

The Antimicrobial Resistance (AMR) MULTI-PARTNER TRUST FUND

Combatting the rising global threat of AMR through a One Health Approach

Country Proposal Submission TEMPLATE

Full proposal overview

Country	Kenya
Project title	AMR MPTF: Preventive Approaches to Containment of AMR
Implementing entities	<i>WHO, OIE, FAO, Ministry of Health and Ministry of Agriculture, Livestock, Fisheries and Cooperatives (Kenya)</i>
Timeframe	<i>24 months – (January 2021 – December 2022)</i>
Lead Tripartite Focal Point	
Name	<i>Jane Lwoyero</i>
Agency	<i>World Organization of Animal Health (OIE)</i>
Title	<i>Program Officer</i>
E-mail	<i>j.lwoyero@oie.int</i>
Telephone number (include country and city code)	<i>+254721905632</i>
Address	<i>OIE Sub-Regional Representation for Eastern Africa and the Horn of Africa, 4th Floor, Taj Towers, Upper Hill Road, Upper-Hill P.O. Box 19687, Nairobi 00202, KENYA</i>
Counterpart Tripartite Focal Points	
Name	<i>Regina Mbindyo</i>
Agency	<i>World Health Organisation (WHO)</i>
Title	<i>Country Team Adviser, Essential Medicines & Health Technologies</i>
E-mail	<i>mbindyor@who.int</i>
Telephone number (include country and city code)	<i>+254733678332</i>
Name	<i>Stella Kiambi</i>
Agency	<i>Food and Agriculture Organisation of the United Nations (FAO)</i>
Title	<i>National Coordinator for AMR</i>
E-mail	<i>Stella.Kiambi@fao.org</i>
Telephone number (include country and city code)	<i>+254724283920</i>
Other Implementing Partners	<i>Government of Kenya; Ministry of Health and Ministry of Agriculture, Livestock, Fisheries, and Cooperatives</i>
Budget	
<i>Total amount (USD) based on budget summary in Annex</i>	<i>1,000,000</i>
<i>Total amount (USD) allocated to each Tripartite partner</i>	<i>WHO= 300,000, OIE=400, 000, FAO = 300, 000</i>
Background	<i>Antibiotics have been useful in fighting infectious diseases for decades. These medicines have played a critical role in saving lives and have been</i>

used in agriculture mainly in animal production for both therapeutic and non-therapeutic purposes. Unfortunately, antimicrobial resistance (AMR) among bacteria of clinical and veterinary importance has reached levels that may reverse the gains made so far in management and control of infections.^{1,2} Both overuse and misuse/abuse of the antimicrobial agents in both human and veterinary practices have been documented to be responsible for the current crises, each side sometimes apportioning blame to the other.³ In Kenya as the human population grows, there will be increased use of antimicrobials to enhance food production. The country will witness commensurate increase in resistance to commonly used antimicrobials, a scenario that does not augur well for treatment and management of infections in both humans and animals. This is especially important for zoonotic bacterial pathogens and antimicrobial resistance (AMR) genes that may be transmitted through various mechanisms between humans and animals.

The situation in Kenya shows a rising trend in AMR in key Gram positive and Gram negative bacterial pathogens including methicillin resistant *Staphylococcus aureus* (5-10%) from hospitalized patients, reduced susceptibility of community acquired pneumococci (19%), multi-drug resistant extended spectrum beta lactamase producing *Salmonella typhimurium* (65%) and *Vibrio cholerae* (68%) from outbreaks in Kenya. With increasing resistance to fluoroquinolones also reported in typhoid outbreaks (25%), there are few antimicrobials options for treatment of these infections in a resource limited setting like in Kenya.⁴

The Knowledge Attitude and Practice (KAP) analyses among healthcare workers at different levels of healthcare and among farmers in different livestock value chains revealed a general awareness of AMR and its effects on society, but the utilization of this knowledge to prevent AMR in clinical practice was lacking.⁵

Although various pieces of legislation exist on the regulation of antimicrobials in human and animal health as well as crop protection in Kenya, they are fragmented, and enforcement is weak. This situation lends itself to the unlikelihood for effective tackling of the problem of AMR in the country. There are, however, efforts being undertaken to review these legislative instruments to align their implementation to the *One Health* (OH) approach.

- ¹ O'Neill (2014) Review on AMR, Antimicrobial resistance: Tackling a crisis for the health and wealth of nations. (https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwir7M6Js73rAhXwAmMBHfoBA-wQFjAAegQIBhAB&url=https%3A%2F%2Famr-review.org%2Fsites%2Fdefault%2Ffiles%2FAMR%2520Review%2520Paper%2520-%2520Tackling%2520a%2520crisis%2520for%2520the%2520health%2520and%2520wealth%2520of%2520nations_1.pdf&usg=AOvVaw2o4ZjnxVEehWL9MapFf5DH).
- ² O'Neill, J. (2016). Tackling drug resistant infections globally: Final report and recommendation (https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwj50Nkqb3rAhWR2hQKHUGNDewQFjABegQIBRAB&url=https%3A%2F%2Famr-review.org%2Fsites%2Fdefault%2Ffiles%2F160518_Final%2520paper_with%2520cover.pdf&usg=AOvVaw0kDaiLbLr8dtJAJDnpiBEF).
- ³ Neill (2015) Antimicrobials in Agriculture and the Environment: Reducing unnecessary use and waste (https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwiU8MKesb3rAhXcCWMBHXsVDvgQFjABegQIBBAB&url=https%3A%2F%2Famr-review.org%2Fsites%2Fdefault%2Ffiles%2FAntimicrobials%2520in%2520agriculture%2520and%2520the%2520environment%2520-%2520Reducing%2520unnecessary%2520use%2520and%2520waste.pdf&usg=AOvVaw1vCnBDU7NN8nFj_CBuDhCF).
- ⁴ Situation Analysis on Antimicrobial use and Resistance in Kenya 2016. Unpublished
- ⁵ Caudell, et al. (2020). Towards a bottom-up understanding of antimicrobial use and resistance on the farm: A knowledge, attitudes, and practices survey across livestock systems in five African countries. <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0220274>

In view of the above, the Ministries of Health and Agriculture developed the *National Policy* (NP) and its implementation framework; the *National Action Plan* (NAP) on Prevention and Containment of Antimicrobial Resistance, which were launched in November 2017. The goal of the Policy is to reduce the burden of AMR and promote prudent use of antimicrobial agents to ensure that, for as long as possible, there is continued successful treatment and prevention of microbial diseases with effective, quality assured and safe antimicrobials, accessible to all who need them.

The Kenyan Government established the *National Antimicrobial Stewardship Interagency Committee* (NASIC), which is a multisectoral AMR Secretariat. NASIC is governed through a *Steering Committee* (SC) and a *Technical Committee* (TC). A similar governance structure, the *County Antimicrobial Stewardship Interagency Committee* (CASIC) is established at the county level to coordinate implementation of the policy. The areas of focus in the AMR NAP include improving awareness and understanding of antimicrobial resistance; strengthening knowledge through surveillance and research; reducing incidence of infection; optimizing use of antimicrobial agents; and ensuring sustainable investment in countering antimicrobial resistance.

Following the launch of the NP and the NAP, the government has engaged various stakeholders through the NASIC secretariat to mobilise resources for implementation of the NAP. Through support by various partners; the government has been able to develop key policy and strategic documents, as follows: i) behavioural change AMR communication strategy; ii) Guidelines for the prudent use of Antimicrobials in animals; iii) National Antimicrobial stewardship guidelines for healthcare settings; iv) National AMR surveillance strategy for public health and animal health; and v) National Infection Prevention and Control Policy and Strategy for HealthCare Settings. Also, KAP studies have been undertaken in the poultry value chain in addition to Kenya consistently celebrating the *World Antibiotic Awareness Week* (WAAW) every year.

