

MY SILVER JUBILEE ANNIVERSARY, REMINISCENCES 1968-1992

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I was born in Tanga on the 30th July 1938 and joined Agakhan Nursery School in the same town in 1942. Here I stayed up to 1945 and met my future academic friends, who were with me in primary and secondary schools in Tanga. I completed my primary education at the Agakhan primary school between 1946-1953. Between 1954 and 1959 I studied at Karimjee School, Tanga earning my Senior Cambridge School Certificate in 1957 and Cambridge Higher School Certificate in 1959. The former one gave me four top prizes vis a vis Geography (distinction) English language (Higher Credit) English Composition (Higher Credit) and Physics with Chemistry (Higher Credit). A total of eight subjects were attempted and cleared successfully. Similarly a total of five subjects were attempted for the Higher School Certificate with best grade in General Paper. All my schooling had been supervised and financed through the good offices of the Administrator for H. H. The Agakhan Schools, Tanganyika, Messers Alnoor Kassum who later became Tanzania's Energy Minister and currently the Chairman of University of Dar es Salaam Council. I owe him my thanks for his concern and assistance.

Between 1960-1964 I worked as a Post and Telecommunication's officer Grade II at Albermale st B.O. London W.C.I. During this period I pursued my academic goals by self-financed evening classes which were

rewarded by a USAID - sponsored John F. Kennedy Scholarship to study veterinary medicine between 1964-1968. This stint went through without a hitch at the Faculty of Veterinary Medicine, Chiromo and Kabete (Nairobi), Kenya. At London Post Office located near Ritz Hotel and Picadilly Circus, I had customers from Drury Lane and Shaftesbury Avenue Theater Lanes. The players often invited me to attend premiers of "My Fair Lady" and "Mouse Trap". It was great fun to see these plays with different casts.

I reported for duty at the Ministry of Agriculture, Dodoma Zonal Veterinary Office on 13th April 1968. However, I could not continue to take charge of Singida Office as Regional Veterinary Officer because of incessant heavy rains that had destroyed Kintinku Bridge in Manyoni District. During this short interval of two and half weeks, I worked at Dodoma Regional Animal Clinic. In the meantime three British Tsetse expatriates connected with tsetse clearance by an aerial spraying were proceeding to their camp at Kinampanda in Iramba District. These expatriates offered me a back side lift in their pick-up Land Rover. The vehicle stopped at Kondoa where the expatriates imbibed "Bubbly" the beer and the "Chewy" the beef! When they were saturated with their cherished ingredients,

the Land-rover joltingly weaved through Bereko, Babati, Katesh, Balang'idalalu and finally deposited my Tired Torso at Zanzibar Guest House situated on Singida's only boulevard worth mentioning. After seven days, came Almighty's Call from Dodoma Zonal Office to quit my hotel according to Standing General Orders. After six weeks of pleasant stay in Singida in almost constant sight of majestic Mount Hanang, third tallest in Tanzania after Kilimanjaro and Meru, I received ALMIGHTY'S second call to proceed to Mafinga National Service (JKT) in May 1968 where I enrolled with Operation Kilimo under the boss-ship of Major Cathles. My Force Number is A2355. From Mafinga Camp I was moved to Kipo B camp on the banks of River Rufiji. In Rufiji area we overstayed our prescribed period of two months to help with construction of new homes for Rufiji flood victims. The year 1968 was memorable for heavy rain damages in the country leading to rise in water level of Lake Victoria. Moreover Enzootic - Epizootic ecosystem for livestock diseases lost equilibrium causing tick-born diseases outbreaks in rain affected areas with losses of thousands of cattle particularly in Sukumaland and even in Central Zone. I completed my Second Phase of National Service between September and November 1970 at Mlale in Songea. This being an Election Year, we were held up in Songea for two and half months instead of just one month because Hon. Rashidi Kawawa was to take the SALUTE. Thankfully, I passed out as a Best Trainee for company A at Maji Maji Grounds, Songea in November 1970. After Songea I returned to Singida to receive Almighty's Third Call to proceed on transfer

