



JULY - AUGUST 2021 | ISSUE 1

KULIMA

FARMER'S JOURNAL

Pg. 25

YOUTH & AGRICULTURE CHINYAMA'S STORY

Vegetable Production | Poultry |
Green House | Landscaping

Pg. 5

AGRO TIPS

Soya Beans

Pg. 11

AGRO INSURANCE

Managing Risks Using Insurance

ESSENTIALS OF GOAT AND SHEEP PRODUCTION

NUTRITION

Let the farmers eat well



Pg. 6

MUTALUBI | IBUKISHENI | TO DO LIST

Pg. 20

KULIMA NEWS



PUT YOUR PASSPORT AWAY

YOU DON'T HAVE TO TRAVEL TO CHINA TO ORDER GOODS

Stanbic Bank, through its partnership with the Industrial & Commercial Bank of China (ICBC), is working with Zhejiang International Trading Supply Chain Company (also known as 'Guomao') to assist importers in executing seamless trade with China. Currently, Guomao has about 35,000 suppliers linked to their business.

Through Guomao, Stanbic Bank will make sure to:

- Source the right suppliers for our customers' business.
- Negotiate the best prices and trade conditions.
- Validate and ensure quality of goods according to required customer standards.
- Provide financing services based on a letter of credit in need
- Handle shipping logistics and delivery to Zambia depending on customer's preference.

Call 8888 or email zambiatradingfinance@stanbic.com for details.



Stanbic Bank **IT CAN BE**



KULIMA

FARMER'S JOURNAL

LET US HEAR FROM YOU

We need your feedback: Let us know how the Kulima Farmer's Journal has helped you as a farmer. If there is a story or any other area you would love us to cover in the next edition, kindly get in touch with us on +260 950 998 001, +260 976 382 503 or email: info@chilucha.com or sales@chilucha.com

MANAGING DIRECTOR

Mr. Stanley Kasiya
stanley@kasiyagroup.com

MANAGEMENT TEAM

Mr. Bright Muteti
sales@chilucha.com, brightdialogue1@gmail.com

Mr. Peter Mweemba
mweembapeter@gmail.com

ACCOUNTS

Mrs. Ntimba H. Hakabwandi
accounts@kasiyagroup.com

CREATIVE TEAM

Jarvis Michelo
jarviskombe@gmail.com

Mr. Mumba Brian
Billymumba90@gmail.com

Mr. Miyanda Keembe
Fredrobie4@gmail.com

DISTRIBUTION TEAM

Mr. Maxwell Kasiya
Lionelmax1344@gmail.com

CHIEF EDITOR

Mr. Nephas Hindamu
nephash@gmail.com

KULIMA FARMER'S JOURNAL A CHILUCHA LIMITED PRODUCTION

Plot No. 596/3, Raphael Kombe Road
Off Independence Avenue, Civic Center Area, Lusaka - Zambia
Mobile: +260 950 998 001, +260 976 382 503 or
Email: info@chilucha.com or sales@chilucha.com
Website: www.chilucha.com

Copyright © Chilucha 2021. All rights reserved. No material, text or photographs may be reproduced, copied or in any other way shared and/or transmitted without the written consent of the publisher. Opinions expressed are not necessarily those of the publisher or of the editor. Chilucha Ltd shall not be liable for any inaccuracies or for any actions in reliance thereon.

KULIMA NEWS

AGRO FINANCING

AGRO INSURANCE

PHOTO GALLERY

KULIMA SPORTS

PROMOTIONS

YOUTH & AGRICULTURE

FARMERS TO DO LIST

KULIMA AGRO TIPS

NUTRITION

KULIMA ENTERTAINMENT

MEET KULIMA AGRONOMIST

MEET KULIMA VET

KULIMA ANSWERS

INSPIRATIONAL INTERVIEW





AGRICULTURE IS OUR HOPE

Agriculture, in all its diverse forms, is and will continue to be the bread basket of Zambia outside of the mining sector. If we have to pursue the poverty reduction agenda, climate change mitigation programs and having a healthy and productive populace, then agriculture is our hope towards that goal.

Any effort, therefore, that promotes the agricultural industry ought to be fully supported. There is no insignificant stride! Most certainly, we shall get there as long as we keep moving in the right direction. One way to 'keep in the middle of the road' on this matter is how to get agro information reaching to all farmers in Zambia, irrespective of their size and location. After all, statistics have it that large-scale farmers make up only 4% of farm households, but cultivate 22 percent of all cropped land. The rest is by emergent and small scale farmers. (Global Yield Gap Atlas, 2020: <http://www.yieldgap.org/zambia#>).

This fact notwithstanding, the volume and quality of information available to the latter is way below what one would call 'substantial enough,' for them to make proper and productive decisions. The desired position is that all farmers should receive the same information and be able to make decisions from an informed stand point. It is a no brainer that the quality and level of information one has determines the quality of decisions they make. Therefore, prudence would demand that this group of emergent and small holder farmers, responsible for most of the agricultural produce in Zambia, be empowered with not only the right information but also at the right time.

It is against this background that Chilucha Ltd has established the Kulima Farmer's Journal, which copy you now hold in your hands. The magazine is designed to reach every corner of Zambia and be in every farmer's hand.

While access to information in print remains a global problem, the rural community is even more disadvantaged. Poor road networks, the supposed poor reading culture and lack of purchasing power and many other factors, restrain those with information from reaching the remotest parts of our country. And as I have already indicated, the business decisions that those in rural communities make, are based on little or no correct information at all.

Having worked with the rural communities for more than 3 years now, and realizing that some of the problems associated with access to information are not beyond redemption, Chilucha Ltd took up the initiative of the Kulima Farmer's Journal. The magazine, the issue you hold now and subsequent ones, shall endeavor to carry agribusiness news, entertainment for farmers, nutritional, health and educational materials, all aimed at promoting agriculture in Zambia.

The fact that you are holding this magazine, is proof that you love agriculture. Keep up with the noble efforts. Let us build agriculture for Zambia together. Our hope rests in agriculture!

Thank you.