The NASIC secretariat to which the Tripartite are members, held the first regional WAAW celebrations in November 2019. Through support of the *Fleming Fund* (FF), OIE conducted a training workshop on the database on antimicrobial agents intended for use in animals in October 2019. FAO has supported various activities including the review of legislation related to AMR, mapping of the veterinary medicine supply chain and the identification of challenges and barriers to compliance. WHO has supported capacity building, adaptation of tools and lessons learning on AMR in country; and a pharmaceutical assessment in the four *Universal Health Coverage* (UHC) pilot counties, which included an audit of prescribing and dispensing records for antimicrobials (2019). WHO has also facilitated the development of the *National Action Plan for Health Security* (NAPHS), which embraces the OH approach and initiated and coordinated the compilation of the AMR Combat Quarterly Newsletter in 2018. Through support of USAID's *Infectious Disease Detection and Surveillance* (IDDS) Project, Kenya developed a National Antimicrobial Resistance Surveillance Training Curriculum.

The Fleming Fund (FF) country grant is supporting, strengthening of AMR surveillance systems in Kenya. The *United States Agency for International Development* (USAID) *Medicines Technologies and Pharmaceutical Supplies* (MTaPS) program has facilitated the development of the monitoring and evaluation framework for the AMR NAP as well as reviewing and updating of the *Kenya Essential Medicines List* (KEML

	<p>2019). The KEML 2019 is adapted from the WHO Model List (2019), and adopts the Access, Watch, Reserve (“AWaRe”) categorisation. The MTaPS has also supported the development of the <i>National Antimicrobial Stewardship (NAS)</i> guidelines for Health care settings and subsequent implementation and strengthening of <i>Infection Prevention and Control (IPC)</i> interventions. The <i>Centers for Disease Control (CDC)</i> through <i>International Training and Education Center for Health (I-TECH)</i>, has supported the development and piloting of the <i>Continuous Quality Improvement (CQI)</i> approach for IPC and a surveillance system for <i>Health Care Associated Infections (HCAI)</i>.</p> <p>Despite the achievements so far realized, reports from various stakeholders reveal numerous gaps, which require addressing. Among the main causes of AMR and barriers to addressing it include: poor infection control practices in hospitals and the community; high burden of diseases in animals associated with poor husbandry practices and low vaccination coverage levels; inadequate access to quality healthcare services; antimicrobial misuse and overuse as a result of over-prescribing by healthcare practitioners, and <i>over the counter (OTC)</i> access and self-medication; as well as weak enforcement of regulation.⁶ Poor uptake and implementation of IPC guidelines and treatment guidelines in health care settings, lack of robust NAS programs at both community and hospital levels have contributed to inappropriate use of antibiotics. In food production, inadequate regulatory oversight along the food production chain, and inadequate private sector engagement on AMR containment raises the risk for food contamination. Poor hygienic practices in slaughterhouses leading to carcass contamination has been shown to increase the bacterial load, some of which are resistant to antimicrobials, in the meat value.⁷ The lack of herd health programs has contributed to poor disease prevention and control; unnecessary use of antibiotics in animal husbandry without professional oversight to cover for poor hygiene and transmission of resistant pathogens in food production, storage, distribution and preparation.</p> <p>Lack of evidence on <i>antimicrobial use (AMU)</i> in plants calls for an urgent need to profile antimicrobial plant protection products in the country and their use to reduce the likelihood of misuse and contamination of the environment. This will also pave the way for the establishment of guidelines on their regulation and use.</p> <p>Areas of focus in strategic objective 4 of the NAP include: Strengthening the regulatory measures, tools and activities of the national medicine regulatory systems in ensuring the safety, efficacy and quality of medicines from market authorization to post-marketing surveillance which will help combat AMR. The impact areas identified in this proposal will support the third and fourth strategic interventions of the NAP which have received little attention and support and yet consist of the weakest link in the fight against AMR.</p>
Status of National Action Plan for AMR	The Kenya NAP for the prevention and containment of AMR was developed in November 2017. Progress reports are presented annually

⁶ Situation Analysis on Antimicrobial use and Resistance in Kenya 2016. Unpublished

⁷ Mwai C.W., (2012). Assessment of the risk of beef contamination with *Escherichia coli* 0157:H7 at the abattoirs in Nairobi, Kenya. Msc. Thesis University of Nairobi, Kenya

	<p>during the <i>World Antibiotic Awareness Week (WAAW)</i>. The last progress report was presented in November 2019 during the WAAW 2019. Plans were underway to conduct a mid-term evaluation in 2020 but these were interrupted by COVID-19 pandemic. Save for the COVID-19 pandemic, the AMR Coordination Committee meets on a quarterly basis, with the Health and Agricultural sectors actively engaged in the process. The NASIC technical committee reports to the NASIC steering committee which comprises of Principal Secretaries of the key ministries. The private sector, civil society and academia are all involved in the coordination committee. The Tripartite provides technical and financial support in the implementation of the NAP.</p>
Project Summary	
Impact	AMU associated behaviours and practices sustainably improved in critical sectors.
Outcome(s)	<ul style="list-style-type: none"> • Use of antimicrobials optimised in critical sectors • Improved understanding of AMR risks and response options by targeted groups
Outputs and Key activities	<p>Output 1: Systems for biosecurity and IPC Strengthened in Kenya <u>Activities:</u> 1.1: Build capacity of 6 county IPC committees on HAI surveillance and the WHO Multimodal strategies for IPC. 1.2: Scale up continuous quality improvement approach through facility IPC committees on Hand Hygiene Waste management and SSI Surveillance in 6 county Referral Hospitals 1.3: Develop farm biosecurity guidelines and interventions in reference to existing regulations, international standards and best practice for high-risk food chains where high AMU predisposes to AMR.</p> <p>Output 2: Systems for optimized use strengthened in human and animal health <u>Activities:</u> 2.1: Scale up enforcement of regulation along the distribution chain of antimicrobials 2.2: Update and operationalise regulatory schedules of antimicrobial agents to align with AWARE categorization 2.3: Develop a reporting system and database to support county level antimicrobial consumption in humans 2.4: Scale up implementation of national AMS guidelines through existing medicines and therapeutics committees in six Counties 2.5: Improve reporting on AMU in animals 2.6: Building capacity of county veterinary services on implementation of the NAP and prudent use of antimicrobials 2.7: Undertake KAP surveys</p> <p>Output 3: Improved capacity to design awareness raising behaviour change and educational activities <u>Activities:</u> 3.1: Support World Antimicrobials Awareness Week (WAAW) celebrations 3.2: Publication/development of newsletters and peer articles on AMR progress and NAP implementation 3.3: M&E and lesson learning workshops</p>

