



SANBio Annual Event 2019

21–22 May 2019

**CSIR International Convention Centre,
Pretoria, South Africa**

Beyond the Valleys: Untold tales of Biopreneurs

SUMMARY REPORT



Day 1: 21 May 2019

Facilitator: Ms Nabwalya Vlahakis

The NEPAD Southern Africa Network for Biosciences (NEPAD SANBio) provides a shared research, development and innovation platform for collaborative research in health and nutrition. The theme of the 2019 SANBio Annual event which provides a platform for networking and collaboration was **Beyond the Valleys: Untold tales of Biopreneurs 2019**. The main thrust of the 2019 annual event was to explore how innovation within the biosciences community could be commercialised to benefit the entire SADC region, and to present the outputs of the BioFISA III Programme which was ending in June 2019. The event was streamed live on You Tub and the videos are available for the full sessions.

YOUTUBE LINKS FOR SESSION VIDEOS

Session	Video Link
Day 1 –Session 1 Plenary – all presentations	https://www.youtube.com/watch?v=r643g9nZ0Cg&t=6082s
Day 1 –Session 1 Plenary – all presentations: Day 1 –Presentation by MFA and Session 2 and Spotlight 1	https://www.youtube.com/watch?v=hrvGwQENVbY&t=5762s
Day 1 – Session3, Spotlight 2, Session 4, Spotlight 3 and Session 5	https://www.youtube.com/watch?v=bumwC5o1AvE&t=9483s
Day 2 –Pitching Session and Session 6	https://www.youtube.com/watch?v=1pYBddaS1ZE
Day 2 –Spotlight 4 and Session 7	https://www.youtube.com/watch?v=OrqYc1pgYak
Day 2 –Spotlight 5 and Session 8	https://www.youtube.com/watch?v=p_bSSbuYycc&t=3017s
Day 2- Session 9 and Closing remarks	https://www.youtube.com/watch?v=XrLtVnpYvCA&t=22s

SESSION 1: PLENARY- INTRODUCTION AND OPENING REMARKS

Mr Daan du Toit, Deputy Director General, International Relations, Department of Science and Technology, South Africa, who opened the event, highlighted three key reasons as to why it was so important for the Dept. of Science and Technology (DST) to support NEPAD SANBio.

Firstly, NEPAD SANBio seeks to harness science for the growth, development and advancement of the lives of citizens through innovation and regional collaboration, building on technologies developed in other countries. Regardless of any political changes at ministerial level which may take place post the recently held general elections in South Africa, the South African government remained committed to investing in science and technology to improve the lives of its citizens and the region as a whole. It had recently developed a White Paper, a policy document which spelt out the government’s desire to translate science into products and services.

Secondly, regional integration and regional partnerships were integral to the government’s foreign policy agenda, which focussed primarily on Africa. The most important aspect of the government’s position on collaboration was inter-African collaboration. As with all countries throughout the world, South Africa had to collaborate with other countries in the field of science and technology. NEPAD SANBio’s role in achieving regional collaboration was critical in order to create a southern African innovation ecosystem which will be essential for the region’s growth.

The third key aspect of NEPAD SANBio was that the program enabled regional countries within southern Africa to build broader partnerships as evidence by the excellent partnership that had been established with Finland. Many of the current innovation programs which were being established in South Africa had their inspiration in

Finland. The BioFISA programme was an excellent example of tri-lateral co-operation between partnership in the north and south to harness science and technology for development.

In conclusion Mr du Toit thanked all representatives and their governments for their continued support to BioFISA. He stated that he was extremely optimistic for the region and it continued to seek its own way in developing its own innovations across sub-Saharan Africa. NEPAD SANBio had to continue to prosper so that it could become the flagship of regional science and technological, regional development.

His Excellency, Ambassador Mr Kari Alanko of Finland, stated that Finland contributed more to the wellbeing of humanity than any other country, a significant feat in light of its small geographical size and small population. For decades Finland had invested huge sums of money into research and innovation within the sphere of health. It was also one of the first countries in the world to establish a national digital database of its population's health covering both the public and private healthcare sectors. According to the World Economic Forum Global Health Competitiveness Report 2016/17 Finland was number one in terms of its availability of scientists and engineers. It also boasted excellent collaboration between its universities and companies. It ranked among the three strongest health technologies in the world.

