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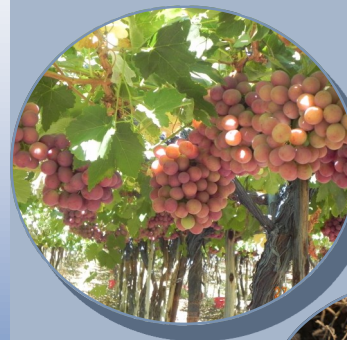


AGRIBANK
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◆ Agri-Learn

✍ Volume 5 (2nd Quarter)

Farmers Information Bulletin



Farming through the Lens



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Agribank’s Agri Advisory Services Division (AASD)
The AASD offers mentorship and training services to farmers in an effort of enhancing their knowledge, skill and attitude in order to improve their farm productivity and income.

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A brief overview: Why is animal health important?



kets and most recently gained access to the United States of America and the Chinese markets. All these market exploration efforts are backed up by the animal health and the free-range statuses that the Namibia beef industry has promoted and maintained over the years.

In addition, the country complies with international trade protocols of the World Trade Organization (WTO), and the animal health protocols of the World Organization for Animal Health known as the OIE.

Livestock production in Namibia mainly comprises of cattle, sheep and goats, and the management practices adopted are aimed at taking care of their health, nutrition and welfare amongst others. These efforts are aimed at ensuring their optimal performance and productivity.

Livestock health is one of the aspects of economic importance to Namibian farmers as it plays a significant role in trading of livestock and their by-products. Livestock production in the country, especially the beef production industry has a significant share in the Namibian export basket be it as live animals such as the weaners to South Africa or as beef cuts to the European markets, for example, to Norway.

The Namibian beef has over the years enjoyed the worthwhile European mar-

This compliance is strengthened by the country's own industry protocols of animal health and trade under the regulatory or facilitating authorities such as the Directorate of Veterinary Services (DVS) of the Ministry of Agriculture, Water and Land Reform, and the Meat Board of Namibia (MBN) embodying all meat industry stakeholders.

Further, the FAN Meat scheme of MBN also created an assurance of quality and safety of the Namibian beef, and a traceability system that enables the Namibian beef to be traced back from the consumer's table to the farm of origin. In order to access and maintain markets to trade the Namibian beef,



TO HELP PREVENT THE SPREAD OF COVID-19

WE MADE THE FOLLOWING CHANGES

 <p>Maintain at least 1.5 meter distance from other farmers</p>	 <p>Wash your hands with running water and soap</p>	<p>OR</p>  <p>Sanitize your hands before entering the venue</p>
 <p>Wearing of a mask is compulsory</p>	 <p>Greeting: Avoid hand shaking or personal contact</p>	 <p>When possible, open windows and doors for ventilation</p>
 <p>Your temperature may be screened at the entrance</p>	 <p>Cover your coughs or sneezes with tissues or your elbow and discard your used tissue immediately in the rubbish bin after use</p>	 <p>Avoid touching your nose, eyes and mouth</p>

AGRIBANK PORTFOLIO
INTEREST RATE
ADJUSTMENTS
MAY 2020

PRODUCT	OLD INTEREST RATE	NEW INTEREST RATE
Subsidised loans (incl. PSSF)	4%	4%
Short-term loans	8.75%	8.25%
Medium-term loans	9.5%	9.0%
Medium-term loans (Aquaculture)	5.75%	5.75%
Long-term loans	9.25%	8.75%
Long-term loans (poultry & bush control - mechanized)	8.25%	8%
NACP non-production loans	8.25%	8%
NACP production loans (not subsidised)	4%	4%
Affirmative Action Loans (upper limited)	9.54995%	9.04995%
Drought Relief schemes (pre -2019 providing interest rate relief)	0-4.75%	0-4.75% (no change)
Bush control loans (labour intensive)	7.25%	7.25%
No-collateral loans	9%	8.5%
ERFP	6.75%	6.75%
Penalty interest on arrears	2%	1.5%

farmers need to play a big role by implementing or adhering to all animal health and trade regulations or protocols. It is important that every farmer develop and use an animal health program (commonly known as a vaccination calendar).

