged to be Ntokiibiri's sister.<sup>43</sup> What is certain is that Luhemba's house became something of a tactical headquarters where Kaigirwa consulted 'the Great Lady' and gave advice and encouragement to those who were fighting.<sup>44</sup> To Luhemba's house also came the booty and a few prisoners. In addition to the general xenophobia which he no doubt shared with Nyabingi supporters, Luhemba had his own reasons for disliking the Baganda in particular. He had been arrested in 1912 on a charge of witchcraft but had been released. When Abdulla Mwanika moved to Nyakishenyi in 1914, he made Luhemba live close to him so that he could keep him under observation, which Abdulla confirmed as being necessary as "every day they were bringing presents to the Nyabingi".<sup>45</sup> He was eventually allowed to live further away near one of the chiefs concerned in the attack. In 1916 Luhemba's hostility to the Baganda became even more personal for his brother was speared and killed by an askari who was out collecting food for the military.<sup>46</sup>

Kaigirwa was a well-known Nyabingi 'priestess'. She had been arrested by Captain Coote, sent to Mbarara but subsequently released. She came to Nyakishenyi from Kinkizi on the instructions of Ntokiibiri to help stimulate the rebellion. Ntokiibiri himself maintained himself on the fringes of the affairs. Although his famous white sheep was said to have been in evidence at the start of the fighting, Ntokiibiri never involved his emblem or himself in the fighting; he kept to the surrounding hills from which he could escape with ease. No doubt his recent evasion of Lieutenant Colonel Riddick's punitive expedition in February 1917<sup>47</sup> made him exercise the utmost caution. He was however prepared to help others. A group of Nyakishenyi chiefs had gone some months before the attack to Ntokiibiri to ask him "to come to fight against Abdulla. If they drive him away he will be a *mukama*. Bichu gave them some meat and medicine saying that anyone eats (*sic*) the meat and touches on the medicine will win the fight. He told them to go to fight against them promising that if they beat them he will come to rule over them".<sup>48</sup> From other evidence as well, it is clear that this group of chiefs played the dominant part in the attack. They kept knowledge of the plot to a small number of people (themselves and the Nyabingi leaders) in order to minimize the risk of the Baganda coming to hear about it.<sup>49</sup> In this way they were aided by the fear of Nyabingi, for as Abdulla Mwanika said "The Bakiga are afraid of the Nyabingi but not of the Europeans".<sup>50</sup> They also showed a modern awareness of timing by launching the attack just before dawn on a Sunday morning. During the attack, the Baganda identified the leaders as local chiefs from their exhortations and orders, for instance "let someone go behind to prevent the Baganda from passing out."<sup>51</sup>

There must remain some uncertainty as to the exact identity and position

of the chiefs who rebelled. Many of them were probably clan leaders<sup>52</sup> confirmed in their position of authority by the Baganda. In 1915, Rukiga had been divided into five districts with a Muganda at the head of each assisted by Bakiga Sub-District chiefs. They sat on the Lukiko and were paid out of fees and fines collected by the court.<sup>53</sup> If one can generalise at all about their motivation, one can start by saying that as Bakiga of Nyakishenyi they shared the general antipathy towards the Baganda, (whether or not inspired by Nyabingi), disliked the unaccustomed exercise of authority over them and resented the tribute of food and labour demanded of them as a result of the war. Some had grievances of their own. Baguma had been fined Rs. 4/- by Mwanika for an offence connected with wheat planting. On another occasion when Baguma had been disobedient, Mwanika threatened to send him to Sebalijja with a view to his dismissal if his conduct did not improve. Baguma is also reported as being incensed at the death of Luhemba's brother—"why does Abdulla send his men to kill our people?"<sup>54</sup> However as chiefs they may have also had motives differing from those of the common man.

By accepting their position as chiefs under the Baganda, men like Baguma and Bagologosa were also tacitly accepting the new order and perhaps realising the advantages of power so ably exemplified by the Baganda. Perhaps they wanted to expel the Baganda so that they could take their place as men of authority under the British rather than wanting merely to return to former conditions of ordered anarchy. One witness detected signs of this urge for power when he complained that the appointed chiefs "behaved themselves big chiefs."<sup>55</sup> The common man was not anxious to see these men ruling them. When Sebalijja asked a rebel if they wanted to drive the Baganda and Europeans away so that they could be controlled by their own Bakiga chiefs, he replied "The chiefs you appointed could not rule over us. Everybody should be independent as our forefathers used to be."<sup>56</sup> How great the divergence of aspiration is between leaders and led is difficult to assess, but perhaps the new 'big chiefs' realised the prizes to be gained by collaboration with the British and envied the Baganda their position of power and the wealth that obviously accrued from it.

Not all chiefs in Nyakishenyi rebelled. The Acting D.C. claimed that seventeen rebelled and seven remained loyal. Their loyalty was disputed, however. "Some of you think that the rest of the Bakiga Chiefs who did not join the forces were loyal; that is wrong; they all rebelled." Tirwakunda, a rebel leader imprisoned for his participation in the rebellion and still living, says categorically that initially all chiefs in Nyakishenyi supported the rebellion. He claims that Kisiagali, who rescued Mwanika, withdrew his men from the fighting at an early stage and then rescued Mwanika because he was afraid of the consequences of rebellion and because he was friendly towards him. He was rewarded with fifteen cows for his perspicacity by the Acting D.C. Another chief, Lisanga, who also changed sides in the middle received two cows.<sup>57</sup> Whatever might have been the loyalties at the beginning of the battle, at the end two groups, one loyal to the British, one rebellious, existed. This split does not necessarily indicate a lack of sympathy on the part of Kisiagali and others towards the aims of the rebel chiefs. But he and his followers were saved the retribution handed out to the rebels<sup>58</sup> and in fact were able to help their rebellious clansmen by providing a refuge. Their defection may have been motivated by expediency rather than principle.

The rebel chiefs were severely punished. Baguma and Bagologosa were arrested after they had fled to Rujumbura and were tried in Kabale. Sitting with two Baganda assessors, J. M. McDougall found them both guilty of murder.

They were sentenced to death and publicly hanged in Kabale on 27 February 1918 near the roundabout by the District Administration Offices.<sup>59</sup> Five other leaders received ten years imprisonment.

The strong measures taken by the Administration did not prejudice Nyakishenyi's participation in district affairs in later years. In fact two of the first Bakiga Saza chiefs<sup>60</sup> in Kigezi came from Nyakishenyi and were nephews of Baguma, the chief hanged in Kabale. Nor were the rebels branded as opponents of British rule for the rest of their lives. Tirwakunda spent three months in prison in Kampala and then was offered the alternative of serving his sentence or joining the East African Expeditionary Force as a porter. He chose the latter. He walked to Mombasa, went to Zanzibar and from there went to Egypt. He came back in about 1922 and was given a commendation for loyal service by the Governor. On the strength of this, he was made a muruka chief and obtained a large area of land in Nyakishenyi.<sup>61</sup> He is now retired but very active and still lives in Nyakishenyi. Kalinda, another rebel, who is alleged to have knocked Abdulla Mwanika's hat off with an arrow when the latter was perched on the roof of his house, also became a muruka chief to join Kisiagali, the man who had rescued Mwanika in the same rank. After about fifteen years, rebels and loyalists were trusted in the same measure by the Administration. Tirwakunda, at least, could rest satisfied with his career. He achieved what he set out to do; to oust the Baganda.<sup>62</sup>

The protest of the Bakiga of Nyakishenyi was answered by the British administration gradually involving the Bakiga in their own government by the substitution of Bakiga chiefs for Baganda. The surprising element here is the slowness with which this policy was carried out, as no real changes were made until 1927-1930, whereas the gradual removal of Kiganda influence had been recommended in 1920 and before. The delaying factor may well have been the Administration's fear of Nyabingi. Whereas the Nyakishenyi Incident drew attention to the unsatisfactory relations between Baganda and Bakiga, it also illustrated, in the minds of government at least, the insidious potential of Nyabingi for using any grievance to stir up trouble. In 1938, the view was still expressed that "though dormant at the moment, many years must elapse before its organisation will be completely broken and many more still before its influence will cease to have effect."<sup>63</sup> So what the rebels gained in political terms by discrediting the Baganda, they lost by having the initiative associated with Nyabingi. The Baganda had to stay because the Bakiga could not be trusted.

The alleged elusiveness of Nyabingi described by Colonel E. M. Jack may well have been due to an almost complete lack of effective organisation and co-ordination. This would certainly be more in keeping with the Kikiga distaste for authority.<sup>64</sup> There do seem to have been attempts to involve other areas in the Nyakishenyi rebellion. The Acting District Commissioner reported a minor outbreak of trouble associated with Nyabingi on the Ruanda border in south Rukiga at the time of the rebellion but it never amounted to very much.<sup>65</sup> Round Nyakishenyi itself, the Nyabingi leaders were singularly unsuccessful in involving neighbouring areas. Kabango a clan leader from Nyarushanje<sup>66</sup> and obviously a Nyabingi sympathiser came to see Kaigirwa when he heard that Nyakishenyi was burning. His followers related what happened: "We went to Luhemba who keeps Nyabingi; then we made war dances before her. Nyabingi told Kabango to go back and bring a great number of men to attack Abdulla at Kisiagali's . . . . Also the lady again told him 'you have to burn Nyarushanje before you leave there', but Kabango refused that order

saying that he will not burn that place unless somebody starts to do that".<sup>67</sup> Without widespread unrest which would prevent the concentration of the police, the rebellion, as a movement to expel the foreigners, was bound to fail.

More evidence is required before any definite conclusion can be reached on the real power of Nyabingi in Kigezi, however the Nyakishenyi Incident would suggest that its ability to organise general resistance was small, but that it maintained its reputation by its elusiveness and ability to create isolated disturbances.

Fear of Nyabingi activities was sufficient to make the British cautious and ironically enough as has been suggested confirmed the Baganda in their offices until the collapse of the reputation of Nyabingi as a political force in 1928.<sup>68</sup> Already the Catholic and Protestant mission had reported that "since the manifestations in February last the attendance at the churches has increased to an amazing extent and all school churches are overflowing with readers young and old".<sup>69</sup> The political impotence of Nyabingi had led, one might assume, to mass apostasy. But the last laugh, perhaps was with the Great Lady; for when a missionary, on safari in 1928, asked why an unusually large crowd was following him, he was told that the local Nyabingi priestess had advised them to go and listen to what the missionaries had to say. And they were following her instructions!<sup>70</sup>

## NOTES

1. The Bakiga are the most numerous people in Kigezi; the other main groups are the Banyarwanda and Bahororo. Rukiga is the language most commonly spoken in the district, but is also the name of the southeastern Saza.
2. I am indebted for this quotation to Mr. N. Bisamunyu M.P., from his unpublished typescript. For other information about Nyakairima see Ngologoza, P., *Kigezi N'Abantu Baa-mwo*, East African Literature Bureau, 1967, pp. 50-55.
3. Bright, R. G. T., Survey and exploration in the Ruwenzori and Lake Region, Central Africa. (*Geographical J.* 34 1909, p. 146.)
4. Bright, R. G. T., The Uganda-Congo Boundary Commission. (*Geographical J.*, 32, 1908, p. 490.)
5. The most accessible account of the Nyabingi Cult's activities in Kigezi is that of Bessell, M. J., Nyabingi. (*Uganda J.* 6, 1938, pp. 73-86.) See also Philipps, J. E. T., The Nabingi—Anti-European Secret Society in Africa, in British Ruanda, Ndorwa and the Congo, (*Congo*, 1, 1928, pp. 310-321) and Ngologoza, *op. cit.*, pp. 46-49.
6. Jack, E. M., in discussion after the reading of a paper by Philipps, J. E. T., Mufumbiro—the Birunga volcanoes of Kigezi-Ruand-Kivu, (*Geographical J.*, 61, 1923, p. 254.)
7. Roberts, A. D., The Sub-Imperialism of the Baganda, (*Journal of African History*, 3, 1962, pp. 446-447). The activities of the Baganda in Kigezi are mentioned.
8. Ngologoza, *op. cit.*, p. 57 also states that Sebalijja was sent by Mbaguta. "Omw, Ssebalijja owaabaire ari omwebembezi waabo, akaba ayoherziibwe Enganzi ya Nkore, Omw. Nuha Mbaguta, kuba kirongoza waabo." The Saza Tour Book of 1937 states that Ssebalijja was in Nyarushanje in 1909. Sebalijja wrote an account of his time in Kigezi, 'Kyebyafayo by'e Rukiga n'awalala, Annexure to *Munno*, 25 1935.
9. See Louis, W. R., *Ruanda-Urundi 1884-1919*, 1963, for a detailed account of the boundary disputes between Britain, Germany and Congo, particularly pp. 3-92. Nyarushanje lies just to the east of the 30°E meridian agreed by the Declaration of Neutrality, 1885, to be the western boundary of the British sphere of influence.
10. For a discussion of the etymology of 'Mufumbiro' see Jack, E. M., The Mufumbiro mountains, (*Geographical J.* 41, 1913 pp. 533-543.), Philipps, 1933, *op. cit.*, p. 235 and Louis, *op. cit.*, pp. 62-63.
11. Kigezi District Annual Report (KDAR) 1914-15, Sub-Section Administration, District Commissioner's Office, Kabale.
12. Rukiga Saza Tour Book, Assistant District Commissioner's Office, Kabale.
13. Abdulla Mwanika remains a shadowy figure. He is alleged to have come from Masaka. He was quite well off. He received 33 cattle as compensation for his losses during the fighting. At first his reputation with the British was good. "Good work has been done by the Agent Abdullah of Nalusanji, who collected Poll Tax to the value of Rs. 6612" KDAR

- 1915-16. But after the troubles, there is little information about him. Much of the information available comes from Kigezi District Court Case (KDCC) 62/17. These cases, to be found in a cupboard in the District Court Kabale, are a fund of small detail about the nature of Kikiga society when the British first came. A short article on the Nyakishenyi by Mwanika can be found in *Mumno*, 8, 1918, pp. 14-15.
14. Thomas, H. B. ed., Kigezi Operations 1914-1917, (*Uganda J.*, 30, 1966, pp. 165-173.)
  15. KDAR, 1915-16, Sub-section 'Rukiga'.
  16. KDAR, 1916-17, Sub-section 'Administration'.
  17. KDAR, 1919-20, Sub-section 'Native Affairs'.
  18. Most of the evidence concerning the Nyakishenyi troubles comes from the Kigezi District Archives (KDA) and the Court Records. Some of this evidence has now been microfilmed and can be seen in Makerere College Library. For another account see Ngologoza, P., *op. cit.* pp. 70-73.
  19. KDA 73/16, Transcript of KDCC 33/17.
  20. Swahili for 'window'. Information obtained from A. R. Ntegamahe, magistrate in Kabale, who was brought up in Nyakishenyi by T. Rwomushana.
  21. Luganda for 'Deputy'.
  22. KDCC 62/17.
  23. Salimu, Muslim teacher, KDA 73/16 Transcript of KDCC 39/17 'Mbuga' means 'compound' ('Embuga' in Luganda)
  24. Most of these people were followers of Mwanika. One Kikiga complaint was that they were taking the good land. Banyaruguru are people of Kiganda descent, living in the north-eastern Saza of Ankole. See Morris, H. F., *A history of Ankole*, Kampala 1962, p. 30. The Bahororo were, traditionally, the inhabitants of the old kingdom of Mpororo, but now the word is used for the people living in Rujumbura, the northwest Saza of Kigezi. Details of deaths to be found in KDA 73/16.
  25. Kisiagali, KDA 73/16 Transcript of KDCC 33/77.
  26. "We had to burn the houses where the people used to live, but in the camp no one was living in it . . ." Kanyalusa's evidence given to Sebalijja. KDA 73/16.
  27. KDA 73/16. A note hastily written in pencil on a scrap of exercise book paper. *Kisakati* is Luganda for an enclosed compound usually associated with a chief.
  28. Acting District Commissioner (AG. ADC) to Provincial Commissioner, Western Province (PCWP) 31st August 1917 KDA 73/16.
  29. *Ibid.*
  30. Kigezi 1:250,000 Uganda Surveys Department 1965.
  31. Information supplied by Tirwakunda, June 18th 1966. He was one of the rebels and still lives in Nyakishenyi Gombolola. Makobore was the hereditary ruler of Rujumbura and the first Saza Chief.
  32. To be found in Assistant District Commissioner's Office, Kabale.
  33. Information supplied by A. R. Ntegamahe, himself a Mucucu.
  34. ADC to PCWP 31st August 1917 KDA 73/16.
  35. 'Nabingi' or 'Nyabingi' was used indiscriminately by the Administration to indicate any person with alleged spiritual powers whose activities had political overtones. In fact the word refers only to the spirit which is said to possess people. See Bessell, *op. cit.*
  36. Philipps, *op. cit.* p. 319 gives further details about Kaigirwa (sometimes rendered Kaigirirwa).
  37. Ndochibiri or Ntokiibiri was a famous rebel in Kigezi. Accounts of his activities and his white sheep are to be found in Bessell, *op. cit.*, p. 82, Philipps, 1928 *op. cit.* pp. 318-320 and Ngologoza, *op. cit.* pp 70-74.
  38. ADC to PCWP August 31st 1917 KDA 73/16.
  39. Sebalijja's statement KDA 73/16.
  40. The evidence of Kanyalusa to Sebalijja KDA 73/16.
  41. Ntokiibiri told the leaders "that if they beat (the Baganda) he will come to rule over them". Bangalube to Sebalijja KDA 73/16.
  42. Already quoted KDAR 1919-20.
  43. See evidence of Kandambuka about Kaigirwa and Luhemba KDA 73/16 and concerning Kaigirwa and Ntokiibiri see ADC to PCWP 21st September 1917 KDA 73/16.
  44. Evidence of Kandambuka KDA 73/16.
  45. Abdulla Mwanika recalled KDCC 62/17.
  46. Magistrate's Judgement KDCC 62/17.
  47. Thomas, *op. cit.*, pp. 170-172.
  48. Evidence of Kangalube to Sebalijja KDA 73/16. Bichubirenga (the clouds pass over) was another name for Ntokiibiri.
  49. Tirwakunda's information, June 18th 1966.
  50. KDCC 62/17.
  51. Abdulla Mwanika, KDA 73/16 Transcript of KDCC 39/17.

52. Tirwakunda's information, June 18th 1966.
53. KDAR 1917-18, Sub-section, 'Native Affairs'.
54. Evidence of Batalingaya KDCC 62/17.
55. Evidence of Buhire KDA 73/16 Transcript of KDCC 39/17. See Edel, M. M., *The Chiga of Western Uganda*, Oxford, 1957.
56. Evidence of Kanyalusa to Sebalijja KDA 73/16.
57. List of rewards to be found in KDA 73/16. Allegations of Kisiagali and Lisanga changing sides from Tirwakunda June 18th 1966. Quotation from Mawatano to Sebalijja KDA 73/16.
58. Ag. ADC to PCWP 29th September 1917. "Up to date according to my present information there are probably about 1,000 rebels who have not returned to their homes".
59. See Ngologoza, *op. cit.* pp. 71-72 for a description of the gallows, that were brought specially from Kampala, and the execution.
60. These were Kangwaje who is still alive and lives in Nyakishenyi, and Mukombe who is deceased. Mukombe was the father of the present Secretary General of Kigezi, S. Mukombe-Mpambara.
61. Information from Tirwakunda, June 18th 1966.
62. Tirwakunda states adamantly that he had nothing to do with Sataani, the church name for Nyabingi, among other things.
63. Bessell, *op. cit.* p. 86.
64. Baxter, P. T. W., *The Kiga in East African chiefs*, edited by Richards, A. I. London, 1959, pp. 281-285. Edel, *op. cit.* pp. 2-3.
65. KDAR 1917-18, Sub-section 'Police'.
66. Ngologoza, *op. cit.* p. 13.
67. Evidence of Kandambuka to Sebalijja KDA 73/16.
68. KDAR 1928, Sub-section 'Native Administration'.
69. Kigezi District Monthly Report for July 1928, District Commissioner's Office, Kabale.
70. Told by Bishop L. E. Barham, who was in Kabale as a C.M.S. missionary in 1928. See Smith, A. C. S., *Road to Revival*, n. d., pp. 36-38.

EXHIBIT A

Faint, illegible text, possibly bleed-through from the reverse side of the page. The text appears to be organized into a list or table with some numbers on the right margin.

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## DROUGHTMAKING AMONG THE LUGBARA

L. AVUA

The Lugbara attach special importance to rainmaking. This is to be expected, because rain enables the community to continue to live well and to prosper, but droughtmaking by human beings with special powers seems to play a greater role in a particular lineage or a number of contiguous lineages than rainmaking. Not all occasions of drought are the result of human manoeuvres, but the majority of cases seem to be. To some extent, the term is validly used: the Lugbara phrase is *'utuke sozu'* (which I translate literally 'to swear drought', because this evidently corresponds to the swearing of an oath). In other places the phrase used is *'utuke dizu'* (whose English literal translation is 'to crush drought, because the object which symbolises the droughtmaking power is literally, ritually crushed, a symbolic action which reflects the destruction of the drought itself). That rain results from this symbolic action is a positive aspect of the process. But the term 'droughtmaking' instead of just 'rainmaking', would add to the better understanding of what happens, even though it is understood that 'rainmaking' plays an apparently secondary role in Lugbara society.<sup>1</sup>

To understand fully this custom among the Lugbara, it is fitting to start by visualising the symbolism which reflects the droughtmaking powers. Among the Aringa (the northern Lugbara), the power is inherent in a stone about the size of a tennis ball. The stone is oblong in shape. It is either white and shiny or red and glittery. The stones are therefore very special. One informant told me that they are capable of reproducing until there is a whole potful of them. They even cry for water during a period of drought: they chime "Give us water. Give us water to drink, please." Among the Terego and Ayivu (the central Lugbara) stones are used which are found only on certain sacred hillocks. These look like five or six very thick fingers joined to what corresponds to a hand. One of the 'fingers' of this special stone is the 'male' and all the fingers are sometimes known as 'nostrils'.<sup>2</sup> In Ayivu (at what is now the eastern part of Arua town), the power is vested in a God-made axe which no human-being must tamper with, except the rainmaker in his capacity as rainmaker and ritual head. Among both the northern and central Lugbara, huge sacred snakes, which live in the raingroves, also carry the drought or rainmaking power in them. Among the Terego and Ayivu, there is a snake called 'Niri' which can travel some fifty miles, passing from one lineage to another. These lineages are very closely related to it and to one another it does not pass through the territory of an alien lineage. The raingroves are what Middleton calls "external lineage shrines"<sup>3</sup> and these shrines serve the purpose of a centre for making rain and for invoking the living dead. At one such shrine on the eastern side of Arua town, there used to be three sacred snakes with long teeth and huge bellies like those of big animals. There is a sacred stream nearby to which the snakes glide to drink water and where there is a God-made axe. As the snakes glide over the grass

on their way to the stream they burn the grass mysteriously and leave fire behind them. None of these sacred objects and places should be destroyed or in any other way tampered with. The external lineage shrine near the eastern end of the town alluded to was cleared for building the residential area of the town. Destruction resulted, so the ritual head claimed, in a phenomenally strong storm which destroyed many town buildings and tore their corrugated iron roofs apart. Also, the colonial administrator who shot dead one of the three sacred snakes died as a result.

The Aringa find the stones in the grass, in a field as they dig or on a path. Anyone who finds the oblong stone regards his finding as a bad omen; he must 'crush' it immediately or leave it alone. But if he is mistreated by another member of the community, he seeks revenge by keeping his find; such an anti-social course of action must be secret. In parts of Ayivu, the stone with its five or six fingers is also kept secretly for a similar purpose. In other places the man seeking revenge or redress relies entirely on the rainmaker, the ritual head. He asks the ritual head to use the powers transmitted to him over rain or drought on his behalf. The Terego who desires to own this power goes to another lineage or to his mother's people and asks for it in the form of a stone. He can pick up a sacred stone, 'child of the hillock', from one of the hillocks. Alternatively, all he does is join a ritual rainmaking meal uninvited, and the power is acquired. It is important to note in this connection that the power to make drought or rain is inherited only by the ritual head, but that an ordinary man who becomes a droughtmaker does not pass the power on to his eldest son. This applies to all the sections of the causes of drought in the Lugbara tribe.

### **The causes of drought**

There are many causes of drought. Almost all of them are human and anti-social or sacrilegious, but one is designed to restore a sense of respect for the lineage head and this produces a sense of order in the community. If a tree is cut down or even if only a twig is removed from any tree in a rain-grove, this will result very often in a drought. If ants are collected from an anthill which forms in the grove, or if fruits are gathered from the sacred trees, or if honey is taken, there will surely be drought in the land. If a person cuts grass from a sacred hill, if a person takes fire to the hill, if a person smokes on top of the hill, or if a woman pounds millet or sorghum on a large flat stone on the hill, these people will be held responsible for the resulting drought and famine. With regard to women, they can dry their cassava flour or millet or sorghum on the hills, but they must not pound the foodstuffs at the sacred place.

A second major cause of drought is the desire for more property. A man keeps the sacred stone he finds by a path in order that his millet in the grain store will last much longer than other people's. So, he must place it secretly on the millet mound in the store. If he wants his cows or goats or sheep to increase in numbers or to improve in health, all he does is to ask secretly for the symbol of droughtmaking power from another lineage and to keep it secretly in a pot somewhere in the house. If he desires prestige or respect which the community have not paid him, he 'swears drought' through the help of the sacred stone. The idea is to force people through the agony of drought, famine and hunger, to appeal to him as the droughtmaker to use his rainmaking powers. Once this happens, people begin to respect him, especially during a subsequent famine. An informant said that many drought-

makers claimed responsibility for the famine of the early 1940s which killed many people, flocks and herds. He added that their sole reason for the claim was ambition for power and respect.

A third cause of drought consists of certain grievances among ordinary members of the community. If a debtor fails to pay back his creditor, the latter seeks to own the power to make drought in order to force his debtor's hand. After examining the ritual place to make sure that the ritual head has not made an offering to cause rain, the creditor takes hold of a drought stone and hides it in the grass outside his homestead. This marks the beginning or continuation of drought, until his debt is paid. Similarly, a man accused of thieving is blamed for making drought as a defence against the accusation he considers false. Likewise, a person accused of poisoning (that is, of sorcery, a very common accusation) may be blamed for making drought for the same reason. This cause can be illustrated by the following example.

A man, *A*, was accused by people of another lineage of poisoning their daughter. Instead of retaliating, he went to the ritual head, *Y*. He asked *Y* to invoke the living dead to send drought on his accusers and their family cluster. Interestingly enough, *A* further threatened that if *Y* refused to present his petition to the living dead, *Y*'s family should be struck with a terrible epidemic. After reminding *A* never to forget his conditional curse on *Y*, *Y* came home from the communal drink, with *A*'s curse ringing in his ears. *Y* said, appealing directly to the living dead, "Okpova! Anyafiyo! Aruva! Ovavaa!. Have you three heard what *A* said to me, that if I do not grant his requests my family would die through an epidemic? Make drought rage!" The result was a most disastrous drought, going well beyond the particular lineage it was originally intended for. The community were so unhappy that their cries compelled *Y* to mention *A* as responsible for this unhappiness. The chief had *A* arrested, and compelled *A* to collaborate with *Y* according to ritual, for the immediate removal of the existing drought and for the making of rain.

Two other causes are specially interesting to note. One is the lowering dignity of a ritual head by one of his 'subjects'. Among the northern Lugbara this at once results in drought. To illustrate this cause of drought an incident is related below.

A ritual head, *Y*, was insulted, despised and beaten up by a man, *A*, from his lineage cluster. *Y*, did not retaliate directly or at once. He came home from attending a mourning ceremony, on which occasion he had been maltreated. All he did immediately was tell his family and neighbours about the way his dignity had been lowered. *A* fell seriously ill as a result of his behaviour, and representatives from *A*'s lineage went to *Y*'s home in the early morning with a bull, to present *A*'s apologies and to satisfy *Y* by admitting his wrong. After the wife of *Y* thought, "These people have come. What wrong have I done them? I am not coming out to meet them." Then he said to his wife, "Go and tell the leading visitor who has talked to you to come in and tell me what he has to." Inside, the leading representative, *B*, of the sick man confessed, "Father, I treated you badly: I maltreated you when, as you came to us on a mourning occasion, one of us beat you up and lowered your dignity. As a result he has become so ill that he may die at any moment. We have have therefore come to you to 'catch your legs'.<sup>4</sup> Please, do not refuse to accept my confession; the punishment I have had inflicted on me has taught me." *Y*, who had been listening quietly, said in a dignified voice,

"I have done no wrong against you. I have failed to discover the reason why you have come. That someone has despised me I do not know." *B*, however, insisted, knowing that *Y* was really testing his genuineness. He maintained, "Surely, someone maltreated you on that day. So we have come. Please, please, do not refuse our petition! We have brought the payment for the injury we cause on you, so, please come out to us. Tell us what we should pay for loweing your dignity, and we are prepared to face up to it."

After much persuasion, necessarily a sign of renewed respect for *Y*, *Y* came out and announced the sentence. As his blood had been shed, a very serious offence indeed, a bull was the most suitable bloodmoney, rather than less suitable payments like a goat or sheep. *B* and his colleagues must pay this.

The last cause of drought worth noting is failure on the part of the ritual head to make offerings to the sacred snakes associated with drought-making. In Terego and Ayivu there is a snake specially called "Ndiri." This python normally lives in an external lineage shrine in Terego. But wherever offerings of food are not made to it, it is said to leave its permanent dwelling-place to travel through lineages which are related intimately to it, and to reside in one such lineage farthest from where it normally lives. Only when a fatted bull is passed on alive from the lineage where the permanent residence is, through related lineages, to where the snake is, does the python come back to Terego. After the bull has been offered to it at the temporary residence and the python has come back to the permanent place, rain falls. Otherwise, there is drought throughout Terego and Ayivu on account of the failure to feed the python, either ritually or physically.

### **The detection of the droughtmaker**

How the droughtmaker is found out is very interesting and very important. The importance is that no mistake should be made about the man causing widespread suffering in the community, that only the man or the lineage deserving punishment should suffer it. The rituals involved are therefore highly systematic.

In northern Lugbara territory, as a preliminary to the rites for detecting the droughtmaker, the ritual head consults with his special appointees on the prevailing drought. Sometimes a man who discovers the droughtmaking object in his brother's grain store or house reports that brother to the ritual head. In this case the appointees have no part to play.

One rite for finding out the troublemaker is the *chickenstone oracle (buro)*. The northern Lugbara use several chickens and ordinary stones for this oracle. First a number of related lineages are collected at the ritual head's home. Then a number of ordinary pieces of stone are arranged in a circular fashion, each piece representing one of the lineages. Chickens are brought to the ritual scene, the number of which birds does not correspond to that of the lineages. Every lineage elder gathered at the ritual head's knows for certain which piece represents him. At the centre of the circle a wooden peg is erected, to which each chicken is tied, and is knifed to make sure that it dies inside the circle. It staggers round and round in agony and dies. The place and moment of its death is of the greatest importance. The chicken should die in, or very near, one of the representative stones. The lineage represented by the stone is thus held responsible for the drought. The rite is repeated exactly as before, but using the second chicken. If the second chicken dies at more or less the same place, this becomes the second piece of evidence

to validate the responsibility of the particular lineage for the present trouble. The rite is repeated again, and yet again. After this inter-lineage rite, the guilty elder goes back to his home and repeats the rite at the level of his family cluster. The point obviously is to find out the particular guilty man in the guilty lineage. If the individual person accepts responsibility for the drought, a number of results occur. The lineage head may refuse to accept guilt. In this case, the lineages very often fight it out with one another. Even if he accepts the blame, an inter-lineage feud may be the alternative to the chickenstone oracle at the family level. He may, alternatively again, regard the result of the oracle as ghost vengeance rather than his own doing. In this case a communal lineage rite follows with its own special purpose.

A second rite is the *boiling medicine oracle*, (*Onda*). Lineage heads gather as for the chicken oracle. A fire is made. On it a number of very small sacred pots are placed empty. Each pot has its bottom intact, and it represents a particular lineage. After all the pots have become hot enough to enable cold water to boil, the ritual head pours cold pure spring water into the pots as quickly as he can. The boiling of water in a pot indicates that the lineage represented by the particular pot is innocent. But if the water in another pot will not boil, if, instead, it evaporates from the pot, the lineage which the pot represents is held guilty of making the prevailing drought. The clan ritual head repeats the rite as many times as he thinks fit.

A third method is the *communal meal oracle*. In this case, the clan head instructs women to prepare a sizeable millet dish similar to a thin maize meal. All the people suspected of causing drought are summoned to a communal meal prepared specially for them. The guilty person who eats this meal soon afterwards becomes sick with constipation, and after only a few days he dies. The innocent droughtmaker enjoys his meal freely. To save his own life, the guilty absents himself from such a ritual meal. Some know of the purpose only too late. Others on realising the idea behind the special meal, refuse to turn up. If such a one does turn up, he leaves the company of his colleagues just about to start the meal. He goes out without anyone else noticing, and accounts secretly for his misdeed.