Food production in Finland is "clean". It is based on the high standard of wellbeing of its animals and the use of technology to support a clean food chain. In recent years interesting food innovations had come into the market. He gave the example of pulled oats, a product which is a combination of three crops but with higher protein content than beef. He highlighted that all milk produced in Finland was free of antibiotics.

In conclusion Ambassador Alanko pointed out that Finland was at the point where it was a sustainable, low carbon society; everything currently produced from oil could be produced from wood and this included bio-chemicals, plastics, pharmaceuticals and food additives.

The main objectives of SADC are to achieve development, peace and security, and economic growth, to alleviate poverty, enhance the standard and quality of life of the peoples of Southern Africa.

Ms Anneline Morgan, the former Senior Technical Advisor to SADC, stated that NEPAD SANBio played a critical role in championing biosciences. This had been achieved by strengthening institutional capacities and facilitating research and development with the SADC region. The increase in regional collaboration was evidenced through the increase in projects across all member states.

Between 2003 and 2005, NEPAD had the vision to set up five network centres of excellence across the continent of which the southern African network was the most successful; all other networks had broken down. NEPAD SANBio continued to support regional development, particularly in the field of mapping the agricultural value chain. The SADC Agri-Chain map had been validated and was now available. The pharmaceutical value chain would soon be completed, along with the mining value chain. All of these would support industrial development.

In conclusion Ms Morgan acknowledged the role of member states who had invested into the network and ensured its sustainability in implementing the SANBio business plan.

The African Union - Promoting Africa's growth and economic development by championing citizen inclusion and increased cooperation and integration of African states.

Dr Tichaona Mangwende, the Principle Program Officer, African Union Development Agency (AUDA-NEPAD), acknowledged all African Union (AU) states represented at the conference. He highlighted the valuable role the CSIR had played in the implementation of the BioFISA programs. He asked NEPAD SANBio to strengthen its identify and make itself known beyond just the structures of the CSIR. The identity of NEPAD SANBio had to be defined along with its relationship with African governments and institutions. Once NEPAD SANBio's identity was known then it had to make known its value and role across the SADC region. NEPAD SANBio also had to focus on innovation within the public sector and to look at how it could deliver the value of innovation to the SADC member states.

In conclusion Dr Mangwende urged NEPAD SANBio to determine how it would deliver its innovation across the region and determine if its systems currently in place actually delivered the value it promised. He thanked the South African government for being the “home” of NEPAD SANBio. He noted that the light of NEPAD SANBio used to only flicker and it was heartening to see that the flame was now getting bigger, delivering warmth to all in the SADC region.

The mandate of the CSIR requires the organisation to undertake directed scientific and industrial development research to improving the quality of life of the people of South Africa.

Dr Thulani Dlamini, the CEO of the CSIR, thanked all delegates for their attendance. He expressed his gratitude to all the partners of the BioFISA II programme. He pointed out that the programme was an excellent example of what could be achieved if when all entities pulled together. He went on to give the delegates an overview of the CSIR and its vision for the future, which included establishing closer linkages and mechanisms to support industry and a reorganisation of its organisational structure into nine clusters aimed at servicing specific industrial clusters. These are Chemicals, Mining and Manufacturing, Health, Logistics, Smart Places, Defence and Security, Next Generation enterprises, and Advanced Agriculture and Food and forms new operation model for CSIR.

He concluded his remarks by saying that the CSIR was open and willing to share its knowledge with all of its partners within the AU.

To live is to choose. But to choose well, you must know who you are and what you stand for, where you want to go and why you want to get there. (Dr Kofi Annan)

Dr Ereck Chakauya, the SANBio Network Manager, reflected on the work that NEPAD SANBio had done in the past. It was pointed out that African economies were becoming increasingly informal whilst innovation, science and technology tended to be the preserve of a formal economy; Africa had to therefore invest more in its own indigenous innovations in order to benefit its increasing informal economy. Whilst the knowledge economy was there, it could not be implemented into informal economies. Within the universities on the continent, although there was a serious lack of researchers, those that were available had to develop projects in conjunction with industry which would benefit citizens across both the formal and informal economies. This could only be achieved if science was aligned with research which in turn must be aligned with industry.