Stanley Kasiya
Chilucha Ltd CEO

 <p>CHILUCHA LIMITED</p>	<p>CHILUCHA LIMITED</p> <p>Chilucha Ltd bridges the gap between the rural smallholder farmers and the rest of the agribusiness world by helping them find the best:</p> <p>AGRO INFORMATION FOR BETTER DECISIONS AGRO EQUIPMENT FOR EFFICIENCY AGRO INPUTS FOR REDUCED COST AND IMPROVED YIELD; AND AGRO MARKETS FOR THEIR PRODUCE.</p> <p>At Chilucha, the core values that drive us are:</p> <p>PASSION MUTUAL RESPECT QUALITY EXCELLENCE INTEGRITY TRUSTWORTHINESS AND OPENNESS, AND INNOVATION</p> <p>Simply stated, Chilucha Ltd is here to help you effectively and efficiently do agribusiness.</p> <p>Contact our team at: Plot No. 596/3 Raphael Kombe Road, Off Independence Avenue, Civic Center Area, Lusaka - Zambia Mobile Phone: +260950998001 or +260976382503 Email: sales@chilucha.com or info@chilucha.com Website: www.chilucha.com CHILUCHA LTD: PROMOTING SMART AGRICULTURAL PRACTICES!</p>	 <p>Nziba Zambia provides road transport services customized for Zambia to facilitate speedy, easy and cost-effective transportation of goods accessible from anywhere.</p> <p>+260977450248 +260956854925 info@nzibazambia.com</p>
--	---	---



SOYA Beans

Words By Francis Chipalo

SOYA BEAN PRODUCTION

Soya bean (*Glycine max*) is a legume plant that grows very well in soils with a relatively high clay content. The crop does not perform very well on weak sands, and it is sensitive to soil acidity. From flowering to pod maturity, soya bean requires reliable rainfall or watering. Soya bean is a good crop to rotate with cotton, maize and wheat.

Among its wide usages, soya bean is a nutritious addition to human and animal feed, making cooking oil, margarine and soya chunks. It is further considered as the richest crop in terms of crude protein (ranges between 40-42 %) and contains 20 % oil. (<https://www.seedcogroup.com>).

In soya bean, just like in any plant-based production cycle, land preparation is a critical stage. Poor land preparation is the challenge most soya bean farmers face, which results in soil erosion, poor germination, weed infestation and poor yields. In addition to land preparation, below is a summary of the areas of consideration as one ventures into soya bean production:

SEED SELECTION

Select the right type of soya bean seed depending on the desired usage. If you want to eat your soya beans, make sure that you have an edible, green variety. Get a black-seeded variety if you are planning on drying the soya beans.

SOIL SELECTION

Ensure that you pick the right soil for your soya bean, and be assured to enjoy the following benefits: fewer weeds; less erosion; right balance of nutrients in the soil leading to healthier plants and better yields.

Take note that the best type of soil for soya beans needs a well-draining loam that isn't packed tightly. If you are working with soil that has a high clay content, you make it more suitable for growing soya by mixing it with peat moss or sand.

PLANTING TIMING

The best time to plant soya beans is after planting maize, and most preferably before mid-December. Planted at the right time, soya beans plants will generally produce the highest yields. However, remember that soil temperature is key.

PREPARING THE SEEDBED

Soya plants need a good balance of nutrients in the soil to grow properly. If there are too many or few nutrients, the plants won't grow properly. Therefore, it's very important to add fertilizer to the soil if the area hasn't been enriched in recent years. For soil that hasn't been enriched recently, add aged manure or compost to enhance soil nutrients to the seedbed before planting. Otherwise, Soya beans respond well to manure application, and do not need much nitrogen in the basal fertiliser. Further, they do not require nitrogen fertiliser top dressing, since they are able to obtain their nitrogen requirements from the soil air.

PLANTING

Plant the soya beans seeds about 3 - 4 cm deep into the soil and space about 7 - 8 cm apart. The row spacing may be from 25 to 90 cm apart. Water until the soil is moist or wait for the rains once you have planted.

In the next issue of Kulima Farmer's Magazine, look out for cultivating the soya bean plant.



MAIZE

This is March, and under normal circumstances and assuming you did everything right before, your maize should be at the tasseling stage. This is the stage of pollen formation. During this stage, remember to:

- Apply top dressing for better yield,
- Keep maintaining your field, and
- Look out for anything strange and be quick to consult an agronomist.

CHITONGA

Tulimumweziwa Miyoba, alimwikutina amwakacitazintu zyoonse zyakelede mukulima mapowe aanu, tuyeeya kuti ono mapopwe azwa ngalaala akufwususa. Eeci nce ciindi calo munsu nuupangika. Aboobo, ecino ciindi:

- mutalubi kubikka camutunzya waatala kutegwa mukabe aabutebuzi bubotu,
- mutalubi kuzumanana kubamba myuunda yanu kabotu, alimwi,
- mutalubi kuyamina myuunda yanu akufwambaana kwaambila basyaabupamu babulimi (agronomist) kuti naa kuli penzi ndimwabona mumuunda.

ICIBEMBA

Ngacakuti mwalikonkele bwino intampulo shonse mukulima amataba yenu, tulecetekela amataba nomba nayafika pamushinku wakufumya ubuluba. Pali uyumushinku, ibukisheni:

- Ukubika umufundo witwa top dressing pakuti mwingasombola bwino,
- Ukusunga ibala lyenu umwabela inkonka ya bulimi busuma,
- Ukuceceta amataba yenu. Ngamwamona ifyalubana, endesheni ukwipusha ba solwesolve bafyabulimi.

SOYA BEANS

If the pods are about 2cm long and you can see small seeds in them, then CONGRATULATIONS!!! You have managed to grow your soya beans up to the flowering pod-filling stage. During this stage, remember to:

- Ensure your crop has enough water. Soya beans get affected heavily by drought at this stage. Supplementary irrigation is recommended.
- Look out for pests and diseases. Caterpillars tend to attack during this stage. Check the leaves of your soybeans for anything strange and be quick to consult your agronomist.

CHITONGA

Kuti na milibo antela makwa alampa kusika acisela ca mpyungu yamunwe, mpoona kuti kamukonzya akubona tuseke mumakwa, nkokuti MWA WOONDA MULIMO! Mwakikonzya kukomezya bunyangu bwanu bwa soya kusika aciimo cakufwulula maluba alimwi akupanga nseke. Aciindi eeci:

- mutalubi kubona kuti zisyango zyanu zijisi meenda manji. Bunyangu bwa soya tabweendelani kabotu acilala pe nobuli mucindi cakufwulula.
- mutalubi kuyamina buuka alimwi amalwazi. Bamazembe balasaala zisyango kapati aciimo eeci. Kamwaalingula matuvwu akufwambaana kwaambila basyaabupampu mubulimi kuti naa kuli penzi ndimwabona kuzisyango zyanu.

ICIBEMBA

Ngacakuti ututeku twa soya beans twalepa ukufika pali citika wakakumo, sefyeni pantu namukusha ubulimi bwenu ukufika pamushinku wakufumya ubuluba nokutwala: pali uyu mushinku, ibukisheni:

- ukumona ukuti amenshi nayafula mwibala lyenu. Soya beans ngayafika pali uyu mushinku, taifwaya icilala. Ngacakuti kuli icilala, fwayeni umusango wakutapilisishamo.
- ukucingilila soya beans ku fishishi namalwele; makanta nefishishi ifyashala, fyatemwa ukwima ino nshita. Moneni ukuti amabula ya soya beans tayalemoneka na utwabutulukila. Ilyo mwamona ifishiweme, mwiposa inshita, ipusheni bakanye-kanye ba bulimi bwa Soya beans



Question: Would you tell us your name and what you do?