### **The removal of drought**

One way to remove drought is to punish the guilty person or lineage by physical force. Inter-lineage fighting may follow the discovery of the guilty family cluster. Fighting follows only if the lineage refuse to admit their responsibility and if they will not account for their refusal. The individual is often in danger of losing his millet and beans, sheep and cattle; all these things are looted or destroyed by the community. The man himself is tied to a rope. Although he pleads, "Surely, children found this drought-making symbol and have been playing with it!" He is compelled to find a sheep all the same and to have it sacrificed during a drought-removing rite. There is no way out of his predicament. This is the individual punishment he suffers among the northern Lugbara. Among the Terego the kin of the droughtmaker in the family cluster punish him on the spot; they smear him with mud and pour the hot water of the boiling water oracle on him. The community also ransack his home and loot his property.

A ritual clan head who does not live up to his responsibility is punished in a similar way by his appointees on behalf of the community.

Apart from this physical punishment, ritual is used. One rite is the *drought crushing rite*. This rite applies only among the northern Lugbara, (Aringa). The man blamed for causing the drought gives two male sheep to the clan ritual head. The head asks a man alien to the lineage to do the crushing. The alien takes one of the sheep down to a stream. He is given the stone, the symbol of the droughtmaking power, to take with him. Accompanied by a few observers appointed by the clan head, the alien reaches the stream. He collects the leaves and rope of a certain strong wild stem which is normally used in tying the big twigs to form a wall. He wraps the dangerous stone in the leaves and ties everything into a bundle with the stem of the plant. He collects two flat, ordinary stones, and literally crushes the dangerous stone in between the ordinary stones, until the whole thing becomes powder. The man throws everything into the stream. In some places the alien throws himself into the water also. In this case, he must jump up and down in the water four times. As the alien throws the dangerous power into the water, his instructor orders that other observers make a big fire for burning the hair on the sheep skin. When the hair of the sheep has been thus removed, the alien roasts and eats the stomach and intestines of the carcass. He must offer some of this at the stream before eating the remainder of the intestines himself. All the meat and intestines and stomach must be eaten without salt, otherwise drought will continue. The guilty droughtmaker has no part to play in this rite: only the alien has the right to eat the ritual meat and to carry out the drought-removing rite. After he has eaten the roast stomach and intestines, the alien takes home the rest of the ritual meat. While the alien is thus occupied with destroying the drought together with the symbol of drought, a communal meal is organised at the home of the clan head. Under the supervision of one man, a number of men appointed by the clan head will have gone round from home to home to collect foodstuffs like millet or sorghum or cassava flour, simsim or ground nuts and beans. Next day when the alien is crushing the stone, these are cooked into a dish sufficient for large numbers of people to eat. While the lineage guilty of causing the drought eats the communal meal, the clan head and his subordinates make lengthy speeches.

The drought-crushing rite and the communal meal thus constitute the first mystical method of removing drought. It is interesting to note in passing that the crushing rite is carried out only among the northern Lugbara, among the central Lugbara the special stone is not crushed but other rites are performed. Alternatively, the droughtmaker simply returns the stone to the sacred hillock where he at first deliberately sought to own it.

A second main mystical rite is performed instead of the crushing rite in some areas. This second rite is a *formal sacrifice* of a male sheep or goat or beer at the external lineage shrine. The formal sacrifice serves a treble purpose: to 'cleanse the territory,' to remove drought and to make rain. The purposes are closely related but distinguishable. The ritual lineage head and his senior advisers take part in this rite. A sheep, or in places, a goat, is the sacrificial animal. In yet other places foodstuffs like those used for a communal meal are used instead of an animal. The central Lugbara make the actual sacrifice on the sacred hill. In the case of a sacrifice rite involving an animal, the lineage head and his seniors are the only people in the community eligible for participation: no women or young men or children can take part. The elders eat all the meat at the external lineage shrine. During the sacrifice which is the centre of the ritual, the ritual head says,

"I have eaten this my ram.  
If there is rain in it,  
Let it come down."

The ritual head makes this appeal very simply, without ceremony, without so much as holding the ritual meat or thick millet meal in his hand. This is among the northern Lugbara. But the central Lugbara use a certain drought-resistant plant, whose leaves have thorny edges, in addition to mud from the stream, for removing drought. These are ritually used during a sacrifice similar to that in northern Lugbara.

The use of an animal in this ritual is worth further examination. Middleton points out that amongst the Nuer, Evans-Pritchard regarded the animal as a surrogate for man. He elaborates this point with reference to the Lugbara: "Lugbara have never suggested to me that the sacrificial victim is in any way a substitute for man. But there is one rite in which substitution is implied. In Omugo, in east-central Lugbara, rainmaking rites were performed on a small hill called Ili, to the northwest of Mt. Eti, the mountain on which the hero ancestor, Dribidu is buried. Until the 1930s the rites on Ili involved human sacrifice".<sup>5</sup> The present writer did not learn of any pre-colonial rites involving human sacrifice in those places studied in detail, in particular Aringa, Terego (Katrini) and Ayivu. It would seem therefore that Middleton's record of the ram being used in place of human sacrifice can only have applied to Terego (Omugo).

A third major method of removing drought is the direct *appeal to the living-dead for rain*. This is the job of the ritual clan, one of whom provided the following example.

A chief of Ayivu (Obitre) who had been a chief by the administration invited the ritual head (Awidule Odrubo) to visit him. After he had entertained the clan head to a sumptuous meal and drink, the government chief said to the clan head, "Father, there is much distress in the land now. I beg you to go for us and present our petition regarding the prevailing trouble to Anyafiyo and Avuva" The chief gave him thirty shillings adding, "Only if you petition unsuccessfully should you give up. I wish it were possible for me

to be heard! Anyway, go and try'. So Awidule and the chiefs' askari set out for the external lineage shrine. When they reached a certain sacred stream called Amarua, Awidule collected a cluster of leaves on a branch of a wild fig tree. He dipped this cluster in muddy water at the head of Amarua and brought it carefully up to the shrine about 300 yards away from the stream. Near the shrine he warned the askari to be prepared to run for shelter from the rain which would soon follow the ritual that he was about to engage in. Then he recited in a most poetic way the genealogy associated with this shrine, as he asked for rain. He said,

"Ah! we are Kakwa,  
We are Idialelea  
Marrying a Kakwa daughter:  
Dukuni's daughter,  
Married by Ibi.  
Kirinya was born with Ibi.  
Ibi married her and begat  
Kirijo and Kirinya.  
They begat Ndrimva  
Ndrimva begat Cakacaka,  
Cakacaka begat Lilibe, buried

Kijomoro and Lamila.  
 Lilibe begat Ava, buried  
 between Micu and Mbaraka.  
 Ava begat Jilimbe, buried  
 In Adumi.  
 Jilimbe begat grandpa Drazini  
 There at Barajia  
 Drazini begat Wani.  
 Wani begat Lea  
 And then—I was born!  
 We beg you, give immediately,  
 The rain we request of you!

After this the ritual head shook the muddy sacred leaves vigorously in the air. As a result the drought was terminated immediately.

In this illustration there is no doubt at all that the living-dead have power over rain, but it is not clear whether they have power to make drought too. One cannot draw any logical conclusions. Middleton's accounts do not quite fit into this picture. A rainmaker, at least Awidule, does not know "the words of God".<sup>6</sup> Rather, he knows the words of the living-dead which he inherited. The genealogy recited by Awidule indicates that the rainmaker's power is inherited from the living-dead and does not come directly from God.<sup>7</sup> The living-dead may obtain that power directly from God, but the power that reaches the living ritual head (rainmaker) is transmitted by the living-dead. Middleton is right in stating that "each tribe has its rainmaker-chief. He is the elder of a genealogically senior lineage and possesses rainmaking powers inherited from the founder of the sub-clan which provides the core of the tribe".<sup>8</sup> He limits this statement, however, only to the northern Lugbara (the Aringa), whereas the statement applies as much to the central Lugbara clans or sub-clans. Hence Middleton's valid reference to Cakida in Maraca (western central Lugbara) who, "being rainmaker, he was said to be above all sectional interests."<sup>9</sup> Again, Awidule's case shows that the central Lugbara also have rainmakers who inherit power through genealogical seniority.

### **The seasonal incidence of ritual**

In what are now termed November, December, January, February and part of March, no droughtmaker wastes his time punishing the man who accuses him of thieving or poisoning. As one informant retorted, "Now that Adroa has blocked the sky, such that it just cannot rain, who dares go against him to act the contrary"? The dry season is the direct responsibility of Adroa (the High God). Another informant told me, however, that in northern Lugbara (Aringa), usually the ritual clan head, discerning the times, cleanses the territory in preparation for the rainy season (from mid-March onwards), or just after harvest. All that happens is that the head instructs that food-stuffs be collected from every home. These are prepared into a sumptuous meal for the whole community to eat. During the meal, the elders make long speeches (*adi*) about the history and the present condition of the land. This is said to enable them to appeal to droughtmakers indirectly: they should not cause distress, they should realise that children should have enough to eat so that they can grow and thus the lineage can prosper. If droughtmakers co-operate, then the rains soon follow the communal meal at the expected time. If a troublemaker does not heed the appeal the new wet season is certain to start badly.

After a drought-removing ceremony a heavy downpour is expected. That is why Awidule warned the chief's askari to be prepared to run for shelter. After he had finished his genealogical recital and waved the fig branch a thunder storm occurred immediately. Sometimes if these rites are unsuccessful, the clan blames other clans. This leads to inter-lineage feuds, in which many people may die.

It may also happen that the rains go on too long. When this happens in northern Lugbara territory, a sacred twig which has been oiled along before, is placed before a burning fire to dry. The drying has the mystical effect of making the rain subside and eventually stop. The twig has to be turned round and round breadth-wise until it is completely dry. This is a rite performed only by the senior clan ritual head. Another method is to turn a sacred pot of water at the external lineage shrine sideways. The water collects from the overwhelming rainfall; some of it runs out of the pot as the pot is tilted. This also is said to reduce the fall of rain. A third method is the method of verbal petition to the living-dead. Precise details of this are unclear. Maybe a genealogical poem is recited by the ritual head. The ritual head makes the verbal petition at his home; he does not have to go to the external lineage shrine, because the living dead can listen to him as much at his home as at the shrine. In Terego it is believed that rain stops by itself, that it does not require human petitioning or an offering by man to the living-dead or to Adroa.

Most of the people I visited say that the power of droughtmaking is not hereditary in ordinary cases. A person who is compelled by circumstances to become a droughtmaker through the possession of special piece of stone does not pass this stone on to his son when he dies. Awidule's case illustrates that the ritual head has power over drought, as much as the ordinary man who wants his millet to last longer than his neighbours. But Awidule's case also shows that the ritual head alone can pass his power on to his eldest son; hence the genealogy during his petition for rain at the chief's request. The question of rainmaking applies only to the ritual head. He alone has power over rain, that is why the community appeal to him for the removal of drought and so for the making of rain. That is why also he is responsible for most of the rainmaking rites at his home compound. The ritual head, therefore, is the only member of the community who passes his drought and rainmaking power on to the first born of his first or most loved wife.

Among the Lugbara, rainmaking is impossible to understand if it is isolated from droughtmaking. The causes of drought are much more important than the way in which rain is actually made. The causes of drought, which imply the invisible rites involved, are as important as rainmaking, whose rites can be seen by those allowed to take part in the rituals. This is to say that rain should fall as the basic means of the community's prosperity and welfare. This must be the case in an agricultural society like the Lugbara who depend entirely on crops and animals for their daily living. It can only be expected, therefore, that while the ordinary droughtmaker is hated by every member of the community, the rainmaker, partly by virtue of his status as clan head but mainly because of his responsibility as rainmaker, is the most respected of all the lineage or clan. The clan ritual head, Awidule, is a good living example of the respect paid to the rainmaker in his double role. When he was an active clan head no bull was slaughtered for a communal meal or for cleansing the territory or for other sacrifices to the living dead unless he was present. If he was dissatisfied with the fatness of the bull about to be slaughtered that particular bull was not knifed. On the other hand, he would show his approval of a diff-

erent bull by getting the bull to urinate and washing his mouth with the urine. Middleton is right in submitting of the Lugbara that "the tribe has no single head with authority".<sup>10</sup> But his next statement that "there may be a rainmaker in a tribe but he has only sporadic ritual authority over its members" is not borne out by the circumstances portrayed in this essay. In most places the rainmaker is both general ritual head and clan senior. As such, he has power as much over the mere droughtmaker as over ordinary members of his community in cases of sickness, ghost invocation and cleansing the land.<sup>10</sup>

From the point of view of the lineage community or communities, the part played secretly by the droughtmaker is obviously negative or destructive and worthy of the man's death. But in no place is he ever killed; only his property is destroyed. He contrasts sharply with the rainmaker who acts as the medium of blessing to the communities. Through these two men drought-making and rainmaking are the two most significant single rites among the Lugbara, because they concern whole lineages instead of only single families.

#### Acknowledgements.

The writer obtained oral evidence for the basis of this essay from Awidule Odrobua, a ritual head living near Arua at Mvara, and Arense Ezekeli a former ritual head living near Arua at Nyovua but he is now quite old and his memory is not too certain. Other informants as ritual heads included Musa Kana of Nyori, Aringa; Sila Okujo of Odravu, Aringa; Apangu Anderia also of Odravu; Ojotre Tito of Odravu and Lika of Anyangba, Terego. The author is grateful to all the above for their assistance. This article is adapted from an earlier draft which appeared in *Dini na Mila*, 5, May 1967, and is reproduced with the kind permission of the editors of that journal.

#### NOTES

1. Middleton, J. *Lugbara religion*, London, 1960, especially references to rain-groves, rain-makers and rainmaking.
2. This reference to the parts of the stone as 'nostrils' is because people in parts of Lugbara-land believe that the droughtmaking power comes into the physical world through these fingers as breath comes out through the nostrils of a human being.
3. Middleton, *op. cit.*, pp. 11, 13 and 29.
4. i.e. to implore him to prevent A's death by accepting the admission of guilt made by the representatives of the wrong-doer.
5. Middleton, *op. cit.*, p. 100
6. *loc. cit.*, p. 207.
7. *loc. cit.*, pp. 252 and 256. Though God is the ultimate source of all power and moral order, though he also associates himself with rain, this association becomes felt only through the rainmakers, because it is to them that he delegates his power of control over rain.
8. *loc. cit.*, p. 128.
9. *loc. cit.*, p. 197.
10. *loc. cit.*, p. 7.

## THE SITING AND RELATIVE IMPORTANCE OF THE FISH LANDINGS OF LAKE ALBERT

By D. A. CADWALLADR AND J. STONEMAN

Fish production in Uganda is currently a major industry, employing approximately 20,000 people, of whom 5,000 are employed in the distributive side of the trade.<sup>1</sup> The total production in 1964 was estimated as 71,000 tons, which has a value of £3 million at the lake shore, and a retail value of £4½ million.

Lake Albert and the Albert Nile, representing 10.1% of the total surface area of 1,385 square miles of open water and swamp in Uganda, contributed 14.1% of the total annual catch in 1964. Production of the lake and river in that year was valued at £209,000 at the landings. Until 1961 a large proportion of the catch was exported to the more accessible markets of high demand in the Republic of the Congo, such as Kisangani (formerly Stanleyville). Exports started decreasing in that year until they ceased in 1964, due mainly to the political and economic instability which prevailed in the Congo at that time. Exports of dried salted fish commenced once more in 1966, and will in time provide important foreign earnings for the country. The loss of the Congo market at the time did not have any serious adverse effect on production from the lake, as an increase in home consumption during these years compensated the fishermen for the lack of exports.

Cadwalladr and Stoneman have reviewed the development of the fisheries of Lake Albert from 1923<sup>2</sup>. They showed that the advancement of the fisheries from a subsistence level to a commercial one since this time, was related to, and dependent on, improvements in the type of gear and canoes, and an increase in the number of canoes and outboard engines in use. Improved marketing facilities and better road communications, particularly since 1957, were also shown to have contributed to the rate of development of the fisheries.

The present paper discusses the siting and organisation of the fishing villages and landings of the present time, in relation to the hydrography of the lake, and the topography of the Lake Albert region. It is shown how the villages have in turn been affected by the development of fish marketing, and economic pressure which have arisen since they were originally sited. The siting of fishing villages and ports in other parts of the world is governed just as firmly by the relevant factors as in these areas. The particular pressure and factors which have governed the development of the Lake Albert fisheries to their present state, are of interest and possible value in the development of unexploited fisheries in other lakes of similar nature in East Africa, such as Lake Rudolph.

### Fish production and hydrography

Holden presented evidence from experimental fishing and echo-sounding to show that the most abundant species landed in the commercial catches, *Alestes baremose*, was limited in its distribution to water of less than 20 m. depth.<sup>3</sup> This is currently the predominating factor in the extent and intensity of the fishing effort in the various parts of the lake, as *A. baremose* formed 81.3% and 78.3% of the total annual catch in 1964 and 1965 respectively.<sup>4</sup> In a description of the state of the fisheries in 1928, Worthington showed that fishing communities were established only in places where seining was possible.<sup>5</sup> These were areas with sheltered, sandy beaches, off shallow waters and where there were few or no weeds to obstruct seining, and which are the sites of the major fishing villages of the present time.

Fig. 1 of the hydrography of the lake shows that the only extensive shallow areas of less than 20m. depth are found at the south end off the delta of the Semliki river, and off the Victoria Nile delta and exit of the Albert Nile in the north. The shallow water between these areas is restricted to a narrow zone north from the Nkusi river delta, and which extends a little further offshore from Butiaba and Wanseko (formerly Ndandamire). Holden showed that *Alestes baremose* was not abundant in this narrow zone north of Buhuka, and that the limited width of shallow water proved an effective barrier between the *A. baremose* stocks of the Semliki and Wanseko areas. Holden also noted from studies of the state of maturity of the gonads, that this species migrated into the Ntoroko area of the Semliki delta, and the Victoria Nile to spawn. He observed that the migration path into the Victoria Nile in July was followed by the fishermen. In February and July the catch of *A. baremose* at Wanseko, on the delta of the Victoria Nile, increases considerably, and this increase is presumably at a time when the fish are migrating into the river. In February, 1965 and 1966 large numbers of the species were observed running up the river as far as the Murchison Falls.

The two major shallow water areas today support the biggest fisheries, mainly for *A. baremose*, in the lake, the fishermen landing their catches at the two biggest landing of Ntoroko in the south and Wanseko in the north. A considerable amount of fish from the shallow water area in the north is also landed at several small villages along the shore from the Congo border to Panyigoro in West Nile.

Table 1 shows the disposition of canoes in relation to the two major shallow water areas in the north and south, and the narrow zone of shallow water between these two areas. In terms of total numbers of canoes fishing, the largest numbers operate out of the Kitara point area, Wanseko and the West Nile shore in the northern shallow waters. The total number of canoes fishing the southern shallow waters out of Buhuka, Ndaiga, Ntoroko and the swamp of the Semliki delta, is lower than the number fishing the narrow water zone out of the landings south of Kitara point and north of Buhuka. It has been estimated from daily catches of the different types of canoes that the planked canoe is 3-5 times more efficient than the dug-out. The efficiency of the planked canoes varies with the type of canoe, from the mostly un-powered Sesse and Congo-barque to the powered Kabalega type. In Table 1 the "dug-out equivalent" of the three areas has been calculated by multiplying the number of planked canoes by 3 and 5, and adding this number to the number of dug-outs. This shows that in terms of fishing intensity the southern shallow waters are more intensely fished than the narrow shallow water zone, despite the total number of canoes being lower.

**Table 1**  
*Dug-out Planked Total Dug-out equivalent*

Major shallow water:					
North .. ..	420	122	542	886-1030	
South .. ..	50	111	161	383- 405	
Narrow shallow water zone .. ..	139	43	182	268- 354	

Numbers of planked and dug-out canoes and the intensity of fishing in these areas by "dug-out equivalents"

The fishing intensity in the three areas is shown by the production figures of 1965, when 4,659 tons were landed in the Wanseko-Panyimur area, 4,000 tons from the south end of the lake, and the remaining 3,376 tons from the the narrow shallow water area and the length of the Albert Nile.

The large catches from the north and south areas were marketed mainly through Wanseko, Ntoroko and the West Nile shore. The formation and existence of these two most important villages is not only the result of their close proximity to the shallow water areas, but also of the influence of topography on the physical and social development of the region, governed by economic priorities in the past.

### Physiography

Lake Albert, a rift valley lake, is one of the smallest of the African great lakes, but it is by no means inconsiderable in its dimensions; it is over 100 miles long and 30 miles wide, and more than half of it lies within Uganda. The coast line varies from papyrus swamp (mainly in the south and a little between Butiaba and Wanseko), through low-lying desolate flats, (such as the Tonya/Kaiso, Semliki and Bugungu flats), to the rocky escarpment of the rift valley which falls 1,000 feet almost sheer into the water. If the wider part of the Albert Nile to Panyigoro is included in the lake proper the shore line north from the Congo border would represent a fourth physiographic area in this classification. This area consists of low-lying lake shore and highly vegetated (papyrus, *Phragmites*, etc.) river bank with very little sandy beach, with the land behind being relatively densely populated compared with the rest of the lake shore. The lengths of shore line occupied by these four physiographic types and the percentages of the total length of the Uganda shore line involved are given in Table 2. The part of the Murchison Falls National Park on the Albert Nile to a point opposite Wanyigoro, is also included in the table for completeness.

**Table 2**

Length and percentage of coast line and the number and percentage of canoes in use in each area.

	Miles of shore line	%	NO. OF CANOES		Total	%	Dug-out equivalent
			Planked	Dug-out			
Papyrus swamp ..	24	13.5	38	12	50	5.6	126- 202
Flats .. ..	83	47.0	183	305	488	55.1	854-1220
Rocky escarpment	44	24.8	—	—	—	—	—
Panyigoro Nile ..	16	8.0	55	292	347	39.3	457- 567
National Park ..	10	5.6	—	—	—	—	—

Table 3

Number and percentage of the total number of canoes in use at the villages on the flats in 1966.

Village	NUMBER OF CANOES		Total	%	Dug-out equivalent
	Planked	Dug-out			
Wanseko .. .. .	49	109	158	17.2	256-354
Butiaba area (north to Wanseko)	89	41	130	13.1	308-486
Kibiro .. .. .	10	2	12	2.5	32- 52
Tonya .. .. .	39	11	50	5.7	128-206
Kaiso .. .. .	20	7	27	3.1	67-107
Buhuka .. .. .	35	16	51	5.7	121-191
Ndaiga .. .. .	1	18	19	2.2	21- 23
Ntoroko .. .. .	2	39	41	4.7	45- 49

(i) *Papyrus swamp*.—The papyrus swamp physiographic area consists mainly of the large swamp in the vicinity of the Semliki river. Up to the end of 1953 it was thought that the Semliki delta was the sole breeding ground for the lake, and that any depletion of the stock of this area would lead to the deterioration of the fishing on the productive grounds to the north of Butiaba. This attitude was encouraged by the results of a survey of the area in June, 1952 by Lowe who concluded that any fishing should be restricted to 8 inch gill nets for *Citharus citharus* (*mpio*) and further recommended that the area should not be re-opened until more was known of the biology of the species.<sup>6</sup> Prior to 1923, the Muzizi-Wasa area and the Ndaiga-Kaiso shoreline were fairly well populated. The steamer *Samuel Baker* called regularly at Ntoroko, which was connected by the "Ntoroko Road" (a well-established track) to Fort Portal.

Following a sleeping sickness epidemic after 1923, the inhabitants of these areas were moved away by government and resettled elsewhere. This led to the area between the Musisi and Semliki rivers being closed to fishing. The Belgian authorities also held similar views at the time, and declared two small areas west of the Semliki closed to fishing. It was also thought at the time that it was undesirable to open up the waters to fishing, as the influx of fishermen into the area would lead to large scale poaching on the unsupervised, game-rich Semliki flats. As a result of this, and the sleeping sickness prevalent on the southwestern shore of the lake, fishing was actively discouraged in the south and no fishermen were licenced to operate in the area. Fishing did take place, however, from a small camp at Ndaiga, (where, mainly for political reasons, fishing was permitted to satisfy the demand from Buganda for an outlet on Lake Albert; the landing and its environs were cleared of bush and tall grass by the district administration and a Medical Department Sleeping Sickness Inspector kept a daily check on fishermen) and a few isolated camps in Toro waters, with the one at Rwengara being connected to the Bwamba road by a track. Fishing had been going on for some time from Kasenyi in the Congo, where Greeks were fishing the southern waters on a commercial scale with motorised, steel launches. There were many reports at the time, and particularly in early 1952, that poaching from the Congo was on the increase in Uganda waters between the Musisi and Semliki rivers.

In 1953 these objections were no longer valid as new evidence, and an



examination of the fisheries statistics of the time, indicated that the fish stocks at the south and north ends of the lake were distinct and did not share the Semliki delta as a common breeding ground. This was substantiated much later by Holden who showed from the results of experimental fishing that the northern stocks of *Alestes baremose* and *Hydrocynus forskahlii* were separate to those of the south, and used the Victoria and Albert Niles as breeding grounds.<sup>3</sup> Also in 1953 a Game Department office was opened in Fort Portal and poaching on the Semliki flats was brought under closer control. With additional pressure from the Toro Government, it was decided to re-open the southern waters to fishing in 1954. This was facilitated by an increase in field staff of the Fisheries Division who were posted to control the development of the southern landings. In January, 1955 it was noted that full scale development was occurring at the small landings, particularly at Rwengara. Rwengara village was first established in September 1954 by Batoro fishermen from Lakes George and Edward, fishing under the titles of the Rwengara Fishing Association and the Kasoga Fishing Company. The development of the village was preceded by the building of a road from Rwebisengo, but as this latter village was itself on the flats the connection with the Fort Portal—Bundibugyo road was passable only in the dry season and then with difficulty. The village was not ideally situated as canoes had to be dragged over 100 yards of mud and papyrus to reach the landing. Owing to this, and the distance involved in getting the fish to the main markets outside Bwamba and in getting supplies in, permanent settlement did not occur on the site. Most of the fishermen moved to Ntoroko when it was established in 1956.

There are several camps at the present time on the low lying ground in the swamp, which are sometimes up to a mile from open water along the swamp channels. Despite the temporary nature of the camps, the number of canoes fishing the area is higher than that fishing the same area out of Ntoroko (Tables 2 and 3). The catch is prepared and salted in the camps, and although a little finds its way through the swamp, the major part is now taken to Ntoroko for distribution.

(ii) *Flats*.—The major part of the lake is bounded by flats (Table 2), which are raised lake-bed deposits, accounting for the flat nature of the terrain and the sandy sedimentary soil. The flats are the only area to provide sandy beaches around the lake shore, and the sandy spits, a distinctive feature of Lake Albert, are found only off the flats. Worthington has discussed the formation of these spits in relation to direction of water movement and depth of water.<sup>5</sup> The current major fishing effort, in terms of numbers of canoes, takes place off these areas (Tables 2 and 3).

The flats vary in size; for example at Bugungu the low lying land is 20 miles wide and extends from the Nile to beyond Butiaba. The Tonya-Kaiso flats, 5 miles wide and with a lake frontage of 20 miles, were little known or visited until 1957. Both villages were small and difficult of access, and both are near the northern end of the flat. After 1923 and the movement away of population, the large southern region of this flat was left undisturbed and unvisited except by a few fishermen. With the gradual neglect of sleeping sickness restrictions, and with the advent of motorised canoes, camps and villages were again established and old village sites, the names still remembered, are now used again. This re-opening of the southern Kaiso flats was encouraged by the frequent coasting trips of motorised Kabalega canoes, moving from Bugungu to Ntoroko after the re-opening of that village in 1954-55. It is interesting to note that before the days of motors, fishermen and their families would pole

and paddle their dug-out canoes from Butiaba to Ndaiga in 2-3 weeks. The powered canoes of today make the same journey in 10-12 hours.

A review of the Lake Albert fisheries has shown that seine netting was the most important method of fishing up to the early 1950's<sup>2</sup>. The presence or absence of sandy beaches suitable for seining would, therefore, have been an important consideration in the siting of villages from which beach seines were used. This aspect of the distribution of the major, but small scale fishing communities using beach seines was noted by Worthington at Panyamur (Panyimur), Bugungu (Ndandamire, now Wanseko) and Butiaba.<sup>5</sup> He noted that the fishing communities established near the spits of Tonya, Kaiso and Buhuka used long lines rather than seine nets, and that the important feature in their siting was the more productive fisheries of the shallower parts of the bays formed by the spits.

Whilst the flats are the only areas to provide sandy beaches, the beaches are never more than a few yards in width, sometimes fringed with vegetation, mainly *Phragmites*, and are nearly all exposed to the rough conditions often encountered on the lake. Nearly all present day landings are situated on or near the lagoons developed on the leeward side of the sandy, hook-shaped spits. The spits provide the large areas of sandy beaches, especially at their distal ends, suitable for seining. Whilst the spits are less important for seining, since the decline in its importance, they still provide convenient open areas for the sorting and laying out of the gill nets to dry. The lagoons also afford the fishermen protection for their canoes from rough weather, often met with on the more exposed beaches.

Whilst the location of the spits off the flats has governed the siting of the major fishing villages by providing focal points for settlement, the rate and extent of the development of the individual villages has differed considerably. Major factors have been the abundance of fish in the vicinity of the spits, and topographical features governing the social and physical development of the area by the government.

As described earlier, the shallow water zone off the Tonya/Kaiso flats is restricted in width, and does not support a large *Alestes baremose* population. Although the number of canoes fishing from these flats is greater than out of Ntoroko, the number of planked canoes is low, making the "dug-out equivalent" lower than for Ntoroko (Table 3). The development of any major fishing community on the flats has also been precluded by the absence of a road down the steep escarpment, the building of which has never been given priority in the development of the region. In addition to what is consumed locally on the flats a little of the catch is carried on foot up the escarpment to Biseruka for limited distribution. The small amount of fish in excess of local demand and what can be carried easily up the escarpment is taken out by canoe to Wanseko and Ntoroko.

A similar situation exists at Buhuka on the smaller flats to the south of, but not connected to the Tonya/Kaiso flats. These are five miles long and one mile wide at the most. The fishing off Buhuka is more productive, and a larger quantity of fish is taken out to Ntoroko after deducting what is consumed locally or carried up the escarpment to Kyangwali. Table 3 shows that the fishing intensity by "dug-out equivalent" is also higher off the Buhuka flats. The village of Buhuka is situated on the flat a mile to the south of the spit. The area around the spit is used by fishermen from the village, and with the rise in importance of Ntoroko, large fishing camps were established on the spit by fishermen from Wanseko and Panyimur. Buhuka village has been

identified with Vacovia where Baker first discovered Lake Albert in 18647. The area has been inhabited for a long period, as is evident from the mounds of pottery fragments at various sites on the flats.

Kibiro, on the narrow, southern extension of the Bugungu flats, is now isolated from the road system of the flats by the Waki river which has been unbridged since about 1929. The village is exceptional in that it is not situated on a spit, but it owes its presence to the long-established settlement where salt has been extracted from high salt bearing sediments in the vicinity. The foreshore at the village gets slight protection from rough water conditions created by the prevailing southerly winds in the area by the large Tonya spit 15 miles to the south. A little of the catch is carried by canoe to Wanseko, but the large part is either consumed locally or carried up the escarpment to Kigirobya. As with Tonya and Kaiso, similar factors of unproductive fishing grounds and poor communications have restricted the development of the village.

Ndaiga, similar to Kibiro, is situated on the north of the narrow extension of the eastern Semliki flats, and is isolated from them by the wide, extensive estuary of the Musisi river which starts at the foot of the escarpment. The shallow waters of Ndaiga bay and the waters off the flats are productive, and a large quantity of fish is taken to Ntoroko after allowing for what is consumed locally and carried up the escarpment to Muhorro.

Until 1956 the productive waters off the Semliki were fished from Uganda only from the temporary fishing camps in the papyrus swamp described earlier, and from Rwengara. Owing to the unsatisfactory site of Rwengara for a major fishing village, continuous pressure was exerted by the fishermen to move to nearby Ntoroko in the Toro Game Reserve on the opposite side of the Wasa estuary. This move was at first officially resisted, as the capital invested by government and fishermen alike at Rwengara would have been lost, but eventually settlement was permitted at Ntoroko. In 1956 a  $1\frac{1}{2}$  mile strip of land at the tip of the Ntoroko peninsula, and which included the sandy spit on the northwestern shore, was excised from the Toro Game Reserve. Settlement occurred at first on the higher ground away from the spit by Batoro, but later settlement by fishermen from Wanseko occurred on and behind the spit.

The Ntoroko peninsula consists of a relatively high, dry southerly extension of the Semliki flats between the estuaries of the Muzizi and Wasa rivers. Although there was no road to the village when it was established, the site immediately attracted fishermen as a station to fish the Semliki waters, or as a base for their fishing expeditions from the temporary camps in the swamp. Most of the catch of this time was sold to Greek wholesale buyers visiting the village in their steel launches from Kasenyi in the Congo, but a little was taken out by way of the tracks to Bwamba. A road was built in 1961 connecting the village with the Bundibugyo-Fort Portal road, at a point 20 miles from the latter. No fish has been exported to the Congo through Kasenyi since 1962 and most of the catch has been marketed in Bwamba since that time. In the last two years at times of high demand, fish has been taken by canoe or road to West Nile for sale in and around Arua. Since the beginning of 1966 fish has also been exported to the Congo by road from the village.

