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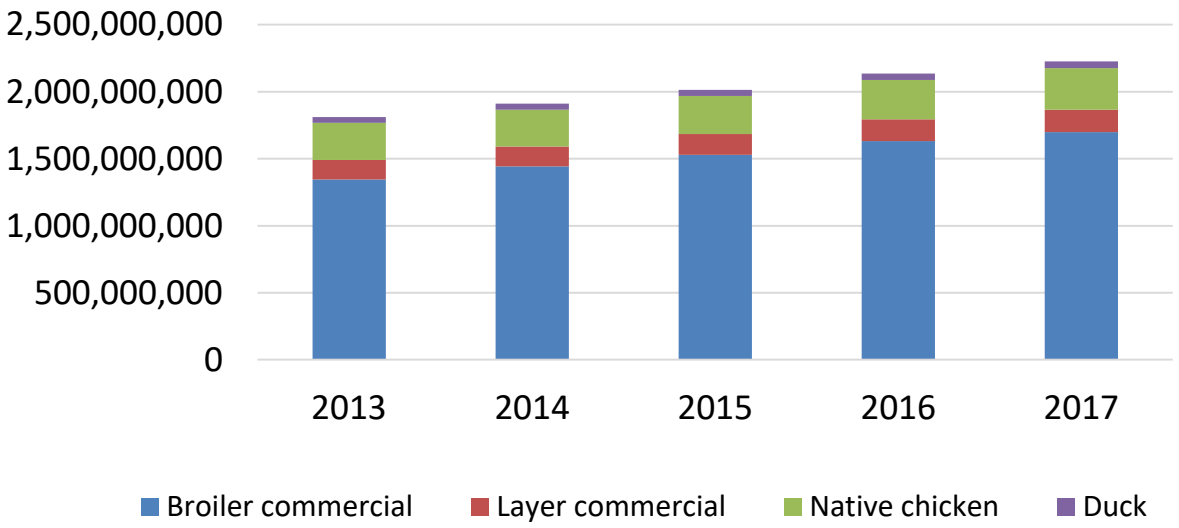
Directorate General of Livestock and Animal Health Services
Ministry of Agriculture
Republic of Indonesia

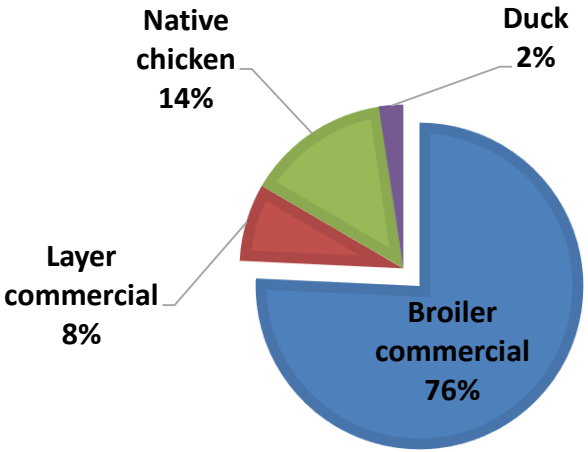
AMU-AMR Surveillance System in Indonesia on Livestock and Animal Health Sector: approach & findings

Imron Suandy

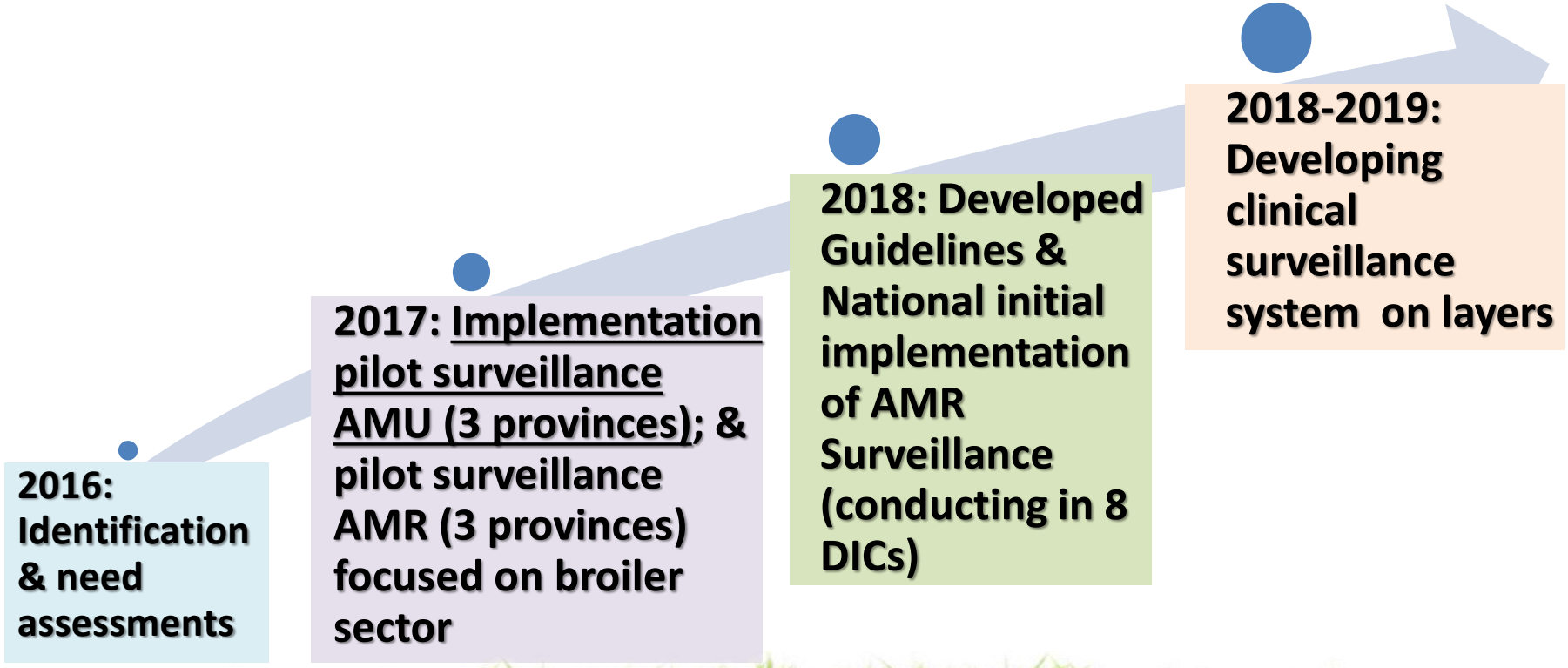
OIE Sub-Regional Conference on
Antimicrobial Resistance (AMR) Related Research and Information
7 March 2019, Bangkok, Thailand