Good science produced knowledge that other people could use. (Dr Chakauya)

Ms Zvikomborero Tangawamira, the BioFISA II Programme Manager, informed the conference that the BioFISA II programme was launched to support NEPAD SANBio in networking across the globe to capacitate the region in terms of technical skills, gender mainstreaming and the commercialisation of research. Over 300 applications were received for commercialisation of which 14 were selected. The vision was to get a minimum of two new products launched with preference given to female entrepreneurs. The achievements of BioFISA II were reported as:

- a. As a result of research and development, seven products had reached end-users.
- b. Six start-up businesses were established.
- c. More than 1000 individuals were trained in technical and entrepreneurial skills.
- d. A network of 30 student ambassadors was created across a number of countries. All were supporting biosciences within the region. 65% of the trainees were female.
- e. The network was expanded from 500 stakeholders to more than 3 000.
- f. Of the supported projects, 20 students graduated
- g. 26 projects resulted in collaboration between the public and private sectors.
- h. At least 50 direct and indirect jobs were created.
- i. 250 women were supported across eight different countries. This activity would be further supported by NEPAD SANBio and Hivos Foundation going forward.

Of key importance to the BioFISA II programme was the youth, who were the future of the continent. There were several teams of youth ambassadors who were working in various countries, supporting their governments' initiatives on BioFISA II.

In conclusion, Ms Tangawamira thanked the CSIR for its support.

REFLECTIONS ON THE FINNISH GOVERNMENT'S SUPPORT ON AFRICAN INNOVATION AND NUTRITION

Presented by: Ms Päivi Lehtonen (Embassy of Finland, South Africa)

Ms Lehtonen stated that the first phase of an African nutrition program had been to build a bio network over a period of four years. Although it proved to be successful, two bottlenecks were identified. The first was that the private sector was not involved which meant that the research undertaken was not reaching nor benefitting those it was aimed at. The second issue was that the SANBio Secretariat proved to be unsustainable as it remained dependent on donor funding. Despite this dependency, the Finnish government undertook to fund the secretariat for a further four-year period.

Phase two of the projects started in 2015 and was focused on animal and human health. BioFISA II had funded 14 projects in total which had resulted in researched products actually reaching their markets. There had also been great successes achieved within the female bio-entrepreneur space.

SESSION 2: SUCCESSES AND FAILURES IN COMMERCIALISING RESEARCH: From spin-offs and start-ups to commercial partnerships

Facilitator: Dr Victor Konde, AEH Global/UNECA, Ethiopia

The session showcased seed and flagship projects which were supported by NEPAD SANBio through the BioFISA II Programme. It explored the various models that could be used to commercialise research outputs and the lessons learned.

The conclusions which emanated out of discussions were as follows:

- a. Procurement in the public sector took too long; it would be better if technologies were licensed out to the private sector.
- b. There had to be a way to instil a culture of commercialisation in universities so that they could partner with the private sector without losing their research capabilities and could realise some commercial returns.
- c. Because the private sector wanted quick returns on investment it put pressure on universities to develop products quicker whilst universities would rather take more time to develop a better product.
- d. The sharing of intellectual property was always a challenge.
- e. Funds coming into universities from donors often had a broad range of targets whereas the private sector focussed purely on profit.
- f. The private sector wanted a product that was already proven to work and was thus not keen on funding development work that took time with no guarantees that the product could be commercialised.
- g. The suggestion was made that projects failing within the university space should be moved into the private sector where there was sufficient funds to continue with development.
- h. The distinction between where research ended and commercialisation started was blurred.
- i. Whilst some may be of the opinion that universities should not commercialise products in competition with the private sector, others were in favour of such competition.
- j. Universities were putting undue pressure on researcher to prematurely "publish and patent", often to the detriment of commercialising the product.
- k. Partnerships between the universities and private sector must share the risks and accountability on research projects.

SPOTLIGHT 1: WHAT'S HAPPENING IN THE REGULATORY FRAMEWORK IN HEALTH?

Presented by: Ms Andrea Keyter, SAHPRA

The regulatory framework in Africa is fragmented and at times poses a challenge for commercialising health innovations. Ms Keyter presented an update on the migration of the MCC to SAHPRA, change in governance and updated legislation and the procedures for registration of complementary medicines and medical devices.

SESSION 3: BOTTLENECKS IN THE COMMERCIALISATION PROCESS

Facilitator: Mr Sibusiso Manana, Technology Innovation Agency

The topic explored the challenges faced by BioFISA II funded seed and flagship projects during the commercialisation process, in particular addressing the following key aspects of commercialisation.

