

Agri Leaders

The people that make agri happen

A portrait of Minister Senzeni Zokwana, a Black man with a shaved head, wearing a dark grey suit, a white shirt, and a blue tie with white polka dots. He is looking directly at the camera with a serious expression.

Minister Senzeni
Zokwana:
**Africa needs
to share**

Africa must up its game

Digitising the agricultural sector

Zambia a beacon for investment

Unlocking the potential of South Africa's oceans



Company Details:

Project Enquiries | agri@talmar.co.za

General Enquiries | info@talmar.co.za

Tel | +27 (0) 11 268 6552

HQ Address | 1 Corlett Drive, Illovo,
Sandton, Johannesburg



A leader
in the professional
design and implementation of
sustainable development projects

MISSION

Talmar's mission is to serve the developing world with:

ENTREPRENEURSHIP

Building new, scalable and profitable businesses that are bottom-based and locally owned, and serve as stimulants for local economic empowerment, social growth and the regeneration of natural (Agricultural) Capital.

SHARED VALUE

Agricultural projects that integrate the pillars of sustainability, creating profitable business and economic platforms which enable both people and nature (the environment) to flourish.

TRUE EMPOWERMENT

An approach that enables project beneficiaries to take ownership of their futures and the opportunities presented.

SERVICES

- Practical, best fit Project Design, including Whole Farm Planning (WFP)
- Project and Concept Feasibility Analysis
- Project / Business Planning
- Project Development and Implementation
- Due Diligence of Existing Initiatives
- Stakeholder Engagement & Mapping
- Social / Socio-Economic Needs Analysis
- Social / Socio-Economic Impact Assessment
- SED / LED / ED Fund Management, Administered by the Talmar Development Fund
- Long-Term Programme Management

Contents

Issue 3 2016



Editor's note 02

INDUSTRY NEWS 02 – 10

COVER STORY

Africa needs to share 12 – 13

SMART AGRI

Digitising the agricultural sector 14

The future for IoT in Africa is an exciting one 16

Land mapping resolves conflict and empowers Tanzanians.. 18

Make the agri space 'sexy' 19

INVESTORS CORNER

Enhancing the international growth of Zambian enterprises..... 21

Zambia a beacon for investment 23

A liquid and transparent derivatives market for the agricultural sector 24

Accelerating away 26

Africa's outlook is positive 27

Insuring lifetime financial goals 28

Access to trade and information is of great interest to the agricultural community..... 30

South African Department of Trade and Industry to introduce dedicated agro-processing incentive 31

PERSONALITY PROFILE

Malose Matsheka, CEO Golden Dice Foods 33

COMPANY PROFILE

Kynoch Fertilizer 34

AQUACULTURE

Unlocking the economic potential of South Africa's oceans 37 – 39

Water is life – if we don't take care of it who will?" 40

Developing a sustainable aquaculture industry in Kenya 41

SUSTAINABILITY

Join forces to create a sustainable sector 42 – 43

Food security for all..... 43 – 44

Africa must up its game 45

Sizing up livestock farming's carbon footprint..... 46

The welfare of the people is key to longevity and sustainability 47

LIVESTOCK

Genetic diversity of livestock can help feed a hotter, harsher world..... 48

Global campaign to eradicate Peste des petits ruminants..... 49

AGRI PROJECTS

Global Aquaphonics 50

Emlanjeni Piggeries 51



Africa AgriLeaders magazine is the official quarterly magazine for the African Agri Council and is endorsed by  African Agri Council

31 Bell Crescent, Westlake Business Park, Tokai • PO Box 30875, Tokai, 7966, SA • Tel +27(0)21 700 4300 • Fax +27(0)21 702 4340

CHAIRMAN: Rudi Leitner **e-mail:** rudi.leitner@agricouncil.org **CEO:** Devi Paulsen-Abbott **e-mail:** devi.paulsen@agricouncil.org

PUBLISHING DIRECTOR: Errol Bryce **e-mail:** errol.bryce@agricouncil.org **EDITOR:** Kristy Jooste **e-mail:** kristyjooste@agricouncil.org

ADVERTISING: Mzamo Jika **e-mail:** mzamo.jika@agricouncil.org **STAKEHOLDER/PARTNERSHIP:** Spell Sigxaxhe **e-mail:** spell.sigxaxhe@agricouncil.org

DESIGN, LAYOUT & PRODUCTION: Virgil Jacobs **e-mail:** rykim@mweb.co.za **PRINTER:** RSA Litho

Neither the Africa AgriLeaders nor the African Agri Council accepts responsibility for any opinions or statements in this publication. Consequently no person connected with the publication of this journal will be liable for any loss or damage sustained by any reader as a result of action following any statements or opinions expressed herein.

hypenica

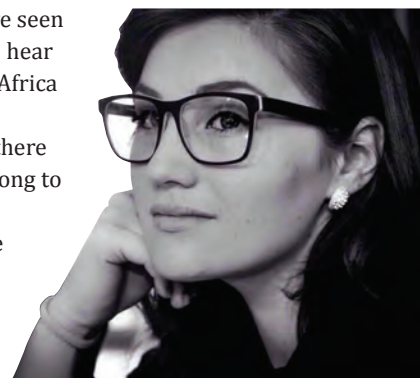
"Your corn is ripe today; mine will be so tomorrow. 'Tis profitable for us both, that I should labour with you today, and that you should aid me tomorrow. I have no kindness for you, and know you have as little for me. I will not, therefore, take any pains upon your account; and should I labour with you upon my own account, in expectation of a return, I know I should be disappointed, and that I should in vain depend upon your gratitude. Here then I leave you to labour alone; you treat me in the same manner. The seasons change; and both of us lose our harvests for want of mutual confidence and security." — David Hume, Scottish philosopher

Weaving through my lengthy conversations with the contributors of this issue, I've seen a trail of bittersweet thoughts aimed at the continent we love. On the one side, I hear many praises like: "Africa is great," or "We will come flying out of this rut," and "Africa is finally moving full-throttle towards success and independence."

And while this makes me place hand over heart and produce a proud, motherly smile – there comes the bitter: "It is too late – Africa was slow on the uptake," and "Why has it taken so long to wake up?" or "We don't have the luxury of time."

And while it may have taken some time for the people of Africa to wake up and smell the barley, but better late than never. Now that Africa has been somewhat kicked into gear, all around me I see loyal devotees doing everything in their capacity to get the entire African agricultural sector to visualise one goal: working together as a continent to achieve self-sufficiency.

Kristy Jooste, **Editor**
kristy.jooste@agricouncil.org



INDUSTRY NEWS

A uniform vision for agriculture

"A long-term unified vision for agriculture can only be obtained if the achievement of the objectives for the industry to contribute to ensuring economic growth and food security for the country are clearly spelled out," according to Fanie Brink, an independent agricultural economist.

He was reacting to the speech by Johannes Möller, president of Agri SA at the organisation's conference, saying organised agriculture and its partners should "search for a unified vision and message."

Brink says economic growth is driven and created by profit and food security can only be achieved and sustained if the production of food is profitable, as it is also a prerequisite in all other economic industries.

"This means that the interference of the government in the economy and agriculture should be limited to a minimum to allow market forces to function optimally as far as possible."

The profitability of agriculture can only be promoted if, firstly, the relationship between the prices paid

by producers for their inputs and the prices they receive for their products can be improvement over the long term. Secondly, if the efficiency of production can be increased by new technological developments to enable farmers to produce more products with the same inputs or to produce the same products with less inputs. These basic principles are also applicable in all other industries in the economy.

"The legislation of the government

should promote and support these objectives of agriculture and not undermined it."

The long term financial survival of the industry due to natural disasters and economic instability, as well as caring for the poor and others in need, is the government's responsibility in the final analysis with which it must comply.

"No agricultural producer in the world can produce food at prices that poor people can afford," Brink said. ■





SUPERIOR RELIABILITY THAT HOLDS ACRES OF EFFORT AND YOUR FUTURE

Get big capacity with even bigger protection. Every Superior Commercial Bin comes with heavy-duty stiffeners and structured roofs to stand up to the harshest weather. Superior offers the only bins that give you storage volume and confidence in equal measure.

S U P E R I O R B I N S . C O M



**COMMERCIAL
GRADE BINS**

1 . 8 6 6 . 8 2 2 . 9 1 4 5



Extreme drought in Southern Africa about to worsen

“Southern Africa is in the midst of the most severe drought in 35 years and according to a United Nations (UN) climate envoy, the extreme dry weather conditions are forecast to worsen over the months ahead. The National Treasury in South Africa, however, made it very clear with the very limited drought relief granted to the agriculture industry since the beginning of the year that these very severe climate conditions is only a big joke,” says Fanie Brink, an independent agriculture economist. “But I’ve got news for them – it’s not a joke at all.”

After a four-day visit to Mozambique, a special envoy of the UN on climate change and extreme weather phenomena such as an El Niño, Macharia Kamau, stressed that the devastating drought could even reach its worst level in January next year. Approximately 18 million people in the region have already been seriously affected by the widespread effects of the drought.

The drought relief measures that the government has granted to the agriculture since its main budget in February this year and in its Medium Term Budget Policy Statement (MTBPS) not only totally excluding the commercial farmers, but it will not do much to ease the fate of the small subsistence and developing farmers, says Brink.

“The African Farmers’ Association of South Africa (Afasa) has made it very clear during its recent conference that there is anyway nothing to see of the more than R2bn which has been spent on new emerging farmers since the beginning of the year. The question that therefore should be asked is how much of this money has eventually reached the emerging farmers?”

“The drought relief measures of R553m that the Minister of Finance has now appropriated in the MTBPS are also not fully allocated to the agriculture. An amount of R212m was allocated to the support program of the Department of Agriculture, Forestry and Fisheries for further fodder purchases. This support program has totally collapsed due to the inability of the Department to implement it successfully over many years.”

“An amount of R341m was appropriated for the Department of Water and Sanitation of which about R291m will be used for a mobile desalination plant, while R50m was added to the allowance for infrastructure water services and the transport of water as a short-term drought relief measure. These appropriations are highly suspect and the question should be asked how much of it will finally reach the emerging farmers.”

“This means that the government

has this year virtually appropriated no drought relief measures for the recovery of the longer term production capacity of the agriculture industry to produce food, which could be a very costly mistake over the next few years.”

Brink says after the serious drought in the early nineties the previous government had to support the grain producers with R3,8bn to alleviate their very serious cash flow problems, as well as with debt postponement schemes and a state guarantee to enable them to obtain production credit to produce again the next season.

Although it has rained in several parts of the eastern production areas where grain producers could already started planting, the producers in the western production areas only have one month left to receive good rains to produce a more or less normal crop next year.

“The western regions produce about 54% of the country’s total maize and about 70% of the total white maize.”

With a few exceptions, the development of small black farmers to develop as fully fledged commercial farmers is a major failure due to a lack of proper training and support from the two agricultural departments.

“The chances for them to be able to make a significant contribution to the country’s food security in the future are therefore very slim,” said Brink. ■

WE LOOK AFTER WHAT'S IMPORTANT TO YOU

REC 

WIRELESS SURVEILLANCE SYSTEMS



RikRhino

AGRICULTURE.WILDLIFE.CORPORATE.RESIDENTIAL

WWW.RIKRHINO.CO.ZA

CONTACT: 087 195 2804

AfDB injects USD1bn to end youth unemployment in Africa

The African Development Bank (AfDB) together with the International Institute of Tropical Agriculture (IITA) is embarking on the initiative “Jobs for Youth in Africa”, aimed to put an end to youth unemployment in the continent by creating 8 million agribusiness jobs within five years. The president of the AfDB, a former Nigerian minister of agriculture, Akinwumi Adesina visited the Agripreneurs training centre at IITA and reiterated his commitment to the initiative.

Under Adesina’s leadership the AfDB has extended support to African youth through the IITA Youth Agripreneurs program that will be scaling up the model of youth engagement in agribusiness. In recognition of his continuous support and commitment to the cause of African youth, IITA will be preserving Adesina’s legacy by naming after him the state-of-the-art youth training centre at IITA headquarters in Ibadan and in Abuja, Nigeria.

The training centres and facilities provided by the AfDB and the IITA will assist African youths to take on work in the agricultural sector. The initiative also seeks to encourage the many unemployed African youths to become involved in agriculture in order to make it a driving force for development in Africa.

Nigeria is not the only African country with high youth unemployment. Youth unemployment in South Africa was estimated at 51.5% in 2014, Namibia 40.1% and Algeria 28.4%. Three in every five young workers in Sub-Saharan Africa do not have the level of education required for them to compete in the job market.

The AfDB president set forth his five development priorities for the institution when he took office in September 2015. One of these priorities is the ‘Feed Africa’ initiative, an agricultural transformation strategy that aims to unlock Africa’s agricultural potential. The strategy also aims to boost job creation with the view of making the agriculture sector profitable and a starting point for industrialization. With the ‘Feed Africa’ strategy, Africa would be able to feed itself and reduce net food importation by 2025.

“There is no reason for Africa to spend USD35bn importing food when the continent could feed itself, said



Adesina, adding Africa must become a global powerhouse in food and agriculture.” And indeed, it could. Africa disposes of some 400 million hectares of agricultural land, waiting to be cultivated. However, different laws, regulations, policies and institutions applying to each African country make it hard for local farmers to access seeds, modern technology and equipment, and to transport their goods in order to sell them on the market.

In order to make the agricultural sector in Africa profitable, it needs to be transformed. African countries need to increase trade amongst each other, maximising their production and getting the food to where it is needed, instead of buying it from outside the continent. Removing barriers to regional trade will benefit farmers, who will make more money from the rising demand, as well as consumers, who are able to buy food cheaper and have more job opportunities by engaging in the growing agriculture sector.

In order to unlock Africa’s large agricultural potential, African governments need to take collective action and produce a set of common rules, standards and taxes. Lifting the barriers to food trade could not only increase Africa’s production, eventually becoming able to feed itself, but could also contribute to decrease the high youth unemployment and give millions of young women and men a future in which they are able to sustain themselves. ■

AllAfrica





TUTWA

CONSULTING GROUP

INVESTIGATE | INFORM | INFLUENCE

Your partner in gaining the inside track



info@tutwaconsulting.com

www.tutwaconsulting.com

REGISTRATION NOW OPEN!



African Agri Council

PRESENTS

TWO ESSENTIAL EVENTS UNDER ONE ROOF!

28 FEBRUARY - 1 MARCH 2017

Nairobi, Kenya

AgriLogistics EAST AFRICA
SUMMIT

Innovative solutions driving farmer to market

Solutions for improving the supply chain process from farmer to market and improving post harvest losses

Topics include:

- Cold Chain optimisation and monitoring - reducing post harvest losses
- Regional update on multimodal transportation & cold chain logistics
- Renewable energy as a solution for cold chain logistics

www.agricouncil.org/logistics-summit

e-Agri EAST AFRICA
SUMMIT

Technology for enhanced farming

Africa's only platform to bring together proven e-agriculture solutions that will benefit agriculture stakeholders

Topics include:

- Agri APP FEST - Improved production and increased productivity
- How data can optimise supply chain
- IoT and automating farming
- ICT and renewable energy solutions for Agri

www.agricouncil.org/eagri-summit



GET IN TOUCH

Commercial opportunities: bethwell.mnyamana@agricouncil.org

Speaking opportunities: nico.lorenz@agricouncil.org

Media partners:



www.agricouncil.org

Agriculture Entrepreneur from Madagascar wins \$25,000 2016 Anzisha Grand Prize for African Youth Entrepreneurship

The 12 Anzisha Prize finalists were hand-picked from an applicant pool of 550 entrepreneurs from 32 African countries.

African Leadership Academy and The MasterCard Foundation are pleased to announce Heritiaina Randriamananatahina, 22 year old agriculture entrepreneur from Madagascar, as this year's winner of the \$25,000 Grand Prize in the sixth annual edition of Africa's premier award for youth entrepreneurship. Heritiaina is the founder of Fiombonana, an agro-processing enterprise that manufactures dairy products and confectioneries using only Malagasy raw materials, employing farmers and providing local job opportunities. Heritiaina was selected from a competitive pool of diverse entrepreneurs from all over Africa. For the first time ever, Anzisha Prize is pleased to award one of the top prizes to a finalist from Madagascar, creating a truly pan-African network of entrepreneurs who represent Africa's best youth entrepreneurs.

This year, Anzisha Prize celebrates increased representation of winners from francophone countries. The first runner-up was environmental entrepreneur Yaye Souadou Fall, 21, from Senegal (who will receive \$15,000) while agricultural entrepreneur N'guessan Koffi Jacques Olivier, 19, from Cote d'Ivoire was the second runner-up (and will receive \$12,500).

The presence of two agriculture entrepreneurs in the top three is emblematic of the important role agriculture plays in Africa's economies. Agriculture represented the sector with the largest share of applicants for the prize this year. The Agriculture Sector Prize was also claimed by N'guessan Koffi Jacques Olivier who demonstrated the potential for agriculture to create jobs for youth.

As the grand prize-winner, Heritiaina impressed a pan-African panel of judges with his venture response to a real need within his community,



Heritiaina Randriamananatahina (on right) celebrating his achievement.

effective business model, job-creation potential, scalability, and demonstrated leadership potential. Fiombonana has enjoyed significant success to date including sizeable growth as Fiombonana produces 800kg of cheese a week, with potential for rapid and low cost expansion due to innovations such as reverse-engineering machinery for food processing. "I am so excited to win the Anzisha Prize for 2016, even though I had to drop out of school when I was in grade six. My hard work in my business is paying off. I appreciate the training I have already received so far. Now that I have won, I will invest in my own education and grow my business," says Heritiaina.

Yaye believes that youth can be agents of change to solve the problems that Africa faces and can drive pursuit of opportunities for economic growth.

The first runner up for the prize, Yaye Souadou from Senegal and founder of E-cover, is also the first Senegalese entrepreneur ever in the top three in the history of Anzisha Prize. The core need the venture meets is to repurpose the many discarded tyres

that are available in her home city, Dakar, into multi-purpose tiles for paving playgrounds, pavements, roads, and other surfaces. Yaye believes that youth can be agents of change to solve the problems that Africa faces and can drive pursuit of opportunities for economic growth. Her win will enable her to build the production capacity that her venture desperately needs in order to meet customer demand.

N'guessan Koffi Jacques Olivier from Cote d'Ivoire is the remarkable second runner up who founded Yaletite Entrepreneurship Group CI. Yaletite Entrepreneurship Group CI is an agricultural group with the aim of producing and selling chocolate and food crops for profit and mobilizing youth for agricultural employment. It is unique for the manner in which Koffi operates his farm, through modern methods to ensure maximum yields during processing. Koffi has managed to tirelessly pursue this innovative venture, and create employment for 35 people. Koffi creates improved livelihoods for over 100 households through access to innovative farming practices.

The Anzisha Sector Prize in Agriculture was also awarded to N'guessan Koffi Jacques Olivier. The Anzisha Prize in Agriculture is offered with the sponsorship of the Louis Dreyfus Foundation, which promotes projects in the areas of sustainable

agriculture, food security and self-sufficiency, particularly through education and direct support to farmers. The Louis Dreyfus Foundation Award for Entrepreneurship in Agriculture was offered for a second year this year, and aims to recognize young African entrepreneurs who are making a sustainable impact in the agriculture sector.

The MasterCard Foundation continues to support both entrepreneurs and the Anzisha Prize support program that the entrepreneurs will now access. "Joining the ranks of the Anzisha Fellows, this impressive group of young men and women are igniting the entrepreneurial spark in young people across Africa," said Koffi Assouan, Program

Manager, Youth Livelihoods at The MasterCard Foundation. "This ripple, the #AnzishaEffect has the power to transform the continent as these young entrepreneurs rise to become the next generation of African movers and shakers."

"Anzisha Prize is a truly inclusive and pan-African Prize. The program is run in a multi-lingual learning environment in which entrepreneurs can learn regardless of their preferred language of instruction such as Arabic, French, Portuguese, and even Malagasy this year. The entrepreneurs really represent the true cream of the crop from the entire continent," says Grace Kalisha, Program Manager for the Anzisha Prize.

The Anzisha Prize is a partnership

between African Leadership Academy and The MasterCard Foundation. The 12 Anzisha Prize finalists were hand-picked from an applicant pool of 550 entrepreneurs from 32 African countries. Now in its sixth year, Anzisha Prize celebrated these outstanding young people at an exclusive, invitation-only ceremony on Tuesday 25 October 2016 in Johannesburg. The 12 finalists presented their ventures to a panel of judges after spending ten days in a business accelerator camp to strengthen business fundamentals. They join a now 67 strong pool of Anzisha Fellows and will receive ongoing business-consulting support, access to experts, and access to networking opportunities to enable sustainable venture growth. ■

South Africa will bounce back



Omri van Zyl, CEO of AgriSA.

"When you look at the South African agricultural sector as a whole, we have been doing very well especially on the export front with 40% of our products in South Africa going into the African market," says Omri van Zyl, CEO of AgriSA, a 105 year old membership organisation consisting of 27,000 farmers and 24 commodity organisations. "The weakening of the Rand has had a detrimental impact to the people that are importing products, but on the other hand it has been greatly rewarding to exporting farmers.

A huge growth potential van Zyl can see is better integration within the value chain. "We see a great opportunity to get

alignment within the value chain and its players within that space. We are also reformulating a commercial strategy for South African agriculture to show how we can take the value chain integration to the next level by aligning this with the National Development Plan and practically implementing it to create a million more jobs."

With the drought greatly affecting South Africa, AgriSA created a drought relief fund in the beginning of 2016. "We have gone through a process of receiving donors and have launched several projects creating fodder banks around the country and in the irrigation areas. We use these fodder banks to transport feed and fodder to farmers in need. We have also focussed on humanitarian assistance – we have provided water and food parcels to communities severely affected by the drought as well as doing our best to keep farmers on their lands and in business."

AgriSA's current key areas of focus include the current drought; mining in agriculture; water and land policies. The organisation has also conducted further research to determine where the areas of crises are in South Africa and what kind of intervention would be needed from government and other stakeholders. AgriSA has recently completed a successful agricultural project in the mining space including socio-economic development projects

such as entrepreneurship programmes and farmer development programmes while empowering rural and commercial farmers.

"We at AgriSA look after the farmers and make sure their sector thrives. To assist the farmers, we look at water allocations and pricing; electricity prices; labour relations; the environment; grain prices and many more – with our core value looking for savings for the farmers and to ensure policy alignments create growth and opportunities to export more commodities," van Zyl says.

"We would like to explore the African market a lot more as we see very strong urbanisation and trends in Africa which concentrates capital and creates markets – and we want to leverage that for South Africa. The American and European markets are ripe for development as well as the Asian markets are growing rapidly – we would like to have a bigger presence there.

