

DARD TRAINS ITS SCIENTISTS AND AGRICULTURAL ADVISORS FOR IMPROVED AND QUALITY SERVICES



S ARE SAFE



Agriculture & Rural Development Department: Agriculture and Rural Development

North West Provincial Government REPUBLIC OF SOUTH AFRICA **Page 02** Together we can beat Corona Virus

> **Page 10** The process of registering a new abattoir to fulfil Meat Safety Act

> > Page 08 Green pepper agri-preneur grows her business against all odds



TOGETHER WE CAN BEAT THE CORONAVIRUS

REGISTER FOR THE VACCINE , TODAY.

Our government has begun its rollout plan for the COVID-19 vaccinations. An electronic system will assist with the rollout across the country. If you are a South African over the age of 60, you can now register via a digital device. Go to **http://vaccine.enroll.health.gov.za**. All you need is an ID number or Passport number (non-RSA) and your contact information. Once the online form has been completed, a notification will be sent through SMS confirming a successful registration.

VACCINES ARE SAFE.

FACT: Vaccines are rigorously tested to ensure that they are safeFACT: Claims linking vaccines to autism relied on poor and fraudulent researchFACT: Vaccines prevent diseases and do not cause them

FACT: Vaccines contain chemicals that we encounter everyday

FACT: Vaccines can help where the body's natural immunity cannot

WE MUST FIGHT AGAINST COVID-19 AND STAY PROTECTED.

VACCINATE TO PROTEST YOURSELF AND YOUR LOVED ONES.

Website: www.sacoronavirus.co.za • WhatsApp Support Line: 0600-123456 • Emergency Hotline: 0800 029 999



health Department: Health REPUBLIC OF SOUTH AFRICA





Contents & Credits

Content

Page Number

Together we can beat Corona Virus02
Contents Page03
Editorial Comment04
From MEC's Desk
DARD trains its scientists and agricultural advisors for improved and quality services
Touching lives of many communities through the food security programme07
Green pepper Agri-Preneur grows her business against all odds08
Season diseases: vaccinate09
The process of registering a new abattoir to fulfil Meat Safety ACT10
Taletso go bafetoledi ba dikuno tsa temothuo le bagwebi ba lephata leno go ikwadisamo polokelo-tshedimosetsong ya lefapha (DATA BASE)11
Everything you need to know about raising broiler chickens
Commercialising the Matuwane livestock farming activities remains a priority for the family business
Combating veld fires
Disability in the agricultural sector: changing mindsets that people living with disabilities are incapable of doing agricultural work
Hatchery training now available at Kgora Farmers Training Centre17
Tsepamo&Co. Mother and Son duo on livestock genetic development
Rabies poster
Vooma vaccination Advert

Credits

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Editorial: Emelda Setlhako

As I write, the national department of health has realised statistics relating to vaccinated adults in our country. At least 13 million adults are fully vaccinated. According to Government News, and Information Systems (GCIS) dated 10 November 2021, South Africa is now home to over 13 million adults who are fully vaccinated.

According to the Department of Health's data, this represents 32.5% of the adult population who are fully jabbed. Se ke dikgang tse di namatsang go bona gore Ma Afrikaborwa a tswelela go enta go thibela malwetsi a a masisi a a ka bakiwang ke go tshwaediwa ke bolwetsi jwa Covid 19.

Profense ya Bokone Bophirima e ntse e tsweletse pele ka keteledipele ya Bakhuduthamaga go rotloetsa baagi go tswelela pele go enta. Seno se dirwa ka lean oleo le anameng profense leo le bidiwang Provincial Vooma Weekend Vaccination drive.

Logato lono la moento lo tsenelela kwa baaging, kwa mabenkeleng, kwa dipalangweng le mo mafelong a mangwe a mantsi.

The agricultural sector was faced with many challenges since the emergence of Covid 19 pandemic. We have nonetheless seen the resilience of many agri-preneurs despite all the challenges. Amongst others, veld fires raked havoc in many areas leaving devastating effects.

As a department, many awareness campaigns have been made to all farmers to prepare for the eventuality. We urge farmers to take heed of all advices to avoid losses. Agricultural advisors are available to provide further guidance.

Our Newsletter is now refining for the better. We are steadily bringing on board a team of departmental specialists who are now using this platform to give you expects advice and they are contributing articles on various topics. We believe this contribution will go a long way in empowering our farmers and this newsletter will form part of your resource book collection. We are towards the end of 2021. December is also a peak planting time. We wish all our crop farmers a good planting season. We know you do it faith. You will indeed reap the fruits of your efforts.

Remember your hard work is also for the economic change of our province and the country at large.

Wishing all the farming community a happy production season.

Re a leboga Emelda SETLHAKO

Motsamaisi wa tsa Tlhaeletsano

FROM her Desk

I send my earnest cheerful season greetings to all our farmers, stakeholders and of course our very important service delivery agents who are our internal staff within the Department.

Although it hasn't been easy for all of us these past twelve months, the department would like you to know that our heartfelt wishes are with you and your family during this holiday season.

2021 has not been an easy year due to many ills surrounding all of us. The primary suspect being the monstrous COVID-19 pandemic that continues to wreak havoc in our societies.

Let's all clap hands and welcome the peace of Christmas, let's summon this good season to wait a while with us, while ushering the year 2022. May this season find you among those you love, sharing in the twin glories of generosity and gratitude. May all your wishes come true in the year ahead, and if not continue with the "try again spirit".