The opening of the Ntoroko road in 1961 and the considerable demand for fish which followed led to the establishment of many more fishing camps between Ntoroko and Buhuka, and a greater fishing intensity from the established landings in the area. The pressure on landing and camp sites became such that many camps were set up on unsuitable areas of shoreline.

The Bugungu flats have been made accessible from the escarpment by a

motorable road, first built in 1914 to Bukumi. Fishing was never productive in the area due to the narrow, shallow water zone, and catches went mostly to supply local demand. There are currently several permanent fishing camps on the flats to the north of Butiaba, the fishermen exploiting the shallow waters which become more extensive as the 20m. depth contour moves away from the shore to the north. The present village of Wanseko, ideally situated on the delta of the Victoria Nile to exploit the productive waters of the north end, although recently founded has always been the site of a fishing community. The village as it is known today, although it moved to its present site after flooding of the old site a mile to the south with the rise in lake level in 1962, stems from the marketing development which occurred in the late 1940's. Before this time most of the Wanseko catch was consumed locally, as there were no communications across the Bugungu flats to the rest of the country. In the late 1940's Greek wholesale buyers started operating at Mahagi Port in the Congo and along the West Nile shore and later at Butiaba in response to the high demand for fish in the Congo at that time. The fishing intensity in the area increased as a consequence, with the majority of the catch being taken by canoe across to Mahagi Port or West Nile for marketing in the Congo. The catch from the landings south of Wanseko was taken either across the lake by the shorter route from the village, or carried by canoe to Butiaba or Kitara point for transshipment on the lake steamer for export to the Congo. A road connecting the village with Butiaba was built in 1956, and a track forced through from the village to the Masindi-Paraa road which was built in late 1955. With the improvement in the roads in the other parts of the country at this time, distribution from the landings became easier, and more of the catch was consumed within Uganda. The state of the communications and the effect on internal fish marketing before this time was noted in the Uganda Game and Fisheries Department Annual Report for 1952. It was reported that despite the demand for fish in Acholi in 1952 very little fish actually reached the district due to the poor road communications and high cost of transport.<sup>8</sup> An increase in demand in West Nile after 1956, led to a greater traffic of canoes carrying fish across to the opposite side. Nearly all the current catch along the eastern shore destined for marketing in Acholi and West Nile passes through Wanseko. This has led to the village becoming the centre of the fishing industry at the north end of the lake, and the most important village in the distribution of retail and wholesale commodities for the fishing communities.

The construction of the Wanseko, Ntoroko and the Masindi to Paraa roads in 1956 facilitated the distribution of fish from the landings into the country behind. As well as satisfying the demand of that time, these roads helped to create new internal markets and to expand existing ones. It has been shown that whilst the maximum weight of fish was exported in 1959, the highest proportion of the catch was exported in 1956<sup>2</sup>. This indicates that internal consumption increased at a greater rate than did exports in the period 1956 to 1959, when exports started decreasing in quantity. The increase in internal consumption has continued up to the present time, and has now fully compensated for the loss of the export market.

(iii) *Rocky escarpment*.—The escarpment plunges directly into the water in places, but for most of its length a rocky shelf, only a few feet wide, has developed on which temporary camps are sometimes found. The fishing along the bottom of the escarpment south of Buhuka is more productive than to the north, and the waters are exploited from small camps on the flatter ground where the escarpment moves away from the lake in the south, and also from Ndaiga.

There are also temporary fishing camps in the area near the delta of the Nkusi river, which extends a half mile into the lake, where the river falls over the escarpment.

(iv) *Congo border to Panyigoro*.—Whereas, elsewhere on the lake the sandy spits have provided convenient sites for the establishment of fishing villages, no such spits occur on the West Nile shore. The whole of the West Nile shore, is sheltered from the prevailing southerly winds. There is no surf to damage the canoes and the whole shoreline is normally safe to land and embark from at all periods. This, and the fact that the Pakwach-Panyimur road makes communication along the shore easy, as it is never more than a half mile from the water, has led to a general fishing from the shore rather than the concentration into villages. Table 1 shows that this stretch of shoreline is the most intensely fished area of the lake. The canoes fish out of several small settlements, with the following villages acting as focal points for landing the catch:— Dei, Kayonga, Ganda, Munyuwa, Nyakagei, Jakwoki, Boro and Panyigoro. Nyakagei and Panyigoro with 64 and 97 canoes respectively are the biggest landing points, but unlike the other villages of similar size on the lake, they owe their status to being conveniently situated as general trading centres for the immediate hinterland.

(v) *National Park*.—In the early years of Uganda's history, prior to 1902, this area was heavily settled, and in fact the headquarters of the then Gulu District were at Koba (now Pakoba Ranger Post on the Albert Nile). The administrative headquarters were moved from Pakoba to Gulu in 1902 and later the whole of the east bank of the Nile from Lake Albert northwards to Liri was cleared of population, and the inhabitants moved into Acholi District as a result of sleeping sickness epidemics. When the population moved out the opportunity was taken to gazette the area as a game reserve and later, part of it as the Murchison Falls Park. It may be noted that there is currently pressure from the Acholi population to be permitted to return to their ancestral fishing grounds along the east bank of the Nile.

### **Congo Waters**

The Congo shore line differs from that of Uganda in that it is dominated by an escarpment, which rises higher than on the Uganda side. The Congo escarpment, whilst higher, is less abrupt, and the vegetation on it more open. Population pressure would seem to be greater than in Uganda and this has led to many small permanent settlements often 300 to 400 feet up the side of the escarpment. These are fishing communities where canoes (all dug-outs) are hauled out on small rocky beaches and coves. Fishing pressure on this stretch of shore is high, the number of nets set in the narrow, shallow coastal belt being comparable to the density off Wanseko. Much of the production is collected by Greek launches from Kasenyi and Ndaru. The Congo African fishery remains primitive, from dug-out canoes, and never had the officially controlled expansion and development of the Ugandan fisheries. Development was instead by the introduction of Greek fishing companies in the early 1920's with a considerable amount of capital investment which set up fishing stations along the western Semliki flats around Kasenyi. Larger boats and stone faced piers did not demand the sheltered spits of the Uganda fishing villages. High exploitation of the Semliki delta area was possible from Kasenyi with the large powered craft in use, and by methods such as large seine nets being hauled by men working up to their necks in shallow water, and later hauling the nets up on to flat barges. The more benevolent labour regulations of Uganda would

not have permitted this kind of use of labour. Up until 1963 all Uganda exports from the south end of the lake were exported through Kasenyi, which is connected with the rest of the country with a road up the escarpment. The north-western extension of the Semliki flats, reaching 10 miles beyond Kasenyi, resembles the Kaiso—Tonya area, and is similarly rich in game. The only fishing village of importance between Kasenyi and Mahagi Port is Ndaró. This fish landing was set up by a Greek operator, and is sheltered from the prevailing winds from the south by a rudimentary spit, and is linked by road to Mahagi Town. Canoes fishing out of Mahagi Port, which connects with the rest of the country by an escarpment road, exploit the limited area of shallow water in the north in Congo waters.

### Structure of Villages

Many villages have been on or near their present sites long before the mid-nineteenth century. When a site is re-occupied after some time, or a new site used, however, the process of growth can be readily observed. It is probable that this currently observed process is essentially that followed in the earlier settlement of these villages.

The typical village starts life as a cluster of very temporary huts of beehive shape, thatched with grass. After a few months' occupation, these are replaced by mud and wattle buildings with a round or ridged roof. Prior to 1954 these were almost invariably thatched with grass, but during the decade after 1954 they were almost entirely re-roofed with corrugated iron. This wattle and daub, corrugated-iron roofed hut is the major construction now found in all the main villages.

Except for government and railway installations at Butiaba, the first permanent building of concrete block walls and cement foundations on the lake shore was a school built at Tonya in 1955. Since then one or two such buildings have been put up in some of the villages, but they are not favoured because of the essentially temporary nature of the villages and the working life of the fishermen. The very first buildings of a village are always on the light sandy soil immediately behind the beach, the easily drained nature of this making the method of sanitation and refuse disposal less offensive. As villages grow, the habitation extends further back from the foreshore on to less suitable, often marshy and swampy ground, and pits are dug to deal with refuse and sanitation in a very primitive manner. This leads to a completely haphazard arrangement of buildings and access tracks, often making it very difficult for lorries to reach the foreshore and the work area of the village. Here nets are mounted and dried, fish unloaded, processed and packed, canoes repaired, and all the activities of a fishing village carried out. The wealthier fishermen move first to the more substantial houses, further back from the insanitary beach, their porters still living close to the work in inferior huts. In time, bars, shops, brothels are built, while in Wanseko and Ntoroko petrol filling stations, motor repair shops and boat building yards are now established.

Attempts have been made recently by government to control the major villages. Approved plans have been drawn up for Wanseko and Ntoroko, and some clearance and re-building to approved standards commenced. Fish stores for rent, in permanent materials, have been built in some villages and Fisheries, Police and Medical staff are being posted in increasing numbers to control development.

With the increasing pace of production and development of the fisheries, the fishing villages must be much more strictly controlled than before and

new factors will have to be considered.

\* \* \* \* \*

It has been shown that the predominating factor in the extent and intensity of the current fisheries in the Uganda area of Lake Albert, is the distribution and abundance of *Alestes baremose*, which is the most important species in the commercial catches. The foregoing description of the fish landings shows that the development of the major fish landings of Ntoroko, Wanseko and the landings along the West Nile shore were dependent upon the influence of hydrography on the distribution and abundance of *A. baremose*, and to a large extent on the construction of roads as governed by topography and previous economic priorities.

Worthington in his report on a fishing survey of Lake Albert in 1928, describes the small scale fishing, mainly by seine nets and long lines, at Kaiso, Tonya, Butiaba and by the Bagungu tribe in the Wanseko area.<sup>5</sup> At that time no fish were exported to the Congo, and the small amount of fish caught annually was consumed locally. Exports to the Congo were first recorded on the small scale of 12 tons in 1938, continued at a relatively low level until 1940. After this time exports started increasing until 1956, when the maximum proportion of 70.4% of the total catch was exported. In 1940 it was estimated that the total catch was only 1,200 tons, and although records do not exist for the next twelve years, the increase in fishing intensity must have been small as the total was only 1,800 tons higher in 1953. After remaining stable between 1,000 and 2,000 tons from 1940, exports started increasing in 1955 when they were 2,745 tons, until they reached a maximum of 6,200 tons in 1959, the year before Congo attained independence. The increase in exports after 1955 was reflected in an increase in total catch at the time. A year after the roads to Ntoroko and Wanseko were constructed in 1956, there was a sharp rise from the 1956 catch of 7,766 to 10,343 tons the following year. The weight of exports actually fell between these two years, confirming that the increase in total catch was consumed internally, as a result of the new roads facilitating distribution within the country. The increase in catch which occurred after 1955 was due to an increase in the landings of *Alestes baremose* from the 477 tons of that year to 9,419 tons in 1965. Records show that gill netting had superseded seine netting in importance by 1953, and at about this time there was an increase in the number of canoes and outboard engines in use, as well as an improvement in the type of canoe. It was mainly the introduction of the nylon gill net which led to the better exploitation of *A. baremose*.<sup>2</sup>

With the increase in demand for fish in the early 1950's the fishermen turned to exploiting the productive shallow waters with gill nets. It was fortunate that the villages of Ntoroko and Wanseko, ideally situated to exploit these productive shallow waters, were also convenient sites from which to export the catch to Kasenyi and Mahagi Port respectively. This then led directly to an increase in exports at the time. The importance of these two sites from the above points of view led to the Game and Fisheries Department pressing for priority to be given to the construction of roads to the two villages, which was realised in 1956. The opening of these roads led to a rapid increase in internal marketing, which is shown in the records of total catch and percentage which is shown in the records of total catch and percentage exports.<sup>2</sup> The increased marketing through Ntoroko and Wanseko led also to the establishment of more small camps, and an increase in fishing intensity away from the two villages.

As described earlier, exports to the Congo ceased in 1965 after a rapid

decline from the maximum of 1959. As shown by the difference between the 13,350 tons landed in 1959 and the 10,042 tons landed in 1964, the decline in exports had a relatively small effect on the total catch. This was because internal consumption was increasing at the time. The slightly lower catch in recent years up to 1964 was due also to the result of the upheaval following the rise in lake level in 1962 when most of the villages had to be re-organised on new sites on higher ground. If exports to the Congo had not ceased in 1964, however, it is probable that the rise in catch by 1965 would have exceeded the actual catch of 12,032 tons. Exports commenced once again in 1966, and the total of 1,000 tons exported to the Congo was the main factor in the 1,000 tons increase in production between 1965 and the 13,000 tons of 1966.

The rise in total catch, initially in response to exports and then to home consumption from the early 1950's has also been the history of the rate of the development of the fish landings. This has led directly to the development of Wanseko and Ntoroko into the major villages which they are today. These two villages not only take the major part of the catch directly or during marketing, but are also the main distribution points for the necessary social and commercial commodities for the majority of the inhabitants of the lake shore.

Holden in his survey of the productivity of the lake, concluded that the annual sustainable yield (a.s.y.) of the exploitable stocks of *Alestes baremose* was 6,000 tons in the Uganda waters of the Wanseko area, and that the total a.s.y. of all species from both Uganda and Congo waters at the south end of the lake was 11,000 tons.<sup>3</sup> It is expected that the consumption of fish in the areas adjacent to the lake in Uganda will increase rapidly in the near future, with the development of the country as a whole at the present time. The catch of *A. baremose* in the Wanseko area in 1965 was approximately 3,400 tons, which is only 2,600 tons lower than the estimated 6,000 tons a.s.y. for the area. Similarly in the south end of the lake, if the Uganda waters are expected to yield two-thirds of Holden's figure of an a.s.y. of 11,000 tons then the 1965 production of approximately 4,000 tons is only a little over 3,000 tons below the expected a.s.y. The actual annual production of *A. baremose* in the north and of all species in the south attaining the expected a.s.y., should be anticipated to occur within the next six years at the present rate of development of the fisheries. The time taken may be even less if the Congo market flourishes once more and adds to the rate of expansion. Once this situation arises, rigid control of the fisheries will be essential if the exploitable stocks are to be conserved and the a.s.y. maintained. This cannot be over-emphasized in the case of *A. baremose*, which is exploited mainly on its spawning migrations. The control of the fisheries once this stage is reached will be a major enterprise on the part of the Fisheries Department staff, and will involve much labour and time and a great deal of co-operation from the fishermen. Various methods of control are available under present legislation, including placing restrictions on the number of canoes and/or nets in use. The method of control adopted will be of great importance, and will be decided at a high level where other factors concerning the fisheries will be taken into account. The degree of success of the method eventually adopted will be of value when considering the form of control to be applied to other fisheries in East Africa reaching the same stage.

Once the total catch attains the level of the a.s.y., there will be no further expansion of the fisheries as they are currently known, other than for more intensive fishing of species other than *A. baremose* in the north. A possibility of limited expansion exists in the potential exploitation of a variety of Nile perch

(*Lates niloticus macrophthalmus*), which has been shown to occur in the deeper waters of the lake.<sup>3</sup> Before this is done on a scale involving capital investment further research is required on the abundance and distribution of the species. In the event of the species being shown to be present in exploitable numbers further expansion will either have to be related to existing marketing facilities, or further road construction will be required down the escarpment to the Tonya-Kaiso flats which are in the centre of the deep water area. As marketing through Wanseko and Ntoroko is relatively well organised at the present time it would be sufficient to employ bigger vessels than those currently in use to carry the deep water catches to these villages. Operation of larger vessels would entail other requirements in efficient landing sites than those obtaining at present, and possibly only a few of the present sites could be utilised to provide bases for the larger vessels. This may already be seen in the contrast between the Congo and Uganda shoreline, where Greek operators using 45 feet steel launches have created a different type of landing to the characteristic ones of Uganda.

The a.s.y. of non-predatory species forming the lower elements of the food chain is potentially far higher than that for predatory species. In 1965 just over 11,000 tons of the total catch of 12,032 tons consisted of predatory species, mainly *Alestes baremose*, *Hydrocynus forskahlii* and *Lates niloticus albertianus*. The a.s.y. described above for *Alestes baremose* in the north and total species in the south are based on the current degree of exploitation of the various species. It is conceivable, therefore, that when these a.s.y.s are attained, a rational manipulation of the stock by a greater fishing effort upon non-predatory species, may increase the yield above that from current fishing practice.

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### NOTES

1. Uganda Fisheries Department, 1964 *Mimeo*.
2. Cadwalladr, D. A. and Stoneman J. *A review of the Fisheries of the Uganda waters of Lake Albert, East Africa, 1928-1965/66, with catch data mainly from 1953*. Entebbe, Government Printer, 1966, *E.A.F.F.R.O. Suppl. Pub.*
3. Holden, M. J., *Report on the Fisheries of Lake Albert*, Lowest Fisheries Laboratory, 1963, (*Mimeo*).
4. Annual Report for Lake Albert Region, 1964 and 1965. Masindi, Fisheries Office, (*Typescript*).
5. Worthington, E. B. *A Report of the Fishing survey of Lakes Albert and Kyoga*, London, Crown Agents, 1929.
6. Lowe, R. Lake Albert Safari (III), 12th-25th June, 1952 Masindi Fisheries Office, 1952, (*Typescript*).
7. Baker, S. W. *The Albert Nyanza*, 1866.
8. Uganda Game and Fisheries Department, Annual Report Entebbe, Government Printer, 1952, p. 60.

## AGRICULTURAL CHANGE AT NAMAKATA, BULEMEZI

By A. W. J. TODD

Namakata is a mutalla situated in the south of Bulemezi county in the Mengo District of Buganda. It is typical of much of the land in this area.<sup>1</sup> The first agricultural survey was carried out in September 1937 and June 1938<sup>2</sup>. It was resurveyed in May and September 1962<sup>3</sup>. The purpose of these mutalla surveys has been described by A. R. Dunbar<sup>4</sup>.

The position of the mutalla is 0° 35'N, 32° 23'E and is about 3,700 feet above sea level. The mutalla is about 2½ miles long and 1 mile wide at its widest point. The mutalla is at the southern end of a ridge running from north to south. There is one main motorable track running across the ridge. The track leads from the main Semuto-Matuga road through Maumo to the village of Namengo, where it joins the Kagembe-Kisito road. The mutalla is bounded on the east by the River Mayanjawenkawe, on the south by the River Danze (which forms the county boundary), and on the west by the River Lubumba. To the north it is bounded by the village of Bulimanyankya and for a short stretch by the Semuto-Matuga Road.

The soil has been classified as Mirambi Catena, the dominant soil type being yellow-red loam underlain by soft laterite<sup>5</sup>. The soil has a good water-holding capacity and is classified as highly productive. There were no large areas of rocky outcrop unsuitable for cultivation. The swampy areas were suitable for tree planting. The natural vegetation was of a woodland climax comprising *Chlorophora excelsa* (Mivule) with *Pennisetum purpureum* (elephant grass). It was thought at one time that there were two separate mutalla, Namakata and Kivule, but it was found later that the area known as Kivule had been named by the purchaser of the land after the mivule trees growing on it. Much of the Mivule was cut down before 1937 to facilitate cotton planting. Only 41 mivule trees were recorded in 1962, 14 of them on the area that is still known locally as Kivule.

The mean annual rainfall is 47 inches and is well distributed in two seasons, the first and usually the heaviest in April to June, and the second from August to November. Rain can often fall in any month, but the driest time is usually December to March, with light showers often occurring in February. Because of the bimodal type of rainfall there are two planting and harvesting periods each year. The mean maximum annual temperature is 25°-27.5°C (77-82°F) and mean minimum annual temperature is 15°-17.5°C (59-64°F).

The population is given in the following table:—

	1937	1962
Number of families .. ..	75	86*
Number of taxpayers .. ..	67	154
Number of men .. ..	108	153
Number of children (resident) ..	43	125
Total resident population ..	233	404
Porters included above .. ..	33	83

\*An additional 4 householders were not included in this survey

In 1937 seven of the householders were women and this figure had increased to 15 by 1962. The total number of offspring recorded in 1937 was 55 and in 1962 was 284. The difference between the total number of offspring and the number resident can be accounted for by the fact that 12 offspring had left the mutalla to marry. In 1962 the situation was much more complex. Twenty seven of the children classified as resident were in fact children belonging to someone else, usually a nephew or a niece. Of the 284 children belonging to the householders the placement was as follows:—

Years of age	At school	At home	Non-resident
0-7 .. ..	34	79	11
7-18 .. ..	59	14	6
Over 18 .. ..	2	5	74
TOTAL .. ..	95	98	91

Approximately 46 per cent of the children under 18 years of age attended school, of these 60% were boys. The average number of children per household was 0.73 in 1937 and 3.55 in 1962. As only 58 of the householders in 1962 reported having children, the average number of children per family was 4.7.

The ethnic composition of the householders is given in the following table:

	1937		1962	
	Number	%	Number	%
Baganda .. ..	62	82.66	71	86.60
Padhola .. ..	4	5.33	2	2.44
Banyarwanda .. ..	1	1.33	5	6.08
Madi .. ..	5	6.66	—	—
Baruli .. ..	1	1.33	—	—
Itesot .. ..	—	—	2	2.44
Jonam .. ..	—	—	1	1.22
Tanzanian .. ..	—	—	1	1.22
Not known .. ..	2	2.66	—	—
TOTAL .. ..	75		82	

The proportion of Baganda had changed little over the years, but a notable change occurred with the departure of the Madi and the arrival of some Banyarwanda. In 1937 all the porters were Baganda, but in 1962 they were all Banyarwanda. The five Banyarwanda householders recorded in 1962 had all formerly been porters, and carried Luganda surnames. In 1962 the Baganda were represented by 18 clans; the commonest were the Mamba (27%) and Nyonyi (13%)

In 1937 only two of the householders had an occupation additional to farming; one was a teacher and one a carpenter. In 1962 there were nine craftsmen and seven traders, two of the householders were schoolboys. The mutalla appeared to be a good place in which to live. In 1962 the average length of stay on the mutalla for the householders was 26 years. The average for those born on the mutalla was 38 years

The area was originally surveyed by the Lands and Surveys Department in April and May 1909. The whole area was then owned by two people with final certificates. One person owned block 217 with 495.75 acres and another person owned block 216 with 453.66 acres. There was an additional 7.35 of road reserve. By 1937 these two blocks had been sub-divided into eleven plots,

held by eleven landowners. By 1967 21 holders had 38 plots with final certificates and 6 other holders were registered to share 3 plots; the final survey had yet to be completed. As four of the largest landowners (totalling 414 acres) have died recently, further transfers of titles and fresh surveys can be expected. Six of the other landholders of 1937 were still in possession of titles in 1962, their acreages were as follows:—

		1937	1962
i	..	63	52.7
ii	..	60	80
iii	..	40	22
iv	..	20	20
v	..	20	20
vi	..	10	10

Thus the average of holdings has changed from 474 acres in 1909 to 86 acres in 1937 and 35 acres in 1967. In 1962 the largest single landowner had 21 tenants. The owner himself grew only four acres of perennial crops and had no annual crops, but he received a total of Shs. 336 in tribute (*busulu* and *nujo*) per annum from some of the tenants as well as beer at brewing time. Land prices are known for fourteen transactions that have taken place in the past few years and the average price was Shs. 50 per acre, there were, however, wide variations from Shs. 240 down to Shs. 2.50 per acre.

The acreage registered in 1909 is slightly less than that registered in 1967 when 951.9 acres were registered. It is unfortunate that the total acreage recorded in the 1937 survey does not agree with the officially recognised acreage recorded and registered by the Lands and Survey Department. For the 1937 agricultural survey, a plane table survey was carried out, and 1,000 acres were recorded in the perimeter measured, compared with 956.66 acres on the 1909 survey. This difference, however, will not greatly affect the results as in both the 1937 and 1962 surveys, resting land has been calculated as the residue after other uses have been noted. It is also unfortunate that in 1962 four holdings calculated to total 25.66 acres were not surveyed. This leaves 926.24 acres included in the survey.

The land use of the area is recorded in the following table:—

	1937		1962	
	Acres	% of total	Acres	% of total
Perennial crops ..	233.16	24.6	437.43	47.2
Annual crops ..	154.24	16.2	70.95	7.7
Compounds and houses ..	9.20	1.0	12.37	1.3
Swamp/woodland ..	3.00	0.3	41.50	4.5
Roads, paths ..	10.61	1.1	9.47	1.1
Grass/resting ..	539.10	56.8	354.52	38.2
TOTAL ..	949.31		926.24	

In 1937 approximately 41% of the land was cropped and in 1962 about 55% was under crops. It is interesting to note that over the past twenty-five years the area under crops had increased by only 14% whereas the resident

population had increased by 58%. This could be accounted for in three ways, a greater reliance on non-agricultural occupations, an increase in crop yields or by a change over from annual to perennial crop production. In the past twenty-five years there has been a noticeable change in the relationship between annual and perennial crops. Thus, whereas the importance of perennial crops has almost doubled, that of annual crops has more than halved. As will be shown later much of this is due to a swing away from cotton to coffee production.

On the original 1909 plan approximately 102 acres were shown as swamp/woodland but at the 1962 survey this had been reduced to 41.5 acres. The proportion of resting land to cropped land (annual and perennial) had changed from 1937 to 1962 from 4:3 to 4:5, due to an expansion in perennial crops, principally coffee. In 1937 there had been an average of 7.2 acres of grass per farm but this had fallen to 4.3 acres in 1962.

This proportion of resting land to cropped land is an important index in deciding whether the area is underpopulated or overpopulated. Tothill laid down that a proportion of less than 2:1 should be regarded as overpopulated. According to this standard the area was overpopulated in both 1937 and 1962, the ratios being 1:1.4 and 1:0.7 respectively. Much of the land is therefore being over-cropped with the consequent dangers of loss of fertility and soil structure especially in the light of little manure being used and little soil conservation being practiced. However, the change-over of most of the cropped land to perennial crops by 1962 will have gone some way to alleviate the problem of soil erosion due to the better and more continuous soil cover provided by the perennial crops.

The livestock kept in the area is presented in the following table:—

	1937	1962
Cattle .. ..	Nil	34*
Goats .. ..	130	132
Sheep .. ..	16	42
Chickens .. ..	558	367
Pigs .. ..	Nil	10
Fish Ponds .. ..	Nil	1†

\*Kept on mutalla, average of 1st and 2nd rains surveys.

†Not in production.

In 1937 it was reported that any form of animal management on the mutalla was absent, so that a slight improvement had taken place since then. At the time of the first survey in 1962, 38 cattle were present, there being 8 males and 30 females. Of these 16 belonged to one farmer who was in the process of erecting a barbed wire fence around his coffee so that the cattle could be paddocked in it at night. This process of night paddocking has the advantage of giving the cattle some grazing at night when they would normally be kept in a kraal, and also they manure the land. All the cattle kept were Nganda. Three of the ten owners gave salt and banana peelings to their cattle. None of the cattle were sprayed against ticks or given any other prophylactic treatment. The cattle were grazed on the resting land in the day-time (and on the swamps in the dry season) and were housed in kraals at night. The cattle were in almost all cases herded by paid porters who were paid Shs. 35 per month. As the average herd size was only about six cattle, and almost no trading was recorded and no milk was sold, cattle do not appear to be an economic concern.

Little change had taken place over the years with reference to other forms of livestock. The poultry were still allowed to range freely in the daytime and were kept in a store or a room of the house at night. No supplementary food was given, but there was evidence of some Black Australorp and Rhode Island Red blood in 14% of the birds in 1962. The number of chickens kept had however decreased. The number of goats had not changed over the years, but the number of sheep had trebled, as had the number of owners. In 1937 the sheep and goats were herded around the compound, but in 1962 they were tethered on areas of resting land and some owners gave banana peelings. Pigs had been introduced by 1962 on two forms, and there was evidence in 1967 that more farmers were keeping pigs.

The proportion of livestock units to residents in an area is a useful measure of livestock keeping. In 1937 there was one livestock unit to 5.8 residents and in 1962 1:5.6. With regard to grazing there appears to be little danger of overgrazing in either year. In 1937 there were about 20 acres of grass for each grazing livestock unit and in 1962 there were about 6 acres.

The methods of cultivation had not altered over the years. No ox or tractor powered cultivation methods were employed, only the hoe. Even in 1962 there were no lumbugu forks, pruning saws or pruning shears for use in the large acreage of coffee, although these implements are recommended by the Department of Agriculture and can be bought at a subsidized price. One farmer had a wheelbarrow and another a watering can.

In 1937 all the houses were constructed of poles, elephant grass, reeds and mud, and all had thatched roofs. By 1962 89% of the houses had roofs of corrugated iron, although all but one had the same type of wall construction; that house was built out of murrum blocks. By 1962 30% of the houses had some form of guttering and a water storage tank of small capacity. In 1962 over 60% of the farmers had bicycles. There were five motor cycles and two cars. This general lack of transport helps to account for the majority of the minor crops being sold locally at usually a low price. In 1962 20% of the households had radio receivers.

\* \* \* \*

Crop production has been portrayed in the tables at the end. The first and most noticeable change over in the past twenty-five years is the great expansion in the acreage of coffee, the acreage having more than trebled whilst the acreage planted to cotton was only one-quarter of what it was in 1937. The acreage of coffee per grower has risen from 1.30 acres per family to 3.60 acres in 1962. Half of the acreage present in 1962 was approaching thirty years of age. 2.5% of the coffee was still young, which showed that plantings were still continuing even though at a reduced rate. The average plot size of the early planted coffee (before 1930) was just over three acres, while the average plot size of that planted in the 1960s was just over half an acre. Coffee had become more important than cotton because of the higher relative price and smaller amount of labour involved (roughly 80 as against 120 man-days per acre).

It was noted in the 1937/38 report that the standard of husbandry of cotton was low, the farmers then spent most of their time on the coffee plots. This fact was still true in 1962, but it can hardly be said that in that year the husbandry of coffee was at a particularly high level, as evidenced by the lack of suitable recommended equipment. In 1962 the average yield of coffee was

about 850 lb. per acre, though it was estimated that in 1937 the acreage that was in full bearing produced around 1,000 lb. per acre. In 1937 only 56% of the farms grew coffee, in 1962 all but one farm had coffee; though it does not mean that it was all picked. One farmer had ceased to pick his in 1959 when the yields were 2½ bags (about 350 lb.) per acre.

More factual information was available from the 1937 survey on cotton than on any other crop. Cotton production is shown in the following figures:—

	1937	1962
Acres per grower .. .. .	2.63	0.79
Acres per taxpayer .. .. .	2.49	0.27
Mean plot size (acres) .. .. .	0.75	0.40
Percentage of farmers growing cotton ..	85%	65%
Percentage of acreage planted in perennials	14%	20%

There has been only a slight increase in other cash crops. In 1962 very small amounts of simsim and grams were grown. Two farmers had developed vegetable growing, cabbage, carrots, potatoes for sale on the Kampala market. In 1961 one farmer received Shs. 385 from this source. Sorghum, which was used mainly for beer making rather than as edible grain had also increased over the years. Sorghum was mainly a first rains crop in 1937, but was much more important in the second rains in 1962. This heavy planting in July 1962 could be accounted for by the high prices on the Kampala Market in mid 1962. This increase in the price of sorghum had come about through an increase in demand for the red variety in anticipation of the demand for beer with which to celebrate Independence. As about 55 acres of cotton were planted in 1961 compared with 42 acres in 1962 it can be assumed that some of the cotton acreage was replaced by sorghum.

The major food crop was plantains, the acreage of which per family was hardly changed, there being about 1.9 acres per family in both years. However the acreage per resident had fallen from 0.61 to 0.36 in the same period. The acreage of other food crops had also fallen from 2.03 acres per family to 0.75 acres which in terms of residents means 0.68 acres and 0.19 acres respectively. This is a remarkable fall, but it does not mean that the people are more poorly fed in 1962 or that yields have increased to allow for smaller plantings. The fact illustrates further the greater importance placed on coffee. The greater cash income and cash reserves in 1962, made the farmers less reliant on self sufficiency. It is also true that in 1937 many more of the food crops were marketed than in 1962. Cassava the main famine reserve crop had fallen from 17 to 2 acres over the years.

## AGRICULTURAL CHANGE AT NAMAKATA

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The sale of produce is represented in the following tables:—

1937

Crop	Values	% of total	Average/ family
	<i>Shs.</i>		<i>Shs.</i>
Coffee .. ..	4,263	22.3	57
Cotton .. ..	7,692	40.4	103
All others* ..	7,096	37.3	95
TOTAL ..	19,051		255

1937 Crop Sales value per resident = Shs. 82.

\* All other crops were given as poles, food, bark cloth, fowls, etc.