Answer: My name is Chipokota Mayamba Mwanawasa. I am an entrepreneur who has ventured into livestock through Cattle Wealth Management. At 10 years old, I developed interest in livestock farming. Through my interaction with farmers, I also got an opportunity to do my internship in people's farms for me to gain experience in managing animals.

Being a lawyer by profession, I have blended so well with my livestock farming passion. I feel farming is the new big thing which many young people out there should venture into as it is lucrative.

Question: How has it been for you to venture into farming as a young person?

Answer: It has not been an easy journey venturing into cattle management. Personally, I have been farming cattle over the past 10 years.

I started cattle farming with one cow before I met my current business partners. I grew from one cow to fifty animals. My growth in cattle business management has not been an easy one. During the learning process, I experienced high mortality of cattle.

Question: How were you able to grow your business?

Answer: I did not have my own farm when I started cattle ranching. I kept my first animals with one of my grandmothers and my Aunt. It was difficult for me because every time I went to check on the animals, I was told of some deaths. I did not give up. I continued contributing towards the upkeep of the animals through feed and medicine even when there was no guarantee that my animals would, one day increase. As I continued with this support, the number of my animals grew. This was because I appreciated, at a tender age, the importance of agriculture, especially livestock.

Question: What are the advantages which young people have in engaging in farming?

Answer: As young people, we are fortunate to have been born during the era of social media. We have easy access to information which we could use to learn quite a number of things. As much as there are challenges in the livestock industry, I would still encourage young people to venture into farming and change the field.

Youths should take seriously the participation into the affairs of the country. Those in the agriculture industry are responsible for what Zambians are going to eat in the next 20 years and beyond.

As Young people, we should know that agriculture is now the next big thing. We have a country that has a growing population. This population would need to be fed. Food would need to be produced in hygienic standards.

Question: What other opportunities came with your involvement in livestock farming?

Answer: Apart from livestock, I have also ventured into Agritech. I realised that this is what needs to be explored.

Question: What would you say to parents who choose careers for their children?

Answer: I would advise parents to encourage their children to explore and dream what they want to be. At the same time, parents should speak to their children to never look down on farming.

I personally thank my mother for helping me when I started this journey. At that time, I could not drive because I was young, yet she gave me a driver to help me move around. Parents play a great role in shaping their children's future through their guidance.

Question: As we conclude our discussion, what words of encouragement do you have for your fellow youths?

Answer: I would encourage my fellow young people and all Zambians to participate in farming. As a country, we should not be left behind in terms of participating in the growing of enough food for the growing population that needs food for survival. Cattle husbandry is a bit different from other forms of farming. This is a field with very few females yet inspirational. It is an industry which we need to look into at every level even as a country.

SMALL SCALE FARMERS LAMENT Over Expensive Farming Inputs

Words by Alain Kabinda



Some small-scale farmers in Shimabala area of Lusaka's Chilanga district have charged that it will take years for Zambia to attain its agenda of making agriculture the mainstay of the country's economy. Lazarus Tembo, a Small scale farmer, feels that the continued skyrocketing costs of farming inputs like fertilizer, is discouraging emerging farmers to venture into farming. Mr. Tembo is of the view that if government is really interested in the agenda of improving and sustaining the agricultural industry, it must look into the prices of farming inputs and make them more affordable for emerging farmers.

"Let the government reduce the farming inputs for the benefit of the farmers. It is difficult for farmers to farm without these inputs," Tembo said.

Let the government reduce the farming inputs for the benefit of the farmers.

~ Lazarus Tembo

Meanwhile, Lusaka Province Principal Agriculture Officer (PAO), James Mwale said farmers in Shimabala are hopeful of a bumper crop harvest despite the infestation of the fall armyworm in maize fields in the area.

The PAO said the situation was still manageable, disclosing that the government had already supplied chemicals to manage the fall armyworm.

The Minister of Agriculture, Hon. Michael Katambo, earlier disclosed that the government had provided 90 thousand liters of chemicals for distribution to areas ravaged by the fall armyworm.





MANAGING RISKS

Using Insurance

By Insurance Association of Zambia



Life is full of risks! However, with courage and preparation, we face the risks. It is no different when we consider agriculture, and how hard-working farmers put their knowledge and experience to good use to provide food for the nation.

As multiple as the risks are, so are the ways we react to them. For example, someone starting a business might treat risks in one of these five ways:

1. **Choose to bear the risk:** Basically deciding that whatever will happen will happen!
2. **Avoid the risk:** The business could be too risky.
3. **Share the risk:** This could be done by getting a business partner, so that the cost of investment and potential loss is shared.
4. **Reduce the risk:** This could be by finding safety measures.
5. **Transfer the risk:** This is by delegating someone else to take the risk on their behalf.

These 5 choices apply in any situation and vocation, including farming. The risks of bad weather, pests or theft are very real. It is important to find ways to reduce them as much as possible.

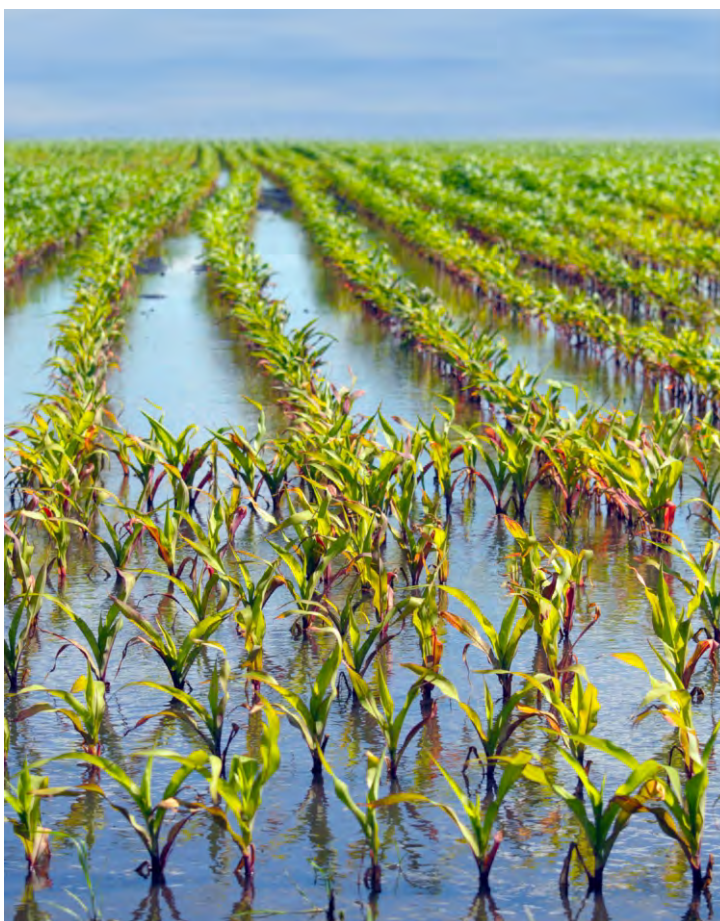
But even when you have done your best, sometimes life just happens.