May the New Year usher in a season of favor and unprecedented blessings over you and your family. May the Lord order your steps and straighten your paths. May this season be relaxing and stress-free so that you can all come back recharged for 2022.

Kgwedi eno ya Sedimonthole, a re tswelleng go rapela Modimo gore a re role tsotlhe tsa ngwaga o o sa re ratang mme re lome ngwaga o moswa ka monyebo le boitumelo. Go balemirui botlhe mo porofenseng ya rona a re tsweleleng go rapelela pula tsa matlhogonolo tse di tsweletseng go re tlhogonolofatsa.

Let's all continue to wear masks and sanitize and keep the required distance in fighting this colossal. To all those who will be driving and visiting family, please obey the rules of the road and play it safe all the time.

Ke a leboga - I thank you!

MEC: Desbo Mohono

North West Department of Agriculture and Rural Development





Researchers, Specialists, Soil Scientists, Agricultural Advisors, Extension Officers of the department and the academic staff from the two state owned colleges of agriculture in the province who converged in Taung Agricultural College last week for a three (3) day Soil Survey and Fertility Management training workshop.

DARD TRAINS ITS SCIENTISTS AND AGRICULTURAL ADVISORS FOR IMPROVED AND QUALITY SERVICES

One of the best ways to enhance knowledge, skills and to improve performance and increase results in any workplace is through training of employees. Getting employees exposed to relevant training can help any organization to render improved and quality services to its clients.

Now to achieve this, in September this year the North West Department of Agriculture and Rural Development took some of its workforce for a training on Soil Survey and Fertility Management.

The training was organized and facilitated by officials from the national Department of Agriculture, Land Reform and Rural Development in partnership with the provincial Department of Agriculture and Rural Development.

It was intended mainly at empowering the workforce of the department who are in the field of soil management as well as the Extension Officers who in the main are the first contacts between the department and the farmers in the province.

The training which was 30% theory and 70% practical revolved around assessing and identifying different soil types, evaluating crop suitability and selecting suitable management and amelioration options; use of a Global Positioning System (GPS) to locate resources and sampling points; taking of soil samples and interpreting the laboratory results and the use of field pH/EC meter to determine soil pH and electrical conductivity and use of Google Earth Pro for mapping amongst other things.

The practical part of the workshop was conducted in both the field and the laboratory setup. One of the participants, Gomolemo Morake who is an Agricultural Advisor based in Matlosana said the workshop was relevant and interesting.

"Everything was explained well and the most interesting part for me was when we were out on the field doing what we have been learning practically. Practical helps one to remember easily for future use or transferring the knowledge to others.

"In terms of relevancy, I would say it was relevant for me as an Agricultural Advisor because that is exactly the kind of information I must teach and explain to my crop farmers to get maximum yields of production from the soil," Morake explained.

Her colleague Lawrence Oage from Brits in the Madibeng area was equally happy about the workshop. "I am also happy to have been part of this workshop. It was an eye opener and was really what we needed as we are working closely with farmers. I have learned that soil fertility is one of the subject matter which does not receive enough attention during crop production,"

Farmers will be the main beneficiaries of this training as employees who attended this training are now on the ground imparting skill and information with farmers on the importance of soil health, analysis of the soil test results and determine how they can best supplement their soil's fertility needs without breaking the bank.

Article by: Thebe Itumeleng



The workshop which was 30% theory and 70% practical revolved around assessing and identifying different soil types ,use of Garmin Global Positioning System (GPS), taking of soil samples and interpreting the laboratory results and the use of field pH/EC meter to determine soil pH and electrical conductivity and use of Google Earth Pro for mapping among other things.





MEC DesboMohono (with green overall) with the officials from the department and Tshirologo Primary School staff. The department planted vegetables for the school.

TOUCHING LIVES OF MANY COMMUNITIES THROUGH THE FOOD SECURITY PROGRAMME

To mark the 2021 World Food Day, the North West Department of Agriculture and Rural Development provided residents of eight villages in one day with agristarter packs to begin their own food production. Residents from the hosting village of Goedgevonden and of Tsetse, Boikhutso, Boikhutsong, Appledraai, Wilgevonden, Mafole and Mogopa villages received vegetable seedlings, fruit trees and indigenous chickens for rearing amongst others from the department.

The department also volunteered the service of expanding the vegetable garden in one of the schools in Goedgevonden to revive the spark of agriculture amongst leaners.

The objectives of the Provincial World Food Day amongst others, is to heighten public awareness on issues of poverty, hunger and malnutrition and to further raise awareness on the different products that constitute a balanced diet. Through the food security programme, the department is able to support communities with interest in agriculture with these starter kits to help them break the cycle of poverty, increase food security, create job opportunities and enhance household income.

Amid the COVID 19 pandemic, this year's commemoration challenged residents to think of food as a symbol of hope, care, dignity and strength. In response to the humanitarian challenges brought about by the COVID-19 pandemic resulting in humanitarian challenges, MEC Desbo Mohono provided child-headed homes, elderly people, orphans, and people living with disabilities and unemployed individuals with agri-packs for household consumption.

Beneficiaries of these programme are identified by the department working closely with the provincial Department of Social Development. Addressing the gathering, MEC Mohono said her department will continue to put in resources and efforts to tackle food insecurity at community and household levels.

