

SUPPLEMENTARY MATERIALS – PART II

ANNEX 1 | Reported reasons for antimicrobial use by systemic syndromes/diseases in poultry and swine commercial and backyard farms in the Philippines

A. Poultry (n = 39 farms).

Antimicrobial class/active ingredient	Enteric n (%)	Respiratory n (%) ¹
Aminoglycosides		
Streptomycin	-	2 (5%)
Fluoroquinolones		
Enrofloxacin	-	13 (33%)
Levofloxacin	-	1 (3%)
Norfloxacin	-	10 (26%)
Macrolides		
Erythromycin	-	3 (8%)
Kitasamycin	-	1 (3%)
Tilmicosin	-	2 (5%)
Tylosin	-	3 (8%)
Penicillin		
Amoxicillin	2 (5%)	8 (20%)
Penicillin	-	1 (3%)
Phenicol		
Florfenicol	-	4 (10%)
Thiamphenicol	-	1 (3%)
Phosphonic acid derivatives		
Fosfomycin	-	4 (10%)
Polypeptides		
Colistin	2 (5%)	3 (8%)
Tetracyclines		
Doxycycline	1 (3%)	5 (13%)
Oxytetracycline	-	4 (10%)
Trimethoprim and sulfonamides		
Trimethoprim-sulfadiazine	1 (3%)	4 (10%)
Trimethoprim-sulfamethoxazole	2 (5%)	-

¹ Percentage is the number of farms using the antimicrobial divided by the total number of poultry farms; please note that responses were not mutually exclusive where one farm may have used the same antimicrobial for the treatment of both enteric and respiratory diseases.

- no response for the antimicrobial and reason for use.

B. Swine (n = 54 farms).

Antimicrobial class/active ingredient	Enteric n (%)¹	Reproductive n (%)	Respiratory n (%)	Nonspecific n (%)
Aminoglycosides				
Apramycin	1 (2%)	-	-	-
Gentamicin	1 (2%)	3 (6%)	3 (6%)	-
Neomycin	1 (2%)	-	-	-
Streptomycin	1 (2%)	-	1 (2%)	-
Cephalosporins				
Ceftiofur	-	-	2 (4%)	-
Cephalexin	1 (2%)	-	-	-
Fluoroquinolones				
Ciprofloxacin	1 (2%)	-	-	-
Danofloxacin	-	-	-	1 (2%)
Enofloxacin	9 (17%)	-	11 (21%)	1 (2%)
Norfloxacin	-	-	3 (6%)	-
Lincosamides				
Lincomycin	1 (2%)	-	2 (4%)	-
Lincomycin-spectinomycin	1 (2%)	-	1 (2%)	-
Macrolides				
Tilmicosin	-	-	4 (8%)	-
Tulathromycin	-	-	1 (2%)	-
Tylosin	5 (9%)	-	7 (13%)	-
Penicillin				
Amoxicillin	1 (2%)	1 (2%)	8 (15%)	1 (2%)
Penicillin	-	-	1 (2%)	-
Phenicols				
Florfenicol	1 (2%)	-	6 (11%)	-
Pleuromutilins				
Tiamulin	4 (8%)	-	8 (15%)	-
Polypeptides				
Colistin	2 (4%)	-	4 (8%)	-
Tetracycline				
Chlortetracycline	2 (4%)	-	1 (2%)	-
Doxycycline	2 (4%)	1 (2%)	7 (13%)	1 (2%)
Oxytetracycline	7 (13%)	4 (8%)	8 (15%)	2 (4%)
Trimethoprim and sulfonamides				
Trimethoprim-sulfadiazine	-	-	2 (4%)	-

¹ Percentage is the number of farms divided by the total number of swine farms; please note that responses were not mutually exclusive where one farm may have used the same antimicrobial for various reasons.

- no response for the antimicrobial and reason for use.