Therefore, insurance becomes one way of transferring the risk, at a cost called a **premium**. When you pay the premium, the insurance company then agrees to compensate you if the risk described in the policy happens. Different types of insurance are available for covering different risks. The policies include **multi-crop peril insurance**, **weather index insurance**, **livestock insurance**, **equipment insurance**, and many more. When you pay a premium, you will be assured that when the insured risk happens, insurers will be there to provide the much needed financial safety need.

Micro-insurance, now commonly called inclusive insurance, is basically low cost insurance that most people can afford. It covers a few basic risks at an affordable price. Examples include **funeral insurance**, **credit life insurance**, and **weather index insurance**.

Weather index insurance (WII) is probably the most widely used form of insurance among farmers, covering around one million farmers in Zambia. WII provides for replacing inputs when crops are lost due to a dry spell after germination; due to floods or other weather-related events. The farmer can plant again when the weather is more favourable. This type of insurance is usually purchased in groups such as under the Farmer Input Support Programme (FISP), or under a Cooperative.

Insurance is an important way to manage farming risks, and it is affordable. There are currently 10 licensed life insurance companies, and 20 licensed general insurance companies in Zambia, able to offer you different products at different costs. Brokers and agents sell insurance on behalf of some of these companies. **Contact your local insurance provider to get details on what form of cover can benefit you.**



COVID-19 SAFETY MEASURES

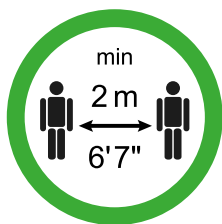
[set of 10 important do's and don'ts]



Wash Hands Thoroughly



Use Soap or Hand Sanitizer



Keep Safe Distance from Other People



Stay at Home if Possible



Use Face Mask or Respirator



Avoid Large Crowds



Do Not Meet Infected or Sick People



Do Not Touch Your Face esp. Mouth, Eyes, Nose



Do Not Travel Unless Necessary



Do Not Touch The Front Part of a Mask

CORONAVIRUS ALERT!

1. Wash your hands regularly with soap. Sanitise your hands regularly with an alcohol based hand rub
2. Cover your nose and mouth with flexed elbow or disposable tissue when you cough or sneeze
3. Stay home and avoid unnecessary outdoor activities
4. Keep 2 metres away from the next person
5. Don't touch your eyes, nose, or mouth if your hands are not clean

ICIBEMBA

Icingilileni kuli COVID-19:

1. Ibukisheni ukusamba kumaboko lyonse
2. Muleshinka imyona nakanwa lyonse lintu mule koola
3. Mwilaenda-enda; Ikaleni pa ng'anda lyonse
4. Mwilatitikana lintu muli abengi
5. Mwiikata kumenso libe tamulasamba kuminwe

CHITONGA

Amucenjele: kazunda ka kkolona kasika. Amuccilile malailile aaya:

1. Amusambe mumaanza ciindi a ciindi, antela kunana musamu wakujaya tuzunda mumaanza.
2. Amulivwumbe kumulomo a kumpemo mwanikukola akweesyemuka kwiinda mukubelesha mukati mwakakokola, nokuba kubelesya tishu akulisowa mwanama kubelesya.
3. Amukkale amunzi wenu; muleke kuswaya-swaya bantu.
4. Amukkale kulaale (ntaamu zyobile) kuzwa kumuntu ngomubambene limwi.
5. Amuleke kulijata kumeso, kumpemo akumulomo kamutasambide kumaanza.



NUTRITION NEED TO DIVERSIFY

Words by the Ministry of Agriculture

All farmers need to improve their nutrition and health through increased production of more diverse and nutritious foods, including small livestock, for home consumption.

WHY?

Families need diverse foods of the right quantity and quality to meet their food and income needs throughout the year

HOW?

These are some examples of actions that farm households can take to grow more diverse and more nutritious foods:

- Grow legumes, such as groundnuts, soya beans, cowpeas, bambara nuts and beans. Beans can provide up to three harvests every year and offer food at all stages of growth – leaves, pods, fresh seed and pulses.
- Grow vegetable gardens to increase household access to nutrient-rich food.
- Raise chickens for eggs or meat.
- Small livestock is a good source of animal protein and income.
- Increase household nutrition

through on-farm processing, preservation and storage practices

WHY?

Good post-harvest practices minimize crop losses, improve food safety and maintain nutrients in food so that more and better food is available for consumption throughout the year.

HOW?

These are some ways to maintain food nutrients, extend the shelf-life of food and reduce food losses:

Fruits and vegetables: dry fruits and vegetables with a solar dryer or on a clean mat in the shade, away from animals.

Remove stones, husks, pods and broken grain before storing maize and legumes.

Get the best from your farm: increase your food and dietary diversity for improved nutrition. The body needs different nutrients to function well and different foods provide different nutrients. No one food supplies all the nutrients the body needs. Eating a variety of foods at

each meal and every day keeps you healthy and well nourished, and gives you energy to work hard in the field. A farmer who is not well nourished has lower work capacity, may get tired easily and delay in doing farm operations.

Do the following to ensure food and dietary diversification for your family's nutrition and wellbeing:

- Plant different fruit trees around your home and in the garden. Choose fruits which produce in different seasons to ensure all year round availability of different fruits.
- Rear different types of small livestock such as poultry, goats, sheep, rabbits, guinea fowls and fish. Use them to improve your family and children's meals.
- Preserve fresh foods when in season and in abundance for use when these food products become scarce.
- Retain enough of the different foods for your family food sufficiency and nutrition wellbeing.



SUPPORTED BY MUSIKA THROUGH IRISH AID



VEGETABLE PRESERVATION

COWPEA LEAVES



Nutritive Value of Vegetables

Vegetables are an important ingredient to human diet. Most vegetables constitute an important source of many micronutrients which have protective benefits against diseases. These micronutrients include potassium, dietary fiber, folate (folic acid), Vitamin A, Vitamin C, B Vitamins, minerals, low-calorie, low sodium, low cholesterol as well as rich in some anti-oxidants. Cowpea leaves, in particular, are a good source of micronutrients such as iron, B2 potassium, manganese and phosphorus. Regular consumption of vegetables is associated with reduced risks of skin disorders, improved bowel movement and reduced risks of non-communicable diseases such as heart diseases, diabetes, cancer, etc.