"Food insecurity remains a pervasive and serious problem. Many of our people, especially those residing in the rural areas, still regularly find themselves living in poverty and without sufficient access to affordable and nutritious food. "So we will continue with what we have been doing in every corner of our province which is providing vulnerable households access to a stable, safe, nutritious food source. It is also about providing our citizens with dignity and well being," MEC Mohono said. One of the beneficiaries Dinah Ditji from Goedgevonden was extremely happy to have received agri-packs from the Department of Agriculture and Rural Development. "I am over the moon. I am grateful to be amongst those who have received fruit trees and chickens," She expressed.

Nomathemba Phaphama from the same village said she was also happy with what she had received. "This is for my children's future," she said referring to the chickens she received from the department. "It's now up to us as to what we are going to do with all these implements the department has helped us with," Nomathemba concluded.

With the outbreak of Covid-19 and its impact on the livelihoods of many people, the department with its food security programme, continues to provide support to the vulnerable people who have been affected by the Covid-19 pandemic. The vulnerable include people who have been laid off work, put on short time or unpaid leave, casual workers and those in the informal sector.

For more information on the food security programme, members of the public are encouraged to enquire at the nearest office of the Department Agriculture and Rural Development.

Article by: Thebe Itumeleng



In response to the humanitarian challenges brought about by the COVID-19 pandemic resulting in humanitarian challenges, MEC Desbo Mohono today in Goedgevonden provided affected families with agri-packs for household consumption.



GREENPEPPER AGRI-PRENEUR GROWS HER BUSINESS AGAINST ALL ODDS

Little did forty six (46) year old Onkarabile Mooketsi know that she would become a farmer herself when she started observing family members who were involved in subsistence farming.

Onkarabile is currently renting an 18 hectare farm where she has six (6) permanent employees and lease some of the equipment from neighbouring farmers to cultivate her land. "I started my project with planting green peppers that I sell to hawkers and local supermarkets, currently, I am busy preparing to plant chillies and spinach in order to expand my produce.

Even though the project is still at a rudimentary stage and no profits have been realised, I am confident that it will soon yield profits because of the evident potential of the land, the skilled individuals and the financial support from the stake holders" she said.

Although farming is not for the fainthearted and often faces challenges of capital to invest in machinery and operations of the business, the commitment she has shown enabled her to receive funding which she used to buy broiler chickens and feed.

She is also one of the female agri-preneurs who received beekeeping equipment in August 2021 from the department's initiative that was started by MEC Desbo Mohono to encourage and empower farmers to penetrate the apiculture market that is rarely explored by black farmers. "Our government is currently geared towards supporting black farmers and the youth thus the importance of taking advantage of every opportunity presented to me so that I can enhance my skills, develop my employees and share knowledge with other emerging farmers like myself" said Onkarabile.

The passionate farmer envisages working towards growing her farming activities to a level where it can be a big, reliable and successful business that is able to supply large markets while able to contribute to food security for indigents.

Article by: Tshegofatso Leepile





Onkarabile Mooketsi on the 18 hector farm she leases in Tweefonte

RAINY SEASON DISEASES: VACCINATE



With the rainy season comes insect borne diseases, the most commonly seen diseases being Lumpy skin diseases (LSD) also known to farmers as KNOPVEL, Three Day Stiff sick (TDSS), and rift valley fever (RVF). With the wet weather experienced late last year and early this year most farmers were met with the above diseases especially lumpy skin and Three day stiff sickness. These diseases were reported in high numbers by our farmers (In Moses Kotane), and this was mainly because most farmers were caught offguard.

The advice we give to farmers is "Don't be caught off-guard act now, vaccinate your animals against the above-mentioned diseases and contact your local state veterinarian for information on other diseases that may not be mentioned here."

Lumpy skin diseases is a viral disease caused by biting insects (mainly mosquitoes). Ticks also play a role in the spread of LSD. LSD can also be transmitted through direct contact with contaminated water and feed troughs.

LSD is mainly characterized by skin nodules (lumps), clinical sign of the disease includes fever and discharges from the nose and eyes. There is no treatment for LSD. Prevention through means of vaccination is the best way to control the disease. There is a popular belief amongst farmers that Dettol cures lumpy skin disease. It is important to note that there is no scientific proof to support this belief.

Three-day stiff sickness is a viral disease of cattle also transmitted by insect vectors i.e., mosquitoes.

Clinical signs include a short duration fever, animals unable to stand (temporary paralysis), reduced bull fertility, reduced appetite, discharges through the nose and eyes, clinical signs can differ depending on how badly the animal is affected, and thus symptoms may differ per individual animal. This diseases stresses farmer and leads them to spending thousands of rands on the care and treatment of the animals when all of this could have been prevented by doing a simple vaccination.

Rift valley fever is a viral disease of cattle, sheep, and goats. It is transmitted by biting mosquitos during years of heavy rains. RVF is a zoonotic disease meaning that it can spread from infected animals to people. The disease causes abortions, storms and death of young animals. The is no specific treatment for rift valley fever and farmers are encouraged to report any animals suspected of being infected with rift valley to their state vets.

Farmers are encouraged to vaccinate their animals now. Prevention will and always remain better than cure, it may look expensive now, but it is worth it in the long run.