Poultry Population in Indonesia in 2013 - 2017

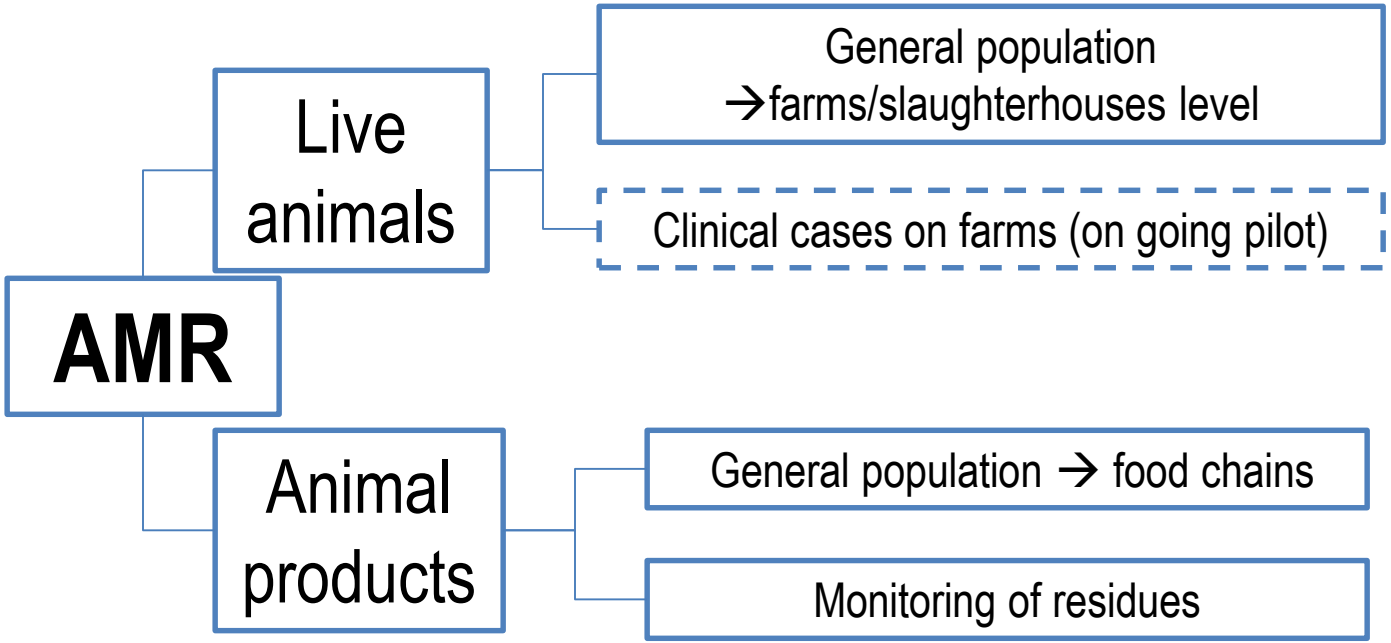




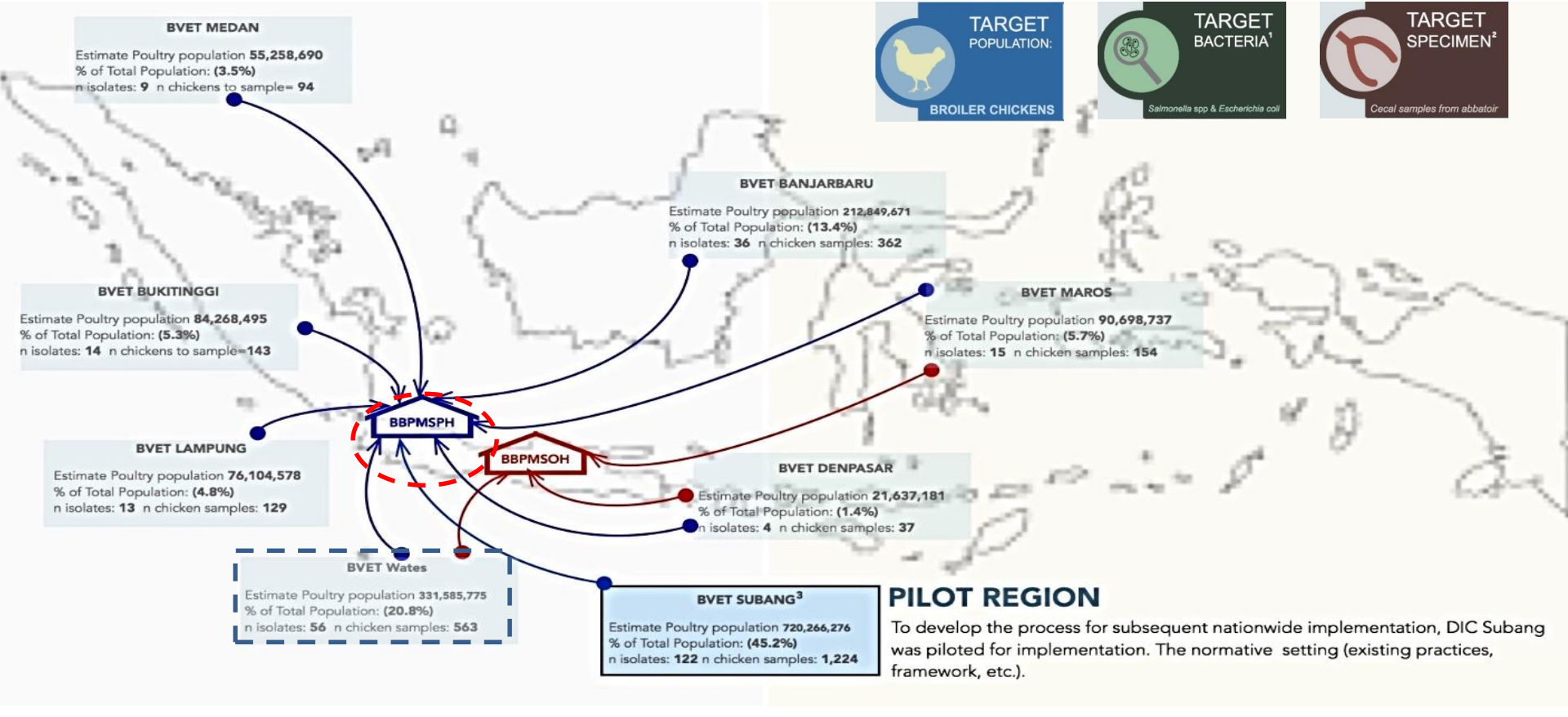
Strengthen Surveillance System (AMU & AMR) in Indonesia