There are certain aspects that farmers need to consider when developing their programs. Firstly, the prevalence of diseases in their farming environment and the country at large; this includes “Notifiable Diseases”, that by law should be controlled (compulsory) regularly through annual vaccinations in Namibia.

They are Anthrax, Brucellosis, and Foot and Mouth Disease amongst others. These diseases have economic or trade implications, hence the export markets strictly require meat products to come from areas that are free or cleaned from such diseases. In addition, there are also other diseases that affect production, and need farmers attention as well, for example Botulism, blackquarter, pulpy kidney and pasteurellosis amongst others.

Another animal health practice that should be included in the program is the control of parasites, both internal (e.g. worms, flukes) and external (e.g. ticks, mites, fleas) parasites. This is very important because parasites can cause

deadly illnesses in livestock. Some parasites also affect meat quality, resulting in economic losses, for example, “beef measles” in carcasses caused by a tapeworm that lives in the human intestines. This tapeworm contaminates the environment through human faeces. Therefore, it is also important to practice hygiene on the farms by building ablution facilities (toilets) to prevent such contaminations.

In order to retain our consumers’ confidence in our livestock and their by-products, every farmer should adhere and support the efforts of the Namibian beef industry. On that, coordinated awareness creation and provision of training to farmers and all stakeholders should be priority. In addition, the farmers associations or unions should continue to strengthen their capacities and widen their operations to promote farmers participation in the entire value chain.



Erastus Ngaruka lecturing farmers

Farm Management Plan

A farm management plan is a defined tool designed for the control of farm resources and situations in order to achieve the desired goal. The key words here are, resources, situations and goal. The basic farm resources include; water, grazing, livestock, financial and human resource amongst others. The situations that commonly occur on farms are drought, veld fires, disease and pest outbreaks. The desired goal for the farm can be defined by either the production scale/level or an income level as targeted.

Planning is an important component in farm management as it enables an informed decision-making process. It allows timely responses and adjustments in the farm business based on realistic information or data from the farm, market, etc. This also helps the farmer to position the farm business in the industry, and to monitor and evaluate the progress on the farm. This is where record keeping becomes essential.

For example, production records should be used to review the progress and performance of an enterprise and its contribution to the whole farm business. This process identifies shortcomings and possible corrective measures.

The farm management plan should en-



Erastus Ngaruka guiding a farmer

compass these basic components; a production plan, marketing plan, financial plan, and labor plan. The plan is the broader guide in managing the entire farm business operations, and the supportive resources such as water and soil amongst others.

The production plan lays out specific production targets and assign specific scheduled activities or duties to be executed in order to achieve the set target for each farm enterprise. For example, the measurable production attributes for farm enterprises would include, weaning and slaughter weight, number of eggs, crop yield, etc.

The marketing plan helps identify potential and profitable markets, as well

and the soil. For that, view the grazing land not only from the “horizontal”, but from the “vertical” perspective as well.

In conclusion, the principles and rules may not universally apply to the varying commercial and communal farmers grazing circumstances or practices. It is important for farmers to understand the underlying forces in the process of rangeland degradation, and thus, explore appropriate and sustainable restoration practices.



AGRI ADVISORY SERVICES



Capacity Building services to farmers include:

- One-on-one Mentorship
- Farmer's Information Days (FID's)
- Short Training Courses
- Excursions / Exposure Visits
- Day / Evening Lectures
- Practical Sessions
- Pre and Post Settlement Training Courses

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(grazed) for a long time, it becomes moribund or dies. Thus, the grass should be utilized sustainably. The most intense form of herbivory is grazing, and with poor management, overgrazing results.

Overgrazing is the common cause of degradation of rangelands or grazing areas in Namibia. It is an excessive use or harvesting of grass plants by the grazers (e.g. cattle). The impact of grazing animals is not only on grass utilization, but also on the soil status. Grasses have an important role of protecting and keeping the soil healthy and fertile. For example, the grass roots and the organic matter are critical to stabilize or keep the soil intact as they hold soil particles firmly together.