<p>Link to National Action plan</p>	<p>The NAP is anchored on the following key strategic objectives:</p> <ul style="list-style-type: none"> • to improve awareness and understanding of antimicrobial resistance. • to strengthen knowledge through surveillance and research. • to reduce the incidence of infection. • to optimize the use of antimicrobial agents; and to ensure sustainable investment in countering AMR. <p>The NAP recognises that better hygiene and IPC are essential in limiting the development and spread of AMR pathogens and <i>multidrug resistant</i> (MDR) bacteria. To prevent transmission of MDR infections, IPC in health care settings, biosecurity, sanitation, hand washing, food and water safety and animal hygiene must be core components of infectious disease prevention. Implementing and monitoring the impact of IPC interventions in Health care settings through the surveillance of Health Care Associated Infections (HCAI) is critical in reducing the need for antibiotics and measuring impact. Improving the level of biosecurity in animal husbandry, hygiene management, vaccination and animal welfare are some of the approaches to maintaining the health condition of livestock. These are extremely important elements of controlling the occurrence and selection of AMR organisms. Further, prudent AMU is vital to sustainable prevention and treatment of microbial diseases. The fourth strategic objective of the NAP focuses on strengthening the regulatory measures, tools and activities of the national drug regulatory systems in ensuring the safety, efficacy and quality of medicines from market authorization to post-marketing surveillance which will help combat AMR. The impact areas identified will support the third and fourth strategic interventions of the NAP that have received little attention and support and yet consist of the weakest link in the fight against AMR</p>
<p>Link to country's development priorities</p>	<p>The National policy on prevention and containment of AMR was developed and aligned to other government policies. More specifically, the AMR policy is aligned to the constitution of Kenya 2010, which under the bill of rights, provides for equitable, affordable and quality health care to all citizens; and freedom from hunger and have adequate food of acceptable quality. The Government of Kenya, in its <i>Medium-Term Expenditure Framework</i> (MTEF 2019/20-2021/22), has prioritized investments towards the 'Big Four' Agenda covering four sectors, three of which impact directly on AMR. These include <i>Universal Health Coverage</i> (UHC), food security and nutrition, and manufacturing to spur economic growth and sustainable livelihoods. The emergence and spread of AMR pathogens have potential to hamper achievement of the constitutional provisions on the bill of rights and the priority areas of Government especially food security and UHC. The Tripartite support to the implementation of the AMR policy through the five-year NAP will have a great impact on achievement of the Government priorities.</p>

We the responsible officers of the Tripartite organisations take responsibility for the efficient delivery of this proposal. We confirm that the proposal has been developed in close collaboration with government counterparts and that it is aligned with the wider agenda around the Sustainable Development Goals. We will work to ensure that addressing AMR is appropriately included in the United Nations Sustainable Development Cooperation Framework, and that there is a strategy to sustain and scale up the outputs of this work

Name **David Phiri, OIC**
FAO Country representative

26/10/2020

Name
Regional Representative OIE

Name
WHO Representative

21-Oct-2020

Joint Programme Description

1 Baseline and situation analysis

1.1 Problem statement (max 1 page)

Numerous reports from different stakeholders' point to high levels of AMR in Kenya (humans, livestock and environment) but the true burden, public health, social and economic impacts remain unknown.⁸ In addition, there is insufficient data on the significance of antimicrobial use (AMU) in crops and their subsequent contribution to AMR. Several factors identified as possible drivers for AMU, and thus hindering mitigation against AMR in the country include: high burden of endemic diseases in humans and livestock due to poor infection prevention and control (IPC) and low vaccination coverage, thus triggering overuse of antimicrobials; *easy over the counter* (OTC) access of antimicrobials due to poor enforcement of laws resulting to misuse and overuse; poor hygiene practices along the food value chains; weak healthcare systems leading to lack of access to quality services; poor animal husbandry practices and inadequate herd health programs, among others.⁸ These issues highlight the complexity of the health and food systems as well as the governance structures in which containment of AMR must thrive. Therefore, concerted efforts which would involve total country commitment including budgetary allocations, review and enforcement of legislations, development, and implementation of guidelines (hygiene, biosecurity, treatment etc.) are critical to the change of behaviours and practices to combat AMR. These efforts will be highly influenced by generation, analysis and synthesis of factual evidence to develop workable interventions amongst the multiple stakeholders involved.

From the global perspective, the Tripartite will embrace localised strategies in close coordination with the NASIC to implement the *Global Action Plan* (GAP) on AMR which has been adopted into the country's *National Action Plan* (NAP). Activities will aim at systems strengthening and national capacity development for addressing AMR by different stakeholders. Strengthening of the governance structures will involve a thorough analysis of human health systems, livestock, and environment including crops to inform policy and planning. Borrowing from international standards, and from evidence generated from implementation of NAP, various guidelines and training materials will be developed to facilitate information sharing amongst different stakeholders. Furthermore, a one-health study will be conducted to assess how the interactions between people, animals, and the environment impacts the distribution of AMR at community level. The output of the study as well as the information from the various KAP studies will support in development of interventions to promote prudent AMU. The intention will be to identify high-risk value chains and critical points for mitigating AMR where little efforts would be required. Further analysis of gaps in healthcare laws and regulations related to antimicrobial consumption (AMC) will be conducted to support reviewing of laws/ policies that would encourage streamlined reporting of AMU data, scale up enforcement of regulation along the distribution chain of antimicrobials and encourage prudent use of antimicrobials. In addition, farm biosecurity guidelines (pork, poultry and dairy), which are currently lacking, will be developed and training conducted for those who require to use them.

1.2 AMR MPTF Results Matrix (Please refer to Appendix 3)

Outcomes and Outputs adopted from Tripartite Results Matrix (Appendix 3) and Activities that are designed as focus of this joint Tripartite programme with identified indicators and baseline data that can be used to measure programme progress.

⁸ Global Antibiotic Resistance Partnership—Kenya Working Group. 2011. Situation Analysis and Recommendations: Antibiotic Use and Resistance in Kenya. Washington, DC and New Delhi: Center for Disease Dynamics, Economics & Policy.

Outcomes

Outcomes	Indicator	Baseline Data
1. Use of antimicrobials optimized in critical sectors	<ul style="list-style-type: none"> Tools for Country level AMC/AMU data collection developed (adapted from global tools) for human and animal health. Integrated national database on AMU/AMC, developed Improved reporting to international databases on AMU, AMC and AMR 	<ul style="list-style-type: none"> Some country level AMC/AMU data collection tool adapted for use AMU annual reporting to the OIE global database on AMU (animal health) occurs but with lots of challenges; also, AMU data reported to OIE is not accessible to human health decision-makers AMR data available from pilot sites
2. Improved understanding of AMR risks and response options by targeted groups	<ul style="list-style-type: none"> National and County targeted AMR awareness campaigns established. Level of understanding of AMR risks and response by targeted groups assessed 	<ul style="list-style-type: none"> Outreach for Targeted Awareness campaigns have been limited to national level in earlier campaigns. Assessment of understanding of AMR risks and response has not been done

Outputs

Output	Indicator	Baseline
1. Systems for biosecurity and IPC Strengthened in Kenya	<ul style="list-style-type: none"> National IPC and good practices guidelines developed and/or disseminated Number of trained professionals on IPC and Biosecurity Number of health facilities submitting reports on Hand Hygiene Audits, Waste Management and Surgical Site Infections 	<ul style="list-style-type: none"> There are no national biosecurity guidelines developed MOH IPC guidelines are available but with limited distribution and implementation All 47 counties have IPC Focal points and training for county TOTs on IPC conducted in 46 counties There is low proportion of professionals with knowledge on implementation of national and international standards on IPC and Biosecurity
2. Systems for optimized use strengthened in human and animal health	<ul style="list-style-type: none"> Number of regulatory framework for AMC/AMU in human and animal health 	<ul style="list-style-type: none"> Gaps in the regulatory framework to support optimized AMU/AMC have been identified

	<ul style="list-style-type: none"> revised/ developed/updated Guidelines for prudent use of antimicrobials in animals disseminated Number of antimicrobial stewardship programs established 	<ul style="list-style-type: none"> Guidelines for prudent use of antimicrobials in animals have been developed but with limited dissemination to stakeholders National Guideline on AMS in health care settings developed and AMS programs established in 6 counties
3. Improved capacity to design awareness raising behaviour change and educational activities	<ul style="list-style-type: none"> Two (2) nationwide AMR campaign targeting stakeholders' groups based on and targeted messaging within sectors The Implementation of the communication strategy harmonised to improve capability for communication and behaviour change initiatives on AMR 	<ul style="list-style-type: none"> Awareness raising among target audience has been limited to national level celebrations and one county. There has been disjointed implementation of the communication strategy.