As a South African sector we always bounce back, as we will after this tough period of droughts. We need to keep the hope alive and be excited about the future. It will change and we will be ready for it. On a more continental level, if you have been through Africa you will know that we sit with all the resources here and with the right application we can – in a very short time – change this landscape completely. ■

Company Details:

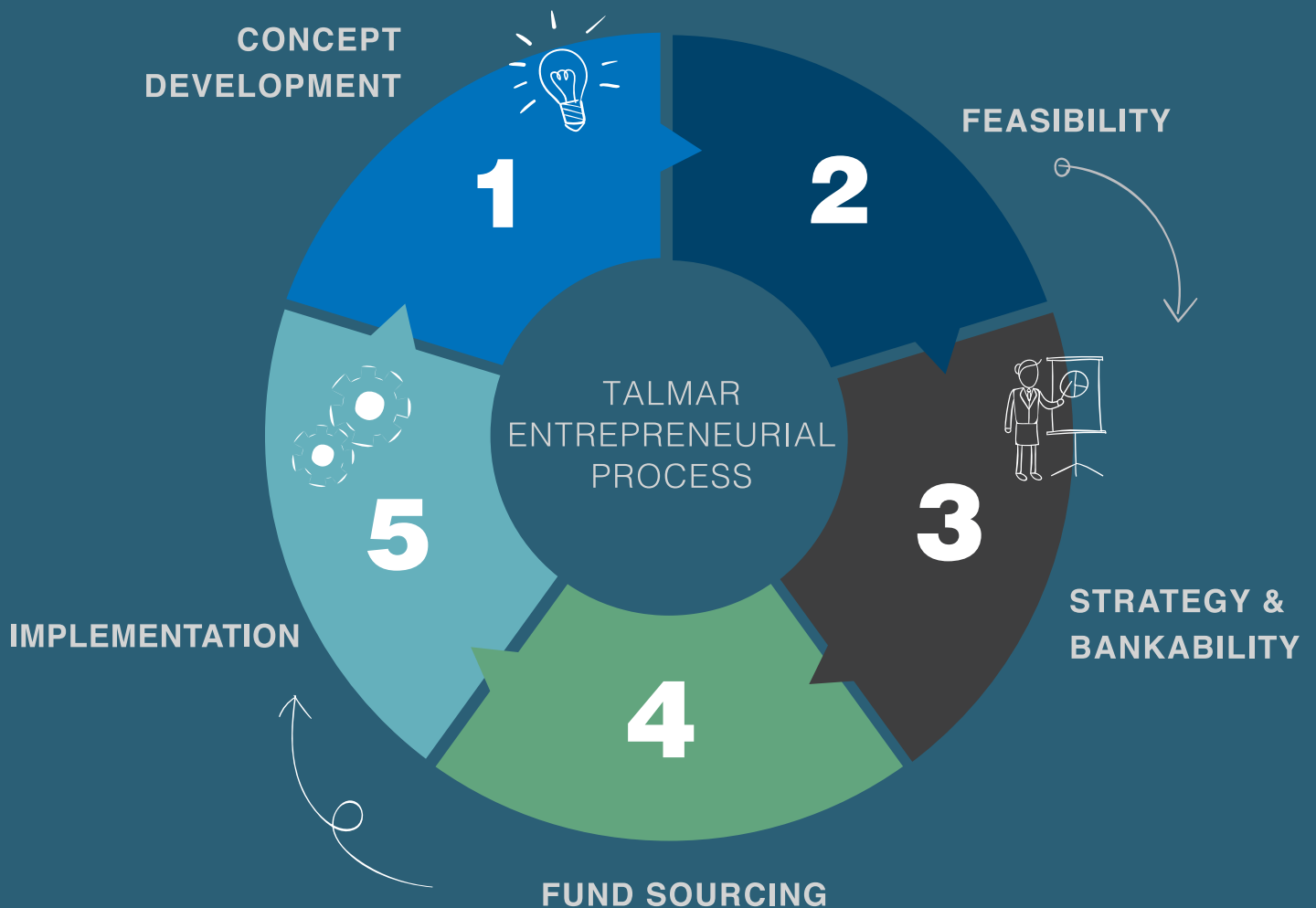
Project Enquiries | agri@talmar.co.za

General Enquiries | info@talmar.co.za

Tel | +27 (0) 11 268 6552

HQ Address | 1 Corlett Drive, Illovo,
Sandton, Johannesburg

A leader in professional design and
implementation of bankable agricultural
development projects



AFRICA needs to share

Senzeni Zokwana is the Minister for the Department of Agriculture, Forestry and Fisheries in South Africa. Zokwana sat down with Africa AgriLeaders to discuss how African countries can better collaborate.



Q Biography

A I was born in 1956 in a small town in the Eastern Cape. Later I became involved in trade union activism in 1980 during the apartheid-era in South Africa at the President Steyn gold mine in the Free State. I joined the ranks of National Union of Mineworkers (NUM) in 1983, became a shaft steward in 1984 and was elected to the branch executive committee in the President Steyn Mine in 1985. I subsequently moved up the ranks to become branch chairperson in 1987, vice regional chairperson in 1992 and regional chairperson from 1993 to 1994. I was first a shift overseer on safety matters and in 1995 I joined the NUM staff as a safety officer – after proving myself a dedicated advocate of modern mine safety techniques. I was elected as vice president of NUM in 1994 – a position I held until 2000 when I was elected president. I was then re-elected for the role and held the position until 2014. In 2014 I became the Minister for the Department of Agriculture, Forestry and Fisheries.

Q What keeps you up at night?

A I had small-scale farm with a few crops and cattle but I was never a fulltime farmer. However I can understand the pain that a farmer goes through when bad situations happen such as drought. Through my meetings I have also been told that a number of farmers may not be able to plant their crops around certain areas because of the high indebtedness and the banks not being able to borrow money. This means we may not have enough food and will be compelled to import which further inflates prices. The safety of our farmers and their farms is an issue for me – we have just begun discussions around living and working conditions of farm workers because I find those to be the key to higher productivity as well as peace within the farming communities.

Q What challenges do you face in your job?

A The drought has been one of the biggest challenges I have faced. Other challenges include farm matters with both farm workers and farm owners; the spread of diseases in livestock which limits our ability to export our products; and creation of markets. Land reform is another problem - we are losing agricultural land in areas like Mpumalanga because of the extension of local housing and mining. It destroys agricultural land and that's why we are working very hard to change the subdivision of land.

Q What do you enjoy the most about your position?

A When I hear that our work has been successful. For example it is enlightening to hear that even in this drought, a small scale farmer will tell us that through the hard work of the department, he has been able to save 90% of his cattle. The feedback I receive means that the services we render here actually reach the people. I also enjoy sharing ideas within the industry and I do believe my regular meetings with key stakeholders within this industry have an impact in changing the attitude of farmers.

Q What are your goals as Minister?

A I believe that Africa as a region has a lot to gain from each other. For example, if we were to galvanize our

farmers and the government of Angola – given their high water levels and rich soil – we could produce crops such as rice for ourselves which takes away a part of our import burden. This will not only provide jobs and an income for our farmers but it will improve production within Angola.

I feel Africa should begin to share what it produces. Each country should appreciate its own value chain and realise that we do not need to import. As a minister I want try and unify the industry – we are dealing with a racial gap between black farmers and white farmers – and I feel food security will help create peace. Farmers can produce peace: when people have enough food on the table they are less likely to do bad things to get it.

Q Where are you seeing positive growth in your market?

A As a department we are quite busy in creating markets for our products. I'm very happy to tell you that India has just agreed to produce Persian pears in South Africa as well as import our mangoes and pork – all to feed their population of 1.2 billion people. China is also on board with us and if it wasn't for the drought, our first batch of maize would have gone to China.

Q Where do you see yourself in 5 years' time?

A I don't know what will happen in 5 years' time or even tomorrow – I should just focus on what I can do while I am still in office.

Q What is your advice for the agricultural sector?

A Climate change is the reality of life. Our task is to find ways and means to adapt and mitigate our existence. This means conducting more research to improve water storage; finding new cultivars that can withstand drought; exchanging information and working with scientific institutions and universities so that more research can be done. I believe that as a continent we need to share more within and balance our imports versus exports.

Q Any interesting facts about yourself which our readers would be interested to know?

A I consider myself a humble person and many mistake that as a weakness. It is not. I simply respect another person as I would like him/her to respect me.

Q African Agri Investment Indaba: What will this bring to the agricultural sector?

A It is my view that investment into African agriculture is of great importance. I believe foreign funding is welcome and should be used to create enthusiasm among our entrepreneurs and bring fresh talent on board. There can be no other forum more important to the agricultural sector than the African Agri Investment Indaba; and so we must ensure that all that is said at this Indaba is not forgotten once we walk out the doors. I would like to thank the people who have made this event happen. ■

Digitising the agricultural sector

“The future of technology and mobility in Africa is very bright and Africa has a chance to leapfrog the development stages that Europe undertook. But where it took Europe decades to get where they are, Africa does not have that time,” says Vuyani Jarana Chief Officer of Vodacom Business.



Vuyani Jarana, Chief Officer of Vodacom Business.

“Africa’s development can no longer be incremental – we can no longer afford to take baby steps and pilots here and there. We have to implement scalable solutions that will bring mass social progress. And leveraging mobility as a platform for transforming African economies is what becomes important.”

Jarana adds that digitising the agricultural sector will help make it interesting to young people.

“When you apply technology into the sector, you will bring back young people into agriculture and is how we will create jobs and make sure the demographic dividend doesn’t become the ticking time bomb that it looks like it could be today.

Vodacom provides IT and telecommunication services to

businesses in South Africa and across the continent including business-to-government services. In agriculture, it works with government and commodity buyers to integrate value chains for smallholder farmers using digital platforms.

“The structure of African agriculture is highly fragmented. In most of its countries, 70% of the farming population are small holder farmers and in cases like Ethiopia, it goes up to 90%. Some of these farmers farm no more than 5 hectares per farm to as low as 1 hectare like Ethiopia. However they account for 90% of agricultural produce in most of the African countries. It is therefore important that the commodity buyers are able to have access to the produce and understand the farming proficiency and skills of each farmer.”

“This is where we come in by tying together the value chain and making it visible for a commodity buyer. This way, we ensure the buyer can see the production cycle of each farmer and how the produce was produced and under what conditions. Therefore the challenge of farmers producing and not knowing what the market needs is now addressed because we can provide the platform for collaboration between commodity buyers and producers in the African continent.”

Vodacom Business has countries where it has direct presence with an invested network – South Africa, Mozambique, DRC, Lesotho, Kenya, Ghana, Nigeria and Tanzania. “Those are our priority countries today however we also look at countries where we don’t have presence in terms of the network infrastructure but they have scale in terms of agricultural impact. Countries like this would be Ethiopia, Rwanda, Zambia, Uganda and Senegal.

“Our key areas of focus are making sure the various stakeholders understand our proposition and the impact of it. AfDB has its own mission that by 2025, Africa must feed itself. That does not leave us a lot of time and for Africa to feed itself, a lot of private capital flows must go into agriculture to finance rural agriculture and smallholder farmers. But for financial institutions with private capital to do this, the need to have a sense of risk profile in agriculture production. This is where our services are useful.”

Jarana says there are two types of risks in farming – production risk and market risk. “When we bring in commodity buyers on the market side, we derisk the market side of things while focusing on the production risks by making sure the production cycle is visible including the farmer’s proficiency, skill and practices using big data and analytics. This helps to improve the risk profile of rural farming or smallholder farming.” ■

A Ready farmer can weather any storm



A mobile phone-based solution for agri-businesses to interact and transact with smallholder farmers.

Vodacom
Power to you



Mezzanine, together with Vodacom, developed a mobile enabled solution to mitigate the risk for agri-businesses doing business with SHFs

Benefits

An interconnected agri-community with:

- Improved visibility of field operations
- Increased access to quality information and more informed decision making
- Less risk in transacting with smallholder farmers
- Improved farmer database management and security for authorised users
- Increased efficiency, productivity and quality of processes in the agri value chain
- Intuitive applications providing field workers with data collection and decision support tools in even the least connected environments

Be a Ready Business.

Call 082 1960 or visit vodacombusiness.co.za


mezzanine

The future for IoT in Africa is an exciting one

Africa is no stranger to connectivity. While Africa may be behind when it comes to IT infrastructure compared to more developed nations, the fact is that more than double the population of sub-Saharan Africa has mobile phone access. With smartphone usage on the up and IT literacy expanding, bringing Internet of Things (IoT) level connectivity is a natural progression for this tech-hungry continent.

By Brett Parker, Managing Director of SAP Africa.



Brett Parker, Managing Director of SAP Africa.

The IoT should be considered more than just technology. Rather, it is an ecosystem of products and services – from software to cloud technology – where effective connectivity adds real business value. This derived value presents an exciting prospect for the region. It also has the potential to drive significant economic growth and – in time – bring African IT up to speed with the rest of the world.

And the adoption of IoT solutions across Africa is not a farfetched idea: Research from McKinsey estimates that Africa will have tripled its internet

penetration to over 50% – the equivalent of 600 million regular internet users – by 2025. It's also predicted that the potential of the IoT in developing countries is huge, with such nations to be accountable for 40% of the worldwide value of the IoT market by 2020.

Currently, 15% of the global population resides in Africa. More than half of global population growth from now until 2050 is expected to stem from the continent. This means having a global, connected system is crucial.

The IoT has the potential to solve many of the issues the continent is currently facing. And many African countries have already embarked on the IoT journey. Healthcare providers in Ethiopia are monitoring the health status of outpatients to better adjust treatment. Intelligent traffic lights in Nairobi are helping ease traffic congestion. Utility providers in South Africa are using load-limiting smart meters that can warn residents ahead of imminent controlled outages. Unmanned aerial vehicles (UAVs), satellite imagery, DNA analysis and apps are being used as part of conservation efforts – by predicting poaching attempts and monitoring wildlife.

The potential is limitless. As technology advances and encroaches upon most people's day-to-day lives in some shape or form, people can expect more IoT enabled solutions that address the unique issues facing Africa.

Agriculture is a vital, yet struggling, industry. Sub-Saharan Africa has 95% of arable land that is dependent on rainfall-fed agriculture. This means food crop productivity is often low, with food insecurity a constant issue. This is where the IoT can help – wireless sensors can track crop growth, soil moisture and water tank levels. Unmanned vehicles can reduce physical labour. The result will be better yields at a lower

cost. According to the United Nations' Food and Agriculture Organization, food production must increase by 60% to be able to feed the growing population expected to hit nine billion in 2050.

With SAP's help, John Deere for example, is taking the IoT out into the field and boosting efficiencies with the goal of improving per-acre crop yields. They are using Big Data to step into the future of farming. This interconnectivity with owners, operators, dealers and agricultural consultants helps farmers enhance productivity and increase efficiency. Sensors on their equipment help farmers manage their fleet and decrease downtime of their tractors as well as save on fuel. The information is combined with historical and real-time weather data, soil conditions, crop features and many other data sets.

Connected robots and systems can help limit the effects of a mass disaster. The ongoing Ebola outbreaks in West Africa highlight the ramifications of human contact. While current technology is still relatively immature, the future of the IoT-enabled technology and better-developed robots and outbreak control mechanisms, like SAP's SORMAS, could see many lives saved and the spread of disease minimised.

The future looks bright, but there are still barriers to overcome. The cost of implementing the IoT is huge and investment will most likely come from outside the region. As well as that, the potential risks of hacking remain a threat as long as there is internet-enabled technology involved. And, having the right skills and training programmes in place will be imperative when making the most of the opportunities that come with new technology.

Overall connectivity is clearly an important enabler. As it stands, many African nations fall short in this area. Yet the lack of a legacy infrastructure can actually be beneficial for Africa. Instead of gradual tech upgrades, the continent can jump ahead into new technologies in ways more developed countries cannot. This also means that the decisions of those spearheading change now are likely to impact the solutions of the future.

There is no question: the IoT is coming to Africa and African businesses cannot ignore it. For now, having the right mindset to embrace innovation is crucial. Added to this, being aware of the inevitable security challenges, and being able to articulate the return on investment to fellow board members will be key skills when pushing for a new tech ecosystem. For a continent fuelled by its entrepreneurial spirit, the prospect of an IoT enabled future presents an exciting period to come. ■

IT News Africa

FROM AFRICA TO AFRICA

VISIT OUR WEBSITE
WWW.BAGTECHINT.COM



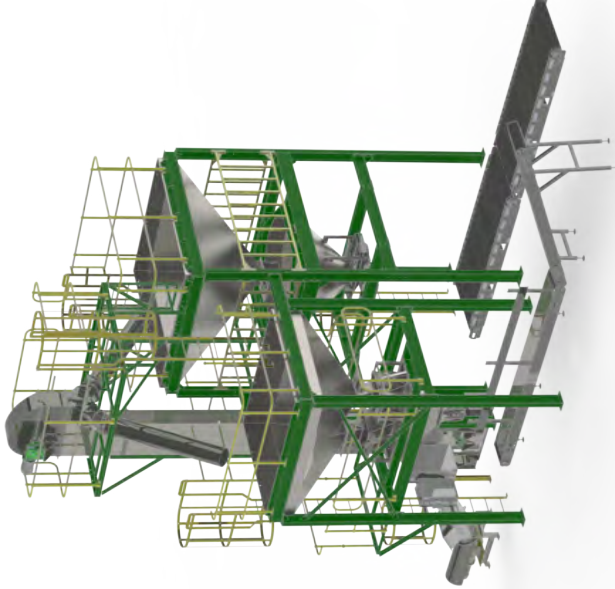
ONLINE MONITORING SYSTEM



BAGTECH, YOUR PARTNER

IN SUPPLYING AND DEVELOPING MACHINERY FOR BLENDING, COATING AND BAGGING FOR FERTILIZER. OUR MACHINES ARE DESIGNED AROUND YOUR NEEDS. WE DELIVER AND COMMISSION ON SITE AT YOUR FACILITY AND OFFER TECHNICAL SUPPORT.

- COATING EQUIPMENT
- BLENDING EQUIPMENT
- BAGGING EQUIPMENT
- SCREENING EQUIPMENT
- CONTAINER BLENDING PLANT
- COMPACT PLANTS



CONTACT US

+27 (0) 31 2010607 SOUTH AFRICA



EMAIL US

BAGTECH@BAGTECHINT.COM

FOLLOW US



BAGTECH

FERTILIZER MANAGEMENT
AND HANDLING SOLUTIONS

Land mapping resolves conflict and empowers Tanzanians

Farmers across Tanzania have farmed the same land for generations but the majority only have informal land tenure security and little documentary evidence to prove their links. Without adequate community land mapping, farmers are at risk of having their land appropriated by outsiders, sometimes with assistance from local leaders. This according to Farm Africa, an international organisation working to build a prosperous rural Africa.



Farmer Katarina Hhaynihhi with Farm Africa officer Thomas Charles Mbaga and a land map of Hhaynihhi's village, Yaeda Ampa.

Communal land that is not being cultivated is also vulnerable as outsiders can perceive it as unused and therefore available for development, despite the fact that local residents depend on it. As a result, unmapped land is often the first to be assigned to investors and used for state development projects, while people living there may receive little or no compensation when their land is taken.

Thanks to funding from the European Union, Farm Africa has worked with 2,436 farmers in the village of Yaeda Ampa in Tanzania's Nou Forest region to create a detailed land use plan which is helping to address conflicts in their village.

Overseeing the project is Farm Africa Coordinator Beatrice Muliahela. She explains, "Unless you know how the land is supposed to be used, you can't plan properly. When there is demarcation of land, it makes it easier to have an understanding of who has the rights to what. The vast majority of people in Yaeda Ampa are entirely dependent on natural resources including soil, plants, and water through agriculture, livestock and forestry. The population is increasing rapidly, putting these resources under enormous pressure."

"This has led to expansion of agriculture, settlements, grazing, and increased tree cutting for charcoal and timber. The mounting pressure on land resources has resulted in a growing number of conflicts between different land users and insecurity of land tenure. There is deforestation and soil and water resources are being degraded, whilst poverty is increasing among community members."

Land mapping involves talking with district officials and bringing them together with the whole village so everyone understands what is happening, and people's needs and concerns can be voiced.

Katarina Hhaynihhi, 48, and her husband Simon, 46, farm 11 acres (4.45ha) and keep a small amount of livestock. They are reliant on their land for survival and have taken an active role in Farm Africa's land mapping project since the beginning.

"Land is an essential resource and provides us with a living, it is all we have to sustain our daily needs. We don't consume everything we produce, we sell some of our crops to get money to buy clothes, send our children to school, pay hospital bills, and buy foods," says Hhaynihhi. "We have received training on land issues and have learnt about the importance of planning our land and how to manage those areas. We have also participated in developing a new land use plan for our village and in establishing by-laws to govern different land uses proposed."

"If the villagers understand where they can go and where they cannot go it makes it much clearer for them. This involves boundary consolidation so they can understand where the forest ends. Now people cannot just go and cut down the forest because they know where the land is demarcated and are aware of what is and is not theirs," Muliahela says.

Hhaynihhi agrees. "There used to be lots of disagreements around grazing and the use of forests and water sources and now those issues are gone. Now we know about planning, we realise that this is a tool that can give answers to different land use conflicts."

"For example, our village had a boundary conflict with another village. Thanks to land use planning we have been able to get the village land certificate approved by a land commissioner which shows the size and boundaries of our village.

"We also had our own problems with people allowing their animals to graze on our farm. After the village land use planning and setting of bylaws that situation is over."

Another positive outcome is that people have become more aware of environmental protection and conservation. Farm Africa help set up environmental committees and members take an active role in policing the local land. Hhaynihhi was selected by her village to be a committee member.

"My role is to facilitate proper management of the environment, including the forest, water sources and even sanitation in our surrounding area. We go on forest patrols and report our findings to the village government. The community sees us as the caretaker of their surroundings." ■

Make the agri space 'sexy'

In five to ten years' time Africa's population will grow quite dramatically and yet land resources, water resources and the ability to find new ways to produce, won't. This is where Lehlohonolo Ramongalo, Managing Director of Figtury believes technology will be a catalyst to enabling that.



Lehlohonolo Ramongalo,
Managing Director of Figtury.

"Africans need to make the agricultural space a little more inviting and 'sexy' because the average age of a South African farmer is between 50 and 60 – it's bad that we have old people producing our food. I think the youth should take that into consideration and really think about generating value in this sector with technology."

Ramongalo assures the youth that their job won't necessarily consist of "wearing gumboots and working with a shovel all day" but transforming and modernising the agricultural space with their knowledge and input.

Figtury develops cognitive IOT (Internet of Things) based solutions that enable clients to disrupt and differentiate at the edge of the network through cloud and mobile applications. In the agriculture sector, Figtury develops digital industrial internet products for the agri-market and the facilities management market.

"Some products we currently offer to the agri market include 'Livestock Wealth' – This is a cow trading platform that allows anyone to purchase a pregnant heifer and earn an annual income from the heifer as it gives birth. This enables any citizen to be a farmer, without the headache and the overhead of a farm," says Ramongalo.

"With our Livestock Wealth product there is quite a lot of movement and we are gaining some really good traction. The last time I looked, the platform was managing around R4m worth of cattle – that's the size of the virtual herd. We are hoping to scale that further. We launched the platform a year ago and we are looking at bringing more value across to our investors. We would like to scale it across other parts of the continent – at the moment we are prototyping in South Africa but the business model has proven to be quite scalable."

