



## Roadblocks and drivers for a prudent use of antibiotics in the Mozambican poultry sector

### Background

Presence of bacteria resistant to antibiotics (AB) in poultry meat is a growing concern for Mozambican researchers on AMR and national authorities. As antibiotic resistance is known to be nurtured by misuse of AB in farming it is vital to understand the drivers of this use.

### Problem

Most studies on the drivers of AB use at farm level focus on farmers as autonomous decision-makers and neglect the role of other stakeholders and the complex structure of the decision-making process.

### Solution

To overcome these limits, the ROADMAP project in Mozambique has assessed the socio-technical roadblocks for more prudent use of AB in the commercial and semi-commercial poultry farms of the province of Maputo, based on in-depth interviews with farmers (80), stakeholders of the vet drugs market chain (26), technicians and extensionists (15) and other key informants (8 members of the Ministry of Agriculture, of international organisations, representants of vets and farmers associations).

### Outcome

The research showed various roadblocks for a more prudent use, internal and external to the farms, such as (figure 1):

- The high vulnerability of the dominant model of commercial poultry farming to the local conditions (access to clean water, urban planification, climate change, infrastructures...) and its reliance on AB use,
- The limited number of veterinarians and technicians and a significant role for unqualified drugs sellers in advising poultry farmers,
- Farmers' and technicians' low knowledge on medication use, and the use of AB as a magic bullet for any health issue and to overcome lack of biosecurity,
- The low quality of traded chicks and feed, fostering a preventive use of AB by farmers,
- The lack of access to antibiograms and laboratory facilities to support the diagnosis,
- The low regulation of the vet drugs markets and the trade over the counter of inappropriate and critical AB,
- The potential "passive consumption" of AB due to the use of growth promotor by feed manufacturers.

Nevertheless, there are also potential drivers for a more prudent use of AB such as:

- Farmers willingness to reduce their production costs, including for AB,
- Consumers concerns for drugs residues in meat,
- The political willingness to implement the National Plan on AMR, and the support of international organisations.

### Practical recommendations

These results show that to tackle the issue of resistance to AB, many stakeholders need to be mobilized besides farmers and their associations, and many actions can be implemented, besides training and concientização:

- To face the numerous constraints in implementing biosecurity measures, more resilient and agroecological farming systems (free ranging, use of resistant genetics and dual-purpose animals, alternative medicines...) need to be promoted,
- The stakeholders of the poultry chain (i.e. chick and feed producers) and the vet drugs chains (from importers to drugs sellers), the representants of the vet professions (OVM, AVETMO), the policy makers and regulators (MADER)...need to contribute to overcoming the numerous roadblocks for a more prudent use of AB and to support the development of agroecological farming systems,
- To support the increasing poultry production, and the required shift in practices, quality controls (drugs, chicks, feed), lab facilities, trained public technicians, effective and updated regulations, need to be promoted.

### Author(s)

Muriel Figuié ([CIRAD](#)), Carlos Cuinhane, Cristiano Macuamule, Rehana Capurchande ([UEM](#))

### Keywords

Antibiotics (AB), Poultry, Mozambique

### Additional resources

<https://www.roadmap-h2020.eu/mocambique.html>



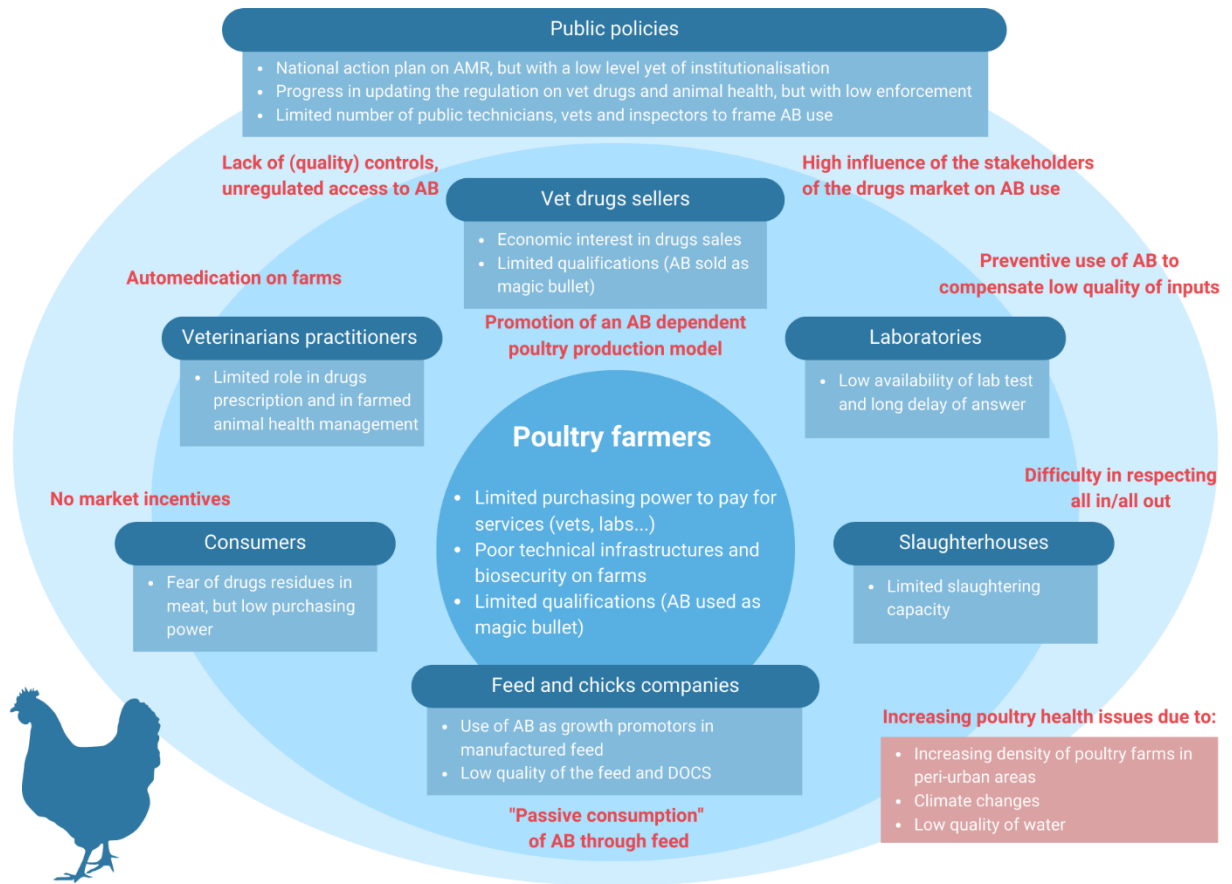


Figure 1 Drivers for the use of antibiotics in the Mozambican poultry sector

Legend Figure 1:

stakeholder

Characteristics influencing AB use

- Drivers for misuse or overuse of AB

### On-farm application

Exchanges with farmers skilled in a prudent use of AB and in resilient and agroecological farming systems need to be encouraged (Figure 2).



*Figure 2 Visit of a free-ranging poultry farm in La Reunion*

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