Concepts of AMR surveillance



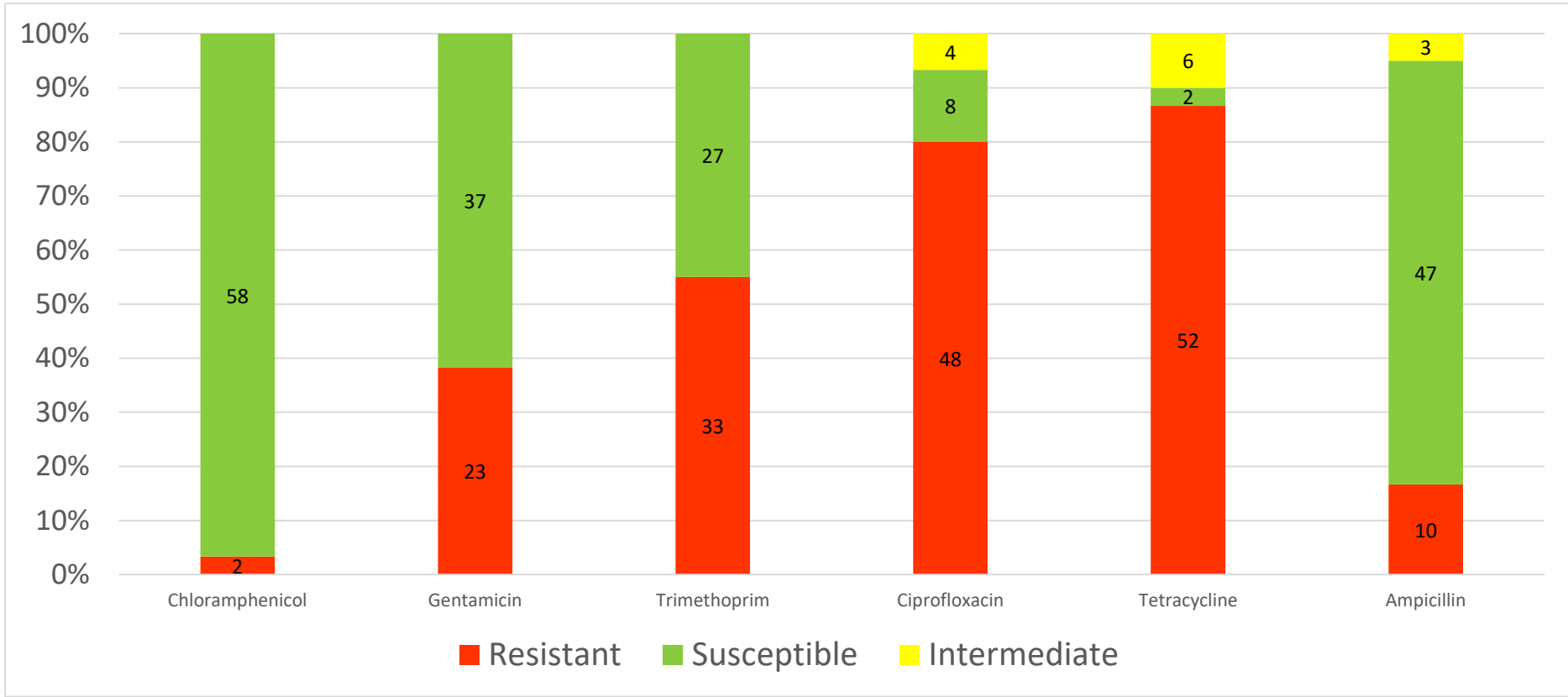
Design of AMR Surveillance based on piloted project in Subang Region 2017



