

NORTHWEST AGRICULTURE HANDS OVER HI-TECH COMBINE HARVESTER TO 40 GRAIN FARMERS



Page 09
*Good Agricultural Practices
at Lekung Food Group*



Page 10
*The Benefits of Practicing Crop
Rotation in Sustainable Agriculture*



Page 12 - 13
*The Importance Of Mentorship In
Agriculture Business*





agriculture & rural development

Department:
Agriculture and Rural Development
North West Provincial Government
REPUBLIC OF SOUTH AFRICA

DEPARTMENTAL LIVESTOCK AUCTION PENS

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Contents & Credits

Content

Page Number

Poster: Departmental Livestock Auction Pens	02
In This Issue/Contents Page	03
Editorial Comment.....	04
From MEC'S Desk.....	05
North West Agriculture Hands Over Hi-tech Combine Harvester To 40 Grain Farmers.....	06 - 07
Everything You Need To Know About Parvovirus.....	08
Good Agricultural Practices At Lekung Food Group.....	09
The Benefits Of Practicing Crop Rotation In Sustainable Agriculture	10
Proposed Crop Rotation Design	11
The Importance Of Mentorship In Agriculture Business	12 - 13
Bulb Vegetables.....	14
Kebonemodisa Gontse Stepping Onto The Ladder Of Top Black Commercial Farmer	15
Smart Agricultural Farming Through Hydroponics Systems	16
Department Donates Bonsmara Cattle And Goats To Bojanala Farmers	17
Preparing Your Livestock For Auction	18
DARD Hand's Over Livestock Kraals To Three Communities	19
Swine Breeding	20 - 21
Department Hands Over Modernised 45000-capacity Broiler House To Selame Poultry	22
New Head Office Contact Numbers	23

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Editorial Comment

Editorial: Emelda Setlhako

Jaanong re khutlisa jalo ngwaga wa ditshetele wa 2023/2024. Seno ga se kaye fela bokhutlo jwa ngwaga wa ditshetele mme ke go ya bokhutlong ya puso-tsamaiso ya borataro fa e sale Aforika-Borwa a iponela tokologo ka ngwaga wa 1994. Re konosetsa dingwaga di le 30 tsa tirelo setshaba e e akaretsang baagi botlhe mme go sa tlhaolwe ope ka mmala kgotsa dingwaga. Now let's approach the term of the new Administration with enthusiasm believing to gain momentum for agriculture growth.

As we close this year, we note that much has been done through the Provincial Accelerated Service Delivery programme, Thuntsha Lerole. Many farmers now carry testimonies of great difference that the Department has done in their projects. This difference, we surely know will have a long term positive impact for them. The intention is for farmers to also grow and not to remain at subsistence levels. This is such that they come back to help others with skills and knowledge as well. Farmers such as Kebonemodisa Gontse, from Tlhakajeng in the Ngaka Modiri Molema District Municipality is one of the people who has a story to tell on the support he has received. Read his profile and see how the Department continues to positively impact lives.

The agriculture sector is dynamic. When it comes to livestock, animal health gets to be very key in order to sustain farming. Farmers need to be knowledgeable about dealing with diseases in animals. Our Animal Health Technicians are also hard at work, increasing their know-how so that they continue to advice farmers about various diseases as well as prevention methods available for them. The story about training of health technicians on TB treatment is sharing insight about management of this disease in both wild and domestic animals and diagnosis. In addition, the article about Canine parvovirus is piece that will explain the contagious virus mainly affecting dogs. Read more about how it is transmitted, treated and symptoms thereof.

The Department recently handed over three livestock auction pens to rural communities. Seno se latela go ipiletsa ga barui gore lefapha le thuse ka marekisetso a leruo a a gaufi. Jaanong baagi ba Ganyesa, Khunwana le Mogopa le metse e e mapabi, lefapha le utlwile kopo ya lona

mme le diragaditse. Read our information leaflet about livestock auctions in this edition. This should assist farmers to properly prepare animals for auctioning. Diruiwa di kgona go rekisega ka tlwatlhwa e e namatshang fa di baakantswe sentle pele ga thekiso. Re solofela gore kitso eno e tla thusa ka ga jaana marekiso ano a tlile go dula a butswa gore barui ba ungwelwe.

The Department's commitment to support designated groups remains. MEC Desbo Mohono did emphasise this in her 2023/2024 Budget speech pronouncement. Koketso Moloko's horticulture project Lekung Food Group has received a boost from the Department. In this edition she shares her inspirational story about horticulture farming and techniques she is using to stay in the game.

Through Letsema, we are also sharing in depth knowledge from Specialists in the Department. With this information we aim to address finer details in the farming business. We know that there will always be experiences and somehow these specialists have come across what you, as a farmer, would be experiencing. We encourage farmers to read these specialists' contributions they may touch on the areas of their work. In this edition the focus is on how to plant and care for vegetables with a focus on onions. Horticulture farmers and enthusiasts, this is for you.

Information about how to start an agricultural business or to sustain it can be obtained from any agricultural advisor in your area or the Local Area Office of the Department. All municipalities have the Department of Agriculture and Rural Development offices. So we say to all in the agriculture sector, "Make hay while the sun shines". A re diriseng tshono ya go botsa, go batlisisa, go aroganya kitso mme re tla bona maano a temothuo a golela pele.

We are available on our landline 018 384 3117 if you have any enquiries.

Emelda SETLHAKO
Enjoy reading. Ke a leboga

FROM her Desk



It's a wrap... It's sealed...It is the end of the 23/24 financial year, and what a year it was!!! Every story has an end, but in life every ending is just a new beginning. This is a time for us to take stock and really see our gains and losses in the last chapter of the previous circle of 2023/2024. As we usher the new financial year 2024/2025, we do so hoping that it will be a year of plenty, a year of harvest and a year of good things heading our way especially within the Agricultural realm. We really need all the luck within the Agricultural space to turn things around for our farmers who are been scorched hard by the climate change.

As a sector all Agricultural industries across the world have been hit hard over the few years by diseases like your bird flu, foot and mouth and the most dreaded COVID-19 pandemic. All these encounters diminished all the gains within the sector. When all of us thought we were having a breather...Booom!!! In comes the spell of El Nino phenomenon. This has led to below-average rainfall in many of the 9 provinces in our country.

