Empowering the Zambian Farmer to become a Sustainable Producer

EMPOWERING FARMERS TO BE SUSTAINABLE PRODUCERS: LIVESTOCK SERVICES IN LIVINGSTONE

In February, our technical team embarked on an **impactful outreach program in Livingstone.** We worked closely with numerous **local farmers and representatives of the Mukuni Royal establishment** to enhance livestock health, integrated crop and vegetable production, and overall productivity.

In these **interactive training sessions**, we covered critical topics such as disease prevention, proper feeding strategies, and sustainable farming practices.

This initiative reflects our **ongoing commitment to empowering farmers with the knowledge and resources** they need to improve their farm efficiency.

By nurturing collaboration between community leaders and veterinary representatives, we are ensuring that **essential veterinary services reach even the most remote areas.**

.

Stay tuned for more updates as we continue **bringing expert-driven solutions to farmers across Zambia!**

IN THIS ISSUE

COMPILED & EDITED BY DR. YENESHA NAMENDA

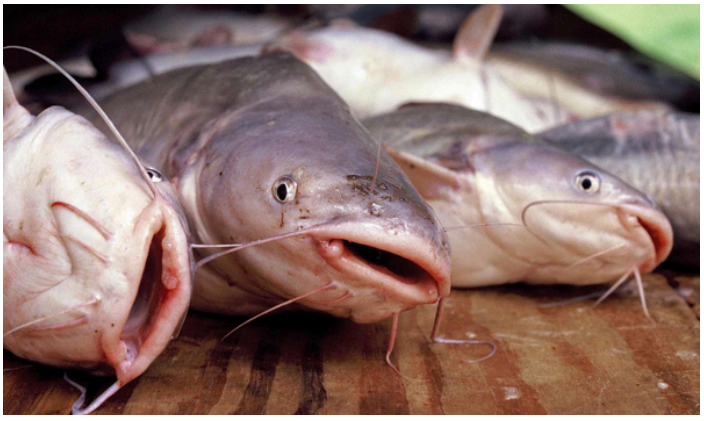
PROFITABLE FISH SPECIES

BY TRUST KAMANGA

- Choosing the right fish species is critical for a successful and profitable fish farming operation.
- Factors crucial in choosing the best species include growth rate, feed efficiency, market demand, and environmental adaptability.
- Below are some of the common species cultured in Zambia:

TILAPIA:

- Known for its **fast growth** and adaptability to various conditions.
- **Ideal for beginners** due to its resilience.
- High market demand, both locally and for export.
- Can **thrive in different climates** and water conditions.



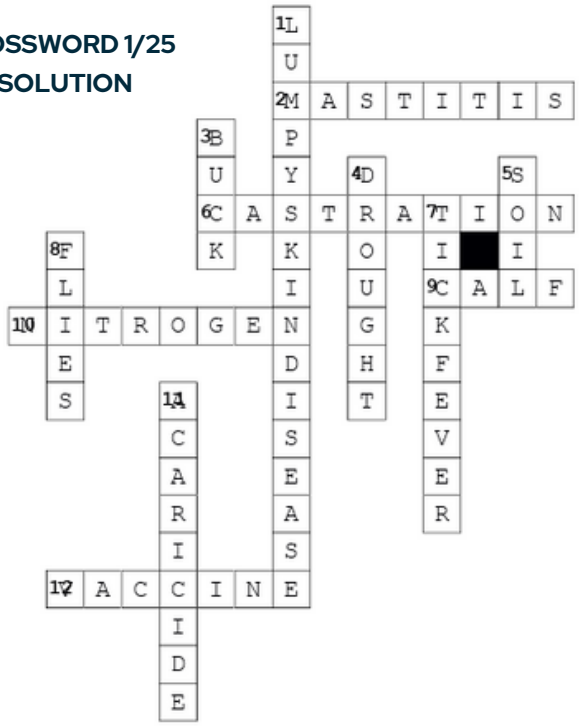
CATFISH:

- Hardy, **fast-growing**, and requires less oxygen.
- Suitable for **high-density farming**.
- Strong market demand across the globe
- Thrives in **warm water**

Choosing the right fish species for farming depends on your local market, climate, and available resources.
Assess your specific setup and target market to select the best species for your operation.