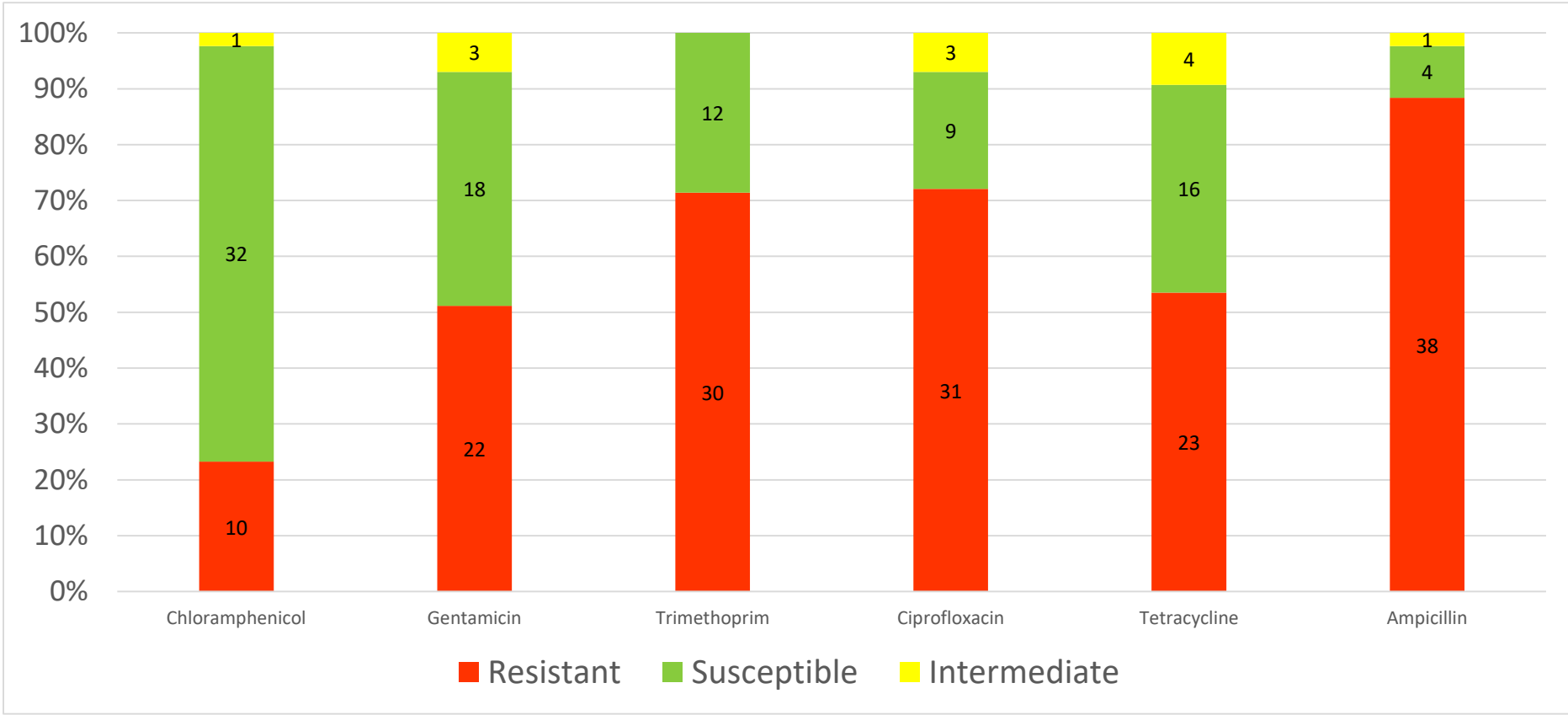
PILOT REGION

To develop the process for subsequent nationwide implementation, DIC Subang was piloted for implementation. The normative setting (existing practices, framework, etc.).

Pilot finding: Percentage resistant of current 60 isolates of *Salmonella spp* (still on progress of total 76 isolates)



Pilot finding: Percentage resistant of current 43 isolates of *E. coli* (still on progress of total 352 isolates)



Concepts of AMU surveillance

Agregat Data

- Report from importers & producers

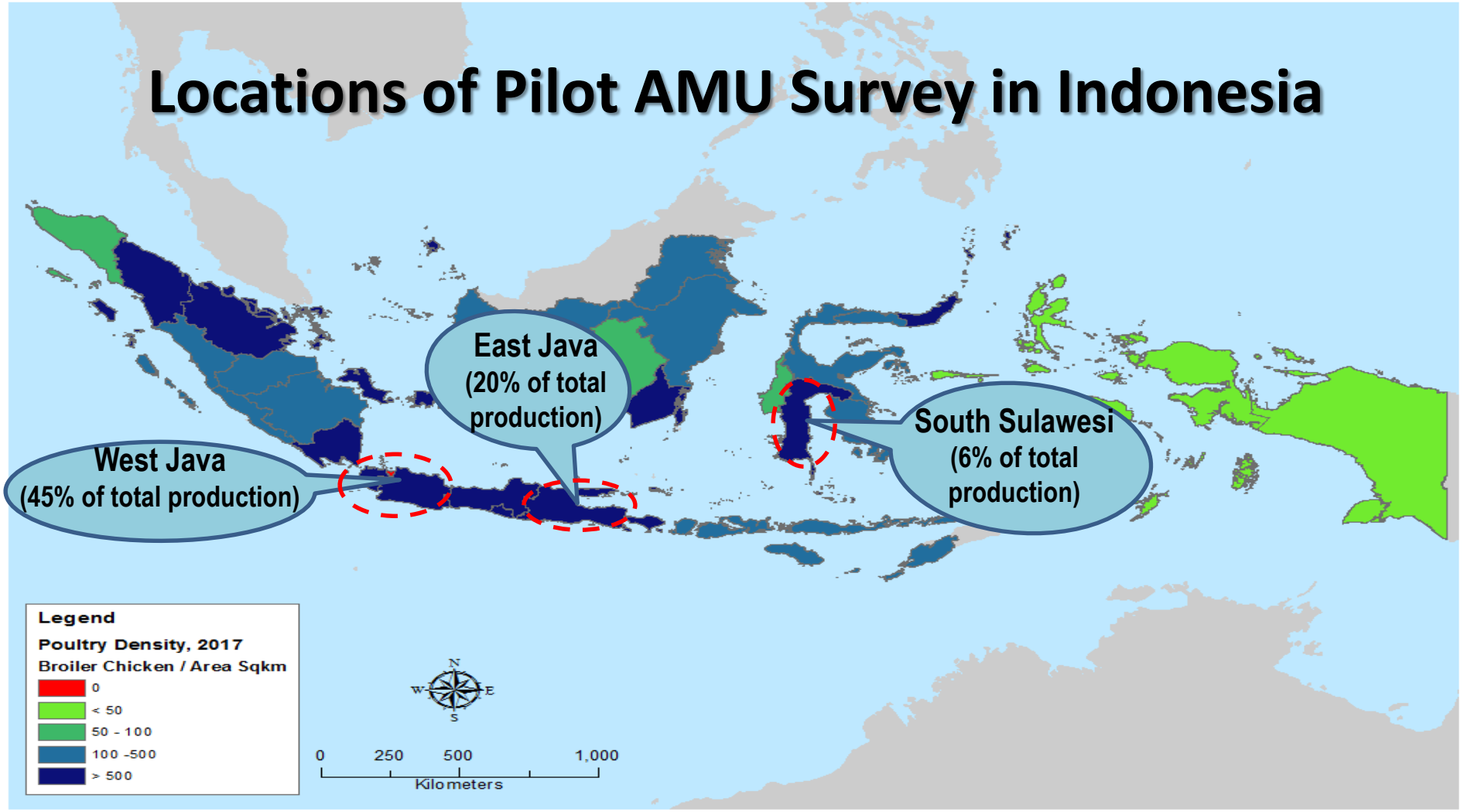
Disaggregat Data

- Clinical used iSIKHNAS (update ruminants data only)
- Clinical used: report by *Vet Service Officers* (VSO) in district level
- Feed Monitoring (not yet implemented)