Maize and other crops have withered ahead of the 23/24 harvesting season in most parts of our province. Our farmers are really finding it difficult to maintain consistent and predictable crop yields as a result of the escalating effects of climate change more especially on traditional agricultural landscapes. As government little can be done to really negotiate with Mother Nature. As much as it is difficult to say this, in order for our farmers to ensure food security, economic stability and environmental sustainability, our agricultural practices need to adapt to Mother Nature's call at all costs.

In keeping our promise from our budget speech blue-print that was tabled in the beginning of the 2023, the department has finally launched and handed over three fully functional Auction pens at Ganyesa Village, Khunwana Village and Ga-Mogopa Village near Ventersdorp. These pens will come as a relief to many commercial and subsistence farmers thus relieving them from transport, feed and medication dilemma. These state of the art auction facilities comprise of security fence, office and ablution facilities, solar installation and water reticulation, auction kraals, pavilion and 8 sided cattle scale, drinking and feeding troughs and finally bio security trenches.

In going through our stories, one that really caught my eye was a huge combined Harvester that was handed over at Madibeng Grains Project based in Brits. This successful project is an association of black grain farmers cultivating wheat, barley and soya beans. After suffering for a very long time this Harvester will come in handy and assist them to streamline all the harvesting process thus reducing high production costs.

In conclusion, it should be noted that the department is making in-roads through the weekly Thuntsha Lerole programme led by the Premier's office. Farmers from all four districts are able to enquire and get help through our posted personnel from all districts. We further encourage all farmers to really take this prime opportunity to engage with the department.

Please enjoy the latest edition of Letsema while having a cold sip of water in your backyard.

Ke a leboga - I thank you!

MEC: Desbo Mohono

North West Department of Agriculture and Rural Development



Harvest

North West Agriculture Hands Over Hi-tech Combine Harvester To 40 Grain Farmers

Agricultural infrastructure refers to the diverse systems and networks of resources that are vital to produce, procure, preserve, process, and trade agricultural products. It plays a vital role in the productivity, competitiveness, and sustainability of the agriculture sector. Many farmers in the North-West province have identified hard infrastructure as one of their critical needs that would enable them to build a competitive agriculture sector and resilient, sustainable food system. Infrastructure enhances agricultural productivity, competitiveness and sustainability. Infrastructure plays an essential role in boosting agricultural productivity.

In order to address this need and the valuable impact that comes with it, the MEC for the North-West Department of Agriculture and Rural Development, Desbo Mohono has handed over a high-tech combine harvester to 40 grain farmers in Madibeng local municipality. The event took place yesterday, 13 February 2024 at Geluk Village in Madibeng, Bojanala Platinum District.

The farmers who are mainly into barley, wheat and Soya production will utilise the harvester collectively through their cooperative Madibeng Grain Farmers. The beneficiaries are mainly from areas including Kareeport, Sonop, Geluk, Sandrift, Mamogalieskraal, Snymansdrift and Wolwekraal.

Amongst the key modern features of the harvester is that it delivers superior harvest quality. Its technology ensures the cleanest grain sample. It also possesses more space comfortable and precise for harvesting.

The IV colour touchscreen monitor can be positioned on the ideal viewing for an operator. The new LED lighting package enables 24-hour productivity. It is also equipped with a 7,5-meters removable header that is designed for particular crops. The header has revolving reel with metal teeth to cause the cut crop to fall into the auger once it is cut. The modernity of this machine will ensure gentler treatment of fragile seeds that were often crushed and destroyed during harvesting.

Amongst many positive take offs of owning the harvester, the Madibeng Grain Farmers aim to improve their agricultural practices, enhance productivity, and establish sustainable market channels. With support from the Department of Agriculture and Rural Development, the acquired combine harvester will assist to streamline harvesting process and reduce production costs. The harvester will now take over the process of reaping, threshing, gathering and winnowing to a single process.

Speaking to the farmers, MEC Mohono has expressed her gratitude for their commitment towards the process of acquiring the harvester. Amongst others, MEC was impressed by the level at which farmers were prepared to share resources thereby positively contributing towards the local economic change. "I urge you to continue with the same spirit as you begin to collectively utilise this harvester in your over 700 hectares of land.

I am happy that complaints of high costs of harvesting will be greatly reduced. Let everyone of the team members be developed in line with the modern technique of this machine," MEC Mohono said.

She also emphasised that the harvester was in position to change the lives of the farmers for better. "This machine is placing you at commercial level, and you must know that you are now greatly carrying responsibility of assisting the improvement of food security levels of our province. This is a game changer in your farming businesses," Mohono added.

On behalf of the group, Mr Obakeng Lebethe who is also a grain farmer welcomed the support from the Department. Not only was he in high spirit during the handover ceremony, but he also took the audience into confidence as he presented how the harvester works.



MEC Mohono with Madibeng Grain Farmers and officials of the Department during the handover ceremony of the Combine Harvester

He said his acquired skills would assist the team to be less reliant on external help. Lebethe said the acquisition of the combine harvester brings to an end their 4-year journey of collectively requesting government to intervene in grain harvesting.

That followed the high costs associated with harvesting, which mainly leaves them with close to no turn-over. He has committed his team to a high level of work etiquette and to ensure that the harvester positively impacts on the lives of all beneficiaries.

The Department will closely monitor the project's progress, assess performance metrics, to manage harvesting and identify areas for improvement.

More farmers are set to benefit from the infrastructure development programme as the Department has through the North-West State of the Province address for 2024/25 set aside R91m to address agricultural infrastructure development backlog.

Mokwadi : Tsholofelo Dintwe



Madibeng Grain Farmers moves the SMART Agriculture way with a new Combine Harvester

HI-TECH Combine Harvester



EVERYTHING YOU NEED TO KNOW ABOUT PARVOVIRUS



Canine Parvovirus, also known as parvo or CPV, is a highly contagious viral disease of dogs which is associated with gastrointestinal symptoms. It is caused by the canine parvovirus type 2 (CPV-2); however, there are several strains of CPV-2 and all produce similar signs. Although all dogs are prone to parvo, it is commonly found in puppies from the age of 6 weeks – especially unvaccinated or not fully vaccinated ones. Infection is acquired through direct oral or nasal contact with contaminated faeces or indirect contact with contaminated fomites, including environment, personnel and equipment. However, the virus does not affect human beings.

According to Mahikeng State Veterinarian, Dr K Makhubedu, the virus attack white blood cells and gastrointestinal tract which cause the common symptoms such as vomiting, in appetite (loss of appetite), bloody diarrhoea, lethargy (weak), fever and abdominal pain.

