## Sample conceptual monitoring and evaluation framework for national action plans on antimicrobial resistance

Planning Baseline		Input Basic resources	Process Activities	Output Results at level of the programme	Outcome Results at level of populations	Impact Ultimate effect in long term
Situation analysis, needs assessment, resources analysis, synthesis of published research		Policies and legislation, guidelines, standards; funding; human resources; laboratory facilities; communication facilities and materials; equipment and consumables	Research, surveillance, training, coordination, management, engagement, promotion, social mobilization, media campaigns, prevention and control, standard operating procedures and tools, quality assurance, technical support, stewardship	Implemented programmes, networks and coordination mechanisms, resources mobilized, innovation promoted, improved methods, research agendas, laboratory capacity, good laboratory and epidemiological data, feedback to data providers, trained staff, educated public	Greater awareness and knowledge, better behaviour, wider population coverage and access, sustainable financing, moderated consumption, stewardship and diagnosis, completeness of reporting, use of surveillance data	Prevalence of AMR and preventable infections, attributed morbidity, attributed mortality, social impact, macroeconomic impact, microeconomic impact
Examples of indicators:	GAP strategic objective 1	Communication programme targeting people in food practice prepared Funding for developing media kit on AMR secured	Participation in global antibiotic awareness week  Number of awareness-raising campaigns targeting health professionals	Proportion of secondary schoolchildren in targeted locations received education on AMR	AMR awareness levels in target populations	Number of communicable disease outbreaks caused by multi-drug-resistant organisms  Number of bloodstream infections caused by <i>E. coli</i> resistant to fluoroquinolones per 100 000 population  Incidence of catheter-associated urinary tract infections caused by multi-drug-resistant organisms  Excess mortality associated with bloodstream infections caused by carbapenem-resistant Enterobacteriaceae  Excess hospital expenditure associated with bloodstream infections caused by methicillin-resistant <i>Staphylococcus aureus</i>
	GAP strategic objective 2	Terms of reference for a national coordinating centre for AMR surveillance prepared Presence of strategic and operational plans for implementing and strengthening AMR surveillance	National laboratory quality assurance programme organized and implemented in all laboratories participating in AMR surveillance Proportion of national surveillance staff trained in AMR surveillance, including GLASS method	National report on surveillance of AMR published  National AMR research agenda developed	Proportion of AMR surveillance sites that submitted surveillance reports to the national coordinating centre on time  Number of AMR surveillance sites participating in GLASS	
	GAP strategic objective 3	Hygiene and infection prevention and control included in undergraduate curricula for animal health professionals  Curriculum and training materials for continuing education on infection prevention and control for health care workers available	Number of train-the-trainers courses on hygiene and infection prevention in agriculture conducted  Number of continuing education courses on infection prevention and control conducted	Proportion of tertiary and large hospitals (> 400 beds) with implemented infection prevention and control programmes  Proportion of animal health facilities with implemented infection prevention and control programmes	Percentage of hospitals with hand hygiene compliance rates > 90% Percentage of animal health facilities with successful results of infection prevention and control programme audit	
	GAP strategic objective 4	List of critically important antibiotics prepared National quality standards for antimicrobials set	Number of antimicrobial agents authorized for marketing	Percentage of hospitals with specific treatment recommendations based on local antimicrobial susceptibility for common clinical conditions  Number of veterinary workers trained in responsible use of antimicrobials	Percentage of hospitals prescribing antimicrobial agents for surgical prophylaxis compliant with facility-specific guidelines in > 80% of sampled cases  Number of antimicrobial days per month per health facility	
	GAP strategic objective 5	Funding secured for creation and functioning of national multisectoral coordination mechanism	AMR NAP budget updated	Plan to secure and use financing for the NAP prepared  Number of new public–private partnerships created to encourage research and development of new antimicrobial agents	Research funds invested per patient death from infections caused by multi-drug-resistant organisms Funding gaps (currency) by investment area	