ISSUE 2

CROSSWORD 1/25 SOLUTION



UPCOMING SEMINARS

LAYER PRODUCTION FREE
MARCH 15TH, 2025
LIVESTOCK SERVICES LECTURE THEATRE

POST-HARVEST MANAGEMENT FREE
MARCH 22ND, 2025
LIVESTOCK SERVICES LECTURE THEATRE

MEAT PROCESSING K300pp
MARCH 29TH, 2025
DELICASA, KABELENGA ROAD (0977782636)

TICK CONTROL STRATEGIES PT.2

BY DR. VIGIRIO MUTEMWA

PLUNGE DIPPING

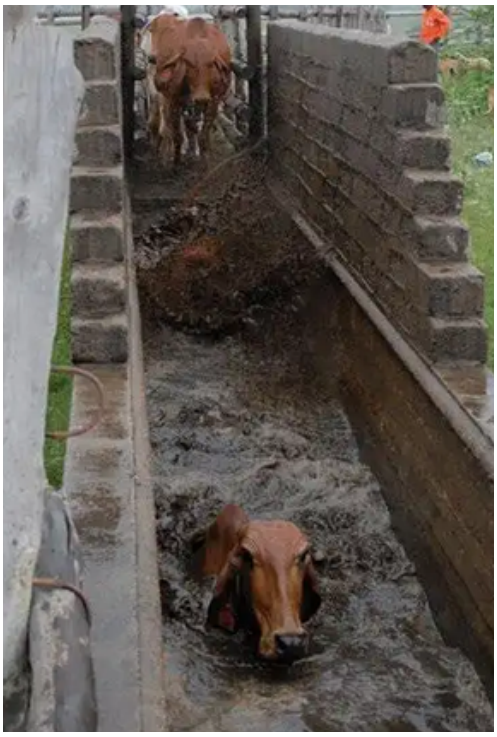
This is the method of choice because it **ensures good wetting with acaricide** when designed properly. Roughly 3L/animal of dip wash is used during dipping, and this requires that the **dip tank be topped up with water and dip concentrate.**

Topping up of the chemical is referred to as **replenishment**, and there are various methods of replenishment. Three methods of replenishment include conventional, head count, and total replenishment.

a) **Conventional replenishment**: dip is fresh **filled every two to five years** or when roughly 20000 animals have been dipped. The dip tank is drained, cleaned, and refilled with the required amount of water. The dip concentrate is added accordingly. Once in use, the dip wash is replenished to compensate for loss of product during dipping. Ensure to sample dip wash at the beginning of tick season (hot-wet) or after long periods of disuse.

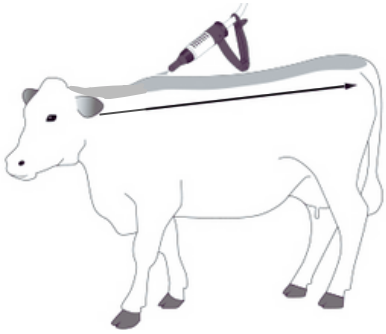
b) **Head count**: the assumption is that each animal removes roughly the same amount of active ingredient, and so the replenishment rate is **based on the number of animals that have been through the dip**.

c) **Total replenishment**: used for **non-lime stabilized amitraz dips**. The dip is fresh-filled with amitraz at each dipping because the amitraz breaks down with time. This method is **only economical if large numbers are dipped on a single day.**



POUR-ONS

These acaricides are dissolved in solvents, which aid the spread of the product over the skin. Labour intensive and requires animal restraint to be done effectively. A calibrated applicator is used. Applied from **between the horns to the tail root** (ensure no chemical enters the eyes).

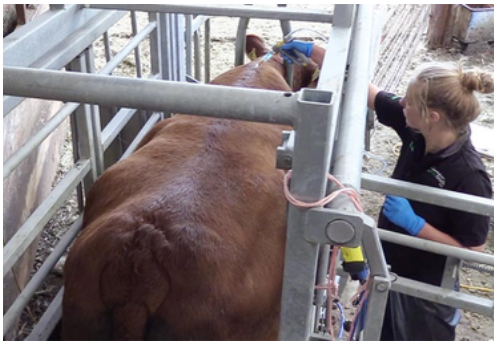


PATCH/SPOT TREATMENT

Done as an adjunct to dipping or spraying by applying chemicals to parts of an animal's body difficult to wet. Also used for low-level tick control methods. This includes tick oils or **grease, pour-on** formulations, etc.

ENDECTOCIDES

Used for **control of one-host ticks**, and thus unsuitable for control of multi-host ticks whose immature stages are found on other animals. Macrocyclic lactones are used, e.g., **ivermectin**, with a focus on rainfall activity.



(Peter Oberem (2017) Control of ticks and tick-borne diseases in Southern Africa, A practical guide for tick control in Livestock and game animals.)