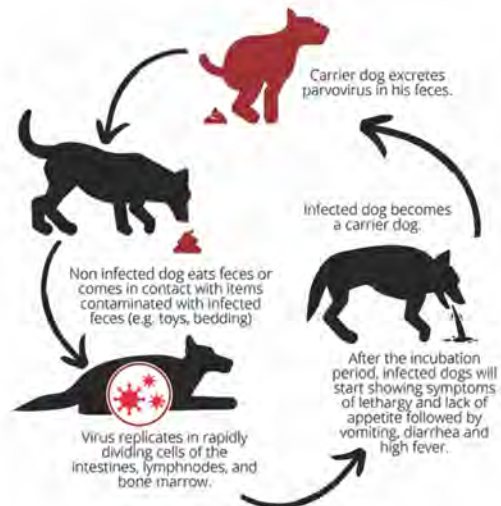
Though people can detect the virus through given common symptoms, Dr Makhubedu maintains that the most common convenient way Veterinarians detect the virus through the practice of performing an ELISA (Enzyme-Linked Immuno-sorbent Assay) snap test. The test detects antigen in faecal matter of the affected animal. Alternative ways to detect CPV antigen in faeces include PCR (Polymerase Chain Reaction) testing, electron microscopy, and virus isolation, however, these can be costly and are hardly used.

Dr Makhubedu insists that there is no specific treatment for parvo, but a supportive care based one. The main goal of treatment is to correct the dehydration and physiological imbalance caused by vomiting and diarrhoea. Supportive care is encouraged in regard to controlling nausea and pain by keeping the dogs warm, preventing other infections from happening and providing nutritional support. However, dogs with severe infection may need hospitalization.

With regards to prevention, Makhubedu is certain that vaccination is key to preventing Canine parvovirus. The parvovirus vaccine is included in a combination vaccine usually referred to as "5 in 1". A series of vaccinations is recommended. Depending on the vaccine product, the first vaccination is usually at 6 weeks of age, followed by 2 doses 3-4 weeks later and then annual boosters. Although puppies born from vaccinated dams usually get immunity in the first weeks of life through sufficient colostrum, the acquired maternal antibodies decline with time and the puppies get susceptible to infection, hence it is important that puppies also get vaccinated to build their own immunity.

In ensuring that the virus does not spread, dogs suspected or confirmed with parvo must be isolated. Parvo can stay for a long time in the environment, so it is crucial to limit the movements of infected dogs. Good hygiene is also extremely important. Surfaces can be cleaned from organic matter and then disinfected with a solution of dilute bleach, Formaldehyde spray (F10) or any effective disinfectant.

"In Ngaka Modiri Molema District, we had started the process of Spay Campaigns which was interrupted by Covid 19 Pandemic. The aim of the campaign was to reduce the number of dogs affected by both Rabies and Parvo. Both prevention and treatment of Parvo has deemed to be very expensive especially in our province which has been classified as a rural province," Dr Makhubedu further clarified.



For more information on the disease please feel free to contact Local State Veterinary Offices in the whole Province or at the district by dialling the contacts below.

Head Office: 018 389 5057/ 066 190 9190
Ngaka Modiri Molema District: 018 389 5294/ 066 141 6838
Ruth Segomotsi Mompoti District: 053 928 0602/ 066 141 6475
Kenneth Kaunda District: 018 294 4358/ 066 141 6472
Bojanala Platinum District: 014 592 9281/2 /066 054 949

*Article by : Katlego Thejane
 Contributors: Dr K Makhubedu & Dr ST Mosenogi*

GOOD AGRICULTURAL PRACTICES AT **LEKUNG FOOD GROUP**



Koketso Moloko with her tomato production from Lekung Food Group

Sweet Peppers grown from greenhouse tunnels are supplied to bigger national Markets

The South African – Good Agricultural Practices (SA-GAP) Certification Programme is in place to assist farmers of fresh produce to access both local and international markets by producing good quality products that comply with food safety and quality standards as required by the markets.

Ms Koketso Moloko, owner, founder and director of the Lekung Food Group in Molote City, Kgetleng Local Municipality is one of those who are Global GAP Certified Farms. The ten hectare farm leased from the Bakubung Ba Ratheo Communal Property Association (CPA), supplies the markets with various crops like cabbages, spinach, tomatoes, sweet Peppers and Hubbard squash. The farm ensures that they provide quality fresh produce for the market.

Her farming story started in 2011 after her father passed on. His late dad was passionate about farming and so she wanted to build a legacy on her father's passion. She then resigned from her full time job to start farming in 2012. She started with crops, growing sunflower and maize and now subsequently added vegetable production site where they do tomatoes and sweet Peppers in greenhouse tunnels and then cabbage and spinach outside.

SA-GAP addresses basic food safety requirements, which includes traceability of fresh produce from the point of production to the retailer until it reaches the final consumer and record keeping of all activities undertaken during the production of fresh produce, hygiene and responsible use of agrochemicals.

Through their resilience, Lekung Food Group has supplied big food service brand, McDonald's South Africa with their tomatoes. She additionally won the MEC's Award during the 2018 Department's Female Entrepreneur Awards (FEA), whereby she was awarded R500 000 which built a 1 hectare shade net and irrigation system on the farm. "I had never thought I would actually become a farmer, but something told me to just give it a try and see if it works, then fortunately the farming bug bit me and here I am, the accidental farmer," said Koketso.

Koketso further emphasized that she wants to see her farm growing and she's looking to put additional greenhouse tunnels, as she currently has six on the farm. Her plan is to put in another six to increase production of sweet Peppers and tomatoes.

She wants to become a full on commercial vegetable farmer despite being one of only a handful of female farmers in the region. Additional funding for more greenhouse tunnels, a pack house, she said would allow them to supply vegetables throughout the year and a medium sized truck to be able to deliver to clients daily will assist her in reaching the commercial milestone.

Koketso attests that farmers make a huge contribution to food security and food access in the country and that's what actually keeps her inspired.

Article by : Kgalalelo Mashomo



THE BENEFITS OF PRACTICING CROP ROTATION IN SUSTAINABLE AGRICULTURE

A suitable crop rotation system is one of the main goals of sustainable agricultural practices in any farming enterprise, which when practised, can result in higher yields and less disease pressure. The crop species in the same family group are susceptible to the same pests and diseases and they should therefore not be planted directly after each other.

