Sample ID	Household/Market ID	Geographical location	Read pairs after QC	Study site	Status	Sample type	Date of collection	SampleID	ESBL_PCR
DL_062_01_FH	DL062	Dhaka city	38561353	Live bird market (urban)	High exposure	Human faecal sample	Feb-Apr 2017	311011DL062	Negative
DL_066_01_FH	DL066	Dhaka city	37658625	Live bird market (urban)	High exposure	Human faecal sample	Feb-Apr 2017	311011DL066	Negative
DL_074_01_FL	DL074	Dhaka city	39966031	Live bird market (urban)	Low exposure	Human faecal sample	Feb-Apr 2017	321111DL074	Negative
DL_076_01_FL	DL076	Dhaka city	43026003	Live bird market (urban)	Low exposure	Human faecal sample	Feb-Apr 2017	321111DL076	Positive
DL_079_01_FL	DL079	Dhaka city	43091262	Live bird market (urban)	Low exposure	Human faecal sample	Feb-Apr 2017	321111DL079	Negative
DL_080_01_FL	DL080	Dhaka city	33379746	Live bird market (urban)	Low exposure	Human faecal sample	Feb-Apr 2017	321111DL080	Negative
DL_087_01_FH	DL087	Dhaka city	39777683	Live bird market (urban)	High exposure	Human faecal sample	Feb-Apr 2017	311011DL087	Positive
DL_096_01_FL	DL096	Dhaka city	38650205	Live bird market (urban)	Low exposure	Human faecal sample	Feb-Apr 2017	321111DL096	Positive
DL_164_01_FH	DL164	Dhaka city	37259951	Live bird market (urban)	High exposure	Human faecal sample	Aug-Oct 2017	311012DL164	Positive
DL_181_01_FH	DL181	Dhaka city	38090402	Live bird market (urban)	High exposure	Human faecal sample	Aug-Oct 2017	311012DL181	Negative
DL_187_01_FH	DL187	Dhaka city	37229794	Live bird market (urban)	High exposure	Human faecal sample	Aug-Oct 2017	311012DL187	Positive
DL_191_01_FL	DL191	Dhaka city	41843041	Live bird market (urban)	Low exposure	Human faecal sample	Aug-Oct 2017	321112DL191	Negative
DL_194_01_FL	DL194	Dhaka city	36366343	Live bird market (urban)	Low exposure	Human faecal sample	Aug-Oct 2017	321112DL194	Positive
TR_002_01_FH	TR002	Tangail district	35007151	Rural household	High exposure	Human faecal sample	Feb-Apr 2017	111011TR002	Negative
TR_008_01_FH	TR008	Tangail district	35780040	Rural household	High exposure	Human faecal sample	Feb-Apr 2017	111011TR008	Negative
TR_011_01_FL	TR011	Tangail district	36152833	Rural household	Low exposure	Human faecal sample	Feb-Apr 2017	121111TR011	Negative
TR_018_01_FL	TR018	Tangail district	45782819	Rural household	Low exposure	Human faecal sample	Feb-Apr 2017	121111TR018	Positive
TR_020_01_FL	TR020	Tangail district	37837958	Rural household	Low exposure	Human faecal sample	Feb-Apr 2017	121111TR020	Negative
TR_118_01_FL	TR118	Tangail district	40500030	Rural household	Low exposure	Human faecal sample	Aug-Oct 2017	121112TR118	Positive
