

# Keynote address

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Honourable Ministers  
Your Excellencies Ambassadors  
President of the All Africa Society for Animal Production  
Esteemed scientists  
All invited participants and stakeholders  
Ladies and gentlemen

I would like to thank you most sincerely for this opportunity to address the 4<sup>th</sup> All Africa Conference on Animal Agriculture (AACAA) whose theme addresses a very current and important subject on science and technology in our contemporary world. Indeed biotechnology presents to Africa and the rest of the world at large, both opportunities and challenges.

It is a great pleasure for me to be amongst you and participate in this important conference. As the Commissioner responsible for the Rural Economy and Agriculture portfolio in the African Union Commission (AUC), I would like to use this opportunity to emphasise that, from the AU's perspective, this meeting could not be more timely or important. May I therefore express the AUC's profound appreciation for the untiring efforts of the All Africa Society for Animal Production, its President Dr Ed Rege and the entire staff of the AACAA Secretariat for facilitating consultations and for making it possible for experts in the field of animal agriculture from across the entire continent to gather here today.

I would like to start my address by reiterating the AUC's strong commitment to build an integrated continent of Africa amidst a number of challenges. This is reflected in its vision 'to build an integrated, prosperous and peaceful Africa, an Africa driven and managed by its own citizens and representing a dynamic force in the international arena'. The global objective of the AUC is to 'consolidate institutional pillars, build the human network, and strengthen the body work of integration'.

In a bid to translate the vision into concrete action, eight departments have been created in the Commission, one of which is the Department of Rural Economy and Agriculture mandated to implement our collective strategy and actions to tackle Africa's socio-economic development problems with respect to agriculture. This, ladies and gentlemen, is a huge task.

Africa is the only region in the world in which average per capita food production has been constantly falling for the past 40 years. Yet, agricultural sector is of fundamental importance to the continent. It provides 60% of Africa's employment, whilst 70% to 80% of our population rely on agriculture for their livelihoods. Despite this fact, Africa still imports large quantities of food, including livestock products, which it could produce. These imports are accommodated at the expense of other social needs such as education, health and other important economic infrastructure such as roads, electricity and communication. This cannot and should not continue because Africa has enormous potential to reverse this state of affairs.

A common vision of many African countries and that of the African Union (AU) is to achieve accelerated rural development through more efficient exploitation of its abundant animal resources.

In this regard, the AUC has recognised as critical, the role of livestock in the socio-economic development and livelihoods of most farming communities in Africa. This would entail, amongst other initiatives, establishing the institutional frameworks that would promote development and implementation of appropriate policy for livestock development. The AUC therefore has established three specialised technical offices on livestock within its Department of Rural Economy and Agriculture to drive its livestock focused poverty and hunger reduction strategies that are based on:

- the coordination and harmonisation of policies for improved livestock production,
- promotion of cooperation on transboundary diseases and pest control including tsetse and trypanosomosis eradication from Africa
- promotion of drought mitigation programmes for improved livestock and pasture management.
- These are among the key strategies for us to achieve our strategic vision of the AU.

It is in recognition of the importance of livestock that the Inter-African Bureau for Animal Resources (AU-IBAR) was established as a technical body of the AU to deal with all aspects of livestock production, health, trade and marketing. IBAR has a mandate from the Heads of State and Government of AU member states to coordinate activities of all AU member-states and liaise with regional bodies, inter-governmental and international organisations in matters dealing with animal resources in Africa. The directors of animal resources in member states meet regularly to assist in the formulation of IBAR's programmes to ensure their relevance to the needs of member states. Ministers responsible for animal resources in Africa also meet every three years to approve IBAR's programmes. In 1986, IBAR initiated the Pan African Rinderpest Campaign (PARC) to control the major animal diseases that affect the African continent and to eradicate rinderpest from Africa.

In this respect it is worthy to draw your attention to the achievement recorded so far in the implementation of the Pan African Control of Epizootics (PACE) programme:

Eradication of rinderpest and control of major epizootics: There is now a single zone of critical importance to the final eradication of rinderpest from Africa, viz. the Somali Ecosystem (covering north-east Kenya, southern Somalia and south-eastern Ethiopia). In this area, eradication remains the priority but can only be tackled effectively once the behaviour of the persisting virus is adequately understood. Twenty-seven (27) countries have made progress along the OIE [World organization for animal health] pathway; 16 are recognised as free from rinderpest out of which 4 are recognised as free from infection. Twenty-six (26) African countries have submitted their emergency preparedness plans for rinderpest; 18 of these plans have been approved.

East Africa has established the capacity for monitoring wildlife disease and undertaking sero-surveys and there is improved awareness of the methodology in West and Central Africa. Jointly with FAO and International Atomic Energy Agency (IAEA), functional epidemio-surveillance systems have been established and are operational in 29 out of the 30 PACE member countries, and performance indicators have been developed for their assessment. There has been an important improvement in disease reporting rates to both AU-IBAR (67.5%) and OIE (92%) from the African countries.