Compiled by: Dr Mukani Nobela Moses Kotane State Vet

Moses Kotane STATE VET

THE PROCESS OF REGISTERING A NEW ABATTOIR TO FULFIL MEAT SAFETY ACT

The Department of Agriculture and Rural Development call for interested public to register a new abattoir in terms of the Meat Safety Act, 40 of 2000 which is administered through the Directorate: Veterinary Services. All enquiries regarding information and process with abattoirs must be channelled through State Veterinary Public Health Offices throughout the province.

An abattoir can be described as a slaughter facility registered in terms of the Meat Safety Act, 40 of 2000. This act regulates all facilities where animals are slaughtered especially with the intention to sell safe meat for consumption. The key role of the Act, it is illegal to sell any meat in the Republic of South Africa without sourced from a registered abattoir. Under this act, there are different regulations for specific species such as poultry, red meat, game and ostrich regulations.

One has to follow the processes in order to meet the requirements; the process of registering a new abattoir also involves other stakeholders who have different mandates or legislations which must be compiled with. Such stakeholders include the Local Authority/Municipality, Environment & Conservation and Water Affairs. When a prospective abattoir owner makes the initial contact with the local Veterinary Public Health Officer, he/she then provides all the necessary guidance on the process to be followed, depending on the species and size of the abattoir in question. The process to follow can be summarised as stated below:

- Contact the local VPH Officer who will then provide relevant guidelines, applicable fees and advice depending on the species and size of abattoir required
- Contact other relevant stakeholders to get clearance/go ahead in line with their legislation
- Have a professional architect/drawer to draw a complete set of drawing plans in line with the Meat Safety Act and applicable regulations, the drawing plans must be also be compliant with the National Building Regulations and Standards. The drawing plans must be submitted to the local VPH Officer with a completed form obtainable from the VPH Officer. Clearance letters from other stakeholders, especially Local Authority and Environmental Affairs must also be attached
- The VPH Officer will have the plans/drawings evaluated on compliance to the Meat Safety Act and give feedback to the client on actions to follow or further

guidance as may be necessary

- When the plans are found to be compliant with the Meat Safety Act, 40 of 2000, the VPH Officer sends them to Head Office in Mmabatho for approval
- Once approved, the prospective abattoir owner may then start with the construction of the abattoir which must be in accordance with the approved plans. Where changes are to be made, again approval by Head Office must be sought.
- Once the construction has been completed, an inspection by the Veterinary
 Public Officer is conducted and if everything is found correct, in line with the
 approved plans, then the client would be required to complete an application
 form and pay applicable registration fee for the abattoir to be registered.
- The client must acquire the necessary personnel for slaughtering, and provide the necessary training for the workers through an accredited service provider. The client must acquire an independent meat inspection services.
- Trial slaughter would then be arranged and a registration certificate issued to the applicant. Otherwise any other shortcomings identified would be pointed out to the client for further attention/correction.
- It is important to note that all abattoir registration certificates expire at the end of December each year; hence applications for renewal and proof of payment must be submitted before the end of the year.
- Throughout the year on regular bases, VPH Officers monitor performance of abattoirs for compliance, and in cases where serious non-compliances occur, a registration certificate may be withdrawn or suspended as a last resort.

Article by: Dawn Mti



AGRO PROCESSORS/ ENTREPRENEURS CALL FOR AGRICULTURAL AGRO - PROCESSORS/ ENTREPRENEURS TO REGISTER ON THE DEPARTMENTAL DATA BASE

The North West Department of Agriculture and Rural Development (DARD) calls for all agro-processors/ entrepreneurs (Processors, Marketers, Exporters and Importers) within the province who are actively engaged in Agro processing, Marketing and Trade (Exporting and Importing) to register their business operations on the departmental data. The registration will be based on the six (6) commodities, namely: Field crops, Livestock, Horticulture, Floriculture, Apiculture and Medicinal Plants production.

The data base established will aid the department to keep accurate statistics of agricultural value adding initiatives/ institutions within the province. Special emphasis is placed on marketing and trade infrastructure.

FOR MORE INFORMATION, PLEASE CONTACT:

Mr Mothusiotsile Setlhabi: 073 199 6899 or Ms Kgalalelo Maleka: 079 967 8914

Registration Forms to be collected from the following Local Agricultural Offices (LAO):

Mahikeng: Ms Seipei Maphage 072 784 2436 Ditsobotla: Ms Cynthia Gonyane 082 949 4381 Ratlou: Mr Timothy Molema 073 166 5178 Ramotshere Moiloa: Mr Reuben Moiloa 072 780 2738 Tswaing: Mr Kgwarai Sebokolodi 082 491 0637

Dr Kenneth Kaunda

JB Marks: Ms Kefilwe Makinane 072 813 2054 **Maquassi Hills:** Mr Dirk Seolwane 072 807 1900 **Matlosana:** Ms Salome Modise 072 811 6971

<u>Dr Ruth Segomotsi Mompati</u>

Naledi: Mr Tshetlho Makhwana 072 795 0434 Greater Taung: Mr Thaelo Letlhogela 072 794 0787 Kagisano Molopo: Mr Nikotima Molefe 072 802 8072 Mamusa: Ms Tuelo Sebekedi 072 781 2345 Lekwa-Taemane: Mr Ogopoleng Motshabi 072 772 8973

Bojanala

Rustenburg - Kgetleng River: Ms Dineo Mokgatlhe 072 804 2146 Madibeng: Mr Solly Molebalwa 072 815 5485 Moretele: Mr David Sebidi 072 808 6784 Moses Kotane East: Mr Mogorosi Magae 072 764 7113 Moses Kotane West: Mr Miga Nokwane 072 753 9960

BROILER CHICKENS EVERYTHING YOU NEED TO KNOW ABOUT RAISING BROILER CHICKENS

One of the most important things to do while raising chickens is to provide a stable natural environment for them to live in and grow. Whether you're raising chickens as a commercial venture or to supplement your home pantry, raising healthy birds is a worthwhile investment of time and effort.