Key issues for consideration:

- a. Conflict arose where several partners were involved in the development of new products and the product had to be registered: in whose name was it registered? IP ownership was at the heart of commercialisation.
- b. All SADC regulatory authorities should be aligned with each other in order to expedite compliance with regulatory requirements across borders.
- c. Cross-country collaboration is an imperative in terms of aligning regulations and allowing for a more flexible movement of products across borders. NEPAD SANBio could assist in this regard in fast tracking products through regulatory environments.
- d. Major markets i.e. the EU are extremely difficult to penetrate as its regulations and sustainability requirements were too onerous for smaller exporting countries to comply with. Thus regional markets assume greater importance.
- e. The production of meal worms as a protein replacement for fish has been difficult. Whilst the worms do not have meet regulations when used for animal feed, they do when being used for human consumption. However, the regulatory framework governing meal worms is extremely onerous.
- f. The publication of research material and findings was vital in order to secure partnerships with businesses that were able to penetrate into overseas markets.
- g. At an institutional level, universities would have to get guidance from government to determine on what basis they could partner with the private sector.
- h. At an organisation level, universities must focus not only on research but also on how they are able to contribute to the private sector in such a way that would create employment opportunities through the production of research products.
- i. At an operational level, the protocols used internally by universities in terms of its interactions with business and regulatory bodies had to become more flexible.

SPOTLIGHT 2: WHAT'S HAPPENING IN GLOBAL HEALTH RESEARCH?

Presented by: Dr Robert Ridley, Unicaf University, Malawi

Reports from international bodies such as the WHO and other UN Agencies have called for research on particular interventions across entire health systems across the globe. Several funders have or are channelling money into such interventions. Since 2015 the focus on Millennium Development Goals (MDGs) had changed to Sustainability Development Goals (SDGs). Dr Ridley noted the following achievements made against the MDGs:

MDGs (2000 to 2015)

MDG4: Reduce the under-5 mortality rate: **Success** - Under-5 mortality rate declined 90 to 43 deaths per 1,000 live births (1990-2013)

MDG 5: Reduce maternal mortality ratios: **Success** - Maternal mortality ratio declined 380 to 210 per 100,000 live births (1990-2013)

MDG 6: Halt and reverse the spread of HIV/AIDS, malaria and other major diseases, such as TB: **Success** Target diseases declined New HIV cases from 3.5 m to 2.1 m, Malaria deaths from 839,000 to 438,000 and Non-HIV TB deaths from 2.4m to 1,1m

SDGs (2016 to 2030)

SDG 3: Ensure healthy lives and promote wellbeing for all at all ages

He informed the audience of new initiatives on the African continent aimed at supporting health innovation and collaboration. He emphasised the need for accurate data to inform evidence based policy. He also indicated that more should be done to encourage youth and more innovations addressing real health social challenges should come from Africa. Another influence is the development of hubs and entrepreneurship has grown over the last five years and the large source of funding may come from private sector in the future. He also mentioned the top 10 health technologies as reported by Deloitte, many of which were based on the use of ICT in solving health and social challenges. It was pointed out that there was a strong and irrefutable correlation between animal and human health; 75% of all emerging infections were animal in origin. Looking after the health of animals is a prerequisite for human health.

SESSION 4: HEALTH INNOVATION IN AFRICA - What's happening in global nutrition research?

Facilitator: Dr Nick Walker, OneBio

Africa has a proud history of health and medical innovation, with some of the most interesting medical and health technology products and services emerging from this continent. The panel discussed the emergence of digital health, opportunities for start-ups in this space and the emerging technologies in the health space and the need for investment in skills at postgraduate level in order to build up the human capacity needed to address these challenges.

Conclusions from the panel:

- a. Digital health platforms are unique ways of communicating information. The South African Dept. of Health has already launched its own apps in this regard and consideration was now being given to the use of video consultations which would offer specialist care in remote areas.
- b. Health care opportunities in Africa lie everywhere simply because there was an abundance of unmet needs throughout the continent. It was anticipated that the healthcare sector would realise a 5 or 6% growth rate which would in turn attract more private sector funding.
- c. Whilst there was venture capital available for healthcare innovations this required strict adherence to regulatory issues such as tax clearances, VAT registrations etc. Many of these requirements do not exist in some African states which made investors wary of investing.
- d. Demand is outstripping supply for start-ups because the basic capacity for technical innovation in Africa is still behind.
- e. There are not enough programs for Master's and PhD students, who are sent out of Africa to study instead of keeping them within Africa to develop African solutions to Africa's problems.