1962

Crop	Values	% of total	Average/ family
	<i>Shs.</i>		<i>Shs.</i>
Coffee .. ..	130,093	79.5	1586
Cotton .. ..	8,954	5.4	109
Beer .. ..	9,564	5.8	116
Food crops ..	15,904	9.3	194
TOTAL ..	164,515		2005

1962 Crop Sales value per resident = Shs. 407.

The average income per family from crop sales has increased eightfold in the past twenty-five years, and the crops from which the income is earned have changed considerably. In 1962 almost 80% of the income came from coffee compared with a little over 20% in 1937. The importance of cotton on the other hand has fallen from 40% to around 5% of the total income from produce sales.

Economic changes in Namakata between 1937 and 1962 have also been considerable. In 1937 only Shs. 19,051 was raised by the sale of produce, as compared with Shs. 164,515 in 1962. In the former year only two persons, a teacher and a carpenter, had other sources of income and only earned Shs. 140 and Shs. 216 per annum respectively, leaving 98% of the income for the mutalla to be derived from the sale of produce. By 1962 15 persons were in employment, and earned a total of Shs. 19,123 so that produce sales represented 89% of the income. In 1937 Shs. 3,960 was paid out for labour, and by 1962 this had increased to Shs. 56,565. Thus in 1937 20% of the gross income was used to employ porters and this rose to 31% in 1962. As already seen by 1962 80 of the 83 porters were Banyarwanda, as against a preponderance of Baganda in 1937. Although the amount paid to porters has increased, wages for porters increased only 3½ to 4 times, whilst the income to farmers increased 7 fold. Another measure of the increase in economic value of the area can be seen in the cash return per acre cropped. In 1937 this had been only Shs 33.50, but had increased to Shs. 294 by 1962.

The agricultural change taking place in the mutalla can be summarised in the following table which shows the production of a typical family holding.

Crop	Acres of crops per annum of a typical family	
	1937	1962
Coffee .. .. .	1.30	3.60
Plantains .. .. .	1.90	1.80
Cotton .. .. .	2.25	0.51
Cereals .. .. .	0.61	0.39
Legumes and oil seeds ..	0.97	0.08
Root crops .. .. .	0.54	0.19
Mixed food crops ..	—	0.27
TOTAL ..	7.57	6.84

The average number of residents per farm increased from 3.1 to 4.9 so that the acreage of land used per resident decreased from 2.06 to 1.25 acres; though allowing for double cropping the difference in acreage of crops per resident had fallen from 2.44 to 1.39 acres. The average acreage of cash crops per resident fell from 1.14 to 0.83 and the average acreage of food crops fell from 1.30 to 0.56 acres. With the radical change in cropping on a typical farm, especially from cotton to coffee, only the acreage under plantains remained fairly constant. Although smaller acreages of annual food crops are being grown, a larger sized family is being supported. This has been made possible by the expansion of the coffee acreage and a greater participation in the monetary economy.

#### NOTES

1. Parson, D. J. *The plantain—robusta coffee systems* Entebbe, Department of Agriculture, 1960, (Memoir of the Research Division Series 3, no. 2).
2. Williams, E. *An agricultural survey of the Mutalla known as Namakata in Mutoba VI; Gombolola, Bulemezi County in Mengo District*. Entebbe, Department of Agriculture, 1938 (?), (Type-script).
3. Todd, A. W. J. *Mutalla Survey—Namakata*. Entebbe, Commissioner for Agriculture, 1967. (Unpublished).
4. Dunbar, A. R. *Mutalla Survey of Bujenje, Kisonga, Bunyoro*, (*Uganda J.* 29, 1965, pp. 61–74).
5. Radwanski, A. S. *The soils and land use of Buganda*. Entebbe, Department of Agriculture, 1960, pp. 44–48. (Memoir of the Research Division Series 1, no. 4).
6. Tothill, J. D. (Ed.) *Part I, A report on nineteen surveys done in small agricultural areas in Uganda; Part II, Fifteen agricultural surveys selected from the above*. Entebbe, Government Printer, 1938.
7. Uganda Department of Agriculture, Marketing Officer—Buganda, Annual report, 1962.

CROP PRODUCTION—FIRST RAINS

Crop	1936				1962			
	Total Acreage	Acres/grower*	% of total acres	% acreage of annual crops	Total Acreage	Acres/grower	% of total acres	% acreage of annual crops
Coffee .. .. .	97.21	1.30	28.6	—	291.01	3.60	59.7	—
Plantains .. .. .	142.59	1.90	42.0	—	147.71	1.91	30.3	—
Maize .. .. .	35.9	0.48	—	36.0	16.74	0.72	—	34.6
Sweet Potatoes .. .. .	7.70	0.10	—	7.7	8.87	0.22	—	18.3
Groundnuts .. .. .	12.84	0.19	—	13.0	3.83	0.24	—	7.9
Sim sim .. .. .	11.18	0.15	—	11.0	0.22	0.22	—	0.4
Beans .. .. .	22.53	0.30	—	22.0	0.16	0.08	—	0.3
Yams .. .. .	0.38	—	29.4	0.3	0.06	0.015	10.0	0.1
Sorghum .. .. .	6.12	0.56	—	6.0	2.68	0.45	—	5.5
Finger Millet .. .. .	0.26	0.26	—	0.3	0.71	0.71	—	1.5
Vegetables .. .. .	—	—	—	—	0.21	0.21	—	0.4
Mixed food crops .. .. .	—	—	—	—	12.71	0.60	—	26.3
Cassava .. .. .	2.74	0.04	—	2.7	2.17	0.13	—	4.5
TOTAL ..	339.46		100.0	100.0	487.08		100.0	99.8

	1936	1962
<i>Per family:</i>		
Acres of perennial crops	1.33	5.35
Acres of annual crops	3.19	0.59
	<u>4.52</u>	<u>5.94</u>

\* Some figures shown as per family.

## CROP PRODUCTION—SECOND RAINS

Crop	1937				1962			
	Total Acreage	Acres/grower*	% of total acres	% acreage of annual crops	Total Acreage	Acres/grower	% of total acres	% acreage of annual crops
Coffee .. .. .	92.21	1.25	19.5	—	291.01	3.60	57	—
Plantains .. .. .	140.95	1.88	29.9	—	148.59	1.92	29	—
Cotton .. .. .	168.89	2.22	35.8	70.2	41.69	0.78	8	58.5
Beans .. .. .	28.00	0.37	—	11.4	0.92	0.15	—	1.3
Mixed food crops .. .. .	—	—	—	—	9.78	0.33	—	13.7
Sweet Potatoes .. .. .	15.45	0.21	—	6.4	4.21	0.14	—	5.9
Cassava .. .. .	14.39	0.19	—	6.0	—	—	—	—
Groundnuts .. .. .	9.29	0.12	14.8	13.9	1.34	0.09	6	1.9
Maize .. .. .	2.32	.03	—	1.0	0.35	0.17	—	0.5
Vegetables .. .. .	—	—	—	—	0.60	0.21	—	0.8
Sorghum .. .. .	1.46	0.13	—	0.6	12.04	0.71	—	16.9
Yams .. .. .	0.36	0.04	—	0.1	0.19	0.09	—	0.3
Grams .. .. .	—	—	—	—	0.16	0.16	—	0.2
Tobacco .. .. .	0.35	0.04	—	0.1	—	—	—	—
TOTAL ..	473.67				510.88			

	1937	1962
<i>Per family:</i>		
Acres perennial crops ..	3.2	0.87
Acres Annual crops ..	3.06	5.36
	<u>6.26</u>	<u>6.23</u>

AGRICULTURAL CHANGE AT NAMAKATA

Total Acreage Cropped during a complete year of farming operations.

Crop	1937/38	1962
	Acreage	Acreage
Coffee .. .. .	97.21	291.01
Plantains .. .. .	142.59	148.59
Cotton .. .. .	168.89	41.69
Maize .. .. .	38.23	17.09
Sweet Potatoes .. .. .	23.15	13.08
Groundnuts .. .. .	22.13	6.17
Cassava .. .. .	17.13	2.17
Beans .. .. .	50.50	1.08
Sorghum .. .. .	7.58	14.72
Yams .. .. .	0.38	0.25
Tobacco .. .. .	0.35	—
Millet .. .. .	0.26	0.71
Mixed food crops .. .. .	—	22.49
Vegetables.. .. .	—	0.81
Sim sim .. .. .	—	0.22
Grams .. .. .	—	0.16
	<hr/>	<hr/>
	568.40	559.24
Land used—One year .. .. .	<hr/>	<hr/>
	482.13	508.38

SOCIETY NEWS

The Annual General meeting of the Uganda Society was held on 10th April 1968. The number of full members of the Society had increased during the year from 646 to 683, and there had been a substantial increase in the number of associate members. As in previous years there had been a large number of new members enrolled to balance the hundred resignations. Also, as for a number of years past the financial status of the society depended upon income derived from the sale of back runs of the Uganda Journal. As seen from the following list over thirty meetings of the Uganda Society were held during the year, at some of which attendance exceeded a hundred persons.

- The programme of meetings and excursions for the year was as follows:
- 18 January. Lugard in Uganda—Professor R. W. Beachey.
  - 31 January. Walking and climbing on Ruwenzori—Mr. D. Pasteur (in conjunction with the Mountain Club of Uganda).
  - 7 February. Glaciers, geology, geomorphology—Dr. P. H. Temple (in conjunction with the Mountain Club of Uganda).
  - 14 February. Plant and animal life on Ruwenzori and comparisons with other mountains in tropical Africa—Dr. H. C. F. Rowell (in conjunction with the Mountain Club of Uganda).

- 15 February. The African meaning of Shakespeare's 'Julius Caesar'—Professor A. A. Mazrui.
- 22 February. Natural History half-day excursion to the Animal Health Research Centre, Entebbe.
- 7 March. Iceland's submarine fissure volcano—Dr. A. T. J. Dollar.
- 15 March. Roman Catholicism in East Africa: the problems of adaptation—Mr. R. E. S. Tanner.
- 19 April. The Sebei of Mount Elgon—Mr. J. Weatherby.
- 10 May. The role of wild animals in the transmission of diseases to man in East Africa—Professor G. S. Nelson.
- 17 May. Aspects of the religion of the Central Lwoo—Dr. Okot Bitek.
- 23 May. Plant life in Uganda—Dr. E. M. Lind.
- 18 June. Natural History half-day excursion to the Namanve eucalyptus plantation.
- 21 June. The importance of fungi to man—Dr. J. Mukiibi.
- 28 June. Cattle in Uganda—Dr. Posnansky and Mr. M. Smith.
- 5 July. Important new fossil primates from Uganda & new isotopic ages for the fossil-bearing strata—Dr. W. W. Bishop & Mr. A. C. Walker.
- 18 July. Natural History members' slide evening.
- 19 July. Apolo Hotel—architectural problems on large projects in Uganda—Mr. R. C. W. Browning.
- 22 August. Mosquitoes—Mr. A. W. R. McCrae.
- 30 August. Aid for malnutrition—but how?—Dr. I. Schneidemann.
- 24 September. Full day excursion to Kome Island.
- 26 September. The use of the fruit bat in medical research—Dr. J. Church.
- 24 October. Birds, beasts and bilharzia—Professor J. D. Goodman.
- 29 October. Natural History full day excursion to Gobero Falls.
- 21 November. The social behaviour of mangabeys in Uganda—Dr. N. Chalmers.
- 29 November. Education in Karamoja—Mr. J. D. Rubadiri.
- 6 December. Agents of colonial rule in Kigezi—Dr. D. J. N. Denoon.
- 23 December. Natural History half day excursion to the Mpanga Research Forest and the Kamunye Forest.

The Society in conjunction with the British Council arranged a fourth series of lectures for the post School Certificate pupils of schools and training colleges in and near Kampala. The programme was as follows:

- 4 September. Introduction to social psychology—Professor M. H. Segall.
- 18 September. Introduction to social philosophy—Mr. A. Gombay.
- 25 September. New approaches to African history—Dr. M. S. M. Kiwanuka.
- 2 October. Culture, society and social change—Professor R. W. Apthorpe.
- 16 October. Economics in simple societies—Mr. B. W. Muriithi.

## THE DIARIES OF EMIN PASHA—EXTRACTS XIII

Edited by SIR JOHN GRAY

(These extracts from *Die Tagebücher von Emin Pascha* edited by Dr. Franz Stuhlmann, vols. i, ii, iii, iv and vi, (Braunschweig: Westermann, 1916–1927) have been translated and provided with introductory notes and comments by Sir John Gray. They have been planned to appear in the *Uganda Journal* as a series covering Emin's first visit to Buganda in 1876, his visit to Bunyoro in 1877 and his second visit to Buganda in the same year, followed by such portions of his later diaries as are relevant to Emin's contacts with the Uganda region during the years spent as Governor of Equatoria until his withdrawal in 1889. Extracts I to X have appeared in successive issues of the *Uganda Journal* commencing with Extracts I in *Uganda J.*, 25, (1961) mo. 1 until *Uganda J.* 29 (1965) no. 2. Extracts IX appeared in *Uganda J.* 30 (1966) no. 2 and Extracts XII in 31 (1967) no. 2. The next instalment will conclude the series.—Eds.)

### XIII—THE STANLEY RELIEF EXPEDITION AND THE MARCH FROM KAVALLI TO ANKOLE

17 November 1888 to 3 July 1889

#### Introductory Note

Emin Pasha's career has been the subject of an extensive literature, chiefly in English and German. His *Life* was written by his nephew Georg Schweitzer in 1897 and was translated into English by Dr. Robert William Felkin in 1898. The literature is extensive, but it is also most controversial.

Gaetano Casati, who took refuge with Emin after the outbreak of the Mahdist rebellion wrote an account of his experiences in 1891. This was translated into English by Mrs. J. R. Clay as *Ten years in Equatoria*.

A. J. Mounteney-Jephson, wrote *Emin Pasha and the rebellion at the equator* in 1890. The author relied to a large extent on his diary, but one looks forward to the early publication of that diary in full as edited by Mrs. Dorothy Middleton for the Hakluyt Society. The journey from Kavalli to Ankole is dealt with very scrappily in the "Conclusions" to Mounteney-Jephson's book.

T. H. Parke was the medical officer of Stanley's Relief Expedition and published *My personal experiences in equatorial Africa* in 1891. This book is methodical, and taken by and large, most reliable. Parke tells a plain, matter of fact story which is devoid of any sign of prejudice against either Stanley or Emin. He also kept a diary, which corresponds in length with that of Emin, but only a few of these diary entries will be referred to here.

H. M. Stanley covers this period in his *In darkest Africa* in Volume 2, published in 1890. Both in this and in his other writings Stanley makes copious

references to the events of this period, but he was patently hostile to Emin. Moreover, the falsity of certain of his earliest statements is clearly proved by the contents of Appendix A to these extracts.

Vita Hassan was a Jewish pharmaceutical dispenser who took service under Emin in 1880. He wrote an account of his personal experiences in *Die Wahrheit über Emin Pascha* in 1895. Emin once described him as being "as good as gold, but flighty, hot-headed and a babbler."

The volume of this literature is so immense that no attempt is made here to adjudicate thereon, save only to explain errors or omissions from Emin's diaries. Nor is it sought to point out the discrepancies between the entries in Emin's diary and the narratives of any of the fore-going. Like the immortal diarist, Samuel Pepys, neither Emin nor he wrote up their notes and diaries from day to day. Consequently memory played them false from time to time. It has also to be remembered that both Emin and Casati had gone through experiences which it is difficult for others to appreciate, and that the same words apply in the case of Stanley and his officers. Commentators on both Emin and Stanley must realise that they are dealing with two very sick men and their equally sick companions, who, as is often the case, failed to realise the ordeals through which those they seek to criticize had passed.

#### Extracts from Emin's Diaries

November 17, 1888. At 7.35 in the morning we were under way from Dufile, the cannon thundered and the trumpets were sounded. What a contrast to my arrival on 19 August. The steamer is full of loads and people.

November 18. At midnight we arrived at Bora in order to take in wood. At 3 o'clock in the night Wadelai came in sight. When we landed, the soldiers were on parade and the cannon fired salvos.

November 20. (Emin received a report from Shukri Aga at Tunguru that Stanley and his people were very near).

November 24. All the under officers visited me and pledged their devotion to me. They wish to follow me wherever and whensoever I go. God grant that Stanley may come soon. Our position is bad enough.

(Between this date and 4 December Emin was receiving copious, and often contradictory information as to the activities of the Mahdists, rebel troops and local African chiefs, but no further news regarding Stanley).

December 4. At two in the afternoon the officers came in a body and informed me that they had mustered the soldiers and had resolved that, as the station was defenceless, they would abandon it. Cannons and boats would be sunk and the ammunition distributed amongst the soldiers, and they would go to Tunguru and Mswa to await the arrival of Stanley.

Jephson declared himself ready to offer them his boat. He and likewise Casati agreed to stand by the officers' decision. There was nothing further that I could say. It had been arranged that we must beat a retreat tomorrow very early . . . . The officers asked me to take command. I told them that I could not do so. When they again asked me, I said that it would be only on condition that my orders should be put into writing.

At five o'clock in the afternoon all the soldiers came to my door, I explained the facts . . . . The rest of the evening and part of the night were occupied by me in packing up a few of the things I had brought and could take away with me, my journal, my clothing etc. All my collections, all my books, all my instruments must be left behind. Towards midnight all was ready. I think a lot

of people will refuse to come on the march.

December 5. Kodi Aga has found 37 porters for me out of which I gave 4 for Jephson, 5 for Casati, and 10 for Vita. Jephson's people had without our knowledge brought 3 porters for themselves. For myself and my property I have 15 porters. I gave my riding donkey to Casati, who is ill. My second donkey I gave to Osman Effendi for his children. I set out at six o'clock in the morning. Behind the station were masses of women and children with their things ready for the march . . . . On the way came news that the soldiers had plundered our houses and that they had refused to march and that there were only two or three soldiers with us and that Kodi Aga had sent to bring us all back to Wadelai.

(Jephson *op. cit.* p. 318 records that he extemporized a hammock for Emin's daughter Ferida in which she was eventually carried to the coast.)

December 6. Our small party consisting of Jephson, Casati, Vita and Marco set out at 5.40 in the morning to continue our march forwards. Soon afterwards it was reported that a steamer had been seen near by in the river. By good luck the village of Panyango, which had been recently built, had a hill top and, I sent some of my servants to look out thence on the river. We had just reached the foot of the hill when they came back and said that Kodi Aga had sent the steamer to bring me back to Wadelai. An officer was waiting for me with three letters. The first was from Rajab Effendi, my former Secretary, informing me of his arrival in Wadelai. The second was unofficial from Selim Aga to myself. . . . . The third letter was official and came from Kodi Aga.

(The text of the letter from Selim Aga is set out in full by Emin in his Journal. It is also printed in Jephson, *op. cit.* pp. 327-9. In it Selim reports a determined assault on Dufile station by a Mahdist force which had been routed and was in retreat towards Rejaf)

I asked Rehan Aga to take us in the steamer to Tunguru, which after some hesitation he agreed to do.

December 7. At eight o'clock in the morning we were afloat and sailed south.

At 2.45 in the afternoon we reached Tunguru. While the people were disembarking I wrote to Kodi Aga and Selim Aga to give them my best wishes and explain to Selim the reason for my departure. When everybody had been disembarked I sent one of my servants (to Wadelai) to rescue my effects, if possible.

So now we are in Tunguru. I cannot conceal from myself that my flight from enemies in Wadelai was all for the best, and that perhaps very difficult times may arise. That I must risk. God grant that Stanley will come in these days. Then all will end well.

December 8. In good time the soldiers came on parade to my door. I could not do otherwise than to receive them. So I gave them the history of myself from the day on which I left them until today and of the victory at Dufile. As usual they showed the greatest enthusiasm. But I explained to them categorically that I did not want to know anything about their administration. Small presents were sent to me from everywhere . . . . From Shukri Aga came a letter from Mswa but no news of Stanley.

December 9. It would be better if we all went to Mswa.

December 11. If Stanley comes soon, we possibly may be able to save ourselves. If he is much later, I shall be more afraid of my own people than of those of Khartum. The best time for him to come would be the middle of January. Besides I want to know for certain, when the time for our departure

arrives, whether they will want to go to Zanzibar or to Egypt or whether on their departure they will settle at the first good village they reach, if Stanley has taken away their arms and ammunition. (Complaints are coming in about Shukri Aga's conduct at Mswa). As for myself I am at least for the moment free to go or to stay behind. At present I am in favour of the latter, because if I went to Mswa, it would arouse the suspicion that I should act in agreement with Shukri Aga, whose devotion for me is known and is feared. If a new station chief were to be appointed a fresh guard would be posted at my door. For the present it is better for me to stay.

December 17. (A long letter received from Rajab Effendi at Wadelai about the events and situation to the north which makes Emin believe that the the mutineers are in greater numbers than ever).

December 19. After I had paid my usual morning's visit Suleiman Aga knocked on my door and asked me on the morrow to take the salute as formerly as their chief at the victory parade. This naturally put me in a difficult position. I thanked Suleiman Aga very much for his kindness to me when I was a prisoner at Dufle, but I was sorry I could not please him. It further seemed to me that his own soldiers were not faithful.

December 20. The parade took place very early. Some shots were fired. The soldiers received an extra meat ration and all was over.

At midday I was glad to have a visit from the Chief Mogo, who had come from Mswa. He told me he had sent his brother to Kavalli for news. Stanley should be at Kavalli's, who had prepared many huts for him, at earliest in the new month (January); Katonza had twice attacked Kabarega's people, killed many people, and carried off many women and cattle as plunder. One of Stanley's men named Sadallah had been left behind ill and was living with Mpigwa.

December 21. I have made two copies of my letters to Stanley and put them in Jephson's wallet.

(These letters are printed in Stanley's *In darkest Africa* vol. ii, pp. 110-2).

Kabarega is in Mruli. The Acholi disapprove of him because Kiza, the late chief Anfin's son, was raiding Acholiland. Ruyonga's sons have been sent to Mwenge and most probably have been killed. The boats did not leave today.

December 23. The boat left today and with it my letter (of 21st) to Stanley.

December 25. Jephson has for days been recalling "Christmas Eve in Old England"; he was lucky enough in the morning to shoot a Nile goose, which could be used for the joint and in the evening I asked Jephson, Casati and Marco to eat with me. An African punch, brewed with hot water, spirits and honey concluded the festivity.

December 28. A boat came early today from Mswa. A European envelope, greasy and dirty, and without any address puzzled me greatly. I found therein a letter in Kiswahili which Stanley and I had addressed on 12 May 1888 to the "white men" who according to Katonza's information were on the plateau.

December 29, 1888. Suleiman Aga died yesterday evening at half past ten and we buried him early today. He is a great loss to me because I fear that an agreement will soon be made by the rebel party with the chief of the station and everything may be altered.

January 12, 1889. At half past seven in the evening a servant of Shukri Aga came with the following letter saying that:

"At seven o'clock this morning a man came to me who had been sent by Mogo with the good news that Mr. Stanley has reached Noosuma. Mogo has gone there to see him and will soon bring the letter we want from him.

If God so wills, there will soon come good news like this and I will at once send it to you."

The letter is dated 12 o'clock today.

January 26. Today at noon a servant of Shukri Aga came with a packet of letters. Shukri Aga writes. "At midday today Mogo returned with the letter herewith which I send with a request for instructions." There is one letter for Jephson and one for me. (These were the long-awaited letters from Stanley announcing his return with the remainder of the Relief Expedition. On 28 January Jephson in the *Khedive* left Tunguru for Mswa and after frustrating delays, joined Stanley at Kavalli's on 6 February. Emin followed some days later.)

February 13. (Emin wrote to Stanley from a "Camp (below Kavalli)" as follows):

"Yesterday I arrived here with my two steamers, carrying a first lot of people desirous to leave this country under your escort. As soon as I have arranged the cover of my people, the steamships have to start for Mswa station to bring on another lot of people awaiting transport.

"With me there are some twelve officers anxious to see you, and only forty soldiers. They have come under my orders to request you to give them some time to bring their brothers—at least such as are willing to leave—from Wadelai, and I promised them to do my best to assist them. Things having to some extent now changed, you will be able to make them undergo whatever conditions you see fit to impose upon them. To arrange these I shall start from here with the officers for your camp, and, if you send carriers, I could avail me of some of them.

"I hope sincerely that the great difficulties which you have had to undergo, and the great sacrifices made by your Expedition in its way to assist us, may be rewarded by a full success in bringing out my people. The wave of insanity which overran the country has subsided and of such people who are coming with me we may be sure."

February 14. At 4 p.m. Mr. Jephson came with a party of Zanzibari and four Sudanese soldiers together with an officer. He brought me a letter from Stanley (which Emin has incorporated in the diary and reads as follows):

St. Valentine's Day, Febr. 14th 1889. Camp at Kavalli's.

My dear Pasha,

Had you observed last evening when we received your letters and understood their contents you would not need to be told that our joy was inexpressible. Mr. Jephson and I were certainly the happiest men in all Africa. Any better news than what your letters contained would have been too great a stress on our feelings.

I send Mr. Jephson down to you with Zanzibaris, Manyema, and natives. Mr. Jephson is instructed simply to submit himself to your wishes. Therefore you will please state to him what he has to do.

Like a zealous fellow he has suggested a great many "supposes", but my final answer has been this "not knowing exactly what the Pasha desires I am unable to advise you. Of course if the Pasha were able to come up—the Zanzibaris can carry him—I would advise you to bring up only the personal baggage and provisions that I might have the interview as soon as possible with the officers, for it may be that all together we could negotiate with the rebels to the better advantage of the Pasha and his loyal followers. However it is far better to leave the matter in the hands of the Pasha who knows the state of affairs better than we do.

I expect our caravan here on the 17th or 18th. A despatch will be sent off to meet Lieut. Stairs and hurry them all up with the good news.

Believe me, there is no fear of our desiring to be inconsiderate, or precipitate, now that the advance of the loyal party has actually arrived within reach. We shall not only be happy to wait for the steamer to go to Mswa, but also to Tunguru and Wadelai to bring all those willing to leave, with all their property and, if you consider it advisable, to carry a good stock of cattle and goats.

Again expressing my delight at the sudden dawning of good time on the part of the refractory people, and congratulating you upon the accomplishment of what appeared to me a hopeless task, I am my dear Pasha in all sincerity.

Your most faithfully,  
HENRY M. STANLEY.

P.S. Please give my hearty welcome to Signor Casati and your other friends etc. etc. H.M. St.

February 15. I have advised Vita and Casati to make use of the porters who have come with Jephson. Vita raises difficulties . . . . Casati, who has always before said he has absolutely no possessions, wants eighty porters. . . . .

February 16. Jephson wants some more flour and so delayed the departure until 7.10 a.m. Shortly before that my oldest servant Bilal, whom I obtained from Gordon, came, and explained that he does not want to bring his wife and children to the hills, but to remain here. He has been with me ever since 1876. I expect others of my servants will follow his example . . . . I am very sorry. This is the first time I have marched without making a map. I have not got the time.

February 17. We were quite ready to march at sunrise and soon after we had crossed the foreground began a steep and toilsome climb up the mountain side, often falling down in the steepest places . . . . At 1 p.m. we were received in Stanley's camp, where all the chiefs, Zanzibari and local people came to greet us. Stanley was very friendly, and let us have a well-cooked breakfast. He was full of promises about the journey.

February 18. I took my officers to Stanley to hear what he had to say to them. On Stanley saying that he wanted to know what they intended and what they wanted, they asked him first of all to explain his mission—as I and Jephson had already done. They were unanimous in saying they wanted to go wherever he took us. These are fine words, although I am convinced some of them wanted to stay and see what the rebel party in Wadelai would manage to do.

Towards midday Stanley's rear party arrived under the leadership of Dr. Parke, Capt. Nelson, and Lieut. Stairs. The caravan looked quite imposing as it came over the hill, but as it came nearer a lot of sick were to be seen.

February 19. I must go back to my lake camp from time to time to look after the sick; and must present some of my officers to Stanley so that he can hand to them a letter for the people at Wadelai.

(Emin's officers handed to Stanley a document explaining their wishes together with one signed by officers at Wadelai. Stanley said he would give them a written promise to the effect that they would be granted sufficient time to proceed to Wadelai to collect their troops and their families and embark them on board the steamers).

February 21. (Emin received a letter in Italian from Casati dated 20 February alleging that on 14 February Rwabudongo had raided the country, and intended to attack the camp by the lake side. In the afternoon Emin left

Stanley's camp to return to the lake.)

February 22. (On his way back from the hill station Emin received another letter from Casati dated 21 February saying that on 19 February Rwabudongo attacked Katonza and took 400 cattle and many women and killed 100 blacks. Rwabudongo and Ireta had returned from a raid on the confines of Buganda. Kabarega had ordered them to concentrate on the island of Bukokwa so as to attack the lake camp).

February 23. In answer to my questions Katonza says Kabarega has heard that we want to give up the land in the north and build in the south. He has given orders to Rwabudongo, Ireta, and Kahuka not to cross the Semliki. Casati has misunderstood the information given to him.

February 24. At 3 p.m. the *Khedive* arrived from Mswa with a full load of women, children, officers, clerks, donkeys and sheep. Kabarega's people have crossed the river in large numbers near Panyigoro and destroyed Okello and Boki's villages and carried off some sheep. The *Khedive* was stranded in a storm; she lost an anchor and sprang a leak in the keel. With some trouble the steamer was refloated but is still in a doubtful state. In the same storm the *Nyanza* lost zinc roofing (Zinkdach) and we must thank God that the small steamer did not completely overturn.

February 25. Early today a porter from Stanley brought me the under-written letter from him,

My dear Pasha,

Kavallis, Feb. 24th 1889.

Your note was received yesterday afternoon 2 p.m.

Chief Mpinga on whom I relied for carriers came to report yesterday morning (23rd) that his people, *over-a-hundred*, would set out and meet my Zanzibaris at Bundi (edge of plateau) and together would descend to your camp. Confiding in his word I send 25 Zanzibaris who will stay at Bundi until Mpinga's people reach them.

All the chiefs round about, having sent one detachment each to the lake shore, will not I think repeat their kindness. We therefore must depend on the Zanzibaris alone which will be equal to about 150 loads per week. Of course I shall avail myself of all native assistance procurable but it is not to be relied on.

Katonza's story was all a hoax. It is the "wolf-wolf". He never keeps cattle near the Lake. They are always on the plateau in care of chief Konumbi, a Mulega.

As soon as Nelson's party arrives I shall send Stairs with 70 or 75 Zanzibaris down to your camp. On the return of Stairs I shall send another party down and so on until all people are up from Lake.

I forgot to ask you whether—all circumstances considered—it would be wise for Shukri Aga to remain at Mswa until the arrival of all the people from Wadelai.

Your tailor has finished one coat (blue serge) and has cut out two more coats on which he is at work now. The pair of pantaloons is suspended—though nearly finished—for want of lining—and buttons. Have you no old pair of pants which would serve for this?

We are steadily at work building—but it is a slow job compared to the demands on us. Marco requires two houses as he has so many women.

Casati wants two houses and Vita two and all the clerks want one—there will be needed some 50 or 60 houses more.

With best regards I am most faithfully yours,

HENRY M. STANLEY.

To Emin Pasha

About 11 a.m. another load of clerks arrives and our camp appears to be like a Noah's Ark.

(The vessel brings what Emin describes as "an arrogant letter" from some mutinous officers of Wadelai. He supplies the names of the writers but no details as to the contents of their letter).

So soon as the news spread the officers assembled and we resolved to abstain from travelling until early next day so as to avert possible excesses at Wadelai. I gave them all instructions and Selim Bey a discretionary power to remove all weapons. I myself am going to Stanley to inform him of this new phase in order to warn him and to expedite the transport of the people. Captain Abdul-Wahab Effendi remains in command of the (Lake) Camp.

February 26. At 7.30 a.m. both steamers depart—the *Khedive* for Wadelai and the *Nyanza* for Tunguru and Mswa. Soon afterwards I marched out . . . .

February 27. At 11 a.m. we met with a friendly reception from Stanley and his officers and some of our people at our huts, which were ready for us.

(Stanley notes that Emin was accompanied by his six-year old daughter, Little Ferida. "She is extremely pretty.")

February 28. Lieut. Stairs has gone with 122 porters to the Lake, I have written to Casati to send Vita and to come himself.

In the afternoon my friend Mpigwa, who lives in a nearby village, came. During my absence from here Mr. Stanley has made a raid and amongst other cattle has brought back 50 cows belonging to Mpigwa, who now comes to reclaim them. We go together to Stanley, who was ready to explain that not only those fifty cows but the cows of everybody else will be restored, if for each cow five loads are brought from the Lake. He adhered to this and Mpigwa soon went off, promising to supply the porters in three days' time.

March 1. Towards evening Kavalli came. He had not previously come since my arrival.

March 2. At 12 noon Lieut. Stairs came back from the Lake and brought (amongst others) Vita. A letter from Casati full of complaints about disorder in the camp.

March 3. Casati arrived at midday.

March 4. Stanley is ill and has not left his tent since yesterday.

March 5. Hawash Effendi has come with the porters from the Lake.

March 8. Stanley is better and has paid me a long and pleasant visit.