Overgrazing decreases the grass density and cover, exposing the soil to adverse conditions such as erosion activities and extreme temperatures amongst others. As a result, the soil loses its moisture holding capacity, the organic matter, its stability and ability to support vulnerable plants, mainly grasses. In addition, when a grass is overused or is constantly eaten with no rest, it gradually loses its competitive ability with other opportunistic plants, such as the woody ones (trees/shrubs/bush). These woody plants take advantage, increase in density and aggressively invade the land. This is termed "bush encroachment".

The encroacher bushes are characteristically efficient in utilizing a limited resource such as water. They have an extensive deep root system and can extract water and nutrients from any soil depth. Their canopy-spread captures sunlight and intercept rainfall drops, thus, depriving the vulnerable or weakened grass species of these resources.

Managing grazing may have varying approaches, but there are basic principles that farmers need to consider as set out in the National Rangeland Management Policy and Strategy (NRMP-2012) document of Namibia. These are; Knowing your resource base, manage for effective recovery and rest, manage for effective utilization of plants, enhancing soil condition, addressing bush encroachment, drought planning, monitoring of the resource base, planning land use infrastructure, and ultimately putting all these principles together.

Further, the land's carrying capacity is not solely based on its size. This judgment should be based on the available grazeable materials versus the amount of grazeable materials required by the animals over a defined period. On that, one critical consideration should be the "allowable grazing duration versus the allowable resting duration". Here, the "graze shorter - rest longer" rule should apply together with a proper monitoring of the reaction of the grazing materials

as the timing or the best times to market the products. In order to have an efficient resource allocation to the farm operations, the financial plan becomes very useful as it portrays the associated costs and incomes through budgeting.

Further, the success of the farm business directly hinges on the labor output. On that, the labor plan is important to direct the implementation of farm operations, responsibilities, performance, and skills needs and development of the workforce.

Inherently, any farm operation faces

risks that are associated with production, market, finance and labor amongst others. Therefore, risk management is integral to the implementation of the farm management plan. A risk plan is needed to identify and profile the risks; it's likelihood to occur, the impacts, and the possible control measures.

In conclusion, an effective farm management plan is one that is practicable and adaptive to both internal and external forces that could influence the normality of the farm business.

The winter lambing and kidding season



With the commencement of the winter season, small stock (goats and sheep) farmers have a big task at hand of ensuring that this lambing (sheep birth) and kidding (goat birth) season progresses well in order to potentially achieve their production targets. Generally, animals' breeding activities take

place during seasons or times most favorable to their bodily functions and wellbeing. For example, mating commences during times of plentiful forage resources amongst others, and this is because the nutritional status of the animal has a direct influence on conception (the better the nutritional status the higher the chances of conception). Well-maintained animals with good body conditions will have higher reproductive performance (e.g. libido and fertility) than those with poor body conditions.

The current lambing/kidding season is resulting from December/January mating. Other lambing/kidding seasons include September/October and

March/April, which in turn can be mating seasons. It is common to farmers that five months after mating they should expect ewes (female sheep) and does (female goat) to commence with parturition (giving birth). This is the most demanding stage of the season where farmers must prepare to provide the necessary support to the ewes/does and ensure lambs and kids survival. It is very important to ensure that the animals are not exposed to adverse health conditions, and that they are adequately fed throughout the season.

Most lambs/kids' mortalities during winter result from cold stress, hunger and parasite infestation. Some of the health conditions in smallstock are predisposed by unhygienic kraal environments or conditions, filled with parasites, dust, dirt and harmful objects. Most of the times lambs and kids are kept in the kraals for long, and thus, directly exposed to these conditions. Dust inhalation and cold stress can result in lung infection (Pasteurellosis/Pneumonia), and eye infections when blown into the eyes.

Pasteurellosis is a respiratory disease caused by several species of bacteria (e.g. *P. multocida* & *P. haemolytica*) that inhabits the respiratory system (e.g. lungs) of the animal. The disease is predisposed by stress factors such as cold, dust, and transportation amongst oth-

ers. The symptoms include, fast breathing, coughing, running nose, loss of appetite, and at post-mortem examination, the lungs are attached to the rib cage. Pasteurellosis can be treated with the common antibiotics (e.g. Terramycin), and can be prevented by vaccinating the animals, and proper management of the stress factors. All adults and young (2 weeks old) should be vaccinated against pasteurellosis.