Economic Value of Vegetables

- Preservation of vegetables provides a promising economic opportunity for reducing rural poverty and unemployment.
- Production of vegetables like cowpea leaves is a key component of farm diversification strategies because they can be intercropped with cereals and tubers.
- Cowpeas are drought-tolerant, hence can enhance access to vegetables in drought-prone areas and climate change.
- Preservation of vegetables like cowpea leaves, assures food security and regular access to micronutrients by families.

Preservation of Cowpea Leaves (Blanching Method)

- Pluck tender cowpea leaves;
- Wash them thoroughly in clean water;
- Drain the water;
- Put water to boil in a large pot;
- Add a bit of salt (optional) to the boiling water;
- Dip the vegetables in the boiling water for 3 minutes;
- Dip the vegetables in cold water to stop further reactions;
- Drain the water again and dry the vegetables on a clean raised platform under the shade; and
- When dry, pack in air tight containers for future consumption.



SUPPORTED BY MUSIKA THROUGH IRISH AID



FRESH PUMPKIN LEAVES

In pounded groundnut cream

By Vera Kamponje

INGREDIENTS

- Fresh pumpkin leaves (Chibwawa)
- Salt
- Tomatoes
- Onions
- Pounded groundnut powder
- Water

PREPARATION METHOD

1. Get two full hands (stacks) of fresh pumpkin leaves and wash them thoroughly in clean water. Thereafter, cut the vegetable into smaller pieces.
2. Clean and cut one big onion and two well ripened tomatoes.
3. Prepare a fire to use for cooking.
4. Get a clean medium pot and put it on the fire.
5. Add a teaspoonful of salt.
6. Add the cut vegetables (fresh pumpkin leaves, tomatoes and onion) in the pot.
7. Add a full cup of pounded groundnut powder on top of the vegetables.
8. Pour half ($\frac{1}{2}$) a cup of clean water in the pot.
9. Let the mixture cook for 10-15 minutes.
10. Then stir to mix the ingredients very well. Let it simmer and cook at low heat for 5 minutes. Stir again and let it simmer for another 5-10 minutes.
11. After a proper 30 minutes of cooking, the food is ready for serving. This dish is best served with nshima, cassava tubes or any preferred starch.



SEEDCORN MAGGOTS



What are Seedcorn Maggots?

The seedcorn maggot is an early season pest of corn. It may be more of a problem during damp, cool seasons and in manured or reduced tillage fields with decaying residue.

The seedcorn maggot is a pale, yellowish-white maggot found burrowing into corn seeds. Pupae do not damage plants or seeds.

About the Seedcorn Maggot

Reproduction and Life Cycle

The seedcorn maggot has several generations annually. During average weather conditions there tends to be 3, with the first generation often causing the greatest amount of damage. They spend the winter in the ground as pupae, and will emerge as adults in swarms. These flies can be found buzzing near or over recently plowed land. The adults will mate after 2 to 3 days and will lay their eggs in soil that is either high in organic matter or among seeds.

The eggs are laid in groups and only take 2 to 4 days to hatch. They can do this even in temperatures as low as 10 degrees celsius. When the larvae hatch, they will be able to thrive and grow as long as the temperature is between 11 and 33 degrees celsius. The larvae will remain in the soil throughout their instars, feeding off of available seeds. It will take 3 weeks for them to fully develop, which is when they will enter the pupal stage. This stage lasts approximately 10 days.

Seedcorn Maggot Identification and Habitat

Identification

The eggs of the seedcorn maggot are small, elongated, and white in colour. When the maggots hatch, they are pale yellow and about 4mm long. They have no legs, cylindrical in shape and taper at the rear. The larvae have tough skin and 2 very small black hooks that help them eat.

During the pupal stage, they are brown, shaped like an oval and are similar in size to a wheat grain. The adults look similar to houseflies, but are about half the size. Varying from light to dark gray in colour, these flies have wings that rest over their body when not in flight.

Habitat

The seedcorn maggot can be found throughout the United States and in southern areas of Canada. This maggot mainly feeds on decaying plant matter, plant roots, different vegetable types, as well as corn and soybean crops. They tend to affect crops in the highest proportions during the spring when weather conditions are cold and wet. The maggots have the ability to burrow themselves into the seed, often ending the germination process. They will also attack new seedlings, eating their roots and first true leaves, which has the ability to destroy the plants growing point. If damage is only minimal, there will be visible holes on the leaves; typically there needs to be 5 maggots per plant for the damage to be significant. Due to the fact that seedcorn maggots are attracted to decaying organic matter, fields that have been manured, or were recently plowed pasture or hay fields are at a higher risk for infestation. Damage can be noticed about 7 days after the plants start to emerge from the ground.

Seedcorn Maggot Management and Control

Methods

Management

The problem with seedcorn maggots is that once you notice the damage they caused, it is often too late to treat. This is why taking preventative measures is crucial in order to avoid a significant infestation. It is; however, advised to observe the seedcorn maggot's population throughout the season to understand when the fly-free periods are. In order to discover this, place yellow buckets with soapy water along the outside of your fields in the beginning of April. The buckets should be placed approximately 100 feet apart. Since insects are naturally attracted to the buckets bright colour, the flies will soon get trapped in the water. Every 4 to 6 days dispose of the old water and refill with new soapy

water. Keep track of the captured seedcorn maggot adults so that you can determine when their population increases and decreases.

Cultural Control

For preventative measures against the seedcorn maggot, avoid using green or animal manure on the field and do not plow weeds or cover crops during the spring. It is advised to complete plowing during the fall, as the flies are more attracted to organic matter mixed in with soil that is live. This is why conservation tillage has been effective to lower maggot populations; with the organic matter remaining on the soils surface, it is not as attractive to this pest. Additionally, different types of cover crops used can influence their population level. Cover crops that are a legume lead to higher populations in comparison to a grass type. Another recommendation is to handle the seeds with care in order to prevent your seeds coat cracking. If the coat is cracked, it makes it easier for maggots to feed on the inside of the seed. Use planting methods that will encourage quick germination, such as shallow plantings, late planting when weather is wet and cold, and having seedbeds well-prepared. If you plant your seed during the fly-free

periods that were determined by the soapy water scouting method, this can also help avoid infestation. There are natural enemies of the seedcorn maggot, such as certain fungi types, and ground beetles.

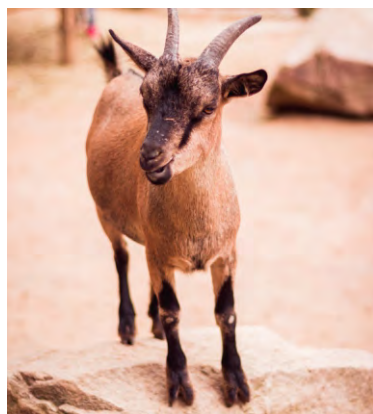
Chemical Control

Insecticides available for the seedcorn maggot are only for prevention measures such as using seed that has been pretreated with insecticide, or incorporating an insecticide into the soil before planting. It is important to note that before using an insecticide, read all labels for cautions and proper application. Also, insecticides can kill the seedcorn maggot's natural enemies; therefore, sometimes an insecticide can cause more harm than benefit.

