



**Speech by MEC Tasneem Essop at the Bio2Biz Conference on the  
17th<sup>th</sup> September 2007 at the CTICC (Ballroom East) at 18:45**

Minister Mangena – the National Minister of Science and Technology  
Line Matthiessen-Guyader – DG Research in the European Commission  
JB Iain Cloughley of UK Trade & Investment  
CEO's of the BRICS  
CEO's of companies  
Finalist of the Student Biotechnology Competition  
Ladies and Gentleman

Welcome to Cape Town and the Mother City

On the 26<sup>th</sup> of April 2006 President Thabo Mbeki spoke at our Freedom Day celebrations of 'the age of hope'

He also said that the 'Age of Hope' is a 'struggle to freedom' in which we should be 'united in a national effort for a faster and shared growth'

By this he challenged South Africans to "define for ourselves" and 'what we want to make of our shared destiny'

As we celebrate Heritage Month I would like to add to what the President spoke of by mentioning a very powerful quote from the murdered Black Consciousness leader Steven Biko who said that,

'In time, we shall be in a position to bestow on South Africa the greatest possible gift  
- a more human face'

As South Africans we know that should we fail to address the issues of poverty and inequality then we seriously run the risk of jeopardising the dividends that our young democracy has yielded

The challenge for us, in our 'age of hope', is how do we marshal all of our collective efforts to deliver on our commitments?

The world that we find ourselves in is changing everyday: technological discovery creates new commercial opportunities, it finds solutions to problems that we have yet been unable to solve yet it struggles to deliver solutions to problems that we were previously unaware of such as SARS, bird flu, climate change, TB and HIV/Aids

As a provincial government we asked ourselves two questions,

- Can biotechnology and innovation help us deliver new solutions to eradicate poverty, reduce the plight of the poor, improve social advancement and generate economic growth?
- Can biotechnology be a potential contributor to national priorities such as to better health care, food security, job creation, environmental protection and help deliver our ASGISA target of 6% economic growth

My Department of Economic Development was instructed to conduct research into the matter and we established the following:

- the biotechnology in the Western Cape is still in its infancy
- it is challenged at every step of the value chain, from the laboratory to the factory gate, and this is a capital intensive process
- there is a very limited pool of money for pre-seed activities
- it requires perseverance to take an idea or product of research through the various stages of laboratory testing to proof of concept
- amongst our first class scientists and other practitioners in the sector few of them have the expertise to commercialise or patent their bright ideas
- there is serious competition for funding and that domestic private equity most probably does not yet see the commercial opportunities in this sector
- the Western Cape is a substantial knowledge based economy yet there is fragmentation amongst the pockets of excellent scientific research at Higher Education Institutions and the 400 research groups in the biotech sector
- but we also accepted that the sector held significant opportunities for improved human and animal health, agriculture, aquaculture, environmental and industrial processes
- and that our province has a rich indigenous biodiversity (that is the fauna, floral and marine biosystems) as well as a genetically diverse human population which is critical to medical discovery

After establishing these conclusions we realised that a response was required from the Provincial Government Western Cape

We also knew that our response had to dovetail with the National R&D Strategy (NRDS), the National Biotechnology Strategy (NBS) and the Advanced Manufacturing Technology Strategy (AMTS) as a driver to build capacity and address the requirements for a strong provincial biotech industry

It is interesting to note that South Africa is one of the few African nations to have developed a national biotechnology strategy

We also decided that we needed to support the Biotech National & Regional Innovation Centres (BRICs) and other incubators as we believed that they were the instruments for growing and facilitating a bio-economy in our province

Today, in the Western Cape, we have a number of incubators and innovation centres which are funded by the DST and Seda, such as the

- Cape Biotech Trust,
- Acorn Technologies Business Incubator
- Medical Research Council Innovation Center, and
- National Bioinformatics Network

In December 2001 we launched the Cape Biotech initiative with nearly R4 million rand of provincial money and this has now become the Cape Biotech Trust

We premised our support on these entities in the belief that there should be a complementary vision between national and provincial government and at the operational level there should be a highly synergistic relationship and spirit of cooperation amongst the incubators

The recent Kopano LifeSciences initiative, which means ‘getting together’ in Tswana, initiated between the Medical Research Council Innovation Center (MRC IC), Cape Biotech Trust (CBT) and Acorn Technologies (AT) is testimony to this vision

The majority of private sector biotechnology companies in the Western Cape are heavily reliant on donor funding, the reasons for this are numerous, and the most apparent are the long lead times to mature and the production of revenue generating products or services and especially the high risks associated with the sector

Setup costs can run into several millions of Rands and ongoing operational costs can easily match this

The most recent audit of SA's nascent biotechnology industry which was commissioned by the department of science and technology, in 2003, found that 47 companies that defined their core business as biotech activities were primarily in human health (39%) and support services (13%).

Most of these firms are based in Gauteng (41%) and the Western Cape (37%)

None of these companies are listed on the Johannesburg stock exchange, less than half employ more than 20 people, and three quarters make less than R10m per annum

As part of the provincial Micro-Economic Development Strategy (MEDS) and the research that we have conducted on the bio-technology sector we will seek to influence the course of these incubators to meet our economic and social development needs, we will also seek to mobilise private sector funding and develop measures of strategic performance such as R&D output, measures of commercial success and job creation

Our MEDS programme of research commenced in the first half of 2004 with eight studies (six sectors and two cross-cutting activities). In 2005, a further ten studies were added (eight sectors and two crosscutting activities) and as part of this policy formulation process we have classified Biotechnology as a secondary sector

Allow me to mention a few achievements in the bio-industry cluster in the Western Cape:

- R140 million invested over three years by national government
- Cape Biotech has made 14 investments into companies ranging from vaccines, drug delivery, diagnostics, nutraceuticals and technology platforms
- Over 250 Jobs have been created, the higher portion in the upstream biotech sector and has resulted in a downstream multiplier effect
- The establishment of the Centre for Proteomic and Genomic Research (CPGR) at UCT – provides access to state of the art facilities for high throughput services to the greater biotech community regionally and nationally
- Kapa Biosystems: direct foreign co-investment with bio-entrepreneurs from the USA
- Biovac Institute: State of the art laboratory, formulations and filling facilities for vaccines (Extended Programme of Immunization vaccines)
- TB Research: Investments in commercializing drug discovery, diagnostics and vaccines from the SA TB research initiatives.

We are also extremely excited by the launch of the International Centre for Genetic Engineering and Biotechnology (ICGEB) at the Groote Schuur Hospital. This centre is the first of its kind on the African continent and is one of only 3 international biotechnology laboratories in the world

President Mbeki said at the launch event that the centre which will ensure collaboration across 47 countries is

‘an eminent example of how humanity can put together limited individual resources within nation states to create a substantial international force for the good of all’

**In conclusion**, I would like to say that we all still have much work to do.

We need to investigate new ways of mobilising private sector funding, especially for pre-seed activities, we need to engage on the role of the public sector, especially with regards to funding, we need to upscale the bio-technology skills development programme which includes a business cross-over component, we must develop stronger project pipelines, we need to develop the next level of our clustering methodology and finally we must link into the work that is being conducted on establishing a national innovation system by COFISA

In this ‘age of hope’ we need to continue in a ‘united national effort’ so that the fruits of your hard labour, scientific discovery and innovation can help us discover new tools to deal with the scourge of disease and poverty, new tools that can drive the development of a world class bio-economy and new job creation so that we will, as Steve Biko said, ‘be in a position to bestow on South Africa the greatest possible gift - a more human face’!

I thank you