Another mayor problem is the internal and external parasite infestation. The most problematic external parasites attacking lambs/kids during winter are the mites, lice and fleas. The common signs of infestation by these parasites is irritation (restless, head shaking, scratching or itching), hair loss, and anaemia (loss of blood) amongst others. These parasites can be controlled or eradicated by dipping or spraying the animals with anti-parasitic remedies. Injectable solutions (e.g. Dectomax) can also be used. Internal parasites should also be controlled either with oral or injectable solutions as well.

During winter, extra care against the cold is needed. A shelter or a housing structure can be constructed especially for the most vulnerable animals to protect or keep them warm. One of the cheapest and simplest practices is to dig a trench in the ground to keep the lambs/kids overnight. Generally, ani-

skills and infrastructure development for Swakara producers, this includes promoting the youth to venture into this unique and valuable business for the country. Attractive production and marketing incentives for farmers will be important to ensure the sustainability of the industry. This could be an opportunity for Agribank to inject financial resources into the Swakara farming production system in order to revive the industry.



The impact of grazing livestock on the rangeland



materials such as leaves and twigs from trees and shrubs. On the other hand, all these animals can opportunistically adjust their foraging preferences and utilize any available forage resource presented to them. For example, cattle browse or utilize trees and shrubs in times of grass scarcity, and goats have been observed to significantly utilize grazing materials like cattle and sheep.

Livestock (cattle, goats and sheep) have different foraging preferences and habits. Cattle and sheep are referred to as grazers because they predominantly depend on grazing materials, mainly grass, and other herbaceous plants such as forbs. Goats are referred to as browsers because their diet is mainly from browse

These foraging preferences do have an influence on rangeland productivity. In general, the main factors that influences rangeland productivity are; utilization or herbivory, plant competition and rainfall. Herbivory is also beneficial in stimulating re-growth, when older tillers (stems) are harvested, new ones can emerge. On the other hand, if the grass is not used

The Swakara farmers have endured such conditions over the years, but with the current climate change events, such as the recurrent drought in the country have exacerbated the farming conditions of the Swakara. With the previous rainy season experienced in the country, most parts of the country received significant rain with good rangeland production. The southern part of the country is still reeling in difficult conditions as the rainfall was sporadic, little with poor rangeland recovery. Some areas were reported to have received about 40 mm of rainfall for the entire season.

On that, the Swakara farmers had to make unusually tough management decisions regarding their flocks. They had to destock drastically, selling off a significant number of their productive animals, male and females. Some had to relocate their animals to other grazing areas, which was a costly exercise, due to leasing and transportation costs, including licks and feed supplementation. The closure of the Hardap dam sluices also had a negative impact to the green scheme projects producing Lucerne and other fodder crops. Thus, fodder supply was affected, and livestock farmers had to import or look for alternative fodder sources at a higher cost. The grazing conditions are poor, most of the perennial grasses are de-

pleted since 2013, the animals' body condition was poor, about 1 and 2 scores. Thus, the sheep reproduction performance was compromised.

Swakara production experienced a drastic decrease in price due to the turmoil in the global fur market and the economic situation in the rest of the world. Further, the covid-19 pandemic has exacerbated the conditions. The trade in Swakara products or pelts was affected, resulting in the scheduled April 2020 auction being migrated to an electronic platform. Local and international borders were closed, and out of the 30,621 total pelts on offer, only 3,228 pelts (10%) were sold via an electronic auction held at Copenhagen Fur on 22nd April 2020. Some pelts were deferred to the September auction.

The Swakara farmers in the country are severely impacted by the Covid-19 pandemic with the largest crisis being a lack of cash flow. Since the production continues in anticipation of the next auction, they may produce more than they would market, or they may face pelt storage challenges e.g. prolonged storage and spoilage of pelts. This is one economic sector hit hard by the pandemic.