For the most part, raising broilers is not much different from brooding layers. However, there are a few special considerations you should know before you get started.

BROILER MANAGEMENT

Pre - placement and house preparation with efficient control of the feeders, drinkers, heaters, thermostats and sensors, floor temperature and ventilation are very critical.

- Optimum starter period with a 7 day body weight of at least 4.2 times the initial chick weight.
- Control growth rate between 7-14 days using a lighting program for better frame development before adding muscle mass, depending on slaughter weight.
- Appropriate nutrient balance and optimized feed intake with good feed presentation.

2. STARTING PERIOD

The first week of life is crucial to ensure future performance. The bird's body weight increases 4.2 to 4.5 times over the first week, and an extra 10g of body weight at 7 days can increase the 40 days weight by 50-60g.

2.1. Quality of day old chicks

- Check the quality of the day old chicks (a sample of at least 30 chicks) using the table below.
- Weigh a representative number of chicks at random to get an accurate initial body weight and uniformity, in order to adapt your management according to the results.

Parameters	Characteristics
Eye	Dry, clean and bright
Navel	Sealed and clean
Beak	Clean, free from red spots and malformation
Feet	Warm, free from deformed toe, malformation, red and swollen hocks
Vent	Clean and dry
Activity	Place a chick on its back, it should stand up within 3 seconds

Environmental factors

Newly hatched chicks are not capable of fully regulating their body temperature.

- Make sure the house and the floor is nice and warm. The temperature zone for a baby chick is very tight (32-33°C). Below 32°C, the chick is not capable of maintaining its body temperature.
- Check and record the temperature, humidity, air speed, and observe the chick behaviour (position, chirping, and attitude, feeding and drinking activity).

The adjustment of the equipment is based on observation of the chick behaviour.

- Chicks from young breeder hens are smaller and so require a higher temperature, about 1°C higher for the first week.
- If chicks have cold feet, increase the temperature to 34-35°C for at least 4-6 hours. Reassess feet temperature regularly until they come back to normal before decreasing the house temperature.

Feed and water

Early feeding stimulates the development of the chick's gastrointestinal system and promotes re-absorption of the yolk sac.

- Floor area needs to be covered with feeding points (paper, egg trays, pans and/or troughs) when the chicks arrive, and placed next to a drinking source so that the chicks can also find clean fresh water straight away 40 to 60 grams of crumb or mini-pellet feed on paper is recommended in 40 to 50% of the brooding area. This paper, if not biodegradable, should be removed on the third day.
- Supplementary feeders or egg trays (1 for 100 chicks) should be provided the first 7-10 days, as they are essential for a successful change to pan or chain feeders, before being removed when chicks are able to eat into feed pans from outside and cannot sleep inside them anymore.
- Renew the feed at regular intervals during the first 3-5 days according to chick size. Water is very important as birds can drink 1.6 to 2 times as much as they eat, depending on age and watering system.
- Refilling and cleaning drinkers (bell and nipple) should take place several times a day during the first week.
- Supplementary drinkers to be used for the first 24-72 hours in case of bell or trough drinkers, adjust the height of the drinking lines (nipples) and the water pressure every day. Eight (8) and twenty four (24) hours after placement, at least 80% and 96% of chicks, respectively, should have a crop full of feed and water. If not, review feed placement, quality and water supply and the brooding conditions (temperature, light intensity, chick quality...).

Lighting

Short dark periods with a maximum light intensity the first 4 days are useful to stimulate chicks to eat and drink each time the light is on again, and prevent them from huddling and sleeping in some area (corners for example) for a long time.

- Light intensity should be strong in the brooding area
- In semi-closed houses, light intensity should be gradually reduced to between 7 and 12 days.

Further growth and development

From the second week of life, further growth and development occurs in skeletal, organs and muscle mass. If birds grow too fast, they will have poor skeleton quality, high metabolic problems and lower resistance (more susceptible to disease). Slowing down growth during this time will help to prevent these problems.

Lighting

A single dark period applied every day is efficient to reduce mortality and leg problems and improve feed conversion.

- Dark periods are especially useful from 7 to 21 days to allow birds to grow a solid frame and thus reduce future leg disorders.
- The optimal duration depends on final body weight, genotype, feed form and composition and the sensitivity of the farm to metabolic problems.
- Because the feed pattern of broilers is to eat and drink before the dark period, it is important to switch off the lights every day at the same time.
- Long dark periods are increasing the activity of the birds during daytime, favouring amongst other factors, the occurrence of skin scratches and tears. So, when skin injuries are already a concern, it is recommended not to implement more than 4 hours of darkness after 21 days depending on local regulation or veterinary advice.

Two main objectives of growth control

To improve the skeletal quality thus preparing the broiler to support compensatory growth and obtain an improved feed conversion with less mortality, culls and downgrades,

2) To reduce the level of sudden and late mortality and problems of ascites.

 The lighting program after five (5) days of age may be further delayed by one (1) to three (3) days for chicks from young breeder hens.