"Another one of our products lean towards the game side where we use second generation trail cameras to manage,

monitor and track activities on a game farm setting for security, conservation and research purposes."

Ramongalo describes Figtury's services as bringing agriculture closer to the consumer. The real vision behind it is to virtualise the farm – wherever it is – and bring it to the city, allowing the city-dweller can be cognisant and conscious of what is happening in the farming space. With livestock, it gives farmers the ability to get money in before they actually sell their livestock, which provides a vital credit line for the farmers who are onboard the 'Livestock Wealth' platform.

The camera management system gives conservationists and wildlife/game owners transparent visibility of what is happening on their properties.

"Imagine owning 40,000ha of land. You have a trail camera somewhere – you may not even remember where you put it and you have to go to it to remove the SD Card, come back home and check the pictures on your camera. Our system enables that same camera to be synced into the cloud and the user can remotely access those pictures as the camera takes them from the comfort of their home on their tablet, computer or cellphone. That is the value we offer."

"This is really the tip of the iceberg," Ramongalo says. "I'm of the opinion that agriculture is one domain that has been slow to take up technology, but is also one space where technology is in fact needed more than in other places where it is applied."

I see a situation on the next five to ten years where farmers fully adopt technology and use it on a day-to-day basis. The market is going through changes – good changes. The awareness and adoption of technology has increased. People are more open to try technology they have never seen before, and if you can prove value then you can crack it. It's not the silver bullet that will solve all the problems, but it is an enabler to really help farmers make the right decision at the right time to get close to the desired results. ■



argusmedia.com

FMB

Book before
9 December and
save \$200

Argus FMB Africa Fertilizer 2017

15-17 February • The Westin, Cape Town, South Africa

*Improving Access and Increasing Consumption of Fertilizer
Building Meaningful Supply Chain Partnerships in Africa*

Key Speakers Include:



Ibrahim Assane Mayaki
CEO, **NEPAD**



Tarik Choho
Managing Director, **OCF Group** and CEO, **OCF Africa**



Dinnah Kapiza
Owner and Managing
Director, **Tisaiwale Trading**

Meet new business partners and hear expert insight at the leading event on fertilizer in Africa:



500+ Delegates: Build relationships with public and private sector leaders driving fertilizer development in Africa



30+ Speakers: Fresh insights from leading fertilizer experts, policy makers and regional players from across Africa



20+ African countries represented: Meet speakers and delegates from west, east and southern Africa at the only pan-African fertilizer event

Principal Sponsor



Fertilizer Manual Sponsor



Gold Sponsor



Lunch Sponsor



Silver Sponsors



Bronze Sponsors



Official Magazine



Supporting Partners



Register now at www.argusmedia.com/fertilizer-africa



Enhancing the international growth of Zambian enterprises

The Zambian International Trade & Investment Centre (ZITIC) was created on April 30th, 2009. It is still the only private sector driven company in Zambia, which promotes and facilitates local and international trade and investment. The main objective is to provide efficient and cost-effective consultancy services to business.

The company was pioneered by Honourable Sebastian Kopulande, MP, to contribute to Zambia's development through trade and investment support, facilitation, research, advocacy, networking and enterprise training.

Sebastian is a Rhodes Scholar and holds the degree of Master of Philosophy (M.Phil) in Management Studies from the University of Oxford, United Kingdom (1985). In 1993 he was elected as a PEW Economic Freedom Fellow at Georgetown University USA, where he studied Transitional Economics.

He has worked as a Management Consultant for Deloitte and Touche and held senior management positions in various companies in Zambia. He served as Board Chairman on several Government-owned companies. He has very rich experience in Government, having served as Director of Industry in the Ministry of Commerce, Trade and Industry, Comptroller/Permanent Secretary at State House under late President Frederick Chiluba and later as Special Assistant to the President (Special Duties), the late Dr. Levy P. Mwanawasa, with the responsibility of advising the Zambian Head of State on a variety of national and international issues. He has a trail of major achievements in public office and is credited with numerous milestone innovations in policy development and infrastructure projects that he helped initiate.

Zambia is a win-win investment destination for investors world-wide. To the country's advantage, it boasts of having almost 50% of the Southern African region's water resources in its boundaries; vast untapped natural resources in all the investment segments; a stable and peaceful political, economic, financial and social environment, and a flexible, open and benevolent approach to investors.

ZITIC services

At ZITIC we believe in minimal or zero bureaucracy, and expeditious professional services. We encourage private and PPP partnerships, Joint Ventures and other mutually beneficial Agreements.

Investment Promotion Activities

"We serve as a reliable and efficient reference point for foreign and local investors and provide procedural support for project approvals and processes in the implementation of investment

projects. One of our numerous strengths is sourcing – both in local and international markets. Our success lies in our reputable and sound market intelligence network, and our investment project database, which helps us to identify investment opportunities in Zambia and globally," says Hon Kopulande.

Investment Facilitation Services

In order to minimize the cost of investing in Zambia, ZITIC assists local and foreign investors in formal registration processes, and provides legal assistance to enable Regulatory compliance. Many investors seek to procure land and business premises, or seek to secure investment sites in Multi-Facility Zones (MFEZ). Other investors require the preparation and negotiation of Investment Promotion and Protection Agreements and Concessions (IPPs).

Exciting opportunities exist in Zambia's Energy, Agricultural, Tourism, I.T., Health, Education, and Construction sectors.

Trade Promotion Activities

According to Hon Kopulande, "In order to contribute to Zambia's foreign earnings and economic growth, we strongly support international trade promotion activities, which we believe will contribute to the socio-economic well-being of our people." That is why ZITIC offers services to help Zambian companies export their products and services, develop business capabilities, find external partners and enter new markets. "We want Zambia to become a thriving African business hub with globally competitive corporations, taking full advantage of the country's strategic geo-political location and favorable socio-political environment."

Pursuant to this objective ZITIC cooperates with the COMESA and SADC Secretariats to enhance intra-regional trade; and advise on preferential trade agreements such as COMESA, SADC, EPPAS, AGOA, FOCAC and other bilateral and multilateral trade agreements where Zambia is featured.

Micro and Small Enterprises (MSEs)

ZITIC supports MSE's and guides them to strengthen governance and improve the quality of service delivery. We supplement this with training, export networking, matchmaking, trade missions and access to equitable markets. ■



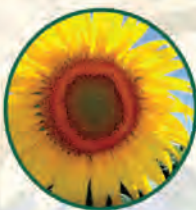
AGRICULTURAL RESEARCH COUNCIL

The Agricultural Research Council (ARC), a schedule 3A public entity, is a premier science institution that conducts research with partners, develops human capital and fosters innovation in support of the agricultural sector.

Through its research work, the Council impacts the agriculture and related sectors significantly, particularly through scientific knowledge generation that influences economic performance and a sustainable development for a transformed society.

The Council's interventions aim to increase agricultural production and productivity, including the creation of new areas of agricultural production to enhance food security and income generation. Special focus on expanding agricultural production in communal areas, rural poverty nodes and peri-urban areas where the potential for increasing the number of productive farmers may be highest.

*Agricultural Research Council is committed to Excellence in
Agricultural Research and Development in South Africa and beyond.*



Tel: +27 124279700 • Fax: +27 124305814

Email: enquiry@arc.agric.za • Website: www.arc.agric.za



Zambia a beacon for investment

Founded by George Mashinkila in 1994, Yombwe Investments Limited (YIL) is growing its role as a trusted investment partner in food and agribusiness. Mashinkila is a qualified Agricultural Economist with over 30 years of field experience covering SADC, COMESA, EAC, IGAD and ECOWAS regional economic communities. Following graduation in 1977 with a Bachelor of Agriculture Sciences degree at the UNZA, Mashinkila worked in home country for two development banks for seven years – Development Bank of Zambia and Zambia Agriculture Development Bank.

“I was employed by FAO/UN for 30 years in Nigeria, Somalia, Sierra Leone, Italy and Ethiopia. During my FAO career, I participated as Agricultural Economist/Project Analyst and Mission Leader in more than 30 programme/project missions for formulating ARD projects in Gambia, Ethiopia, Eritrea, Zambia, Tanzania, Ghana, Sudan, South Sudan, Lesotho, Malawi, Uganda, Kenya, Rwanda, Sierra Leone, Egypt and Uganda.”

Mashinkila took early retirement to focus on YIL operations and management as the Chief Executive Officer from FAO/UN August 2014.

YIL is a diverse African investment holding company incorporated in Zambia with subsidiaries in niche sectors of the Zambian economy – agriculture and rural development, energy, trucking/logistics, mining, micro finance, construction and property development, water and energy, mining and trading. YIL works with local and external partners who are recognized leaders in their respective industries to generate synergies in high capital industry support projects. The core focus is agriculture and rural development; attract private sector investment for agriculture; reduce post-harvest losses and develop rural infrastructure.

“Our vision is to be a catalyst for sustainable growth in Zambia’s food and agribusiness sector. Building businesses and delivering enviable returns while mindful of impacts on people and the environment – food and agribusiness investment with a purpose,” says Mashinkila.

Presently YIL has activities in Zambia only, but has plans to expand to Mozambique, Malawi, Ethiopia, Uganda, Ghana and Nigeria. It aims to service the agricultural sector by focusing on improved and increased agricultural productivity; agro-processing, agribusiness and marketing; employment and job creation including the rural youth; improved health facilities; improved education facilities; Increased farm household income; better social amenities and facilities; knowledge management and skills transfer.

“As you may be aware, one of the key pillars and drivers for Zambia’s economic development is agriculture. However, while

Zambia has potential to emerge as a leading breadbasket in the region, the agricultural sector has not delivered expected results partly because of lack of mechanisation and capital injection by the majority of Zambian farmers,” Mashinkila. Says.

The Government of the Republic of Zambia (GRZ) has embarked on the commercialisation of Farm Blocks (100,000ha) in the country by making land available for large scale agribusiness investments also promoting and supporting the establishment of Mini Farm Blocks with an individual area of 10,000 hectares, consisting of 10 lots of 1,000 ha. YIL/MFL has acquired 10,000 ha virgin undeveloped land with agricultural potential in Machiya Chiefdom, Mpongwe District, Copperbelt Province; and will encourage the different categories of farmers to invest in the mini farm blocks through the franchisee which will be responsible for providing shared services for developing the mini farm block.

The Government of the Republic of Zambia’s (GRZ) National Agriculture Investment Programme (NAIP), 2014 to 2018, the Revised SNDP (2013 – 2018) and National Strategy on Industrialization and Job Creation (2013) recognise the potential of agriculture to stimulate broad-based economic development through commercial agricultural production, processing, intensified agri-business and socio-economic activities. The agriculture sector is important to the Zambian economy since it contributes more than 20% to GDP.

“The sector has strong potential to increase its contribution to the country’s GDP, foreign exchange earnings, employment and reduction of poverty. Zambia has about 42 million ha of agricultural land but only 14% are utilised, with maize as the dominant crop and few high value crops as sugar cane, cotton, tobacco and soybeans,” says Mashinkila.

The agriculture sector in Zambia is expected to increase farm incomes, create rural employment opportunities and reduce poverty and stimulate national economic growth. The sector employs 67% of the labour force and supplies raw materials to agro-processing industries that account for approximately 80% of manufacturing value addition. ■

A liquid and transparent derivatives market for the agricultural sector

AgriLeaders met up with the JSE's Chris Sturgess, Director of Commodities & Key Client Management, as well as Raphael Karuaihe, Manager of Commodity Derivatives; to find out how the JSE Commodity Derivatives Market supports the agricultural community.



Raphael Karuaihe, Manager of Commodity Derivatives.

The JSE is more than a 125 years old. And for more than 100 years the JSE has operated purely as an equity market where companies came to list to raise capital. This was shortly after the Gold Rush in Johannesburg of the Reef and, logically, many companies that influenced the creation of an exchange at that time were gold mines who needed to raise money to buy equipment for the mines. This is according to Karuaihe.

"Of course the JSE of today is no longer the same because of a dynamic financial landscape. Today, the JSE is no longer an equities-only exchange and offers a complete suite of financial products across equities, derivatives, equity derivatives, bonds, currencies and commodities," said Karuaihe.



Chris Sturgess, Director of Commodities and Key Client Management.

Sturgess says the Commodity Derivatives Market was only founded in 1995 following the deregulation of the agricultural markets in South Africa. "With the change in government so came the change in marketing policies and so this opened up the opportunity for a commodity derivatives market to be established. The aim of a derivatives market is to provide a platform for participants to manage their price risk with this working well especially for our flagship grain products like white maize, yellow maize,

wheat and soya beans. The commodities market was originally founded under the SAFEX license; however this was acquired by the JSE in 2001 and today is integrated into the larger JSE exchange business," says Sturgess.

The JSE derivative contracts provide the agricultural industry with standardised contracts through futures and options, with the ability to manage price risk and thereby remove the volatility. "Think of it as a farmer wanting to lock

in a price for his commodity that will afford him to continue producing whilst a miller has the same objective but to manage the risk of higher prices," Karuaihe says.

A liquid and transparent derivatives market is hugely beneficial to the market as this allows participants access to a platform that where they can not only can they discover the value of their product, but can also use this to manage out price volatility in their business. This ultimately encourages sustainability of the business and allows for further expansion.

"We are fortunate the Commodity Derivatives Market in South Africa has been a real success story and today is globally recognised. With the establishment of a robust and secure market, so we find that access to financing commodities held in storage is readily available," Sturgess adds.

The JSE's Commodities Market today remains the only platform globally to offer derivatives on white maize improving its footprint. In addition to its deliverable grain contracts, JSE also offer derivatives contract on beef; metals like gold, platinum, palladium, copper and silver; energy products like crude oil, diesel, heating oil and gasoline; and access to the global grains markets for corn, soybeans and wheat. The diversified product range strives to provide market participants access to a liquid and efficient market range.

"We are primarily a South African domiciled exchange regulated within the South African legal framework," says Karuaihe. "However, current technologies make it possible for exchanges to play a more meaningful role beyond borders. When looking at the other asset classes like your equities, and currencies, the JSE is well-established globally and on the African continent. It is however only now that, on the agricultural commodities side, we are collaborating with other African countries to roll out our products and services as well. You may be aware that the JSE is the only exchange on the African continent that offers commodity derivatives and we have been actively assisting our peers in the other African countries," he adds.

The JSE is currently piloting a project in Zambia where the Zambian agriculture and agribusiness community are, for the first time, in a position to manage price risk on their white maize, wheat and soybeans in USD\$ using derivative instruments.

"Apart from the Zambian Agricultural Commodity Exchange (Zamace) whom we have partnered with, the Zambian agricultural community will benefit from skills transfer. Once

Are energy prices cutting into your bottom line?



Effectively manage the price risk of rising or falling fuel prices with Diesel Hedge Futures and Options.

COMMODITY DERIVATIVES

Diesel Hedge

The Diesel Hedge gives you exposure to an efficient hedge for the local diesel pump prices by tracking an international reference market. Now you can ride out the fuel price waves with confidence. Talk to us and find out how.

011 520 7000 | commodities@jse.co.za

www.jse.co.za



Johannesburg
Stock Exchange

this project delivers the desired results, we could consider partnering with other countries in the region on the same basis," says Sturgess.

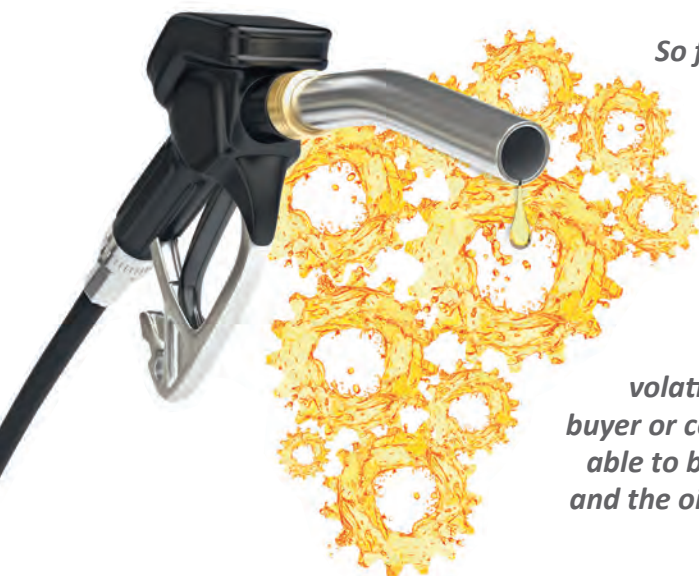
Karuaihe says current market conditions affecting trade activity at the JSE are the back to back droughts experienced over the last two marketing seasons. "While we are hopeful that the following season will be a good year with above average rainfall, we are not out of the woods yet. Such drought conditions have had an influence on the trading activity on our platforms since a commodity derivatives market trading activity is directly related to the size of the underlying market."

JSE continuously strives to explore new products in the agricultural sector and so plan to extend its product offering to include a lamb carcass contract as well as a feeder calf contract, thereby enabling the meat sector with tools to

manage their price risk. Although the focus is on additional products, JSE remains in touch with its existing products that may from time to time require enhancements to ensure they remain relevant and an accurate reflection of prices, this requires a sound and secure physical delivery platform.

"The JSE Commodity Derivatives Mmarket has come of age since it was started established 21 years ago. Today it is hard to imagine the South African grain industry without the use of our instruments for price risk management. We are excited with developments in the beef and livestock space with the introduction of Beef and Lamb cCarcass cContracts and the soon to be launched Feeder Calf cContract. We are equally excited with our collaboration on the USD-denominated Zambian contracts and the sky can only be the limit," Sturgess concludes. ■

Accelerating away



So far this year, 26 000 JSE Diesel Hedge Futures and Options contracts have been traded, with an estimated value of R630m. This number is up by 39% as compared to 2015, with 130 million litres traded. The Diesel Hedge gives investors the opportunity to hedge against movements in the local pump price of diesel. It's particularly suited to investors and business owners in the mining, agriculture, transport and logistics industries. "It gives you the ability to lock in a price, which is driven by two volatile components – the oil price and the exchange rate. As a buyer or consumer of diesel, by locking into a contract now, you are able to buy diesel at a cheaper price if the exchange rate devalues and the oil markets go up," says Chris Sturgess, the JSE's Director of Commodity Derivatives.

Conversely, importers and refiners who may be concerned that the diesel price is going to fall could lock in the price at a higher level. The contracts reduce risk by providing a hedge through following the price of European gasoil, as traded on the New York Mercantile Exchange. The contracts are traded in rand per litre, with each one representing 5 000 litres of diesel, although there is room to expand this further, and provide investors with a hedge against movements of the price of diesel, which is refined in Europe.

By locking in their margins, regardless of the movements of the diesel price, Sturgess believes businesses could benefit in relation to long-term sustainability. Initially, the Diesel Hedge appealed to financial players but Sturgess says the JSE is seeing an uptake from more transport and logistics companies. He suggests that anyone using 10 000 litres or more of diesel per month would be attracted to this derivative.

The JSE is hoping to take its Diesel Hedge facility to the next level by exploring the possibility of a deliverable diesel contract. "This will solve some of the risk in matching the settlement price because we are now able to pick up physical delivery of diesel on the grid. We want to actively explore opportunities for deliverable diesel in the wholesale space," he says.

Sturgess notes that the JSE is considering contracts of 40 000 litres – the amount of diesel carried by the average oil tanker. The diesel is available at 26 delivery points around South Africa and the final settlement price would be the deliverable diesel. "What we are doing is tapping into the existing delivery network and making it more visible," he says, adding that they had received interest in the new offering and were holding workshops about it.

The current products are typically 12 months out but are driven by demand. "We're excited to be working on the deliverable contract. It's a great combination taken together with our standardised 5 000 litre diesel hedge contract," he says.

"Hopefully the two will complement each other, so that we are able to increase the growth of our hedging products."

Investors have the option of buying as many contracts as they need as the JSE contract taps into the deep and liquid international markets. With so much flux in global markets, the diesel hedge is seen as a comforting option.

"The rand has a huge impact on our local energy prices. With most commodities linked to the dollar, we see volatility in the exchange rate that filters through to commodity prices. Contracts like this at least offer some peace of mind," says Sturgess. ■

Africa's outlook is positive

Chief Executive Officer at Zambian International Trade & Investment Centre (ZITIC), Sebastian Kopulande shared his insights with AgriLeaders into his work in Zambia and his love for the agricultural sector.

Q Biography

A On 11th August 2016, I was elected as the first Member of Parliament for Chembe Constituency in Luapula Province, Northern Zambia. I am married with four children. I am a Rhodes Scholar with a degree from the University of Oxford in Management Studies, Master of Philosophy (M.Phil), United Kingdom (1985). In 1993 I was elected as a PEW Economic Freedom Fellow at Georgetown University USA, where I studied Transitional Economics.

I have worked as a Management Consultant for Deloitte and Touche and have held senior management positions in various companies in Zambia. I also served as Board Chairman on several Government-owned companies. In Government I served as Director of Industry in the Ministry of Commerce, Trade and Industry; Comptroller/Permanent Secretary at State House under late President Frederick Chiluba and later as Special Assistant to the President (Special Duties) under late Dr. Levy P. Mwanawasa. I am credited with a trail of major achievements in public office and have achieved numerous milestone innovations in policy development and infrastructure projects that I helped initiate.

With my extensive experience in economic development matters, trade and investment promotion, I created the Zambian International Trade and Investment Centre (ZITIC) in 2009. Recently I was appointed by the Speaker of the Zambia National Assembly to represent Zambia at the ACP-EU Joint Parliamentary Assembly. At our first meeting in Brussels, I was elected as Chief Rapporteur on AID to ACP countries.

Q Tell me about your work history within serving the agriculture industry in Zambia?

A First of all, in my personal capacity I come from a family who has a strong agricultural background. I own and manage two farms – one in Lusaka dealing in crop production, the other in Luapula which deals in ranching activities. During my term as Permanent Secretary at State



Sebastian Kopulande, CEO of ZITIC.

House, and as Special Assistant to the President, I was instrumental in providing policy advice to the Head(s) of State. A key feature of this advice was the economic diversification programme, to lean Zambia away from dependence on copper extraction, to agriculture.

We put in place incentives such as land reform, access to financing, agricultural equipment and fertilisers by the majority of traditional and small-scale

farmers. I also advised on infrastructure development, which would enable rural farmers to more readily access markets. These policy innovations are still in place today, and are assisting our rural farmers. Recently I served as a Chairperson of the Project Management Board of the Irrigation Support Fund financed by the World Bank through the Ministry of Agriculture in Zambia.

I am strongly focussed on our rural women and youth, who are the majority in the rural areas. They need sustained empowerment in agriculture, equitable markets,

affordable financing, and land ownership. The more they are employed in agriculture, the more we shall attain the Millennium Development Goals in improved nutrition, health, employment, and reduced child mortality rates.

Q How did you get involved with ZITIC and come to be the CEO?

A Looking at all the positive natural endowments Zambia has – the vast arable land, the bulk of water resources in Southern Africa, available manpower, amenable climate and national peace and stability; I decided to make a personal impact on the economy, using my experience in industrial and trade policy, economic policy formulation, small enterprise development, and investment promotion by establishing ZITIC. I believe that the private sector should play an increased active role along-side government Initiatives.