For any queries contact us on +260 950 998 001 / +260 976 382 503 or Email us: sales@chilucha.com, info@chilucha.com



ESSENTIALS OF GOAT AND SHEEP PRODUCTION



To make sheep and goat production less stressful, the following aspects are important to consider:

TICKS/MITES/FLIES

These are parasites. They affect productivity by causing discomfort and feeding on blood. Most importantly, they transmit diseases such as heartwater. Moreover, some flies can lay eggs in nostrils, causing nasal bolt. Control is by dipping or spraying. You can also use any one of the following pour-ons:

- Milbitraz
- Triatix
- Paracide
- Cylence
- Amipour
- Drastic deadline
- Triatix plus

WORMS

Worms are parasites that can cause debilitation (weakening and loss of energy) of body condition, reduce productivity as they feed on nutrients and blood of the host animals. They are also an important cause of mortality in severe infestation. Use dewormers from at least 3 different classes: Alternate Levamisole, Ivermectins and Albendazoles. You may also target nasal bolt. Importantly, you can start deworming at 4 weeks.

Deworm at least 3 times a year: November, March and June using the dewormers below:

- Levicon
- Endotape
- Valbazen
- Valbantel
- Ivomec super
- Bimectin
- Dectomax

FOOTROT

Goats/sheep tend to develop wounds on the hooves especially during the rainy season. Use copper sulphate as footbath. Ensure the animals don't drink the solution. Dilute at 500g per 10 litres of water. Hoof care by trimming can also assist. Formalin solution can also be used for the footbath.

VACCINATION

Sheep and goats suffer from a lot of diseases which can be prevented by vaccination. It is important to get information from District Veterinary Officers on prevalent diseases in your area. The important diseases include clostridial diseases such as pulpy kidney and black leg. You may also need to vaccinate against anthrax and cheesy gland. Important viral diseases include orf virus. In some areas, you may need to target Rift Valley fever and Blue tongue.

ABORTIONS

Sometimes sheep and goats experience reproductive failure. Reproductive failure can be in form of failure to fall pregnant, abortions or death of young ones soon after birth. Possible causes include nutritional deficiencies and diseases like chlamydia, leptospirosis, brucellosis and vibriosis. Important nutrients that help against abortions are vitamin E and Selenium.

Multi-min can also be given 3-4 weeks before breeding. Diseases can be prevented by vaccination.

- Vitamin E and Selenium
- Multimin
- Chlamysure
- Multi-min

NUTRITION

Sheep and goats should have access to forage. To improve productivity, it's important to give concentrates. Concentrates should be fed with caution as they can lead to an overeating disease (Enterotoxaemia/Pulpy Kidney). Concentrates include maize bran/no. 3 meal, soya cake, cotton seed cake and sunflower cake. Make sure that forage is available in combination with concentrates. Ensure that forage forms the bulk of the diet.

Also give injectable multi-vitamins. You can see a nutritionist to formulate feed for your animals.

- Vitol-ject
- Tonavet
- Multivitamin-Bimeda

TOOLS

- Have 10ml syringes and 20ml syringes
- Needles 18G*40mm
- Dosing gun
- Ear tags + Applicator
- Elastrator rings + Applicator
- Thermometer
- Hoof trimmers

DRUGS TO HAVE IN YOUR FIRST AID KIT

- Terramycin /oxyject 20% / Maxitet / Ultratet / Terralon/ Tetroxy L.A (same drug - choose one!)
- Penicillin; Megapen
- Amoxicillin 15%/Bimoxoy L.A
- Dofartrim / Kyrotrim / Bimotrim
- Flunazine

- Iodine
- Methylated spirit
- Cotton wool
- Wound spray Futa and Supona
- Dexaject and MFC/Calcitad/BCG

COCCIDIOSIS

Coccidiosis causes diarrhoea. The animals will have soiled rears. Can cause death. Use antibiotics or anti-coccidials e.g. Baycox 5%, Sulfadimidine, Sulfazine or Amprolium.

PASTUERELLOSIS

Causes coughing and death. Mostly occurs when animals are exposed to stress. Vaccinate and you can treat using antibiotics. Use tetracyclines as prophylaxis during times of stress. Inject all at risk animals.

HELMINTHIASIS

Leads to loss of body condition, affects productivity and results in death. Animals may become anaemic, unthrifty, have a rough coat and may exhibit a bottle jaw. Deworm. Rotate Dewormers. Submit faecal samples to determine worm burden.

HEARTWATER

Heartwater is a tick borne disease. Leads to change in temperament and death. Death can occur suddenly. Treat using tetracyclines, among other antibiotics. Control ticks by dipping or spraying. Can

also vaccinate.

FOOTROT

Common in rainy season due to collection of mud between hooves where bacteria lead to wounds. Use foot bath to control. Put copper sulphate in the footbath at 500g/10L or 1 L of Formalin in 9 Litres of water.

MANGE

Leads to loss of fur. The animals will show discomfort and may be scratching against objects. Control by dipping, spraying or injectable drugs such as Ivermectins or doramectin.

PULPY KIDNEY

A clostridial disease. Leads to acute death. Animals die in good condition. Mostly in animals fed on a diet high in grains or concentrates.



NASAL BOT

Occurs when flies lay eggs in nasal cavity of animals. Larvae cause irritation to animals. There will be discomfort and animals may be distracted from feeding. Animals exhibit excessive nasal discharge. Treat using Ivermectins or Doramectin.

ORF

A viral disease. Causes nodules or sores around the mouth. You can vaccinate or contact a Vet to make an autogenous vaccine for you. You can use penicillins for secondary bacterial infections but the wounds themselves can be managed using Povidone iodine as a spray.

OBERDINE WOUNDSPRAY

Look out for Coccidiosis, Pastuerellosis, Helminthiasis, Heartwater, Footrot, Mange, Pulpy kidney and Nasal bolt. Report high incidence of abortions, your flock may have enzootic abortion.

For general reference only. Always consult a Veterinarian, Animal health expert or Nutritionist.