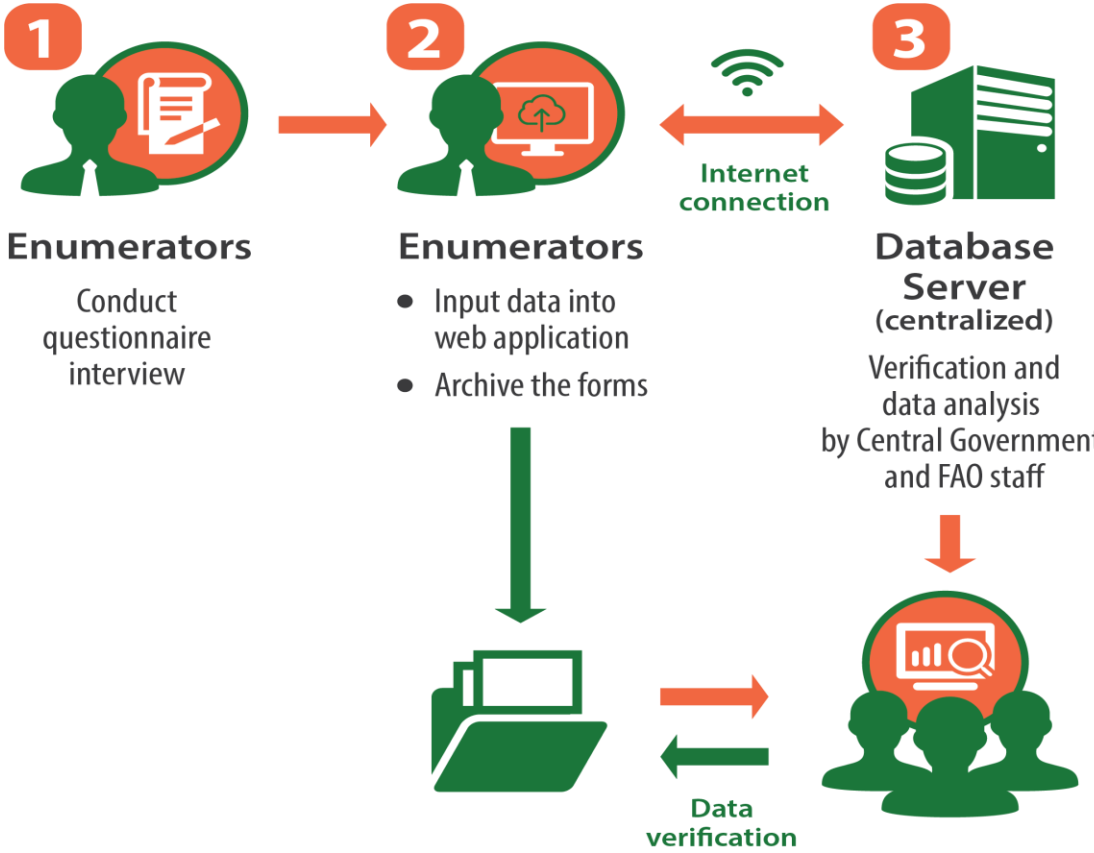
Background of AMU Survey

- Poultry production has been expanding rapidly in Indonesia to keep up with increased demand for animal protein by the fast-growing human population.
- Small and medium-scale (< 10,000 birds) commercial broiler flocks dominate this poultry sector (76%) and antimicrobial usage (AMU) is said to be widespread on farms.