The passion for my country birthed at the Zambian International Trade and Investment Centre – ZITIC – on April 30th, 2009. Since then we have made notable achievements and continue to do so, in promoting Trade and Investments into Zambia.

Q What are your goals as CEO?

A I am currently the Chairman and CEO of ZITIC. My goal is to drive ZITIC higher, to the highest possible point a private company can attain. I wish to account for multi-million USD investments through private, and PPP initiatives that shall impact positively on Zambia's GDP, create more jobs and enrich our rural, peri-urban, and urban peoples.

Q What keeps you up at night?

A Many nights I am kept awake at night putting together programmes that will help the majority of people in my Constituency, Chembe. I wish to improve and increase agricultural production, improve infrastructure, education, primary health; and create more jobs for them.

I lie awake at night co-ordinating the direction of ZITIC and mooted programmes to increase FDI flows into Zambia, which will impact GDP, and alleviate poverty in our country.

Q Challenges you face in your job?

A One of the biggest challenges I face is that I always want to hit the ground running. I am impatient to see credible and sustainable development take place in Zambia, and in the whole of Africa.

Q What do you enjoy the most about your position?

A What I enjoy most about my position as MP of Chembe; Chairman and CEO of ZITIC; and Chief Rapporteur ACP-EU Joint Parliamentary Assembly, is that they keep me focussed and working hard in what I enjoy most – serving the poor and changing lives for the best.

Q Where do you see yourself in 5 years' time?

A I see myself positioned to work harder, achieve more, and say to my God "Thank you for using me as your servant"

Q Advice for the agricultural sector?

A Certainly Agriculture is pivotal to Africa's growth, and the outlook for Africa is very positive. Population growth in African countries is rising more rapidly than many governments can plan for and absorb. The onus falls on the agricultural sector to increase food production and strengthen national food security. However, it needs to diversify its products and concentrate on those products that have a strong comparative advantage. In order to achieve this, there needs to be deliberate government policies to support our rural and traditional farmers, including small-scale farmers. They need the financing, the structures, and access to equitable local, regional, and international markets. We need to train and educate our people on climate change, organic and eco-farming. Agriculture should drive employment and achieve higher earnings for all our people.

Q Any interesting facts about yourself which our readers would be interested to know?

A I am a very simple man, who is result-oriented. I am a God-fearing Catholic who has a large heart for the poor. I have established a powerful network in government and private circles. With God's help I am self-made and my vision is to see suffering and poverty eliminated or alleviated for all our people. ■

Insuring lifetime financial goals

Mutual & Federal is the oldest short-term insurer in South Africa with a history that dates back 185 years. The company partners with brokers to offer an extensive range of insurance products and solutions to fulfil personal, commercial and corporate needs. It also provides insurance products for the agriculture, engineering and marine sectors. As a brand, Mutual & Federal promises to enable positive futures as it protects what's important to its customers and puts them first in everything that it does. The teams' values are accountability, respect, pushing beyond boundaries, integrity and passion.

"We recognise that we would not have been around for 185 years without the support of our dedicated brokers. They are at the heart of our business and are the face of our policies, therefore, at Mutual & Federal, we partner with them to deliver personal advice to protect our mutual customers' valued assets and help them attain their lifetime financial goals and aspirations. Our brokers will continue to be business partners on our journey to become Africa's most trusted short-term insurer."

To be the short-term insurer of choice, Mutual & Federal

says it will build a multi-channel business focused on delivering value to the customer, while fostering close relationships with its strategic business partners.

"As part of the Old Mutual Group, we want to treat customers as group customers, and not just policyholders. Our customer value propositions need to be integrated across the banking, insurance, savings and risk needs of our customers." ■



We're Celebrating our 100 years with a cake you helped make

As a specialist in agricultural insurance, we've learned that farming requires dedication, working from the base up until you are able to reap your rewards.

For 100 years with your support, we've been able to secure your assets and help you in your times of need. And will continue to for the next hundred years and more. Thank you.

For more information visit www.mf.co.za



Policies underwritten by Mutual & Federal Insurance Company Limited (FSP 12).

A member of the  **OLDMUTUAL** Group

Authorised Financial Services Provider

MUTUAL & FEDERAL | **agri**

PROTECTING WHAT'S IMPORTANT TO YOU. SINCE 1831

Access to trade and information is of great interest to the agricultural community

An interesting upcoming development to hit the African audience is the Continental Free Trade Area (CFTA) to be launched in 2017. The main objectives of the CFTA are to create a single continental market for goods and services with free movement of business persons and investments; and thus pave the way for accelerating the establishment of the Customs Union. It will also expand intra-African trade through better harmonisation and coordination of trade liberalisation and facilitation instruments across the RECs and across Africa in general. The CFTA is also expected to enhance competitiveness at the industry and enterprise level through exploitation of opportunities for scale production, continental market access and better reallocation of resources.

Peter Draper, Managing Director at Tutwa Consulting Group says the group is working with the Southern African Customs Union on negotiations for the CFTA.

"We are mapping out the scope, modalities, opportunities and some of the threats that these negotiations represent. If the CFTA goes through, the African trade landscape may look quite different in 10 years from now."

Draper sees the CFTA as a great opportunity, however sourcing reliable information to action those opportunities is quite a challenge. "It is always a challenge to get information especially when it is not always readily accessible – the same applies to market entry analysis. Particularly in Africa, coming across good, reliable data is a challenge for everybody. We require local consultants on the ground who can feed you first-hand insights into what's going on in that market and that requires solid networks."

Draper says policy terrains can also have substantial informational gaps. "We may take governments for granted when publishing policy documents online or having national data available online - this falls away when you work with a country like, for example, the DRC, because the information is just not there. You have to dig for it. In the research space – and we do a lot of research – we are very aware of those challenges, and that's why you need top-notch researchers, and analysts, who can help overcome those information gaps."

Tutwa Consulting Group operates in three practice areas: first is trade and investment policies in Africa and further afield. For example, they have done projects for the Namibian and South African governments - helping them to develop trade policies; and the Southern African customs union - helping them with the continental free trade agreement negotiations as well as doing various other projects.

The second practice area is public affairs and political risk. There Tutwa works primarily with big companies or organised business on identifying key challenges in the policy and regulatory terrains and working with them to address those challenges.

The third practice is market expansion - analysis and advisory in the market expansion space, notably identification of key export markets, barriers to those exports, and advice around market entry modes.



Peter Draper, Managing Director at Tutwa Consulting Group.

"We are not a big group although we do have a big network, so we can work pretty much anywhere," Draper says.

Tutwa is currently working with a big regional project for the tobacco industry as they approached the recently concluded UNFCCC (United Nations Framework Convention on Climate Change) negotiations in Delhi. That includes mapping the tobacco value-chain, analysing socio economic issues around the industry's regional role, and advising the International Tobacco Growers Association on how to approach the UNFCCC process.

"We also work quite closely with the Ag Biz Chamber in tracking international trade policy and negotiations developments. The work we generally do in the trade policy and investment terrain is of great interest to the agricultural community. For example, the Tripartite Free Trade Agreement negotiations, assuming they succeed - should deliver substantial tariff liberalisation. This could open up markets across the continent for our agricultural products, in addition to a range of others. So understanding what's coming down the track and trying to influence that should be of great interest to the agricultural community." ■

South African Department of Trade and Industry to introduce dedicated agro-processing incentive

The Department of Trade and Industry (DTI) in South Africa is working on introducing a dedicated agro-processing incentive aimed at attracting investment, DTI Minister Rob Davies says.

This sector is critical because of its labour intensity across the value chain and its high economic multipliers, especially with respect to exports. The incentive will contain strong conditionalities, including with respect to labour practices and empowerment,” says Minister Davies.

The Minister addressed the Manufacturing Indaba in the Western Cape, South Africa. The indaba brings together the country’s industrial movers and shakers with the intent of focusing on and boosting the growth potential of key industry sectors including automotive, construction, forestry and paper and packaging, among others.

Davies says the manufacturing sector and diversification of the economy is a key driver to attaining South Africa’s economic growth objectives.

“We all know that the performance of our economy has been flat, but we were saved by the second-quarter gross domestic product manufacturing statistics. That was mainly through the implementation of a transparent localisation policy that we have developed and this result also demonstrates that manufacturing and diversification of our economy is highly critical if we are to achieve our economic strategic objectives,” says the Minister.

Minister Davies says the largest parts of international trade were mainly focused on intermediate products.

“By the early 2000s, domestic boatbuilding capabilities had hollowed out, with the exception of the luxury yachting sector. Government introduced a stronger industrial financing

instrument and boats were designated for local procurement. The sector is now witnessing the crowding-in of private sector funding and capabilities to meet demand both locally and internationally.”

The success of Nautic Africa (a shipbuilder and maritime services provider) now part of the Paramount group and Damen are testament to what can be achieved, Minister Davies said, adding that effort has also gone into the clothing and textile clusters in the last decade in the Cape.

“National government has deployed significant incentives to support, among others, companies in this sector in the province. We have injected R2bn incentives over the last five years to support the industry and successfully raise productivity and competitiveness,” says the Minister.

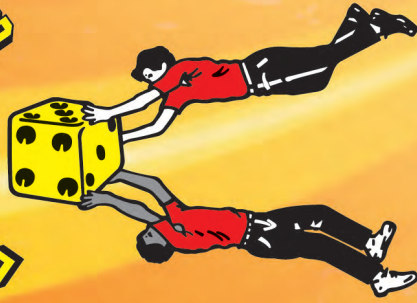
The MEC responsible for Economic Development and Tourism in the Western Cape, Alan Winde, said the conference focused specifically on agro-processing and oil and gas as they had demonstrated themselves to be key drivers that promote manufacturing.

“We have given ourselves a target of enabling 60,000 jobs in oil and gas at Saldanha Bay Industrial Development Zone. We are also doing work on skills, energy and for the removing of administrative red tape that hampers the flow of business,” said MEC Winde.

He said the Western Cape had set itself a target of producing 32,500 apprentices in the next three-years to work in the energy space and pleaded with delegates to make use of the unit established in his office to remove red tape. ■



GOLDEN DICE FOODS (PTY) LTD



PACKAGING & DISTRIBUTION OF DRY AGRICULTURAL PRODUCTS

GOLDEN DICE FOODS PTY LIMITED (GDF) IS A LEVEL 1 BBBEE AND A DYNAMIC, HANDS ON OPERATED MAIZE MILLING, MABELA MILLING AND DRY GRAINS PACKAGING BUSINESS.

GDF SPECIALISES IN THE MANUFACTURING OF SUPER MAIZE MEAL, MABELA, AS WELL AS PACKAGING & DISTRIBUTION OF DRY AGRICULTURAL PRODUCTS.

THE COMPANY ALSO PACKAGES AND DISTRIBUTES WHITE AND BROWN SUGAR.

**MORE QUALITY
MORE CHOICE**
Since 1985

OUR PRODUCTS

MANUFACTURING:	PRE-PACKING OF THE FOLLOWING:
MAIZE MEAL (SUPER MAIZE MEAL)	BEANS
MAIZE SAMP	(RED SPECKLED, KIDNEY BEAN & SMALL WHITES)
MAIZE-RICE	GREEN SPLIT PEAS
FOWL FOOD	POPCORN
MABELA (FINE AND COARSE)	SUGAR (WHITE & BROWN)
	RICE

FOR ORDERS CONTACT:

TEL: 011 814-1850/1/2/3 • FAX: (011) 814-1458 • EMAIL: gdf@mwweb.co.za
Cnr 1st Avenue & 5th Street, Extension 6, Vosterskroon, Nigel 1490

PASSING TRADE ALSO ALLOWED
www.goldendice.co.za

PARBOILED RICE



MAIZE RICE



SAMP



SAMP & BEANS



RED SPECKLED BEANS



MABELA



COARSE MABELA



POPCORN



YELLOW MAIZE



SMALL WHITE BEANS



BROWN SUGAR



WHITE SUGAR



MIXED POULTRY GRAIN



GREEN SPLIT PEAS



SUPER MAIZE MEAL



Matshekga – At the helm of creating a formidable business

Malose Matshekga, CEO Golden Dice Foods, spoke to AgriLeaders about growing up alongside agriculture and his passion for business.

Q Biography

A I was born and raised by my grandparents in “GaMashashane Sebori”- a small rural village in the Limpopo province. This is where I completed my primary and high school education. My childhood is littered with many memories of planting maize and beans alongside my grandparents among other things. I learnt a lot from watching them trade these products with cooperatives during harvesting season. Although as a young adult I got involved in various entrepreneurial ventures as a student at Wits University, this forms the most preliminary learning I can recall, that fostered in me an ambition to be creative and industrious in making a living and providing for the needs of one’s family. I am now the CEO and part owner (alongside Khulu Montsiwagae) of Golden Dice Foods (GDF) Pty Limited. GDF is located in the heart of a maize producing area called Nigel in Ekurhuleni municipality. Our company specialises in the milling/ manufacturing of maize and mabella products, as well as the packaging and distribution of dry agricultural products. Little did I know (as a child) that maize and beans would form an integral part of my story, even later on in life.

Q How did you get involved with Golden Dice Foods and come to be the CEO?

A Golden Dice Foods was founded nearly 30 years ago by the Wehmeyer brothers. It was a small family business, which packaged dry farm products. The company philosophy since its inception has been to produce quality products and deliver them with great service. Through dedication, focus on the right strategies and consistency, the directors have grown the business year on year. The brothers reached retirement age and sold the business. We (Khulu Montsiwagae and I) acquired the business through funding from the National Empowerment Fund in 2015. Subsequently, I was appointed CEO in order to harness my experience and overall commercial capability in driving the business.

Q What are your goals as CEO?

A We have set strategic goals and objectives designed to strengthen the company’s revenue earning potential, win market share and build loved brands. Our key strategic goals are customer and brand

leadership; driving operational efficiencies; route to market; sustainability and optimising earning potential.

Q What keeps you up at night?

A What keeps me up at night is defining strategies and plans on how we can work harder and smarter than ever. We have great competition so we have to be relentless in pursuing opportunities to grow our share in market and meet customer needs. Our sphere is one that is largely commoditised and serving customers with increasing financial constraints and pressures. The economic environment needs us to be more efficient in our operations and more agile to anticipate and respond to changing customer needs. And the only way to deliver this is through engaged employees who will challenge complexity and deliver focused effort and solutions.

Q Challenges you face in your job?

A As new owners, we face our own share of challenges ranging from general employee engagement in a high contract/ labour services environment; physical security threats; operating successfully in a transitioning environment and remaining relevant; various determining factors affecting the company’s balance sheet; volatility in forward buying/supply chain elements; and from a personal perspective- balancing a need for self-actualisation and security for ourselves and loved ones with the inherent risks of being an entrepreneur.

Q What do you enjoy the most about your position?

A I see abundant opportunity and massive prospect. As CEO, my position allows me to galvanise a group of diverse people behind a common and inspiring vision. I relish the opportunity to be at the helm of creating a business which will become a formidable competitor in the industry, and is 100% black owned.

Q Where do you see yourself in 5 years’ time?

A I see myself having acquired significant market share and considered a formidable player in the industry with our existing brand and products. Concurrently, possibly pursuing opportunities for line, product and brand extensions that are customer-centric, benefits based and grow the value of our customers and GDF over time.

Q Advice for the agricultural sector?

A As a sector, we have a big part to play in building a more inclusive economy. There is value in harnessing diversity of all kinds. More importantly for small and medium players, put more impetus on actionable customer insights, agility, a relentless focus in building mutuality with all stakeholders as well as recognising both business and social innovation and opportunities. ■



More than 100 years of service to the agri market

Kynoch Fertilizer is an importer, blender and retailer of a complete range of granular, liquid and speciality fertilizers in Southern Africa (including South Africa, Namibia, Mozambique, Malawi, Zimbabwe, Zambia, Botswana and the Democratic Republic of the Congo). Kynoch operates warehouses as well as import and blending facilities in all the major ports in the Southern Africa Region and a number of inland locations.

The Kynoch brand has been part of agriculture in Southern Africa for more than 100 years. The original Kynoch started in Birmingham, United Kingdom, as an ammunition and explosive company. The company then moved to South Africa at the time of the war in 1908 and opened up in KwaZulu-Natal. After the war the company diverted to fertiliser and since then the different divisions had undergone many changes in ownership (including AECI, Norsk Hydro, Yara, Farmsecure). During 2014 Kynoch became a member of Export Trading Group (ETG), a multinational operating in Africa for more than 30 years.

In the Fertilizer Industry there will always be a portion of the market that is only looking at price – you have to be the cheapest at any given time to get this business. Fortunately, there is also a large portion of the market that understands value and is willing to accept and invest in value-added products, services and technology. This is a portion of the market in which Kynoch Fertiliser continually invest in order to bring enhanced efficiency to the farm and do its part



*Eugene Miller, Regional Head
for Fertiliser and Agri Input.*

in really making a difference to producers and ultimately towards food security.

Eugene Muller, Regional Head for Fertiliser and Agri Input, says, "What Kynoch tries to do is bring enhanced efficiency to the farm through fertiliser products and programs that enhance both the efficiency of the fertilizer itself as well as the efficiency of the crop." Kynoch is, amongst others, the exclusive distributor of globally proven Agrotain nitrogen stabilisers supplied by Koch Industries.

Kynoch had historically focused mainly on the main row crops in South Africa – maize, sugar cane, soya etc – but in recent years had also started to make a significant difference in the intensive cropping markets such as fruit and vegetables and

the repeatability of successes excites us.

"By bringing enhanced efficiency to the farm we focus both on the efficiency and the effectiveness of our products and have started to incorporate growth enhancers and stimulants – and in the future even nano-technology – into the actual products in order to also enhance the efficiency of the crop that we are trying to produce. We are really trying to manage the metabolism of the crop as well as the fertiliser by doing the above with a combination of how and when we use fertiliser; and using specific fertiliser programs to produce optimal results in term of yield."

Kynoch has the production facilities, infrastructure and personnel to offer a comprehensive product and service offering to farmers in the sub-region. The acquisition by ETG will enable Kynoch to utilize the logistics, infrastructure and trading synergies in the ETG Group to expand the Kynoch brand and footprint in South- and Southern Africa and continue the legacy that this company has created over the past century.

"I believe Kynoch is on a growth path and has a bright future ahead of it. We have come from a difficult recent past with many changes in the business but managing and integrating those changes with our new partners is beneficial to both parties. We would like to increase our market share into

Africa and be seen as a company assisting the upcoming agricultural market by taking hands in ensuring food security," Muller concludes. ■





« Enhanced efficiency through innovation »



KYNOCH

Company Profile



History

The Kynoch brand in Southern Africa is more than 110 years old. Kynoch has been a ground breaker in the fertilizer industry since the early 1900's and has proven it can stand the test of time.

In 1908 the first Kynoch factory was built by George Kynoch at Umbogintwini just south of Durban to produce explosives for the then booming mining sector in South Africa. After the end of the 1st World war in 1918 this factory was converted to a fertilizer factory.

Kynoch Fertilizer grew from strength to strength to the brand that South African farmers countrywide remember to this day. Between 1999 and 2010, during ownership by Yara, the Kynoch brand was absent from the market until reinstated in 2010. However, during these periods, the values and ethos of the Kynoch brand lived on through its staff and customers.

Kynoch today

During 2014 Kynoch became a member of **Export Trading Group (ETG)**, a multinational company, operating in Africa and Asia for more than 30 years.

At the time the EG group was a consortium of three major investors including Carlyle Group, Pembani Remgro and Standard Chartered Bank PLC. Annually ETG trades close to 1.5 mill tons of fertilizer, but also deals in various other commodities including maize, pulses, wheat, rice, sugar, oilseeds, edible nuts, coffee, tea and farm implements in more than 30 countries.

At Kynoch it remains "business-as-usual". Kynoch Fertilizer is a leading importer, blender and retailer of a complete range of granular, liquid and speciality fertilizers (Optimizers™) in Southern Africa whilst our farmers are serviced by a large sales and agronomic technical support team.

Kynoch operates warehouses and blending facilities in all the major ports in the Southern Africa Region and a number of inland locations.

Kynoch is the exclusive distributor of the globally proven Agrotain® nitrogen stabilizer range supplied by Koch Industries and this is now being expanded into the rest of Africa through the ETG supply chain. To complete the full range of plant nutrition requirements, other fertilizer raw materials, products, technologies and enhancers are sourced locally and internationally.

Vision

Our vision is to be an innovative plant nutrition supplier that complements our clients' businesses through *Yield Enhancing Technologies™* and Innovation.

This, as well as a comprehensive range of agronomic services, *plant nutrient scheduling™* aligned with plant development and growth enhancers allows us and our clients to manage the development of their crops optimally.

As far as we are concerned there are no silver bullets, but long term success results from the sum total of all we do.

The Kynoch-team is excited about the future and is looking forward to continue to service our customers and to make a difference on the farm.

Enhanced Efficiency through Innovation

This phrase is at the core of all we strive to do at Kynoch.

Gone are the days when it was good enough only to supply a good quality product to our clients. Southern Africa's population is growing at almost 2% per year. Food production must more than double in the next 20 years to feed the expanding population, and production needs to increase using the same or fewer natural resources.

With the demands that are set on food producers in this day and age it is imperative that we make a difference to our partners' operations by ensuring we supply them with an input that conforms to all the required specifications, but to also cost-effectively offer the added advantage of innovative breakthroughs regarding crop nutrition so as to ensure optimal yield.



« Enhanced efficiency through innovation »



KYNOCH

Company Profile



KynoPlus® (Enhanced-N Efficiency)

Kynoch has been a leader in bringing these technologies to the Southern African food producer since it first introduced nitrogen stabilizers to the Southern African market.

As exclusive distributor of patented Agrotain®-technology, Kynoch introduced KynoPlus® to the regional market in 2010. Since then results seen when applying this technology - that reduces nitrogen volatilization - has been astounding. KynoPlus® is only the first product in a range of N-enhanced-N™ nitrogen fertilizer blends that will control nitrogen volatilization, nitrification and leaching.

Agrotain® nitrogen stabilizer products help secure your nitrogen investment. When untreated urea or UAN is surface-applied, on average up to 40% of the urea-based nitrogen can be lost. By using enhanced efficiency fertilizers, like KynoPlus®, you can help guard against costly nitrogen loss.

KynoPop™

KynoPop™ is Kynoch's carefully formulated pop-up fertilizer – an innovative new product which further enhances the plants potential for optimal production.

KynoPop™ is a fine, dry highly water-soluble product that enhances the effectiveness of the seedling and improves early root development, and results in stronger seedlings that can better tolerate stress conditions (cold, heat, drought, herbicides, etc.), diseases and pests.

KynoPop™ gives your crop the best chance for success and reduces the risks associated with young seedling during the 1st few weeks of life.

OEMFF®

Kynoch has developed its own foliar range to address the specific needs of different crops. This product range had been developed with the specific crop's physiology in mind and as a result this offering does not follow a "one-size-fits-all" approach

The specially formulated and growth stage specific OEMFF® products from Kynoch will boost your crop to reveal only their best at each growth stage. Each of the tailor-made formulations complement the macro and micro nutritional requirements of the plant at a particular phenological stage.