March 10. (A party under Nelson was sent to the Lake for Jephson's and other loads. Presently they returned followed by Nelson. Stanley had them disarmed by another company after the ringleaders had been tied to the flagstaff. They were then sent under Nelson to the Lake without arms. In the evening some Zanzibaris came to Emin asking to be released from this transport duty and that a transport column be formed with one or two Zanzibaris as chiefs. They were very friendly and protested to Emin that they were ready to take him to the coast if he so wished).

March 11. (Stanley drew up a schedule as to the number of loads to be carried).

March 12. (Emin comments on excessive quantity of loads brought up from the Lake for three clerks.)

March 13. (Similar comments on excessive number of loads of three clerks).

March 14. Shukri Aga arrived at 4 p.m. with five soldiers having left Lieut. Stairs on the way. Suleiman Effendi and an Egyptian had come from

Tunguru, and Osman Effendi, Mohamed Shah and some soldiers from Tunguru. Everybody complained that Osman Effendi shipped his property and left no room for other people. In Mswa everything is in good order. In Tunguru there is disorder. On 7 March Selim Bey left Tunguru for Wadelai.

March 15. Early this morning Shukri Aga announced that he wanted to stay here with the soldiers who came with him and that a large number of people from Khartum had come to Rejaf.

Towards evening I went to Stanley and after a long discussion which became somewhat warm on both sides, decided to postpone the march from here until 10 April. Stanley wanted the march to begin on 30 March. The result was due to the withdrawal from Wadelai. Here I must observe that as Jephson once said (in English) "St(anley) may be everything but he never will be a gentleman". On every occasion I learn something new about Stanley.

March 18. A large caravan has arrived from the Lake: officers, clerks children and other impediments.

March 19. Further people from the Lake. Shukri Aga reports that he set out for Mswa on 18 March.

March 22. At 3.30 a.m. Stanley sent his people under the leadership of Stairs and Jephson on a raid without saying a word about his intentions to me.

They returned after sunset with one wounded man and a lot of cattle (over 300) besides some women. They had attacked and plundered Melingwa's people under the leadership of a son of Mpigwa. The pretext for this raid was that a local chief had complained that a body of hill-dwellers had stolen 40 of his cattle and some women. I have had a long discussion with Stanley who is still most obliging.

March 25. Near evening time two of Shukri Aga's men came with some letters for me. Shukri Aga has not come—only his clerk. On opening the letter a letter from Shukri Aga fell into my hands. Annexed to this letter were two documents—one for Mr. Stanley and one for me.

That for Stanley was dated 12 March. (Brief statement follows as to its contents. The letter to Emin reported that Shukri Aga had arrived at Wadelai on 4 March and sets out his difficulties).

March 26. Early today Stanley brought his letter saying that the march would begin on 10 April. Whoever remained behind would have to thank himself.

Stanley came and we again had a long conversation in which to my astonishment he said amongst other things that I would be assured of a yearly income of £700 to £800 if I was appointed either by the King of the Belgians as Governor of the Lower Congo or by Mackinnon as Governor of Mombasa. Good God!

In the afternoon I was called to Casati to act as interpreter. Stanley explained to him the motive for his departure on 10 April to which Casati made a strong objection from a moral point of view but Stanley overruled him and he suddenly submitted.

(Emin's diary is from this date full of details of the preparations of loads for departure on 10 April).

April 7. An early parade and mustering of my people and their weapons. Finally there came Stanley's servant and spy to summon me to Stanley and I sent him back to ask what I was wanted to do. He came back again and told me to come at once, which I refused to do as I am ill.

In the evening Ferida fell down in the street and had a severe contusion of the elbow which brought on fever.

April 9. I have all my instruments packed, cases brought out and everything ready for tomorrow. Later I was going to Stanley to change five sick Madi, who had been allotted to me as porters and are unable to carry. But he only sent me an evasive answer. Later he let me know that there were 330 porters ready. At night there was noise and singing until rain dispersed the people.

April 10. The preparations of the porters began at 6 a.m. without assistance from anybody. Half an hour later Jephson brought 26 porters. Of these I sent 13 to Hawash's house, 4 to Vita, 3 for separate clerks and 6 as extra help for my people; Jephson and Stanley set out and immediately after them followed the people. I set out at 7.30 a.m. with my servants on foot. The two donkeys have been taken for sick people.

About 2 p.m. we reached our camping ground—a farmstead belonging to a chief of Mpinga called Katente. Stanley, who was not carrying anything, arrived before us and established his camp near ours.

Late in the evening Stanley informed me that he was going to arrange a raid in order to obtain porters for his and my people.

April 11. At 4 a.m. the raiding party set out. They returned at 5 p.m. and brought back 60 cattle and 20 goats.

April 12. I reduced my loads to three and marched at 6.30 a.m.

April 13. Stanley is very ill. Gastritis.

April 14. I sent early to Stanley to ask after his health. He sent word to me that he was a bit better and would be glad to see me. I went to him and found him in bed. (Parke and Emin had a consultation and prescribed treatment. Parke, *op. cit.* pp. 415-6, described Emin as being "really well up in his work as a medical man, considering what he must have forgotten during the past thirteen years of African life.")

April 15. Stanley had a restful night, but I was early sent for because he and Parke wanted to have my opinion about painful paroxysms which were alarming him.

(Treatment was prescribed)

April 16. Mazamboni says our camp is called Nyangabo. His people are Bagwiga.

Stanley is a little better today and has slept. I saw him this evening when he was somewhat feverish. He spoke to me about another raid tomorrow evening. I must confess I did not say much about this.

April 17. Stanley is undoubtedly better and has for some time been getting up. I hope that in five or six days we will be able to set out. Four the last few days I have been investigating Casati's claims. (respecting his personal staff.)

(Their details take up most of pp. 258-60 of the *Tagebücher*. Casati demanded a commission of inquiry into them).

Stanley is better this evening.

At 9 p.m. a party under Jephson and Stairs and my people under Shukri Aga set out on a raid. I fear the whole land will rise against us. We are in great need of provisions and Mazamboni brings us absolutely nothing and Stanley has nothing to give us.

April 18. All my people are away and I myself have had to patrol during the night.

I have not seen Stanley today, though I twice went there. Parke tells me he is undoubtedly better and has taken food.

At 5 p.m. people returned from the raid. The Zanzibaris have taken a rich booty of slaves, cattle, poultry and bananas. Regarding this Shukri Aga

has complained that Stairs and Jephson kept back our people and let the Zanzibaris do what they liked.

Yesterday Stanley asked for a coffee-mill belonging to Vita.

April 19. Today I again went to Stanley but found him apparently asleep. Casati has written again. Shukri Aga has been to Stanley and spoken somewhat bluntly about the methods of the raid and treatment of his people and has expressed a wish for his people to make a raid without the Zanzibaris, which Stanley would be very glad to do.

Dr. Parke is very ill. High temperature. High fever. He has stayed for five nights in Stanley's hot tent.

April 20. Stairs came from Stanley who wants Vita to be "in attendance" on Dr. Parke. I suspect that if Parke needs service and nursing, not only Vita, but I myself will next see him. I realize, however, that Stanley cannot understand the attendance on an invalid, which he has received from Parke. So I made no promise. Then I went to see Parke. High fever . . . . Towards evening he was a little better.

April 21. Dr. Parke is a little better. I have not seen Stanley but have given Jephson an emetic for him as his own remedy was laughable.

April 22. Parke is better. I went to see Stanley, whom I found fully clothed and sitting on a stool in the fly of his tent. He said he felt much stronger.

April 23. Parke is certainly better and almost free of fever. Jephson is ill. Towards evening I went to see Stanley but I found him full length in bed, but he soon showed weariness in his speaking with me. He told me he had heard that some of my people had failed to arrive and he said he could not wait for them. Illness brings out the good and bad in people and I regret I must say with Stanley's officers "There never was a more egotistical person than he" (words set out in English).

April 24. Stanley has been very restless during the night. I found Jephson better. Parke was a bit feverish.

April 25. The expedition set out at 8 a.m. Parke, despite his illness receives so many questions etc. to answer from his colleagues and people that he is again ill. Nelson is ill. I have seen Stanley. He appeared to be ill and complained of pains in the liver. He seemed so ill that I went to Parke, whom he trusts, to ask him to go and examine Stanley and speak to him.

April 26. Stairs went out early with some Zanzibaris to look for a new camp one or two hours from here.

April 30. The chief Sagara wants ten or fifteen soldiers for help against Kabarega's people, who have built huts in his neighbourhood and thence make raids for cattle and women.

Stanley has left his tent today. I have been housebound owing to the heat.

May 3. Stairs came. He had (in English) "an unpleasant message" for me. (The English text follows)

"Tell the Pasha that, if he seems not very anxious to procure slaves for his people, I am not anxious at all to do it."

I spoke somewhat sharply to Stairs about this and asked him to tell Stanley to spare me his "impertinence", as I was not a schoolboy. Jephson was loath for me to use the word "impertinence". He asked me, however, quite calmly to say "to mind his own affairs". Dr. Parke, who had been at this scene had left. When I asked him why he came so infrequently and if he was a thorough going "Stanleyist", he answered (in English) "Never I shall (be) so, at least only when pigs can fly".

May 6. I made a contract with Rashid Bin Omar, Stanley's principal

headman for three porters at a monthly pay of five dollars to carry my servants' loads to Usukuma or Zanzibar.

May 8. The march began at 7 a.m. Soon afterwards our camp was set on fire. Our night quarters are Vunumbe.

(In the afternoon Emin went to Stanley to ask him to wait for Selim Bey so as to enable him to join the expedition with one hundred old soldiers).

Stanley emphatically explained—and I think he was right—that he could not do so.

May 9. (Reached Bujungwe). A report reached Stanley that outlandish (? Manyema) people had attached and burnt Kiriyaanga, which lies on our route.

May 10. (Reached Vurumbe). Received four cows from Stanley.

May 11. At midday reached our night quarters Buvovo or Buhogo and I found a big hut in the village ready to receive me.

(Kabarega's people reported to be in the vicinity)

May 13. Jephson is ill, feverish, and had to be carried yesterday, Kiriyaamo and the people on the Semliki have capitulated to Kabarega. On this side of the Semliki Mboga, one of Kabarega's chiefs, will be ready with a lot of armed men to fight us. In the fight on the day before yesterday there were six to eight Banasura. They all retreated—some to the mountain and some to the lake.

May 14. We marched almost before day break. (Reached Kiriyaamo, a market place belonging to Kabarega).

May 15. (Nelson sent to find a suitable place for crossing the Semliki). Jephson is very ill and should he leave Africa in better health (hope to God he will) he will for years have bouts of fever in Europe. Stairs is ill today. (Nelson returned from the river towards sunset. All the canoes had been removed by Rwabudongo.)

I went then to see Jephson and Stairs, each of whom has a bad dose of fever.

May 16. Stanley is again ill. Stairs—fever. Jephson—fever. A good outlook!

May 17. Left Kiriyaamo. Bakwaiwuga yesterday made blood-brotherhood with Parke.

(Parke himself gives an account of the ceremony in *Personal Experiences*, pp. 429–30).

May 18. Parke has opened a way to the river and the ammunition is on the other bank. Bakwaiwuga went ahead this morning. On each side of the river there was incessant firing. Stanley had let me know that, if my people wanted to cross, everything was ready. I went at once and found him sitting by the river supervising the crossing of which Nelson was in charge. Stanley was in a conciliatory mood. I went back and shipped my people and loads across the river. The crossing place is sixty yards wide with a strong flowing stream, which was very strong on our side of the river. The bank on which we landed was somewhat better. We found ourselves near some huts. The Zanzibaris had established themselves in a large farmyard. There were small huts left for me.

Whilst I was writing these notes, we were all called to arms. Kabarega's Banasura had hidden in a banana plantation and were firing into Stanley's camp. The firing was heavy.

The worst of all is that all our cows have disappeared and up to now cannot be found.

(The fullest account of the crossing of the Semliki is that of Parke, *op. cit.*, pp. 429–30. He and Nelson were the only Europeans physically fit to super-

intend the operation. Bonny had occupied the opposite bank so as to supervise disembarkation).

May 20. About 6.30 a.m. we began our march along the river to the east.

May 21. We rested today.

May 23. Stanley sent me yesterday privately the information that we would march early and we came at once into a forest. We at last came to our camping ground at 7 p.m.

May 24. Yesterday we were in Bwamba. The people have suffered much from Kabarega's raids.

May 27. All the villages in this district belong to the Bawamba, whose principal chief is called Mworagongi and resides in Bukoko. All these lands were once rich in herds of cattle, but these have been taken by Kabarega and today there are only goats, sheep and poultry there. They are unwilling to give any geographical information.

May 29. We are now encamped in a small village surrounded by bananas and maize fields, which are full of pumpkins.

Notes—Yesterday's camp Bssaro. Today's Butaro. Tomorrow we shall reach Buesse and the day after Bukoko, where we shall sleep two nights. Thence it is only three days to Busongora. The people here are not Bawamba but Bartambwa. They speak a modified form of Runyoro.

May 30. A prisoner was brought in by Stanley's people with a flint stock gun (Victoria Regina, Tower, 1861). This shows we must be very close to Kabarega's Banasura. We are now in Buesse, whose inhabitants are like the Bawamba. Our next night's camp is Bukoko, where the Manyema dwell. Then follows Waranoogwe and then Busongora begins.

May 31. The Manyema have come to visit Stanley. It is only three days from here to Busongora. From Busongora to Bunyampaka it is six to eight days. Stanley has ordered every body to collect three days' provisions.

June 1. (Difficulties of collecting provisions set out) The Manyema are eagerly employed in buying and selling.

June 2. (Once again set out on march to east).

June 3. Stanley himself came—the first time since Kavalli's—to say that no route had been found and that we must stay here tomorrow. So the people may be lucky in their foraging.

June 4. (Marched early WSW and then S).

June 5. (A halt whilst exploratory parties go to find a suitable route).

June 6. (Set out at daybreak in a southerly direction and halted by a river at 3 p.m.).

June 7. (Halted for day to collect provisions).

June 8. (A captured woman says the present camp is called Musukali and its chief is Mutaregara. It is four days march to Busongora).

June 10. A deputation of eight Bakonjo came. The chief of this district of Bulega is called Nyamyambogo.

June 11. This was the most agreeable march that I have ever made in Africa . . . . Our camping ground in the small Bakonjo village Mtsora or Mutjora. The people have been dispersed by Kabarega's Banasura. From here to Busongora is two days. From thence to Bunyampaka is five days. We have today crossed the small districts of Bulema and Bubenga. Stanley has told people that it is only three days from here to his former camp in Bunyampaka.

June 12. My people were sent out foraging. Stanley has told me that the day before our arrival here twenty of Kabarega's Banasura with one hundred spearmen had been here. In Busongora at the Lake there is a rear guard with

many weapons and herds of cattle. Their chief is well known to me. He is a certain Rukara who once came to see me at Lado. Kabarega's people have laid waste and plundered Busongora. From here to the Lake is three marches. From here to Stanley's old camp is about fifteen days.

June 13. Quite early I received the following note from Stanley (in English).

"Will you be kind enough to muster your principal people and to say that after tomorrow there is little or no food for several days, 4—5 days. Therefore they should make provisions for as many days as they can carry as a reserve.

"I wish all men having rifles to muster before our tent at 9 a.m. with such young fellows as would like to have rifles."

I at once did what was necessary. Stanley has formed a company and given them weapons and placed them with my consent under Shukri Aga. In the evening Shukri Aga came to inform me that all my servants and armed men had taken service in the company.

I thereupon went to Stanley and told him I would willingly give up three of my six servants, but three men for keeping watch over my things and two armed men for my body guard were absolutely necessary. There then followed an outburst of fury more brutal than that at Kavalli . . . . First of all I replied quite calmly, but as more accusations quickly followed I said it would in any event be best to treat me as a trouble-maker and to leave me where I was and for him to go his own way.

(Parke, *op. cit.* p. 439, describes this incident as having taken place on 16 June. He says:—

"The Pasha and Mr. Stanley, who had always been good friends up to the present, had a row today about making a company of the Pasha's men. The Pasha said impatiently "You had better leave me where I am, Mr. Stanley." The latter replied "You can do as you like, Pasha. You are a thankless, ungrateful man." The Pasha afterwards apologised."

(Parke's dating of the incident is clearly wrong, but his summary of what took place rings true).

June 14. (An African called our camp Masambo and said it belongs to Busongora). From here we will go tomorrow to chief Mukasa and the next day to Kisaka and reach the Lake (Albert Edward) early the following day.

June 15. (Emin records that he apologised to Stanley for his apparent display of ingratitude regarding Stanley's treatment of him and his people. See entry under 13 June 1889).

Our night quarters are called Kyamvali and belong to Busongora. For the first time since 9 April I have slept in a hut.

June 16. Two natives—Basongora—give me the information that our night quarters are called Kisaka. The chief is Kikamba, a brother of Ireta. Rukara's station is on the Lake and is called Katwe. Thence to Bunyampaka is only two days' march. Rukara has been set up as chief by Kabarega. My acquaintance Kakende of Toro has been driven out by the Banasura and is now settled in Buganda.

June 17. (Expedition reached Katwe. Stanley proposed to halt next day so that people could collect provisions.)

June 20. (Expedition left Katwe and is now on the Equator).

June 22. Our night quarters are called Mruli.

June 23. The people of Katwe have a permanent trade with those of itagwenda (noted by Stanley), where there is a large market place. The

chief of Kitagwenda is Mukasa, the son of Ruigi, who is ready to acknowledge Kabarega or Ntare of Ankole. Perhaps he will come to us. It is a good five days' march from here to Kitagwenda. No. 1 camp in the open, No. 2 at Nsongi, No. 3 at Kibale Kyakonya and early on the fifth day at Kitagwenda.

June 24. Reached Kinyayuwi in District of Kitagwenda. After this Kiramoli and Kigale.

June 28. Stanley has fallen ill today.

June 29. Stanley is still ill.

Captain Nelson was received in a friendly manner by a friendly Muhuma chieftainess and I learn from him what follows. Our camp is called Mpanga. Kibale was the last camp and belongs to Toro. We next reach Kasunga Nyanja, a great salt market, to which the people of Buganda, Karagwe, Mpororo, Kitwara and Ankole flock. The chief of Kasunga is Mukasa, son of Bulemu, son of Ruigi, and is now himself called Ruigi.

June 30. Mukasa Ruigi has sent a deputation to inquire whether we are friends or foes.

I went to Stanley but did not see him. Dr. Parke was preparing an injection for him. Jephson and Stairs are better, but still weak. Bonny is ill with fever. Casati has not been seen for three or four days. Why?

A second deputation has come to Stanley from Mukasa Ruigi. In his name Stairs and Nelson have assured him of our peacefulness and friendship.

Stanley is a little better and has let me be informed that he will be able to march tomorrow.

July 1. Ten or twelve boats were provided for us. (sc. to cross the estuary of the Mpanga River). We were soon good friends. They call this place Bukurungu. It belongs to Bunyampaka and Mukasa Ruigi is their chief.

Stairs has brought me the following message from Stanley. The first part of our journey is at an end. The tribes ahead of us are more dangerous than those behind us. We will have to make longer marches. Stanley has told his officers that we are very near to his old camp in 1876. It is three hours inland on a plateau. He is waiting until tomorrow for a visit from Mukasa Ruigi.

(See *Early Treaties in Uganda in U. J.* 12 (1948), 25, 28-9, and my letter in *U. J.* 17 (1953), 189. See also Appendix A, *post.*)

July 2. I went to Stanley who told me we would certainly have to fight our way through Ankole.

A boat has arrived from Katwe and the people have told Stanley that after our departure Kabarega's Banasura had returned and established themselves in their former quarters.

July 3. Today Captain Nelson has broken down and is sleeping feverishly. At 6.20 a.m. we were on our way. Here we are in Ntare's kingdom of Ankole. People from here with whom I have spoken call the place Tjikumbe and say it belongs to Ankole.

Nelson is very ill indeed.

## APPENDIX A

The original Bulemu was a grandson of Olimi V, who was supplanted c. 1852 by Kamurasi as Mukama of Bunyoro (H.H. Karubanga, *Bueya Niberwa* (1949), p. 11) This Bulemu was succeeded by a son named Ruigi, who was succeeded by Mukasa, who on accession assumed the name of Bulemu.

Hertslet, *Map of Africa by Treaty*, Vol. i, p. 76 and *Africa* No. 4 (1892). 'Papers relating to the Mombasa Railway Survey and Uganda' state that Bulemu Ruigi ceded Unyampaka and Kitegwenda to "Bula Matari (or H.M. Stanley . . . . in this moon (May 1888))".

But Stanley was at the south end of Lake Albert in May 1888, and did not reach Bulemu Ruigi's territory until the latter days of June 1889. The falsity of this document is accordingly apparent.

When Lugard reached Kitagwenda on 28 November 1891 he was met by envoys from Mukasa Ruigi, professing friendship. "I therefore reassured him, telling them that he should retain his country, but would, as in old time, regard Kasagama and not Kabarega, as his suzerain chief. This, he said, was what he earnestly desired . . . . I have not a good opinion of this men Ruigi . . . . I determined to build two forts in Kitagwenda with the object of closing the roads by which powder is brought into these countries" (*Africa*. No. 2 (1893), p. 10).

Mukasa Ruigi died of small pox shortly after Lugard's visit.

## NOTES

THE RHINOCEROS VIPER:  
A NOTE ON ENVENOMATION AND CAPTURE OF PREY

By J. G. MATTHEWS

The rhinoceros viper, (*Bitis nasicornis*, Shaw), is to my mind quite the most beautiful of the East African snakes; the colouring is outstandingly attractive. For those who have not seen this snake I quote from Isemonger's description, "The head is bluish-green above, with a dark lance-shaped mark, with its point on the snout. A vertebral series of pale blue nicked oblongs, each bisected and bordered with a very narrow bright yellow line extends to the tail. There is a geometrical pattern of triangles in bright red and greyish-brown on the flanks".<sup>1</sup> The common name of this snake arises from the vertical scales, like small horns, set on the snout.

I kept one of these snakes for a considerable time, and thus was able to observe it feeding on a large number of occasions. The food used at each feeding was a live or freshly killed mouse or a frog. When offered food this viper never failed to take it. Among herpetologists it is generally accepted view that when a viper bites it does so very swiftly and that the bite is followed by an immediate withdrawal of the head. Thus Fitz-Simons wrote of it :— "Unlike the back-fanged and elapid snakes there is no holding on after the bite, but immediate release and withdrawal to the former position of readiness; this whole action of strike and immediate withdrawal is so quick that it is often difficult to follow with the eye."<sup>2</sup> I therefore think it worthy of record that my viper, when offered food, seized it instantly, burying its fangs deeply, but never once released the prey after the initial forward strike. After seizure, the prey was gripped firmly between the jaws for some minutes. Presumably this firm grip was to ensure complete envenomation of the prey, and whether such prey was alive or dead made no difference, the pause, animal in mouth, always being noticeable and prolonged. The normal procedure of swallowing then ensued, the viper's long fangs being used alternately, in a finger-like manner, to push the meal into the throat.

I would have preferred to have observed the feeding habits of this snake over a much longer period of time, unfortunately the snake developed a respiratory infection (I suspect, virus pneumonia) and died very rapidly. Since then I have been unable to obtain another viper of the same species. I am, consequently, left wondering whether holding after the bite is a specific trait of *Bitis nasicornis*, or if this was a habit developed by the individual in my possession. If in fact such a deviation from normal viper behaviour proves to be widespread within this species, then it would seem possible that there is a defined reason for it, and that more prolonged study would therefore prove profitable.

In closing I should mention that my specimen was quite a small one; a long way, I judge, from maturity.

Any correspondence on this subject would be welcome.

\* \* \*

A brief description of this snake is here appended :—

*General:* The head is triangular, and is very distinct from the neck. Two long, horn-like scales are set between the nostrils. Remainder of head covered with small, imbricate scales. Dorsals and laterals are strongly keeled. Body very thick, and the tail extremely short.

*Length:* Up to six feet, though specimens of such a size are extremely rare.

*Food:* Amphibians and small mammals.

*Venom:* Very powerful. Probably a mixture of haemotoxins and neurotoxins.

*Habitat:* Damp forest. Found mainly in or under bushes, under logs, large stones, etc.

*Temperament:* Generally quiet and non-aggressive, but will bite if molested. Nocurnal in habit.

*Other names:* "Nose-horned viper" or "River-jack".

*Distribution:* Uganda and western Kenya.

#### NOTES

1. Isenmenger, R. M. *Snakes of Africa—Southern, Central and East*, 1962, p. 159.
2. FitzSimons, V. F. M. *Snakes of southern Africa*, 1962, p. 25.

## THE SPREAD OF CHRISTIANITY IN AND AROUND UGANDA

L. PIROUET

The following table and accompanying map provide a summary of the spread of Christianity in Uganda and neighbouring areas. The dates indicate the year in which evangelism was first effectively undertaken in an area. Hence the first Christian teachers to visit Ankole in 1898 have been omitted because they stayed only about a week, but the 1894 venture to Kavirondo has been included because one source says there were baptisms as a result of it.

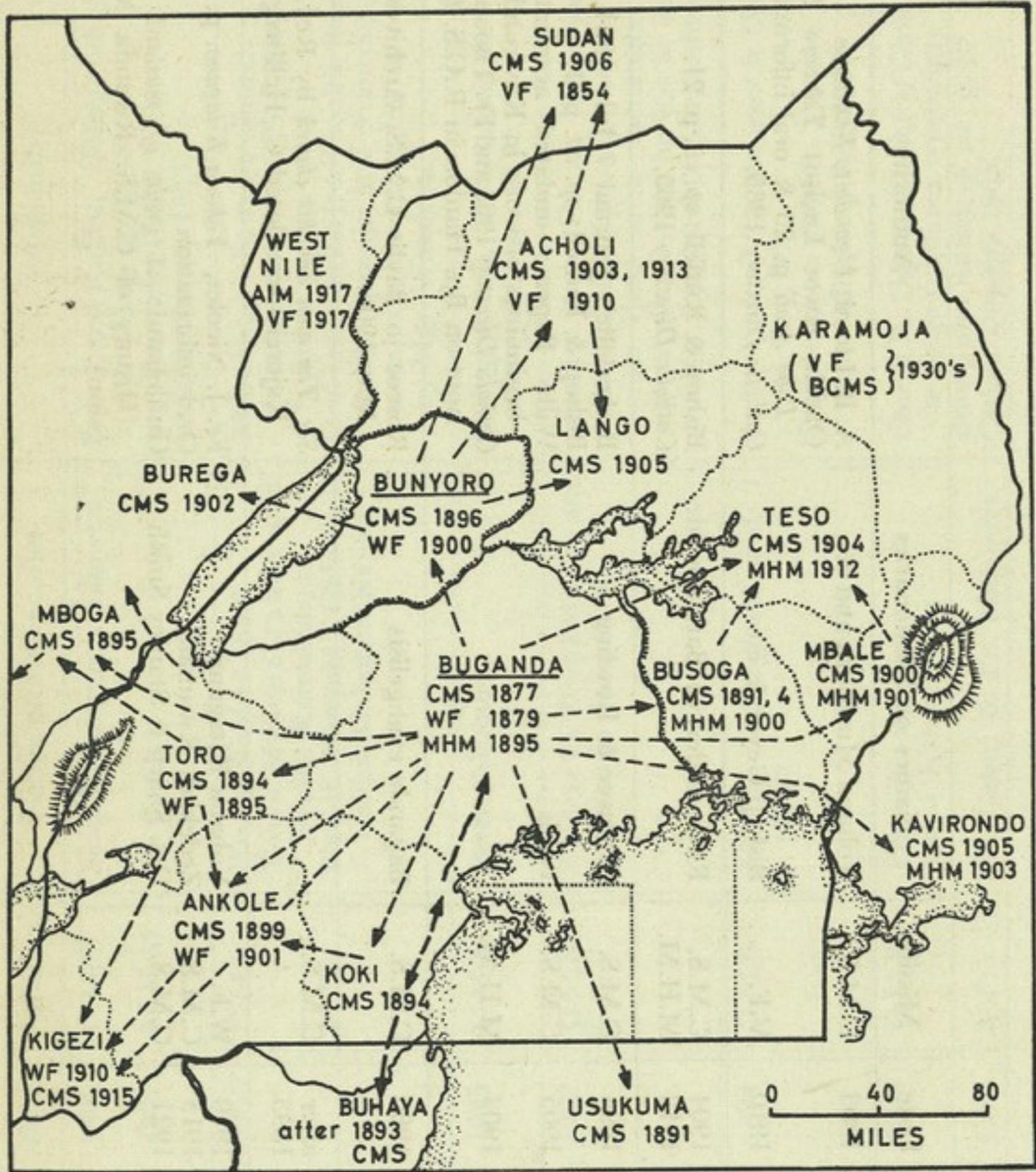
The following initials have been used:—

- |          |   |
|----------|---|
| A.I.M.   | = Africa Inland Mission.  |
| B.C.M.S. | Bible Churchmen's Missionary Society.                           |
| C.M.S.   | = Church Missionary Society (Church of Uganda).                 |
| M.H.M.   | = Mill Hill Mission. (St. Joseph's Foreign Missionary Society). |
| V.F.     | = Verona Fathers. (Sons of the Sacred Heart).                   |
| W.F.     | = White Fathers.  |

Area	Date	Mission	Names of Missionaries	Authority
Buganda .. ..	1877	C.M.S.	Lt. Shergold Smith Rev. C. T. Wilson	
	1879	W.F. ..	Pere Lourdel Brother Amans	
Usukuma (Nassa)	1891	C.M.S.	Not the year when this station was first started but the date when the first Baganda went as evangelists outside their own tribe (N. Mudeka, B. Mudiru, S. Kalikusinga)	Baskerville's Journal 13 July 1891 Nassa Account Book, Namirembe Archives S. Kalikuzinga, oral information given in 1965.
Busoga .. ..	1891	C.M.S.	F. C. Smith, Rev. E. C. G. Gordon. and Baganda	Baskerville's Journal, 20 April 1891
	1894	C.M.S.	Rev. F. Rowling and Baganda	Comments on Finance Committee Minutes, 9 July 1894. C.M.S. Archives.
	1900	M.H.M.	Fr. Van Agt.	<i>Catholic Directory</i> , 1965. Fr. Thoonen, R.C.S. files.
Toro .. ..	1894	C.M.S.	Mako Lweimbazi, Petero Nsubuga, Nua Nakiwafu, Tito Wakibinga	Comments on C.M.S. Finance committee Minutes, 9 July 1894. N. Nakiwafu in <i>Ebifa</i> November 1911 G. Leblond, <i>Le Pere Auguste Achte</i> , p. 194. <i>Catholic Dictionary</i> 1965. R.C.S. files.
	1895	W.F. ..	Pere Achte	
Ankole .. ..	1899	C.M.S.	Firipo Bamulanzechi, Andereya Kwamya	A. R. Cook Journal 3 Dec. 1899 Canon Y. Buningwire, oral information 1965.
	1901/2	W.F. ..	1901 ? in Nyabushozi 1902 Mbarara (catechists)  Peres Salles, Gorju, Varangot	J. J. Willis Journal 30 Aug. 1901 J. J. Willis Journal 15 Sept. 1902 J. J. Willis Journal 18 Oct. 1902. Fr. J. Nicolet <i>Yohana Kitagana</i> p. 15

Area	Date	Mission	Names of Missionaries	Authority
Mbale area ..	1900	C.M.S.	Seme Kakunguru's followers	Bishop and Ruffell, <i>History of the Upper Nile Diocese</i> pp. 2—3 Fr. Thoonen, R.C.S. files. <i>Catholic Directory</i> 1965.
	1901	M.H.M.	Fr. C. Kirk	
Bunyoro .. ..	1896/7	C.M.S.  W.F. ..	(Daudi Kagiri? 1895) Yairo Musenziranda and Danieri Kamukukuru Placidi Mutyabi, Gabulieri Kaliisa, Gabulieri Kajura	Mika Fataki, Bunyoro Church Magazine, 1931, pp. 65—7 confirmed by Fisher papers. Oral information from Bazilio Bicocoli, Patrisi Kasaija and Francois Kya- wera, all recommended as reliable by Mgr. Wandera.
Mboga .. ..	1895	C.M.S.	Petero Nsubuga	T. B. Johnson, <i>Tramps round the Mountains of the Moon</i> , p. 57.
Burega .. ..	1902	C.M.S.	Andereya Dwakaikara and Asanasio Bafirahara	Mss by Rev. H. D. Muherya s/o Dwakaikara (internal evidence sup- ports date as a messenger told Dwakaikara when he was in Burega of the deposition of Kitehimbwa).
Koki .. ..	1894	C.M.S.	Mikaeri Luzung'ana and 3 others	A. R. Tucker, <i>Eighteen years in Uganda</i> , Vol. 2. p. 186 Comments on C.M.S. Finance Com- mittee Minutes July 9 1894.
Lango .. ..	1905	C.M.S.	Yosua Konge and Yosua Katono	Canon R. Ogwal: <i>Coming of Christianity to Lango</i> (undated typescript) Bishop and Ruffell <i>op. cit.</i> , p. 16. <i>Catholic Directory</i> 1965.
	1930	V.F. ..	Fr. Casari & Fr. Malandra	

Area	Date	Mission	Names of Missionaries	Authority
Acoli .. ..	1903	C.M.S.	Yohana Murusura and etc.	A. B. Lloyd; <i>Uganda to Khartoum</i> Okech, Rwot Lacito: <i>Tekwaro Kiker</i> <i>Lobo Acoli</i> p. 25 & oral information <i>Catholic Directory</i> 1965.
	1910	V.F. ..	Bishop Geyer & etc.	
Teso .. ..	1904	C.M.S.	Rev. Andereya Batulabudde	Bishop & Ruffell: <i>op. cit.</i> p. 21. <i>Catholic Directory</i> 1965.
	1912	M.H.M.		
Kavirondo ..	1894	C.M.S.	Crabtree & Rowling	Baskerville's Journal 7 July 1984. . Bishop & Ruffell: <i>op. cit.</i> p. 1. Willis Papers: undated account of beginnings of work in Kavirondo <i>Catholic Directory</i> 1965 and Fr. Thoonen's note on Bp. Hanlon in R.C.S. files.
	1905	C.M.S.	Willis	
	1903	M.H.M.		
Sudan .. ..	1906	C.M.S.	Baganda evangelists	Roscoe to Baylis C.M.S. Archives 12 May 1906.
Buhaya .. ..	after 1893	C.M.S.		<i>See The man and his church</i> by Rev. A. Kajerero translated C. Hellberg.
Kigezi .. ..	1910	W.F. ..	Yohana Kitagana	Fr. J. Nicolet, <i>Yohana Kitagana</i> . p. 35. Oral information Guillebaud: <i>A grain of mustard seed</i> (History of C.M.S. Rwanda Mis- sion).
	1915	C.M.S.	Zedekiah Rwamafa	
	1921	C.M.S.	Drs. Sharp & Stanley Smith	



THE SPREAD OF CHRISTIANITY IN AND AROUND UGANDA

## PUBLIC HEALTH IN THE KIBUGA

By F. B. WELBOURN

In *The royal capital of Buganda* (p. 122) P. C. W. Gutkind quotes Roscoe's report that Kabaka Ssuuna II "made the neglect of certain sanitary conditions in the capital punishable by death". He does not complete Roscoe's report that a certain medium criticised him, in the name of *balubaale*, for so doing. The whole story comes out more clearly in Sir Apolo Kagwa's *Basekabaka* (1927 edition, p. 88). One of Ssuuna's bearers slipped on *obusa* while passing through a camp of Bakerere and nearly fell. He explained to his master that he had stepped on *empitambi*. As a result, three hundred Bakerere were killed and Ssuuna forbade the depositing of *obusa* in the capital. Despite Snoxall's dictionary [*busa*, o n. XIV dung of animals (not of human beings)]. I am assured that *obusa* unqualified (cf. *obusa obw'ente*. cow-dung) is in regular, if vulgar, use for human dung. In speaking to a superior the word would be *empitambi*, which means only human dung. The story of the encounter between Ssuuna and the medium is more fully told by M. B. Nsimbi, *Amannya Amaganda* p. 146 ff. It is plain that what may well have been the first public health enactment in the *kibuga* had nothing to do with empirical considerations.