Locations of Pilot AMU Survey in Indonesia

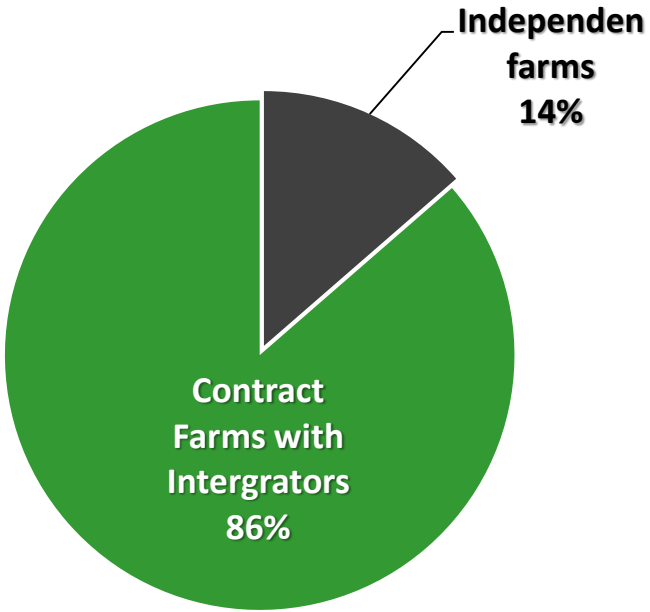


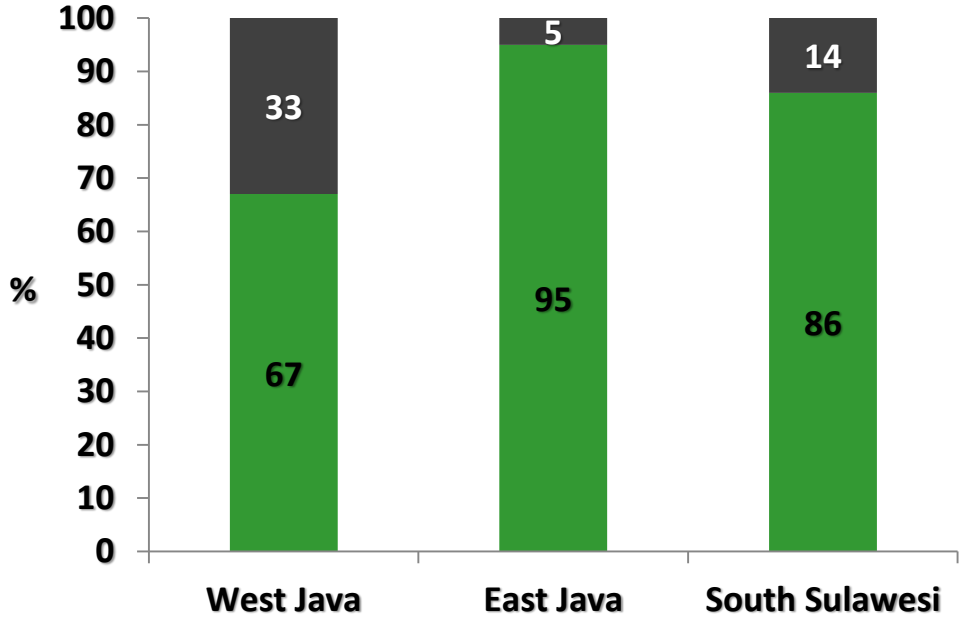
Methodology



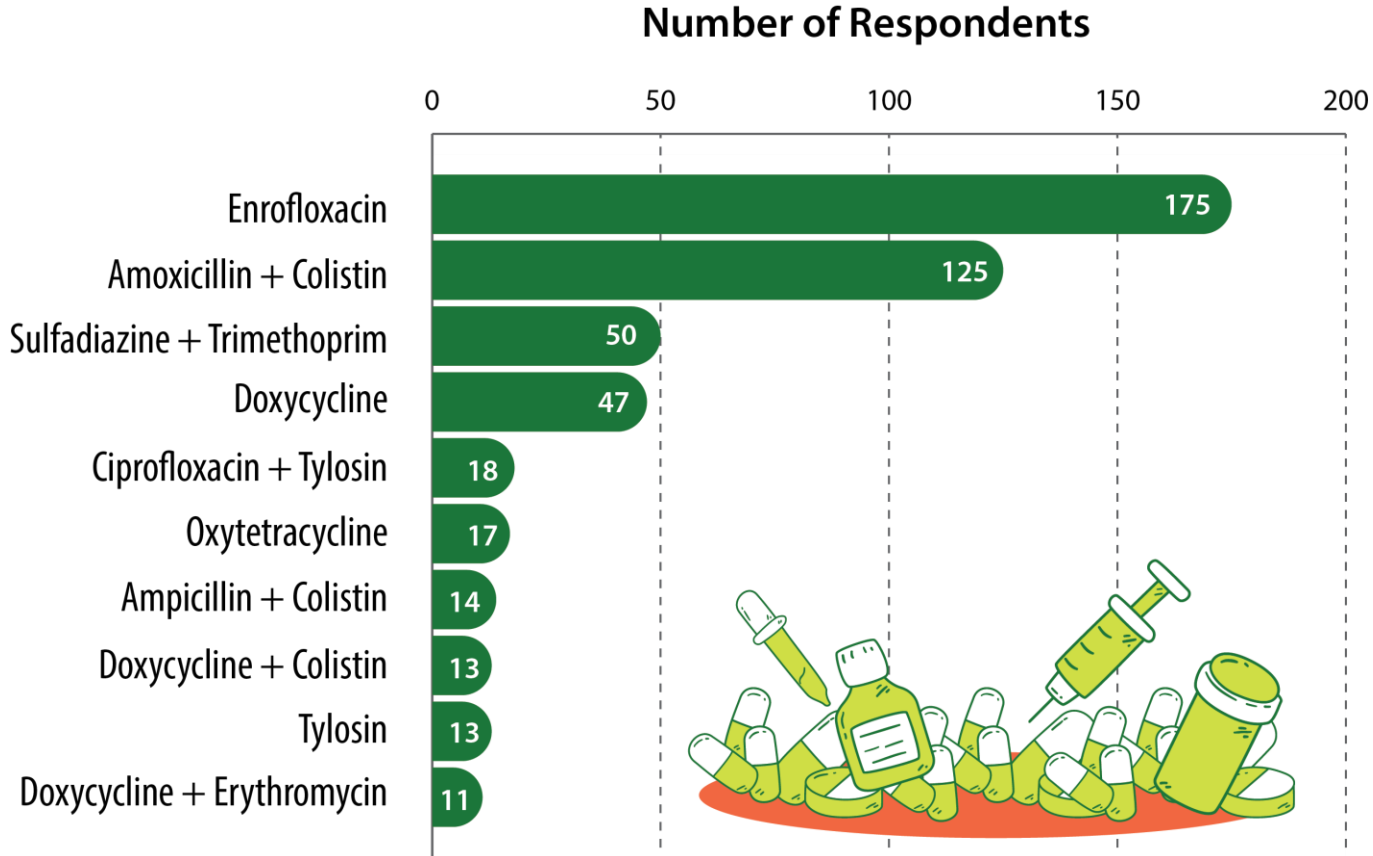
- The survey was conducted in September 2017 by 36 sub-district level of Veterinary Service Officers (VSO).
- 360 broiler farms were selected conveniently.
- The VSOs were trained in the administration of questionnaire surveys & data entry using a web-based application.