Agricultural Services

Precision Agriculture

The latest trend in agricultural worldwide is Precision Agriculture because it saves time, reduces cost and is environmentally friendly. Precision farming will ensure sustainability through the use of the correct inputs, and the optimal quantity of inputs at the right place at the right time.

Our in-house team of experienced Agriculturalists will be able to assist you in so far as recommending the correct products, program and scheduling of nutrients based on your specific circumstances and needs.

Soil Analysis

Our in-house team of experienced Agriculturalists truly understand the science or business of cultivating the soil.

All our soil analyses are processed at accredited laboratories so as to ensure accuracy and acceptable turnaround times.

Customised Blends

In accordance with your actual requirements, although governed with very specific rules from the Registrar, we are able to supply you a fertilizer blend that matches your specific nutrient requirements.

Combinations

The total suite of products available ensures that our clients are able to match the nutritional needs of their crops at every growth stage, but also adapt either their overall fertilizer programs or their practices.

It is important to note that although Kynoch has a range of enhanced products available, we do not believe in a single "silver bullet" but rather the combinations we offer to ensure optimal performance.



Unlocking the economic potential of South Africa's oceans

In his State of the Nation Address in February 2014, South African President Jacob Zuma announced the launch of Operation Phakisa with the purpose of accelerating the delivery of South Africa's national priorities by using the Delivery Labs problem-solving and performance management methodology. The first focus area of Operation Phakisa is an ambitious programme to unlock the economic potential of South Africa's oceans.

An economic analysis undertaken in 2013 found that South Africa's oceans could generate an estimated GDP contribution of up to R177bn by 2033, multiplying their contribution by 2,5 to 3,5 times in 20 years. Accordingly, the number of jobs linked to the ocean's economy could potentially employ 1 million people by 2033 compared to 316,000 in 2010. The analysis also considered the geopolitical, environmental and security issues associated with South Africa's oceans and also the institutional and logistical requirements to advance the ocean's economy.

The analysis found that the future potential of the ocean economy is highly concentrated within four new growth areas, which could deliver approximately 76% of the total ocean-based GDP by 2033 among them, along with 95% of the job creation contribution. These sectors are marine transport and manufacturing activities (coastal shipping, transshipment, boat building, repair and refurbishment, etc.); offshore oil and gas exploration, aquaculture, marine protection services and ocean governance.

As the first step in this programme, the Oceans Economy Labs took place in Durban, South Africa in July and August 2014. More than 200 full and part-time participants came together to develop detailed implementation plans to unlock the economic potential of the above sectors.

The Department of Agriculture, Forestry and Fisheries is the lead department for the Oceans Economy Aquaculture focus area and its deliverables. The Lab concluded that South Africa's aquaculture sector has a high growth potential due to an increasing demand of fish products due to the increasing global population; increasing income by the middle class in developing countries and more awareness on the dietary benefits offered by fish products. Moreover the capture fisheries yield has been plateauing over the past decade while aquaculture continues to grow over 7% per annum and it is expected to continue growing at an even a higher rate in the future. Currently, the sector is at a very small scale and production is focused on a few high-value species such as abalone, oysters, mussels and finfish. Challenges include regulatory barriers, high cost of production, difficulty in accessing funding, poor access to markets and limited pool of skills; poor access to quality inputs, fragmented research and development and limited infrastructure in rural areas and inclusivity in the sector.

The goal is to grow the aquaculture sector in South Africa to play a major role in supplying fish products and an enhanced role in job creation and contribution to national income. The targets over the next five years seek to grow sector revenue from R0,67bn to R3bn; production by 20,000 tons; jobs from

2,227 to 15,000 and to ensure increased participation to support transformation in the sector.

The Aquaculture lab comprised of stakeholders from industry, government and academia who identified eight key initiatives, which are expected to spur the growth of the sector. One initiative will address the selection and implementation of 24 projects, improving both the number and productivity of the new farms. Three initiatives relate to the creation of an enabling regulatory environment and others focus on funding support, increasing skills pool and awareness and improving access to markets. To deliver these initiatives, the aquaculture lab created detailed implementation plans and accompanying budgets, a proposed governance system to take responsibility for initiatives and key performance indicators to help monitor delivery.

Post the Oceans Economy Lab, two more work streams were taken on-board:

- Small Harbours Development led by the Department of Public Works (three feet planning tune-up Lab to take place in 2016/17); and
- Coastal and Marine Tourism (three feet planning tune-up Lab to be completed in May 2016).

These six focus areas are supported by cross-cutting strategies in the areas of:

- Skills Development and Capacity Building led by the Department of Higher Education; and
- Research, Technology and Innovation led by the Department of Science and Technology.

During the Lab, 24 initial catalyst projects were registered on the Aquaculture Lab. Since the Lab more projects have been accepted as part of the Aquaculture Operation Phakisa and to date, 32 projects are registered. 13 projects discussed in detail below are operational and on track in terms of implementation plans.

ABAGOLD HERMANUS (ABALONE)

Abagold (Pty) Ltd is situated in Hermanus in the Western Cape and produces abalone at the most Southern tip of Africa. The company exports live, canned and dried abalone to Asian countries. The project is a leader within its sub-sector, serves as an ideal business model for growing the aquaculture sector and is progressing well without much assistance from Operation Phakisa. The production of local fish feed was identified as one of the key challenges facing the sector by Operation Phakisa. Abagold has not only expanded significantly but constructed and launched a new feed plant in September 2015. The project was awarded the Friend of the Sea certification and is the first abalone company worldwide to be awarded the certification. Certified products sold locally and internationally will bear the branded eco-label.

HIK ABALONE BUFFELSJAG (ABALONE)

The HIK abalone farm has invested into upgrading their hatchery and built a new packing and processing facility. The project has also begun constructing the first phase of the new 100 ton abalone farm in the rural Buffeljags area. After establishing that no clinic exists in the community nearby the farm, HIK are now building a clinic on site to serve employees and the local community. The Department of Agriculture, Forestry and Fisheries is providing guidance and assistance with the Environmental Impact Assessment (EIA) for the second stage of development.

BLUE OCEAN MUSSELS SALDANHA BAY AND VELDRIFF (MUSSELS)

Blue Ocean Mussels (Pty) Ltd is a premium mussel farming operation, located in Saldanha Bay. The unpolluted and pristine seawater is perfect for mussel farming because the windy west coast conditions create upwelling currents which support the fresh, clean, cold and nutrient rich water which is perfect for growing good quality mussels. This farm has received a long-term water lease from Transnet National Ports Authority (TNPA) and was approved for funding by the Aquaculture Development & Enhancement Programme (ADEP) administered through the Department of Trade and Industry (the dti). The funding was used for a boat and expansion of their operations.

SALDANHA BAY OYSTERS (OYSTERS)

Saldanha Bay Oyster Company (Pty) Ltd is a land based site situated in Saldanha Bay in the Western Cape. The company is a leader in the South African oyster market and delivers a delicately sweet flavoured oyster which makes it one of the top choices for both South Africa and international palates. The oysters weigh between 65g and 120g. Since joining Operation Phakisa, the project was supported with a long-term land lease from the Department of Public Works for its holding and purging operations. This lease allows the annual production to increase to 10 million oysters per year. Through TNPA, the project received a long-term water space lease which will go a long way to sustain current employment, secure investment and continue the expansion of primary production.

DORINGBAAI ABALONE FARM (ABALONE)

Doringbaai Abalone (Pty) Ltd farm is an abalone grow-out facility and hatchery in Doringbaai on the West Coast of South Africa. This project involved the development and establishment of infrastructure for Western Cape fishing communities and sustainable aquaculture projects within these areas. The community owns a 35% share in the company to ensure sustainability and upliftment. In 2015, the farm was expanded due to the high demand of abalone in the market. The objective was to increase the carrying capacity of the farm from 30 tons to 50 tons of abalone. Since Operation Phakisa, Doringbaai Abalone successfully secured a long-term lease with the Department of Public Works and the EIA for the first phase of expansion was approved in record time.

HAMBURG AQUACULTURE PROJECT (DUSKY KOB AND OYSTERS)

The Hamburg kob pilot project is driven by the Department of Agriculture, Forestry and Fisheries and is owned by the Siyazama Cooperative who employs 21 people from the Hamburg community in the Eastern Cape. The department has identified a number of aquaculture projects that aim to empower coastal communities through the transfer of technology, skills development and job creation. The department decided to take lead with industry on kob farming in order to share the risks associated with developing this fairly new type of farming in South Africa. A dusky kob pilot project has been established on the 2 hectare (ha) site and will have the capacity to produce 20 tons of kob per annum in the pilot phase. The Hamburg Aquaculture project has received continued funding support and has been prioritised by Operation Phakisa and the Expanded Public Works Programme (EPWP).

WILD COAST ABALONE RANCHING (ABALONE)

This project uses the abalone ranching model which restores impacted natural abalone stock levels by augmenting with hatchery reared spat. The abalone stock is protected from poaching using high-tech private security solutions. The vision is for the business units to eventually make a profit from sustainably fishing the restored abalone resources working alongside coastal communities. The project incorporates three ranching projects in Port Elizabeth and East London as well as two stock enhancement projects in conjunction with coastal communities in Hamburg and the Transkei. Through Operation Phakisa, the project has received a lease from TNPA for security and ranching operations.

SOUTHERN ATLANTIC SEA FARMS (MUSSELS)

The Southern Atlantic Sea Farms located in Saldanha Bay, aims to utilise the existing 15 ha of water lease area to produce 1,000 tons of mussels per annum. This will be increased to 2,000 tons in the second phase of the project alongside the increase of the water area to 30 ha. The company is using technology and equipment which is new to the South African mussel industry but well proven and tested over a number of years in New Zealand and used all over the world. The farm area is away from industrial pollution and can offer a pollution free product. Operation Phakisa has assisted the farm through securing a long-term lease and an additional 15 ha of space. The Department of Agriculture, Forestry and Fisheries is providing support to existing and potential aquaculture operations in the Saldanha Bay area by initiating an EIA for the entire Aquaculture Development Zone.

MOLAPONG TROUT SEA CAGE (TROUT AND SALMON)

This is one of only two marine finfish cage pilot farms in South Africa. Through Operation Phakisa, the project was assisted with a water space lease from TNPA and a Marine Right through the Department of Agriculture, Forestry and Fisheries. This project aims to produce 500 tons of ocean trout during phase one and up to 2,000 tons of trout and salmon at phase three (2019) over a total area of 45 ha. Molapong Aquaculture is currently the biggest producer of fresh trout in South Africa and the ocean trout and salmon products are aimed at extending their product offerings to their existing local customers, as well as having stock available to fill export orders.

AFRICAN OLIVE TRADING (MUSSELS)

The mussel farm is situated in the inner bay of Saldanha, in the Western Cape and is 100% black owned company. The vision of the African Olive Trading farm is to expand the farm from 5 ha of water space to 25 ha. In terms of tonnage, the farm

will expand from its current 50 tons to a maximum of 1,000 – 1,200 tons per annum. Currently all produce is sold to Blue Ocean Mussels in Velddrif. The farm has six farm workers and through Operation Phakisa received a land lease and water space lease from the Department of Public Works and TNPA respectively.

IMBAZA MUSSELS (MUSSELS)

Imbaza Mussels is based in Saldanha Bay. This majority BBBEE Operation Phakisa project received a 15 year water space lease from TNPA for their existing 30ha and a long term land lease for their land based operations from the Department of Public Works. Currently the project employs 17 workers and they were approved for funding from ADEP through the dti. The vision is to build a packing facility for fresh mussels as well as to build 5 mussel rafts that will increase the production to 1200 tons per annum.

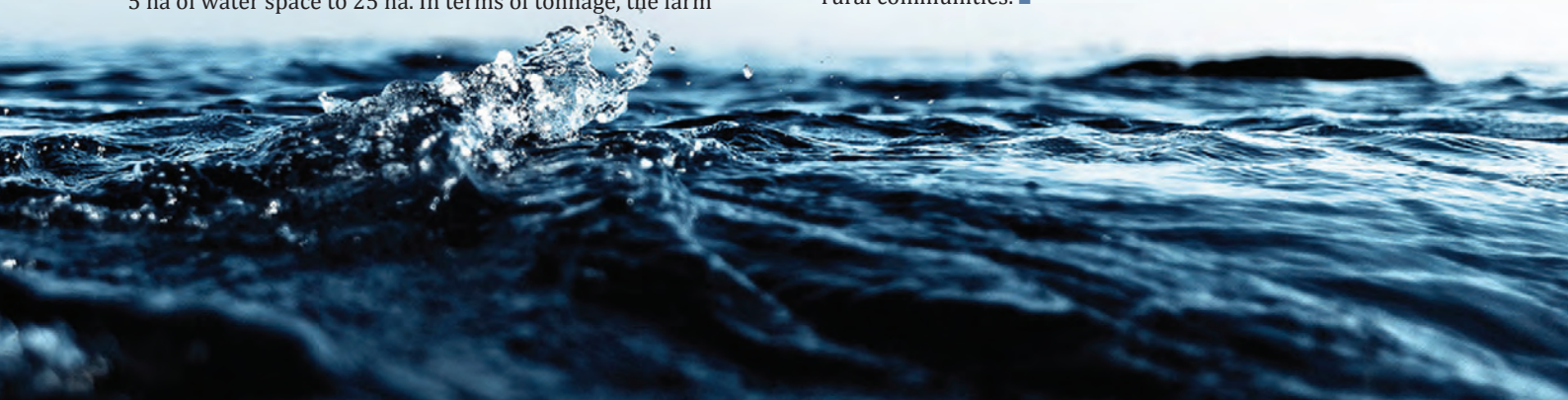
WEST COAST OYSTER GROWERS (OYSTERS & MUSSELS)

West Coast Oyster Growers is an existing small mussel and oyster producer situated in Saldanha Bay which intends to expand its mussel and oyster operations to become a significant role player in the shellfish industry in South Africa. The project secured a 15 year long-term water space lease from TNPA through Operation Phakisa. The mussels are sold locally as fresh or frozen half shell whereas the oysters are sold as fresh both on the local and international markets.

BLUE SAPPHIRE PEARLS (OYSTERS)

The Blue Sapphire Pearls project is located in Saldanha Bay. Since Operation Phakisa, the Small Medium Enterprise was awarded a water space from TNPA as well as a land lease from the Department of Public Works which will facilitate the expansion and diversification of the project. The vision is to expand the current 5ha water space of oyster cultivation for optimum growth; to commercialise the current pearl culture operation; to integrate a farm tour operation and initiate a mussel cultivation operation. The oysters produced are of high quality and the business is poised to expand to take advantage of new opportunities and international markets.

The progress made thus far through the Aquaculture Operation Phakisa is encouraging to the aquaculture industry, government and all related stakeholders. As challenges continue to rise, it is met with a commitment to collaborate and continue the momentum to further unlock growth of the sector. The aspirations set out for the Aquaculture Operation Phakisa are continually emphasised which is to contribute to food security and job creation; an increased contribution to the growth domestic product and improve the livelihoods of rural communities. ■



Water is life – if we don't take care of it who will?

In South Africa about 70% of its water is used by the agricultural sector. With the current drought and the water shortages the country is facing – much of which is caused by the mismanagement of our natural water resources – this creates a need for water efficiency and saving solutions.

Christiaan Muller, Director of Aquamat – a company focusing on water solutions – says, “if we at Aquamat could implement our system on every irrigation farmer’s land and harness 30% water saving, we could make a huge change in South Africa.”

The key is to make every drop count. In the past, South Africans took water for granted because it was so affordable and so freely available – there was no real value attached to water. Muller says now that we face droughts and water restrictions, “everybody has a better mindset towards water sustainability and water usage.”

Since 1968, Aquamat has conducted its operations in developing, manufacturing and distribution of products, systems and services for the treatment of water in South Africa and neighbouring countries. Aquamat’s products range from basic surface or underground water treatment to fully-fledged desalination plants which turn sea water to drinking water.

“We have over 2,000 different products and we successfully operate in more than 33 African countries – we send our products all the way up to Egypt. It has also been very successful in Germany where there has been a big interest in its agricultural irrigation markets.”

Aquamat’s current focus is packaged portable water treatment plants. These are containerised units, truck mounted units, trailer mounted units and skid mounted units ideal for rural applications in villages.

“There are many communities in South Africa and Africa as a whole that don’t have access to clean drinking water. We can treat borehole, river, dam or even sea water for these communities and the drinking water standards we produce exceed the World Health Organisation standards,” says Muller. “We have had a lot of success with this from local municipalities.”

We have a lot to offer and we are happy to share the market with other companies that offer water solutions because the water problem in Africa is so great that not one single company can control it all – and that should never be the case.



Christiaan Muller, Director of Aquamat.

Muller says Aquamat has started down a sustainable path by incorporating sustainable solutions in its product range which includes rain and grey water harvesting and recycling. The company also looks at water recycling for factories and production farmers to recycle their water for reuse in their production, as well as sending that water to irrigation stands where they can use it on their own property or provide for surrounding communities.

“We have a lot to offer and we are happy to share the market with other companies that offer water solutions because the water problem in Africa is so great that not one single company can control it all – and that should never be the case. We rather work with our competitors than against them because water is life and if we don’t take care of it, who will?”

Muller would like to see his company grow as economically feasible as possible by making sure he has the right people in place to make a real impact in the African water space with effective, sustainable solutions to promote better water management.

Muller, his father and his brother took over the company in February 2014. ■

Developing a sustainable aquaculture industry in Kenya

Lake Victoria is the biggest freshwater lake in Africa and the largest inland fishery in the world.

Surrounded by Kenya, Uganda and Tanzania it is of huge economic and strategic importance regionally and supports around 40 million inhabitants. Much of the surrounding population derives its livelihood directly or indirectly from the lake's resources. But with almost 50% surviving on less than \$1.25 a day, poverty in the region is having a hugely detrimental environmental impact.

Farm Africa, a development charity working at creating successful farmers across Eastern Africa, says over the last four decades Lake Victoria has faced numerous problems, including pollution, biodiversity loss, habitat destruction and soil erosion. Increased cultivation along the banks, damaging agricultural practices, and the destruction of forests and wetlands are all contributing to the destabilisation of this valuable ecosystem.

The lake is home to around 200 species of fish, many of them endemic to the area, and a lot of these are under threat from introduced species, encroachment of breeding areas and over-fishing. The World Wildlife Fund estimates that the lake's indigenous fish species have reduced by 80%, and over 70% of the forest cover in the catchment area has been lost.

In Kenya, demand for fish as a healthy source of protein is increasing rapidly due to population growth, rising incomes and increased awareness about the nutritional benefits. The country's fish production is heavily reliant on wild fish caught in the lake but with fish stocks dwindling, wild fisheries are struggling to meet demand, particularly of tilapia, the country's most popular freshwater fish.

Despite laws specifying the methods and sizes of fish caught, things remain mostly unregulated. With big fish becoming increasingly hard to find, fishermen are catching smaller ones, placing further strain on declining stocks by removing younger fish which have not yet had the chance to reproduce. With Kenya's population set to grow to almost 56 million by 2025, demand for fish is sure to increase further. Given the declining stocks of wild fish available for sale, a sustainable alternative is the development of an aquaculture industry where fish are farmed commercially in tanks or other enclosures for human consumption.

To promote fish farming as a viable source of food and employment, and to counter falling fish stocks and rising prices, the Kenyan government launched a scheme in 2009 to help farmers establish their own fish ponds. 48,000 were constructed, stocked with young fish – known as fingerlings – and fish feed, given free of charge. In addition the government launched an 'eat-more-fish' campaign, to encourage the public to buy and eat locally farmed fish instead of imports.

Spurred by the Kenyan government's initiative, an aquaculture sector is now emerging with the potential to increase employment, improve incomes and provide the public with an affordable and sustainable source of protein. However there needs to be further investment and support for farmers, suppliers and traders in order for fish farming to develop into a competitive industry.

Since 2011, international development charity Farm Africa has

been building on the Kenyan government's initial investment by establishing a network of 'aqua shops' to help disseminate high quality equipment, feed and training to fish farmers. The aim has been to catalyse the development of aquaculture in Western Kenya into a sustainable, competitive industry.

Now, with funding from the Embassy of the Kingdom of the Netherlands in Nairobi, Farm Africa has launched the Kenya Market-Led Aquaculture Programme (KMAP), to work along the entire fish farming value chain in order to increase productivity, and strengthen the policy environment and market systems so that farmers can turn their ponds into thriving businesses.

This involves giving fish farmers access to high-value markets so they can increase their incomes, and supporting them to organise into trade associations.

Along the supply chain it's about assisting suppliers who produce inputs such as fish feed and fingerlings to improve the quality of their products and trading, and working with traders to increase their access and capacity to sell larger volumes of farmed fish. It's also about increasing public demand by carrying out an educational campaign to promote the benefits of farmed fish.

Changing a young industry is challenging. But working alongside partner organisations and fish farmers themselves, Farm Africa is contributing to the growth of a vibrant aquaculture sector in Kenya in which both small and big farmers can make a good living by supplying quality fish at an affordable price. ■



Join forces to create a sustainable sector

Gauteng Department of Agriculture and Rural Development (GDARD) MEC, Lebogang Maile, says he wants to see the agricultural sector come together and realize the vision and goals articulated when it comes to sustainable development – particularly that of no hunger.

Let us collaborate to optimise the potential of the agricultural sector – with value adding and agro-processing – towards the creation of jobs. Let us ensure that we implement climate-smart agriculture as a mechanism for adaptation and mitigating climate change. And finally let us join to mainstream smallholder farmers so they become integral to the agricultural value chain and do not remain in the periphery.”

Maile says inadequate resources for agricultural development remain one of the most fundamental and key challenges.

“Other sector challenges include long-term changes in the climate and its impact; rising costs of inputs and dependence on external factors that the farmer cannot control; finite natural resources which encompass water scarcity and increasing loss of soil and its fertility; very little market predictability and various forms of market barriers especially for the smallholder farmers; and increasing competition from cheap subsidised imports.”

To help overcome these challenges, GDARD is implementing a number of interventions to address the challenges raised above.

“We are implementing a climate-smart agriculture program which includes training of farmers in water saving technologies, promoting water harvesting and implementing conservation agriculture including the Landcare project. The department is also assisting farmers with infrastructure and procurement of inputs such as seeds, fertilisers and animal feeds through the Letsema/Illima program. We help farmers to access markets through partnerships where the industry gives off-take agreements and furthermore ensures that smallholder

farmers access mainstream markets; and investing in critical agriculture production infrastructure for smallholder farmers,” says Maile.