SIMPLE FERTILISATION TIPS

BY MWAPE KANGWA

Fertilisation is a crucial step in ensuring a healthy and productive harvest. Here are some fertilization tips to boost your yield:

Soil Test Before Fertilizing

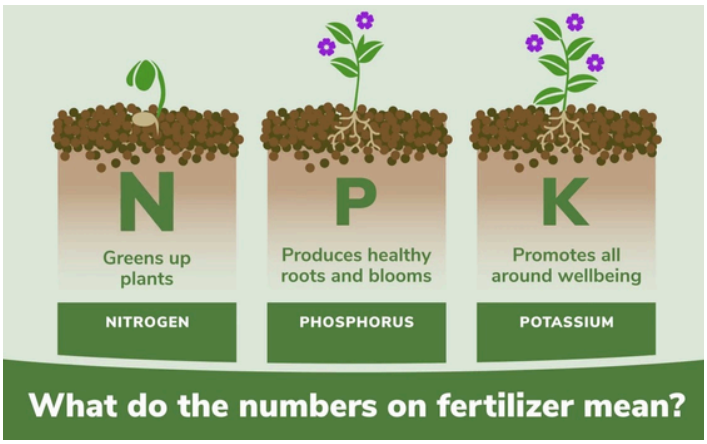
- Before applying fertilizers, test your soil to determine its nutrient content. This will help you identify the specific nutrients your soil needs.
- Apply lime to adjust the soil pH, if necessary.
- Incorporate organic matter like compost or manure to improve soil fertility.

Choose the Right Fertilizer

- Select a fertilizer that matches your crop's nutrient requirements. For example, nitrogen-rich fertilizers promote leaf growth, while phosphorus-rich fertilizers promote root development.

Apply Fertilizers at the Right Time

- Basal Fertilizer Application (From planting to 4 weeks)
  - Apply a basal fertilizer (e.g., NPK) at planting time.
- Top-Dressing
  - Apply a top-dressing fertilizer (e.g., urea or ammonium nitrate) when the crop is about 6–8 inches tall.
- Foliar Application
  - Apply a foliar fertilizer (e.g., nitrogen-rich fertilizer) to promote healthy plant growth and fruiting.



Follow the Recommended Application Rates

- Follow the recommended fertilizer application rates to avoid over- or under-fertilizing. Over-fertilizing can harm your crops and the environment.

Consider Organic Fertilizers

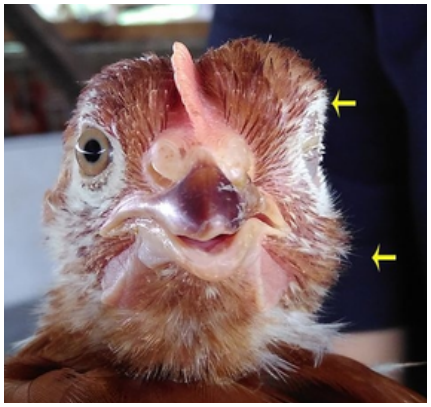
- Consider using organic fertilizers like compost or manure. These fertilizers release nutrients slowly, promoting healthy soil and crop growth.

By following these simple fertilization tips, you can boost your yield and enjoy a healthier, more productive harvest.

INFECTIOUS CORYZA

BY DR. MWAKA-MUBOTU CHILANGA

- Infectious coryza is an upper respiratory disease of chickens caused by Avibacterium paragallinarum.
- Coryza usually begins abruptly, with all affected chickens showing signs of disease within 24-72 hours after exposure to infection. Chickens of all ages are susceptible; however, susceptibility increases with age. The disease typically lasts 2-3 weeks.



- Coryza is primarily transmitted by direct bird-to-bird contact, or through airborne droplets, and contamination of drinking water. The disease can also be introduced when infected birds are brought into the flock. Outbreaks commonly result when infected birds that are not showing any signs of the illness are brought into a healthy flock.

SIGNS

- Facial and sinus swelling
- Clear discharge progressively becoming foul smelling and purulent (containing pus).
- Roosters may have swollen wattles.
- There is marked conjunctivitis and lacrimation (tearing or watery eyes). Infected birds may have their eyes partially or completely closed due to the excessive eye discharge, making it difficult for them to see to eat and drink. Other clinical signs include open mouth breathing, weight loss, diarrhea, poor performance and decreased egg production.

TREATMENT

- Antimicrobial treatment and supportive care help manage the infections. A proper treatment regimen should be based on a thorough clinical assessment and professional diagnosis to ensure safety and effectiveness.

PREVENTION

- Vaccination, proper biosecurity, and good management are the best prevention methods of disease outbreaks on the farm.
- Outside the poultry house: restricted entry of visitors and vehicles on to the premises; pest control; use of boots and correct clothing; proper disinfection of workers attire; and hand washing.
- Inside the poultry house: proper disinfection, do not stock multi-aged flocks, and dispose of carcassess properly.