

Opening speech

Hon A. Diallo

Deputy Minister for Water and Livestock Development, Tanzania

The President, All African Society of Animal Production

The Chairman, Tanzania Society of Animal Production

Distinguished guests

Ladies and gentlemen

It is my great pleasure and privilege to welcome you to Tanzania and in particular to this very important Fourth All Africa Conference on Animal Agriculture. I can assure you apart from the favourable weather at Arusha, the hosting of this meeting in partnership with the Tanzania Society of Animal Production is a great honour to my Ministry and Tanzania as a whole.

The choice of this year's conference theme 'The role of biotechnology in animal agriculture to address poverty in Africa: Opportunities and challenges' has come at a time when the continent is searching for new ways and means to battle its long-standing development problems. Africa remains plagued by rampant poverty, hunger and famine, poor health, degradation of natural resources and loss of biodiversity.

Africa's economy is heavily dependent on agriculture where its people grow crops and also keep livestock. Agriculture accounts for about 35% of the continent's GDP, 40% of its exports and 70% of its employment. With the exception of a few countries, the sector is characterised by the lowest productivity in the world due to several factors including inappropriate policies, biotic factors (such as drought, high temperatures, poor soil fertility), and biotic stressors (such as pests and diseases) and high costs of inputs (such as veterinary drugs and chemicals).

There is no doubt the underdevelopment of agriculture has resulted into reduced growth of African economies with its negative implications for the people's livelihood. While rural people strive to feed themselves, urban residents spend more than 70% of their earnings on food, leaving only 30% for basic needs such as health, education and shelter.

Today, over 180 million people in sub-Saharan Africa live below the poverty line, and number is expected to increase to 300 million by 2020. More than 200 million people in this region suffer from chronic under-nutrition. Twelve million Africans are currently facing starvation. Acute malnutrition is high as evidenced by the rates among children under five of underweight (27%), stunting (39%) and wasting (8%).

The continent leads the world in major health problems as 80% of global infectious diseases are found in sub-Saharan Africa. Each year, malaria alone reduces the GDP of sub-Saharan Africa by 1%, kills 2 million people and accounts for about 10% to 25 % of direct child mortality. The HIV/AIDS pandemic has worsened the situation. Tuberculosis, a disease considered to be for the poor, has re-emerged and is causing havoc throughout the region along with infectious diarrhoea, pneumonia and whooping cough, sleeping sickness etc.

Let me briefly talk about our natural resources. Africa's natural resources and biological diversity are under fast degradation, threatening economic and physical survival of the people. Escalating soil erosion, declining soil fertility, soil pollution by agro-chemicals and desertification are some of the factors underlying this degradation. Some 500 million hectares of land in Africa have been affected by soil degradation since 1950. An average of 5.5 million hectares of land resources are

lost every year. Biological diversity is thus under threat in Africa unless immediate action is taken to safeguard them.

It is obvious that the underlining solution to the inherent problems in Africa is the availability and use of appropriate technologies. The world has observed major advances in science including biotechnology during the last 100 years. I am informed biotechnology refers to a basket of scientific techniques that are used to modify life forms with the aim of producing products and services. I am further informed that biotechnology itself is not new. Traditional biotechnology applications such as microbial and food fermentation, tissue culture, breeding and composting have been around for some time. What is new is the degree, precision and speed with which living organisms can be altered using advanced molecular techniques.

Despite the advancements in technology, there are serious reservations about the economic, social and ecological value and costs of some of these modern technologies including genetic engineering. This is, however, not surprising because I tend to believe that every technological advance has potential benefits and risks. Sometimes the hidden costs of technologies can be disastrous to the community. You are all aware of the mad cow disease, ozone-depleting substances and the results of Hiroshima and Nagasaki.

Biotechnology products like GMOs [genetically modified organisms] raise economic, environmental, health and social concerns. There are fears that GM foods may cause new allergies, may be toxic or may result in the development of super weeds. Our farmers are afraid of losing their power to save seeds through the restrictive intellectual property regimes that come with biotechnological advancements.

Sometimes the benefits of biotechnology seem to be over exaggerated. Everybody knows that poverty and hunger are caused by a number of economic, social and political factors. I am sure there are a number of interventions that can be used to solve these problems instead of advanced technologies such as biotechnology.

However, biotechnology has played a large role in improving the welfare of the people in the world since there are many biotechnological tools that do not result in GMOs. For example, I am informed that most of our human and animal vaccines are now DNA based. With DNA fingerprinting, we are able to characterise our livestock.

Because of being ill informed, people many times have failed to separate genuine concerns and benefits of biotechnology. People need scientific evidence from systematic research, backed by cost-benefit analyses and transparency. I thus challenge African scientists to develop a coherent biosafety agenda under our own conditions. Many questions have been asked about the safety of GM foods, but very little work has been done to answer them. You need to develop a common agenda to evaluate the potential biotechnology risks and mechanisms to manage such risks. If you do not, I am afraid Africa will continue to be the recipient of unsound science and hence biotechnologies.

The impressive number of participants to this conference is a clear indication that there are enough and competent scientists to make a case for their people. We should not be dependent on outsiders for opinions or positions on matters of such paramount importance. Potential harm can be predicted and its likelihood minimised through systematic scientific research, regulation and institutional support. Outsiders are of course still welcome, but only as equal and smart partners for mutual benefit.

We need to think strategically and act collectively as Africans to defend our resources, develop our capacity to feed ourselves and maintain our dignity. I hope this conference will indeed act as a catalyst to harmonise our thinking, debating, promoting and regulating the safe and responsible use of biotechnology in pursuit of our development goals and priorities.

No country can afford to ignore biotechnology and hope to succeed in this highly competitive global village. Sound policies and not charity will determine whether the new biotechnologies will be a tool for human development in Africa. Countries need to implement policies that encourage innovation and investment in biotechnology research and development. This should be complemented with rigorous biosafety systems harmonised nationally, regionally and globally.

International arrangements such the Cartagena Protocol on Biosafety, the Bonn Guidelines on access to genetic resources and benefit sharing and the International Treaty on Genetic Resources for food and agriculture are a good starting point. They are not adequate. Efforts should be made to develop comprehensive biotechnology regulatory and policy frameworks that cover all biotechnologies. The development of such frameworks should be done with the full participation of Africa. We have been short-changed many times. International frameworks should not be put in place to safeguard the interests of a few economically privileged countries. The development of international policy and regulatory frameworks should be all-inclusive.

Ladies and gentlemen, looking at your timetable I am relieved because challenges and opportunities, policies, genetic resources improvement, trade and marketing as well as issues related to environment are addressed. I am grateful to Tanzania Society of Animal Production for hosting the Fourth All Africa Society of Animal Production conference. This conference will give you an opportunity to meet and discuss these contentious issues. Dialogue such as this one should help you come up with a well thought out position that should strengthen the African place in the global considerations on biotechnology for animal agriculture.

I once again thank you for inviting me to officiate this very important conference. I wish you a fruitful conference, and now declare it officially opened.