The programme for improved delivery of veterinary services and assistance, a community based animal health delivery system supervised by veterinarians, was successfully established in remote pastoral areas of Eastern Africa. The development of new concepts to promote livestock trade within and from Africa is also being promoted, especially in PACE countries.

These achievements could not have been possible without the involvement of African scientists and our development partners. Despite the challenges that remain, I can today confidently extend my congratulations to all those who have made these and other achievements in the field of animal agriculture possible.

I would also like to draw your attention to one of the greatest constraints to animal agriculture in the African continent today, the tsetse and trypanosomosis problem. This problem has been widely acknowledged to be rapidly deteriorating since the 1970s. The problem is inherent in 37 countries of Africa. The multinational nature of tsetse and trypanosomosis eradication programme is inherent in the transboundary nature of tsetse infestation and trypanosomosis prevalence, which in turn calls for maximum inter-state cooperation for effective action, and necessitates a central mechanism to guide and coordinate its implementation. In response to this problem, African Heads of State and Government adopted a decision during the July 2000 Summit held in Togo, urging member states to act collectively and embark on a Pan African Tsetse and Trypanosomosis Eradication Campaign (PATTEC) aimed at eliminating the disease from Africa.

The PATTEC initiative is therefore a programme of the African Union, which proposes to accelerate intervention action against trypanosomosis, through inspiring and engaging the commitment of the affected African countries and emphasising the strategic importance of the ownership, leadership and direct involvement of African governments. Some of the key achievements recorded in the implementation of the PATTEC initiative are:

- A strategic plan and plan of action for the implementation of the initiative were developed.
- Convening and managing regional and inter-state meetings of high-level experts and senior government policy officials in affected countries.
- Training manuals on various themes, including the application of geographic information system (GIS) in tsetse control and the sterile insect technique in tsetse and trypanosomosis control interventions, were developed and a number of training courses and workshops were conducted for participants from member states.
- Several countries have been assisted to develop their national plans and strategies on the implementation of the PATTEC initiative and many countries have now developed their eradication project proposals for identified areas.
- In collaboration with the African Development Bank, a framework has been developed through which countries engaged in the implementation of the objectives of the PATTEC initiative will be assisted. In this connection, the African Development Fund (ADF) is funding a multinational project for the creation of tsetse-free areas in six countries (Burkina Faso, Ethiopia, Ghana, Kenya, Mali and Uganda), as the first phase that forms part of a wider programme coordinated by the AUC under the initiative. The project will cover 37 countries affected by trypanosomosis. The second phase of the project, which is currently being prepared, will include several countries (among them Angola, Botswana, Cameroon, Chad, Namibia, Nigeria, Rwanda, Senegal, Sudan, Tanzania, Zambia and Zimbabwe).. These countries are currently in the process of preparing their national plans of action.

Another AU institution dealing with livestock issues is the Pan African Veterinary Vaccine Centre (PANVAC). PANVAC was founded knowing that livestock health in Africa, especially regarding major infectious diseases that are preventable by vaccination, can be dramatically improved by the use of good quality vaccines and good laboratory diagnosis support. PANVAC is an AU Regional Centre with the principal objectives of certification and quality assurance of veterinary vaccines.

During its previous phases and with the technical assistance of FAO, PANVAC has been able to record the following achievements among others:

- Improve vaccine production and quality control methods in the region
- Promote veterinary vaccine biologics standardisation
- Provide training of over 300 veterinarians and technicians from national vaccine production laboratories in Africa
- Provide technical expertise to vaccine producing countries and to vaccine procuring countries.

The current and future activities of PANVAC are directed to reach its strategic objectives that are to:

- Maintain its status of an international and independent centre of excellence for veterinary vaccines and other biologics quality control and certification
- Strengthen African laboratories and institutions capacity in veterinary vaccines and other biologics production and quality assurance
- Ensure the centre viability and sustainability as an African Union agency.

Allow me now to recall one of the recent decisions by the African Heads of States and Government to foster agricultural development and food security in Africa that was taken in Maputo in July 2003. The African Heads of State and Government recognised the need for Africa to utilise its full potential to increase its food and agricultural production to guarantee sustainable food security and ensure economic prosperity for its peoples.

Cognizant of the critical importance of Africa's agriculture, the Maputo 2003 Summit also adopted the Comprehensive Africa Agriculture Development Programme (CAADP) as the framework for the restoration of agriculture growth, food security and rural development in Africa.

Cognizant also of the critical role of livestock in the livelihoods of rural communities, the Maputo Summit also requested the development of CAADP II, a companion document that covers livestock, fisheries and forestry. This document will be presented to the Ministerial meeting of Ministers for Livestock in Kigali, Rwanda, in November 2005. Priority areas for livestock in the CAADP II companion document include:

- the development of practical technologies for controlling animal diseases that limit livestock productivity
- facilitation of access to input and services for effective animal health delivery systems
- extension services and the development of infrastructure

The AUC also adopted the Africa Livestock (ALive) initiative as a platform for the implementation of its livestock development programmes. This was done after a series of consultations with relevant stakeholders, especially on how the platform can be owned and driven by the African livestock agenda. ALive as an initiative of the World Bank was launched in May 2004 and is a partnership for building a sustainable livestock sector to reduce poverty and stimulate economic growth in Africa. The governance structure of ALive has been devised to encourage the contributions of all of the different partners in the programme and to facilitate participation, transparency, accountability and effectiveness.