SPOTLIGHT 3: WHAT'S HAPPENING IN GLOBAL FOOD RESEARCH?

Facilitator: Dr Victor Konde, AEH Global/UNECA, Ethiopia

The African continent faces the problem of combatting malnutrition in its various forms: undernutrition and micronutrient deficiencies as well as overweight and obesity. The scale and nature of these problems differ across countries and their populations on the continent.

Dr Konde presented on the current status of nutrition challenges and food insecurity in Africa. Globally there are two extreme sides to the issue with 0.8 billion people malnourished on the one hand, while on the other side there are 2 million people Africa is faced with challenge of obesity.

The key issues that need to be balanced are:

- Access to quality food – increase production vs reducing production cost
- Several solutions are needed – fortification vs diversity
- Storage and preparation – well cooked, over cooked
- Jobs and incomes – busy lives lead to increased demand for fast foods by consumers and a range of food choices
- Nutrition – choice, fun, social, enjoyable
- Sustainability – think of the poor, the middle income and wealthy

Innovation in the nutrition sector should consider scientific elements, access to food and the business opportunities that food innovation can bring about to support socio-economic development. There are still various opportunities for more research in the food and nutrition sector which includes looking at the different food needs for different age groups, and specific nutrition needs for different genders. Other issues to consider are global versus African trends; rural versus urban trends.

SESSION 5: FOOD INNOVATION IN AFRICA

Facilitator: Dr Sechaba Bareetseng, NEPAD SANBio

Despite the richness of the plant species on the African continent and the availability of R&D data at universities, the continent is struggling to unlock its potential to address pressing issues in food. A coherent strategy to tackle food and nutrition insecurity is urgently needed. The main issue was that of mainstreaming indigenous foods and managing supply chains.

The delegates were unanimous in their response that simplicity is the answer; design food products that use local produce (i.e. cassava and sorghum) and that do not rely on imported raw ingredients i.e. wheat. There are local staple products that are nutritious, easily grown and able to cope with Africa's climatic conditions. It was also agreed the university researchers had to look to those food products which could be distributed at local SMME (Small, Medium and Micro Enterprises) level which did not require logistical support. The suggestion was also made that universities should expand their services to include food labelling, food safety and even as far as assisting in food production. Above all, the youth had to become the drivers of investment into the agricultural space.

“As Africans we need to appreciate what we have on the continent. We are a young society and must use this to our advantage.”

PITCHING SESSION 1 & 2

Another key element of the event was the support of emerging entrepreneurs, innovators, start-ups and established companies who participated in two pitching sessions co-hosted with Hivos Foundation, a leading impact investor in the region. At the pitching event 13 companies out of 45 who had applied and working in the health and nutrition sectors, were selected because they were working on addressing an unmet need in the agriculture, fintech and health space. The list of companies is in Annex 2. They presented in front of an esteemed panel including representatives from Hivos Impact Investment, LifeCo UnLtd, IDC, Land Bank, and SAB Foundation. Five companies were then selected to present in the final pitching session on day 2.

SPEED NETWORKING AND IDEATON SESSION

Delegates were asked to introduce themselves to each other in an interactive speed networking session where they had to collect four similar coloured rubber bands from other delegates, thus collecting five in total.

Different groups were then asked to have an ideation session/brainstorming session where they could address the following topics or innovation challenges:

- a. How to fund SANBio in the next five years?
- b. What platforms should SANBio use to support exchange of information and collaboration
- c. Future priorities for the SANBio Network Nodes – Mushroom
- d. Future priorities for the SANBio Network Nodes IKS
- e. Future priorities for the SANBio Fish Node (Aquaculture)
- f. Future priorities for the SANBio Network Nodes Plant Genetic Resources
- g. Future priorities for the SANBio Network Node – Bioinformatics
- h. Future priorities for the SANBio Network Node – Animal Livestock
- i. Role of artificial intelligence in Biosciences
- j. Future of 3D printing to improve efficiency in Biosciences

The output of this session has been sent to NEPAD SANBio to use in the business plan development for 2020-2024.

