

**Dr David Lawrence**

**Speaking notes: 27 May.08 –**

Assistant Minister, High Commissioner, fellow chemists, ladies and gentlemen.

Syngenta is delighted to be partnering the Royal Society of Chemistry on this project. I believe The Pan Africa Chemistry Network will play an important role in enabling scientists to communicate more effectively. It will also assist in the vital task of improving scientific education in schools and universities. This will help build local capability and capacity in order to translate the Millennium Development Goals into reality.

Chemistry is an absolutely critical technology. Although many do not realise it, we live in a universe of mostly natural and some synthetic chemicals, and indeed we ourselves are at the simplest level just bags of chemicals. Learning how to harness the power of chemistry is a key component of creating wealth and health.

Plants are exquisitely sophisticated chemical factories. They create the oxygen we need to breathe. They manufacture vitamins and other essential chemical components we need in our own bodies, and ultimately all of the food we eat comes directly or indirectly from plants. Plants have also always been a vital source of energy: it is easy to forget in the heat of the current debate on biofuels that the oil and gas we have been using for the last century or so comes largely from ancient plant material which has been converted by natural chemical processes.

At Syngenta we understand the science of plants, so the partnership with the Royal Society of Chemistry is a natural and appropriate one.

Agriculture is a critical stepping stone to increasing economic growth one of the Millennium Development Goals.

For the first time in our history there are now more people living in urban areas than living and working on the land to produce food, yet three quarters of the world's poor continue to live in rural areas. Most of them depend on agriculture for a living. We therefore have to work together to ensure that through agricultural technology we can both feed an ever growing world population and lift the rural population out of poverty.

Investment in agriculture brings with it investment in transport, communication, water, power, education and health. Increases in agricultural yield lead directly to reductions in the population living on less than one dollar a day. Doing this sustainably is essential and technology lies at the heart of the challenge.

It has been estimated that without crop protection products, 35 to 40 percent of arable food crops would be lost to pests and diseases each year. Syngenta invests over \$800m each year in research and development in agriculture as we help farmers across the world to improve agricultural productivity. How else are we going to feed more than 8 billion people on this planet in 2030, if we don't embrace existing and future technologies?

This is why we are partnering with the RSC to create this first hub of the network in Kenya. This will foster communication among scientists which is something that I personally strongly support.

As the largest supplier to the African continent in our industry, Syngenta already plays an important role in the Kenyan economy. We employ over 2000 people in our seeds and crop protection businesses. We also have a vector control business to help the fight against malaria. We estimate we have already provided protection from malaria for over 2.5 million people across the region.

The Syngenta Foundation for Sustainable Agriculture also works with local partners, through conventional seed breeding, on new corn varieties that are resistant to pests such as corn borer.

We are a key partner for flower growers in Kenya who meet the demanding quality standards of the European consumer and who, through their large presence in Kenya, have a major impact on rural, social and economic development. Our people in Kenya are as excited by this initiative with the RSC as I am. They will be playing their full part to make this project real.

Sustainable agriculture is not just about growing crops to feed today's population. It is about growing for today in a way which benefits people tomorrow. This means optimising the use of our natural resources, safeguarding wild spaces and biodiversity, ensuring a sustainable supply of clean water, and contributing to the improved health and well-being of people everywhere.

Investing in the future of agricultural production has never been more important. Commodity prices have soared. Wheat and soya have almost doubled. Rice has more than doubled. The President of the World Bank has warned that exploding food prices threaten widespread instability.

As well as extra mouths to feed, as emerging economies develop, tastes change. There will be greater demand for a wider range of food, including more fish and meat. There are new demands for biofuels and other materials from plants.

Simply put, agricultural production will have to double to meet the demand for food, feed, fuel and fibre.

Don't forget we also need to battle the effects of climate change on agriculture – rainfall pattern shifts, more extreme weather, more drought, more floods.

We have limited new land available to bring into cultivation. We absolutely need to protect wilderness areas and rainforests in particular since they are not just our best source of biodiversity, but their loss would make climate change much worse locally and globally.

Against this backdrop, we need to double yields by 2050. That isn't going to be easy, and it isn't going to happen by magic. Can it be done at all? I believe that it can, but only through the application of technology.

Technologies will be essential for future success globally, but the real challenge is to deploy these technologies in ways appropriate to local farmers worldwide. Sustainable agricultural systems must be developed locally.

The pillars of a sustainable system are

- Economics
- Soil fertility protection
- Water management and protection
- Biodiversity
- Waste minimisation

But none of this is possible without good communications and the connection of scientists who can provide answers.

The Syngenta hub will develop a means by which African scientist colleagues can work more effectively together and ultimately deliver these sustainable objectives for the continent. The Network is about partnership with the Federation of African Societies of Chemistry and chemists. At an academic level we shall support education with fellowships and grants. Scientific connections will be made through conferences and seminars. We shall help bring entrepreneurial ideas to fruition by holding workshops on how to write effective grant applications. Such grants are vital in securing funds for innovation and progress. The entrepreneurial skills and training which we shall foster are an essential component in creating a dynamic economy.

By connecting scientists, sharing knowledge and extending scientific education we shall be helping to develop the economy of African states. With a developing agricultural base comes the economic infrastructure of transportation, clean water, power and education. Good food, produced using modern technologies and in a non labour intensive manner, is key to a better future. As

nutrition improves so does health and productivity. Increased productivity releases people from the land. and with better education, starts a process of rural development.

Better education is vital for emerging markets. That is why I am particularly please that as part of the Syngenta hub we shall have a schools component. We are creating an annual chemistry competition. The aim of the competition is to enthuse children about chemistry and to teach them about the role it plays in sustainable agriculture. We want children to be intrigued and enquiring about science, to enjoy chemistry and perhaps eventually to see it as a career as our other speakers today have done.

Stewardship will play an essential part in the programme. Every year across the world we train over 5 million farmers about the safe and correct use of chemicals. If we educate children about safety we shall also reach their parents as we have shown in other continents.

The benefits of our partnership with the RSC on this project will also be complemented by the work of the Syngenta Foundation for Sustainable Agriculture, which is working with the Rockefeller Foundation to increase the number of women scientists in Africa.

In conclusion I would like to say that I am personally very excited by the Network's potential. Syngenta is totally behind this project, not just financially but working in partnership on the ground. I am especially looking forward to the workshops today, where we will start to turn our ambition into firm plans which match local needs. In five years time when this first hub is able to stand on its own, it will be the sustainable heart of a network that we hope will span the continent.

Thank you