Activities under Output 1: Systems for biosecurity and IPC Strengthened in Kenya

Activity	Indicator	Baseline
Capacity building for county IPC committees on HAI surveillance and the WHO Multimodal strategies for IPC (6 counties; 150 pax)	Number of county IPC Committees trained	Zero. NB: There has not been any focused training for County IPC committees.
<p>Scale up continuous quality improvement approach committees on HAI surveillance and the WHO Multimodal strategies for IPC and Hand Hygiene, Waste management & injection safety Surgical Site infections in 6 county Referral Hospitals</p> <ul style="list-style-type: none"> Conduct base line assessments for the 6 facility IPC Committee Conduct training for IPC CQI and HAI surveillance for facility IPC committees in 6 county referral hospitals 	<ul style="list-style-type: none"> Number of health facilities implementing the CQI approach Number of health facilities submitting reports on Hand Hygiene Audits, Waste Management and Surgical Site Infections Baseline report for the 6 sites Number of health workers trained on IPC CQI Number of Hospital IPC Committees trained on CQI 	Two (2) facilities in two counties are currently implementing CQI and submitting reports on Hand hygiene, waste management and surgical site infections

<ul style="list-style-type: none"> • Conduct biannual mentorship sessions for the 6 facilities • Conduct monthly virtual capacity building sessions for the 6 sites 	<ul style="list-style-type: none"> • Number of on-site mentorship sessions conducted • Number of virtual capacity building sessions conducted 	
Develop farm biosecurity guidelines and interventions for high-risk food chains where high AMR in reference to existing regulations, international standards and best practice.	<ul style="list-style-type: none"> • Biosecurity guideline documents for the poultry, pork and dairy value chains developed, printed and disseminated • Number of animal health professionals and farmers trained on biosecurity guidelines developed • Documented interventions to reduce AMU in Poultry, pork and dairy value chains 	<ul style="list-style-type: none"> • There are no biosecurity guidelines developed in the country for the named value chains • Training on biosecurity guidelines for animal health professionals and farmers has not been undertaken • Gaps for interventions to reduce AMU in the poultry value chain identified from a pilot study site

Activities under Output 2: Systems for optimized use strengthened in human and animal health

Activity	Indicator	Baseline
<p>Scale up enforcement of regulation along the distribution chain of antimicrobials</p> <ul style="list-style-type: none"> • Review of health laws and regulations related to AMU 	<ul style="list-style-type: none"> • Number of pharmaceutical inspectors of human health supply chain sensitized on AMR • % of retail pharmacies whose dispensing records for antimicrobials have been inspected (per county and nationally) • % antimicrobial dispensing records that comply with AMR stewardship guidelines. • Number of new laws or regulations relating to AMR 	<p>Currently, no AMR-focused inspections of pharmaceutical retail chain</p> <p>No legislation or regulations relating to AMR</p>
Update regulatory schedules of antimicrobial agents to align with AWARE categorization	<ul style="list-style-type: none"> • Updated/ Revised drug schedules, including AWARE categorization of antimicrobials 	<ul style="list-style-type: none"> • Outdated drug schedules (draft PPB guidelines for scheduling and re-scheduling developed) • National EML updated (2019) and AWARE categorization adopted therein.

Develop a reporting system and database to support reporting on country level consumption of antimicrobials in humans	<ul style="list-style-type: none"> • Database for prospective reporting (by pharmaceutical manufacturers) of antimicrobials production developed 	<ul style="list-style-type: none"> • AMC data being compiled (by PPB) for prior years
<p>Scale up implementation of AMS guidelines through existing medicines and therapeutics committees in six Counties</p> <ul style="list-style-type: none"> • Conduct training for 6 hospital MTCs on establishing an AMS program • Conduct bi-annual on-site mentorship sessions for AMS • Conduct monthly virtual capacity building and mentorship sessions 	<ul style="list-style-type: none"> • Number of MTCs trained on Antimicrobial Stewardship programs • Number of health workers trained on AMS • Number of AMS mentorship sessions conducted • Number of monthly virtual capacity building and mentorship sessions conducted for AMS 	<ul style="list-style-type: none"> • National antimicrobial stewardship guidelines in place; AMS programs in place in a few hospitals • MTCs in place in all 47 county referral hospitals
Improve reporting on AMU in animals	<ul style="list-style-type: none"> • Post- market surveillance data collection Plan developed • AMU database developed. 	<ul style="list-style-type: none"> • There is no post market surveillance plan for antimicrobials in animal health. • The AMU database has not been developed • VMD has been compiling annual import data on antimicrobials intended for use in animals for reporting to the OIE global database
Capacity building of county veterinary services on implementation of the NAP and prudent use of antimicrobials	<ul style="list-style-type: none"> • Number of veterinary professionals in the counties trained on the NAP implementation and prudent use of antimicrobials 	<ul style="list-style-type: none"> • Limited knowledge on AMR NAP and its implementation and the prudent use guidelines is limited to few professionals in the counties
Conduct a socio-anthropological study to help design interventions that will influence behaviour change across the public health and veterinary service providers (One Health study)	<ul style="list-style-type: none"> • AMU associated behaviour driving AMR in public health and animal health identified 	<ul style="list-style-type: none"> • Such a KAP study has not yet been undertaken in the country
Profile AMU in crops with reference to use of clinically important antimicrobials in crop production disease and pest control	<ul style="list-style-type: none"> • A report on AMU profile in crops 	<ul style="list-style-type: none"> • Lack of information on AMU in crops

Activities under Output 3: Improved capacity to design awareness raising behaviour change and educational activities

Activity	Indicator	Baseline
Support towards World Antimicrobials Awareness Week (WAAW) celebrations	<ul style="list-style-type: none"> • Number of Seminars/, Workshops, for medical and veterinary Professionals, farmers, journalists, and the public with targeted messages 	<ul style="list-style-type: none"> • Limited national-wide coverage of AMR awareness already created
Publication/development of newsletters and peer articles on AMR progress and NAP implementation	<ul style="list-style-type: none"> • Biannual AMR newsletters, sensitization, educational material and policy briefs developed/reviewed and disseminated • At least one manuscript published in peer reviewed journals per year. • Annual report of the NASIC (consolidated, result-focused) 	<ul style="list-style-type: none"> • “The AMR Combat Quarterly” a quarterly newsletter was developed, but has not been continuously published • There is a lot of sensitization material from the previous WAAW events. • Currently, there is no annual report that captures the activities of the NASIC (all actors), or the overall achievement of results across the NAP objectives.

1.3 Stakeholder mapping and target groups

Among the key stakeholders in the AMR MPTF Kenya country grant proposal is the government through the Ministries of Health (MOH) and Ministry of Agriculture, Livestock, Fisheries and Cooperatives (MoALF&C). The MOH hosts the NASIC secretariat and through the Directorate of Health Standards Quality Assurance and Regulations, the Directorate of Clinical and Referral Services, and the Pharmacy and Poisons Board (PPB) the MOH implements the human health component of the NAP. Further these entities will be the main implementing partners for the AMR MPTF project. The MOALF&C through the Directorate of Veterinary Services co chairs the NASIC secretariat and implements the Animal Health component of the NAP. The other stakeholders who will be involved in the AMR MPTF grant include Medicine regulatory bodies namely Veterinary Medicines Directorate (VMD and Pharmacy and Poisons Board (PPB), Academia; Professional regulatory bodies; and civil society organizations. The brief on the role of these stakeholders is outlined in Table 1. There are stakeholders who will directly benefit from the implementation of the AMR MPTF program. These include; the Government to which this program will complement its efforts towards achieving the Big 4 Agenda; the two key Ministries (MoH and MoALF&C) which will receive financial support to implement some of the NAP objectives; farmers through improved farming practices; and consumers mainly in households since this program focuses on AMR risks attributed to foods of animal origin that could be contaminated by resistant pathogens. Medical regulatory agencies and professionals in the medical and veterinary practice will also directly benefit. Others who will benefit indirectly from this program include the pharmaceutical industry, food processors and the private sector in general.

