Duration: Two years (1st December 2020 to 1st December 2022)

Kenya's activities under the MPTF project set out to strengthen biosecurity and IPC, monitor antimicrobial consumption and improve stewardship, as well as implement awareness raising and educational activities. Among the main activities being undertaken by Kenya are:

- Capacity building on HAI surveillance and strategies for IPC
- Development and dissemination of farm biosecurity guidelines
- Development of a reporting system and database to support county level antimicrobial consumption in humans as well as improvement of reporting of AMU in animals
- Scaling up implementation of national AMS guidelines
- Publication/development of newsletters and peer articles on AMR progress and NAP implementation

Highlights of project so far

The AMR MPTF project in Kenya was officially launched on 18 February 2021, with representatives of donors, the government, the Tripartite Secretariat and the three organizations in attendance. Activities began with the joint development of the MPTF project's M&E plan together with data collection tools to facilitate the monitoring of progress made. The M&E plan and data collection tools were finalized by February 2021.

This was followed by a baseline survey for the three output areas that are the focus of the project, to identify current status and document gaps in infection prevention and control (IPC), antimicrobial stewardship (AMS), the existing systems for AMU, as well as the capacity to design AMR awareness raising messaging and educational activities targeting behaviour change. The baseline report was finalized in October 2021.

The baseline assessment of IPC and AMS practices was carried out in May to September 2021 in six counties namely Kiambu, Embu, Machakos, Mombasa, Uasin Gishu and Busia. The assessment was carried out by staff from the Ministry of Health (Division of Patient & Health Worker Safety), county health management and individual health facilities.

The IPC assessment was done using a national Infection Control Assessment Tool (ICAT) to assess the current IPC situation in the target facilities while AMS assessment was done using a standardized checklist adapted from WHO to identify existing and missing core elements for AMS programs at the county and facility level.

Joint efforts between OIE and FAO were made towards developing a set of management and physical measures designed to reduce the risk of introduction, establishment and spread of animal diseases, infections, or infestations to, from and within an animal population. A workshop in March 2021 brought together veterinarians drawn from the National Directorate of Veterinary Services (DVS), County Directorates of Veterinary Services (CDVS) and other expert field veterinarians working in the poultry, pig and dairy cattle value chains to develop biosecurity guidelines. The draft farm biosecurity guidelines were developed in reference to existing regulations, OIE international standards, reference texts and best practice.

This was followed by a national stakeholder's workshop in May 2021 to review and validate the farm biosecurity guidelines. A wider agricultural sector representation including the DVS, the Kenya Dairy Board (KDB), the Department of Livestock Production (DLP), other expert field veterinarians, industry representatives, private animal health practitioners working in the identified poultry, pig and dairy cattle value chains contributed to the process. The adoption of biosecurity measures proposed in the guidelines is expected to contribute to improved and sustainable animal husbandry, antimicrobial use associated behaviors and practices among the three livestock value chains and consequently reduce the need for antimicrobials during production as well as minimize AMR risks attributed to foods.

The validated farm biosecurity guidelines have been used to train 29 veterinary paraprofessionals (VPPs) who play an important role in animal disease surveillance, prevention, and control as well as providing basic clinical services. A training of trainers in October 2021 aimed to create an understanding among the 30 public and private VPPs about the link between implementation of farm biosecurity measures and reduced

emergence and spread of AMR and about how to share this information in the course of their work. The participants were drawn from 15 counties with a high potential for production of dairy cattle, pigs and poultry. The counties included Kiambu, Baringo, Nairobi, Kakamega, Laikipia, Kirinyaga, Kajiado, Trans Nzoia, Nyeri, Kericho, Narok, Murang'a, Nakuru, Nyandarua and Isiolo. The objective of the training was to build a pool of competent instructors and to prepare the selected VPPs as future trainers for continued dissemination and implementation of farm biosecurity measures.

A training was organized in December 2021 for county veterinarians in recognition of the critical roles in regulation and supervision of use of antimicrobials including offering professional advice on their use to farmers and animal keepers. The participants were drawn from both the public and private sectors in the same 15 counties mentioned prior. The objective of their training was to ensure that well-trained public and private veterinarians are at the forefront in the implementation of the National Action Plan on antimicrobial resistance (AMR- NAP)

Main challenges

Due to the increasing cases of COVID-19 during the first quarter of 2021, restrictions on holding physical meetings were introduced in the country. This resulted in the postponement of some activities as well as a smaller number of participants attending workshops. The stakeholder review and validation workshop for farm biosecurity guideline documents was delayed by three months.

There was clear guidance from the Ministry of Health on COVID-19 measures to be observed and guidance regarding the continued implementation of activities relating to the Ministry of Health. The postponed activities were successfully held at later dates when the restrictions on physical gatherings were lifted.

Key stakeholders who were affected by Covid-19 were given the opportunity to provide comments to working documents virtually. Their input was later integrated into the documents under development just as it would have been during workshops. Having recovered and been declared healthy, these participants were also able to join the other stakeholders during the review and validation session for the farm biosecurity workshop.