Once chicks can reach easily the bottom of the feeder (normally from 10-14 days of age), regular feeder emptying procedure should be implemented. Birds should be allowed to eat almost all the feed before fresh feed is distributed, in order to reduce the amount of fine particles accumulating in the pans

- Feeders should be emptied every day from 20 days of age.
- Interrupt the feed supply before the light goes off and take advantage of the chick's hunger when light is on again to reduce the amount of fine particles before refilling the feeders with fresh feed.
- Weighing chicks on arrival and then every 7 days is a way to follow the growth.

Key points

Key points to record	Key points to do daily
Weight every seven (7) days	Temperature (mini and maxi)
Daily mortality and selection	Humidity (mini and maxi)
Amount of feed and water used	Litter quality
Minimum and maximum temperature	Dead and weak birds + culling
Vaccination and treatment given	Feeders and drinkers

VENTILATION

Ventilation management should meet two objectives:

- Keep the ambient parameters inside a defined range depending on birds' age.
- Ensure a good distribution of fresh air on all birds wherever they are located inside the house.

Nutrition and feeding

Feed intake controls rate of growth. According to the characteristics of the breed being reared, stimulating or reducing their feed intake helps towards achieving the optimum performance. The main factors of stimulation are the feed presentation and the growing conditions.

Feed presentation

Intake is directly linked to the quality of the crumbs, pellets (hardness and durability) or mash (particle size and uniformity) placed in the chain or pan feeders.

- Provide birds with a uniform quality feed, which is adapted to their ability to eat and swallow, to reduce feeding time and energy used
- Broiler growth and FCR will be better if the starter feed is given in sieved crumbles or mini-pellets followed by pellets of appropriate size (diameter and length) to processing.

Compiled by: Matshidiso Maine & Thebe Itumeleng

- Poor feed presentation with high level of fines will have a negative impact
 on broiler intake. By instinct, chicks pick up larger and more palatable
 particles of feed and because fine feed contains higher levels of additives,
 vitamins and trace minerals, it will generate an imbalance in the bird's
 intake.
- The change from crumbs to pellets is often difficult and can causes waste, above all if pellets are too big for the age of the bird and the size of their beak.

Withdrawal feed

 A withdrawal feed is needed when pharmaceutical feed additives are used to avoid residual carcass contamination at processing.

Supplemental whole grain feeding:

- If supplemental whole grain is added, make sure the dilution is taken into account when the compound feed is formulated to keep the nutrients at the recommended levels.
- The grains may be added after 7-10 days. Start with 1 to 5% inclusion rate, then a up to 10% in the grower and 30% in the finisher (up to 40% for heavy broilers). Inclusion rate will depend on the feed composition.
- Whole grain should be removed two days before catching to avoid carcass contamination at processing.

Fasting

- A minimum of 8 hours of fasting is required in order to avoid carcass contamination at processing from faecal ejection and feed left in the crop.
- Water should remain available until catching.
- Lights should be dimmed to avoid birds from eating wasted food in the litter.





COMMERCIALISING THE MATUWANE LIVESTOCK FARMING ACTIVITIES REMAINS A PRIORITY FOR THE FAMILY BUSINESS

The Matuwane family business has been running for eight (8) years and currently employing two people on a full-time basis outside the directors and five casual workers. The five pride themselves with operating a feedlot consisting of goats and sheep which vary from boergoat, dorper and meatmaster. Their trade includes selling at auctions and supplying customers on demand directly from the farm.

Samuel, Caroline, Nongalithini, Nokuphiwa and Linda's agribusiness is also manufactures feed that has been endorsed by the Department of Agriculture and Rural Development.

The company has received government assistance in acquiring of assets that have helped the business be more productive. However, Linda indicated that with the pandemic, like most businesses that depend on everyday sales to show profitability the business has seen a decline but working on recovering and building a much more self-sustaining enterprise. Prior to the pandemic, the company was showing profit and was able to grow it to venture into other farming activities. Acquiring land for ownership has a hefty price tag and remains a challenge with farmers who wish to expand their activities and that isn't any different for the Matuwane's who have taken time to research on privately leasing and unfortunately found it to be too costly therefore limiting activities that can be done on the farm. "Assistance in acquiring land would be very helpful and could mean that the business will do more in terms of farming thus creating more permanent jobs.

The goal is to see ourselves as commercial entrepreneurs - farming has always been something practiced in the family, it came naturally so to do it on a commercial scale would generate an income and improve the family's quality of life and contribute towards alleviating three triple challenges that we face in South Africa" said the twenty-three (23) year old Linda.

The family is determined to get a 30 year lease on a state farm or purchase own holding to focus on-growing their activities.

Linda advices young black farmers to seek government's various funding programmes to assist them with funding. "We are very privileged as young people living in this country because government favours youth, especially in farming and emerging Agri-preneurs would likely be awarded funding's to start or grow their businesses, bearing in mind that successful farmers didn't just wake up and became successful - it takes dedication, willingness to learn, research and never giving up".

Article by: Tshegofatso Leepile



COMBATING VELD FIRES

With the environmental impact on biodiversity and the gradual reduction of natural land, veld fires can cause relentless damage to livelihoods of farmers if not managed thoroughly. In this way, there is a need for comprehensive understanding of the causes and management of veld fires.

Veld fires are bush fires that have the potential to spread out of control, most fires are a result of human actions that originate from the throwing away of cigarettes, the burning of vegetation when preparing fields, the use of fire by hunters, smoking out bees and the making of fires by motorists along highways.