Day 2: 22 May 2019

Facilitator: Ms Nabwalya Vlahakis

PITCHING SESSION

INTRODUCTION - Ms Tanja Lubbers, Hivos Southern Africa

Ms Lubbers opened the session saying that it was an honour to partner with the CSIR to try and scale up the NEPAD SANBio programme, particularly with regard to promoting female entrepreneurship. Hivos had a long history of supporting farmers and was one of the first organisations to embrace micro financing concepts. In 2016 Hivos Impact Investments was founded, focussed on investing in social entrepreneurs with viable projects.

A pitching panel session was then held whereby each presenter was given three minutes to present their concept to a panel of judges. All five companies were selected for further business support and advisory services.

1. Mr Kutukwa – Mobbisurance

The current business models of the insurance industry do not support small farmers. Mobbisurance was attempting to solve the problem of providing low cost insurance cover for small farmers who often lost their crops to natural disasters. The proposed solution was the use of satellite based imagery which would: reduce monitoring costs on farmers, automate pay-outs, allow for experts to monitor crops and give advice, negate the need for site visits by insurance officers and negate the need for costly claims' departments. The business's idea was to target 1.4m small farmers through partnering with other agricultural and insurance entities. Climate change and the history of changing weather patterns were incorporated into data collections and because such data gave greater certainty to farmers, input and running costs were reduced. Insurers also had more certainty and could reduce their costs as well. The support required for the business was a strategic partnership with businesses that focussed on the requirements of small farmers.

2. Mr John-Paul Matenga – YouFarm

YouFarm believed that there were no excuses for not funding farmers. Banks were not willing to lend money to small farmers so the idea behind YouFarm was to get people to invest with farmers. YouFarm gives access to farmers for collateral-free finance by getting people to invest in crops and livestock, sharing the profits with the farmers when the product reached the market. Other investors and those who did not own land would be part of the value chain and could realise a return on investment at the same time. YouFarm is the convergence

of fintech and agriculture. The business model was that farmers and investors took 40% each of the profits with the remaining 20% going to YouFarm.

YouFarm funded its first crops at the end of 2018. It now had USD1.2m in cropping investments for 2019/2020. This effectively meant that every crop, before being planted, already had a market. The business had grown extremely fast with over 180 farmers already registered. The business was seeking USD1m in funding to invest in growing feed for livestock (feed constituted 75% of livestock costs).

3. Mr Paul Shepard – Future Farms Hydroponics

Future Farm Hydroponics provides training and systems to the food market within Johannesburg and Cape Town. It currently had 16 commercial farms established on city buildings and had trained 20 previously disadvantaged people. Its vision was to bring farming into the urban environment by utilising inner city buildings, thus negating the need for some logistical support services to get to market. It required R8m to establish more farms and cover their running costs until such time as the project became self-funding. The advantages of hydroponic farms were that they enabled produce to grow in a controlled environment realising increase yields, used less water and pesticides and had a low overall running cost. A partnership had been formed with an LED lighting company which assisted with the correct lighting. The company had to stress the economic advantage of this agricultural approach.

4. Dr Peter Durcan - Afrobodies

Afrobodies produces custom antibodies that detect previously 'hard to find' substances with speed and precision. It uses the unique properties of the immune system of alpacas to make recombinant antibodies that are smaller, more heat stable and more easily adaptable to detect carbohydrate moieties and chemical compounds. Alpacas in particular were used for the product of the antibodies as they naturally produce an antibody not found in cows, rabbits and mice. It was looking to raise USD6m to expand its operation. The advice given by the panel was to reduce the ask and manage investment by milestones, thus securing different levels of finance at different stages of the business growth.

5. Sibongile Bongadi – uku'hamba

Uku'hamba is in the business of producing low cost prosthetics from natural fibres used in materials for 3D printing. It needed support to buy a 3D printer for R250 000. Discussion ensued on the business with some judges of the opinion that uku'hamba was involved more in a social cause than an economic pursuit. The suggestion was that the enterprise attempt to raise funds from benefactors rather than raising investment equity.

SESSION 6: ENHANCING THE ENTREPRENEURSHIP LANDSCAPE IN THE SADC REGION

Facilitator: Dr Chamunorwa Togo, The Innovation Hub

The session explored the different mechanisms and role players in supporting entrepreneurship focused on women and youth in the SADC Region.