GDARD’s current key focus areas follow the goal of ensuring “A modernised and transformed agricultural sector increasing food security, economic inclusion and equality” and “sustainable natural resources management.” GDARD also has an overarching agriculture strategy named “Gauteng Agri-food Transformation Strategy” which has 6 pillars. The pillars and interventions are:

Primary agricultural production

- Protecting the agricultural resource base,
- Increasing the amount of agricultural land under sustainable production
- Provision of effective farmer support

Food security

- Improved food security and nutrition
- Improved food safety controls

Industrialisation of the agricultural value-chain

- Value-chain development in priority sectors
- Cluster development
- Agroprocessing support and development
- Market development and export promotion

Strategic Economic Infrastructure

- Investments in Strategic economic Infrastructure
- Resource mobilisation and funding
- Agro-logistic support

Research, Innovation and Technological Development

- Research and Development
- Innovation and Technology Development
- Skills Development and Knowledge Transfer

Transformation

- Promoting Entrepreneurship
- Enterprise Development
- Promoting of AgriBEE
- Leveraging public procurement

Maile says there are a lot of positive developments as well as exciting projects coming up in the sector.

“Up to now the department has successfully implemented the Agriparks program as the strategic infrastructure for mainstreaming smallholder farmers into the agriculture value chain. The Gauteng province is recognised to be the



MEC Lebogang Maile.

leading province in this particular regard and has furthermore successfully implemented the Nguni cattle; the agro-processing program; the urban agriculture program with specific reference to the food security community and school food gardens program; and the comprehensive agriculture Infrastructure support program where farmers have been assisted with Infrastructure and production inputs through the Letsema/ Ilima project.”

The department plans to grow its impact through ensuring the following:

- Increase primary agricultural production by 2% (farm outputs) in 6 prioritised commodities (Horticulture, Grains, Poultry, Livestock, Piggery and Niche Commodities: Mushroom and aquaculture) by 2019.
- Implement Agriparks as Strategic Economic Infrastructure Program for farmer development from current 7 to 10 by 2019.
- Increase number of Community gardens mainstreamed into the vegetable supply chain through Agriparks and market access procurement to 100 by 2019
- Increase number of smallholder enterprises who undertake value adding and food processing activities to 30 by 2019
- 30 Black Commercial farmers to be developed by 2019 (5 farmers per prioritized commodity).

Speaking on African Development Bank’s quote “Africa must feed itself by 2025”, Maile says African countries can work together through increasing collaboration in research to ensure improved seeds and other inputs, promotion of Inter-Africa Trade and strengthening regional collaboration.

“We believe it can be done with more investments in skills training and education; research; investments within on-farm and off-farm infrastructure; enhancing effectiveness of agricultural extension services and encouraging open trade within regions; and broadly keeping our eye on the sustainable development goals.”

GDARD – working through Department of Agriculture, Forestry and Fisheries (DAFF) – subscribes to the Comprehensive African Agriculture Development Program (CAADP). CAADP is a programme of the African Union in the New Partnership for Africa’s Development (NEPAD). The

overall goal of CAADP is to “Help African countries reach a higher path of economic growth through agriculture-led development, which eliminates hunger, reduces poverty and food insecurity, and enables expansion of exports.” CAADP is a growth-oriented agricultural development agenda, aimed at increasing agriculture growth rates to 6% per year to create the wealth needed for rural communities and households in Africa to prosper. To achieve this goal, CAADP focuses its interventions in four key points to achieve measurable outcomes:

- Extending the area under sustainable land management and reliable water control systems;
- Improving rural infrastructure and trade-related capacities for market access;
- Increasing food supply, reducing hunger, and improving responses to food emergency crises; and
- Improving agriculture research, technology dissemination and adoption.

In terms of broader agricultural trends, GDARD sees an increasing need for diverse foods resulting from changing food consumption as well as shifting trend towards intensified agriculture aimed to combat declining farming profitability and water scarcity.

“We also see increasing attention towards mitigation of loss of food between the farmer’s field and the dinner tables; post-harvest storage and food processing; and sustainable agriculture practices which encompass the way land and water resources are used,” says Maile.

“As a department we agree with the report that ‘Removing barriers to regional trade presents benefits to farmers, consumers and governments.’ Farmers will make more money from meeting the rising demand; consumers get cheaper access to food and benefits such as jobs from a growing agricultural sector; and governments can better deal with food security. We therefore believe that increased trade and stronger regional collaborations within regions such as South African Development Community and between regions will help in reducing food security whilst at the same time contributing to the necessary critical infrastructure required for trade and development to flourish,” Maile concludes. ■

Food security for all

In the 2014-2019 Strategic plan, the Gauteng Department of Agriculture and Rural Development, South Africa (GDARD) repositioned its mandate and core functions as well as its Vision, Mission, Strategic Outcome Oriented Goals and Strategic Objectives. The core areas of responsibility and functions of GDARD remained unchanged i.e. environmental protection and management, agricultural development, food security and rural development. The Strategic Plan also focused the mandate towards supporting and consolidating the socio-economic growth and development potential within these functional areas of responsibility.

The Department’s key policies are directly impacted on by the election manifesto of the African National Congress which is the governing party, the National Development Plan and its outcomes expressed in the Medium Term Strategic Framework (MTSF) and the SONA(State of the Nation Address and SOPA(State of the Province Address)

of 2015 and 2016 speeches. The political agenda of the 5th term of the Provincial government is Transformation, Modernisation and Re-industrialisation (TMR). Under the TMR the Gauteng Provincial Government has 10 pillars which contribute to radical socio-economic transformation. GDARD responds specifically to the following pillars:

- Pillar 1- Radical Economic Transformation
- Pillar 2- Decisive Spatial Transformation
- Pillar 3- Accelerated Social Transformation
- Pillar 6- Modernisation of the Economy
- Pillar 7- Modernisation of Human Settlements and Urban Development
- Pillar 9- Reindustrialisation

Pillar 1: Radical Economic Transformation

As part of Gauteng Province's mandate –Transformation, Modernisation and Re-industrialisation linked to township revitalisation – the department established five new Agriparks. The agriparks comprised of packaging house, training room, 20 hydroponics tunnel infrastructures, borehole water sources within a well secured and fenced property. A total of 85 infrastructures were established in Quarter 4 of 2015/16. The department furthermore contributed to the maintenance and operations of the existing Agra-parks (Soshanguve, Rooiwal, Watteville and Onverwacht) which seek to address the issue of promoting high value and commodities for the benefit of the communities.

The department has provided 50 farmers with vegetable pack house facilities. Most of these pack houses are fitted with machinery and equipment which contributes immensely to their operational efficiency and economies of scale. 78 of these farmers also received training on Hazard Analysis and critical Control Points (HACCP) scheme and are participating in government procurement programme supplying the department of health with fresh vegetables.

The department continued partnership in 12 research projects through collaborations with University of Pretoria, National Agricultural Marketing Council, Agricultural Research Council, AfricaBio and Wits University. The department ensured that 910 farmers attend the exhibitions which include NAMPO, African farmers Expo Jacaranda Show, AVI Poultry Expo and Undercover farming expo. Furthermore, the Department held awareness on Pesticide and demonstrations on the safe handling and use of Pesticides which took place on 5 March 2015 at ARC-VOPI in Roodeplaat. 39 participants including farmers, agriculture advisors and the production scientists attended the demonstration and training.

In the 2015/16 financial year, the Nguni Cattle development project was launched by MEC Lebogang Maile. It saw the initial three farmers receiving their animals (30 pregnant heifers and a bull) but have also been placed under a structured veterinary and livestock production mentoring program. As a result the farmers are expecting a successful second calving and weaning

in 2016, which bodes well for the growth of their herds. Three additional farmers have already been identified and pre-qualified, should receive their allotment of 30 heifers and a bull in the course of 2016.

2461 farmers were supported with Extension and Advisory Services in the financial year 2015/16. The total of 1600 smallholder farmers received non-accredited training on vegetable production, poultry production TB testing in Cattle, Piggery production, Bio security, beef management, handling and transportation of Nguni Cattle, Mechanisation support, layer management, pest management, fish production, cooperatives, marketing and disease control. 536 farmers received accredited training. 36 of this was commercial farmers. The accredited trainings were on broiler, piggery, beef cattle, layer production, vegetable production, market access, irrigation, water saving technology, agro-processing, and maize production.

Pillar 3: Accelerated Social Transformation

The department's initiatives towards accelerated social transformation is around food security interventions, the Department in the duration under review has managed to provide around twenty thousand community and homestead food gardens.

Pillar 9: Re-industrialisation of the Gauteng Province

GDARD has committed to establishing the milling plants in Gauteng in conjunction with DTI as part of implementing the Agro-processing Strategy which speaks to how the province should position itself with regards to agro-processing. Phase 1 of the milling plants have been completed in Randfontein. Phase 2, which is the actual construction of the milling factory, grain silos, administration block and staff hall has commenced. 29 jobs have already been created through this intervention. A total of R14m has been set aside for the project.

During the 2014/15 financial year, a total of 142 smallholder farmers were assisted with production inputs and agricultural structures. 30 farmers were provided with piggery production inputs (i.e. starter, creep feeds, grower feeds, boar feeds, 6 x pregnant gilts/sows and 1 x boar) and 30 smallholder were provided with poultry production inputs (i.e. starter ration, grower ration and finisher ration as well as a 1000, day old chicks for each farmer), a total of 45 smallholder farmers were supported with poultry structures, 16 with drilling and equipment of boreholes and a total of 12 smallholder farmers were supported with hydroponic structures.

The Department supported a total of 75 smallholder farmers with on-farm infrastructure through Comprehensive Agricultural Support Program (CASP). This was mainly with the primary focus of enhancing production on various agricultural commodities that farmers are embarking on throughout the province. A total of 159 smallholder farmers were assisted with production inputs.

20 small businesses owned by emerging farmers have been legally registered and currently supplying big retailers and provincial institutions like hospitals and rehabilitation Centre's. The Department has invested in a turnkey animal feed milling solution in Cullinan. Department has started a multi-year renovations project to refurbish various facilities at the Vereeniging Fresh Produce Market (VFPM) in order for it to comply with food safety standards and reposition it as a regional player. ■



Africa must up its game

“Agriculture is the place to invest in Africa – that is what we know and that is what we do best. The potential in the future for Agriculture is strongest in Africa however the continent is the least developed compared to other regions,” says Dr Yemi Akinbamijo, Executive Director of FARA (Forum for Agricultural Research in Africa).



Dr Yemi Akinbamijo, Executive Director of FARA.

In the next five to ten years, FARA's aim is to optimise Africa's natural resources and technological opportunities in a way that transforms into improved livelihood and sustainable and environmental choices in the production of food.

FARA is a continental organisation responsible for coordinating and advocating for agricultural research for development. FARA serves as the technical arm of the Africa Union Commission on matters concerning agriculture science, technology and innovation. Headquartered in Accra, Ghana, the FARA Secretariat has been in existence for 14 years. Over this period, it has provided a continental forum for stakeholders in agricultural research for development to shape the vision and agenda for this sub-sector and to mobilise themselves to respond to key continent-wide development frameworks, notably the Comprehensive Africa Agriculture Development Programme (CAADP).

“There is a saying ‘if you do what you always did, you will get what you always got’. It is no longer acceptable that we continue to run agriculture the way our grandparents did. It is also no longer acceptable that women with babies strapped to their backs and a machete in hand is what will propel the food production system for Africa in the coming years - we cannot think that we will be able to feed Africa without science and technology. The only way Africa can stop this unnecessary food import bill is to up our game and optimise our home base resources using science, technology and innovation,” Akinbamijo says.

“There is also a proverb which says ‘Your neighbour will not help you to build your granary’. In other words, those who are selling food to us will not help us to be self-sufficient because that would kill their market. So when we do become self-sufficient in the agricultural sector, it will be all by ourselves. Feeding Africa is a must, a necessity and a priority for everyone – not just for the governmental and private sector.”

“FARA plays a key role in galvanising the agricultural research for development sector, and brings a strong African voice to global forums such as the Global Forum on Agricultural Research (GFAR) and the Global Conference on Agricultural Research for Development (GCARD). As a coordinating body, FARA works through collaboration with its partners, an approach driven by the principle of Subsidiarity, which devolves the implementation of programmes to the Sub-regional organisations and the National Agricultural Research Institutes (NARIs).”

In implementing its strategy, FARA mobilises stakeholders around a portfolio of continent-wide programmes and projects jointly developed with the stakeholders, to address specific challenges or opportunities. Currently and in the recent past, FARA has coordinated the following such initiatives:

- DONATA: Dissemination of New Agricultural Technologies in Africa
- PAEPARD: Platform for African – European Partnership on Agricultural Research for Development
- RAILS: Regional Agricultural Information and Learning Systems
- SSA CP: Sub-Saharan Africa Challenge Programme
- UniBRAIN: Universities, Business and Research in Agricultural Innovation
- PARI: Program of Accompanying Research for Agricultural Innovation
- The Africa-Brazil Agricultural Innovation Marketplace

We at FARA have noticed that one of the major ongoing challenges is the lack of joint effort in advancing the application of science, technology and innovation (STI) in African agriculture,” says Akinbamijo. “And so we thought that formulating an African-owned agenda around how to enhance the application of STI in agriculture in the context of CAADP and in a coherent manner would be useful. This prompted the elaboration of a Science Agenda for Agriculture in Africa led by the FARA Secretariat.

“This is a monumental achievement FARA has and I am very proud of the institution,” Akinbamijo adds.

The creation of FARA was mooted in late 1990s by a core group of committed champions, including both African scientists and enlightened donor aid officials, who believed in agriculture's potential to lift the continent from poverty. Yet they realised that this would only be achieved if the continent's weak and fragmented agricultural research systems could somehow be brought together and strengthened under a common banner. FARA was then voted into existence in 1997 by the Sub-Regional Organisations, including CORAF/ WECARD, ASARECA and SACCAR, at the 17th Plenary of the Special Programme for African Agricultural Research (SPAAR), a precursor organisation to FARA, situated within the World Bank. ■



Sizing up livestock farming's carbon footprint

A new and interactive tool released by FAO allows farmers, policy makers and scientists to calculate meat, milk and eggs production as well as greenhouse-gas emissions from livestock to make the sector more productive and more climate-friendly.

GLEAM-i, the Global Livestock Environmental Assessment Model interactive, provides answers to a wide range of questions. For example, as a small livestock keeper or a pastoralist, how can you get your animals to produce more milk, meat or eggs? If you're a policy maker, what practices to reduce greenhouse gas emissions from livestock should you support?

Based on GLEAM, the model developed by FAO's Animal Production and Health Division to support policy and practice change to achieve sustainable livestock development, GLEAM-i can be run by anyone using the Excel software, including community organizations working in remote rural areas. It includes variables such as countries and regions, the number and types of livestock - dairy or meat sheep, backyard or industrial pigs, grazing or mixed systems - feed materials, manure management as well as the specific conditions under which the animals are kept.

"The objective of GLEAM is to help reduce greenhouse gas emissions and ensure that livestock activities are as efficient as possible so that they can continue to contribute to people's food, nutrition and livelihood needs while utilizing fewer natural resources," said Anne Mottet, Livestock Policy Officer at FAO.

Hundreds of millions of people around the planet depend on livestock for livelihoods, food security and nutrition. Livestock is particularly important for developing countries where demand for animal protein is growing and for remote and marginal areas, where limited alternatives exist. Yet, it

is estimated that the sector is responsible for 14.5% of all anthropogenic greenhouse gas emissions.

FAO research based on GLEAM has found that with feasible and affordable changes, livestock farmers can increase production and reduce emissions by nearly a third.

"The sector is responsible for 14.5% of all anthropogenic greenhouse gas emissions."

Precise information about the environmental footprint of livestock supply chains will help stakeholders to take better-informed decisions and reduce greenhouse gases emissions. "For example, governments can use GLEAM-i to prepare national inventories and to develop policies for improved efficiency in animal husbandry, feed and manure management," Mottet said.

GLEAM currently supports a range of national and international projects, including climate smart agriculture initiatives in Ecuador, Niger, Zambia and Malawi. It also supports a program funded by the Climate and Clean Air Coalition initiative on improving productivity and reducing enteric methane emissions in South America, South East Asia and, East and West Africa. ■

FAO

The welfare of the people is key to longevity and sustainability

Leon Taljaard, Executive Director of Talmar Sustainable Developments, says he started Talmar in August 2011 as a result of a dream he developed to work and bring people and the economy together.

Talmar Sustainable Developments is a commercial developer operating in South Africa that specialises in the integration of the pillars of sustainability within the context of your venture. Talmar is passionate about the extraordinary influence that the economic and built environments can have on the socio-economic welfare of landscapes. Talmar is equally vested in the social and natural environments that support it.

"Talmar is rooted in innovation and the drive to contribute to the welfare and quality of life for all. Talmar is structured in a way that allows us to provide absolute service in sectors pertaining to the business development process, ranging from concept to implementation. We are intensely aware of future global challenges and the inter-dependence of various environments. It is a matter where innovation meets quality: transferring knowledge and design excellence into practice.

We are human oriented in our approach, as we believe that the welfare of people is key to longevity and sustainability of anything. It is in essence people that have the ability and responsibility to take ownership of structural, socio-economic and environmental innovations. People have the capacity to both destruct and preserve, and at Talmar we believe in creating profitable physical and

abstract environments that empower humans to accept the responsibility to take ownership."

Agriculture has become one of Talmar's key areas of focus due to it being an extremely attractive field of work and because the sector is "so close to the people." Taljaard says it is a very dynamic topic in terms of job creation and economic sustainability not only on a country level but also on a local level.

"So it addresses a number of transformational themes and in terms of our project development capabilities, we felt that it is a strategic match for us while being an area where we can generate exponential impact."

In South Africa and Africa, land transformation and getting bankable agricultural projects developed from the ground up is a significant challenge. Talmar overcomes this challenge by providing solid economic analysis, planning ability and business management abilities to assist the people on the ground working through their project plan. By doing this, Talmar creates the capacity for them to grow their projects into sustainable businesses as well as becoming involved in the sourcing of finance over the long term to assist with their management and government structures until the business can run on its own.

One of the major challenges Taljaard faces is a massive divide between policy and enabling environments from a government perspective. "We are finding that there is quite a big divide and that it requires extremely hard work to bridge that gap and carry people who haven't had the previous exposure or don't necessarily have the required access to the formal economy. So we are also working with policy makers to contribute to the conversation and help them understand the practical ground level challenges.

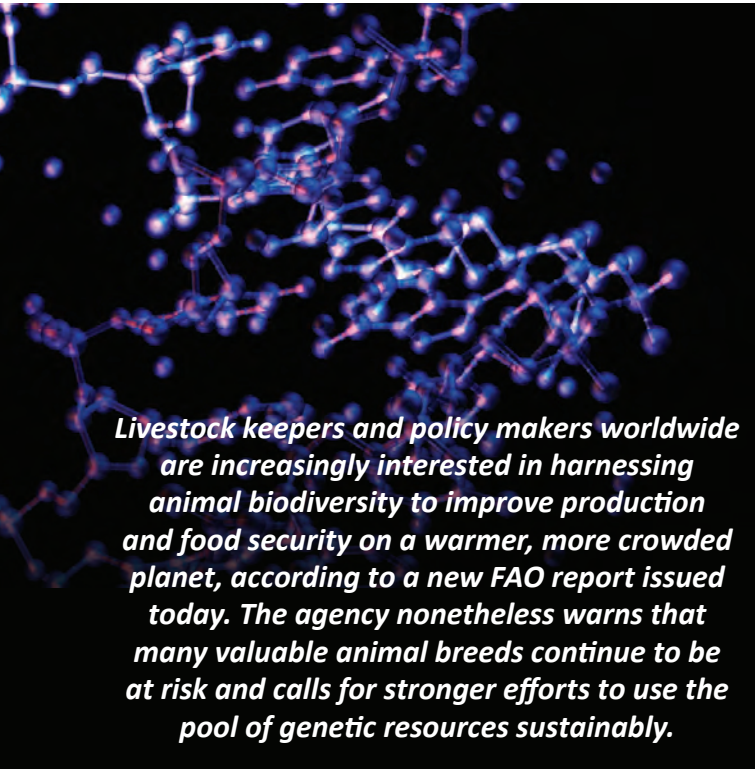
"It requires true entrepreneurship and grit to build projects from the ground up. Quite often investors invest in projects without really understanding what it takes to get them off the ground within that specific context. Often the investee is also ill prepared or lacks the exposure to play on an international market level. This is something that we'd really like to bring to the table – a realistic view of what it takes to make new business happen, to position them firmly within the formal economy, and to grow them into profitable businesses while helping them achieve scale." ■

Leon Taljaard, Executive Director of Talmar Sustainable Developments.



Genetic diversity of livestock

can help feed a hotter, harsher world



Livestock keepers and policy makers worldwide are increasingly interested in harnessing animal biodiversity to improve production and food security on a warmer, more crowded planet, according to a new FAO report issued today. The agency nonetheless warns that many valuable animal breeds continue to be at risk and calls for stronger efforts to use the pool of genetic resources sustainably.

According to The Second Report on the State of the World's Animal Genetic Resources for Food and Agriculture, some 17% (1,458) of the world's farm animal breeds are currently at risk of extinction, while the risk status of many others (58%) is simply unknown due to a lack of data on the size and structure of their populations. Nearly 100 livestock breeds have gone extinct between 2000 and 2014.

Country data shows that indiscriminate cross-breeding is considered as the main cause of genetic erosion. Other common threats to animal genetic diversity are the increasing use of non-native breeds, weak policies and institutions regulating the livestock sector, the decline of traditional livestock production systems, and the neglect of breeds considered not competitive enough.

Genetic diversity provides the raw material for farmers and pastoralists to improve their breeds and adapt livestock populations to changing environments and changing demands.

"For thousands of years, domesticated animals, like sheep, chickens and camels, have contributed directly to the livelihoods and food security of millions of people," said FAO Director General José Graziano da Silva, "That includes some 70% of the world's rural poor today."

"Genetic diversity is a prerequisite for adaptation in the face of future challenges", according to the Director-General, who added that the report will "underpin renewed efforts to ensure that animal genetic resources are used and developed to promote global food security, and remain available for future generations."

Among the future challenges are climate change, emerging diseases, pressure on land and water, and shifting market demands, which make it more important than ever to ensure animal genetic resources are conserved and used sustainably.

Currently, some 38 species and 8,774 separate breeds of domesticated birds and mammals are used in agriculture and food production.

A total of 129 countries participated in the new global assessment, which follows nearly a decade after the release of the first global assessment of animal genetic resources in 2007.

"The data we've collected suggests there's been improvement in the number of at-risk breeds since the first assessment," says Beate Scherf, Animal Production Officer at FAO and co-author of the report. "And governments overall have definitely stepped up efforts to halt genetic erosion and more sustainably manage their national livestock breeds."

The study finds that governments are increasingly recognizing the importance of sustainably using and developing the genetic resources embodied in livestock.

When FAO published the first global assessment in 2007, fewer than 10 countries reported having established a gene bank. That number has now risen to 64 countries, and an additional 41 countries are planning to establish such a gene bank, according to the new report.

And these efforts are bearing fruit, experts say: "Over the last decade, countries across Europe have invested heavily in building shared information systems and gene banks as security measures," according to Scherf.

Some 177 countries additionally have appointed National Coordinators and 78 have set up multi-stakeholder advisory groups to aid national efforts to better manage animal genetic resources.