During a veld fire, water is generally not available in sufficient quantities or at adequate pressure for the management of major fires, however sand or other loose mineral soil material can be an effective control and tree branches can be used to beat fire.

The Disaster Risk Management Unit of the North West Department of Agriculture and Rural Development (DARD) is currently doing awareness campaigns on disaster reduction in the form of gatherings where farmers and officials discuss the natural hazards especially veld fires during this fire season. The Unit also ensure that farmers comply by maintaining and creating fire belts, an arrow piece of a convenient width up to about three metres, which is cleared of any flammable material by various means to facilitate controlled burning, or to apprehend very small flames, normally around a section in accordance of the Act 101 of 1998 (National Veld and Forest Fire Act).

Farmers are furthermore advised to maintain firebreaks that have not yet received sufficient rain in order to curb or reduce incidence of the fires. An owner of land is obliged to create their own fodder banks, obtain fire fighting equipment, do training to combat fires; in addition, it is also the farmer's responsibility to create and maintain fire belts and to ensure that their property is protected against veld fires with regard to the weather, climate, terrain and vegetation of the area.

Farmers affected by these damages are to ensure that their applications are completed and signed by relevant authorities and submitted to their Local Agricultural Extension Office. The department ensures the Disaster Risk Management unit completes fire awareness survey to determine the effectiveness of awareness material and to determine preferences of target groups. All considerations for assistance will be forwarded to the Provincial Head Office.

Article by: Kgalalelo Mashomo

Application forms farmers have to fill in from their Local Agricultural Office when affected by veld fires or any other natural disaster on their land.





DISABILITY IN THE AGRICULTURAL SECTOR: CHANGING MINDSET'S THAT PEOPLE LIVING WITH DISABILITIES ARE INCAPABLE OF DOING AGRICULTURAL WORK.

Agriculture is a pivotal sector for many living in poverty in the North West Province, but it is one where people living with disabilities face some of the greatest challenges.

Ms Keatlaretse Mabel Mosiane, is one of the women living with disability and owns a poultry farm specializing in egg production. She owns a broiler house consisting of 1000 layer birds. She generates her income by selling fresh table eggs, culled chickens and sawdust as a source of fertilizer to vegetable farmers.

Keatlaretse is responsible for management, skills training and development and generally plays an administrative role to ensure that the participant will meet the sustainability benchmark period and assist in the operational and marketing efforts of the farm. She has won the Special Awards Category during Female Entrepreneur Awards at the provincial level in the year 2017/18.

Her intentions are to reduce poverty within the community of Ramatlabama Village by producing good quality eggs that will attract good market price, generate income and to use the farm to its full potential in order to maximize farm profits from various suitable enterprises, while contributing to the economic growth of the local district, promoting affirmative action and gender equity with the farming communities and to expand the egg production capacity to 5 000 birds

The North West Department of Agriculture has assisted the project with the construction of a 1000 layer house, equipped with cages, lights and water connection to the layer house – Sighting, 150m drilling, testing and equipping with submersible pump and supply of a 5000 litre water tank with 6m stand and a tap.

The farmer has expressed that farmers living with disabilities that work in agricultural settings face the greatest trials that in addition impact their

productivity, physical and mental health, and quality of life on a daily basis. "People living with disabilities encounter tribulations, but we are still able to make a living, we must rise up and do something for ourselves and help create job opportunities where feasible" said Keatlaretse.

Her main objective is to produce better quality eggs at higher rates to generate a considerable income that can sustain the enterprise and to ensure suitable farming practices that are profitable in a long run, and the vision is to become a commercial viable and consistent supplier of fresh table eggs in the municipality and province at large.

Article by: Kgalalelo Mashomo



Keatlaretse Layers Farming broiler house situated in Ramatlabama, with 500 layer birds.birds.



HATCHERYTRAINING NOV AVAILABLE AT KGORA FARMER TRAINING CENTRE

Akgora Farmer Training Centre has recently added basic hatchery management training to a list of skills development courses offered at this centre for beginners and experienced farmers to improve their results. This follows the completion of a mini-hatchery project at this centre.

This mini hatchery can produce up to two thousand (2000) chicks per week and it was established with the aim of training farmers who want to own hatcheries.

Aspiring farmers who attend this training will learn practical aspects of hatchery management that includes the biology of fertile egg production, fertile egg handling, setter and hatcher environment, processing day-old chicks and hatchery biosecurity.

With the range of excellent facilities at Kgora, the centre is able to offer onfarm practical work for participants during training.

Another project that has been recently completed at this centre is installation of 180 tons storage bins. These silos are fitted with an electronic conveyor for ease of loading and dispatch. This type of storage provides optimum storage conditions for the grain, by controlling the temperature, insects, mould, birds etc.

The silos will also be used for storage of grains produced by Kgora itself and to store feed and maize brought in bulk for future total mixed ration (TMR) for Kgora livestock.

Reacting to the completion of these projects at Kgora, MEC DesboMohono of Agriculture and Rural Development said she is happy that there is progress.

"We had a dream about this centre and I am glad today to say that dream is slowly but surely becoming a reality. This milestone represents yet another step of ensuring that this state owned farmer training centre is equipped with the modern infrastructure to train and develop local farmers.