\* \* \*

On seeking Mr. Nsimbi's view on the above note it became apparent that some people interpret *obusa* as a polite term and *empitambi* as vulgar, in contrast to Mr. Welbourn's informant. Mr. Nsimbi writes "Roscoe and Sir Apolo Kagwa both relate the story of the decree issued by Ssuuna against the dropping of human excreta in his capital, in much the same way. One thing I doubt very much is whether Sir Apolo Kagwa used the very same words uttered by Ssuuna and his bearers and courtiers at the time of the incident. In those days people had to be very careful of the language they used when speaking to the Kabaka and other high ranking officials as well as to one's in-laws. The nouns *empitambi*, *amazi* and *ebyayi* have always been regarded as vulgar if used in high society and I doubt if anyone would have used such words in front of Ssuuna. On the other hand *obusa* unqualified is quite acceptable, although *obubi* is the most polite word. Another word *bbi* (probably derived from *obubi*) is now much in use when referring to children's dung. There are, however, other clauses which people use in order to avoid being vulgar in public."

\* \* \*

Mr. Welbourn also draws attention to the fact that Dr. M. Kiwanuka in his Ph. D. thesis says that the bearer slipped on animal dung and lied in saying that it was human.

Other interpretations of the incident would be welcome (Eds.)

## CORRIGENDA

A few corrections need to be made to the previous number of the *Uganda Journal*, Volume 31 part 2.

*Kasagama of Toro* pp. 186-187. Two references are made to Mr. and Mrs. Fisher in 1896 and 1897. These should be to Mr. Fisher alone, since the Fishers were not married until 1902.

*Drums of Padhola* p. 192. The clan referred to in the penultimate paragraph should be the Orua-Lapa (not Orua-Iap). On p. 193 the gombolola referred to on the third line from the bottom should be Paya (not Paye). On p. 194 the location (line 7) should read Katajula (not Kitajula), the area (line 14) is the Yo woko (not Ye woko) and in the last paragraph the clan is the Amor/Kagulu (not Kugulu). On p. 198, note 3, the clan is the Orua-Dembe, (not Orua-Jembe).

*The Baganda Martyrs* is correct in its Luganda version, but a few amendments are necessary in the English version. On p. 212 line 6 of the English text, the date 1887 needs inserting after January. The very last line should refer to Bazzekuketta Atanasi (May 27, 1886), (not to Atanansi—May 27, 1887).

The Editor apologises for these, and doubtless many other, errors.

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*Mr. A. T. Matson* served with the Kenya Medical Department from 1944-63, and has contributed several papers to the *Uganda Journal*. His history of the *Nandi resistance to British rule* is about to be published.

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## REVIEWS

## MEN WITHOUT GOD?

By J. K. RUSSELL

London, The Highway Press, 1966. 7s. 6d. (U.K.)

## POLITICS AND POLICIES

An essay on politics in Acholi, Uganda, 1962-1965.

By C. LEYS

Nairobi, East African Publishing House, 1967. 12s.

Publications concerning the Acholi are so rare that one is tempted to elevate these two essays to the status of "books." Neither Bishop Russell nor Professor Leys have had anything so comprehensive in mind, however, and their offerings are mere chapters in the piecemeal study of Acholi-land. The two essays deal respectively with God and Government—both twentieth-century imports into northern Uganda—and the limitations of each are self-imposed. It is only because the subjects are universal that the reader feels he could have expected more.

J. K. Russell, lately Anglican Bishop of Northern Uganda, has taken as his text Bonhoeffer's provocation: "God is teaching us that we must live as men who can get along very well without him." The Acholi, Russell maintains, are very well aware of this, for *dini*, or religion, came to them "as something entirely other, entirely discontinuous with anything previously known." The work of Okot p'Bitek on the concept of *jok* is cited to show that there was no hierarchy among these enigmatic "spirits": "There was no High God to whom all knees were bended." Indeed, there is no mention of God or gods in any Acholi clan ritual; Christianity was thus never allowed to intrude upon the corporate clan existence.

Early missionaries found it difficult to believe that they were to describe their message on a *tabula rasa*. Bishop Russell has used linguistic evidence and common sense to discredit A. B. Lloyd's testimony that the Acholi wishes to "worship the white man's God." Further, in an analysis of the texts of the early preaching in the region, he has explained (as has Father Crazzolaro) the serious misapprehension on the part of the missionaries: their insistence on finding the equivalent of the Christian Creator-God. The mistake was compounded by the willingness of the Acholi to listen to the "teachers" tell of the "Great and Loving Father"; it was not clear that he was seen as that aspect of the white man's wisdom which brought forth material miracles. It was only for the very few that Christianity replaced clan ritual.

Social factors (politics, marriage, death) are analysed in an attempt to explain this condition. In education, the conclusion is that the separation of "schooling" and "religious practices" has led to a decline in Church-going in Acholi. There is irony in the admission that the demand for education in the

early years was primarily responsible for the success of the Church in Acholi. The condition of the ministry, ordained and unordained, has been weakened by the lack of a tradition of voluntary service and insufficient monetary incentive. Given these depressing conditions, and the additional stress of politics, the dedication of the few is remarkable.

In his article on the Acholi concept of Fate, Okot p'Bitek has noted the irreligious tendency of the Acholi and described their spiritual concern as "this-worldly." Russell attempts to draw a number of parallels between the Acholi world-view and Bonhoeffer's denial of religion. But, having characterized the Acholi outlook as being "pragmatic rather than speculative, earthy rather than heavenly, corporate rather than individualistic," he finds that Bonhoeffer's premise has no meaning for the Acholi. Undaunted, he turns to Tillich's thesis that man's "Ground of Being" is Love, and suggests that here may be a common meeting-ground for the Acholi and western situations. If so, Russell insists, Christian missionaries must not assume that the outward forms should coincide.

More important missionary contributions to northern Uganda than religion were education, agriculture, commerce, and hospitals. When government entered the picture as a parallel agency for social service, the Acholi realized that if they encouraged competition, they would get more material benefits from each of the institutions. In sixty years the distribution of these benefits have become policy issues and Colin Leys has considered those issues which require acts of government. Because of low incomes, almost all governmental actions or decisions are of major importance to the individual, and government is seen as a source of further income to be obtained by manipulation. Politics, for the Acholi as for others, is the art of the possible: realistically, they expect some improvements in rural life but not a wholesale transformation of their lot.

This, it seems, is the point of view of the rural voter which Leys has sought; he claims in his preface to have presented only "a fragmentary glimpse of some of the political concerns of the district elite." A second objective of the study was to determine a pattern "in which local politics and national policies interact." What emerges from the study is an account of the obstructions to the implementation of policy. These include the formidable divisions in Acholi society themselves (East v. West, Protestant v. Catholic, UPC v. DP, clan v. clan) as well as the difficulties inherent in the establishment of any new political system (the effective use of an impartial bureaucracy, the pursuit of party rather than public interest).

Although Professor Leys has not allowed himself to speculate on the possibility of removing these obstructions, he has attempted to define the demands of the electorate and the issues which evolve therefrom. It was perhaps premature to seek "patterns of political competition" in the first years of independent government, but the methods Leys has used in Acholi will no doubt succeed in future examinations of Uganda's local political scene. This will be especially true as researchers receive the same excellent co-operation from politicians who have learned that rural concerns have taken the *polis* out of politics.

## MEDICAL CARE IN DEVELOPING COUNTRIES

*Edited by M. KING*

Nairobi, Oxford University Press 1966. 200p. 22 Shs. 50 cts.

There is no doubt that Uganda can be, and is, rightly, proud of the traditions of its University and teaching hospital at Makerere. A great deal of valuable research in medicine has been undertaken there, and now Maurice King's book comes from it as one of its most outstanding Publications. It is subtitled a Primer on the Medicine of Poverty, for it deals—as do all too few medical books—directly with the problems of medical care in that vast neglected half of the world which is still underdeveloped.

For these regions, largely but not only tropical, in Africa, much of Asia, central and south America, the basic problem is not ignorance of what should be done but poverty: poverty of funds, of trained personnel, of equipment, supplies and of good communications. This therefore is a symposium designed to help the student and the doctor in his work especially in the poorer and remoter parts. Here are numerous practical hints and new approaches, bringing the most necessary and modern medical techniques to bear in an economical, simple, and efficient manner where they are most needed. It ranges widely over problems of medical administration, hospital and health centre practice, the design of buildings and sites, the best deployment of professional and auxiliary personnel available, laboratory techniques, choice and use of drugs and anaesthetics, maternity and child welfare, health education, blood transfusion and emergency surgery, radiography, mental health, malnutrition and the supply and choice of library facilities for the staff.

The constant stress is on economy, simplicity and feasibility. Out of a number of Professor King's axioms stand out most clearly the duty of the doctor to *teach* as well as heal, to teach other doctors, students, nurses, auxiliaries, and the whole field of hospital and public health staff, and to *spread out* to unreached areas, to extend the range of medical care to reach every village and every patient with some help before further improving the lot of the fortunate few in the large cities.

In fact the whole book has a distinctly missionary atmosphere about it. This is not surprising when one notes that the editor began the book after doing a locum for Dr. Peter Cox, a medical missionary in what is probably the remotest hospital in the country, at Amudat in Karamoja. He had in mind the great lack of suitable texts to guide doctors in just such situations, and thus helped to spark off a conference, supported by WHO and UNICEF, on health centres and medical care which attracted doctors of like mind to put together their ideas. They included government doctors, medical missionaries, lecturers from Universities in Africa and Britain, and laymen. Of particular interest to readers of the *Uganda Journal* will be the chapters written by Professor D. Jelliffe on malnutrition, Dr. P. Stanfield on immunisation, Dr. J. Bennett on health education, three distinguished teachers whose chapters are based on work done in Mulago, at Kasangati, and elsewhere in Uganda, and the chapter on progressive medical care by the medical missionary brothers, Peter and Ted Williams in the West Nile. In fact 42 of the 73 contributors were working in Uganda, though some, like the editor himself, who recently accepted the Chair of Preventive Medicine at Lusaka, are no longer in the country. Too few of the writers are Africans, and it is to be hoped that future editions will find chapters increasingly written by them.

A few minor criticisms are the lack of a chapter on occupational health, for all too few medical assistants and nurses in tropical estates, factories and even mines know how to set about their work adequately. There is a rather irritating lack of the normal page numbering, for though the sectional key numbers with their good cross references should stay, page numbering as well would save time in locating material. The additional printed sheets sent out with copies of the East Africa medical journal are a good idea.

Dr. King claims to be only the editor of this work, but apart from his own chapters, he is much more than merely an editor. Into the whole book has gone something of his spirit and enthusiasm which gives it a uniform character of compelling interest and value. His devotion to the task of putting all this complex technical information together became almost legendary in the Medical School. He gave every spare hour, often late into the night, and those who worked close to him and saw him often as I did, could not fail to catch his infectious enthusiasm and admire his minute attention to detail in the revision. The numerous sketches, diagrams, charts and graphs were all his own labour, and his room fulfilled his own axiom, that the right equipment for the job was in the end the most economical and efficient. The result is invaluable, and should be in the hands of every doctor who wishes to practise medicine in developing countries, and in the hands of a good many others in related work.

R. SCHRAM

#### AFRICAN ELITE—MAKERERE COLLEGE STUDENTS 1922—1960

By J. E. GOLDTHORPE

Nairobi, Oxford University Press, 1965, 109p., (East African Institute of Social Research, East African Study, No. 17)

In this interesting book, Dr. Goldthorpe draws on the Makerere College Register, and on information obtained from his follow-up of 55 men who left the College during the 1930s, and a survey he carried out in two stages in 1958 of students in residence at Makerere. He sets out "to make a systematic survey of Makerere students, and the roles and characteristics finally acquired by these elites when they left school".

The book traces the tribal and family back-grounds of the 1700 students covered in the survey; it describes the system of schools through which they came, and their experience on the way; and it describes the students' problems of adjustment, their careers, and their styles of life. The general picture which emerges is that between 1920 and 1960 Makerere held a key position for African aspirations. The students' social origins, though sophisticated compared with those of East Africa generally, were humble compared with students elsewhere. The path of the African child who sought entrance to a secondary school and Makerere, was beset with many difficulties. The Pilgrims Progress was a pleasant Sunday afternoon walk compared with the scholastic swamps, precipices, thorn thickets, and miscellaneous obstacles which faced the intrepid African child who set off on a narrow road leading to a diploma or degree.

Dr. Goldthorpe's *African elite* is at once a penetrating sociological account of Makerere students in pre-independent East Africa, and a misinterpretation

of African conditions, especially in those sections where subjective judgements are made of the relationships between the African elite, and his fellow Africans, Europeans and Asians.

The Makerere students are a product of the educational system of the pre-independence era in East Africa, and this system seems to have had limited objectives. As Goldthorpe says, the educated Africans were wanted, under British rule, firstly as teachers; next as medical men, and thirdly to staff the agricultural and veterinary extension services. The stability in career of most Makerere men referred to later in the book was in part due to these limited and specific jobs for which they had been prepared.

In describing race relations in East Africa, Goldthorpe says these were not easy, due mainly, to the shortcomings of the African elite. "One factor in this situation was that most educated Africans at that time lived in such poor houses that they felt unable to offer reciprocal hospitality to Europeans." He also talks of the irritation which could be caused by "The rather prevalent habit among educated Africans of accepting invitations to meals which they did not turn up to eat, and being generally slapdash about times, places, and arrangements." To me it seems rather odd that the blame was so one-sided. Dr. Goldthorpe described one instance in which he visited the home of a former Makerere student. He was given "cloud-grey water in a glass; I drank it with misgivings." He was also entertained to "tea, African style—half-milk, heavily sweetened, and flavoured with ginger, and stale thick slices of bread and butter." If this is how hospitality in an African home can be described, is it any wonder that you do not get invited again? These are only a few examples, of some of what I have described as a misinterpretation of African conditions.

Nevertheless, the book for the period it describes, fills in an important gap in sociological literature in East Africa. One only hopes, as does Dr. Goldthorpe, that a study of how the educated elite stands in the present "confusion" between traditional and western values can be undertaken by one of the elite group.

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B. OTAALA.

#### FACTORS AFFECTING INDUSTRIAL EMPLOYMENT: A STUDY OF UGANDA EXPERIENCE 1954 TO 1964

By A. BARYARUHA

Nairobi, Oxford University Press 83p., Shs. 8 (East Africa only). (East African Institute of Social Research, Occasional Paper, No. 1).

The author states that his study was prompted by the failure of employment to expand in the last few years. This is perhaps an understatement of the situation in Uganda since, as the figures in the study reveal, employment has actually declined over the last few years; in 1964, 224,894 people were in paid employment compared to 259,220 in 1954, a fall of about 13% on 1954 figures (table IV, p. 7). Another way of looking at this problem is that nearly 35,000 jobs will have to be created in order to restore the 1954 employment level; this is equivalent to one-third of the new jobs expected to be created under the 2nd Five-Year Plan 1966-71. This phenomenon must be viewed against a

population increase of about 2½% per year combined with a higher emigration of people from the rural areas to urban centres. Thus the challenge to the government is first to arrest this decline and then expand employment.

At the same time there has been substantial increases in output over the same period, so that fewer people have been producing more. This would lead one to the conclusion that employers have either been substituting capital for labour or improving the productivity of their labour force, through better selection, training, and stabilization of their labour force. Accordingly, the author made careful studies of six firms in an attempt to assess the importance of these factors regarding employment, and the body of the study is taken up by a report of his findings in these case studies. The firms selected were Nyanza Textiles, Uganda Breweries, British America Tobacco, Kilembe Mines, Sikh Saw Mills and Madhvani Sugar Works. These case studies produce diverse results: for instance Nyanza Textiles and Kilembe Mines have both increased employment substantially while B.A.T. and Sikh Saw Mills are conspicuous by the rate at which they have reduced their labour force. The Uganda Breweries and Madhvani Sugar Works have also reduced their labour force but not to the same extent. In cases where information was made available concerning investment an attempt was also made to relate capital to labour (i.e. capital needed per job created) and capital/output relationships.

One conclusion which stands out clearly in these case studies is that the minimum wage legislation of 1963 which substantially raised wages in the lower brackets has been a major factor in inducing employers to adopt capital intensive techniques. This process has been greatly facilitated by the availability of labour-saving machines due to technological advances in more developed countries; but some labour saving devices would have been introduced even without minimum wage legislation just to keep up with technological advances elsewhere. While the profit motive could be blamed for this substitution it is interesting to note that employment in the public sector has not increased either: in fact since 1959 the level of employment in the public sector has been declining, a point which is not mentioned in this study. This must be an indication of the limitations on the choice of technique in production amid advanced technology elsewhere. For instance in the construction sector which is directly or indirectly (through the tender system) controlled by the government very little has been achieved in the way of adopting labour intensive methods of production. It is noteworthy that a Conference on Education, Employment and Rural Development held in Kericho in 1966 was not "convinced that there is any major opening for labour-intensive manufacturing, processing, craft or cottage industry" in Kenya.

This book would have benefited greatly from an expansion of the third chapter concerning conclusions and policy implications. For instance no attempt is made to justify the ranking of factors which have contributed to labour productivity; one might ask why better nutrition is ranked eighth in affecting labour productivity in Sikh Saw Mills and Madhvani Sugar Works but fourth in Nyanza Textiles. Even subjective evaluations need some justification. Nor is the recommendation that escalation of salaries should be halted especially at the top justified as the study itself shows that wage increases have been most rapid in the lowest brackets.

It would also appear that the author paid too little attention to trade union activity in Uganda with respect to wage determination. Trade unions can swell a firm's wage bill, not by fighting for increased wages per month but by negotiating for fewer working hours. Also the labour cost to a firm could

increase by granting (under trade union pressure) such things as better housing, longer leave and other fringe benefits. Concentrating attention on wage rates may mask important developments in this area. Trade union activity must have scared employers in another respect with the achievement of independence under majority rule. This must have acted in favour of machines which, after all, do not go on strike. These are some of the considerations which ought to have been discussed at length after the case studies, in order to buttress the valuable work embodied in the case studies.

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Y. KYESIMIRA.

### MONEY IN AN AFRICAN CONTEXT

By W. T. NEWLYN

Nairobi, Oxford U.P. 1967, 156p, Shs. 12.

Mr. Newlyn's book, which is the first in a series under the heading "Studies in African Economics" published by the Oxford University Press, sets out and applies monetary theory to African economies, in particular to the three East African territories of Kenya, Uganda and Tanzania. The author is perhaps uniquely qualified to undertake this task as not only is he a noted authority on monetary theory and finance, but he has been closely connected with the economic affairs of East Africa since 1951.

In the standard texts on the subject, monetary theory has usually been applied to fully developed economies, and it was while preparing a course of lectures on money and banking at Makerere University College that the author came to realise the need for a book which would apply monetary theory and analysis in the context of less sophisticated monetary systems such as those in the developing countries of Africa. The book is addressed primarily to students at University degree level, but the subject matter is presented clearly and logically, and should not present undue difficulty to the interested general reader.

In the first chapter Mr. Newlyn sets out to analyse the nature of monetary development and describes five analytical stages in the progression from a simple barter economy to a fully developed monetary system. This development is illustrated by reference to the English monetary system, upon which of course the East African system has been based. An interesting feature of African development is that by virtue of the superimposing of sophisticated monetary practices on primitive systems all these five stages can be found taking place at one and the same time. The book proceeds in the next chapter to examine the determinants of the money supply in a general form applicable to any monetary system, to present a definition of money and to discuss the relationship between primary and secondary money, i.e. currency and bank deposits. The supply of money is then considered with the origin and function of the East African Currency Board described, and the development of banking in East Africa. The purpose and functions of a Central Bank are set out in detail and it is pleasing to note that the author takes a moment to correct the widely held misconception among the un-informed that the Commercial Banks suck out money from exploited underdeveloped countries. In fact as Mr. Newlyn points out, the Commercial Banks in East Africa at least, are over-committed. After examining the general accepted analytical model of

monetary equilibrium and indicating its application in economies such as those of East Africa, the author goes on to discuss fiscal policy and the introduction of the Central Banks in Kenya, Uganda and Tanzania.

The diagrams and graphs throughout the book are well prepared and complement the text, and the writer although concerned to offer a serious study of a complex subject, has produced a lucid and engaging style that makes *Money in an African context* a thoroughly readable as well as instructive work.

R. E. MANKELOW

## FOREST INSECTS OF UGANDA: AN ANNOTATED LIST

By K. W. BROWN

Entebbe, Government Printer, 98p., Shs. 10.

As stated in the sub-title, this is an annotated list of the insect species of forestry importance, collected by the Entomology Section of the Forest Department. The work has been going on since the section was started in 1957. In comparison with temperate regions, fundamental biological studies have had to wait in Uganda, while as Mr. Brown says in his introduction, "more important and economically urgent research" had to be carried out. Nevertheless, some 2,000 insect species have been collected together with information on their host plants, habits and control methods.

This small book is arranged in two sections. The first covers the insect species list under seven orders: Coleoptera (21 families), Diptera (5 families), Hemiptera (8 families), Hymenoptera (12 families), Isoptera (3 families), Lepidoptera (21 families) and Othoptera (3 families). In the second part, from which insects which are parasites, predators and scavengers are omitted, the species are arranged under their host trees. Those working on insect pests in Uganda and elsewhere will welcome the book for, as Mr. Brown says, the insects are neither restricted to Uganda nor to its forests. Unfortunately, the author who has now departed from Uganda, does not foresee its rapid revision, but envisages periodic amendments. (There is no date on this first edition but internal and other evidence indicates that it was closed in 1966 and published in 1967). The author is to be congratulated on producing it.

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W. B. BANAGE

## THE AFRICAN ELEPHANT

By R. BERE

London, A. Barker, 1966, 21 Shs.

"I have to be at my grave when I die", the elephant is reputed to confide to itself. And does it do it? In *The African Elephant*, Rennie Bere, formerly Director of Uganda Parks fascinatingly recounts many tales about the elephant. He also tells several interesting elephant stories.

*The African Elephant* is a well written layman's book, profusely illustrated with very good photographs, many of which are in colour. Both adults and children will enjoy Rennie Bere's most recent contribution to the documentation of East Africa's wildlife.

Uganda National Parks

F. X. KATETE

## BIRDS OF PREY OF THE WORLD

By M. GROSSMAN and J. HAMLET, *photographed by* S. GROSSMAN

London, Cassell, 1965, 496 pp. 126 Shs. (U.K. Price).

This book is a co-operative effort by three Americans. The first two seem to have done most of the writing while the third, husband of the first, contributed the photographs, half-tone silhouettes and maps. He also designed the whole book. Line drawings are by yet another person, J. McManns. There is a silent commentary, more eloquent than any I have met, on the futility of vernacular names in biology. In this instance it so easily gives away the American origin of the book. At the beginning, there is a translation of the bird names from "American" to "English" by James Ferguson-Lees. The reader will need to keep his finger at this spot if he wants a running translation, but he may decide that it is much simpler to get smoother reading and just stick to the American names.

The book took four years to produce and the authors have had to delve into a lot of topics not easily come by, except by experts, like History, Egyptology and other ancient cultures, especially on the other side of the Atlantic. The publisher's blurb introduces it as a "major contribution to ornithological literature", a "definitive study of all birds of prey and owls", and as "the most complete, authoritative and exciting book ever produced on the subject". Exciting it certainly is, but in several ways the claims for it may be a little extravagant and the reader will have to decide for himself whether it succeeds in its declared objective, namely to dispell misinformation and misunderstanding of the birds of prey.

From the point of view of arrangement the book is divided into two parts. After an Introduction, Part I deals with Prehistory, Birds of Prey and Man, Ecology and Habits, Design for Survival, and Conservation. In Part II "the 289 species of hawk-like birds of prey and 133 species of owls are systematically illustrated and described and maps are provided to show their approximate breeding ranges. Biological information is given on sexual dimorphism, colour phases, geographical variations and on young forms. Most birds are illustrated with superb photographs and, to my mind, this is the more valuable part of the book. There is an adequate Index of 11 pages and, as a guide to further reading, a Selected Bibliography, arranged under topics, regions and species.

This is the kind of book which is not likely to please everyone. I found it exasperating, for instance, to find that the Fish Eagle, perhaps our finest bird of prey here, is put in the genus *Haliaeetus* instead of the more usual *Cucuma* and also that it is indexed only as the African Sea or River Eagle. In language, too, there are several puzzles which will make the purists sit up and think as to what they mean. An example is on p. 43 where it is stated: "The worship of hardly any form of animal has been neglected". The less fastidious but economy-minded will be put off by the price.

W. B. BANAGE.

## FAMILIES OF FLOWERING PLANTS IN ETHIOPIA

By W. C. BURGER

Oklahoma State University Press, 1967. 236p. 7.00 Dollars

This book was prepared when the author was teaching at the college of Agriculture, Haile Sellassie I University. It is a praiseworthy collection of drawings, descriptions and quick diagnostic features of some 237 families of plants (the majority woody) found in Ethiopia and in many parts of East Africa.

Dr. Burger explains in the Preface that the main purpose of the book is to help students in Ethiopia, and elsewhere, to identify a plant as far as the Family. He first reviews the main technical concepts likely to be found necessary for this identification, dealing with all the parts of the plant, from the habit, through roots, stems and leaves on to the characters connected with the flowers and (briefly) the fruits. Many sections of this introduction to the family descriptions are very good, but it is a pity that there is some confusion in the use of terms such as 'secondary' and 'adventitious' roots; 'cladophyll' and 'cladode', words which seem to refer to one and the same structure; 'disc', which is surprisingly said to be non-nectariferous; and 'pistil/carpel', always difficult concepts to grasp.

This introduction is followed by Keys to the families of plants which are dealt with later in the book, and which include Gymnosperms as well as Angiosperms. Dr. Burger has attempted to key out the families on easily observable differences—no mean task when 237 families are being separated. He begins by using habit differences, aquatics, parasites, saprophytes and so on, and then uses external vegetative and floral features before going on to characters of the stamens and pistils. He is rightly diffident about the success of these Keys in every instance, and it is to be hoped that as many people as possible will try using them and will let him know if they come across snags with particular species.

Detailed synopses of each of the Families are then given. The main headings, habit, leaves, flowers and so on are in bold type and stand out clearly, and reference is made to any appropriate illustration. Quick diagnostic characters, or particularly important or easily recognisable members of the family, are mentioned, as well as other references available for the area, e.g. Flora of Tropical East Africa, Flora of the Sudan.

The Families which have been described are mainly illustrated by woody members, with only a minority of herbaceous plants, for reasons which Dr. Burger discusses on p.1. These drawings form a very useful part of the book, although as he points out their main purpose is to aid identification and not to be an introduction to the morphology of the families. The pages are large, 22 x 30 cm., with from one to four families on each page, each family being represented by plants from one or more genera. There is usually a vegetative, or sometimes a floral, shoot of each plant, with detailed structure of the flower and sometimes the fruit, either whole or cut, and often a floral diagram as well. (It is perhaps quibbling to ask why the author calls a half flower a 'longitudinal section', or why the orientation of the detailed drawings is not consistent.) Labelling is minimal and is at the foot of each page. This, in conjunction with the inevitable crowding required to get the maximum number of drawings on each page, makes it sometimes difficult to see at a glance which illustration belongs to which species, (especially as there is no consistent order

for, say, diagrams 1, 2, 3 and 4, on each page), whilst the heavy print used for symbols and the line scales is somewhat distracting. Reference to particular structures illustrated, such as staminodes or discs, have already been included in the descriptions and are not written on to the drawings, except for structures in such specialised families as the Gramineae and Orchidaceae.

The overall standard of the drawings is very good. The number of illustrations on each page has however often meant that only a small portion of each plant could be drawn, and this sometimes makes quick identification difficult, where perhaps the position on the page gives a wrong impression of habit (e.g. the 'creeping' *Hypericum revolutum*, p. 155, or the 'hanging' *Nicotiana glauca*, p. 200) or where the host-parasite attachment could not be included (e.g. *Lorantus* and *Osyris*, p. 148). Leaf position in the upper part of a flowering shoot is also not always typical of the plant as a whole (e.g. in the East African *Lantana trifolia*, perhaps the *L. triphylla* on p. 198, the upper leaves are in whorls of two, the more typical ones, as the name suggests, being in whorls of three), whilst in many cases such diagnostic vegetative characters as stipules and stipels (e.g. *Rumex abyssinicus*, p. 149, *Desmodium*, p. 162) or spines (e.g. *Dichrostachys*, p. 160) have not been included in the drawings.

The floral diagrams are perhaps less satisfactory, in that fusion of sepals and/or petals and epipetalous stamens have not always been shown on the diagram although they have been described earlier in the book, and placentation within the ovary is sometimes rather unclear.

It is inevitable in a work involving so many descriptions and illustrations that some errors have occurred, but let it suffice here to draw attention to only one or two. In Figure 6 (3) on p. 144, only two of the three kinds of flower often found within a cyconium (syconium?), or fig, are shown. The male flower is correctly labelled, but the short-styled flower labelled 'female' seems to be a gall flower, the female flowers being those in the section of the fig, left-hand side, with long styles and, in this species, shorter pedicels. The insect shown above the fig is one of the parasites (inquilines) which has hatched out of the gall flowers after feeding on the gall-wasp maggots; the female gall wasp, the only sex with wings, does not have such a long ovipositor and shows other morphological differences from the parasite illustrated. Figure 34 (3) is said to include a 'male flower with one petal removed', although elsewhere *Dodonaea* (not, I think *Dodonea*) is said to have no petals. *Ipomoea* should read *Ipomoea*, *Kalenchoe* is *Kalanchoe* (correct in the index) and *Sericompsis* is *Sericocompsis*.

Finally the author has compiled a useful glossary of botanical terms, with reference back to particular Figures where appropriate. It is perhaps unfortunate that he has not been able, say in the index, to include the authorities for the species names which he uses, as these are always valuable in preparing students for any publishing of plant names which they may undertake later on, whether their interest in the plants is chemical, pharmaceutical, zoological or merely botanical.

This is a useful and well-presented addition to the books available for reference to plant families within our area, and one which will no doubt be helpful to people with many different interests but with the common aim of identifying plants.