Table 1: Role of stakeholders		
Stakeholder	Involvement in AMR at National	Interest and Relationships
Ministry of Health	Co-Chair of the NASIC Secretariat and hosts the AMR secretariat	Implementation of the Human Health components of the NAP
Ministry of Agriculture	Co-Chair of the NASIC Secretariat	Implementation of the Animal Health Component of the NAP
Veterinary Medicines Directorate	Regulation of Veterinary Medicines in the country	Enforce regulation of veterinary medicines and coordinate collection of AMU data animal health
Directorate of Health Standards Quality Assurance and Regulations	Hosts the AMR secretariat and Infection Prevention and Control Program	Coordination of the NAP implementation process Coordination of processes relating to human health legislation
Directorate of Clinical and Referral Services	Hosts the Health Products and Technology components	Coordinate review of the EML (incorporating AWARE) and support its implementation Coordinate (as secretariat) the National Medicines and Therapeutics Committee Support establishment of Medicines and Therapeutics Committees in healthcare facilities in the counties
Pharmacy and Poisons Board (PPB)	Regulation of Human Medicines in the country	Enforce regulation of Human medicines and coordinate collection of AMC data in human health
Academia (University of Nairobi and Aga Khan University)	Training and Research	Current information on AMR to update the training curriculum and for research
Professional Regulatory bodies (Kenya Veterinary Board (KVB) Kenya Medical Practitioners and Dentists Board, (KMPDB), Pharmacy and Poisons Board (PPB)	Regulation of health professions (veterinary, medical and pharmacy) professionals	Compliance to relevant regulations and conformity to antimicrobial stewardship guidelines
Pharmaceutical industry.	Provide regular data to regulators on production of antimicrobials (for human and animal use)	Enabling environment for their operations (clear legislation, guidelines, reporting mechanisms, etc.); ease of reporting

<p>Civil society organizations (World Animal Protection (WAP), Action Against Antimicrobial resistance in Africa (ReAct Africa), Kenya Veterinary Association (KVA), Kenya Medical Association (KMA))</p>	<p>Advocacy on AMR and antimicrobials stewardship</p>	<p>Support to facilitate advocacy efforts</p>
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2 Programme strategy

2.1 Overall strategy

The MPTF programme is transformational because it promotes synergy in the work of the Tripartite agencies in Kenya, and thereby accelerates implementation and achievement of the NAP objectives to address key drivers of AMR. The joint programme will enable the pooling of resources, synergies of efforts and direct focus on objectives supporting the country. Through the Tripartite organizational mechanisms, the joint programme will also facilitate better leveraging of technical expertise from the national, regional and global levels. Currently, the work on AMR in Kenya, through the support of several partners, places greater focus on awareness creation and generating data through surveillance, which are Objectives 1 & 2 of the NAP). The joint programme will be focussing on objective 3 & 4 of the NAP thus facilitates fast tracking of these critical areas that were lagging in implementation due to insufficient resourcing.

The MPTF programme brings added value to the Tripartite through improved collaboration and joint action at country level; and contributes to joint achievement of common results towards AMR containment. The priorities and activities included in the MPTF programme are aligned to the AMR NAP for Kenya, which is aligned to the AMR *Global Action Plan* (GAP). In this regard, the programme contributes to the AMR GAP priorities and initiatives.

The MPTF programme is developed in collaboration with the Government, through the respective AMR focal points in the health and agriculture sectors. In this respect, the joint programme is designed to support the priorities and activities of the government. Also, the planned activities will be implemented by the respective government departments and agencies, thereby strengthening the overall capacity of the government to address the problem of AMR. Furthermore, by embedding the joint programme within the existing country structures, the MPTF will strengthen the national and sub-national capacities, facilitate scale-up of government efforts and the attainment of priority results; and also ensure that key interventions can be sustained beyond the life-span of the MPTF programme.

The Tripartite is currently supporting AMR interventions in Kenya in selected areas, in line with their respective agency mandates and comparative advantage. The joint programme fits within and enhances the existing work of each agency on AMR, thereby contributing to the achievement of greater results compared to the current situation. Also, by focussing on the NAP objectives that are less supported, the joint programme will complement the work of other development partners, and consequently enabling achievement of a broader range of AMR results in Kenya.

The priority activities in the MPTF program are aligned with broader areas of support to the country for the respective organisations, and for on-going joint work. For example, the support to PPB and VMD on medicines regulation (human and veterinary) aligns with ongoing support by the Tripartite organisations to strengthen the entities in undertaking their activities entities. This also aligns with ongoing legislative processes across sectors, which are driven by the Government's "Big Four" Agenda (i.e. Universal Healthcare (UHC), manufacturing, housing, and food security). In particular, the MPTF programme will support the "Big Four" priorities in two key pillars: i) UHC (access to safe, efficacious and quality medicines; and ii) food security (control of AMR-related risks along the various food value chains). Therefore, the support through the MPTF will augment the current country support by the Tripartite; as well as complementing other AMR support programmes by other partners, e.g. surveillance (Fleming Fund), Stewardship (USAID) among others.

After this phase of the joint Tripartite programme is effectively completed, we anticipate that the respective sectors will continue to implement and sustain the work going forward. We expect that the joint programme will develop key tools and capacities, and generate key results and lessons, that will inform and facilitate more effective and efficient interventions on AMR. In this regard, the Tripartite agencies will continuously engage the key leaders and other actors at the national and county levels, in order to incorporate key sustainability measures, and to promote the needed lessons learning across the different levels of implementation and decision-making.

2.2 Theory of Change

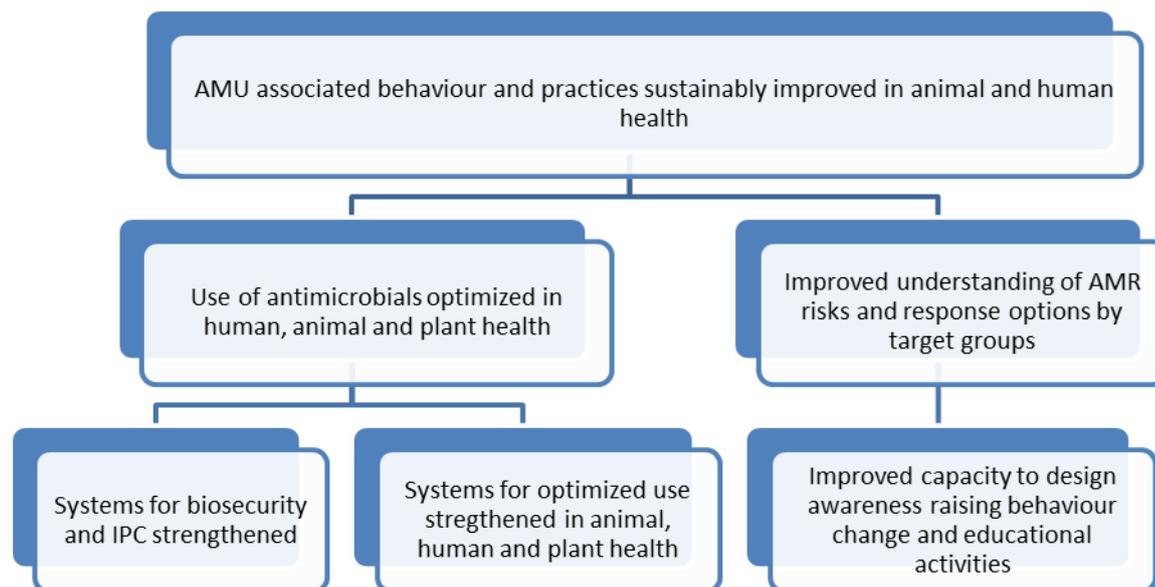
The AMR Status in Kenya as captured by scientific reports identifies poor infection control practices in hospitals; high burden of diseases in animals associated with poor husbandry practices and low vaccination coverage levels; weak healthcare systems leading to lack of access to quality services; antimicrobial misuse and overuse as a result of easy *over the counter* (OTC) access and self-medication; as well as poor enforcement of regulation.⁹ There is poor uptake and implementation of *infection prevention and control* (IPC) guidelines in health care settings, coupled with a lack of robust antimicrobial stewardship programs at both community and hospitals levels leads to inappropriate prescribing of antibiotics.