Dr Togo highlighted the fact that there had to be a dedicated approach in providing support for women and the youth simply because of population demographics within the SADC region; Africa had a growing youth population with a far greater number of females than males. It therefore made sense to support the larger proportion of females. Mixed in with this, is the element of gender discrimination against women. It was heartening to see that more governments were shifting their focus to the development of women entrepreneurs but there was still a severe lack of funding for such development. In particular, women had to work harder in order to raise funding as most could not raise it as easily as men could and women needed mentors and support systems to help them grow in their entrepreneurial endeavours as they typically started from a much lower base than men did.

Skilled youth within SADC were developing entrepreneurial skills but they too suffered from a lack of available funding which often forced them to move to Europe where there were more opportunities. Mentorship, again, is an important part of up-skilling the youth to start and grow their own businesses. Linking women and youth

entrepreneurs to established networks and funders designed to focus on these sectors was critical. Various panellists shared their initiatives and mechanisms that they had in place – bespoke programmes for women and youth, access to regional networks, bootcamps and acceleration programmes and the importance of co-creation and entrepreneurial hubs in facilitating this support.

SPOTLIGHT PRESENTATION 4: INSIGHTS ON VENTURE CAPITAL AND PRIVATE EQUITY FUNDING AND CROWD FUNDING

Presented by: Mr Vuyisa Qabaka, HYBR GROUP Southern Africa

Mr Qabaka highlighted a number of ways in which funding could be accessed. He noted that the venture capital landscape in Africa was currently at USD725m which was a clear indication that there was money available within the start-up space. He drew particular attention to the following facts:

- a. R346 billion – the current funding gap of SMEs in South Africa
- b. 98.5% of the SA economy is made up SMEs yet they are only delivering 28% of all jobs
- c. 70% of SMEs in SA are informal with majority of these being black-owned sole proprietors
- d. 52.4% of SA youth was currently unemployed, the highest globally with black youth suffering the most

Fast growing start-ups (SMEs), also called scale-ups are important. Globally, only 0.5% of start-ups reach USD10m revenue by their fifth year, i.e.1 out of 200. The failure rate of start-ups was due in the main to: inexperienced leadership, non-scalable products or services, under-optimised operations, poor access to markets and an inability to raise funds.

New models of funding were being explored, such as:

- Angel Investing: An angel investor is an affluent individual who provides capital for a business start-up, usually in exchange for convertible debt or ownership equity. Angel investors usually give support to start-ups at the initial moments and when most investors are not prepared to back them.
- Peer-2-Peer investing: Peer-2-Peer investing was a loan-based method of funding.
- Crowd funding: Crowd funding accounted for 14% of all global capital.
- Most start-ups ran out of cash and ended up in “the valley of death: not enough revenue, quickly enough”.

SESSION 7: FUNDRAISING FOR START-UP COMPANIES

Facilitated by: Dr Audrey Verhaeghe, SA Innovation Summit

Securing adequate funding is a key requirement for growth of any type of business, but for many start-ups, the acquisition of funds that helps them build their company is an immense challenge. Most business start-ups usually begin with high hopes and create at least some kind of traction with investors.

The panel was tasked with discussing the perceived disconnect between entrepreneurs and investors in Africa and the fact that they two parties seemed to “elude” each other.

The reality was that capital had to come from somewhere and it came with an expectancy of a return. Investors expected entrepreneurs to be sufficiently educated to run an effective operation. Unfortunately, the level of entrepreneurship education currently available only achieved setting up people up for failure: There had to be an “entrepreneurship ecosystem” which could create and produce the talent required to build a sustainable enterprise.

Africans had to understand that funds for Africa’s projects came from outside of its borders. Projects had to be bankable but they also had to compete for capital with the likes of India and other developing countries and emerging economies. Africa had to stop looking at itself as being deserving of special treatment when it came

to funding and, most importantly, Africans had to start investing in African projects. It was also imperative that Africans understood that, in order for their projects to attract funding they too had to have “skin in the game”; investors will not invest if the entrepreneur himself has not put his own funds at risk.