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## EARLY ISLAMIC ARCHITECTURE OF THE EAST AFRICAN COAST

By P. S. GARLAKE

London and Nairobi, Oxford U.P., 1966, 207p., 84 fig., 16 plates, 95 Shs. (U.K.). (British Institute of History and Archaeology, Memoir No.)

In a well produced but rather expensive monograph Mr. Garlake provides a description of 69 pre-nineteenth century mosques in Tanzania, 31 in Kenya and 15 in Zanzibar, of which he visited nearly three quarters. This book will remain for long a standard text, as it is doubtful, whether, except for excavation, any further major Islamic sites will be found. This work whets the appetite for a description of the Islamic sites of the Somalian coast to which the East African buildings are related.

All the buildings described are of stone, few bear the mark of architects though master builders were employed. Garlake concludes that the buildings were employed. Garlake concludes that the buildings exhibit "an architectural style, perhaps limited in its aims and satisfied with a standardized and unadventurous technical competence sufficient only to such aims, never seeking the imaginative or technical new solution." The inspiration and initial impetus was from abroad but local conditions such as the narrow rooms and vaults imposed by the length of the mangrove poles (1.80—2.80 metres) led to indigenous regional variations of style. From the architecture some influences can be shown to have derived from areas such as Mamluk Egypt, southern Persia and the Hadhramaut coast but it is impossible to indicate very close or valid detailed comparisons.

The earliest extant stone buildings date from the end of the eleventh century A.D. and the architecture reached its apogee in the Kilwa palace and mosque of the late thirteenth century.

Mosques survive since the walls were not subject to the wanton plundering for building stone of domestic buildings but though an emphasis is placed on the mosques by the author some justification exists for this since the mosque formed a focal point for the communities by which they were built. The towns provide little evidence of planning and it is doubtful whether any had more than fifty stone buildings.

The British Institute and Mr. Garlake are to be congratulated on their first memoir. The author's beautifully executed plans and concise text will for long illuminate what has hitherto been a coastal history dominated by chronicles, excavations, pots and coins. His almost clinical architectural descriptions indicate the contribution that can be made to East Africa's past by disciplines other than those of the historian and archaeologist.

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M. POSNANSKY

## UGANDA BIBLIOGRAPHY 1967

Compiled by

BRYAN W. LANGLANDS

This is the tenth bibliography on Uganda concerned with publications since 1961; previous issues of the *Uganda Journal* have contained bibliographies for 1961-62, 1962-63, 1963-64, 1964 1964-65, 1965, 1965-66, 1966 and 1966-67. This list contains 300 of which two-thirds are for works published in 1967. Normally the bibliographies have not contained references to mimeographed papers, which may be impossible to obtain, or which are extremely ephemeral. This bibliography includes references to mimeographed papers published by the Makerere Institute of East African Research since these are purchasable from the Institute. Items which have not been seen by the compiler are marked with an asterisk.

The following abbreviations have been used for works published in East Africa :—

- E.A.A.F.J.* = *East African Agricultural and Forestry Journal*, Nairobi.  
*E.A.E.R.* = *East African Economic Review*, Nairobi.  
*E.A.G.R.* = *East African Geographical Review*, Kampala.  
*E.A.J.* = *East Africa Journal*, Nairobi.  
*E.A.L.B.* = East Africa Literature Bureau, Kampala, Nairobi.  
*E.A.L.J.* = *East African Law Journal*, Nairobi.  
*E.A.M.J.* = *East African Medical Journal*, Nairobi.  
*E.A.P.H.* = East African Publishing House, Nairobi.  
*E.A.W.J.* = *East African Wildlife Journal*, Nairobi.  
*G.P.* = Government Printer  
*M.I.S.R.* = Makerere Institute of Social Research, Kampala.  
*M.M.J.* = *Makerere Medical Journal*, Kampala.  
*O.U.P.* = Oxford University Press, Nairobi.  
*P.E.A.A.* = Proceedings of the East African Academy, Nairobi.  
*U.J.* = *Uganda Journal*, Kampala.  
*U.P.H.* = Uganda Publishing House.

In addition *Azania*, *Nexus* and *Zuka* are published in Nairobi, and *Transition* and *Mawazo* are published in Kampala.

### GENERAL

- BADER, F. and WALTER, J. Landschaftsökologie und Landschaftswandel in den National parks Uganda. (*Die Erde*, Berlin, Vol. 97, no. 4, 1966, pp. 246-267.)  
Cathedral church of St. Andrew, Mbale, Uganda. (*Architectural Design*, Vol. 33, July, 1963, p. 344)  
E.A.C.S.O. Report of the East African metric commission. Nairobi, G.P., 1967, 36 p.  
GOULD, P. R. On the geographical interpretation of Eigenvalues. (*Transactions of the Institute of British Geographers*, London, vol. 42, December 1967, pp. 53-86 19 fig.) Contains an analysis of the road network of Uganda, 1921 and 1935.

- HUNTER, G. Development administration in East Africa. *Journal of Administration Overseas*, London, Vol. 6, no. 1, January 1967, pp. 6-12.)
- JONES, P. R. Book selection in senior secondary school libraries in Uganda. (*School Librarian*, Vol. 12, July 1964, pp. 138-159.)\*
- JULSRUD, H. G. *Jambo Uganda: To ar med det Norske fredskorps* Oslo, Pax, 1966, in-16 mo., 198 p., 13 photos. (In Norwegian).
- Kampala today, annual report of the City Engineer, 1966. Kampala City Council, 1967, in-4 to., 60 p., 42 photos.
- Mbale Cathedral, Uganda. (*Builder*, Vol. 204, June 1963, pp. 1291-1294.)\*
- Recent architecture in Uganda. (*Builder*, Vol. 208, April 1965, pp. 919-921.)\*
- THOMPSON, M. The Albert Cook Library. (*M.M.J.*, Vol. II, November 1967, pp. 46-47, 1 photo, 2 fig.)
- Uganda. *Statistical abstract* 1966. Entebbe, Government Printer, 1967. 108p.
- Uganda. Diplomatic list—September 1967. Entebbe, Min. of Foreign Affairs, 1967, in-16mo., 62.
- Uganda: new cathedral at Mbale. (*Architects Journal*, Vol. 137, May 1963, pp. 932-41)\*

#### AGRICULTURE—Crop Production

- E.A.C.S.O. East African Agriculture and Forestry Research Organisation, Record of Research and Annual Report, 1966, Nairobi, E.A.A.F.R.O. 1967, 189 p., Brief reports are given of the main E.A.A.F.R.O. experiments, of which the longest account concerns Army worm (E. S. Brown).
- KER, A. D. R. *Agriculture in Bukedi district*. Soroti, Arapai Agriculture College, Ministry of Agriculture, 1967, in-folio, 150p., 5 fig., (Cyclostyled).
- MABEY, S.E. The effect of shade on the relationship between stem diameter and tree weight of young seedling cacao. (*E.A.A.F.J.*, Vol. 33, no. 1, July 1967, pp.14-22, 7 tables.) An account of observations made at Kikuza.)
- RIGGS, T. J. Response to modal selection in Upland cotton in northern and eastern Uganda. (*Cotton Growing Review*, London, Vol. 44, no 3, July 1967, pp. 176-183, 2 fig., 5 tables.)
- RIJKS, D.A. Optimum sowing date for yield: a review of work in the BP 52 cotton area of Uganda. (*Cotton Growing Review*, London, Vol. 44, no. 4, October 1967, pp. 247-256, 4 fig.)
- STEPHENS, D. Experiments with nitrogen and magnesium fertilizers on coffee in Uganda. (*Experimental Agriculture*, London, Vol. 3, no. 3, July 1967, pp. 191-203, 1 fig., 9 tables.)
- Uganda. Report on Uganda census of Agriculture, Part IV. Entebbe, Ministry of Agriculture, 1967, 47 p., 41 tables. This section of the census deals with crop yields.

#### AGRICULTURE—Livestock

- An economic survey of dairy farming in Uganda. A survey of dairy farming in Kyaggwe and Bugerere counties in 1965.* Entebbe, Department of Agriculture, 1966, 75 p., 10 photos, 3 fig., 24 tables.
- BAKER, P. R. *Environmental influences on cattle marketing in Karamoja*. Kampala, Department of Geography, Makerere University College, 1967, 57 p., 3 fig., 3 maps. (Cyclostyled). (Occasional Paper, no. 5.)
- LONG, M.I.E. Investigations on the in vitro digestibility techniques used under East African conditions. (*E.A.A.F.J.*, Vol. 33, no. 2, October 1967, pp. 166-169, 3 tables.)
- MUSANGI, R. S. and SONEJI, S. V. Feeding groundnut haulms to dairy cattle in Uganda. (*E.A.A.F.J.*, Vol. 33, no. 2, October 1967, pp. 170-174, 3 tables.)
- Uganda. Annual report of the Department of Veterinary Services and Animal

Industry. 1966. Entebbe, G.P., 1967, 58 p., numerous tables.

#### **AGRICULTURE—Pest control**

DAVIES, J. C. Spray interval studies on cotton in eastern Uganda in 1961-1965. (*E.A.A.F.J.*, Vol. 33, no. 1, July 1967, pp. 37-48, 3 fig., 13 tables.)

INGRAM, W. R. An evaluation of five insecticides for the control of late season cotton pests in Uganda. (*E.A.A.F.J.*, Vol. 33, no. 2, October 1967, pp. 206-211, 1 fig., 5 tables.)

—, Chemical control of sweet potato weevil in Uganda. (*E.A.A.F.J.*, Vol. 33, no. 2, October 1967, pp. 163-165, 3 tables.)

—, Insecticides on cotton in Uganda. (*Cotton Growing Review*, London, Vol. 44, no. 3, July 1967, pp. 203M212, 9 tables.)

#### **ANTHROPOLOGY**

ALNAES, K. (Mrs. Sommerfelt). Nyamayingi's song: an analysis of a Konzo circumcision song. (*Africa*, London, Vol. 37, no. 4, October 1967, pp. 453-465.)

BEIDELMAN, T. O., LUYOBYA, E. K., and SOUTHWOLD, M. Kiganda witchcraft. (*Transition*, no. 32, Vol. 7, no. 1, August 1967, pp. 5-7.)

DE CAROLIS, A. Il conte di Nyapea (Uganda). (*Nigrizia*, Verona, Vol. 85, May 1967, pp. 14-17.)\*

DESHLER, W. N. The Dodos; a cattle keeping tribe in East Africa. Chapter in *Focus on geographical activity*, edited by R. S. Thonan and D. J. Patton, New York, McGraw Hill, 1964, pp. 7-11.

GUNDARA, N. and ZIVANOVIC, S. *Os incae* and wormian bones in East African skulls. (*U.J.*, Vol. 31, no. 2, 1967, pp. 214-218, 1 fig.)

LA FONTAINE, J. S. Parricide in Bugisu: a study in inter-generational conflict. (*Man*, London, Vol. 2, no., New Series, June 1967, pp. 249-259.)

LANNING, E. C. The surviving regalia of the Nakaima, Mubende. (*U.J.*, Vol. 31, no. 2, 1967, pp. 210-211, 1 photo.)

NEEDHAM, R. Right and left in Nyoro symbolic classification. (*Africa*, London, Vol. 37, no. 4, October 1967, pp. 425-452, 1 fig.)

OPILO-OPOYO, T. *Acebe re ma jok*. Kampala, Longmans, 1967, 57p.

SOUTHWOLD, M. Was the kingdom sacred? (*Mawazo*, Vol. 1, no 2, December 1967, pp. 17-23.)

ZIVANOVIC, S. Elongated styloid process in East African skulls. (*E.A.M.J.*, Vol. 44, no. 7, July 1967, pp. 298-302, 2 fig.)

#### **ARCHAEOLOGY**

BAKKER, E. M. VAN Z. *Palaeoecology of Africa 1950-1963*. Amsterdam, Balkema, 1966, 270p. Numerous references to Uganda in the index.

CHAPLIN, J. and MCFARLANE, M. The Moniko petroglyphs. (*U.J.*, Vol. 31, no. 2, 1967, pp. 207-208, 2 photos.)

COLE, G. H. The late Acheulian and Sangoan of southern Uganda. Essay in *Background to evolution in Africa*, edited by W. W. Bishop and J. D. Clark, Chicago U.P., 1967, pp. 481-528, 18 fig., 6 tables.

CRANE, H. R. and GRIFFEN, J. B. University of Michigan radiocarbon dates, Part VII. (*Radiocarbon* Vol. 8, 1968, p. 201.)

FAGAN, B. M. Radiocarbon dates for sub-Saharan Africa—Part V: Uganda, Nsongezi. (*Journal of African History*, London, Vol. 8, no. 3, 1967, p. 520.)

LEAKEY, L. S. B. Notes on the mammalian faunas from the Miocene and Pleistocene of East Africa. Essay in *Background to evolution in Africa* edited by W. W. Bishop and J. D. Clark, Chicago U.P., 1967, pp. 7-29, 2 tables.

MORTON, W. H. Rock engravings from Loteteleit, Karamoja. (*U.J.*, Vol. 31, no. 2, 1967, p. 209, 1 photo.)

POSNANSKY, M. The iron age in East Africa. Essay in *Background to evolution in Africa*, edited by W. W. Bishop and J. D. Clark, Chicago U.P., 1967, pp. 629-649, 2 fig., 2 tables.

### BOTANY

BURGER, W. C. *Families of flowering plants in Ethiopia and adjacent areas of eastern Africa*. Dira Dawa, Ethiopia, College of Agriculture, Haile Sellasie University, 1967, in-4to., 236p., 74 fig.

OTIENO, N. C. Polyporaceae of eastern Africa. Part I. The genus *Favolus*. (*Acta Tropica*, Basle, Vol. 23, 1966, pp. 353-364, 3 fig.)

VERDCOURT, B. Corrections and additions to the "Flora of Tropical East Africa" —convolvulaceae: I. (*Kew Bulletin*, London, Vol. 21, no. 1, 1967, pp. 83-92, 2 fig.)

### BOTANY—Grasses

IVENS, G. W. *East African weeds and their control*. Nairobi, O.U.P., 1967, 2440., 113 fig.

MARSHALL, B. and LONG, M.I.E. The digestible energy content of some East African grasses. (*E.A.A.F.J.*, Vol. 33, no. 1, July 1967, pp. 64-66., 1 table.)

STEPHENS, D. Effects of grass fallow treatments in restoring fertility of Buganda clay loam in south Uganda. (*Journal of Agricultural Science*, London, Vol. 68, no. 3, June 1967, pp.391-403, fig. 7, table 5.)

### CLIMATOLOGY

NAKAMURA, K. Climate of East Africa as related to equatorial westerlies. (*Geographical reports of Tokyo Metropolitan University*, Tokyo, Vol. 2, July 1967, pp. 49-69, 11 fig., 4 tables.)

WALKER, J. T. and RIJKS, D. A. A computer programme for the calculation of confidence limits of expected rainfall. (*Experimental Agriculture*, London, Vol. 3, no. 4, October 1967, pp. 337-341.)

### DEMOGRAPHY

SMIT, P. Aspects of population growth and food production in Africa. (*Journal for Geography*, Stellenbosch, Vol. 3, no. 1, September 1967, pp. 67-73 2 fig., 1 map.)

### ECONOMIC HISTORY

BERE, R. M. Cassava in north Uganda. (*U.J.*, Vol. 31, no. 2, 1967, pp. 213-214.)

WARREN, A. East Africa. Chapter 3 of *Africa in transition: geographical essays*, edited by B. W. Hodder and D. R. Harris, London, Methuens, 1967, pp. 163-217.

### ECONOMICS

*Annual report of Uganda Commercial Bank, 1966-1967*. Kampala, U.C.B., 1967, 19p.

*Annual report of the Uganda Development Corporation 1966*. Kampala, U.D.C., 1967, 93p., numerous photos, and tables.

BOSA, G. R. African business financing schemes in Uganda. (*M.I.S.R., Conference Papers*, January 1967, 140., 4 tables, Cyclostyled). (Paper no 415).

CHARSLEY, S. R. The profitability of a group farm in Bunyoro. (*M.I.S.R., Conference Papers*, January 1967, 12p., Cyclostyled). (Paper no 405.)

ELKANS, W. and WILSON, G. The impact of the Owen Falls hydroelectricity project on the economy of Uganda. (*Journal of Development Studies*, London, Vol. 3, no. 4, July 1967, pp. 387-404, 6 tables.)

HALL, M. Regional economic planning in Uganda: the Buganda experience. (*M.I.S.R., Conference Papers*, January 1967, 220., Cyclostyled) (Paper no .426.)

HAZLEWOOD, A. The East African Common Market: importance and effects. (*Bulletin of the Oxford University Institute of Economics and Statistics*, Oxford,

- Vol. 28, no. 1, February 1966, pp. 1-18.)
- I LETT, J. Inducements for industrial development: when are they worthwhile? (*Yorkshire Bulletin of Economic and Social Research*, Leeds, Vol. 19, no. 2, November 1967, pp. 101-123.)
- KNIGHT, J. B. The determination of wages and salaries in Uganda. (*Bulletin of the Oxford University Institute of Economics and Statistics*, Oxford, Vol. 29, no. 3, 1967, pp. 233-264.)
- LAW, D. H. *How to apply a bonus incentive plan in your business*. Kampala, Milton Obote Foundation, 1967, 29p., (The bonus incentive plan is applied to the management of a co-operative ginnery by way of example.)
- LOXLEY, J. Financial intermediaries and their role in East Africa. (*M.I.S.R., Conference Papers*, January 1967, 240., 11 tables, Cyclostyled) (Paper no. 410.)
- MAITRA, P. *Import substitution potential in East Africa*. Nairobi, O.U.P., for East African Institute of Social Research 1967, 42p., numerous tables. (*E.A.I.S.R. Occasional Paper* no. 2.)
- MEAD, D. C. Uganda's balance of payments position during the second five-year plan. (*M.I.S.R., Conference Papers*, January 1967, 16p., Cyclostyled). (Paper no. 445.)
- NEWLYN, W. T. Monetary developments in East Africa. (*Bankers Magazine*, London, March and April 1967, pp. 171-177 and 240-244.)\*
- , *Money in an African context*. Nairobi, O.U.P., 1967, 156p., numerous tables, 12 sh.
- , Money markets in East Africa. (*Journal of Modern African Studies*, London, Vol. 4, no. 4, December 1966, pp. 471-478.) (And also *M.I.S.R., Conference Papers*, January 1967, 8p.,)
- , The shiftability of industry and the measurement of gains and losses in the East African market: a reply. (*Bulletin of the Oxford University Institute of Economics and Statistics*, Oxford, Vol. 28, no. 4, November 1966, pp. 281-282.)
- NIXON, F. Factors influencing the location of industry in Uganda. (*M.I.S.R., Conference Papers*, January 1967, 10p., Cyclostyled) (Paper no. 417.)
- STOUTJESDIJK, E. J. *Uganda's manufacturing sector*. Nairobi, E.A.P.H. for M.I.S.R. 1967, 101 p., 40 tables. (East African Studies, no 29).
- Uganda. Background to the budget, 1967-68. Entebbe, G.P., for Statistics Division of Ministry of Finance, 1967, 62p.
- Uganda. Census of distribution, 1966. Part I. Entebbe, Statistics Division, Ministry of Planning and Economic Development, 1967, 54p., in folio, (Cyclostyled).
- Uganda. Estimates of development expenditure 1967-1968. Entebbe, G.P., 1967, 33p.
- Uganda. Estimates of recurrent expenditure 1967-68 for the year ending 30 June 1968. Entebbe, G.P., 1967, 104p.
- Uganda. Financial statement and revenue estimates 1967-68 for the year ending 30 June 1968. Entebbe, G.P., 1967, 11p.
- Uganda. Public accounts of the Government of Uganda for the year ending 30 June 1966. Entebbe, G.P. 1967, 145p.
- WILSON, G. *Owen Falls: Electricity in a developing country*. Nairobi, E.A.P.H., for M.I.S.R., 1967, 111p., 35 tables, 7 maps. (East African Studies no. 27.)
- WOINCEK, J. M. Economic integration and regional distribution of industrial activities: East Africa. (*E.A.E.R.*, Vol. 3, no. 1, June 1967, pp. 31-43.)

**EDUCATION**

- ASHBY, Sir Eric. *Universities, British Indian, African*. London, Weidenfeld and Nicolson, 1966, in-4. to, 558p. Numerous references to Makerere.

- AWORI, A. S. East African university must be Africanised. (*E.A.J.*, Vol. 5, no 8, December 1967, pp. 15-22, 4 tables.)
- BECK, A. Colonial policy and education in British East Africa 1900-1950. (*Journal of British Studies*, Vol. 5, no. 2, 1966, pp. 115-138.)\*
- CHESSWAS, J. D. *Educational planning and development in Uganda*. Paris, U.N.E.S.C.O., International Institute for Educational Planning, 1966, 97p., 6 tables. (African Research Monographs, no. 1.)
- CRAWFORD, M., MAZRUI, A. A. and TANDON, Y. Government and universities in East Africa. (*Minerva*, London, Vol. 5, no. 3, 1967, pp. 376-386.)
- KIWANUKA, B. P. The role of the vernacular languages: bilingualism in education. (*E.A.J.*, Vol. 4, no. 6, October 1967, pp. 21-24.)
- LULE, Y. K. New academic developments at Makerere, 1967-1970. (*Mawazo*, Vol. 1, no. 2, December 1967, pp. 3-5.)
- MCADAM, Sir I. Medical Faculty: the next step. (*M.M.J.*, Vol. II, November 1967, pp. 4-12.)
- , Makerere Medical School. (*Journal of the Royal College of Surgeons of Edinburgh*, Vol. II, no. 3, April 1968, pp. 164-169, 2 photos.)
- SOMERSET, H. C. A. The effects of elementary school quality on secondary school achievement. (*M.I.S.R.*, *Conference Papers*, January 1967, 20p. cyclostyled.) (Paper no. 422.)
- WASAWO, D. P. S. Developing the academic spirit in East Africa. (*Bulletin of the Atomic Scientist*, Chicago, October 1966.)\*
- WEEKS, S. G. Are hostels necessary? A study of senior secondary school pupils in Greater Kampala. (*Journal of Developing Areas*, Macomb, Illinois, Vol. 1, no 3, April 1967, pp. 357-373.)\*
- , Education for Ugandans. (*West African Journal of Education*, Vol. 8, February 1964, pp. 24-27.)\*

### ENTOMOLOGY

- BROWN, K. W. *Forest insects of Uganda: an annotated list*. Entebbe, G.P. 1967, 98p., 10 shs.
- CARCASSON, R. H. A preliminary survey of the zoo-geography of African butterflies. (*E.A.W.J.*, Vol. 2, 1964, pp. 122-157, 6 maps.)
- CROWE, T. J. Common names for agricultural and forestry insects and mites in East Africa. (*E.A.A.F.J.*, Vol. 33, no. 1, July 1967, pp. 55-63.)
- E.A.C.S.O. *East African Trypanosomiasis Research Organisation, Annual Report 1966*. Nairobi, E.A.T.R.O., 1967, 102p. A collection of reports on protozoology, immunology, biochemistry, chemotherapy, entomology and epidemiology; with a few notes of particular concern to the human and cattle diseases of the Tororo area and south Busoga.
- , *East African Virus Research Institute, Annual Report*, 1966, no. 16, 1967, pp. 34-46. Notes on Simulium in Uganda by A. McCrae and notes on mosquitoes by various authors.
- GOODCHILD, A. J. P. Shield bug infestation of oyster nut. (*E.A.A.F.J.*, Vol. 33, no. 2, October 1967, pp. 192-196, 2 photos.)
- MILLER, P. L. The function of haemoglobin in relation to the maintenance of neutral buoyancy in *Anisops pelliceus*. (*Journal of Experimental Biology*, Cambridge, Vol. 44, no. 3, June 1966, pp. 529-543, 9 fig.)
- , The supply of oxygen to the active flight muscles of some large beetles. (*Journal of Experimental Biology*, Cambridge, Vol. 45, no. 2, October 1966, pp. 285-304, 1 plate, 12 fig., 1 table.)
- OWEN, D. F. Swarming and polymorphism in the African edible grasshopper,

*Homorocoryphus nitidulus*. (*Acta Tropica*, Basle, Vol. 22, 1965, pp. 55–61, 1 fig., tables.)

- ROWELL, C. H. F. Corpus allatum implantation and green-brown polymorphism in three African grasshoppers. (*Journal of Insect Physiology*, Oxford, Vol. 13, no 9, September 1967, pp. 1401–1412, 3 fig., 2 tables.)
- ROWELL, C. H. F. Experiments on aggregation of *Phymateus purpurascens* (Orthoptera, Acrididae, Pyrgomorphinae). (*Journal of Zoology*, London, Vol. 152, no. 2, June 1967, pp. 179–193, 8 photos, 4 fig., 2 tables.)

#### **GEOLOGY and GEOMORPHOLOGY**

- BAKKER, E. M. van Z. Upper Pleistocene and Holocene stratigraphy and ecology on the basis of vegetation changes in sub-Saharan Africa. Essay in *Background to evolution in Africa*, edited by W. W. Bishop and J. D. Clarke, Chicago U.P., 1967, pp. 125–147, 7 maps, 1 table.
- BALDOCK, J. W. On the re-investigation of the Bukusu carbonatite complex, southeast Uganda. (*Eleventh Annual Report on Scientific Results*, 1965–1966, Leeds, Research Institute on African Geology, University of Leeds, June 1967, pp. 29–30.)
- BISHOP, W. W. Annotated lexicon of quaternary stratigraphical nomenclature in East Africa. Essay in *Background to evolution in Africa*, edited by W. W. Bishop and J. D. Clark, Chicago U.P., 1967, pp. 375–395.
- , The late tertiary in East Africa; volcanics, sediments and faunal inventory. Essay in *Background to evolution in Africa*, edited by W. W. Bishop and J. D. Clark, Chicago, U.P., 1967, pp. 31–56, 2 fig., 3 tables, 1 map.
- and TRENDALL, A. F. Erosion surfaces, tectonics and volcanic activity in Uganda. (*Quarterly Journal of the Geological Society*, London Vol. 122, no. 488, 1966, published June 1967, pp. 385–420, 2 fig., 5 maps, 2 tables.)
- GAUTIER, D. New observations on the late tertiary and early quaternary in the western rift; the stratigraphical and palaeontological evidence. Essay in *Background to evolution in Africa*, edited by W. W. Bishop and J. D. Clark, Chicago U.P., 1967, pp. 73–87, 2 tables, 1 map.
- LOWENSTEIN, P. L. Progress report on studies of pegmatite and tin mineralisation in southwest Ankole, Uganda. (*Tenth Annual Report on Scientific Results*, Leeds, Research Institute in African Geology, June 1966, pp. 34–36, 1 map.)
- , Second progress report on studies of pegmatite and tin mineralisation in southwest Ankole, Uganda. (*Eleventh Annual Report on Scientific Results* 1965–1966, Leeds, Research Institute on African Geology, June 1967, p. 39.)
- MCCONNELL, R. B. The East African rift system. (*Nature*, London, Vol. 215, no. 5101, August 1967, pp. 578–581, 2 maps.)
- MILLER, J. A. Problems of dating East African tertiary and quaternary volcanics by the Potassium Argon method. Essay in *Background to evolution in Africa*, edited by W. W. Bishop and J. D. Clark, Chicago U.P., 1967, pp. 259–272, 2 fig., 1 table.
- REEDMAN, A. J. Aspects of tungsten mineralisation in the Mutanda area, Kigezi, southwest Uganda. (*Tenth Annual Report on Scientific Results*, Leeds Research Institute in African Geology, June 1966, pp. 36–37.)
- , The geological environment and genesis of the tungsten deposits of Kigezi district, southwestern Uganda. (*Eleventh Annual Report on Scientific Results* 1965–1966, Leeds, Research Institute on African Geology, June 1967, p. 38). Thesis abstract.)
- TEMPLE, P. H. Causes of intermittent decline of the level of Lake Victoria during the Late Pleistocene and Holocene. Essay in *Liverpool essays in geography*, edited by R. W. Steel and R. Lawton, Longmans, 1967, pp. 43–63,

2 fig., 3 maps.

- VAIL, J. R. Distribution of non-orogenic igneous complexes in southern Africa and their tectonic setting. (*Eleventh Annual Report on Scientific Results*, 1965-1966, Leeds, Research Institute on African Geology, University of Leeds, June 1967, pp. 33-35, 1 fig.)
- VARNE, R. The geology of Moroto mountain, Karamoja, northeastern Uganda. (*Tenth Annual Report on Scientific Results*, 1964-1965, Leeds, Research Institute of African Geology, University of Leeds, June 1966, p. 26.) Summary of thesis.
- VON KNORRING, O. Carbonatite rocks from the volcanic field of western Uganda. (*Eleventh Annual Report on Scientific Results* 1965-1966, Leeds, Research Institute on African Geology, University of Leeds, June 1967, pp. 30-32.)
- , Niobium-tantalum minerals. (*Ninth Annual Report on Scientific Results* 1963-1964, Leeds, Research Institute of African Geology, University of Leeds, June 1965, pp. 42-43.)
- , Pegmatite mineral studies. (*Tenth Annual Report on Scientific Results* 1964-65, Leeds, Research Institute of African Geology, University of Leeds June 1966, pp. 32-33.)
- , Pegmatite mineral studies. (*Eleventh Annual Report on Scientific Results* 1965-1966, Leeds, Research Institute on African Geology, June 1967, pp. 36-37.)
- , and HORNING, G. Notes on mineralogical study of volcanic rocks from the western rift, Uganda. (*Ninth Annual Report on Scientific Results*, 1963-64, Leeds, Research Institute of African Geology, University of Leeds, June 1965, p. 41.)
- , and HORNING, G. Pegmatite investigation in East Africa. (*Ninth Annual Report on Scientific Results*, Leeds, Research Institute of African Geology, University of Leeds, June 1965, pp. 44-45.)

### HISTORY

- ALPERS, E. A. *The East African slave trade*. E.A.P.H. for the Historical Association of Tanzania, 1967, 27, p. A few references to Uganda.
- DAVIDSON, B. *East and central Africa to the late nineteenth century*. Longmans, Nairobi, 1967, 334p., numerous illustrations and maps. (Chapters 3 and 15 deal with Uganda).
- DUNBAR, A. R. Kabarega, king of Bunyoro-Kitara. (*Baessler-Archiv Beitrage zur Volkerkunde*, Berlin, Vol. 15, no. 1, 1967, pp. 153-1968, 6 photos, 1 map.)
- EMWANU, G. The reception of alien rule in Teso 1896-1927. (*U.J.*, Vol. 31, no. 2, 1967, pp. 171-182.)
- FURLEY, O. W. The reign of Kasagama in Toro from a contemporary account. (*U.J.*, Vol. 31, no. 2, 1967, pp. 183-190.)
- GRAY, Sir John, The diaries of Emin Pasha—Extracts XII: The rebellion at Dufie. (*U.J.*, Vol. 31, no. 2, 1967, pp. 155-170.)
- , The partition of East Africa. Chapter in *Africa in the Nineteenth and Twentieth Centuries*, edited by J. C. Anene and G. Brown, London, Nelson, 1966, pp. 472-486.
- HOLMBERG, A. *African tribes and European agencies: colonialism and humanitarianism in British South and East Africa 1870-1895*. Gothenburg, Scandanivan University Books, 1966, 409p., Part 3 is entitled The Buganda feuds.
- KIWANUKA, M. S. M. *Muteesa of Uganda*. Kampala, E.A.L.B., 1967, in 16mo, 890., 5 photos, 1 map.
- NGOLOGOZA, p. *Kigezi n'abantu Baamwo*. Kampala E.A.L.B., 1967, 137p., 1 map. (in Rukiga.)

- OGOT, B. The impact of the Nilotes. Chapter in *The middle age of African history* edited by R. Oliver, London, O.U.P., 1967, pp. 47-55, 1 map.
- ROWE, J. A. The western impact and the African reaction: Buganda 1880-1900. (*Journal of Developing Areas*, Macomb, Illinois, Vol. 1, October 1966, pp. 55-65 and as *Reprint Series No. 8*, Northwestern University, Program of African Studies.)
- The Omukama of Toro: Sir George Kamurasi Rukidi. (*Medical Missionary*, Vol. 38, 1964, pp. 21-23.)\*

**LANGUAGE**

- AKOL, J. W. L. *Ngiemuto a Ngikarimojong*, Kampala, E.A.L.B., 1966, 40p. Fables in Karimojong.
- KAKEMBO, F. W. *Eddembe lyo, akatabo kamateeka aka buli muntu*. Kampala, Milton Obote Foundation, 1966, 26p., (Luganda).
- KARWEMERA, F. K. *Oteebwa orurimi rwawe*. Kampala, E.A.L.B., 1966, in-16no. 41p.
- LUBWAMA, A. *Sindibad Omulunyaanja*. Kampala, U.P.H., 1967, 67p., 4 sh. 50 cts. Luke. Nairobi, the Bible Society in East Africa, 1967, (St. Luke in Kakwa.)
- LYAVALA-LWANGA, E. J. *Endheso dh'abasoga*. Kampala, Milton Obote Foundation 1967, 97p.
- Marakao. Nairobi, The Bible Society in East Africa, 1966, 58p., (St. Mark in Teso).
- Matayo. Nairobi, The Bible Society in East Africa, 1966, 93p., (St. Matthew in Teso.)
- Matayo. Nairobi, The Bible Society in East Africa, 1966, 102p., (St. Matthew in Nkore-Kiga).
- Mathayo. Nairobi, The Bible Society in East Africa, 1966, 106p. (St. Matthew in Karimojong).
- OPOLO-OPIYO, T. *Acebe re ma jok*. Kampala, Longmans, 1967, 57 p. Alur (Lwo) Reader II.
- SANTANDREA, S. Nomenclatura di pareutela in Luo e Ndogo Bahr el Ghazal (Sudan). (*Africa*, Rome, Vol. 23, no. 3, September 1967, pp. 286-300). (Acholi).
- SNOXALL, R. A. (Ed.) *Luganda-English dictionary*. London, U.P., 1967, in-16mo., 357p., 42sh.
- Yohaana. Nairobi, The Bible Society in East Africa, 1966, 86p. (St. John in Nkore-Kiga).

