



Food and Agriculture
Organization of the
United Nations



AMRU: Antimicrobial Resistance and Usage

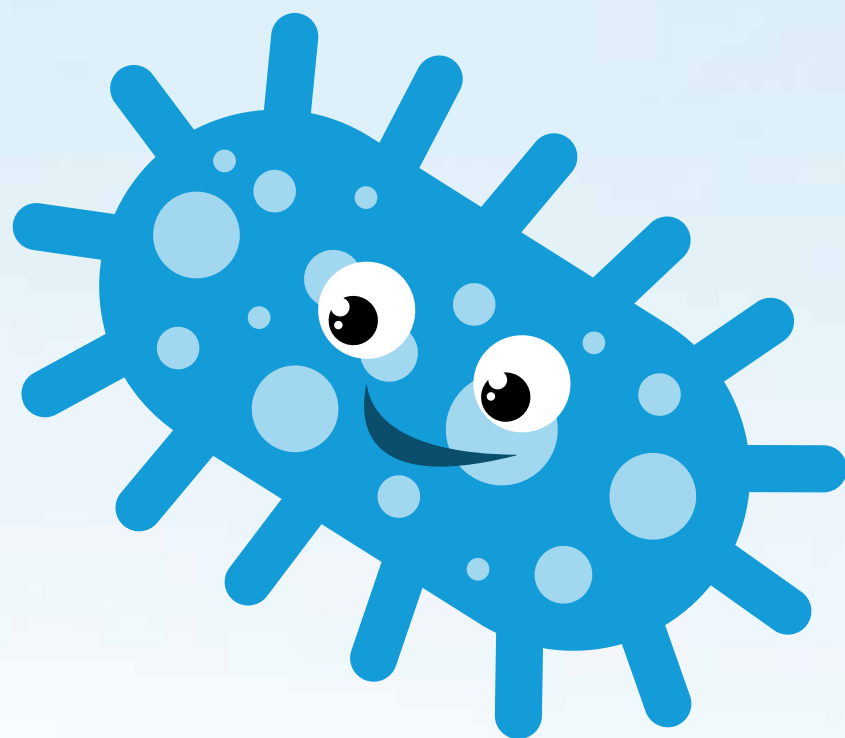
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AMRU: ANTIMICROBIAL RESISTANCE & USAGE



I am AMRU Your Friendly Bacteria (Germ)



-  I am your friend and guide
-  I help you manage your farm sustainably
-  Adopt good farm management practices
-  To keep your goals bright
-  But if the disease strikes
-  Use antibiotics only on doctor's advice
-  Long term profits are more important than short term gains
-  Mantra to success is responsible use of antibiotics



Listen to What I Have to Say..



Diseases are caused by bacteria, viruses, parasites and fungi



Antibiotics are the medicines that destroy only bacteria



Antibiotics will NOT cure diseases caused by viruses, parasites and fungi



Consult a doctor before administering antibiotics



Use antibiotics responsibly and be a smart farmer



Do you know what is Antimicrobial Resistance (AMR)?



AMR is the ability of the microorganisms to persist or grow in the presence of drugs designed to inhibit or kill them. Inappropriate use of antibiotics is an important cause of AMR.



Inappropriate use of antibiotics can make them ineffective to treat diseases in the future. This is known as AMR.

- ✓ **Who are at risk?**
- ✓ **Farmers are at risk**
- ✓ **Humans are at risk**
- ✓ **Animals are at risk**






- ✓ **What are at risk?**
- ✓ **Environment is at risk**
- ✓ **Sustainability is at risk**
- ✓ **Profits are at risk**

All are at risk

Do's on Antibiotic Use

Consult the doctor before using antibiotics:

ASK HIM

-  Which antibiotic?
-  When to administer?
-  How to administer to animal / fish / bird?
-  How many days?
-  How much dose?





Don'ts on Antibiotic Usage



Don't use antibiotics as a routine preventive measure



Don't use medicines / antibiotics after expiry date



Don't use leftover antibiotics / medicines



Don't use antibiotics as growth promoters or for the weight gain of animal / fish / bird



**Your Birds/
Animals/
Fishes are
Important**

**Vaccinate
Them**





Good Farm Management Practices



This is in Your Hands





Do's in a Farm



Provide adequate sunlight and ventilation



Keep the farm clean



Cover open drainage



Keep sheds of the same type at 30 ft. and of different types at 100ft.



Keep only one entrance and one exit



Do fogging of the populated sheds

Do's in a Farm (Indoor)

Maintain Personal hygiene

Sanitize hands frequently

Segregate diseased animals /
birds / fish

Detect early signs of disease and
consult doctor

Transport the feed to the young
flock first, then to the older flock.



Do's in a Farm (Outdoor)



Keep animals clean



Store feed in a cool dry place on a raised platform



Disinfect transport vehicles and surfaces



Ask visitors to sanitize and wear appropriate Personal Protective Equipment (PPE) when entering farms



Use only treated fecal matter as manure



Remove and dispose dead birds / animals / fish in proper manner



Dispose carcasses by burning / burying them away from the farm



Don'ts in a Farm

Don't allow visitors in the farm

Don't allow entry of stray animals / rodents / birds

Don't provide mouldy / stale feed

Don't keep waste in the farm

Don't keep diseased and healthy animals / birds / fish together



A large flock of white chickens is housed in a farm building. The chickens are densely packed, filling the lower two-thirds of the frame. They are white with red combs and wattles. The building has a brick wall and several windows with wire mesh. Bright light from the windows illuminates the scene, creating a warm, golden glow. The upper right portion of the image is darkened to provide a background for the text.