The rotation of different crops can thus prevent the outbreak of insect and plant diseases and can break the pests' cycle. Otherwise a rotation system of "food, feed, fallow" can be followed by a farmer. What is crucial, is the planning of a crop rotation system to attain success.

There are numerous benefits of practising crop rotation, and this include nitrogen management. Legume plants, such as Lucerne, soybeans, and etc. can fix nitrogen. This advantage can reduce input cost as the fixed nitrogen will be freely available to the follow-up crop.

Weed resistance can also be better managed in a crop rotation system than in monoculture. Herbicide resistance of grasses, caused by the overuse of herbicides with the same mode of action during a specific crop can be avoided in crop rotation systems. The use of herbicides with different modes of action to fight resistance and their withholding period are factors that need to be considered when planning crop rotation.

Cover crops planted in rotation systems binds the soil particles with their roots to prevent the rate at which soil is eroded. Therefore, one is advised to rest a piece of land as much as possible after harvest to prevent top soil degradation from water and wind erosion.

Crop rotation can also conserve water by increasing soil structure and water holding capacity. Absorption and storage of water will become more effective as soil structure develops and improves. The need for irrigation might be reduced, and more water conserved. Some additional benefits of better water holding capacity include the lower risk of flooding, and reduction of runoff and loss of nutrients in soil.

All these factors, that is, nitrogen management, insect and weed management, reducing soil erosion, water conservation are factors contributing to the main goal of crop rotation in increasing the profitability and sustainability of the farming enterprise.

Mokwadi : Tshiamo Mothata, Specialist Agricultural Advisor: Horticulture, 2024





PROPOSED CROP ROTATION DESIGN

<i>Cycle</i>	<i>Plot 1</i>	<i>Plot 2</i>	<i>Plot 3</i>	<i>Plot 4</i>	<i>Plot 5</i>
<i>Cycle 1</i>	Leafy crops	Legumes	Brassica	Root crops	Solanaceae
<i>Cycle 2</i>	Solanaceae	Leafy crops	Legumes	Brassicas	Root crops
<i>Cycle 3</i>	Root crops	Solanaceae	Leafy crops	Legumes	Brassicas
<i>Cycle 4</i>	Brassicas	Root crops	Solanaceae	Leafy crops	Legumes
<i>Cycle 5</i>	Legumes	Brassicas	Root crops	Solanaceae	Leafy crops

Leafy crops: Swiss chard, etc.

Solanaceae: Tomatoes, Sweet peppers, Potatoes, Eggplant (Brinjal), etc.

Root crops: Carrots, Beet, Onions, Sweet potatoes, etc.

Brassicas: Cabbage, Cauliflower, Broccoli, etc.

Legumes: Beans, Peas, etc.

Cucurbits: Pumpkin, squash, melons, cucumbers, etc.

Green mealies and cucurbits can be included in the rotation at any point.

Do not plant underground bearing crop in consecutive seasons in the same soil.

Mokwadi : Tshiamo Mothata, Specialist Agricultural Advisor: Horticulture, 2024

THE IMPORTANCE OF MENTORSHIP IN AGRICULTURE BUSINESS



Mr Duncan Serapelwane urges farmers to ensure better farming practices in order to get good results

Whilst starting an agriculture business has proven to have unique challenges, sustaining this business carries significant demands. This means that there is a need for someone developing relations with those who have been in the farming business for longer. Many farmers have attested that mentorship is playing a critical role in any sustainable farming business.

The role of a mentor is not primarily the wholesale transfer of knowledge, but rather guiding the mentee in the right direction and imparting sufficient knowledge to empower him or her to make decisions with confidence. Otherwise, both will grow frustrated, resulting in a fruitless process.

This role has been embraced by one of the commercial farmers in the province, i.e. Mr Duncan Serapelwane of Moalosi Bonsmara. Serapelwane is a livestock farmer based at Taylorspan Farm, in the Kagisano Molopo Local Municipality. When Letsema team met up with him, he had arranged a farmers' information day at which he was going to seize an opportunity to speak to both established and upcoming farmers. Mr Serapelwane has earned his stripes in the business and is currently using every opportunity to share information. Whilst he is a renowned Bonsmara farmer, he has made himself available to advise livestock farmers across all the breeds. "I have the love for Bonsmara and I am not shying away from that fact, however I do share information that benefits any livestock farmer. The intention is to guide people towards better farming methods that will economically benefit them," Mr Serapelwane added.

"When we were growing up, we associated farming to be a place where children who did not do well at school were taken. This is one of those things that has left a negative legacy around farming as a business. We are working hard to bring as many people on board as possible. The sector is currently attracting a lot of academics and that demystifies the old "thoughts" around it. I have availed myself as a mentor because I would love to see farmers who do business that earns them good results. It becomes a fruitless exercise if it's not done right. It's a waste of money and time," Mr Serapelwane emphasized.

"So, I have taken a decision to take many under my wings, to help them with step-by-step process," He said he is doing this so that they grow and be confident. "I know they will eventually help others," he further remarked. Amongst those who were part of the information day, a young farmer, Tsholofelo Moyo of Seatla sa Modimo farm is one of Mr Serapelwane's mentees. She told us that unlike many mentees approaching seasoned farmers, in her case it was the other way round. Mr Serapelwane saw her social media posts and he became interested in taking the agriculture journey with her.

Through their interaction, Moyo said her farming methods have changed a lot and she is seeing the results of mentorship. She is also learning more about her choice of breed and that has increased her love for it and the passion to work with it. She is looking forward to more and more interactions.



Many farmers are reaping the benefits of information as commercial farmers are availing themselves to share knowledge

Moyo concedes that whilst she was alone in her production, she always knew that in agriculture it is important to find someone you can learn from. She said guidance and building of relations is critical. "We all have something to learn from one another. Never underestimate the impact you could have on someone else because you might just change his or her life or perspective. If you ask me, that's a special position to find yourself in," she said.

Mentorship in essence should encourage and enable another person's development. The journey in the agriculture sector indicates that, when possible, individuals should choose mentors who have experience relevant to their area of work. When mentors convey their successes, the mentee can use them as an example to strive toward and copy the steps they took. Mentors can also share the mistakes they made along their journeys. So a mentee benefits because they learn lessons about the mistakes' negative impacts but do not have to suffer the consequences themselves. Learning about these experiences can also help prepare the mentee for the challenges they can expect to face and provide demonstrable advice on how to overcome them. This type of environment will create a trusting relationship. A trusting mentorship relationship enables honest feedback. By establishing trust, the mentee understands that constructive criticism aims to build their professional growth.