TR_120_01_FL	TR120	Tangail district	45641601	Rural household	Low exposure	Human faecal sample	Aug-Oct 2017	121112TR120	Positive
DL_061_CL1	DL062	Dhaka city	51141259	Live bird market (urban)	High exposure	Poultry caecal sample	Feb-Apr 2017	31911DL062	Negative
DL_067_CL1	DL067	Dhaka city	44121474	Live bird market (urban)	High exposure	Poultry caecal sample	Feb-Apr 2017	31911DL067	Positive
DL_083_CL1	DL083	Dhaka city	38094318	Live bird market (urban)	High exposure	Poultry caecal sample	Feb-Apr 2017	31911DL083	Negative
DL_087_CL1	DL087	Dhaka city	38648142	Live bird market (urban)	High exposure	Poultry caecal sample	Feb-Apr 2017	31911DL087	Positive
DL_164_CL	DL164	Dhaka city	45859444	Live bird market (urban)	High exposure	Poultry caecal sample	Aug-Oct 2017	31912DL164	Positive
DL_186_CL	DL186	Dhaka city	46070830	Live bird market (urban)	High exposure	Poultry caecal sample	Aug-Oct 2017	31912DL186	Positive
TR_002_CL	TR002	Tangail district	38881971	Rural household	High exposure	Poultry caecal sample	Feb-Apr 2017	11911TR002	Negative
TR_006_CL	TR006	Tangail district	37902384	Rural household	High exposure	Poultry caecal sample	Feb-Apr 2017	11911TR006	Positive
TR_008_CL	TR008	Tangail district	30431280	Rural household	High exposure	Poultry caecal sample	Feb-Apr 2017	11911TR008	Negative
TR_101_CL	TR101	Tangail district	35535578	Rural household	High exposure	Poultry caecal sample	Aug-Oct 2017	11912TR101	Positive
TR_006_WWK1	TR006	Tangail district	37077148	Rural household	High exposure	Waste water	Feb-Apr 2017	11411TR006	Positive
TR_116_WW	TR116	Tangail district	42493061	Rural household	Low exposure	Waste water	Aug-Oct 2017	12412TR116	Positive
TR_118_WW	TR118	Tangail district	36023980	Rural household	Low exposure	Waste water	Aug-Oct 2017	12412TR118	Positive
TR_120_WW	TR120	Tangail district	37031265	Rural household	Low exposure	Waste water	Aug-Oct 2017	12412TR120	Positive
DL_062_WW2	DL062	Dhaka city	27439521	Live bird market (urban)	High exposure	Waste water-2	Feb-Apr 2017	311311DL062	Positive
DL_067_WW2	DL067	Dhaka city	25026740	Live bird market (urban)	High exposure	Waste water-2	Feb-Apr 2017	311311DL067	Positive
DL_087_WW2	DL087	Dhaka city	3829374	Live bird market (urban)	High exposure	Waste water-2	Feb-Apr 2017	311311DL087	Positive
DL_164_WW2	DL164	Dhaka city	11057317	Live bird market (urban)	High exposure	Waste water-2	Aug-Oct 2017	311312DL164	Positive
DL_168_WW2	DL168	Dhaka city	40957429	Live bird market (urban)	High exposure	Waste water-2	Aug-Oct 2017	311312DL168	Positive
DL_186_WW2	DL186	Dhaka city	39592199	Live bird market (urban)	High exposure	Waste water-2	Aug-Oct 2017	311312DL186	Positive