This comes at a time of expansion in the global trade in breeding animals and livestock semen, often for cross-breeding purposes, with many developing countries emerging as significant importers and some also as exporters of genetic material.

Increasingly, farmers and policy makers in developing countries have embraced imports of genetic material as a way to enhance the productivity of their livestock populations - growing their milk output, for example, or decreasing the time needed for an animal to reach maturity.

But if not well planned, cross-breeding can fail to significantly improve productivity and lead to the loss of valuable characteristics such as the special ability to cope with extremes of temperature, limited water supplies, poor-quality feed, rough terrain, high altitudes and other challenging aspects of the production environment.

In order to better manage livestock diversity going forward, animal breeds and their production environment need to be better described, according to the report, which shows genetic resources are frequently lost when limited knowledge leads to certain breeds going underused. ■

FAO

Global campaign to eradicate Peste des petits ruminants

The ground has been broken on a major international initiative to rid the world of Peste des petits ruminants (PPR) – also known as sheep and goat plague – a highly contagious viral animal disease that causes major losses in regions home to millions of the world's poorest people. The annual damage due to PPR is estimated to be between \$1.4bn and \$2.1bn.

The \$996.4m plan launched by the Food and Agriculture Organisation of the United Nations (FAO) and the World Organisation for Animal Health (OIE) is the first phase of what will be a 15-year effort to eradicate PPR by 2030.

“Wiping out PPR will have a major positive impact on the lives of pastoralist communities in all developing countries and directly support global efforts to end poverty and hunger by 2030,” FAO Director-General José Graziano da Silva said about the plan. “When it comes to viral animal diseases, much attention falls on the threats they pose to human health – but their effects on economic growth, human livelihoods, quality nutrition and food security can be equally devastating. That’s why this campaign needs wide support,” he added.

“We have international standards for surveillance and diagnosis of PPR, a global system to report outbreaks, and standards for vaccines that are highly effective when applied appropriately,” OIE Director General Monique Eloit said. “We also have international standards to prevent spread through trade, to officially recognise the control programmes of our Members, and their status as free when

those programmes achieve success,” she added. “So all the tools are available to us, and are integrated into the plan. Its successful implementation now relies on the capacity of Veterinary Services at national level – the OIE is committed to provide them with ongoing support.”

Since it was first identified in Côte d’Ivoire in 1942, PPR has spread to some 70 countries in Africa, the Middle East and Asia – in September 2016, Mongolia reported its first-ever case of PPR. Over 80% of the world’s sheep and goats are found in these regions, where many families rely heavily on products like goat milk, mutton and wool for their nutrition and livelihoods. FAO estimates some 300 million small-scale farming families worldwide depend on small ruminants for food and income.

While the disease is highly lethal to small ruminants – killing up to 90% of infected animals – it is easily preventable with inexpensive vaccines that can be administered for as little as 25 cents and will protect the animal for its entire life. The plan for the first five-year phase of that effort is now ready to be put into action and consists of a global strategy backed by nine regional road maps.

The initial portion of the campaign is focused on countries where PPR is known to exist or where its status has never been assessed. It will involve activities to raise awareness among farmers, build their capacity to prevent and contain the disease, strengthen national veterinary health services and systems for control of PPR and other diseases, and

implement targeted vaccination campaigns.

But the plan goes beyond disease eradication alone – it also aims to improve national production models and help herders build the strongest, most resilient livelihoods with their animal resources.

With this approach, the agencies are looking to harness the potential of animal husbandry as a path



Photo: ©FAO/Marco Longari

out of poverty and valuable source of nutrition for poor families.

Together, FAO and OIE will coordinate the global efforts of governments, regional organisations, research institutions, funding partners and livestock owners through the Joint PPR Global Secretariat, based in Rome.

With the world population set to rise to over 9.7 billion by 2050, small ruminant production is expected to rise with growing demand for meat and milk, growth that is generating new opportunities for producers, processors, and sellers. With that comes stronger interest from governments and industry to make supply chains more reliable and the movement of animals safer. ■

FAO

Agri Projects are fundamental to the growth in the African Agri sector – and so is the funding of these projects. As a unique offering to the African Agri Council members, Africa AgriLeaders will feature random projects that seek funding such as below. If you are a project owner looking for funding or you are an investor interested in funding these projects, please contact Kristy Jooste: kristy.jooste@agricouncil.org

Global Aquaponics

Global Aquaponics (PTY) Ltd is a 100% black female-owned company based in Johannesburg, South Africa, registered in November 2015; a sole proprietorship owned by the founder, Ntombikayise Queen Ncoco, planning to manage and operate the business with two international non-executive directors: Ifeanyi Clifford Nweze (Nigeria) and William Martin (United States of America).

Global Aquaponics will provide fish to chain stores and retailers across the country. Global Aquaponics will provide convenience and variety not found in the traditional fish selling industry.

Research has shown that fish production and processing is one of the most complex yet the demand for the product is high. It is conservatively estimated that by the end of last year there was approximately seven million internet users who live in the continental U.S. and demand fish and fresh farm produce. We estimate that 5% (350,000) of these users will view our site in one year's time and that 2.5% (8,750) of those potential customers will actually buy fish. Our contacts that side provided this insight.

What creates such an opportunity for Global Aquaponics is that most people do not have access to retail fish shops. Some of the most commonly consumed fish cannot be found in these shops at all. Furthermore, the current online fish sellers do not have any background and care requirements information for the fish that they sell. Global Aquaponics will offer both information on the species we carry and the ability to order the researched fish without having to go to another website.

Global Aquaponics will also be operating in a niche market where established customers' loyalty provides significant competitive advantage. By providing a comprehensive site, Global Aquaponics expects to create a one-stop experience that will encourage the customers' loyalty.

Vision

To be the Global leaders in indoor fish production. We believe that we can end the poverty crisis in Africa and the rest of the world by ensuring that every person on the planet has access to high protein and vitamins which is the human-body's most basic need – nutrition.

Mission

Implementing commercial aquaponics systems capable of producing world standard, healthy and affordable food using the best high-technology.

Training individuals in aquaponics techniques enabling them to feed themselves and creating business opportunities.

Keys to success

- Efficiently breed the species of need and demand by the consumers.
- Quickly and reliably deliver the fish and vegetables to customers.

- Develop a strong reputation within the fish and vegetable consuming community.
- Ensure that all large search engines link to our site.

We value

- Our environment
- Our customers
- Our employees
- Our partners
- Our community

Our principles

In order to deliver quality services which translate to sustainable trainings, Global Aquaponics adheres to certain fundamental principles.

- Creation of policies and procedures that are relevant to each unique group of individuals.
- To treat all our clients with outermost respect.
- To be open to change and innovation.
- To communicate effectively with all stakeholders
- Provide quality in all ventures undertaken.
- Create the most conducive environment to learn and transfer information.

Goals and objectives

- To offer quality products.
- To exceed customers' expectations.
- To add a value for money to all our clients.
- To remain competitive for the foreseeable future.

The Global Aquaponics' most important objectives are:

- To produce 350 tons of fish per month.
- Community empowerment and job creation
- Training of skilled and semi-skilled staff. ■



Agri Projects are fundamental to the growth in the African Agri sector – and so is the funding of these projects. As a unique offering to the African Agri Council members, Africa AgriLeaders will feature random projects that seek funding such as below. If you are a project owner looking for funding or you are an investor interested in funding these projects, please contact Kristy Jooste: kristy.jooste@agricouncil.org

Emlanjeni Piggeries

Emlanjeni Piggeries was officially registered as a business in May 2015 by Siyabulela Shosha (BCom Honours – Business Management) and Mziyanda Shosha (National Diploma in Agriculture – Livestock Production). Through a joint venture, the farm is situated in Eastern Cape, South Africa, as the area is viable for such an operation. The piggery will be operating on a commercial scale in future and will definitely be seen as a major role player in the economy of the chosen area. Small scale pig farmers exist in the area whom are breeding pigs for their own consumption and do not have the capacity to commercially breed pigs on a large scale. Our service offering is split into two segments mainly the core business (i) Pig farming and (ii) Chicken farming

One of the cornerstones of Emlanjeni Piggeries is the implementation of the affirmative action policy and the empowerment of neglected and impoverished communities.

Emlanjeni Piggeries is a fully black-owned company and implements Affirmative Action policies as well as empowerment is clearly understood by the company. We create opportunities within its environment to improve abilities and skills of the previously disadvantaged, in order that they become marketable in the competitive environment.

Emlanjeni Piggeries is gender sensitive thus intends to create a momentum whereby women make up at 50% of our ownership management component. Women within our communities need to be uplifted, as they are not only mothers of our families but also mothers of our communities. We are a level 1 BBBEE accredited company.

Our customers

Our current clientele is segmented into the following two segments: Individuals who have a need for good quality pork as well as a few butcheries. We also have a strong focus on targeting breeding pigs exclusively for commercial sale to abattoirs in the area.

Vision statement

Our vision is to operate within the South African market, by being one of the most productive, professional and cost efficient black owned pig farms and lead as an all-black operated company in a currently white lead industry. We aim to identify, guide and empower young black farmers through supportive management in the industry of agriculture and primary farming.

Mission Statement

It is the mission of Emlanjeni Piggeries is to ignite the potential that exists within the nation of South Africa. We strive to meet and exceed our client's expectations to foster long term partnerships and earn the privilege of being the general producer of choice.

Values

- Integrity
- Accountability
- Transparency
- Honesty
- Environmentally conscious
- Timeous delivery

Business goals and objectives

- To grow our revenue stream by 15% per annum;
- To grow our staff compliment by 50% by the year 2018;
- To increase our market share by 5% by end of 2018;
- To diversify and increase our expertise in other related and unrelated markets.

Business objectives

The company is pursuing the following business objectives:

- To create job opportunities for the previously disadvantaged but capable and provide an environment where they can excel.
- Vertical Integration (Back vertical integration) i.e. Livestock and Crop production.

Economic intent

As any business exists and seeks to survive market conditions, the company's economic intent is to make a sustainable profit and contribute immensely to the economic growth of the country.

Competitive business advantage

Having worked with some of the best individuals in the industry, Emlanjeni Piggeries have acquired a unique business model and strategy and through our experience we have identified the challenges that are faced by small to medium farmers which more often than not slow down the growth of these entities. We have formulated strategies that will bring solutions to these recurring issues and plan to use that as our core business edge. ■



28 FEBRUARY - 1 MARCH 2017
Nairobi, Kenya

AgriLogistics
 EAST AFRICA
 SUMMIT

Innovative solutions driving farmer to market

Solutions for improving the supply chain process from farmer to market and improving post harvest losses

Topics include:

- Cold Chain optimisation and monitoring - reducing post harvest losses
- Regional update on multimodal transportation & cold chain logistics
- Renewable energy as a solution for cold chain logistics

www.agricouncil.org/logistics-summit

e-Agri
 EAST AFRICA
 SUMMIT

Technology for enhanced farming

Africa's only platform to bring together proven e-agriculture solutions that will benefit agriculture stakeholders

Topics include:

- Agri APP FEST - Improved production and increased productivity
- How data can optimise supply chain
- IoT and automating farming
- ICT and renewable energy solutions for Agri

www.agricouncil.org/eagri-summit



GET IN TOUCH

Commercial opportunities: bethwell.mnyamana@agricouncil.org
 Speaking opportunities: nico.loretz@agricouncil.org

Media partners:

Agri Leaders
 The people that make agri happen
 AFRICA

Business News
 CAPE

bim
 INFUTURE

ports
 AFRICAN
 evolution

rail
 AFRICAN
 evolution

EXHIBITOR LISTINGS

<p>Stärke Ayres is committed to research and innovation and is continually working to deliver new, improved vegetable varieties to fulfil the changing requirements of our clients. The company has breeding programmes in tomato, zucchini, butternut, pumpkin, beans, sweetcorn, Hubbard squash, scallops and onions.</p> <p>We not only use the most advanced techniques in our own laboratories but ensure that we collaborate with international partners that do the same. Key objectives include yield potential, disease resistance, and seed quality.</p> <p>Superior Grain Equipment manufactures a complete line of grain storage, grain handling and conditioning storing and conditioning grain.</p>			<p>TEDA was established with the primary objective of cultivating an environment within which the City of Tshwane (CoT) can grow its human capital and the economy through the facilitation, implementation and management of developments with a specific focus on economic development and investment attraction into the greater Tshwane.</p> <p>What we do:</p> <ul style="list-style-type: none"> • Project management and development facilitation • Investment promotion and aftercare • Export promotion and aftercare 	<p>Wesgro is the official tourism, trade and investment promotion agency for Cape Town and the Western Cape. Wesgro is the first point of contact for foreign buyers, local exporters and investors wishing to take advantage of the unlimited business potential in the region.</p> <p>Working closely with key role players including the national, provincial and local government, our mandate is to facilitate foreign and domestic direct investment into the region, exports of products and services through development of export capability, demand and market access and to promote Cape Town and the Western Cape as a viable business, leisure and film destination.</p>		<p>The Western Cape Department of Agriculture provides a wide range of development, research and support services to the agricultural community in province.</p> <p>We also render services to new and commercial farmers from our research farms, Education and Training Centres, extension offices, state veterinary offices and animal health technicians situated throughout the province.</p> <p>The agricultural sector not only stimulates economic growth in the province, it also plays a major role in creating sustainable job opportunities. The department is very committed to deliver on Project Khulisa, focusing on job creation and economic development.</p>		<p>Western Cape Fine Food Initiative (WCFFI) is a non-profit company (NPC) established in November 2010. The WCFFI provides an engagement platform for the Agri-Processing and Fine Food Industry in South Africa enabling academia, support agencies and government to interact with the sector. Its vision is to grow the South African Agri-Processing and Fine Food Industries toward achieving worldwide recognition as a supplier of premium products and brands thereby creating a common dialogue platform and a joint action plan among the value chain stakeholders.</p>		<p>The Zambian International Trade and Investment Centre (ZITIC) was created in 2009 to serve as a reliable and efficient reference point for local and foreign investors, as well as provide procedural support for project interests. ZITIC is strong in sourcing and facilitations, locally and internationally. Our success lies in our reputable and sound market intelligence network, and our investment project database, which helps us to identify investment opportunities in Zambia and globally. Our vision is to increase FDI into Zambia and positively impact the Zambian economy.</p>	
---	---	---	---	---	---	---	---	--	---	--	---

EXHIBITOR LISTINGS

<p>Wakulima Marigiti (Pty) Ltd, serves the east African market, specialising in equipment for agriculture and food production industries. Agencies include RUSANDUS and Cubicool International as well as others.</p> <p>RUSANDUS engineers, designs, manufactures, services and sells full and partial solutions to the chicken and meat processing industry (e.g. pluckers, scalders, chillers, overhead lines, conveyors, LBH systems etc.)</p> <p>Cubicool International is a leading designer and manufacturer of refrigeration equipment suitable for cooling or freezing of perishable products, as well as commercial applications.</p>	
<p>If Mpumalanga is the 'Place of the Rising Sun', MEGA is the agency tasked with providing the far-reaching horizon, the backdrop that is needed for the sun to rise.</p> <p>The Mpumalanga Economic Growth Agency (MEGA) is an official development finance institution and the trade and investment promotion arm of the Provincial Government of Mpumalanga, dedicated to positioning the province as an investment destination of choice and a regional trade hub.</p> <p>As such, its central objective is to leverage trade and investment, provide funding for SMMEs and cooperatives, and deliver housing finance, so as to foster the growth and development of Mpumalanga's economy.</p>	
<p>The NAMC is a statutory body reporting to the Minister of Agriculture, Forestry and Fisheries. Our mandate is captured in our four core divisions namely; Agribusiness Development, Agricultural Trusts, Statutory Measures and the Markets and Economic Research Centre.</p> <p>We serve through the following initiatives:</p> <ul style="list-style-type: none"> • Development schemes; to leverage the potential of smallholder agriculture through partnerships, as well as technical assistance and training programmes, and transformation. • Industry trusts; bridging the communication gap between industry and the Ministry. • Statutory measures; investigating statutory measure applications, • Monitoring food prices and inputs costs, as well as value chain, trade and linking farmers to markets research. 	
<p>Let the NWDC assist your business to be first!</p> <p>Our vision is to be the cornerstone of sustainable economic development and job creation in the Bokone Bophirima (North West) Province. The Province is an ideal investment destination due to its array of valuable resources and business opportunities.</p> <p>The NWDC has ten branches across the province and some surrounding areas such as Gauteng and the Northern Cape, offering an extensive range of services which include:</p> <ul style="list-style-type: none"> • Small business development and loans • CIPC (company) registrations • Exporter support • Property rentals (Industrial, retail and residential) • Investor assistance • Industry development 	
<p>Onderstepoort Biological Products (OBP) Soc Ltd, is a biotechnology company that supplies products and services to the animal health sector in South Africa, Africa and the world as a whole. Its work is to produce world-class vaccines to control diseases among various animal sectors – goes to the heart of the development of a healthy agricultural industry here, and on the wider African continent.</p> <p>OBP's success is not limited to South Africa. Its influence, scientific and technical backup are far-reaching, and many of its products are uniquely designed to combat livestock diseases elsewhere in Africa, the Middle East, Europe and South America.</p> <p>OBP will continue exploring ground-breaking technologies in the creative realm of science to realise the vision of being a leading global biotech manufacturer and provider of animal health vaccines developed by skilled, innovative and passionate scientists.</p> <p>For longer than a century we have preserved and valued not only the passion for science, but also the responsible determination to make a world of difference for livestock, farmers and in the lives of consumers of animal products, preparing for the challenges of tomorrow.</p> <p>OBP is entering a new era of vaccine production by setting unequalled standards in research, product innovation, manufacturing and distribution of high-quality vaccines.</p>	
<p>Established in 2012, Price Forbes (Pty) Ltd. is a wholly-owned subsidiary of Price Forbes Group Limited and offers clients the same approach to meeting their needs as the wider Price Forbes group. Licensed by the Financial Services Board (FSB) and located in Johannesburg, the Price Forbes (Pty) Ltd's office broadens the offering available to insurance and reinsurance buyers of domestic corporate and commercial insurance; providing enhanced access to international markets and introducing specialist skills and greater competition into the South African insurance market, following significant consolidation.</p>	

Download the unique event app to have full access to the latest programme and to connect with peers!
See page 3 for details.

EXHIBITOR LISTINGS

<p>About Absa Bank</p> <p>Absa Bank Limited (Absa Bank) is a wholly owned subsidiary of Barclays Africa Group Limited, which is listed on the Johannesburg Stock Exchange and is one of Africa's largest financial services groups. Absa offers a range of retail, business, corporate and investment banking and wealth management products and services primarily in South Africa and Namibia. Barclays Africa is 50.1% owned by Barclays Bank PLC (Barclays). At 31 December 2015, we had 847, 8 million shares in issue and a market capitalisation of R121,6 bn.</p>		<p>The Agricultural Business Chamber (Agbiz) is a voluntary association of agribusinesses operating in southern Africa. Key constituents of Agbiz include major banks, short-term and crop insurance companies, agribusinesses and cooperatives. They provide a range of services and products to farmers and various other businesses in the grain, horticulture, viticulture and animal product value chains of the agri-food industry.</p> <p>Through Agbiz, members can actively participate in a network widely recognised as important, politically neutral and influential in the agribusiness sector.</p>	<p>ARC Vision</p> <p>"Excellence in Agricultural Research and Development"</p> <p>The ARC's vision reflects its core business and celebrates its unique role, acknowledging its position as the principal agricultural research institution in South Africa.</p> <p>The vision highlights the need to harness ARC capabilities to ensure that it becomes an organisation known for its excellence in its core area of business.</p> <p>ARC Mission</p> <p>"The Agricultural Research Council is a premier science institution that conducts research with partners, develops human capital and fosters innovation to support and develop the agricultural sector."</p>	 <p>Avantu Without Borders specialises in the accelerated biological treatment of both wastewater treatment and non-wastewater treatment. The company produces natural based proprietary products that cater to the agricultural, mining, water management services and manufacturing industries. These products use a proven natural process of treatment called Bio-Augmentation to rehabilitate contaminants, using no unnaturally occurring chemicals or artificial biological agents. The result of which is the ability to produce guaranteed desired results in a cost effective, eco-friendly way.</p>	<p>Over 25 years' experience in agribusiness across the African continent, Bagtech International is based in South Africa, Durban. Nowadays, Bagtech is focused on offering a supply chain management service and developing custom-made equipment for handling bulk fertiliser. The company offers advanced technology through an innovative management system in partnership with Festo, in order to provide accurate information to the clients. The company's main goal is to offer the expertise in the fertiliser industry by providing consultancy, equipment and services from Africa to Africa. As far as products are concerned, we can design in-house fertilizer blending plants from 45tph, coating plants 40tph, bagging equipment from 10kg to 1ton, screening equipment and any other compact fertilizer plant as per customer needs.</p>	 <p>CHERRY IRRIGATION specialises in the design and implementation of all types of agricultural irrigation systems. We are an authority on irrigation and climate control systems for the greenhouse market. Based in the Western Cape of South Africa, we proudly serve a variety of businesses, across Sub-Saharan Africa. With over 30 years' industry experience, we offer a turn-key solution, covering all aspects of the project from the initial consultation, through to design, implementation and after-sales support. We use our in-house specialists throughout and have no need to rely upon sub-contractors. Contact us for a tailor-made open-field or undercover solution.</p>	<p>Consolidated Wire Industries, or CWI, is a premier producer of mild steel wire and wire products in South Africa. Products include process wire, bright/black: used for the manufacturing of nails, bolts and nuts, welding electrodes and weld mesh for the manufacture of supermarket trolleys, racking/shop fitting etc. Galvanised wire is used for the manufacture of armouring of electric cables, baling of paper pulp and various fencing products which are also manufactured in house by CWI.</p> <p>Wire Products manufactured in house: field fencing, barbed wire, high-tensile fencing wire, and wire for baling and binding.</p>	 <p>Vision</p> <p>United and transformed agriculture, forestry and fisheries sector that ensures food security for all and economic prosperity.</p> <p>Mission</p> <p>Advancing food security and transformation of the sector through innovative, inclusive and sustainable policies, legislation and programmes.</p> <p>Values</p> <ul style="list-style-type: none"> • Drive: driven to deliver excellent service through leadership and professionalism • Attitude: being an ambitious, passionate, reliable and dedicated workforce • Fairness: acting with objectivity, empathy, integrity and transparency • Focus: focusing on people, economic and rural development
--	---	---	--	---	---	--	--	---

Download the unique event app to have full access to the latest programme and to connect with peers!








See page 3 for details.