Interventions to contain and prevent AMR have been spearheaded by the government Ministries of Health and Agriculture, Livestock, Fisheries and Cooperatives through the *National Antimicrobial Stewardship Interagency Committee* (NASIC), which is made up of policy makers, civil society, private practitioners research institutions and academia. Despite this effort, there has been inadequate private sector engagement on AMR containment in food production thus raising the risk for transmission of AMR through food contamination. Poor hygienic practices in slaughterhouses, leading to carcass contamination has been shown to increase the bacterial load, some which are resistant to antimicrobials, in the meat value chain.¹⁰ Most farmers do not practice any herd health programs. This has contributed to poor disease prevention and control and unnecessary use of antimicrobials in animal husbandry without professional oversight to cover for poor hygiene practices and a likely transmission of resistant pathogens in food production, storage, distribution, and preparation.

⁹ Situation Analysis and Recommendations: Antibiotic Use and Resistance in Kenya - See more at: http://www.cddep.org/publications/situation_analysis_and_recommendations_antibiotic_use_and_resistance_kenya#sthash.QjL8u8WR.dpuf

¹⁰ Mwai C.W., (2012). Assessment of the risk of beef contamination with *Escherichia coli* 0157:H7 at the abattoirs in Nairobi, Kenya. Msc. Thesis University of Nairobi, Kenya

Areas of the MPTF Result Chain Covered by This Proposal



In articulating the desired change from the current status, the proposal seeks to improve the understanding of AMR risks and how to mitigate against them among the different target groups; at the same time advocating for a sequence of events and a set of actions that will spur optimized use of antibiotics in the human, animal and plant health sectors.

The joint Tripartite program will provide technical assistance and capacity development to strengthen and accelerate the efforts by the government in the implementation of the AMR NAP objectives. This aims to reduce the incidence of infection through effective sanitation, hygiene and IPC measures while optimising the use of antimicrobials in human and animal health from a One Health approach. This complementary support by the Tripartite is projected to be achieved through building capacity and developing and/or scaling up critical components such as IPC, antimicrobial stewardship programs; farm biosecurity; training of professionals to support prudent use of antimicrobials and promoting AMR awareness; and communication activities. These approaches are expected to initiate a sustainable AMU behaviour change and adoption of good practices in the selected areas of intervention.

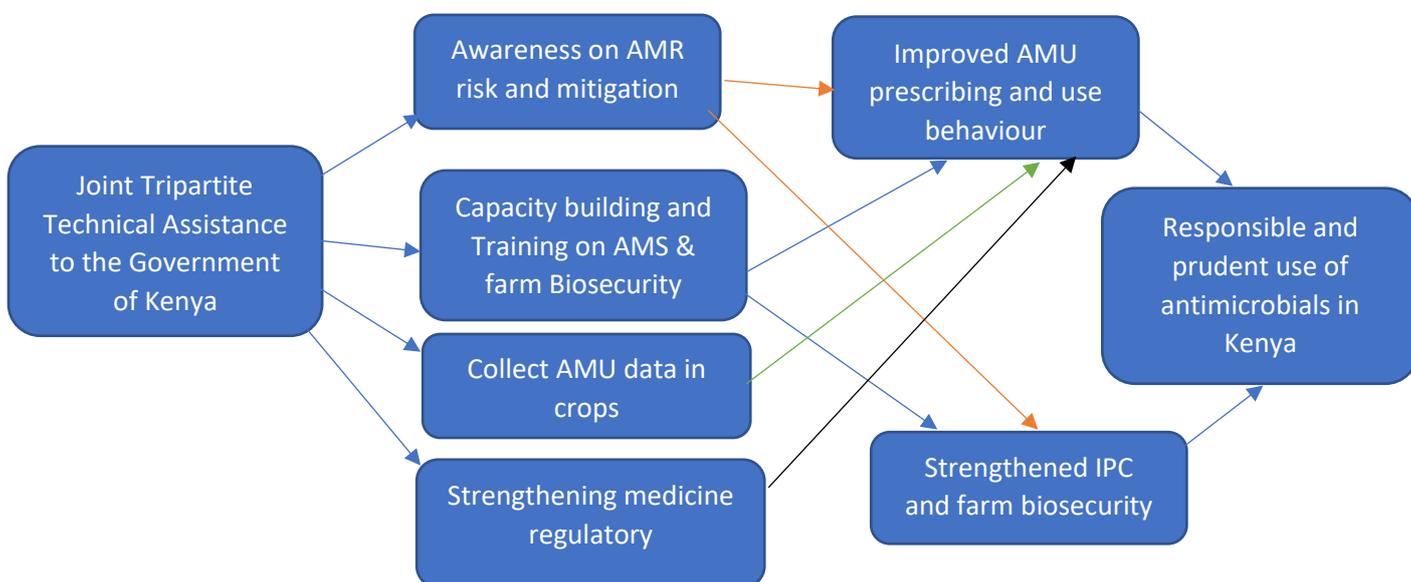
All the three output areas of this proposal are interdependent. To realise improvements in AMU behaviours and practices, the target stakeholders need to understand and play their roles in IPC and hygiene in optimising the use of antimicrobials. This information will be conveyed to the target audiences through awareness raising and communication, training and education while systematically and meaningfully engaging civil society groups and private sector. Leveraging on awareness raising about the risks of AMR and the response options will promote responsible and prudent use and adoption of best practices among targeted audiences. This will provide a better understanding of AMR and the need for appropriate use and promotion of behaviour change.

Support to strengthen regulatory mechanisms for medicine regulatory agencies have been identified. This is aimed at streamlining the medicine supply chain management and legal and regulatory frameworks review across the human and animal health systems. Development of a post marketing

surveillance system will enable the veterinary service to collect data on unauthorised, sub-standard, and falsified products in the market. A successful implementation of these activities will enable the country to build up systems that will support appropriate prescribing behaviour and strengthen regulation of registration, distribution, quality and use of antimicrobials under professional oversight. In addition to prudent and responsible use of antimicrobials, strengthening IPC, biosecurity and good animal welfare in farming will limit infections and unintentional exposure through environmental contamination or unsafe food that facilitate the spread and development of AMR infection and multidrug resistant bacteria. These measures will ensure patient safety, protect health, and farm workers as well as animals and plants; thereby, reducing future need for antimicrobials, protecting the environment and ensuring sustainable food and feed production. This will also promote responsible use of antimicrobials, stewardship and behaviour change among medical professional, patients, veterinarians and farmers. Investment in biosecurity will substantially reduce unnecessary antimicrobial use while boosting agricultural productivity and ensuring food safety and security. The KAP studies will help generate information that will be used to design interventions that will promote prudent use of antimicrobial and reduction of AMR

The project seeks to work within the existing frameworks to facilitate an enabling environment for the implementation of the AMR NAP activities by contributing to the development of tools, in-service training and improvement of systems for medicine regulation. The systems developed will enhance the AMR surveillance and AMU monitoring which is the focus of the Fleming Fund (FF) country grant to Kenya. The FF country grant aims at strengthening the country’s capacity to undertake AMR surveillance and monitoring for AMU in the human and animal health sectors as well as improving the laboratory capacity for antimicrobial susceptibility testing. This proposal therefore takes a proactive initiative to strengthening approaches that will promote responsible and prudent use of antimicrobials in both sectors and support the FF interventions by providing a database for AMU data. The success of this AMR MPTF project, which promotes the use of preventive measures to reduce AMU and emergence of AMR, will be supportive the monitoring and surveillance program thus providing synergy to the FF project.