Type of ownership of the farms

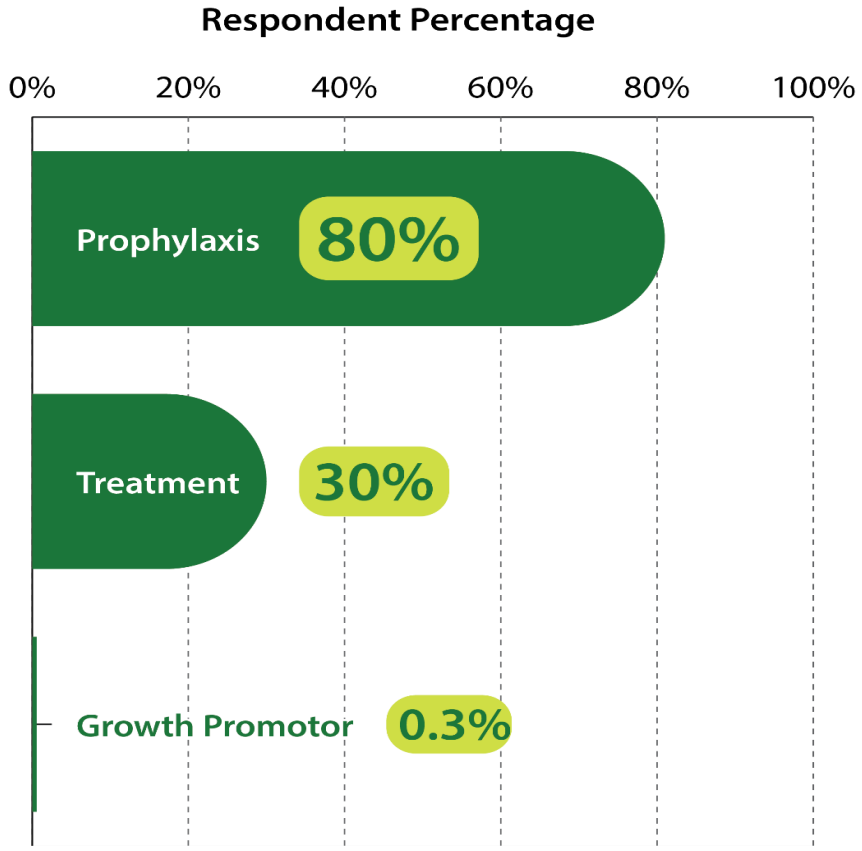


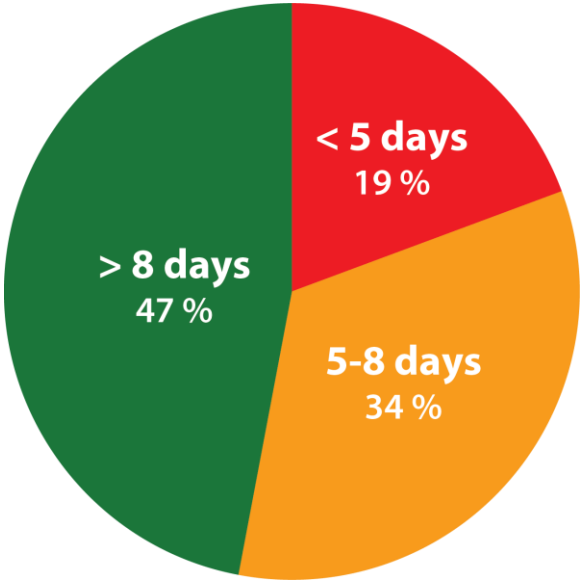


Top Ten Antibiotics (and combinations) used on 360 Surveyed Farms



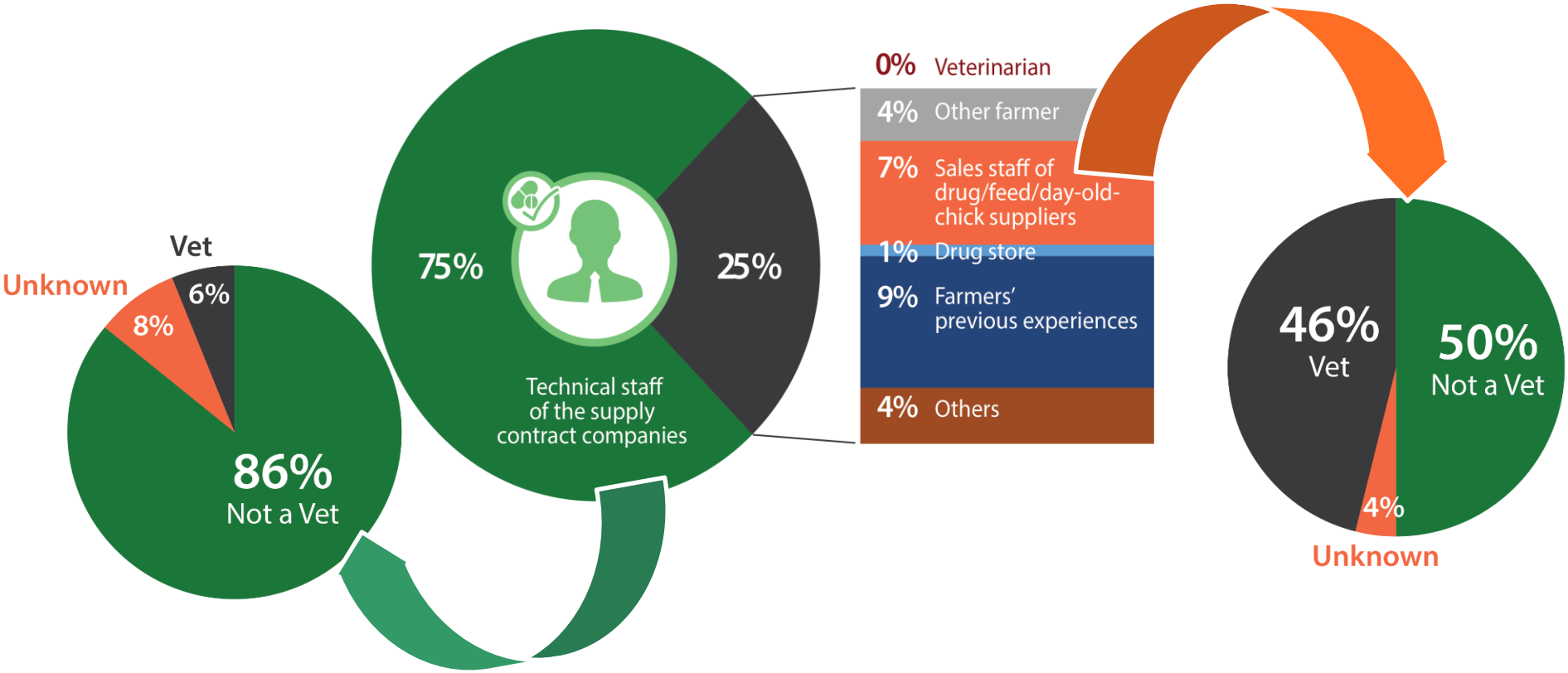
Purpose of Antibiotic Usage on Surveyed Farms