PARTNER LISTINGS

THE FOLLOWING COMPANIES ARE PROUD PARTNERS OF THE EVENT






MEDIA PARTNERS:

	http://africapaidigest.com/			www.africacouncil.org/content/agri-leaders-magazine			www.africanbusinessmagazine.com		www.access-africa.com
--	---	---	---	--	--	---	--	---	--

	www.africanindy.com		www.african-review.com		www.africanfarming.net		www.africanindy.com		www.analyse-africa.com		www.barclayhedge.com		www.bizcommunity.com
---	--	---	--	--	--	---	--	---	--	---	--	--	--

	www.cbn.co.za		www.iol.co.za/capetimes		www.farmersreview-africa.com		www.alive2green.com/publications/green-economy-journal/		www.frost.com		www.harvesta.co.za
---	--	---	--	--	--	---	--	---	--	--	--

	www.hedgenews-africa.com		www.investafrica.pi		www.iol.co.za		www.matchdeck.com		www.namibianfarming.com		www.newafricanmagazine.com
---	--	---	--	--	--	---	--	---	--	---	--

	www.pretorianews.co.za		www.savvyinvestor.net		www.primediazw.com		www.thesundayindependent-newspaperdirect.com		www.thisisafricaonline.com
---	--	---	--	---	--	---	--	---	--

ASSOCIATIONS AND STRATEGIC PARTNERS:

	www.agbiz.co.za		www.sites.google.com/site/agriculturalindustry-network/home		www.arc-agric.za		www.eatta.com		www.eavca.org
---	--	--	--	---	--	---	--	--	--

	www.euchamber.co.za		farafrica.org		www.frost.com		www.kenaff.org		www.lellointernational.com		www.economy.gov.il
---	--	---	--	--	--	---	--	---	--	--	--

	www.namc.co.za		www.npkc.org		www.sabi.co.za		www.sa-drc.co.za		www.scibus.com		www.wesgro.co.za
---	--	---	--	---	--	---	--	---	--	--	--

	www.westerncape.gov.za		www.investzim.com		www.zitio.co.za		www.ziticozambia.com
---	--	---	--	---	--	---	--

Visit the show app to find a detailed listing of all media and association partners

FREE MEMBERSHIP TO THE AFRICAN AGRI COUNCIL – REGISTER NOW!

DEVELOPING SUSTAINABLE AGRICULTURE IN AFRICA

The African Agri Council is a network of global executives, decision makers and key stakeholders in Africa's agricultural industry. We connect executives with their peers, policy makers, investors & financiers and leading global service providers across Africa and around the world.

The Council is an exclusive platform for networking, matchmaking and deal-making in Africa. We focus on the business dynamics of agriculture; the pioneers, partnerships, investments, joint ventures and regulatory dynamics that determine the future direction of the industry and shape tomorrow's sustainable food production and consumption landscape.

OUR CORE FOCUS INCLUDES:

- **Networking:** connecting the Agri community in Africa
- **Matchmaking:** creating a business and product matchmaking platform for the development and promotion of sustainable agriculture in Africa
- **Deal-making:** identifying opportunities and connecting agricultural professionals from small farmers to commercial farming enterprises with investors and financiers
- **Knowledge:** providing knowledge sharing access to the latest research, development and tech innovation to stimulate growth

The African Agri Council welcomes your membership – please visit www.agricouncil.org to connect with international agri executives today!

2017/18 MEET UPS – CONNECT WITH THE INDUSTRY IN ROUND TABLE DISCUSSIONS AND NETWORKING FUNCTIONS THROUGH OUT THE YEAR ACROSS THE WORLD!

- **FEB 2017:** Meetup in Nairobi, Kenya
- **APR 2017:** Meetup in New York, USA
- **MAY 2017:** Meetup in London, UK
- **JUNE 2017:** Meetup in Accra, Ghana
- **NOV 2017:** African Agri Investment Indaba 2017, Cape Town, South Africa
- **FEB 2018:** Meetup in Asia (Hong Kong / Tokyo)



PROGRAMME: WEDNESDAY 30 NOVEMBER 2016

16:00 Investment case studies – Food production

- Practical experiences about investing in Ethiopia
 - Dr Faisal A Guhad, Managing Director, Jigjiga Export Slaughterhouse (JESH), Ethiopia
- The collaborative design and implementation of bankable greenfield projects in Africa – Large scale essential oil production through a modern co-operative
 - Leon Taljard, Executive Director, Talmar, South Africa

16:30 Developing a globally competitive food manufacturing industry

- Access to finance
- Access to skills and talent
- Access to markets

Panelists:

- Jacob De Villiers, Managing Director: Grain Management, AFGRI, South Africa
- Chris Sturges, Director: Commodity Derivatives, JSE Limited, South Africa
- Unati Speirs, Group Chief Operations Officer, African Global Trading, South Africa
- Peter Draper, Managing Director, TUTWA Consulting, South Africa
- Kate Sharum, Director, EBS Advisory, South Africa

17:30 Closing remarks

Chris Hart, Executive Director: Leapfrog Advisory, Leapfrog Global, South Africa

Conference proceedings

(For paying delegates only)

The African Agri Investment Indaba proceedings will be available online after the event:

1) To access the presentations use the username and password that will be emailed to you after the event.

2) Please note conference proceedings information will only be emailed to conference delegates and conference speakers.

For additional information contact Ben Leyka: ben.leyka@agricouncil.org, [+27 73 794 8799](tel:+27737948799)

FREE MATCH MAKING SESSIONS FOR ALL DELEGATES

Meetings will take place in the Matchmaking area on the exhibition floor on Tuesday 29 and Wednesday 30 November 2016 and each meeting will last up to 20 minutes. We have endeavoured to pre-arrange three to five meetings for each attendee (who wishes to make use of this service.)

Remember to download the event app to make use of all networking opportunities!



Download the unique event app to have full access to the latest programme and to connect with peers!
See page 3 for details.

PROGRAMME: WEDNESDAY 30 NOVEMBER 2016

10:30 Early AM refreshments and networking

11:00 Southern Africa Regional Roundtable: What makes African countries an attractive investment environment for investors – Outlining opportunities

Moderator: Chris Hart, Executive Director: Leapfrog Advisory, Leapfrog Global, South Africa

- **DRC**
 - John M. Ulimwengu, Principal Adviser for Agriculture and Rural Development, Office of the Prime Minister, DRC
 - Thierry Nawejl, Chairman, South Africa - Democratic Republic of Congo Trade and Investment Chamber, South Africa/DRC

- **Zimbabwe**
 - Paul Zakariya, Executive Director, Zimbabwe Farmers Union, Zimbabwe
 - Marc Carrie-Wilson, Acting Director, Commercial Farmer's Union of Zimbabwe, Zimbabwe

- **Zambia**
 - Sebastian C. Kopulande, Chief Executive Officer, Zambian International Trade and Investment Centre (ZITIC), Zambia

12:00 East Africa Regional Roundtable: What makes African countries an attractive investment environment for investors – Outlining opportunities

Moderator:

Chris Hart, Executive Director: Leapfrog Advisory, Leapfrog Global, South Africa

- **Kenya**
 - Dr John Mutunga, Chief Executive Officer, Kenya National Farmers Federation (KENAFF), Kenya
 - Elizabeth Thande, Chairman, A/WAN Kenya, Kenya

- **Tanzania**
 - Jacqueline Mkindi, Chief Executive Officer, Tanzania Horticultural Association, Tanzania

12:45 Networking lunch

14:00 West Africa Regional Roundtable: What makes African countries an attractive investment environment for investors – Outlining opportunities

Moderator:

Chris Hart, Executive Director: Leapfrog Advisory, Leapfrog Global, South Africa

- **Cote d'Ivoire**
 - Allan Musona, Senior Advisor (Investment Banking, Mining and Metals, Infrastructure, Agri Business and Energy), Loita Group, Cote d'Ivoire

- **Nigeria**
 - Olumide Lawson, Partner, Sahel Capital, Nigeria

14:45 International Financial panel: Challenging current trends and models to drive financing into the food manufacturing industry

- Structural reforms for SMEs to attract innovative financing solutions
- How to make different financing options work for investment ready projects
- Investing in agriculture to achieve annual returns and capital appreciation – A comparative analysis of agriculture and other industries

Panelists:

- Michael Hoefer, Director Agri Funds, Deutsche Bank, Germany
- Hendrik Norlander, Regional Director East Africa, SWEDFUND, Sweden
- Jeremy Parkes, Managing Principal, Injaro Investments, Ghana
- Acumen, Kenya
- Allan Hackner, Regional Economic Growth Office, USAID Southern Africa, South Africa

15:45 Afternoon refreshments and networking

Download the unique event app to have full access to the latest programme and to connect with peers!

See page 3 for details.

PROGRAMME: TUESDAY 29 NOVEMBER 2016

16:50 Country case study panel – Investing in South Africa

- What is the current status of agriculture as an asset class and what have been the major developments within the last five years?
- How should investors think about the South African market when developing their agriculture portfolio?
- How does agriculture private equity compare to direct investments, farmland funds, venture capital and agriculture public equities in terms of risks and returns in South Africa?
- Government investment vs. Donor investment vs. Private sector investment

Moderator:

Mohsin Cajee, Investment Principal - Old Mutual Private Equity, Old Mutual Investment Group, South Africa

Panelists:

- Mokegethi Tshabalala, GM: Thebe Agri-processing, Thebe Investment Corporation, South Africa
- Hendrik Jordan, Chief Executive Officer, 1K1V, USA
- Zano Mataruka, Senior Investment Officer – Agribusiness, International Finance Corporation (IFC), South Africa
- Thinus van Schoor, Head Agriculture and Maltings Africa, SAB Millers, South Africa

17:50 Closing remarks

18:00 Cocktail function

PROGRAMME: WEDNESDAY 30 NOVEMBER 2016

07:00

Registration

Chairman's address

Chris Hart, Executive Director: Leapfrog Advisory, Leapfrog Global, South Africa

09:00

The role of ICT in financing agriculture – Vodacom case study

Vuyani Jarana, Executive Director and Chief Executive Officer, Vodacom Enterprise Business, South Africa

09:30

Investing in food production – Boosting domestic demand

- The role of the agri-processing sector in a diversify economy
- How do we influence investors' confidence to ensure global competitiveness?
- Expanding agri-processing production value chain

Moderator:

Dylan Platt, Senior Chief of Staff and Consumer and Industrial Products Industry, Deloitte, South Africa

Panelists:

- Ronald Ramabulana, Chief Executive Officer, National Agricultural Marketing Council, South Africa
- Nazem Sterras, Chief Executive Officer, Western Cape Fine Food Initiative NPC, South Africa
- Marci Pather, Founder and Executive Director, All Joy Foods Ltd, South Africa
- Solly Molepo, Deputy Director: Agri-Processing Industrial Development Division, Department of Trade and Industry (DTI), South Africa
- Louw van Reenen, Chief Executive Officer, Beefmaster, South Africa



AFRICAN AGRI INVESTMENT INDABA

Participate in 2017!
20-22 November 2017, CTICC Cape Town

- Diarise the dates • Allocate budget • Sponsor or exhibit

✉ natalie.cumberlege@agricouncil.org

PROGRAMME: TUESDAY 29 NOVEMBER 2016

12:00

Non-African Governments panel – A stage for countries across the globe actively seeking to develop relationships and invest in Africa's agriculture industry

- Policies for African agricultural investment
- Our strategic role and positioning in African agriculture value chain
- The evolution of agriculture as an asset class – Assessing recent capital deployments into Africa by local institutional investors

Moderator:

Joyene Isaacs, Head of Department, Western Cape Department of Agriculture, South Africa

Panelists:

- *European Union*
- *Mr Arthur Lenk, Ambassador, Embassy of Israel in Pretoria, Israel*
- *Dr Takele Tassew, Feed The Future Coordinator and Agriculture Team Lead, USAID Southern Africa, South Africa*

13:00

Networking lunch

14:15

Policy and legal environment overview Panel

- Enhancing vs. Destroying value in the agricultural industry – the vital importance of effectively managing political, regulatory, and reputation risks

- Driving competitiveness and ensuring growth and stability

- Reshaping the industry in order to ensure a clear future and sustainability of Africa's agri-processing sector

Moderator:

Thabi Nkosi, Sector specialist: Agriculture and Agri-processing, Public Investment Corporation (PIC), South Africa

Panelists:

- *Dr John Purchase, Chief Executive Officer, Agricultural Business Chamber (Agbiz), South Africa*
- *Dr Yemi Akinbamiyo, Executive Director, Forum for Agricultural Research in Africa (FARA), Ghana*
- *Gerald Masila, Executive Director, East African Grain Council (EAGC), Kenya*
- *Dr Nigel Chanakira, Chairman, Zimbabwe Investment Authority, Zimbabwe*
- *Omri van Zyl, Chief Executive Officer, Agri SA, South Africa*
- *Motsepe Matlala, President, National African Farmers Union (NAFU), South Africa*
- *Prof. Ferdinand Meyer, Director, Bureau for Food and Agricultural Policy (BFAF), South Africa*
- *Nigel Gwynne-Evans, Chief Director: African Industrial Development, Department of Trade and Industry, South Africa*

15:15

Financing and risks overview panel – Investing in Africa

- Strategic investments to secure access to food – Seizing opportunities in uncertain times
- Investment opportunities across the food value chain – What are the choices and what are the associated risk/return trade-offs investors must consider?
- What investment structures best suit African agribusiness opportunities?
- Government investment vs. Donor investment vs. Private sector investment

Moderator:

*Greg Benjamin, Corporate Finance, Consumer and Industrial Products Leader
Deloitte Capital, South Africa*

Panelists:

- *Simon Glossop, Chief Executive Officer, Camscorp and Chair of Octopus Investments EOC Committee, United Kingdom*
- *Mark-Anthony Johnson, Chief Executive, JIC Holdings, Gibraltar / United Kingdom*
- *Sanjay Sethi, Managing Director – Planning and Coordination, International Projects, Signature Agri Ventures Ltd, UAE*
- *Paul Nguru, Partner, Agri-Vie Investment Fund (Pty) Ltd, Kenya*
- *David Ekabouma, Deputy Head, Business Development / Head of Product and Structured Finance, African Guarantee Fund, Kenya*
- *Lesley Wentworth, Programme Manager - Southern Africa Business Forum – Private Sector Desk, NEPAD Business Foundation, South Africa*
- *Samuel Dzotefe, Manager – Agribusiness, International Finance Corporation (IFC), South Africa*

16:15

Afternoon refreshments and networking

16:30

An overview of the changing dynamics in South African agriculture – Challenges and opportunities

Omri van Zyl, Chief Executive Officer, Agri SA, South Africa

Download the unique event app to have full access to the latest programme and to connect with peers!

See page 3 for details.



PRE-CONFERENCE WORKSHOP: MONDAY 28 NOVEMBER 2016

MONDAY 28 NOVEMBER 2016: 13:00 - 17:00

ROOFTOP TERRACE AT CTICC (light refreshments will be provided)

ARE YOU INVESTMENT READY?

During this workshop, you will be the basic principles of how financiers and investors evaluate applications in easy to understand terms. Various forms of funding and the differences between them will be discussed, you will be provided with tips on how to become finance/investment ready, and what you can do to increase your chances of successfully financing your business.

PROGRAMME: TUESDAY 29 NOVEMBER 2016

07:00 Registration

09:00 Official welcome

MEC Alan Winde, Western Cape Minister of Economic Opportunities, Western Cape Department of Economic Opportunities, South Africa

09:00 Keynote

Hon. Senzeni Zokwana, Minister, Ministry of Agriculture, Forestry and Fisheries of the Republic of South Africa, South Africa

09:30 Keynote

Mr Vusi Khanyile, Executive Chairman, Thebe Investment Corporation
Mr Nhlanhla Nene, Resident Advisor, Thebe Investment Corporation and Non-Executive Board Member, Allan Gray

9:50 Keynote

Mr Seydou Bouda, Executive Director for Africa, World Bank

10:10 Keynote

MEC Lebogang Mole, Gauteng Department of Economic, Environment, Agriculture and Rural Development, South Africa

10:30 Keynote

MEC Alan Winde, Western Cape Minister of Economic Opportunities, Western Cape Department of Economic Opportunities, South Africa

11:00 Early AM refreshments and networking

11:45 Attracting FDI - Policy and legal environment

Stefan Sakoschek, Regional Director, EU Chamber of Commerce and Industry in Southern Africa, European Union



NETWORKING
COCKTAIL
RECEPTION
29 NOVEMBER 2016
18:00

Download the unique event app to have full access to the latest programme and to connect with peers!
See page 3 for details.

FLOORPLAN

AFRICAN AGRI
INVESTMENT INDABA

28 - 30 November 2016
Cape Town International Convention Centre
Cape Town, South Africa

HOSTED BY
African Agri Council



Client Name	Booth Number	Client Name	Booth Number
-------------	--------------	-------------	--------------

ABSA	504	NAMC	704
AGBIZ	205	DAFF: FORESTRY	709
AVANTU WITHOUT BORDERS	608	ELUDINI WOOL PROCESSING PLANT	705
ARC	209	CARA	707
BAGTECH	606/607	DAFF: FISHERIES	708
CHERRY IRRIGATION	206	NAMC	708
CONSOLIDATED WIRE INDUSTRIES	605	ONDERSTEEPPOORT BIOLOGICAL TECHNOLOGIES	210
CUBICOOL INTERNATIONAL	508	PRICE FORBES	208
MPUMALANGA ECONOMIC GROWTH AGENCY	505	STARKE AVRES	506
NORTH WEST DEVELOPMENT CORPORATION	303	SUPERIOR GRAIN EQUIPMENT	211
AFRICAN AGRI		WESTERN CAPE FINE FOODS	200
INVESTMENT INDABA		WESGRO	400
		TSHWANE ECONOMIC DEVELOPMENT AGENCY	202

Download the unique event app to have full access to the latest programme and to connect with peers!
See page 3 for details.

EVENT AT A GLANCE

Monday 28 November 2016 – Pre-conference

13:00	Investment readiness workshop
17:00	Workshop ends

Tuesday 29 November 2016

08:50	Official welcome – MEC Alan Winde
09:00	Ministerial keynote addresses
11:00	Early AMI refreshments and networking
11:45	Conference sessions resume
13:00	Networking lunch
14:15	Conference sessions resume
16:15	Afternoon refreshments and networking
16:30	Conference sessions resume
17:50	Closing remarks
18:00	Cocktail function

Wednesday 30 November 2016

08:50	Chairman's address
09:00	Conference sessions
10:30	Early AMI refreshments and networking
11:00	Conference sessions resume
12:45	Networking lunch
14:00	Conference sessions resume
15:45	Afternoon refreshments and networking
16:00	Conference sessions resume
17:30	Closing remarks

Matchmaking sessions – Tuesday 29th and Wednesday 30th November

09:00 – 17:00	Matchmaking sessions
---------------	----------------------

Matchmaking areas

Investment discovery sessions – Wednesday 30th November

(For registered investors and project owners only)

ID5 rooms 1-3



SCAN TO DOWNLOAD




SEARCH FOR "AFRICAN AGRI INVESTMENT INDABA"

The official Agri Investment Indaba app is available for download to iOS and Android devices. This app has everything you need to navigate your way through the upcoming event! Install it to have full access to the detailed guide and social functionality. Scan the QR code below to download or alternatively search in markets for "African Agri Investment Indaba"

AFRICAN AGRI
INVESTMENT INDABA





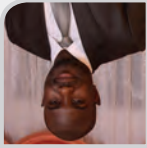
African Agri Council

ABOUT THE AAC

The African Agri Council is a network of global executives, decision makers and key stakeholders in Africa's agricultural industry. We connect executives with their peers, policy makers, investors and financiers and leading global service providers across Africa and around the world.

The Council is an exclusive platform for networking, matchmaking and deal-making in Africa. We focus on the business dynamics of agriculture, the pioneers, partnerships, investments, joint ventures and regulatory dynamics that determine the future direction of the industry and shape tomorrow's sustainable food production and consumption landscape.

Welcome to the African Agri Investment Indaba 2014!



On behalf of the Western Cape Department of Agriculture, Wesgro, and the African Agri Council, the organiser, I would like to extend a warm welcome to all the participants attending the inaugural African Agri Investment Indaba (AAII) 2016.

The time has come for businesses and governments across the African continent to translate agricultural and agro processing opportunities into tangible economic benefits. The African Agri Investment Indaba (AAII) provides a platform for captain of industry, governments, investors and bankers to connect and identify real opportunities in African agriculture. This is the hunting ground for bankable projects that will impact how Africa feeds itself and how we feed the world.

The next three days will feature ample opportunity to network with African and international participants, one on one meetings facilitated through matchmaking and opportunity to conduct business during the Investment Discovery Sessions.

Lastly, I invite you to take a tour on the exhibition floor and engage with industry stakeholders in your search for future partners that will take your business to the next level.

Kind Regards,
Ben Leyka
Executive Director
African Agri Council

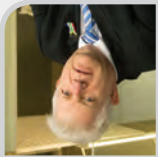
YOUR ONSITE TEAM

Sponsorship and exhibition enquiries:
spell.sigxaxhe@agricouncil.org

Delegate bookings:
manuel.singano@agricouncil.org

Programme and speaking enquiries:
ben.leyka@agricouncil.org

Western Cape Minister of Economic Opportunities Welcomes African Agri Investment Indaba (AAII) 2016 delegates



On behalf of the Western Cape Department of Agriculture, I would like to extend a warm welcome to the delegates attending the African Agri Investment Indaba (AAII) 2016 to our beautiful city of Cape Town. Hosting an event of this magnitude forms an integral part of our strategy to promote the Western Cape Province as an agricultural hub and leading tourist and events destination. Hosting such events, allows us to cement our reputation as a business, lifestyle, sporting and events capital.

Importantly, our partnership with Wesgro and the African Agri Council (AAC) serves as a driving force to spearhead the development of agriculture across the African continent by using agriculture as the catalyst to grow our economy, as well as connecting investors and financiers with agricultural opportunities in Africa.

Within this context, the AAII 2016 is an important event and plays a critical role in bringing key government officials and senior stakeholders across the agriculture value chain together to discuss current trends influencing investors' confidence in African agriculture. AAII 2016 has created a vital platform for stakeholders to showcase opportunities in agriculture, network and share knowledge and best practice across the African continent.

Lastly, but most importantly, I invite delegates who will be descending in the mother city to explore what our beautiful city has to offer.

Minister Alan Winde
Western Cape Minister of Economic Opportunities

AFRICAN AGRI INVESTMENT INDABA

Event Guide

28 – 30 NOVEMBER 2016

Cape Town International Convention Centre, South Africa

YOUR GATEWAY TO THE ENTIRE AGRI VALUE CHAIN



EVENT HIGHLIGHTS NOT TO MISS

FOR AGRIBUSINESSES

- Free pre-conference 'investment readiness workshop' on 28 November, see page 5 for more info.
- Free to attend cocktail reception on 29 November from 18:00 on the expo floor.
- Matchmaking sessions for all delegates in dedicated matchmaking areas to take your business to the next level.

FOR INVESTORS

- Hear the Hon. Senzeni Zokwani, Minister of Agriculture's keynote address on 29 November from 09:00
- Listen to the latest investment and agri case studies from across Africa from over 60 speakers.
- Meet project owners from 12 countries on 30 November in the 'Investment Discovery Sessions', presenting their pre-qualified and bankable agri projects to international investors

Sponsors:



Follow the conversation [@Agricouncil](#) #AgriIndaba
Organised by: [www.agri-indaba.com](#)

Download the unique event app to have full access to the latest programme and to connect with peers! See page 3 for details.