**LAW**

- East African Law Reports*. London, Butterworth, 1966, 4 vols., 596p.
- JAMES, R. W. Some problems concerning leases and licenses. (*E.A.L.J.*, Vol. 3, no. 3, September 1967, pp. 218-251.)
- Judgement in the matter of a writ of Habeas Corpus and in the matter of an application by Michael Matovu*. Kampala, High Court, 1966, in folio, 56p. (Cyclostyled.)
- MACNEIL I. R. Research in East African law. (*E.A.L.J.*, Vol. 3, no. 1, March 1967, pp. 47-78.)
- MAINI, K. M. *Land law in East Africa*. Nairobi, O.U.P., 1967, 270p.
- MORRIS, H. F. Some recent changes in the judicial systems of East Africa—Uganda. (*Journal of African Law*, London, Vol. II, no. 1, Spring 1967, pp. 48-50.)
- PICCIOTTO, S. Extradition and independence. (*E.A.L.J.*, Vol. 2, no. 3, September 1966, pp. 198-210.)
- OBOL-OCHOLA, J. Elopement in Uganda. (*E.A.L.J.*, Vol. 3, no. 2, June 1967, pp. 117- ).

- SAWYERR, G. F. A. The High Court of Uganda and customary law. (*E.A.L.J.*, Vol. 3, no. 1, March 1967, pp. 27-46.)
- , (Ed.). *East African law and social change*. Nairobi, E.A.P.H. for E.A.I.S.C.A., 1967, 307p. (Contemporary African Monographs, no. 6). The following essays concern Uganda; The position of customary criminal law in African countries (E. Cotran), Investment guarantees (F. X. Njenga), Commercial law in modern East Africa (M. Rogers) and Internal conflict of laws in East Africa (G. F. A. Sawyerr).

### LITERATURE

- KIRONDE, E. (Ed.). *Four plays for schools*. U.P.H., 1967, 91p., 12 fig.
- NAZARETH, P. The headmaster: a short story. (*E.A.J.*, Vol. 5, no. 1, January 1968, pp. 23-26.)
- Penpoint* 22. Kampala, Department of English, Makerere University College, September 1967, 42p.
- RUGANDA, J. M. Covenant with death. (*E.A.J.*, Vol. 4, no. 6, September 1967 pp. 25-46.) A one-act play.
- , OKELLO-OCULI, J and SSEMUWANGA, J. B. K. Poems. (*E.A.J.*, Vol. 5, no. 1., January 1968, pp. 22, 26 and 48).
- SSEMUWANGA, J. B. K. The blind, and Day-dreaming. (*Nexus*, Vol. 1, no. 2, 1967, pp. 13 and 43.) Two poems.
- TULYA-MUHIKA, S. The grass that moved. (*Zuka*, no. 1, September 1967, pp. 5-12). A short story in Uganda.

### MEDICINE

- BAILEY, N. M. Recent developments in the screening of populations for human trypanosomiasis and their possible application in other immunizing diseases. (*E.A.M.J.*, Vol. 44, No. 11, November 1967, pp. 475-481.)
- BANWELL, J. G. and CAMPBELL, J. Pancreatic exocrine function in African patients. (*Transactions of the Royal Society of Tropical Medicine and Hygiene*, London, Vol. 61, no. 3, 1967, pp. 390-398, 1 fig., 2 tables.)
- , HUTT, M. S. R. and Others. Exocrine pancreatic disease and the malabsorption syndrome in tropical Africa. (*Gut*, London Vol. 8, no. 4, August 1967, pp. 388-401, 4 fig., 3 tables.)
- BILLINGTON, R. Mengo Hospital: the first seventy years. (*M.M.J.*, Vol. II, November 1967, p. 3).
- BROWN, R. E. and JELLIFFE, D. B. Decreased elasticity of the auricular cartilage in Ugandan children with kwashiorkor. (*American Journal of Clinical Nutrition*, Bethesda, Maryland, Vol. 20, no. 11, November 1967, pp. 1230-1233, 3 fig.)
- BUCKLEY, R. M. Patterns of cancer at Ishaka hospital in Uganda. (*E.A.M.J.*, Vol. 44, no. 11, November 1967, pp. 465-468, 2 tables.)
- BURKITT, D. The African lymphoma: clinical features, response to therapy and epidemiological aspects. (*Journal of the Royal College of Surgeons of Edinburgh*, Vol. II, no. 3, April 1966, pp. 170-184, 10 fig., 2 tables, 4 maps).
- COOK, J. Kaposi's sarcoma. (*Journal of the Royal College of Surgeons of Edinburgh*, Vol. II, no. 3, April 1966, pp. 185-195, 3 fig., 2 tables.)
- CONNOR, D. H., SOMERS, K. and Others. Endomyocardial fibrosis in Uganda. I—An epidemiological, clinical and pathologic study. (*American Heart Journal* St. Louis, Vol. 74, no. 5, November 1967, pp. 687-709, 2 plates, 4 fig., 3 tables, 1 map.)
- E.A.C.S.O. *East African Virus Research Institute, Annual Report*, 1966, no. 16, 1967, 54p. Contains a note on an outbreak of jaundice in Kigezi, studies of Burkitt's tumour in West Nile and various other brief notes.

- E'BYENGOZI, E. B. A study of the superficial cubital veins in Uganda. (*M.M.J.*, Vol. II, November 1967, pp. 17-18, 1 fig.)
- FRIPP, P. J. and GOODMAN, J. D. New foci of *Schistosoma rodhaini* in Uganda, (*Transactions of the Royal Society of Tropical Medicine and Hygiene*, London Vol. 61, no. 4, 1967, pp. 613-614.)
- GEBBIE, D. A. M. Vacuum extraction and symphysiotomy in difficult vaginal delivery in a developing country. (*British Medical Journal*, London, December 1966, pp. 1490-1493, 7 tables.)
- GRECH, E. S. and LEWIS, M. G. Ovarian tumours in Ugandan Africans. (*E.A.M.J.*, Vol. 44, no. 12, December 1967, pp. 487-492, 1 fig., 1 table.)
- GREGORY, Sister. A medical practice in Uganda, Holy Family Hospital. (*Medical Missionary*, Vol. 38, 1964, pp. 146-150.)\*
- GRIFFITH, H. B. Gonorrhoea and fertility in Uganda. (*Eugenics Review*, Oxford, Vol. 55, no. 2, 1963, pp. 103-108.)\*
- GUNDARA, N. S. and CARDOZO, L. Primary lymphosarcoma of the stomach. (*E.A.M.J.*, Vol. 44, no. 12, December 1967, pp. 509-512, 1 fig.)
- HADDOW, A. J., WILLIAMS, M. C. and others. Twelve isolations of Zika virus from *Aedes africanus* taken in and above a Uganda forest. (*Bulletin of the World Health Organisation*, Geneva, Vol. 31, 1964, pp. 57-69.)
- HUCKSTEP, R. L. Animal reservoirs of Salmonellae. (*British Medical Journal* London, December 1967, p. 681.)
- , Orthopaedic problems in East Africa. (*Journal of the Royal College of Surgeons of Edinburgh*, Vol. II, no. 3, April, 1966, pp. 206-223, 14 fig.)
- , Polio in Uganda. (*E.A.M.J.*, Vol. 44, no. 9, September 1967, pp. 374-375.) Report of a film.
- HUTT, M. S. R. and DULO, A. An analysis of diseases found in adults of the Baganda and Banyarwanda-Rundi tribes at autopsy. (*M.M.J.*, Vol. II, November 1967, pp. 24-26, 3 tables.)
- JELLIFFE, D. B. A children's ward in the tropics. (*Lancet*, London, January 1967, pp. 102-103.)
- , and others. Ecology of childhood disease in the Karamojong of Uganda. (*Archives of Environmental Health*, Vol. 9, July 1964, pp. 25-36.)\*
- KAGAN, A. SHAPER, G. and others. A note on signs in the fundus oculi and arterial hypertension: conventional assessment and significance. (*Bulletin of the World Health Organisation*, Geneva, Vol. 34, 1966, pp. 955-960, 6 tables.)
- KAGWA, B. H. Endemic viral encephalitis in Uganda (*E.A.M.J.*, Vol. 44, no. 8, August 1967, pp. 333-342, 2 fig.)
- KIBUKAMUSOKE, J. W. Hypertension and urea retention in proliferative glomerulonephritis. (*E.A.M.J.*, Vol. 44, no. 6, June 1967, pp. 238-240.)
- , The examination of multiple slides for the demonstration of malaria parasites. (*Journal of Tropical Medicine and Hygiene*, London, Vol. 70, no. 2, February 1967, pp. 46-49.)
- KULKARNI, N. B. and ROE, P. F. Childhood tetanus in Busoga. (*E.A.M.J.*, Vol. 44, no. 10, October 1967, pp. 441-445.)
- MCADAM, I. (Sir). Tropical phagedenic ulcers in Uganda. (*Journal of the Royal College of Surgeons of Edinburgh*, Vol. II, no. 3, April 1966, pp. 196-205, 12 fig.)
- MARTIN, D. C. and ARNOLD, J. D. Studies on an East African strain of *Plasmodium falciparum*. (*Transactions of the Royal Society of Tropical Medicine and Hygiene*, London, Vol. 61, no. 3, 1967, pp. 331-339, 2 fig., 4 tables.)
- MARTIN, J. A. M. Disease of the ear, nose and throat in tropical Africa: a Uganda survey. (*Journal of Laryngology and Otology*, Ashford, Vol. 81, no. 10, October 1967, pp. 1079-1098, 2 fig., 8 tables.)

- MOORE, E. W. Radiological experience of upper intestinal tract disease in Kampala, Uganda (*E.A.M.J.*, Vol. 44, no. 12, December 1967, pp. 513-517, 4 tables.)
- MORLEY, D. C. MARTIN, W. J. and ALLEN, I Measles in East and Central Africa. (*E.A.M.J.*, Vol. 44, no. 12, December 1967, pp. 497-508, 4 fig., 2 tables.)
- Nutrition in eastern Africa*. Nairobi, Longmans, 1966, 95p., 11 photos, numerous tables.
- PALIWODA, T. Z. and WILLIAMS, P. N. Surgical removal of the carotid body and denervation of the carotid sinus for bronchial asthma. (*E.A.M.J.*, Vol. 44, no. 7, July 1967, pp. 285-287.)
- PECE, G. V. Kielland forceps delivery in Bantu women. (*E.A.M.J.*, Vol. 44, no. 7, July 1967, pp. 288-291, 1 fig.)
- RAYNER, V. and MUGAMBI, M. G. The innervation of the gut in Hirschsprung's disease. (*M.M.J.*, Vol. II, November 1967, pp. 39-42, 5 fig.)
- RICHMOND, J. and DONALDSON, G. W. K. Splenectomy and idiopathic tropical splenomegaly. (*Journal of the Royal College of Surgeons of Edinburgh*, Vol. II, no. 3, April 1966, pp. 224-231, 5 fig., 2 tables.)
- SHAPER, A. G. On the nature of some tropical cardiomyopathes. (*Transactions of the Royal Society of Tropical Medicine and Hygiene*, London, Vol. 61, no. 4, 1967, pp. 458-481, 6 tables.)
- SHEPHERD, J. J. and WRIGHT, P. Rectal and colonic sensations in patients with volvulus in Uganda (*E.A.M.J.*, Vol. 44, no. 11, November 1967, pp. 451-454, 1 fig.)
- SOMERS, K. and FOSTER, W. D. Salmonella bacteraemia and brucellosis. (*Lancet*, London August 1966, p. 396.)
- STAMBULI, P. Histopathological diagnosis of mycobacterial 'Buruli' ulceration in Uganda. (*M.M.J.*, Vol. 11, November 1967, pp. 36-38.)
- STANFIELD, J. D. Organisation of M.C.H. services in developing countries: VI—Immunisation. (*Journal of Tropical Pediatrics*, Jamaica, Vol. 13, no. 3, September 1967, pp. 102-116, 2 tables.)
- TEMPLETON, A. C. Phaeochromocytoma in East Africa. (*E.A.M.J.*, Vol. 44, no. 7, July 1967, pp. 271-277, 2 fig., 1 table.)
- VAN DER GELD, H., PEETOOM, F., SOMERS, K. and KANYEREZI, B. R. Immunohistological and serological studies in endomyocardial fibrosis. (*Lancet*, London, December 1966, pp. 1210-1214, 7 fig.)
- WILLIAMS, E. H. Report of five years of operation of a leprosy control scheme in the West Nile district of Uganda. (*Leprosy Review*, London, Vol. 35, no. 4, 1964, pp. 219-222.)\*
- WILLIAMS, R., PARSONSON, A., SOMERS, K. and HAMILTON, P. J. S. The portal hypertension of idiopathic tropical splenomegaly. (*Lancet*, London, February 1966, p. 329.)

### MOUNTAINS

- Climbing on the Ruwenzori. (*Summit*, Big Bear Lake, California, Vol. 10, no. 6, July 1964.)\*

### MUSIC

- ANDERSON, L. The African xylophone. (*African Arts*, Los Angeles, Vol. 1, no. 1, Autumn 1967, pp. 46-49, 66 and 68-69, 5 photos, 1 map.)
- KUBIK, G. Music in Uganda: a synopsis. (*Afrika*, Bonn, Vol. 7, no. 6, 1966, pp. 42-44.)
- SHARMAN, A., and ANDERSON, L. Drums of Padhola. (*U.J.*, Vol. 31, no. 2, 1967, pp. 191-199, 4 photos.)

**POLITICAL SCIENCE**

- ADOKO, A. The constitution of the Republic of Uganda. (*Transition* 33, Vol. 7, no. 2, October 1967, pp. 10-12.)
- AKINS, J. C. Problems of federalism in Uganda. (*Public Policy*, Harvard, Vol. 13, 1964, pp. 369-394.)\*
- BOOT, F. H. Ethnic factors in the struggle in Uganda. (*African Institute Bulletin*, Pretoria, Vol. 4, no. 11, November 1966, pp. 267-274.)\*
- BRADLEY, A. W. Constitution-making in Uganda. (*Transition* 22, Vol. 7, no. 1, August 1967, pp. 25-31.)
- CARTRY, M. Traditions et changements dans le royaume du Bouganda. (*Revue Francais Science Politique*, Paris, Vol. 12, March 1963, pp. 89-119.)\*
- DOORNBOS, M. R. Protest movements in western Uganda: some parallels and contrasts. (*M.I.S.R., Conference Papers*, January 1967, 18p., Cyclostyled.) (Paper no 416.)
- FALLERS, L. A. The predicament of the modern African chief: an instance from Uganda. Essay in *Social change in the colonial situation*, edited by I. Wallerstein, New York, 1967, pp. 232-248. Reprinted from *American Anthropologist*, Vol. 55, no. 2, 1955, pp. 290-305.
- GINGYERA-PINYCWA, A. G. G. Monarchism an anachronism? The republicans outlaw the royalists in Uganda (*E.A.J.*, Vol. 4, no. 7, November 1967, pp. 9-14, and p. 19, 5 photos.)
- GUTTERIDGE, W. A. *Military institutions and power in new states*. London, Pall Mall, 1964, 182p., (A few references to Uganda).
- KASFIR, N. The 1967 Uganda Constitution Assembly debate. (*Transition* 32, Vol. 7, no. 2, October 1967, pp. 52-56.)
- KIAPI, A. The Treaty for East African Co-operation. (*E.A.L.J.*, Vol. 3, no. 3, September 1967, pp.
- KIBULYA, H. M. and LANGLANDS, B. W. *The political geography of the Uganda-Congo boundary*. Kampala, Department of Geography, Makerere University college, 1967, 105p., 13 maps. (Cyclostyled.) (Occasional Paper no. 6.)
- LEE, J. M. *Colonial development and good government: a study of the ideas expressed by the British official classes in planning decolonization, 1939-1964*. Oxford, Clarendon Press, 1967, 34p., (A lot of references to Uganda.)
- MABILEAU, A. and MEYRIAT, J. *Decolonisation et regimes politiques en Afrique noire*, Paris, Librairie Amand Colin, 1967, Sections on Uganda pp. 105-113, 134-135 and 142-144.
- MAIR, L. P. Busoga local government. (*Journal of Commonwealth Studies*, Leicester, Vol. 5, no. 2, July 1967, pp. 91-108.)
- MAYANJA, A. The government's proposals for a new constitution of Uganda. (*Transition* 32, Vol. 7, no. 1, August 1967, pp. 20-25, See also *Transition* 33 Vol. 7, no. 2, October 1967, pp. 43.)
- MAZRUI, A. A. Borrowed theory and original practice in African politics. Chapter 4, *Patterns of African development*, edited by H. J. Spiro, New York, Prentice Hall, 1967, pp. 91-124.
- , and M. The impact of the English language on African international relations. (*Political Quarterly*, London, Vol. 138, no. 2, April, 1967, pp. 140-155.) Contains some comments on the role of English in Uganda.
- MUTESA, Sir E. *The desecration of my Kingdom*. London, Constable, 1967, 194. p., 10 photos.
- PROCTOR, J. H. The effort to federate East Africa: a post mortem. (*Political Quarterly*, London, Vol. 37, no. 1, January 1966, pp. 46-69.)
- REYNER, A. S. Length and status of international boundaries in Africa. (*African*

- Studies Bulletin*, Boston, Vol. 10, no. 2, September 1967, pp. 6-9.
- ROTHCHILD, D. From federalism to neo-federalism in East Africa. (*M.I.S.R., Conference Papers*, January 1967, 19p., Cyclosyled.) Paper no. 419.)
- , The limits of federalism: an examination of political institutional transfer in Africa. (*Journal of Modern African Studies*, London, Vol. 4, no. 3, November 1966, pp. 275-293.)
- ROUCEK, J. C. Uganda in geopolitics. (*New Africa*, Vol. 7, no. 2, 1965, pp. 9-13, 1 map.)\*
- ROTHERMUND, I. Die asiatische Minderheit in Ostafrika. (*Int. Afrika forum*, Munich, Vol. 2, no. 9, September 1966, pp. 411-414.)\*
- SIBLEY, J. Division and integration in Uganda. (*Institute of Race Relations, Newsletter*, London, September 1965, pp. 22-25.)\*
- TANDON, Y. and GINGYERA-PINYCWA, A. G. G. Uganda-Sudan relations and Uganda-Congo relations: a comparative examination, 1962-1966. (*M.I.S.R., Conference Papers*, January 1967, 18p., Cyclostyled.) (Paper 429.)
- TAYLOR, S. (Ed.) *The new Africans*. London, Hamlyn, 1967, pp. 453-472 contains brief accounts of the political leaders of Uganda.
- Uganda. (*Report on World Affairs*, London, Vol. 47, no. 2, April 1966, pp. 136-138, and Vol. 48, no. 3, July 1967, p. 266.)
- Uganda *The Constitution of the Republic of Uganda*. Entebbe, G.P., 1967, 102p.

#### RELIGION

- AANO, J. Uganda—ny nasjon med gammal misjonsarv. (*Norsk Tidsskrift for misjon*, 1962, pp. 79-82.)\*
- APELO, A. Y. O. *Sunday school buk 1 leb Lango*. Gulu, Church of Uganda, 1967, 36p.
- BARRETT, D. B. Two hundred independent church movements in East Africa: a survey, analysis and prediction. (*M.I.S.R., Conference Papers*, January 1967, 11p., 1 map cyclostyled.) (Paper no. 424.)
- BEETHAM, T. A. *Christianity and the new Africa*. London, Pall Mall, 1966, 267p. References to Uganda in index.
- BIERRE, P. (Ed.) *Afrika von der Vorgeschichte bis zu der Staten der gegenwart*. Frankfurt, Fischer, 1966, 384p., References to Uganda in index.
- CULLEN, W. J. The Martyrs of Uganda canonized. (*Interracial Review*, Vol. 37, December 1964, pp. 227-228.)\*
- DAHINDEN, J. Quatre monuments au martyrs de l'Ouganda. (*Art d'Eglise*, Vol. 3, no. 133, 1965, pp. 258-261.)\*
- DDIBA, J. L. *Eddini mu Uganda*. Vol. 2. Masaka, St. Liberatium Printing Press, 1967, 238p., photos.
- Epopees des martyr Buganda. (*Vivante Afrique*, 1964, 61p., Special Number 234)\*
- GRAY, J. R. The missionary factor in East Africa. Chapter in *Africa in the Nineteenth and Twentieth Centuries*, edited by J. C. Anene and G. Brown, London, Nelson, 1966, pp. 458-471.
- HUNNERMANN, G. *La flamme qui chante: les martyrs de l'Ouganda*. Mulhouse Salvator, 1963, 170p.
- KALEMERA, B. M. The Baganda martyrs—a correction. (*U.J.*, Vol. 31, no. 2, 1967, pp. 211-212.)
- KITTLER, F. D. The black saints. (*Sign*, Vol. 44, October, 1964, pp. 40-45)\*
- LEDGER, R. (Ed.) *Katigondo, presenting the Christian message in Africa*. London, Chapman, 1965, 138p. Report of a conference held at Katigondo, Uganda.
- LEYSBETH, A. *Les martyrs de l'Uganda*. Leopoldville, Bibliotheque de l'etoile, 1964, 55p.

- LONG, F. R. Uhuru and the Medical Missions Sisters come to Uganda. (*Medical Missionary*, Vol. 38, 1964, pp. 4-0.)\*
- McCOULEY, V. The Church's response to the challenge of independence in Uganda. (*Medical Missionary*, Vol. 38, 1964, pp. 14-16)\*
- MACINNES, G. S. C. C. Your parish is busy? Butiti parish in Uganda. (*World Mission*, Vol. 15, 1964, pp. 49-58).\*
- New African saints. (*Maryknoll*, Vol. 58, October 1964, pp. 60-62.)\*
- PRICE, T. The church as a land-holder in eastern Africa. (*Bulletin of the Society for African Church History*, Vol. 1, no. 1, 1963, pp. 8-13.)\*
- ROURKE, J. C. S. C. Uganda martyrs. (*Extension*, Vol. 59, November 1964, pp. 36-40)\*

**SCIENCE**

- BOSHOFF, W. H. Reaction velocity constants for batch methane fermentation on farms, notably in the tropics. (*Journal of Agricultural Sciences*, London, Vol. 68, no. 3, June 1967, pp. 347-349, 3 fig.)
- VISSER, S. A. Gas production in the decomposition of *Cyperus papyrus*. (*Journal of the Water Pollution Control Federation*, Vol. 35, 1963, pp. 973-988.)\*

**SOCIOLOGY**

- APELO, A. Y. O. *Buk me youth 1 leb Lwo*. Gulu, Church of Uganda, 1967, 32p.
- BHARATI, A. The unwanted elite of East Africa. (*Transaction*, St. Louis, Missouri, July 1966, pp. 37-41)\*
- DAVIS, C. The strength of the Muller-Lyer illusion as a function of attentional factors. (*M.I.S.R., Conference Papers*, January 1967, 220. Cyclostyled). (Paper no. 408). A report of psychological research carried out on Banyankole and Makerere subjects.
- INEICHEN, B. Bugoto: a fishing community on Macdonald Bay, Busoga. (*U.J.*, Vol. 31, no. 2, 1967, pp. 201-205, 3 tables.)
- Labour problems in Uganda*. Kampala, Milton Obote Foundation, 1966, 123p. A collection of papers presented at a conference in July 1966, the following of which concern Uganda:— The role of trade unions (J. Reich), Trade unions and management (A. Adoko), Trade unions in modern industries (W. W. Nakibinge), Strikes and disturbances (I. K. Musazi), Relations between trade unions and the government (E. R. Kibuka), Politics and trade unions (H. M. Luande), Government policies and trade unions (L. Lubowa), Responsibilities of trade union officials (Y. W. Nega), Uganda Teachers Association (J. F. Kisaka), Government policy in industrial relations (T. Sebuyira), Factors affecting organisations and the control of funds (S. N. Wanje), E.A.R. & H. trade unions (C. Tamale), The second five year's development plan, (J. Kakonge).
- LANGLANDS, B. W. and OBOL-OWIT, L. E. C. *Essays on the settlement geography of east Acholi* Kampala, Department of Geography, Makerere University College, 1967, 54p., 9 map's. (Cyclostyled). (Occasional Paper, no. 7.)
- MILLS, R. Problems of old people in East Africa. (*E.A.J.*, Vol. 4, no. 6, October 1967, pp. 16-20.)
- NAMBOZE, J. M. Weaning practices in Buganda. (*Tropical and Geographical Medicine*, Haarlem, Vol. 19, no. 2, June 1967, pp. 154-160, 5 tables.)
- RADO, E. R. Manpower planning in East Africa. (*E.A.E.R.*, Vol. 3, no. 1, June 1967, pp. 1-30, 3 tables.)
- Manpower planning in East Africa. Chapter 16, *World Yearbook of Education* London, Evans, 1967.
- , The 1966-71 Uganda manpower plan. (*Journal of Development Studies*, London, Vol. 3, no. 4, July 1967, pp. 451-456.)

*Responsible parenthood*. Kampala, National Council of Social Service for Uganda, 1966, 8p. (Cyclostyled.)

SEGALL, M. H., CAMPBELL, D. T. and HERSKOVITS, M. J. *The influence of culture on visual perception*. Indianapolis, Bobbs-Merrill, 1966, 268p. Includes brief references to work done in Ankole and Toro.

*The role of the co-operative movement in Uganda*. Kampala, Milton Obote Foundation, 1967, 165p. A collection of papers presented at a conference in October 1966. All the papers refer to Uganda and include The role of the co-operative movement (J. K. Babiiha), Problems facing the co-operative movement (B. Emor), Management problems (D. H. Laws), The Lint Marketing Board and the co-operative movement (E. K. K. Ntende), The role of banking in co-operative movements (F. Luyimbazi), The work of the U.C.C.U. in marketing minor crops (Y. W. Wamboza), The Coffee Marketing Board and the co-operative movement (R. J. Mukasa), Government and Co-operation (P. Kwebiha), The duties of committee members (R. C. Gates), The role of the co-operative movement in developing commerce and industry (C. J. Obwangor), History and success of the Bugisu Co-operative Union (C. M. Wakiro), Agricultural problems facing the co-operative movement (H.R. Berunga), Co-operative principles (G. E. Roelofs), The co-operative movement in developing the animal industry (H. S. K. Nsubuga), The co-operative credit scheme (C. F. Campbell), Co-operative farmers' bye-laws (E. D. Mpagi), Consumer co-operative in Uganda (V. T. Mitala), Co-operative meetings (H. F. Janneck), and Government policy (J. M. Byagagaire).

SOUTHALL, A. W. Determinants of the social structure of African urban populations with special reference to Kampala (Uganda). Essay in *Social change in the colonial situation*, edited by I. Wallerstein, New York, Wiley, 1967, pp. 321-339. Reprinted from a UNESCO report, 1956.

STARR, M. African labour college on the equator. (*American Federationist*, Vol. 71, January 1964, pp. 20-21.)\*

TANNER, R. E. S. Some problems of East African crime statistics. (*M.I.S.R., Conference Papers*, January 1967, 14p., 7 tables, cyclostyled) (Paper no 431.)

TAYLOR, D. Kampala College. *Canadian Labour*, Vol. 9, September 1964, pp. 21-24.)\*

VERJEE, S. A. K. S. and others. A project to determine what proportion of women delivered at a rural maternity centre would benefit by the use of family planning. (*M.M.J.*, Vol. 11, November 1967, pp. 27-28.)

VORLAUFER, K. *Physiognomie, struktur und funktion gross—Kampalas*. Frankfurt-Main, Seminars für Wirtschafts-geographie der Johann Wolfgang Goethe Universität, 1967, in 2 vols., 556p., 40 maps in volume 2.

WELBOURN, H. *A first book of child care for African parents*. London, Mills and Boon, 1966, 54p.\*

YELD, R. E. Continuity and change in Kiga patterns of marriage: an analysis of structural change in Kiga marriage in the 1930s and the 1960s. *M.I.S.R., Conference Papers*, January 1967, 38p., 12 tables, Cyclostyled). (Paper no. 406).

### ZOOLOGY

HAY, P. W. and MARTIN, R. W. Python predation in Uganda kob. (*E.A.W.J.*, Vol. 14, 1966, pp. 151-152, 1 phto.)

JAMIESON, B. G. M. A taxonomic review of the African megadrile genus *Stuhlmannia*. (*Journal of Zoology*, London, Vol. 152, no. 1, May 1967, pp. 79-126, 34 fig., 3 tables, 1 map.)

LAWS, R. M. Age criteria for the African elephant. (*E.A.W.J.*, Vol. 4, 1966, pp. 1-37, 17 fig., 5 tables.)

- MUTERE, F. The breeding biology of equatorial vertebrates: reproduction in the fruit bat, *Eidolon helvum*, at latitude 0: 20°N. (*Journal of Zoology*, London, Vol. 153, no. 2, October 1967, pp. 139–161, 1 fig., 4 tables.)
- OWEN, D. F. Polymorphism in Pleistocene land snails. (*Science*, Vol. 152, 1966, pp. 71–72)\*
- PLOWRIGHT, W.<sup>1</sup>, LAW, R. M. and RAMPTON, C. S. Serological evidence for the susceptibility of the hippopotamus to natural infection with rinderpest virus. (*Journal of Hygiene*, Cambridge, Vol. 62, 1964, pp. 329–336, 2 tables, 1 map.)
- ROWELL, T. E. Female reproduction cycles and behaviour of baboons and Rhesus Macaques. Essay in *Social communication among primates*, edited by S. A. Altman, Chicago U.P., 1967, in-4to., pp. 15–32.
- , Forest living baboons in Uganda. (*Journal of Zoology*, London, Vol. 149, no. July 1966, pp. 344–364, 2 plates, 5 fig., 6 tables.)
- SIKES, S. K. The African elephant, *Loxodonta africana*: a field method for the estimation of age. (*Journal of Zoology*, London, Vol. 150, 1966, pp. 279–295, 9 plates, 3 tables.)
- THURSTON, J. P. The morphology and life-cycle of *Cephalochlamys namaquensis* from *Xenopus muelleri* and *X. laevis*. (*Parasitology*, London, Vol. 57, no. 1, February, 1967, pp. 187–200, 11 fig., 3 tables.)
- ZOOLOGY—Fishes**
- E.A.C.S.O. East African Freshwater Fisheries Research Organisation, Annual Report, 1966. Jinja, E.A.F.F.R.O., 1967, 46p., 9 fig. With appendices on food of *Tilapia esculenta* (R. L. Welcomme), breeding of *Aplocheilichthy pumilus* (R. L. Welcomme), predation by *Haplochromis* (J. H. Buruga), trawling on Lake Victoria (J. M. Gee and M. P. Gilbert).
- HAMBLYN, E. L. The food and feeding habits of Nile perch (*Lates niloticus*) (*Revue Zoologie et Botanique Africaine*, Brussels, Vol. 74, no. 1, September 1966, pp. 1–28, 2 fig., 14 tables.)
- ZOOLOGY—Ornithology**
- KAHL, M. P. Observations on the behaviour of the Hamerkop *Scopus umbretta* in Uganda. (*Ibis*, Vol. 109, 1967, pp. 25–32.)\*
- MOREAU, R. E. *The bird faunas of Africa and its islands*. London, Academic Press, 1966, 425p.
- ZOOLOGY—Wildlife**
- KILEY, M. A preliminary investigation into the feeding habits of the water-buck by faecal analysis. (*E.A.W.J.*, Vol. 4, 1966, pp. 153–157, 1 table.)
- LAMBRECHT, F. L. Some principles of tsetse control and land-use with emphasis on wildlife husbandry. (*E.A.W.J.*, Vol. 4, 1966, pp. 89–98, 1 fig.)
- Report and accounts of the Trustees of the Uganda National Parks for the year ending June 1966*. Kampala, U.N.P., 1967, 150.
- SPINAGE, C. A. and FAIRRIE, R. D. Removal of a snare from a white rhinoceros in the West Nile Rhino Sanctuary. (*E.A.W.J.*, Vol. 4, 1966, pp. 149–151.)
- TALBOT, L. M. A survey of past and present wildlife research in East Africa. (*E.A.W.J.*, Vol. 3, 1965, pp. 61–85, bibliography.)