withdrawal time practices by farmers

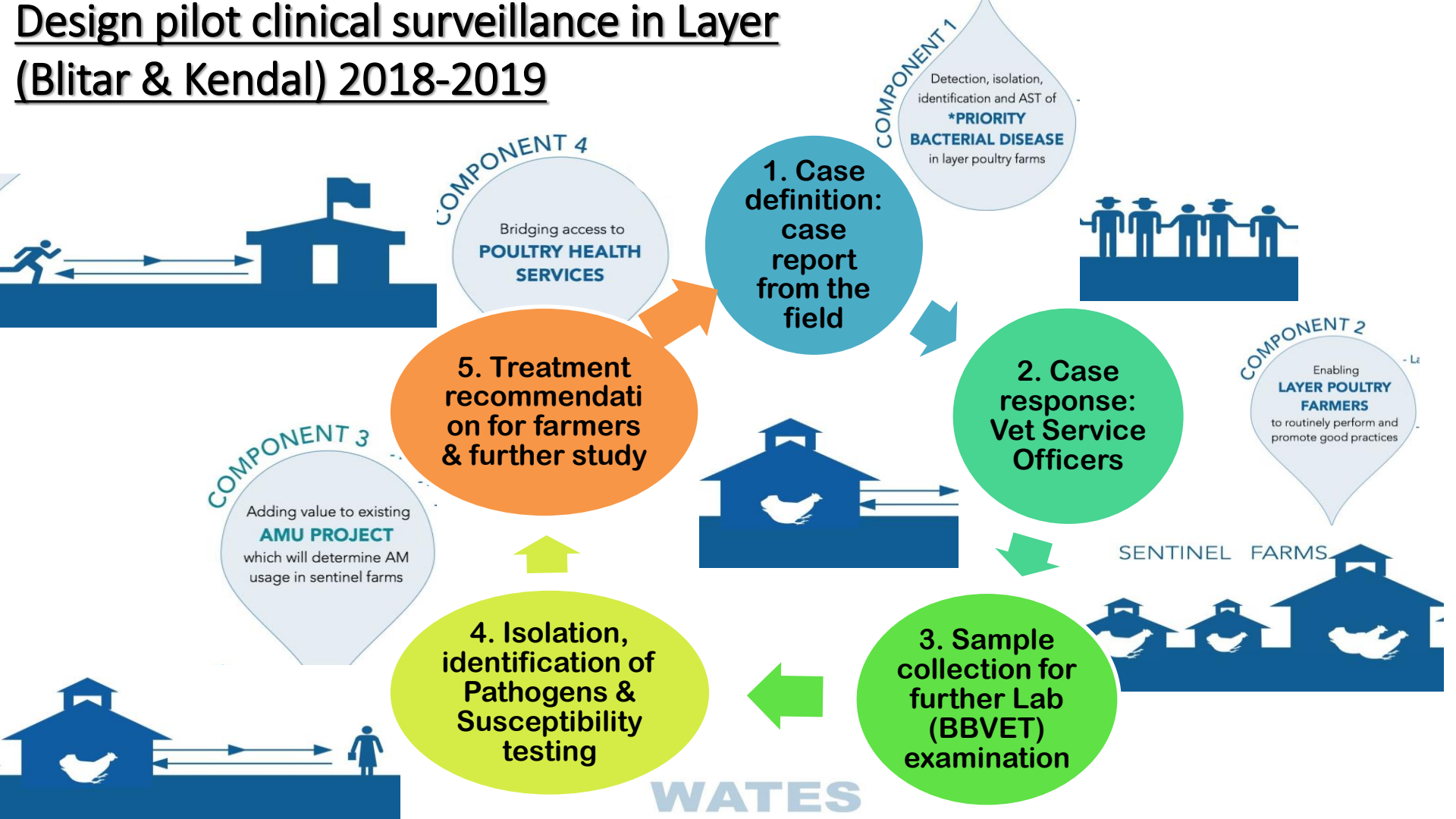
Actors that Influence Treatment Decision Making



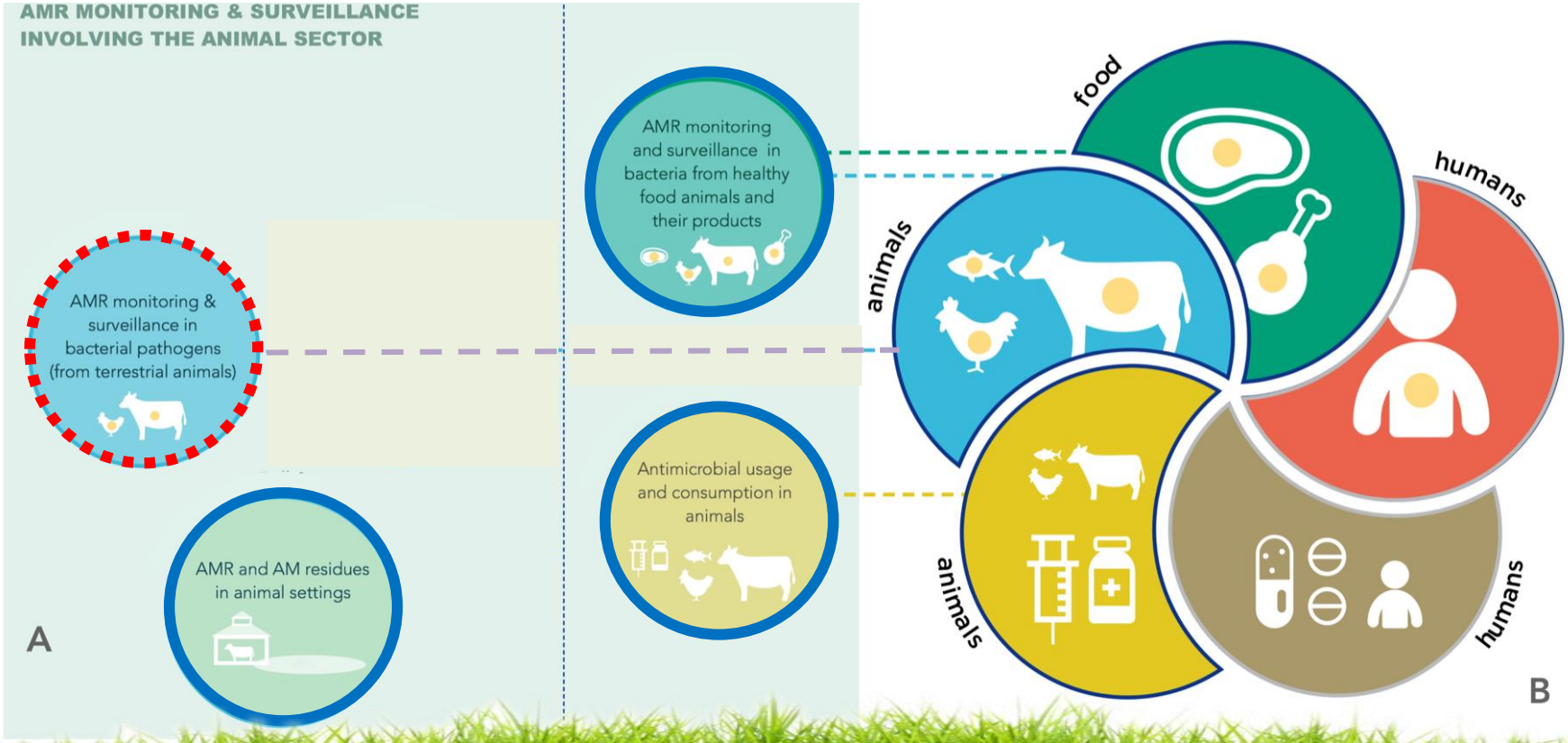
Others finding

- Only 2% of farmers performed antibiotic susceptibility tests to select antibiotics for flock treatment purposes;
- Failures of antibiotic therapeutic treatment in broilers were experienced by 57% of farmers surveyed;
- When failures occurred at marketable age, 80% of farmers would sell the broilers to the market.

Design pilot clinical surveillance in Layer (Blitar & Kendal) 2018-2019



AMR Surveillance system



Acknowledgements

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TERIMA KASIH
THANK YOU