

Policy brief

Mobilising veterinary drug shop staff to combat antibiotic resistance in Vietnamese farms

In Vietnam, rising livestock production has led to heavy antibiotic use, fuelling antibiotic resistance that threatens health and livelihoods. While regulations exist, small-scale farmers often lack access to veterinary services. Veterinary drug shop staff are a widely available but overlooked group who, with proper policy support and training, could help promote disease prevention and responsible antibiotic use.

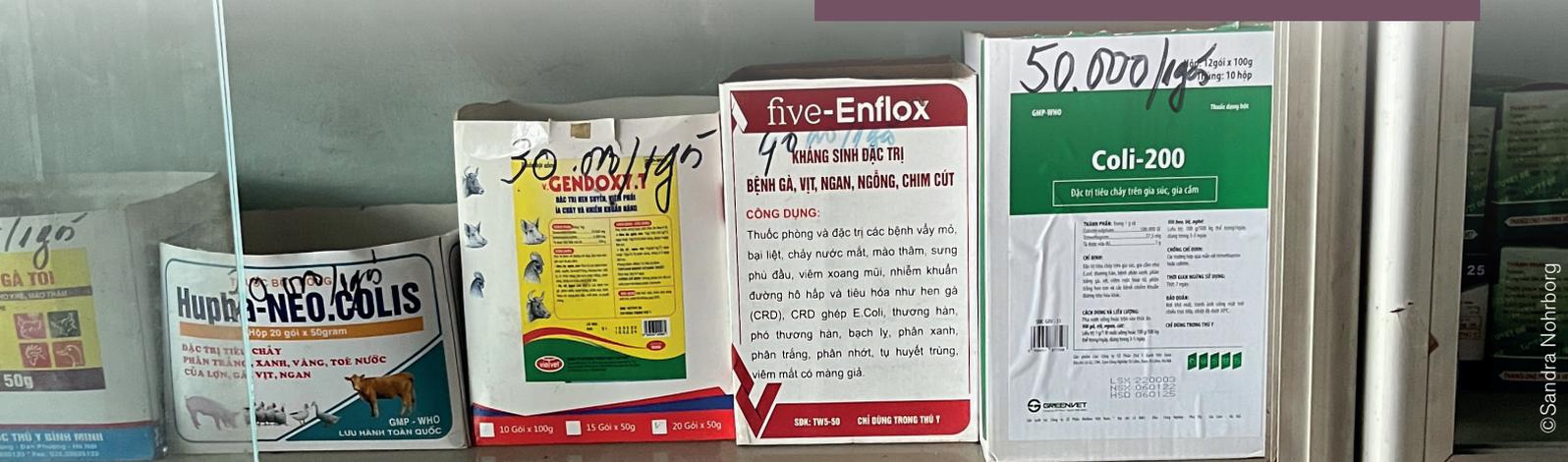
Antibiotic resistance – an urgent threat to health and livelihoods

The tremendous economic development Vietnam has seen the past decades has resulted in an increased demand for animal-source foods. To meet this demand, the livestock sector has expanded. The most prominent increase is seen in poultry where the number of animals has increased with almost 160% in the last 10 years. However, when farmers start to keep more animals, more disease often follows, especially if disease prevention measures are insufficient. This, in turn, may result in an increased demand or need for antibiotics among farmers.

The Vietnamese livestock sector is already largely dependent on antibiotics, not only for curing disease, but also for preventing disease and growth promotion. Out of the total amount of antibiotics used in the country, more than 70% are used in livestock. The problem is that the use of antibiotics causes bacteria to develop resistance, which makes the antibiotics

KEY MESSAGES

- Antibiotic resistance is an urgent and growing threat in Vietnam, driven largely by high antibiotic use in livestock, which accounts for more than 70% of total antibiotic consumption.
- Overuse of antibiotics in livestock undermines animal health, food security and livelihoods, while resistant bacteria can spread from animals to humans through food and the environment.
- Improved disease prevention — not routine antibiotic use — is key to reducing resistance, especially in small-scale poultry systems where biosecurity and vaccination practices need strengthening.
- Veterinary drug shop staff are an overlooked but potentially crucial group of key actors, as they are often well educated and accessible to farmers who lack access to professional veterinary services.
- Targeted policies, training programmes and regulatory monitoring could mobilise drug shop staff to support responsible antibiotic use and strengthen animal health services across Vietnam.



Antibiotics sold in a veterinary drug shop in Vietnam.

lose their effectiveness. The speed of this development depends on how much antibiotics are used, and therefore, the excessive antibiotic use seen in the livestock sector needs to be urgently reduced.

Antibiotic resistance makes bacterial disease difficult — and sometimes impossible — to treat and thereby threatens the health of livestock as well as people's food security and livelihoods. Resistant bacteria can also spread from livestock to humans, for example through animal-source foods or the environment. Currently, Vietnam is facing one of the most severe resistance situations in the world, and it is expected to worsen even more if not addressed forcefully.

The Vietnamese government has taken important steps to handle antibiotic resistance in livestock, including the implementation of several regulations concerning antibiotic use and sales. However, enforcement of regulations may take time, as key actors (e.g. farmers, veterinarians, and veterinary drug shop staff) need to be educated on the existence of the new regulations and also get the chance to adapt their practices accordingly. Therefore, other actions on multiple levels are needed to complement, and facilitate the enforcement of, those regulations.