Mr Serapelwane concluded that agriculture is not a solo business. He said he also continues to hold on to relationships he has with other farmers who have greater experience and is continuously learning from them. He said he was also learning from his mentees as well.

Article by: Tsholofelo Dintwe

KEYS TO SUCCESSES



Bulb vegetables

WHAT ARE BULB VEGETABLES?

Bulb vegetables have underground, vertical shoots that have modified leaves (or thickened leaf bases) that are used as food storage organs by the dormant plants. Some bulb vegetables, garlic for example, are also known for their medicinal values.

Bulb vegetables include some of the following:

- Chives
- Garlic
- Leeks
- Onions
- Scallions
- Shallots
- Water chestnuts

Production areas in South Africa

Approximately 6 100 ha of bulb crops are grown annually in South Africa in the Western Cape, KwaZulu-Natal, Limpopo, and Northern Cape provinces, and 600 ha of bulb seed crops are grown primarily in the semiarid regions of the Western Cape.

Climatic requirements

Bulb crops are cool season crops which grow well in a wide range of temperatures (optimal temperatures are 13 to 29 °C). Bulb plants perform well (quantity and quality) when temperatures are cool during the early stages and warm towards the end of the growth period. Cool conditions favour optimum growth.

N.B. Day temperatures above 24 °C reduce the yield of some cultivars.

Soil requirements

Most bulb vegetables can grow in practically all types of soil but most prefer deeply cultivated sandy loam, alluvial clay soils, friable, fertile soils well supplied with humus and well drained with a high level of organic matter.

Planting

The suitable planting time differ from one area to another in South Africa and this is due to different climatic conditions but planting can start from February to May.

Planting depth

The cloves are planted to the depth of about 50 mm on raised beds or on the flat ground.

Planting density/spacing

Spacing between rows will depend on the method of planting and available equipment for cultivation. Single or multiple rows of plants are commonly used. However, the general recommendation for spacing the divided cloves is 8 to 15 cm with row spacing of 30 to 40 cm.

Potential problems and management

Thrips (*Thrips tabaci*)—the most important bulb pest as well as diseases such as downy mildew (*Peronospora destructor*), purple blotch, *Fusarium* basal rot, soft rot, neck rot, onion smut and onion rust are most common in growing bulb vegetables. Therefore, registered and recommended chemicals can be used as control measures. It is also advisable to practice crop rotation to reduce attacks by diseases and pests. Proper sanitation is also a requirement.

Production schedules

Bulb vegetables	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.
Chives	X	X										X
Garlic			X	X	X							
Leeks									X	X	X	
Onions					X	X	X	X				
Scallions						X	X	X				
Shallots					X	X	X	X				
Water chestnuts	X	X							X	X	X	X

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www.harvestwizard.com/bulb_vegetables/
www.fotosearch.com/photos-images/bulb-vegetables.html



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REPUBLIC OF SOUTH AFRICA



Stepping Onto The Ladder Of Top Black Commercial Farmers

"From humble beginnings come great things". This popular quote has been proven time and time again. Success isn't something that's easily handed to anyone on a silver platter, one has to work hard for it. This is a true testimony for Kebonemodisa Gontse who hails from Tlhakajeng, a small rural area of Kraaipan in Ngaka Modiri Molema District Municipality.

Like any other black child living in a household of farmers, Gontse (48) grew up looking after his grandfather's livestock throughout his entire upbringing. And, as a gesture of appreciation, his grandfather gave him a cow as a reward for his constant efforts. The cow remarkably gave birth to more calves over the years and, as a result, he accumulated over 20 cows. In 2017, Gontse added about twenty pregnant Simmentalers breed to his herd. However, one morning he was greeted by a sight that can only be described as a farmer's worst nightmare. His livestock was stolen and still hasn't been found to this day. This ordeal forced him to sell his remaining cattle and give up on farming.

Fortunately, not all hope was lost. He returned to his roots fully determined. As part of the Land redistribution, his Communal Property Association (CPA) - Gasegwe has farms which he, as a primary beneficiary, was able to apply to occupy them. He started at Damascus Farm near Delareyville, which was about 176 hectares (140 ha arable & 36 ha grazing). Furthermore, the Vrolikheid Farm, where he's currently working on full-time basis, has 570 ha, 540 ha arable and 30 ha which compromises of farm house, stores, pig cages, cattle handling facility and four divided camps. He has managed to employ six full-time employees and about thirty seasonal ones.

For most farmers, some days are harder than others and when it rains it pours. Gontse encountered financial challenges and lack of mechanisation as an emerging farmer. He was required to fund his operations from his own pocket, which was extremely straining at times. His challenges were short-lived after requesting assistance from the Department of Agriculture and

Rural Development. As part of the departmental mechanisation support programme, the military veteran received the new Holland Tractor T6050 which continues to function efficiently in the fields, and 11 000 litres of diesel on August 2023. To this day he's still appreciative of the assistance he received from DARD. "My success would have not been possible if it was not for this assistance from the Department, I am a commercial farmer today due to them, and keeping the farm of the Land Redistribution functional to date", he beams, as he expresses his gratitude.

Gontse is currently doing mixed farming, a livestock and crop production. The livestock include the Boer goats, Kalahari reds, Meatmasters and Bonsmaras. He also plants sunflower, white and yellow maize on rotational basis on the fields. His products can be found in retail stores such as NWK at Delareyville and Geysdorp Silos.

His advice to emerging black commercial farmers is that they should possess financial discipline and be focused all the time, as farming is a 24/7 hands on operation. "It is imperative to calculate risks associated with production process. Don't shy away from seeking advices. Make time to learn from older farmers because they have much knowledge on how to work the land perfectly. I'll further advise that they start small, work the land perfectly while ensuring good yields during harvest. And lastly, short cuts do not pay", he advises.

Moving forward, Gontse's goal is to work over 1500 hectares in 2024/25 season with the focus on making 2000 tons of harvest. With the land he already secured through leases, he wishes to create more sustainable employment for youth within the areas of his operation and plough back into communities.