In order to revive and sustain the Swakara industry, the role players including government should invest in

animals generate or increase their body heat through metabolism, therefore it is advisable to ensure that your goats and sheep have enough roughage feed (e.g. Lucerne hay) all the time during winter.

In conclusion, the survival and performance of your animals depends on your timely management interventions. This starts with the preparation of the breeding stock for mating, caring during gestation and parturition, and caring for the young towards weaning. This includes a supply of enough feed and water throughout, carry out all necessary vaccinations, protection against adverse environmental conditions, and maintaining a clean farm/kraal environment. All necessary equipment and remedies must

be acquired in advance in order to provide first aid during complications. For example, antibiotics for bacterial illnesses or conditions such as, retain placentas, diarrhea, eye infections, and navel ill amongst others should be available all the time.



A basic understanding of farm enterprise diversification



Agricultural production involves growing crops, raising livestock and producing a range of commodities or end-products that can be derived from them. Farm enterprise diversification is simply a practice of producing a range of commodities as opposed to a single commodity on the farmland. Diversification involves the process of allocating farm resources or the factors of production (land, labor and capital) to different enterprises. This process identifies valuable or alternative enterprises that are expected to have a significant contribu-

tion to extra income generation, cost reduction, or risk minimization on the farm amongst others.

Diversification is not only the introduction of another enterprise on the farm, but it also involves the production of different commodities from the existing enterprise. For example, the options of diversification can be a combination of enterprises such as crops, cattle, chicken, wood, charcoal, aquaculture, horticulture, and/or processing whereas on the other hand, it can be a combination of commodities from a single enterprise, for example, a cattle enterprise producing milk, beef, cheese, cream, and butter.

Diversification is driven by factors such as climate change, changing consumer demand, technology, government policies, and development activities amongst others. These factors exert pressure on agricultural productivity, thus, influencing farmers to adjust or adopt responsive production systems or practices to ensure sustainability. Farm enterprise diversification is one of the responsive approaches to sustainable agriculture, and a means of promoting food security and food self-sufficiency.

During the process of decision making, a farmer should consider certain aspects and undertake important tasks required for the effective implementation of the proposed enterprise. It is important to

base the decision on the type of contribution the enterprise will have on the existing farm business operations, the market opportunity, and the potential and capacity of the available land or farm resources to support the additional enterprise.



Diversification starts with the identification of the need or market for the alternative enterprise or commodity. This is where a farmer should understand consumer demand, especially the quality attributes sought after and demand sustainability. This includes, conducting a comprehensive market research, interacting with existing producers and institutions or role-players (e.g. poultry or charcoal associations, farmers unions, etc.) to understand the enterprise value chain, the production needs and other relevant information about supply and demand. In the process, one should establish strong networks within that in-

dustry.

Another important aspect is the financing of the enterprise, the starting capital and other costs associated with the enterprise operations. Farmers are therefore advised to develop realistic business plans, identify financing options, e.g. loan, grant, or own funding, and secure funding for the enterprise. One question to consider is whether the new enterprise will generate extra income at lower costs and risks as compared to the existing enterprise on the farm.

Introducing a new enterprise or commodity on the farm will be a challenging task since it may be a new experience for the farmer. Adoption and adaptation may be slower due to limited skills or

technological challenges. Moreover, there may be errors and some of the objectives may take a longer to achieve. It is, therefore, important to prepare for such and to explore appropriate corrective measures.

Lastly, diversification should be an economic decision for the purpose of expanding income streams and spreading the risk of the farm business, "not keeping all eggs in one basket".



The Swakara farming system under the current situation

The Namibian government declared the Swakara industry as an industry of strategic importance for the country. The Swakara farming is prominently undertaken in the southern regions of Namibia, the Hardap and the //Karas regions. The regions' climatic and rangeland conditions are characteristic of the arid environments, with erratic and little rainfall activities, and extreme temperatures. The Swakara sheep is a robust breed, able to thrive despite the dry desert conditions in the //Karas and the Hardap regions of Namibia. In some

parts, conditions are so harsh that no other livestock or crop can be profitably cultivated but Swakara, thrives as a perfect product for the harsh conditions of the country.