Learning Innovation

There were several gaps in IPC knowledge among professionals which varied across facilities and departments. The establishment of AMS programs and AMS structures were at different levels of progress in different counties. Generally, AMS committees are part of medicines and therapeutic committees in most facilities. Knowledge gaps on AMR and the link between AMR & IPC exist among health care workers and leadership across all levels of health care delivery

Leadership support and existing governance structures play a key role in IPC and AMS.

Carrying out of some activities required more time than originally planned, especially those that required a wide stakeholder engagement (such as the development, review, and validation of the farm biosecurity guidelines). Ideally, the activity should have been a three-step activity and not a two-step one as planned.

Developing guidance materials for stakeholders requires considerable time and going forward planning in sufficient time for editing, formatting, and printing is required.

County government colleagues are eager and look forward to receiving support from the national government in implementing the AMR-NAP.

Review of progress against log frame

Log frame outcomes

MPTF Outcome	Indicators	Assumptions – any revisions? Put here	
Outcome 1: Use of antimicrobials optimized in critical sectors	1. Tools for Country level AMC/AMU data collection developed for human and animal health	Pharmacy and Poisons Board and the Veterinary Medicines Directorate will support the processes.	
		All stakeholders required for this process are willing to participate	
	2. AMC/AMU databases developed in the MoH and MoALFC	There will be adequate capacity to develop the databases in a timely manner.	
Outcome 2: Improved understanding of AMR risks and response options by targeted groups	National and county targeted AMR awareness campaigns established	Stakeholders from counties will be willing to participate in the awareness campaigns.	
		Respondents will be willing to participate in the assessment.	

Log frame outputs and associated indicators

MPTF Output	Indicators	Progress description (activities started/completed)	Indicator % met
Systems for biosecurity and IPC strengthened	National biosecurity and IPC practice guidelines developed and disseminated	 Farm biosecurity guidelines for diary, poultry and pig value chains were: developed in a workshop in March 2021 involving multi-sectoral experts from public and private sectors validated during a review workshop in Aug 2021, and disseminated to veterinarians and paraprofessionals during training sessions where trainees were also informed to further disseminate the guidelines to stakeholders in their respective networks. National IPC guidelines disseminated - Guidelines have been published on the MOH website and ECHO platform used for further dissemination. 	100%
	Number of professionals trained on IPC	Baseline assessments for AMS and IPC completed in the six counties and selected facilities.	100%
	Number of professionals (Training of Trainers) and farmers trained on Biosecurity	Thirty county veterinary paraprofessionals (14 men, 16 women) trained as Trainers of Trainers on farm biosecurity measures in October 2021. Twenty-nine county veterinarians (22 men, 7 women) trained on AMR-NAP implementation,	50%-75%

		responsible use of antimicrobials and Farm Biosecurity in Dec 2021. 150 farmers sensitized in Bungoma county during WAAW 2021 celebrations.	
Systems for optimized use of antimicrobials strengthened in critical human and animal sectors Improved capacity to design awareness raising, behavior change and educational activities	Number of regulatory frameworks for AMC/AMU in human and animal health revised/developed/updated.	To be done in 2022	0%
	Guidelines for prudent use of antimicrobials in animals disseminated to veterinarians and veterinary paraprofessionals	Guidelines on prudent use of antimicrobials and those of farm biosecurity in dairy, poultry and pig production shared with County veterinarians and veterinary paraprofessionals during various trainings.	50-75%
	Support delivery of two (2) nationwide AMR campaign targeting stakeholders' groups based on targeted messaging within sectors	 Supported WAAW 2021 celebrations: at national level with a 1-day meeting to train the media on AMR and a high-level meeting to launch WAAW and launched documents to support implementation of Kenya's AMR-NAP. at subnational level by enabling Bungoma County AMS Interagency Committee (CASIC) to hold a farmer field day that sensitized more than 150 farmers and other key stakeholders. During WAAW 2021, various awareness creation materials (banners, branded t-shirts and caps) were distributed at national level as well as to five CASICs. 	50-75%
	Communication strategy harmonized	Joint and sector specific awareness activities with joint AMR messages developed, organized and communicated	50-75%

Risk matrix – no changes

Risk description	Risk Category:	Worst case consequence for the project	Risk Score			
	Contextual Programmatic Institutional		Impact	Likelihood	Mitigating action	Action owner
COVID-19 situation	Contextual	Delay in start of the project activities on the ground	High	High	Several activities were carried out virtually, such as launching the AMR MPTF project, holding national consultations etc.	Tripartite
Inadequate coordination amongst the key stakeholders	Institutional	Delay in implementation of activities	High	Medium	Early consultation with key focal points and continued engagement	Tripartite
Political instability and changes in focal points	Institutional	Changes in the activities and priorities	Medium	Low	Involve all relevant stakeholders including policy, technical and operational staff working on AMR/AMU to maintain continuity	Tripartite
Delay in fund release	Programmatic	Delayed implementation of the project activities	Medium	Low	Continuous follow up and identification of focal points at HQ/Regional/National Tripartite offices.	Tripartite