"What makes me happier is the fact that farmers will be the biggest beneficiaries of these developments taking place at Kgora Farmer Training Centre. The main goal is to ensure that our farmers constantly learn new and old practices and adapt to changes in the sector, MEC Mohono said. She went on to say she is confident that with this mini hatchery, more hatchers who would receive top-class training from "one of our training institutions would be produced".

The centre can only accept up to a certain number of participants at a time and it is operated on a first come first serve basis.

With regard to the centre's contribution to the food security programme, Kgora often donates chickens to farmers for rearing and seedlings to different applicable projects across the province.

Members of the public are urged to enquire with the local agricultural offices on skills development courses offered at Kgora or contact the office on

018 388 1244.

Article by: Thebe Itumeleng







Mother and Son duo holding the turf for livestock genetic developmentbusiness

The farming business in Tsepamo&Co. family project seems to gain momentum as generations follow. Mme Masego Mosimanyane and her son Kehentse Mosimanyane are pulling out all stops to ensure that their farming grows better to acquire a better position and offering thereof.

This family's goat farming project is making a mark in North West province's far western area called Morokweng. Mme Mosimanyane took the baton from his late father and never looked back. She is currently slowly taking the background and now allowing her son, Kehentse to move forward in centering the business and placing it at the helm of best meat offerers. Top of their competitive approach is pursuing animal genetic improvement.

Tsepamo&Co. is one of the agricultural projects that the North West Department of Agriculture and Rural Development is working closely with on advisory support. This includes animal health and general extension and advisory services. The Department has also donated them a heifer bull earlier this year as part of the Departmental Livestock Improvement plan and to boost their efforts of livestock genetic improvement.

Although their business started over 20 years ago with a few sheep and goats which were mixed breeds then, it was only in 2015 when Tsepamo&Co's started to develop recognisable footprint. This is the same year when the business finally got access to a 528 hectares (shared with other farmers) of farm to lease from a communal land in Morokweng village, Kagisano Molopo Local Municipality.

This then meant that Kehentse would have more time and space and to introduce the family to the modern farming techniques. The Mother and son are working together though she has relegated most responsibilities to his to bring about the young mind to the project. He is currently working hard to and continuously learning from more experienced individuals in the agriculture industry and in order to position the business much better.

As he reflectson the initial stages of the project, Kehentse indicates that the process was never easy and required a lot of persistence. He knew his mother's passion and had seen it over the years. He has seen how farming could provide for his studies even though it was subsistence. He therefore was aware of the potential of the agricultural industry and wanted to break the barriers and lift the standard."When we visited other farmers who were into genetic development for the sake of learning from them, we saw genetically developed animals which were well conditioned and efficient in their production cycles.

This became an inspiration to us to invest our time and resources in developing our own herds. We started looking for the breeds that were of interest and that could be efficient in the climatic conditions of our area. We then concluded and settled on Boerbok goats and Bonsmara cattle and also to crossbreed sheep until we get a type of sheep that will be best adaptive and efficient in our area. For every herd we had to buy genetically developed sires with the purpose of mating them with any type of females until we get to the expected breeding standard," he elaborated.

He said this development came with a need to learn and this included the depreciating grazing due to climate change as well as nutritional supplements that are most suitable for each herd depending on the amount of rainfall in that season and other variables. Amongst other things Tsepamo & co worked on developing the network of support, marketing

and the quality that is expected by the market or the people who would buy animals. "We also had to learn that farming is not only the rearing of animals but an agricultural business and therefore needed to be treated and managed as such,"Mr Mosimanyane said passionately.

As Letsema visited Tsepamo&Co, the quality of the animals was evidently impressive. The duo says their project has generally improved over time. The animals improved in conditional maintenance, genetics and efficiency. "We are also hoping to make the farm more efficient and self-sustaining over time. With improved quality, we hope to make much more than what we have to spend on the production cost of the animals therefore making the farm more efficient," Kehentse Mosimanyane said.

Amongst many achievements, the project has been able to sell animals at the production auction having gone through strict inspection processes that are done according to the South African Boerbok standards. In March 2021, they had 100% of their goats qualify for the production auction. With the crossbreeding of sheep, they have been able to sell at the abattoir and their meat quality approved and accepted by the abattoir.

Tsepamo&Co. would like to positively contribute to the economy of South Africa and Africa at large. With the challenges of employment, they would want to make a mark by creating employment opportunities in the areas surrounding Morokweng where the farm is located. Their eyes are also firmly set on becoming one of the greatest suppliers of excellent quality beef, mutton and chevon locally and internationally. As is had been done to them, they are also open to mentor upcoming farmers and Agricultural entrepreneurs in the future.

Article by: Tsholofelo Dintwe



Kehentse Mosimanyane is making strides and gradually positioning the family's 2 decades business. The duo (Mme Masego Mosimanyane and her son Kehentse are taking pride in their livestock improvement efforts. Goat herd belonging to Tsepamo & Co family business



Rabies is a deadly disease caused by a virus. BEWARE: Rabies kills people and animals. Prevention of Rabies in Humans

RABIE

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Rabies is a zoonotic disease (which means that people can become infected by an infected animal). The virus is shed in saliva and is spread mainly by the bite of an infected animal. Rabies affects the brain and is fatal once a person or animal shows clinical signs.

Animal infected by rabies show changes in behavior and neurological symptoms. They may salivate, become paralyzed, are unable swallow, may vocalize continuously and may become aggressive or non-responsive.

Report any suspect rabid animal immediately to your state or private Veterinarian, Animal Health Technician or the police.

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