Some objectives of this project related to capacity building and development of tools will be achieved with the resources provided. However, frameworks developed within the project such as the regulatory reviews and tools will be sustainable foundations that the country will built upon long after the projects cycle. Below is a schematic representation of the theory of change for the current proposal.



2.3 Expected results and Narrative

Tripartite commitment and responsibilities

The Tripartite agencies' commitment to work together at the country level in accelerating the implementation of the Kenyan AMR NAP on the specific objectives of this proposal will yield the expected results. The proposed Tripartite activities have been carefully selected to contribute to the achievement of the desired outputs. This is in response to addressing the current challenges and shortcomings including suboptimal practices and behaviours, inadequately trained professionals, lack of preventive measures and professional oversight identified as the main hinderances to the realisation of strengthened IPC, hygiene and biosecurity and implementation of good agricultural practices.

WHO will be responsible for provision of technical assistance and overseeing the delivery of training at county level (6 of 47 counties) to strengthen IPC, hygiene and antimicrobial stewardship (AMS) in human health. The MPTF support will cover six (6) of 47 counties and focus on the county referral hospital in each county as well as the county health management teams. WHO will also support the strengthening of regulatory enforcement of antimicrobial use (AMU) in human health, in three key areas: (i) review and updating of medicine schedules, and adoption of the AWARE categorization; (ii) inspections of dispensing records in retail pharmacies in 3 regions, including the capital city; and (iii) development or review of legislation and regulations relating to AMR.

OIE and FAO will provide technical assistance and guidance for the improvement of biosecurity systems and hygiene in animal health and promote the adoption of good agricultural practices in the dairy, pork and poultry value chains. The OIE will also be accountable for strengthening the system for AMU in animal health and supporting dissemination of prudent use guidelines for antimicrobials and encourage adoption of the OIE list of antimicrobials of veterinary importance. FAO will be accountable for collection of evidence on AMU in crops and improving the capacity for the country to design awareness raising behaviour change and educational activities. Each Tripartite agency will also be accountable for guiding the monitoring and evaluation of the component of the project directly under their implementation.

Incremental implementation of the activities leading to achievement of the project outputs and subsequent outcomes has been planned. IPC trainings for healthcare professionals and scaling up of continuous quality improvement on surveillance of hospital acquired infections will be continuous activities that will run throughout the project cycle. Development and training of farm biosecurity guidelines will be done in the first year of the project while training of veterinarians, farmers and veterinary paraprofessionals on the developed farm hygiene and biosecurity guidelines will be held in the second year. Regulatory review processes will be started in the first year and continue through the second year of project implementation. The activity implementation will be in a manner such that foundations are built first for enabling the next phase of project implementation. The development of AMU databases at the pharmacy and poisons board and at the veterinary medicines directorate will be started in the first year of the project whereas the development and strengthening of post marketing surveillance systems in both sectors to help streamline the medicines supply chains will follow. Awareness raising will be undertaken during the World antimicrobial awareness weeks in the two years as well as during the training forums.

Capacity needs for government to sustain results

A capacity needs assessment for the delivery of the project and sustainability of the desired results carried out jointly by the Tripartite and NASIC at the concept development stage gave rise to the above proposed trainings aimed at strengthening skills, abilities and processes that will ensure optimized use of antimicrobials in the human and animal health sectors. This would also enhance the understanding of AMR risks and response options by the different stakeholders targeted. Improved exposure and understanding derived from the on-job training and documentation support will guarantee long-term impacts of the project interventions. The involvement of the NASIC in the project implementation will safeguard the uptake and promotion of the strengthened systems

within the country building on the government's commitment in containing AMR hence sustaining the achievements derived from the Tripartite's collaborative efforts.

Transboundary, regional issues and opportunities

The Eastern African countries have comparable trends and prevalence of transboundary diseases (TADS) and infections in humans and animals. They have similar approaches to diseases/infection control and management systems. Given the related challenges and drivers for AMR arising from disease / infection management, it follows that the countries may have similar needs that require addressing in the fight against AMR. This similarity of events offers an opportunity for sharing intervention strategies and documents thereafter developed. This also offers opportunity for sharing of experiences and lessons learned in addressing AMU associated behaviours and practices in Kenya with other countries in the region. As the medicines market across the East African region follows a common supply chain, and Kenya is actively involved in cross-border collaboration and harmonisation within the East African Community (EAC), there is opportunity to share experiences in a bid to support the mutual recognition agreement (MRA). Specifically, Kenya is actively contributing to the African the *East African Medicines Regulatory Harmonization (AMRH)* Initiative, which aims to harmonise regulatory requirements for human health medicines, including antimicrobials. Therefore, through the work of the national regulatory authorities, Pharmacy and Poisons Board (PPB) and the Veterinary Medicines Directorate (VMD), the regulatory measures implemented through the MPTF project will support the promotion of a harmonised approach to the regulation of antimicrobials across the East African sub-region.

Future scenario for early 2022.

Prior to early 2022, inadequate systems and a weak enabling environment for IPC, hygiene, farm biosecurity and implementation of good agricultural practices in Kenya, required that the Tripartite work with the National antimicrobial coordination team to address the problems encountered. Concerted efforts were made to deliberately strengthen systems for IPC and biosecurity in human and animal health respectively and training of professionals to implement the antimicrobial stewardship in healthcare and responsible use of antimicrobials in animals intended for food together with implementation of good agricultural practices and animal welfare. Evidence was generated on dispensing practices relating to antimicrobials in human health, through inspections of retail pharmacies in selected counties. Information on antimicrobials used in crops was collected and KAP studies conducted to shed light on the AMU associated behaviours and practices. Awareness raising on the AMR risks and response options by target groups was conducted. Data available before early 2022 provided evidence for informing regulatory interventions to improve appropriate use of antimicrobials. Regulatory enforcement for antimicrobials was strengthened through the updating of medicines schedules, and the adoption of the AWARE categorisation; and the updating of legislation to facilitate AMR-related regulation. By rescheduling antimicrobials to comply with AWARE, this regulatory action is guiding health care professionals to prescribe and dispense antimicrobials effectively and efficiently; and the regulatory authority is able to monitor the use of the various categories of antimicrobials, and to guide the health sector (national and county levels) on the appropriate actions to be taken to improve antimicrobial stewardship. Evidence on antimicrobial used in crops was collected and KAP studies conducted to shed light on the AMU associated behaviours and practices. Awareness raising on the AMR risks and response options by target groups was conducted.

