

SOKOINE UNIVERSITY OF AGRICULTURE SHOULD SAVE THE WIDER TANZANIAN COMMUNITY

An Address to the 17th Convocation Luncheon of SUA By Hon. Professor Jumanne A. Maghembe, Member of Parliament for Mwanga Constituent.

The Guest of Honour
The Vice Chancellor
The President & Vice President of the SUA Convocation
The DVC and Registrar of the University
Deans of Faculties & Directors of Institutes and University Committees
Academic Staff
Distinguished Guests, Ladies and Gentlemen

Thank you very much for inviting me to the 17th meeting of the Convocation of the Sokoine University of Agriculture(SUA). I am delighted to be back to the University, which educated me and gave me the key to be a significant player in the world of Science. I am particularly thankful and very pleased indeed that you accorded me the honour to become the guest speaker at this years convocation Luncheon.

After 15 years of absence from SUA I will present my talk as a home coming report from one of your own who has been out there looking at SUA from the outside. In doing this I have picked a leaf from Pare mythology that “ *a man inside the forest cannot see a forest, he has to go out of it into the vantage of a high ground and look down to see the forest and how the individual trees relate to each other.*” I left SUA in 1987. At the time, I was Associate Professor and Head of the Department of Forest Biology. Before leaving I had also the honour to be a Fulbright Scholar and Visiting Professor at the Department of Forest Science, College of Forestry at Oregon State University. From 1987 to the year 2000, I served as a Principal Scientist and Country Representative of the International Centre for Research in Agroforestry (ICRAF) based in Malawi. Effectively working both as a Research Scientist as well as a Diplomat.

My job brief was to lead Agroforestry Research that would deliver Soil improvement technologies to poor peasant farmers. These farmers could not afford to purchase inorganic fertilizers because government had removed subsidies to cope with conditionalities set by the IMF, World Bank and other donors for economic reform. Mind you without these fertilizers families could not grow enough food to feed themselves.

Through research on station in Malawi, we developed tree/crop mixtures that facilitated increases in maize yields from less than 1 ton/ha of grain to reach 2.5 to 3 tons/ha without the need to fertilize; and 3 to 5 tons/ha of grain with applying only ¼ of the recommended fertilizer regime. These mixtures were easy to adopt and apply on farm and produced clear solutions to the farmers’ problems. However, from the thousands of farmers who came to see them, only a few took them up. It was quite clear to us that;(a) whatever miracle technology we came up with, it had to go on farm before farmers could take it up on any large-scale; (b) that farmers tend to believe outcomes of testing

technology in another farmer's field than from a Professor's trial plot and (c) that once familiar to a technology, farmers are better trainers of other farmers than Scientists.

We undertook a major effort in On-Farm Research and later went into Dissemination (giving extension education to extension agents and farmers as well as transferring technologies directly to the farmers) of research results directly to farmers. Within a period of 5 years, more than 20,000 farmers had taken up the technologies. Today over 100,000 farmers are using and benefiting from the technologies. This is the most gratifying thing for me and I can tell you, it makes me very proud that my research could make such a big difference to many poor families!

After a career spanning 13 years at ICRAF, I returned home to participate in National Development as a Member of Parliament. My experiences in converting from a Research Scientist into a Constituency MP were tough, and can only be a subject of another talk. Suffice to say that bruises from the struggle have just healed. Today I wish to reflect on how the world out there sees SUA and challenges that SUA should address as it positions itself for the 21st century.

Sokoine University of Agriculture is recognized worldwide as a centre of excellence for Tropical agriculture, Forestry and Veterinary Medicine. All yard sticks for measuring quality in training and research give SUA very high marks. In terms of scientific contribution, SUA Scientists are prolific contributors to international journals. Many of us are members of Editorial Boards of top International Journals. Mr. President, I have served as the only board member from Africa in the Elsevier Journal *Forest Ecology and Management* from 1984 until today. I have also served in the board of the Kluwer Journal *Agroforestry Systems* for 4 years from 1994. Many of my colleagues here have similar experiences.

The best measure of SUA's Science quality is the trust the peers have on SUA scientists as exemplified by the appointment of our Scientists to lead international institutions/centres. This is an important indicator as it demonstrates international recognition of professional achievements of our Scientists and SUA's contribution to Agricultural Research in its broadest sense. Since it is not possible to give a complete list in a luncheon speech, please accept a few examples which will vividly demonstrate this fact.

-Professor John Monyo, was appointed as TAC Executive Secretary to coordinate research of all the International Agriculture Research Centres of the Consultative Group. This top job is reserved only for the world's best Agricultural Scientists.

- Professor Hosea Kayumbo, became the DG of UTAFITI in Tanzania and Chair of the Board of the International Foundation for Science (IFS) before his appointment to Lead the Desert Locust Control Organization.

-Professor Martin Kyomo who was founding Deputy Vice Chancellor of the University was the founding Director of the Southern Africa Centre for Agriculture Research and

Training. After Leading it for many years, he retired and handed the Leadership to another SUA distinguished Scholar **Professor Bruno Ndunguru**.