SPOTLIGHT 5: MARKETING FOR BIO-BUSINESSES IN THE 21ST CENTURY

Presented by: Mr Rob Maclean, eCommerce Experts

Mr Maclean presented a marketing tool for marketing for bio-businesses in the 21st Century. Key to marketing was to first get the “free stuff right”. Start small, test and learn. Of key importance was that any business had to find the right platforms it needed in order to market its products; there was no “one size fits all” philosophy. Companies should develop their e-commerce strategies based on their target markets and products. Often resources and efforts are wasted when companies do not do their homework in developing their brand and their market strategy.

SESSION 9: SCALING A BUSINESS: CHALLENGES AND PITFALLS TO LOOK OUT FOR IN HEALTH & NUTRITION

Facilitated by: Dr Boitumelo Semete-Makokotlela, NextGen Health Cluster, CSIR

Growth is the key to the success of any start-up, but the best businesspeople know that following a path of careful, calculated growth is smarter than pursuing expansion it cannot handle. Knowing this, there are a number of issues both seemingly small and unexpectedly complex to consider. The panel was asked to consider the pitfalls when scaling a business, at what level should a business scale up and have the organisational structure in place and for suggestions of the optimal way to commercialise.

The panel concluded:

- a. An entrepreneur must produce a product that he/she knows. Not only must the entrepreneur know the product, they had to know the market as well.
- b. Entrepreneurs should never lose sight of quality and service delivery.
- c. Leadership is key. Always have the right leadership in place as 80% of businesses fail due to poor leadership. Leadership must also be exposed to or come from the private sector because it is that sector which is focussed on money and how to make it.
- d. At the point where the business is ready to scale, a more formal and larger management team and organisational structure must be put in place.
- e. One key element in marketing and finding new markets for products is the use of distributors.
- f. Innovators should immerse themselves or work closely with the private sector to know how the operations of getting a product to scale would work.

SANBIO AND THE WAY FORWARD

Facilitated by: Dr Ereck Chakauya, SANBio Network

As NEPAD SANBio is 14 years old and is engaged in business plan development for 2020-2024, this session engaged key NEPAD SANBio stakeholders who have been collaborating with the Network to address a key question – NEPAD SANBio in 5 years, what’s next? Each of the stakeholders provided a synthesis of where they think NEPAD SANBio should go and the focus for NEPAD SANBio in the next five years, considering the notable changes in the operational model of NEPAD SANBio and the business environment regionally and at continental level. The question asked of the panel and from the audience was “What should NEPAD SANBio do over the next five years?”

The panel and audience provided the following input:

- a. NEPAD SANBio should define its identity and assess its position in regional networks and what it can offer the region.
- b. Harness the power of collaboration. NEPAD SANBio is ideally placed to do this, having established good working relationships with regional partners.
- c. Partner with other organisations e.g. Hivos for future collaboration and other continental and regional networks that function in the science, technology and innovation domain.
- d. Establish a social media presence and become known amongst the youth of SADC.
- e. Facilitate funding and links with funders to support bioscience in the region.
- f. Engage with policy makers at a regional level (SADC).
- g. Establish better and more effective links with universities, particularly on prototype products that could be brought to market.
- h. Map value chains in specific bioscience sub-sectors. This can be closely linked with the 4IR agenda and the SADC industrialisation policy.
- i. Strengthen its internal governance. Government partners should be able to contribute support to NEPAD SANBio and its activities.
- j. Encourage universities to change their curricula to include more effective teaching within innovation and entrepreneurship.

CLOSING REMARKS

Prof Dr Domingos da Silva Neto, Secretary of State, Angola

On behalf of the government of Angola, Prof Domingos da Silva Neto thanked the governments of Finland and South Africa for their support for NEPAD SANBio. He stated that the multi-disciplinary principle between all collaborating nations was working well and this meant that both the SANBio network and BioFISA II were doing excellent work in finding solutions to the health and nutrition challenges in the SADC region. He encouraged both organisations to continue to prioritise their support of projects and innovations which focussed on the promotion of local and regional products.

The next ministerial committee meeting would happen in July and suggested that it would focus on what NEPAD SANBio could do differently in order to improve regional integration and improve the usage of the facilities offered by NEPAD SANBio. He wished all well on their journeys home and offered a special thanks to the organising committee.

South Africa's need for rapid expansion of its scientific and technological skills is immense... On your shoulders rest the challenge of giving science a face that inspires our youth to seek out science, engineering and technology

(Nelson Mandela)