Article by: Katlego Thejane

SMART AGRICULTURAL FARMING THROUGH HYDROPONICS SYSTEMS

Hydroponics is a process whereby plants are grown in a nutrient solution rather than soil, instead of the roots growing down into dirt and gaining nutrients that way, in a hydroponic system, the roots grow into a liquid solution that is fortified with all the essential nutrients for healthy plants.

In order to better understand how many farmers are taking advantage of this technique, Letsema's Kgalalelo Mashomo spoke to award winning entrepreneur and innovator, Mr Tebogo Masobe of Sobaestros Café, a food eatery in Mahikeng, Tebogo saw a niche and ventured into aquaponics farming during the year 2020. With this farming he is able produce his own vegetables for his restaurant in efforts to save time and money.

He grows his own vegetables and seedlings, specializing in a bouquet of leafy greens such as lettuce, spinach, and cabbage, as well as herbs and edible flowers, grown exclusively through hydroponic systems. The foundation of his business was influenced by Mahikeng Digital Innovation Hub in which they offered resources, access to markets and mentorship for him to be able to sustain himself.

With water scarcity and food security becoming an increasing challenge, moving toward sustainable agricultural practices such as hydroponics positions him as one of the trailblazers in innovative farming solutions. "The hydroponic system recycles water continually, showcasing exceptional water use efficiency considering the country's water scarcity issues," emphasised Tebogo.

During his trial stages he noticed that plants grown in a hydroponic system plants grow at a rate of 30-50 percent faster when compared to traditional farming methods, the reason for this quickened growth is because seeds within these systems are provided with the perfect amount of nutrients and will receive much less stress from the environment.



Seedlings grown through the hydroponic system

Hydroponic production depends on external inputs and technology, whereas organic processes rely on biodiversity, ecological inputs and procedures.

Amongst the challenges he faced when starting this farming was power cuts as well as water scarcity.

Tebogo, through his aquaponics farming managed to install solar panels and has borehole to counter any unnecessary interruptions which might hinder his production. "The aquaponics project is to encourage business and other small-scale farmers to not only focus on access to land, but to utilise the spaces they have as you can do vertical farming" said Tebogo. His aquaponics farming has created lots of revenue for him and offers a full range of services, whereby he helps businesses install greenhouses, teach them how to operate the system and further offers maintenance for those greenhouses.

The Department has on the other been a greater part of the projects. Through Agriculture Extension and Advisory Services, the Department has shared some in depth knowledge and skills with Tebogo and will continue to be on his side.

Article by : Kgalalelo Mashomo



Spinach grown exclusively by Tebogo through hydroponic systems to assist in his restaurant business



DEPARTMENT DONATES BONSMARA CATTLE AND GOATS TO BOJANALA FARMERS

MEC Desbo Mohono handed over forty-five (45) pregnant Bonsmara cattle and two (bulls) to Tshidi Tshwagong during the Provincial Accelerated Service Delivery Programme – Thuntsha Lerole held in Tlhabane, Rustenburg. Tswagong’s farm in Boshoeck is leased from the Royal Bafokeng Administration. In total Tshwagong has a hundred and eighty (180) Bonsmaras and Brahmans on this 1400-hectare farm.

The Department has also assisted the farmer with a 10km fence, feed, and repaired the farm’s handling facility. Tshwagong said he plans on gradually increasing his breeding stock up to full capacity of the farm and introducing weaner backgrounding on the farm where weaners will be fattened to the desired live mass before being sold.

Another farmer, Khumo Mosathupa who owns Blu Agrifuxion Farm received 103 commercial boer goats for breeding. The Department assisted Khumo with 5km of fencing material and the construction of a handling facility.

Khumo and Tshidi who both hail from the Bojanala Platinum District Municipality commended MEC Desbo Mohono, the Departmental officials, and the Thuntsa Lerole pioneers for their commitment to bringing services closer to the communities. “The department’s assistance has contributed immensely to the day-to-day operations of the farm. As for the goats I am very pleased and I am expecting a number of them to give birth in a couple weeks,” said Mosathupa.

These farmers sell their livestock to various markets across the district and province, they have full-time employees and are receiving mentorship from like-farmers in the province.

Speaking after the handover ceremony of these livestock, MEC Desbo Mohono commended farmers from this region for working together. “I appreciate the unity and commitment that our farmers are portraying in ensuring that they grow together and assisting new entrants in the sector. They should continue working together to expand their operations by collaborating with farmers who are already exporting their produce. I want to see all farmers supported by the Department succeed and commercialise to grow the province’s Growth Domestic Product (GDP) and reduce unemployment by creating employment,” stated Mohono.

Article by : Tshegofatso Leepile



HOW TO AUCTION YOUR LIVESTOCK



WHAT IS AN AUCTION?



An auction is a public sale in which goods are sold to the highest bidder, a place whereby people who want to buy show the auctioneer how much they are willing to pay for the animal and the animal is sold to the person who offers the highest price.



STEP 1: PREPARATION

- Decide which animals you are going to sell and why.
- Issues for consideration:

Quality and classification

- Classification characteristics are determined according to the age, fatness, conformation, damage and sex.
- The marketing agent can help you to classify the animals.

Quantity

- Farmers should form cooperatives or commodity groups to increase stock numbers and lower transportation costs.

Weight

- You will have to determine the weight of the animal before the auction.



STEP 2: ARRANGE THE AUCTION

- Contact the marketing agent and enquire about the prices and market trends.
- Supply relevant information about the quality and classification, gestation status, weight and, very important, the reserve price of your livestock.
- Make a reservation for the sale of your stock on the appointed date.
- Make sure that all your livestock have legal identification marks.
- Make sure that all your livestock is free from diseases
- Make sure that all your livestock is free from both internal and external parasites
- Make arrangements for transportation.
- Obtain a certificate of removal from the local Stock Theft Unit, without this documentation you could be fined or your animals confiscated.



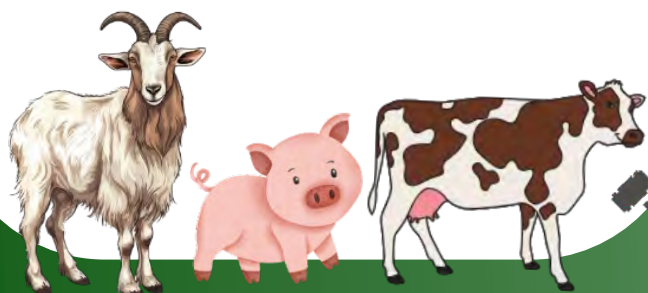
STEP 3: AT THE AUCTION

- Fill out the form of Acknowledgement of Receipt with your name, address, ID number and stock identification details.
- Note that your livestock still belongs to you and are your responsibility.
- The auction is concluded when you say "sold".