to Veterinary Investigation Center (VIC) Mwanza. At Singida we managed to run successful Rinderpest and Rabies vaccination campaigns. This paid dividends as Singida area had high protective antibodies against Rinderpest and was deleted from further vaccination. While Rabies was kept South of the Central Railway Line away from the National Parks and adjacent game areas. Trade stock livestock was another big issue for transporting cattle via Kitaraka, Kindai and Mkwese holding grounds destined for Tanganyika Packers. Despite intermittent outbreaks of Foot and Mouth Disease (FMD) around holding grounds and designated Livestock Markets, stringent vaccination of all trade stock cattle with FMD, Anthrax and Black Quarter vaccines and maintenance of dips and dipping regimes paid dividends as livestock was railed regularly to Dar es Salaam. Moreover local cattle herds doubled from around 300,000 to 600,000. This caused pressure on farming lands, as tsetse-free grazing lands could not sustain increased number of livestock. By 1970 large herds of Sukuma-owned cattle were heading towards Chunya and other parts of Mbeya region through the Rift Valley corridor described as Wembere Steppes. Today these herds constitute prominent livestock units in Chunya, Mbeya, Sumbawanga, Mbozi, Njombe, Iringa and Songea districts. At Singida, I was on my first appointment and livestock activities very challenging. But if I managed to weather the storm, it was with great moral encouragement and assistance I received from Singida Region Members of Parliament Messers Abdalla Mende Nungu, Abel Nalingigwa, Pastor Musa, Sheikh Ali and Paulo Luwanje. Among the Singida

Region veterinary staff members, I recall with gratitude assistance of Kashe Ramadhani Mbagi, Solomon Musa, Juma Kinkopela, Late Peter Masanja Kayogera, Andrea Mwiko and Bonus Ndunguru who gave me solid support during my formative years as a veterinarian. Singida also offered opportunity to deal with wild Game issues which were mainly referred to us by a very capable Senior Game Officer, Chief Senge Maghenyi. His fanatic interest in wild life conservation is vividly remembered. I personally vaccinated against Rabies scores of lions, leopards, cheetahs, wild dogs, hyenas and jackals that he used to exhibit in various parts of the country as a Mobile Zoo.

At Mwanza and adjacent Lake Victoria littoral areas of Lake Zone, enzootic belt had moved southward and westward encroaching on "clean" epizootic area causing heavy cattle losses during 1968-1970 heavy rains. I arrived at VIC Mwanza during January 1971 and found high involvement of this laboratory with tick-borne diseases diagnoses and dip-wash testing. Soon after my arrival in Mwanza, I became Coordinator of Rinderpest Campaign for Lake Zone and Chairman of Lake Zone Veterinary Association. I stayed in these positions till 1976. This same year I left Mwanza for Stockholm, Sweden to study post-graduate veterinary pathology for one academic year, earning me a Diploma in this subject. My many thanks are due to FAO/UNDP for offering me this opportunity. Fortunately after completion of this diploma course, Swedish University of Agricultural Sciences which had just moved to the ancient University Town of Uppsala

in 1977 gratefully offered me facilities and finances for a PhD programme at the world-famous Biomedical Center in the department of Veterinary Bacteriology. I successfully defended my PhD thesis entitled Enterotoxigenic Bacteria from Alimentary, Clinical and Environmental Sources; with special reference to Salmonella and Aeromonas bacteria. This was on 26th September, 1981.

