

**ADDRESS BY DEPUTY PRESIDENT CYRIL RAMAPHOSA AT THE
5th CSIR NATIONAL CONFERENCE**

CSIR CONVENTION CENTRE, PRETORIA

7 OCTOBER 2015

Minister of Science and Technology, Ms Naledi Pandor,
Chairperson of the CSIR Board, Professor Thokozani Majozi,
CEO of the CSIR, Dr Sibusiso Sibisi,
Representatives of business, academic and research institutions,
Ladies and Gentlemen,

The fossil record tells us that humans originated in Africa.

It was here, over the course of several millennia, that humans evolved the capabilities that enabled them to venture beyond the shores of our continent, to colonise new lands and to build new civilisations.

It was here that our capacity for innovation developed.

It was here that we began to understand and master our physical environment.

It was in Africa that humans discovered what we now know as science.

It therefore gives me great pleasure to address you on the occasion of the 5th CSIR Conference and to mark with you the 70th anniversary of this, the Council for Scientific and Industrial Research.

As a country, we commend the positive, progressive contribution made by the CSIR to advance science, engineering and technology in the democratic era.

The work of the CSIR is helping to transform our society.

It is changing the way we live, the way we do business, the way we solve problems.

It is improving lives, creating opportunities and enabling us to develop more sustainably.

The women and men of the CSIR do not pursue knowledge merely for its own sake.

They pursue knowledge so that they may improve the human condition.

These are people who are developing drugs to block malaria transmission because they have a vision of a world without malaria.

They are designing better public buildings because they recognise the value of safe and effective social infrastructure.

They are improving the ability of our security services to detect threats and secure our borders because they want to protect lives and promote peace.

They are using technology to curb poaching and conserve our environment.

These scientists are using pioneering methods to measure climate change so that we are better able to slow its progress and mitigate its effects.

They are supporting the growth and sustainability of small businesses in areas such as biotechnology because they see science as an instrument of enterprise.

Ladies and gentlemen,

Science is at the centre of all human progress.

It is critical to our development as a nation and as a continent.

In 1994, we inherited an economy with deep structural deficiencies.

We had to put in place interventions to ensure economic stability and inclusive growth.

We have focused on transforming the economy, pursuing policies to grow strategic sectors and create employment opportunities.

Investment in research and development has been an important part of our economic development strategy over the last two decades.

Technological innovation is crucial for economic diversification and sustainability.

As we have encouraged investment in research and development, we have worked to reconfigure and reorient our research institutions, and to promote cooperation between higher education institutions, state agencies and business.

We know that progress towards a knowledge-based economy will be driven by a variety of elements.

These include human capital development, knowledge generation and exploitation, and knowledge infrastructure development.

It requires that we address the gap between research results and socioeconomic outcomes.

Significant progress has been made during the past two decades, but more still remains to be done.

Our economy is still faced with profound challenges that require a coherent and concerted response from all social partners.

The Department of Science and Technology is leading government's efforts to make South Africa a preferred destination for foreign investment in science, technology and innovation.

The work being done to encourage international companies to locate their research and development facilities in South Africa is seeing results.

We applaud General Electric, for example, for the announcement of a R500 million investment in a customer innovation centre in Gauteng.

We welcome its decision to invest a further R200 million to support South African SMMEs through technology transfer.

We also applaud IBM for its announcement of a R700 million investment over 10 years into ICT research and development.

We applaud Cisco, which has announced a three-year partnership worth R66 million to increase the company's research and development activities in South Africa.

Government will continue to work hard to promote relationships with global partners and to leverage foreign investment in science and technology in South Africa.

We will continue to support training opportunities for South African researchers abroad, and enable cooperation agreements that allow South Africa to share its international experience and expertise.

Ladies and gentlemen,

Science and technology is critical for our continent's economic growth and development.

For centuries, Africa has provided the raw materials that have fuelled the greatest industrial and technological advances in human history.

But we have not had the opportunity to fully enjoy the economic and social benefit that arises from the exploitation of our resources.

That needs to change.

That is why the recent approval by African Heads of State of the science, technology and innovation strategy is such a positive development.

It has the potential to establish Africa as a supplier not merely of raw materials, but also as a supplier of the technology and knowledge required to transform those materials into a better life for all its people.

South Africa is committed to playing its part.

In 2011, we published our country's beneficiation strategy, which proposes five value chains for analysis.

These are in the areas of coal and nuclear, iron and steel, titanium pigment and metal, platinum group metals and precious metals.

One of the outcomes of that strategy was the construction of a titanium pilot plant at the CSIR.

While South Africa is the second largest producer of titanium-bearing mineral concentrate in the world, little value is added to the mineral before it is exported.

Government has invested some R100 million over two years to help develop and commercialise a process to produce primary titanium metal powder.

By developing technologies to manufacture titanium products, the country can become a significant contributor to the global aerospace market.

Our government adopted the National Infrastructure Plan in 2012 to transform our country's economic landscape, while simultaneously creating significant numbers of new jobs and strengthening the delivery of basic services.

We are investing more than R800 billion over three years in building new, and upgrading existing, infrastructure.

The rollout of the infrastructure development plan will play a crucial role in unlocking economic opportunities, promote mineral extraction and beneficiation, address socio-economic needs and lead to inclusive economic growth.

A strong manufacturing sector is crucial for industrialisation.

We will continue to support our manufacturing sector to enable our companies to develop new capabilities and products that will broaden our exports.

The CSIR has the capacity and expertise to contribute to the growth of our manufacturing sector.

The organisation has demonstrated this capability by supporting SMMEs in the production of biotechnology-based products.

The CSIR has used laser technology to improve the competitiveness of our manufacturing industry.

It has supported programmes to improve the energy efficiency of large companies.

The National Development Plan outlines our country's long-term vision for a more competitive, inclusive and diversified economy.

Science, technology and innovation must be at the forefront of realising this vision.

The NDP says that science and technology must be used to address some of the problems in education, health and economic development, and to facilitate access to information and knowledge.

Already that is happening.

The departments of Health and Science and Technology, for example, are working with the CSIR to design information and communications technology architecture for the National Health Insurance.

We have also seen important successes in areas like HIV prevention and treatment, satellite building, paleontology, fluorochemicals, and technology for improved service delivery.

Progress in developing and supporting renewable energy solutions are particularly encouraging.

Government will increase its support for the work done by the CSIR and other parties in identifying strategic geographical areas that are suitable for wind and solar projects.

Government has invested in infrastructure for hydrogen research at the CSIR, and is keenly following progress in finding a way to more easily store hydrogen for use as a clean energy alternative.

We commend the partnership between the UN Industrial Development Organisation, Department of Trade and Industry and the CSIR for the successful implementation of the National Cleaner Production Centre of South Africa.

Over the past five years, the centre has assisted more than 80 industry plants to save sufficient energy to electrify over 120,000 South African homes for a year.

Ladies and Gentlemen,

Our vision for 2030 is that we become a dynamic and connected information society and that we have a vibrant knowledge economy that is inclusive and prosperous.

The CSIR has a critical contribution to make to the achievement of such a society.

Our country needs more science researchers and engineers.

Government is increasing its support for postgraduate students, researchers and research chairs.

We call on all scientists in South Africa – at the CSIR and other institutions – to continue to contribute to making South Africa a better place.

I am confident that you will use this two-day conference to find innovative ways to move our country forward and ensure our future through science.

Hundreds of thousands of years ago, Africa was at the centre of human innovation.

It can become so again.

I thank you.