**LIVESTOCK SERVICES
COOPERATIVE SOCIETY
+260211254024/254497/8**

VACCINE	DISEASE	TIME TO VACCINATE
Covexin / Ultrachoice 7	Clostridials	3 Weeks old. Give twice 3-4 weeks Apart Then 6-12 months
Multivax P Or One Shot	Clostridia + Pastuerella	September/November
Glanvac	Cheesy Gland Tetanus Pulpy Kidney	(Can give other times)
Rift Valley Fever	Rift Valley Fever	September/November
Blue Tongue	Blue Tongue	(can give other times)
Orf	Orf	September/November
Swollen Head Syndrome	Swollen Head Syndrome	September November
Heartwater	Heartwater	In case of incidence. Can use Autogenous vaccine.
Chlamysure	Enzootic Abortion	At weaning
Brucella Rev.	Brucellosis	2 weeks of age 4-6 weeks before Breeding. Safe in pregnancy 2-5 months of age

CASSAVA OFF-TAKER PROJECT Evokes an Agricultural Revolution

Words by Alain Kabinda



After maize, cassava is the second most economically important crop in Zambia, and is widely grown in Northern, Luapula, North-Western, Western provinces, and in some parts of Lusaka and Central provinces. Although cassava ranks high on the ladder of economic importance, the crop is mostly grown by subsistence farmers, who depend on it as both a staple crop and as a source of income. The biggest challenge is sustainability and growth beyond subsistence level.

To promote small-scale farmers as well as to provide sustainability to them, Chifwani Concept Project, a local initiative and Zhongkai International limited, signed an off-taker (counterparty) agreement to produce and sell cassava to a Lusaka-based ethanol manufacturer.

This long term agreement hopes to ultimately induce increased production of cassava. The project is initially targeting 1,000 small scale farmers in Northern Province, who will sell their produce to Zhongkai Ltd.

The small-scale-farmers have been engaged in cassava production under the partnership of the Chifwani Project and Zhongkai Ltd, and the supervision of traditional

leaders in Northern Zambia. The ultimate desired goal is to have self-reliant cassava producers. Speaking at the launch in Lusaka, Zhongkai Ltd Managing Director, Chen Guiping, whose company specializes in production of biofuels and output of various by-products for chicken, pig feed, other fattening concentrates and edibles, said his company's investment in Zambia is based on the country's high (75-90 percent) starch content compared to other countries in Africa.

"We invested in Zambia after realizing that the country has the best starch in Africa, averaging 75-90 percent. We hope the farmers will sell as much cassava as possible because our plant can take 35,000 hectares to produce 200,000 tons of starch for production of various products, including animal fatteners," Chen said.

Chifwani Project seeks to scale-up cassava production in the country seeing that the agreement with the Zhongkai International Ltd, guarantees 100 percent buy out of the cassava produced and supplied by Chifwani Concepts.

This engagement will be an assured and reliable source of income for small-scale farmers. From this collaboration, the anticipation is that the beneficiaries will live

sustainable, durable and improved livelihoods in the long term. Once successfully nurtured, the venture will be extended to other parts of the country as a sustainable poverty alleviation measure for small-scale farmers.

And Chifwani Project Coordinator, Emmanuel Mwamba, said the partnership was a culmination of the long standing relationship with the company and government's efforts towards realization of the 2017-2021 7th National Development Plan.

"Cassava farming has been recognized by the government as one of the cash crops that has potential to provide wealth to our people, and at the same time providing a means to the next staple food," says Mr. Mwamba.

Zhongkai International Company Ltd, produces industrial ethanol, stock feeds, animal fatteners, glue, fertiliser and other products from cassava and its by-products.

The project is also in tandem with the prospects of transforming Zambia into a middle income nation through the use of "Smart Agriculture," which is also in line with vision 2030 and the 7th National Development Plan.

ALTERNATIVE ENERGY

To Curb Deforestation

Words by Dorothy Chisi



The growing rural population in most developing countries, Zambia inclusive, has exerted alarming stress on forest resources. This is mostly so because most of these rural areas rely on wood for energy, which have telling effects on climatic conditions. With the effects of climate change becoming visible through droughts and flash floods even in Zambia, organisations like Cook Stove Project, are coming up with innovations that use gliricidia sepium twigs and not any other wood for cooking.

Cheembe Chiponde, Cook Stove Project Monitoring and Evaluation Officer, told Kulima News that farmers wishing to be part of the initiative could get in touch with the Project and be part of this environmental friendly initiative.

Apart from helping save the forests, the Cook Stove initiative helps people, especially in rural areas, to enrich their soils with the gliricidia plants. The Project encourages people to grow this

tree species as it takes only two to three years to mature.

Mr. Chiponde revealed to Kulima News that interested farmers need to be in groups and be ready to grow the plants which the Project provides, and members are eligible to use the twigs for free once the trees mature.

Meanwhile, Community Markets for Conservation (COMACO), a social enterprise that supports wildlife conservation and small-scale farmers in Eastern Zambia, has revealed that it is supporting 102,000 people in alternative energy to avoid deforestation in Nyimba, Petauke, Sinda, Katete, Chipata, Mfuwe, Chipangali, Kasenengwa, Lumezi, Lundazi, Chasafu, and Chama.

Organisation Communications and Outreach Specialist, Peter Banda, said COMACO had constructed energy efficient cook stoves that use twigs instead of big logs as firewood. The rocket cook stove

burns wood more efficiently, producing less smoke and more heat, thus cooking meals quicker and avoiding over exposure to dangerous smoke. Gliricidia sepium trees are not only useful for their twigs, but also fix nitrogen in the fields of the farmers.

Mr. Banda said COMACO was also encouraging farmers to go into conservation farming by using agroforestry as this was one way of promoting the growing of healthy foods as well as combating climate change and restoring depleted forests. He further said COMACO was on track to grow 37 million Gliricidia sepium trees in the 2020/2021 planting season in Eastern province.

Mr Banda said COMACO with the support of its partners CQuest, a global leader in fuel-efficient cook stoves aims to reach 250,000 cook stove beneficiaries by the end of 2022.



MOUNT MERU GROUP OF COMPANIES

Revises Number of Cotton Growers by Over 200%

Words by Dorothy Chisi

Mount Meru Group of Companies has revealed its intention to grow the number of cotton farmers it is sponsoring across the country by 200%, from 35, 000 to 80, 000 in Central, Eastern and Southern Provinces.

Group General Manager, Dharmesh Patel, attributed this expansion to the commissioning of the cotton ginnery two seasons ago. The new and expanded ginnery has increased the number of farmers in the cotton industry, who now have a guaranteed market. Mr. Dharmesh said Mount Meru had come on board after seeing a decline in cotton production in the country, mainly due to weather challenges as well as the diminishing interest from farmers.

"In a bid to promote and support farmers, as well as to get the industry going, Mt. Meru has pioneered the offer of minimum price to farmers. Last season the farmers got an average K3.50 per kilogram of cotton. This year the company has offered cotton farmers a minimum price of up to K5 per kilogram" Mr. Dharmesh told Kulima News.

The General Manager explained that this move was a risk which Mount Meru, as a business, had taken, seeing the price of cotton was dependent on the international market. However, the company felt a compulsion to help grow the cotton industry.

Mr. Dharmesh said that Mount Meru looked forward to a good harvest from farmers this year, as the rains seemed promising. He also hoped that the cotton farmers would appreciate the gesture which the company had offered them by honouring their standing contracts.