Supplementary Table 1. Description of metadata for all 40 metagenome samples analysed in this study. Samples with the same Household/Market ID were collected from the same location. Read pairs after QC relates to the number of read pairs remaining following non-target removal and trimming. Status reflects exposure to poultry (hence all poultry caecal samples are denoted high exposure).

Intersection	Shared unique ARG subtypes	Antibiotic group breakdown (ARG subtypes)
Human faecal (high exposure)	2	beta-lactam (2)
Human faecal (low exposure)	28	beta-lactam (26); MLS (1); trimethoprim (1)
Human faecal (high exposure): Human faecal (low exposure)	12	beta-lactam (8); MLS (2); defensin (1); multidrug (1)
Poultry (caecal): Human faecal (high exposure)	3	vancomycin (2); MLS (1)
Poultry (caecal): Human faecal (low exposure)	1	phenicol (1)
Poultry (caecal): Human faecal (high exposure):Human faecal (low exposure)	5	vancomycin (3); MLS (1); beta-lactam (1)
Poultry (caecal)	26	beta-lactam (7); vancomycin (7); MLS (5); aminoglycoside (4); phenicol (1); polymyxin (1); multidrug (1)
Poultry (caecal): Wastewater: Human faecal (high exposure)	6	MLS (2); multidrug (2); beta-lactam (1); aminoglycoside (1)
Poultry (caecal): Wastewater: Human faecal (high exposure): Human faecal (low exposure)	158	vancomycin (3); sulfonamide (3); mupirocin (3); bacitracin (2); phenicol (2); rifamycin (2); novobiocin (1); other peptide antibbiotics (1); pleuromutilin (1)
Poultry (caecal): Wastewater: Human faecal (low exposure):	57	beta-lactam(15); aminoglycoside (14); phenicol (10); multidrug (5); trimethoprim (4); quinolone (3); MLS (2); tetracyline (1); polymyxin (1); bleomycin (1); fosfomycin (1)
Poultry (caecal): Wastewater	81	aminoglycoside (19); polymyxin (12); MLS (11); phenicol (9); beta-lactam (7); multidrug (6); tetracycline (5); trimethoprim (3); vancomycin(3); quinolone (3); fosfomycin (1); rifamycin (1); streptothricin (1)
Wastewater: Human faecal (high exposure)	9	beta-lactam (3); multidrug (3); MLS (2); quinolone (1)
Wastewater: Human faecal (high exposure): Human faecal (low exposure)	41	beta-lactam (25); multidrug (5); tetracycline (5); fosfomycin (3); MLS (1); polymyxin (1); quinolone (1)
Wastewater: Human faecal (low exposure)	52	beta-lactam (33); quinolone (6); multidrug (4); tetracycline (4); fosfomycin (2); MLS (1); polymyxin (1); antibacterial fatty acid (1)
Wastewater	566	beta-lactam (309); aminoglycoside (57); multidrug (39); quinolone (27); polymyxin (23); tetracycline (22); trimethoprim (22); phenicol (13); rifamycin (7); vancomycin (5); defensin (2); tunicamycin (1); sulfonamide (1); streptothricin (1); fusidic acid (1); bicyclomycin (1); antibacterial fatty acid (1)

Supplementary Table 2. Demonstrating that wastewater samples harbour a diverse range of ARG subtypes undetected in both human faecal and poultry caecal samples. The intersection of unique ARG subtypes occurring in ≥2 samples from each sample origin (human faecal, poultry caecal and wastewater). The number of unique ARG subtypes within an intersection is shown in column two; the contribution of different antibiotic groups to the intersection is shown in column three, with the number of ARG subtypes displayed in brackets.

General Contig Information & Metadata					esistance Gene Identifier (RGI) Protein Homology Outpu				megaBLAST		
Contig ID	Sample	Origin	Setting	Contig Length (bp)	Best Hit ARO	AMR Gene Family	Amino acid Identity (%)	Reference Gene Coverage (%)	Taxonomy (best combined identity and query coverage)	Nucleotide Identity (%)	Query Coverage (%)
TR_120_WW__k141_222896	TR_120_WW	Wastewater	Rural Household	3200	OXA-65	OXA beta-lactamase	100	99.64	*Acinetobacter baumannii* strain B8300 (CP021347.1)	99.34	100
DL_168_WW2__k141_898078	DL_168_WW	Wastewater	Urban Wet Market	1853	GES-5	GES beta-lactamase	100	100	*Klebsiella pneumoniae* strain NMI4661/17 plasmid (MN436715.1)	100	70
DL_186_WW2__k141_1129259	DL_186_WW	Wastewater	Urban Wet Market	1585	GES-2	GES beta-lactamase	100	100	*Pseudomonas aeruginosa* strain C79 chromosome (CP040684.1)	95.59	82

Supplementary Table 3. Metadata for contigs with taxonomic and genotypic evidence to suggest the presence of 'critical concern' antibiotic resistant organisms in wastewater samples.