Don'ts in a Farm (Outdoor)



Don't allow personnel without PPE



Don't forget to use the foot bath



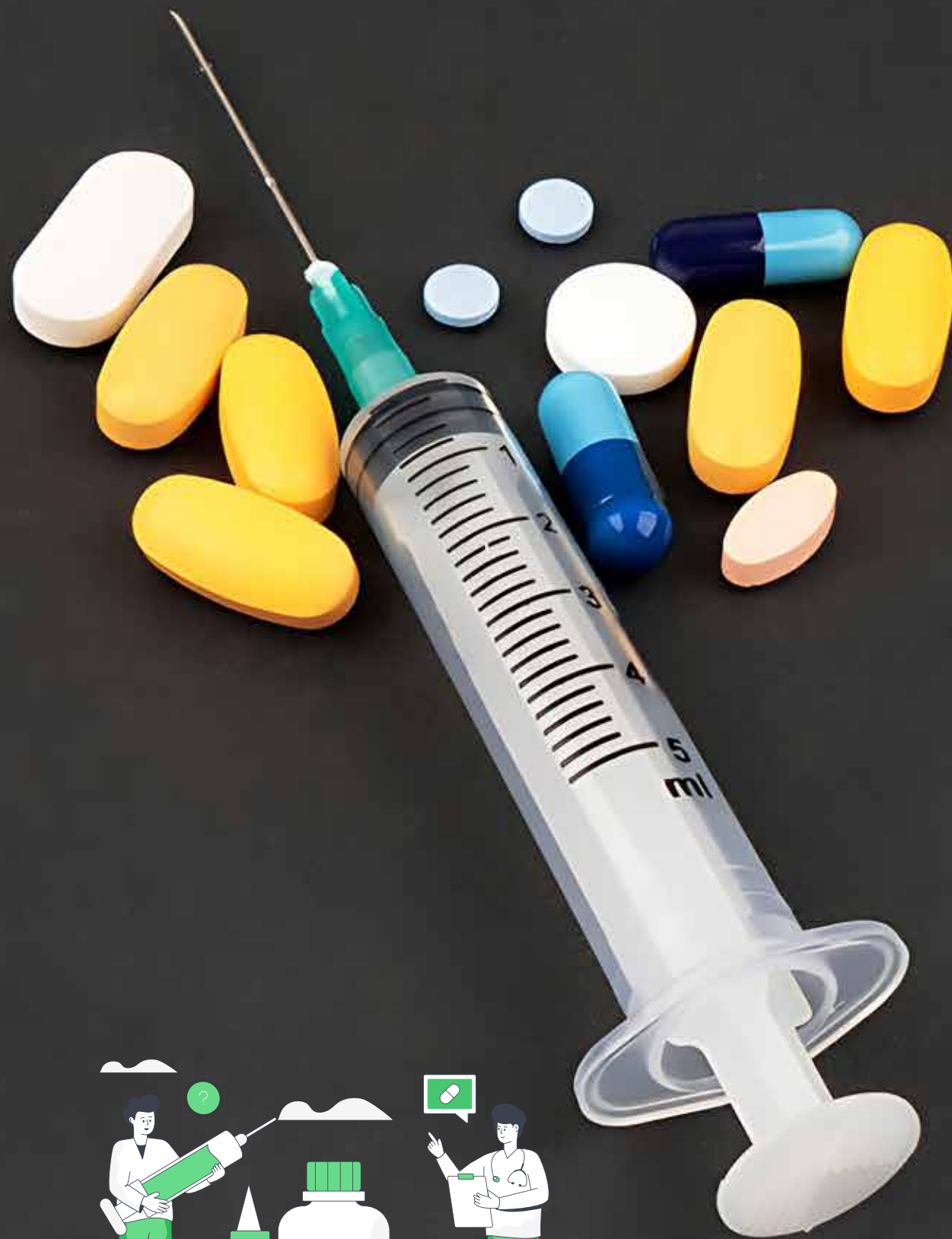
**Don't use the same equipment in
all units**



Alternatives to Antibiotics

That is

-  **Nutraceutical**
-  **Herbal products / medicines**
-  **Probiotics**
-  **In addition always adopt 'Good Management Practices'**



What Happens when you Indiscriminately use Antibiotics ?



First you use one antibiotic, when this does not work you use the second one, then the third and so on. One day no antibiotics will work and there will be antibiotic resistance.



Instead, first you should use 'lower class of antibiotic' to treat a disease.



When this does not work you use 'medium class of antibiotic'



When the 'medium class of antibiotic' does not work, finally you use 'higher class of antibiotic'



You keep incurring more and more costs, resulting in fewer profits.



One day even the 'higher class of antibiotic' may not work and there will be antibiotic resistance.



Use antibiotics responsibly

One Health is Important: Misuse of Antibiotics Affects All