STEP 4: AFTER THE AUCTION

- Finalize the transaction - Draw up the clearance statement and make sure that all the particulars are correct.
- Accept payment - Either cash or EFT. Make sure that all the details on the cheque are correct, a safer option is to have your money deposited into your bank account.
- The buyer needs a document of authorisation that is obtainable from the auctioneer to transport the livestock.
- It is always a good idea to attend an auction before you actually send your livestock for the first time or take someone along who have done it before.



AUCTION KRAALS



MEC Desbo Mohono addressing farmers, buyers and sellers at the Mogopa Village Livestock Auction launch and handover.

MEC Desbo Mohono Hands Over Three Auction Kraals To Rural Communities

The Department of Agriculture and Rural Development has officially handed over three auction kraals to three communities namely; Ganyesa, Ga-Khunwana and another one to Bakwena Ba Mogopa Trust in the North West Province.

These livestock facilities are built in rural communities and are aimed at providing local farmers with the platform to competitively market their livestock, encourage the commercial approach towards livestock production, embark on a sustainable rural economy and modernise livestock production business in rural farming.

These auction kraals are fully equipped with a security fence, office and ablution facilities, borehole sitting and drilling, auction kraals, pavilion, cattle scales and a solar systems.

The pens established in 2023 by the Department of Agriculture and Rural Development (DARD) are an intervention to link livestock smallholder farmers to formal markets, meet the increased demand for functional marketing infrastructure and to serve as a deterrent to current and prospective livestock speculators.

One of the farmers from Ga-Motlatla Village said he is happy about this infrastructure. "We are excited as farmers in the JB Marks Municipality to have kraals nearer to us. In the past we had to spend money on transportation and other logistics to ensure that livestock got to auctions that are always far from our area. Jobs have been created through the construction of these pens, families, and the communities around Mogopa will continue to benefit from the launch. From now on I will be part of the farmers that take care of this project that we have been supported with," said Humphrey Motswatswe a smallholder farmer from Ga-Motlatla Village in the JB Marks Local Municipality.

A local bonsmara stud breeder Tshidi Tswagong said the commitment displayed by the department in empowering black farmers is amazing. He added that bringing the much-needed auction kraals closer to farmers who use auctions as a market will relieve them from the strain and challenge of risking their livestock not being bought but spent monies on logistics or being exposed to possible theft due to trading their animals at distant auctions.

A guaranteed opening special offered to sellers by the department saw farmers not paying a commission and assisted with logistics to bring their

livestock at the auction. "The ten percent commission charged was paid by the department to the auctioneer. The monies saved can be used by farmers for other needs such as fodder, medication, etc. We are aware of the challenges faced by farmers during auctions; hence we saw it befitting to fully support and encourage farmers to participate in this auction that will see them using these facilities in future to sustain their businesses, boost the local economy and increasing the household disposal income that will curb food insecurity in Mogopa," explained MEC Desbo Mohono.

To support previously disadvantaged business owners in the agricultural sector, the Ga-Mogopa Livestock Auction Committee contracted a reputable black auctioneer registered with the South African Institute of Auctioneers. Boitshenolo Auctioneers performed auctioneering services during auction sales of pigs, sheep, goats, and cattle. In addition, strict bio-security measures were followed by the Veterinary Services Directorate to ensure that all livestock adhered to the required health protocols and were disease-free.

Article by: Tshegofatso Leepile



Strict bio-security measures were followed to ensure livestock met the required health and safety protocols.

The auction pens will benefit Mogopa and seven other villages within the area.



BREEDING PIGS: HEATING AND PREGNANCY

Heating Detection

Detection of estrus (heat) is one of the most critical mechanisms of a successful swine breeding program. Accurate and consistent detection of estrus is necessary to ensure mating occurs near the time of ovulation and to identify open females. Since accurate heat checks are so important, farmers must know the typical signs that females approaching estrus show and how to best use a boar to stimulate females to express estrus.

Palesa Watch of Watch P Piggery, a piggery farmer, said the most precise process is to record the dates that the sows and boars mate to accurately track the pregnancy cycle. "We mate the pigs twice during the three-day heat period, if the sow is not on heat after 21 days it simply means it is pregnant. If it is on heat again after 21 days, it means it never conceived therefore the process of mating is then repeated. Once it has conceived, there are injections that need to be administered during pregnancy," said Palesa.

Pregnancy

Watch indicated that sows are pregnant for three months, three weeks and three days, that is a total of 115 days, with a range of 111 to 120 days, from the first day of mating. Should the piglets be born 109 days before they will be classed as abortions. Most importantly, pregnancy length can differ according to age, environmental conditions, breed or time of the year.

"During pregnancy it is important to keep the sows in familiar surroundings and in a normal routine. Sows can show minimal signs of pregnancy until close to the time of farrowing which can be an inconvenience if you do not keep a mating schedule that will inform you of the possible delivery date. I usually ensure a strict monitoring program on a daily basis when I am sure that the sows have successfully conceived and use observatory means to detect slight abdominal distention as early as 80 - 90 days of gestation," said the breeder.