ANNEX 2 | Reported routes of administration of the antimicrobials used on farm

A. Routes of administration in poultry (n=39 farms).

Antimicrobial class/active ingredient	Feed n (%) ¹	Intramuscular n (%)	Water n (%)	Both water and intramuscular n (%) ²
Aminoglycosides				
Streptomycin	-	-	2 (5%)	-
Fluoroquinolones				
Enrofloxacin	-	-	13 (33%)	1 (3%)
Levofloxacin	-	-	1 (3%)	-
Norfloxacin	-	-	9 (23%)	1 (3%)
Phosphonic acid derivatives				
Fosfomycin	-	-	4 (10%)	-
Macrolides				
Erythromycin	-	-	3 (8%)	-
Kitasamycin	-	-	1 (3%)	-
Tilmicosin	-	-	2 (5%)	-
Tylosin	-	-	3 (8%)	-
Penicillins				
Amoxicillin	1 (3%)	-	8 (20%)	-
Penicillin	-	-	1 (3%)	-
Phenicols				
Florfenicol	-	-	4 (10%)	-
Thiamphenicol	-	-	1 (3%)	-
Polypeptides				
Colistin	-	-	5 (13%)	-
Tetracycline	-	-	-	-
Doxycycline	-	-	6 (15%)	-
Oxytetracycline	-	1 (3%)	3 (8%)	-
Trimethoprim and sulfonamides				
Trimethoprim-sulfadiazine	-	1 (3)	4 (10%)	-
Trimethoprim-sulfamethoxazole	-	-	2 (5%)	-

¹ Percentage is the number of responses divided by the total number of poultry farms; please note that responses were not mutually exclusive where one farm may have used the same antimicrobial administered via different routes of administrations.

² These antimicrobial active ingredients have pharmaceutical forms intended for both oral and intramuscular administration.

- no response for the antimicrobial and reason for use.

B. Routes of administration in swine (n=53 farms).

Antimicrobials class/active ingredient	Feed n (%)	Both feed and intramuscular n (%)	Intramuscular n (%)	Water n (%)
Aminoglycosides				
Apramycin	-	-	-	1 (2%)
Gentamicin	-	-	7 (13%)	-
Neomycin	1 (2%)	-	-	-
Streptomycin	-	-	-	2 (4%)
Cephalosporins				
Ceftiofur	-	-	2 (4%)	-
Cephalexin	-	-	-	1 (2%)
Fluoroquinolones				
Ciprofloxacin	-	-	-	1 (2%)
Danofloxacin	-	-	1 (2%)	-
Enrofloxacin	-	1 (2%)	18 (34%)	2 (4%)
Norfloxacin	-	-	2 (4%)	1 (2%)
Lincosamides and aminocyclitols				
Lincomycin	-	1 (2%)	2 (4%)	-
Lincomycin-spectinomycin	1 (2%)	-	1 (2%)	-
Macrolides				
Tilmicosin	2 (4%)	1 (2%)	1 (2%)	-
Tulathromycin	-	-	1 (2%)	-
Tylosin	1 (2%)	1 (2%)	9 (17%)	1 (2%)
Penicillin				
Amoxicillin	-	3 (6%)	7 (13%)	1 (2%)
Penicillin	-	-	1 (2%)	-
Phenicols				
Florfenicol	-	4 (8%)	3 (6%)	-
Pleuromutilins				
Tiamulin	4 (8%)	3 (6%)	4 (8%)	1 (2%)
Polypeptides				
Colistin	1 (2%)	1 (2%)	-	4 (8%)
Tetracyclines				
Chlortetracycline	2 (4%)	-	1 (2%)	-
Doxycycline	2 (4%)	3 (6%)	2 (4%)	4 (8%)
Oxytetracycline	1 (2%)	1 (2%)	19 (36%)	-
Trimethoprim and sulfonamides				
Trimethoprim-sulfadiazine	-	-	2 (4%)	1 (2%)

¹ Percentage is the number of responses divided by the total number of swine farms; please note that responses were not mutually exclusive where one farm may have used the same antimicrobial administered via different routes of administrations.

²*These antimicrobial active ingredients have pharmaceutical forms intended for both oral and intramuscular administration.*

- no response for the antimicrobial and reason for use.