At its last session of the ALive General Assembly held in Paris, France, in May 2005, the AU was elected President of the Assembly and Chair of the Executive Committee. This will facilitate the harmonisation of policies of ALive with mandates and vision of the African Union. A decision was also adopted at the last session of the ALive assembly to transfer the secretariat of ALive that is currently housed at the World Bank to AU in the next three years.

I would like to turn to the theme of this year's conference, which is also a subject of interest to the African Union. The debate on the role of biotechnology in agriculture appears to involve a complex set of issues that will take a long time to resolve. Biotechnology has an unrivalled potential to offer solutions to the problems of food security and poverty in Africa. Though not entirely, over the past few decades this area of science and technology has been a source of much debate and contrary views. Africa, in particular has been caught between the liberal views of North America and the more cautious stand of Europe. Meanwhile local public opinion in Africa presents yet another challenge requiring a sober, reasoned position on modern biotechnology.

In recognition of public concern for potential adverse effects of modern biotechnology on human health, biological diversity and the environment in general, the Organisation of African Unity published an African Model Law on Safety in Biotechnology (OAU 2002). The model law is based on the precautionary principle, addressing activities related to import, transit, contained use, release or placing on the market of GMOs [genetically modified organisms] and their products.

The AU Executive Council decision in Maputo 2003 on 'Africa-Wide Capacity Building in Biosafety' also called on the AUC to undertake to convene a meeting of experts and civil society organisations to discuss the issue of biosafety and biotechnology and to come up with proposals for an African common position. The AU has appointed and inaugurated a high-level panel of experts of biotechnology that will advise member states on how to take advantage of this new technology. This initiative is currently ongoing.

Agricultural biotechnology, a term which covers a broad range of different techniques ranging from non-controversial tissue culture to controversial genetic engineering, has the potential to increase agricultural yields; improve livestock productivity; reduce yield losses from insects, diseases and drought; and enhance the nutritive value of crops and livestock products crucial to human health. Modern biotechnology has already yielded transgenic food crops resistant to pests, disease, soil salinity and harsh climate. Recombinant animal vaccines, diagnostics kits for plant and animal diseases are the other benefits already being derived. Despite these success stories, the technology is being confronted with unresolved issues amongst scientists, policy makers and ultimate consumers in the food chain, hence the current debate.

Recently, the focus of public attention on the applications of biotechnology has been on the manipulation of animals, often for production purposes, and on the novel pharmaceuticals for medical applications. However, the area where progress to practical application can be made with the greatest public acceptance is probably in the area of control of animal disease. Genomic sequencing and manipulation of the genomes of pathogens has the capacity to deliver vaccines that offer better protection and less adverse consequences. In the longer term high throughput techniques now in experimental use are likely to be adapted for routine diagnostic purposes, and nucleic acid sequencing is likely to find wider application in epidemiological investigations.

Clearly, the content and nature of the biotechnology debate on how to respond to food crises has been fundamentally and irreversibly altered. So too have been those elements of the debate on how to achieve longer-term agricultural growth and food security through self-sustaining process of growth fuelled by technological advance in agriculture. Many stakeholders believe that in the wake of GM food will come GM agricultural technologies. Enduring uncertainties and controversies over the relevance, efficacy, sustainability and safety of those technologies appear to render such a progression, unpalatable to many.

Now, let me now highlight some challenges that surround biotechnology from an AU perspective that should attract your attention during your deliberations in this meeting:

- Development and application of methods of mammalian embryo manipulation for programmes of animal breeding in Africa will permit more efficient selection and so increase the rate of genetic improvement and production of animals with particular traits.
- There is concern expressed by many people about long-term negative health and environmental effects, such as those now debated in developed countries.
- Unequal sharing of benefits of biotechnology is a major concern, especially where the sovereignty over products like seeds resides with the manufacturer, leading to virtual enslavement of the farmer.
- African countries have made insufficient investments in modern biotechnology so far. Currently, these countries spend on average only 0.85% of their agricultural GDP [gross domestic product] on research, a much lower figure than the 2.6% averaged by industrialised countries.
- Sub-Saharan Africa has deployed insufficient capabilities and resources to advance public GM research. Even as the region makes efforts in research and development of GM products, little effort has so far gone into development of legal and regulatory frameworks at local levels, and in educating the public on GM technology and products.
- Public confusion about risks and benefits of biotechnology should be addressed. Small-scale farmers, who are the backbone of food security in Africa, must be engaged so that they are taken on board in the impending GM revolution.

In conclusion, let me reiterate that biotechnology promotion initiatives that the AU has taken need to be complemented by you as scientists because we need an African common position on biotechnology in animal agriculture. As scientists, I believe you will make a distinct mark in contributing to this position.

I wish you a very successful meeting, and on behalf of the AUC, I look forward to receiving the outcome of your deliberations.