If I may go back to my Mwanza years at the VIC our biggest accomplishment was successfully attending to Saa Nane Island's Zoo Animals Health Status which up to 1978 was under my close supervision and in good shape. Rinderpest vaccination coverage was religiously adhered to. So much so that by 1974 areas showing persistent high antibody titers were logically removed from further vaccination. Animal Health status of all government and parastatal owned livestock units were programmed from VIC Mwanza. Regular surveillances of blood-borne parasites, Brucellosis, Tuberculosis, Johne's disease were practised on all official properties which included Malya, Shishiyu and Mabuki stock units, Nyegezi and Ukiriguru Agriculture colleges' stock units, Butimba Prison Livestock units and several other missionary - owned units in Mwanza area. In Shinyanga Region such screening was effected at Binza Stock Farm in Maswa; Nindo and Salawe ranches and Tinde Local Farmers project in Shinyanga District. In Geita District Rubondo Island Game sanctuary was regularly screened. In Musoma Region, Bweri Holding Ground, Makoko Seminary, Serengeti Prison Ranch, Utegi Dairy Farm, Rwamkoma State Farm, Buhemba JKT Farm, Buhemba Central

Synod Farm all benefitted from planned activities of the Mwanza VIC. In Bukoba Region, Kitengule and Missenyi Ranches were digressed upon due to large numbers of animals. However, Kawalinda, Igabiro, Maruku, Tungamo and Kaisho herds were also regularly checked. It is a great pleasure to note that during my long tenureship at the Mwanza VIC, the best run livestock farm was at Malya under the able control of a present staff member of Veterinary Microbiology & Parasitology Department, Prof. A. A. Kassuku. During my stay at VIC Mwanza we also had very fruitful cooperation with church - run cattle units. In Musoma Region, Maryknoll RC group based at Komuge Mission near Kinesi/Usimbiti and under the dynamic leadership of Reverend Father Arthur Willy made meaningful use of our laboratory facilities which were always offered gratis. Similar assistance was also offered to Lutheran - run livestock units in Bukoba district. Most prominent among these being Igabiro Farmers Training Center under the able command of Mr. Ishabakaki. I also wish to remember veterinary staff members Late Dr. Louis Tesha, Dr. Kudra Majaliwa, Dr. Taher Lukmanji, Dr. John Mrema, Dr. Poly Pereka, Dr. Elizabeth Shayo, Deputy Speaker and Kwimba D.C., Chief Kasasura, Mr. Romuald Tungaraza, Mr. Zacharia Senti, Late Mr. Ali Issa Kasembe, Mr. William Justus Kalaye, Mr. Richard Lugola and Mr. Issa Buzohera currently of SUKITA, Dar es Salaam for their unstinted support and comradeship. Furthermore SHIHATA heads in Singida and Shinyanga regions Mr. Mbegu Malipula and Mr. Mussa Jamma gave full advance publicity to Rinderpest vaccination programmes in

Central and Lake Zones resulting in very good response from the stock owners. To these two information officers, I owe my many thanks and most deserving appreciation.

After completion of my PhD programme in September 1981, I was offered a lecturing tour of several universities in Scotland U.S.A. and Canada. I was seconded to my present department, since my arrival at Morogoro where I have taught bacteriology classes for second year BVM students between 1981 and 1992. I also had opportunity to teach bacteriology classes at Botswana Agriculture College in 1986 and UNDP-organized Inter African Microbiology Workshop held at Dar es Salaam in 1982. In 1987 I was honoured as Visiting professor at my old almamater in Uppsala. Gratefully I was also asked to be external examiner in Veterinary microbiology at Kabete and Kampala Veterinary schools between 1984-1988. The papers quoted hereafter indicate my interest in virulence factors and pathogenesis of enteric bacteria mainly *Salmonella* and *Campylobacter*. However, the star of research effort would be establishing production of enterotoxins by a variety of *Salmonella* and their statistical validification in a number of in vitro and in vivo models. This work lent further credence to resemblance of *Salmonella* heat-labile (LT) enterotoxin to *Escherichia coli* LT and cholera LT by cross- neutralization studies in in vitro and in vivo models using monospecific anti-sera and Ganglioside receptors. My later research work since my arrival at Morogoro is enlisted hereafter and the topics speak for themselves.

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