Mount Meru was grateful with the feedback from the cotton farmers on the offer of minimum price as compared to the way they lived in uncertainties when they grew their cotton without knowing the price. He also noted that during the cotton season, about 400 jobs were created, of which 200 would be maintained off season depending on the number of farmers who will be signed up.

AGRICULTURE EXTENSION OFFICERS

Implored to be of Service to Farmers

Words by Dorothy Chisi



The farming community in Magoye area of Southern Province has implored the Ministry of Agriculture to engage Agricultural Extension Officers to offer new farming methods and techniques to improve their yields

and make farming a viable business, in view of the inconsistent rainfall pattern.

Speaking in an interview with Kulima News, Cornhill Mweemba, a farmer in the area, said growing

early maturity varieties of crops would be an answer to local farmers in the area. Mr Mweemba said deforestation has negatively affected the rainfall pattern in the region, thus rendering production of certain crops difficult.

The Magoye area has suffered massive losses of forestry resulting from indiscriminate cutting down of trees for firewood, charcoal production and farming activities, resulting in poor rainfall patterns.

"This is the reason we need to be assisted with new methods of farming because we are heavily affected by droughts due to the poor rainfall pattern we experience," said Mr Mweemba.

Mr. Mweemba recommended the application of smart agriculture which promotes the use of new farming techniques like conservation farming, if he and fellow farmers could benefit from it. He said conservation farming coupled with growing of leguminous crops would help farmers to raise quick money as such crops matured early and required less rains compared to maize, whose yields have continued to dwindle due to reduced rainfall in the area.

World over, Agricultural Extension Officers are intermediaries between research and farmers, and operate as facilitators and communicators. They help farmers in their decision-making and ensure that appropriate knowledge is implemented to obtain the best results regarding sustainable production and general rural development.



THE END.



YOUTH AND AGRICULTURE – CHINYAMA'S STORY

Words by Brian Mumba

Many young people from across the globe, had been seeing no future in agriculture. This is the case even here in Zambia, where a large percentage of depend on agriculture for their livelihood.

But thanks to education which has opened many a young people's eyes, that agriculture provides the single most important platform for employment, income generation and food security and can drive poverty reduction through increased productivity, value addition and links to other sectors.

Today, Zambia is witnessing many young people involved and invest in activities that support agricultural production. They are becoming farmers.

In this edition, we feature Chinyama Jere, a young farmer, who shares with us how he got into farming and what he is benefiting.



Poultry Farming

Question: What is your name?

Answer: My names are Chinyama Jere, am a youth with a passion for Agriculture.

Question: Where did you draw the

passion from?

Answer: My passion for Agriculture came when I was at University. I became exposed to it from the studies about crops and the impact agriculture has to our society. After I completed by Degree in Land and Water Resources at Mulungushi University, I started my journey to agriculture.

Question: Why didn't get a job after graduating from university?

Answer: Finding a job was very frustrating. I couldn't find one, so I decided to put into practice what I was taught and the experience I acquired in attachments from various commercial farms.



Vegetable Production

Question: How did you start; What was your first project?

Answer: I first started with poultry farming, rearing of broiler chickens after borrowing some money from my parents. It was hard experience in the beginning. I encountered unforeseen circumstances such as mortalities, lack of proper budgeting and losses and just to mention a few.

Question: Apart from rearing chickens, what other minor projects did you embark on?

Answer: When I improved on keeping



Green House

broilers, I ventured into vegetable gardening.

Question: What else did you to improve in your farming passion?

Answer: In 2019 I joined the Zambia army as a civilian where I work under the farm's directory. Realizing that there is a lot of economic potential in farming, I registered a company that deals in agricultural services such as provision of fresh farm products, seedlings of various crops/plants and landscaping services. From here I can boast of being an upcoming successful young farmer.



Q What is the recommended rate and timing of application for ESN in soya beans?

A Previous research has shown that soya bean plants may cease forming nodules if there is a large amount of available nitrate in the soil. For this reason, soluble forms of nitrogen are not recommended for application until after flowering. Using ESN should allow for more flexibility in this type of application because of the controlled-release mechanism.

Q What causes corn plant leaves to turn yellow and how do you go about treating yellowing corn plants?

A Firstly, corn is one of the heaviest feeders in the garden. Yellowing corn leaves are most probably an indicator that the crop is deficient of some nutrient, usually nitrogen. Corn is a grass and grass thrives on nitrogen. The plant moves nitrogen up the stalk, so a nitrogen deficiency manifests itself as corn leaves turning yellow at the base of the plant. A soil test can help you determine if your plants are low in nitrogen. The solution is to side dress with a high nitrogen fertilizer.

Q What causes milk fever in Dairy Animals?

A Milk fever is a metabolic disorder caused by insufficient calcium, commonly occurring around calving.

Milk fever, or hypocalcaemia, is when the dairy cow has lowered levels of blood calcium. It generally occurs within the first 24 hours post-calving, but can still occur two to three days post-calving.

Q How frequently should cattle be dewormed?

A At this point, my recommendation is to focus on deworming calves and young stock up to two years old, twice a year.

Q What should I do if my cattle has lots of ticks?

A Kindly dip them weekly.

Q What should I do. I am dipping but the ticks are not dying at all.

A Could you kindly show me how you dip/spray your animals.

Q What type of feed should I buy for my animals? They are thin?

A Kindly give them supplements such as soya cake etc.

Q What type of cattle should I buy that grows very fast and easy to rear?

A Boran cattle.

Q My females are delaying to have young ones?

A May we kindly do a fertility test.

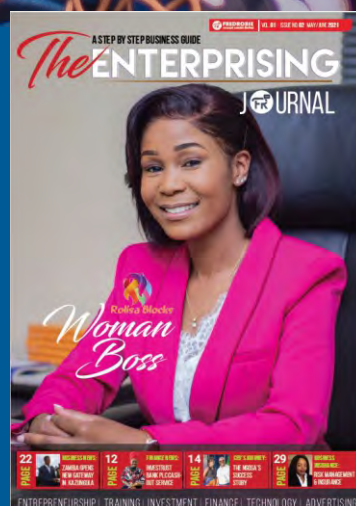






FREDROBIE

concept zambia limited



FREDROBIE CONCEPTS ZAMBIA LIMITED OFFERS THE FOLLOWING SERVICES

CONCEPT DEVELOPMENT

- ADVERTISING CONCEPTS
- MARKETING CONCEPTS
- PROMOTION CONCEPTS
- SALES CONCEPTS

COPY WRITTING

- PRINT ADVERT COPY
- DIGITAL MARKETING COPY
- DOCUMENTARY & ADVERT SCRIPTS



Fredrobie4@gmail.com



+260 760 600 833
+260 955 366 740
+260 975 707 752



OFFICE: PLOT # 596/3. ALONG RAPHEAL KOMBE RD,
OFF INDEPENDENCE AVE. RD, CIVIC CENTRE AREA