Prevention is better than cure

Healthy animals do not need antibiotics. Therefore, improved disease prevention is key to reduce the overuse of antibiotics in Vietnamese livestock. An effective disease prevention strategy includes good general management routines (e.g. housing, feed, water), internal/external biosecurity (i.e. prevent spread of disease within and between farms), and relevant vaccination protocols. However, disease prevention practices should not include antibiotic use. Nonetheless, preventive use of antibiotics is currently common practice in Vietnamese small-scale poultry farming (see further reading).

As small-scale, outdoor, poultry systems are especially challenging when it comes to disease prevention, these farmers need to have access to proper veterinary advice on how biosecurity practices may be adapted to, and adopted into, their daily farming routines.

Veterinary drug shop staff – promising key actors

However, while access to antibiotics over the counter in veterinary drug shops is widespread, access to professional veterinary services that assist small-scale farmers with disease prevention and management, is often limited. This mismatch poses a major risk for incorrect antibiotic use as a professional diagnosis is rarely made before antibiotics are sold and used. Also, when farmers lack access to animal health services, they often rely on their own experience when it comes to antibiotic treatment. This, in turn, makes them less responsive to treatment advice from veterinary drug shop staff. Another complicating factor is that veterinary drug shop staff rely on sales of antibiotics for their incomes, creating conflicting economic interests.

Nonetheless, Vietnamese veterinary drug shop staff are often well educated in veterinary medicine and knowledgeable about antibiotic resistance, but this competence could be harnessed much better. As governmental and private veterinary services are unable to cater for the

needs of the many small-scale farmers, there is an opportunity for Vietnamese policy makers to mobilise veterinary drug shop staff to fill the gap of access to veterinary service. This would increase farmers' possibilities to receive proper veterinary assistance and advice regarding disease prevention and responsible use of antibiotics.

How can policy be used to mobilise the drug shop staff?

To increase access to animal health services for Vietnamese small-scale farmers in urban and rural areas, policies to improve, and better harness, the competence of veterinary drug shop staff should be considered. Through such policies, the services of veterinary drug shop staff could function as a complement to the services provided by governmental and private veterinarians. However, for increased use of veterinary drug shop services to result in improved farm practices, including more responsible antibiotic use, policies for education and trainings for veterinary drug shop staff should be adopted.

Providing a structure for the development and dissemination of targeted education programmes in disease prevention, antibiotic use, and antibiotic resistance should be incorporated into the assignments of responsible national authorities. To facilitate the enforcement of regulations on antibiotic use and sales, such training programmes should also include education on the relevant Vietnamese legislation. Although training programmes may be developed and funded by national authorities, it is recommended that they are disseminated to local authorities for tailoring and distribution.

Finally, in order to follow up on the uptake of newly adopted legislation in the antibiotic use and sales area, national authorities may consider initialising a monitoring programme of regulation compliance in veterinary drug shops, operationalised by local authorities.



A small-scale chicken farm in Vietnam.

Practical policy recommendations to mobilise veterinary drug shop staff

- Map the distribution of veterinary services at the provincial and district levels to increase the understanding of where access to veterinary services needs to be strengthened.
- Map the veterinary competence among veterinary drug shop staff at the provincial, district, and commune levels.

Following this:

Encourage veterinary drug shop staff with veterinary competence to offer diagnostic services. A suggested “service package” could be developed by authorities.

Encourage veterinary drug shop staff to offer consultation on disease prevention measures other than antibiotics.

- Strengthen collaboration between veterinary drug shop staff and veterinarians to facilitate re-direction of farmers when needed.

Suggested actions include:

Providing veterinary drug shop staff with lists of veterinary services at the commune level.

Establishing a governmental veterinary medical advisory service to which veterinary drug shop staff can call for guidance on how to treat disease.

- Offer recurring training activities to veterinary drug shop staff through the sub-Departments of Animal Health (subDAHs), or other competent stakeholders, **including:**

Updates on locally circulating poultry diseases.

Disease prevention and biosecurity practices suitable for small-scale farms.

The need to reduce sales of antibiotics for disease prevention and antibiotics critical to human medicine.

Antibiotic resistance, with special emphasis on the One Health aspects, i.e. the risk of spread of resistant bacteria between animals and humans.

- Provide mandatory education to veterinary drug shop staff through the sub-DAHs on current and upcoming legislations regarding antibiotic use and sales
- Consider offering veterinary drug shop staff an official certificate on “expertise in antibiotics” after going through above-mentioned trainings.
- Use veterinary drug shop staff as local distribution channels for information regarding farmer trainings and vaccination campaigns offered by authorities, to improve outreach to small-scale farmers.
- Use joint trainings for farmers and veterinary drug shop staff on poultry diseases as well as disease prevention and management as tools to improve relationships and farmers’ compliance with advice.
- Enhance the physical and digital monitoring of antibiotic sales practices in veterinary drug-shops to improve regulation compliance.



Inside a veterinary drug shop in Vietnam.

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Further reading

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