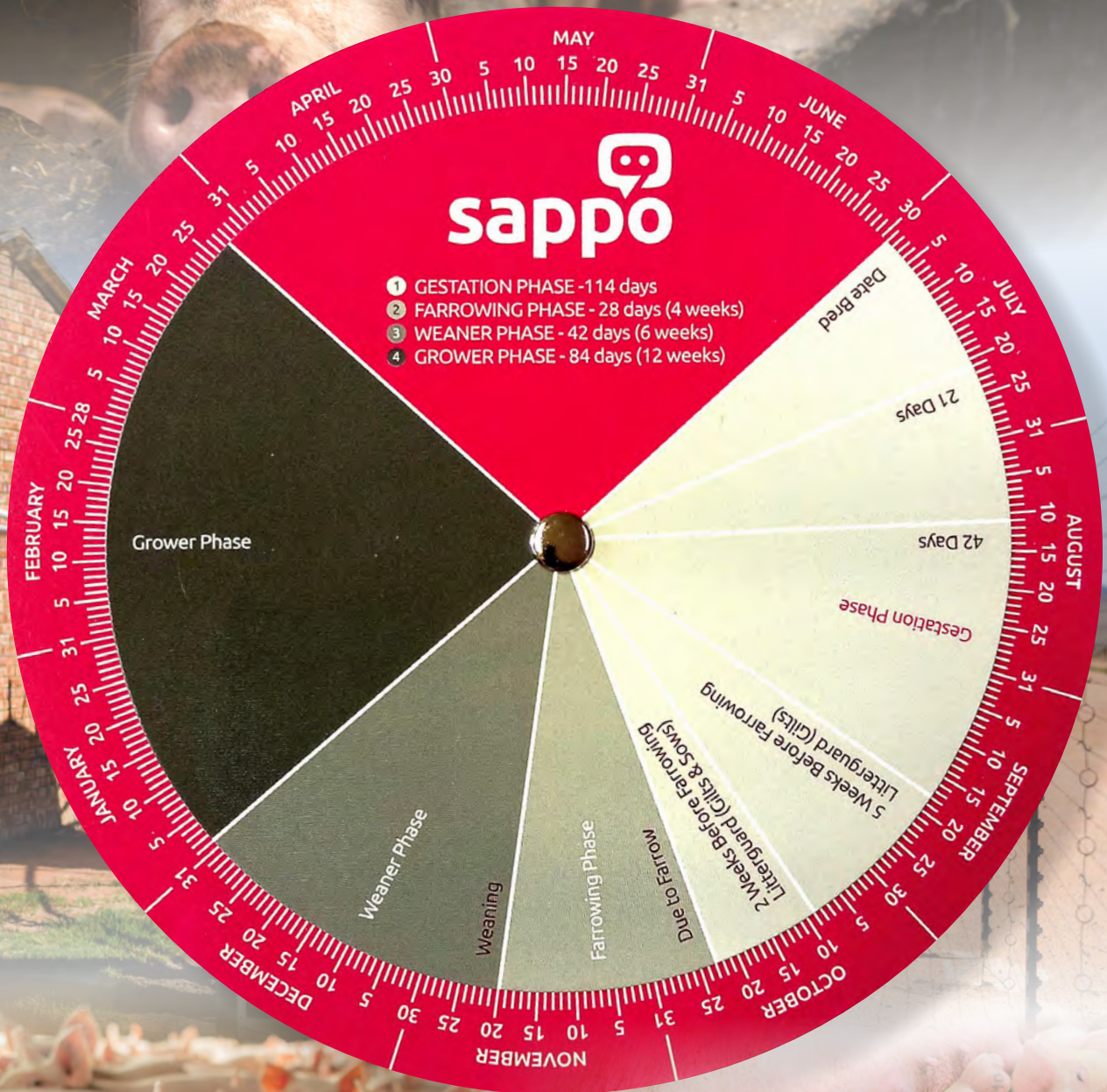
Signs that one should look out for during the last week of gestation is the vulva that may become swollen and red, and the mammary glands will distend with colostrum 24 - 48 hours prior to farrowing. Preventive care, including vaccinations and deworming, should be put in place towards the last weeks of pregnancy. In addition to that, farmers that are not familiar with administering medication for themselves should discuss the process with a veterinarian, animal health technician or extension and advisory officer prior farrowing.

Article by : *Tshegofatso Leepile*





BREEDING PIGS: HEATING AND PREGNANCY



oink



Its all system go for the newly renovated Selame Broiler project. MEC Desbo Mohono and Team DARD hand over a new broiler house to farm owner, Ms Rose Rakgwale.

DEPARTMENT HANDS OVER MODERNISED 45000-CAPACITY BROILER HOUSE TO SELAME POULTRY

When she opened the doors for poultry business during the year 2012, Mme Rose Rakgwale of Selame Poultry had only a vision of being the best in the chicken business. With much enthusiasm she managed to pull all stops and by the end of the year 2019, the business was flourishing with fully functional six broiler houses, producing 40 000 birds each per cycle.

The inevitable happened and she has been on a 3-year hiatus of business in her Haartebeesfontein based 70ha farm. In the 2023/2024 financial year, the North-West Department of Agriculture and Rural Development came on board to assist the farmer to resume business.

The North-West MEC for Agriculture and Rural Development, Desbo Mohono has now handed over a 45000-capacity refurbished broiler house to Selame Poultry, a Haartebeesfontein-based agriculture project. This was delivered on Friday, 22 March 2024 as part of the Provincial Accelerated Service Delivery Initiative, Thuntsha Lerole at Matlosana Local Municipality.

Owner and founder of Selame Poultry, Ms Rose Rakgwale said the handover was a sign of a nod from the Department for the project to open doors for business. The Project previously had to stop operations to address infrastructure issues. Their established market required the project to stick to the required specifications to sustain their supply. "I had no choice but to listen. It was a difficult decision to pause operations, but it was necessary," Rakgwale said as she reflected on her journey.

She has acknowledged the Department's support and only had words of gratitude towards the work done on the farm. "There was a time when I doubted if we would be able to pull the work successfully. I am glad that the house is high-tech and carries all the details that were required by my market. We are ticking all the boxes. I thank the MEC and the Department for this empowerment. The world needs to see what the government is doing for us," Rose said enthusiastically. The refurbished house is environmentally friendly and is equipped with a water reticulation system, a high-end security system, and a modernised electrical power system.

MEC Mohono said it was necessary to assist the farmer noting the capacity she has to deliver. She said the farm which previously was operating six broiler houses needed to be assisted so that it can continue with its established supply market. MEC said she was elated that Selame will now

continue to do business and stir the economic activity in the area. She also appreciated the farmer's patience towards the delivery of the project. "The Department took some time to complete the project, but this farmer was patient and that goes to show that indeed agriculture is not for the faint-hearted. I have so much pride in her etiquette, and I am confident that she will ensure that work in this farm runs with speed," MEC Mohono said confidently.

MEC encouraged the farmer to work hard so that all other remaining houses could also be renewed to meet the required specifications and be functional.

Selame Poultry project has done best in its operations previously bagging accolades of Best Entrepreneurship Awards from the North-West Department of Agriculture and Rural Development as well as the National Department of Agriculture, Rural Development and Land Reform. It has a supply contract with one of the largest chicken abattoirs in the province. They also previously boosted an annual production of over 2,000,000 birds.

Article by: Tsholofelo Dintwe



The broiler house can carry 45000 birds per cycle and is equipped new systems including with water reticulation, modernised security and electrical power supply.





agriculture & rural development

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