-Dr. Bjorn Lundgren a Lecture in Forest Biology at SUA and distinguished Scholar in Tropical Forest Soils became DG of ICRAF and later became the Director of IFS.

-Professor Andrew P. Uriyo has had a distinguished career at the International Institute of Tropical Agriculture(IITA) as Deputy Director General. Another SUA Distinguished Scientist **Prof. James Teri** Coordinated IITA research in east and southern Africa.

-Professor Dennis P Dykstra who was Associate Professor of Forest Engineering at SUA became Deputy DG of the Centre for International Forestry Research (CIFOR) and later President of the World Timber organization (WTO). **Professor Godwin Sifueli Kowero** of Forest Economics at SUA is the current head of CIFOR programmes in Africa.

- Professors Peter Huxley and Hussein Mongi both of SUA were founding scientists of ICRAF. **Later I joined ICRAF as Lead Scientist** in Southern Africa and providing overall Scientific guidance in multipurpose tree selection and domestication throughout the centre. **Professor August B Temu** is the ICRAF Coordinator for Trainig and Education.

-Professor Geoffrey Mrema assisted Botswana to establish a Faculty of Agriculture and moved on to be founding Director of ASARECA. He is now the Direcor of Research Development at the FAO.

- Professor Manase Salema is a Deputy Director at the International Atomic Energy Agency. He was chair of the board of TSBF.

Many SUA Professors and Senior members of the University Faculty are distinguished Scientists in their areas of professional specialization and have given our University the international lime light that it now enjoys. Therefore Mr. President, I wish to take this opportunity to congratulate all of you for the hard work. As we move into the 21st century, you will need to work harder to keep this level of excellence.

However, in spite of all this eminence and in spite of the availability of a lot of knowledge and suitable agricultural technologies in our university, very little of this knowledge has reached the Tanzanian peasant farmer. The farmer has not been able to draw and benefit from the wealth of Agricultural production technologies developed here.

SUA should therefore position itself and Lead the transformation of Agriculture, Livestock production, Management of natural Resources and Conservation of the Environment in Tanzania.

SUA should in light of this re-examine it mission of training, research and extension education. *And in this juncture, I would like to suggest strongly that you widen the last*

part of your mission (extension education) to include not only giving extension education but also delivering Agricultural, Livestock and other production technologies to farmers and the wider community. Therefore, I suggest that your mission be “**training, research and dissemination**”. Such a change will enable SUA to collaborate with others especially government ministries and NGOs to disseminate knowledge and technologies and have the impact that the people of Tanzania have been expecting it to deliver.

This should involve a major re-thinking in the Strategic plan of the University and the National Agricultural strategy so that budgetary arrangements can enable SUA to establish Zonal Development Centres (in the Southern Highlands, Southern, Lake, Western, Northern and Central parts of the country) in a step wise approach to (a) lead delivery of agricultural technologies to farmers and (b) to tackle the research issues that will arise out of the dissemination of new and/or modern technologies to communities in rural areas.

What we want to see is a deliberate involvement of SUA in Agriculture modernization and a realization of poverty eradication sooner rather than later. As examples, (a) SUA should champion the production of quality seed, deliver improved crop husbandry methods to farmers, engender quality control in crop preparations for sale, provide market information to the farming communities and provide guidance in crop processing (b) SUA should lead the establishment of disease free areas to promote livestock exports to the middle east, promote massive Artificial Insemination and other livestock reproductive methods to promote Dairy farming and the manufacture of dairy products.(c) SUA should promote conservation of whole ecosystems and lead the identification and preservation of all our endemic species of plants and animals.

In the light of very limited research funds and other resources, SUA should consult closely with its partner Department in the line ministries of Agriculture, Livestock development and Natural Resources and Tourism to remove duplication of research and optimize capacity utilization.

Another key area that SUA needs to look at is its curriculum delivery *vis a vis* the prevailing circumstances in the job market. There is no doubt on the quality of the SUA graduate at the BSc, MSc, and PhD levels. The SUA graduate is known throughout the SADC region as a top notch Veterinarian, Forester, Agriculturist and Wildlife Specialist. However, these graduates are trained to be absorbed into a well-established job market. Unfortunately, such a job market no longer exists in Tanzania. We must therefore train the same quality but build in entrepreneurship into our graduating students. I wish to suggest therefore that entrepreneurship be introduced as a compulsory subject in all years of study and all graduates should have a business plan when leaving campus after graduation. Government and Donors should be invited to become partners in this process so that out of the graduating students we can have the nucleus of modern agriculture, we can have modern ranchers, forest owners and private developers in tourism and other wild land businesses. This evidently requires careful thinking and detailed project preparations as well as some adjustments in our curriculum.

Mr. President, a back home report may have many observations and indeed I do have more to say. However, you have all been eating and a long speech may not be the best in facilitating digestion. Let me therefore stop here by thanking you most sincerely for inviting me to these celebrations.

Thank you very much.