All the interventions put in place have resulted in a change in behaviour and attitude towards the use of antimicrobials by professionals, farmers and the public. Guidance documents have been on antimicrobial stewardship and prudent use of antimicrobials in animals have been disseminated for use by *professionals*. This has led to the improved antimicrobial stewardship and diagnostic stewardship amongst healthcare professionals and veterinarians and enhanced compliance to regulations guiding antimicrobial use by professionals and prudent use of antimicrobials at farms. Different stakeholders have an increased understanding of AMR risks and response actions and documented evidence of AMU in crops realised to support interventions for responsible use in the sector.

Stakeholders in all sectors are well aware of AMR risks and response actions. There is available information and evidence of AMU in crops to support implementation of the recommended interventions. The Tripartite program has strengthened the delivery of healthcare services to the public with regards to antimicrobial stewardship which is beneficial to the public by improving health outcomes and containing the development and spread of antimicrobial resistance. The improved uptake of farm hygiene and biosecurity coupled with optimised antimicrobial use in animals intended for food will continuously improve animal health by reducing occurrence of diseases and thus reduce the farmers' costs for treatment of animal diseases.

2.4 Budget, sustainability, and value for money

The budget for this project will be spent on practical prioritised areas of maximum value as identified by the Tripartite and country teams. This involves building capacity to front line professionals that handle patients and farmers. Entrenching antimicrobial stewardship among frontline professionals with a focus on patient safety and AMU reduction at farms ensures that the vulnerable groups (patients and farmers) reap benefits from the institutionalisation of best practices in routine work. This approach will enhance sustainability for the NAP implementation long after this project. Use of human resource from the government who are already committed to the project implementation for planning and execution improves the partnership between the Tripartite organisations and the government. This will ensure a clear vision of the project objective built on strong and well governed institutional structures and organisational processes. Conducting TOT trainings will lead to the development of resource people who will be used by the government to educate and sensitise other professionals and stakeholders thus developing critical mass required to sustain efforts towards, infection prevention and hygiene in human and animal health. Use of local experts from the university, local industries, and practitioners ensures that home grown solutions are documented to solve challenges and reduce the cost of expert fees. The project seeks to benefit the farmers who will gain new information to help them invest in farm biosecurity and hygiene. The reduction in disease prevalence and reduced development of new infections and spread of AMR will reduce the need for antimicrobials and treatment costs. This will improve the overall health of the flock with reduced mortality. This will translate into better incomes and sustainable agriculture for the farmer.

Greater value for money (VfM) will be achieved when maximum outputs for the money invested are delivered. VfM considerations will be embedded into project management processes by adopting implementation/delivery models that combine quality, cost-effectiveness, and equity. A key approach to ensure VfM will be achieved through joint planning to ensure harmonisation of activities and platforms through adoption of the following strategies:

- understand the country's scope as determined by the *National Action Plan* (NAP) and what each of the Tripartite and other stakeholders are doing to enhance synergy and avoid duplication of efforts
- Ensure that adequate data on antimicrobial use (AMU) and antimicrobial consumption (AMC) is collected, managed, and analysed to generate evidence that will be used to inform policy and planning among the involved sectors
- Converting evidence from the AMU/AMC data to guide on development of intervention options and policy instruments that would offer higher returns to investment. Examples of interventions would be cost-effective stewardship programmes in both human and animal health sectors as well as infection prevention and control
- Utilisation of the multi-disciplinary team within the organizations comprising of microbiologists, epidemiologists, pharmacology/pharmacists, laboratory experts, social scientists, public health experts and health economists/policy experts to promote quality project outputs
- The following arrangements are proposed to ensure cost-effectiveness and cost-efficiency of the project:
 - Utilising the OIE sub regional office to provide coordination and leadership to the project will provide value in terms of least cost for relevant quality of management services. Only partial salaries from the three organizations will be drawn from the project
 - Convening back-to-back meetings and workshops in cost-effective venues, taking into consideration objective of meeting and composition of participants

- Using existing structures for project implementation with no additional costs to create new systems
- Coordinated monitoring and evaluation for managing risks and taking responsibility for delivery of outputs
- Engaging technical staff (Tripartite and government partners) with adequate skill to manage the program
- Adopting the OH approach and increasing stakeholder engagement
- Keeping the unit cost of data collection and analysis as low as it can be

Key risks to sustainability include: i) staff turnover in the government affecting current AMR champions, which would weaken implementation of the NAP, ii) non-utilization of AMU/AMC data evidence from the database proposed to inform policy interventions. Some key strategies for sustainability include:

- Increasing capacity for addressing AMR beyond the national level (sub-national levels). Funds from this project will be utilised in training and sensitisation on AMR, AMU/AMC amongst human, and animal health domains aiming at developing more capacity and increasing the number of AMR champions not only at the national but also at sub-national level (counties).
- Generation of data and information to build a case for funding from the regular government funds. This is because implementation of new policies like the AMR policy is often hindered by heavy start up investments, particularly, insufficient knowledge and baseline data. The project funds will fill this gap by collection of quality data that will be analysed to highlight the implications and points of interventions for AMU/AMC policies, infection prevention control (IPC), farm biosecurity and husbandry intervention strategies. In addition, future projects will find baseline data and information onto which they could build on. Based on good practices and lessons learned through this project, a roadmap will be proposed that could be used by the country to efficiently address AMR using a One-Health approach. Through the project, both national and county governments will be sensitised and requested through NASIC and the CASIC to include annual budget lines for AMR and AMC/AMU surveillance.
- Building on existing governance structures to spearhead implementation of the NAP. This will further enhance ownership of the initiatives supported through this grant. Our strategic approach to enhance this mutual understanding and ownership throughout the grant and thereafter, the Tripartite takes a strategic approach that include: i) Aligning of the activities to the country priorities and work closely with NASIC and respective units to implement the activities, ii) Use the coordination platforms (NASIC and CASICs) to discuss on project progress, identify challenges, opportunities and solutions, iii) Promote data driven interventions through facilitating dialogue on the information required for policy and interventions, iv) convening of engagement forums involving policy makers including senior Government officials to discuss on AMR issues and implementation progress during the lesson learning workshops, v) Use of and strengthening of existing government systems (manpower, infrastructure) to collect, analyse and utilize AMU/AMC data.

2.4 Partnership and stakeholder engagement

The Tripartite organisations are members of the NASIC and have individually supported implementation of the NAP through provision of technical support and capacity building. This joint program provides an opportunity to strengthen coordination of the NASIC secretariat in implementing the NAP considering the numerous gaps, which require addressing. These include but not limited to; poor infection control practices in hospitals and the community; high burden of diseases in animals associated with poor husbandry practices and low vaccination coverage levels; lack of evidence on antimicrobial use (AMU) in plants calls for an urgent need to profile antimicrobial plant protection products in the country and their use to reduce the likelihood of misuse and contamination of the environment.

The impact areas identified in this proposal will support the third and fourth strategic interventions of the NAP. This Tripartite program will greatly support the NASIC work in addressing the gaps and the interventions, which have received little attention and support and yet consist of the weakest link in the fight against AMR.

The Ministry of Health (MoH) through the through the Directorate of Health Standards Quality Assurance and Regulations and the Directorate of Clinical and Referral Services will implement the AMR MPTF in collaboration with WHO. The Ministry of Agriculture, Livestock Fisheries and Cooperatives (MOALF&C) through the Directorate of Veterinary Services will implement the animal health component in collaboration with OIE and FAO.

The Tripartite, through their respective global, regional, and national networks will provide guidance, technical and financial support for implementation of the project.

2.5 Programme implementation in the light of COVID-19

Due to the challenging COVID-19 landscape in the country, the implementation may be slowed down if Public Health Safety Measures such as restrictions on movement and gathering continue to be instituted through the implementation period. These might affect planned meetings or scheduled training sessions that require travel across counties. The project addresses core elements that are aligned to the Covid-19 response such as Hygiene and IPC, appropriate use of antibiotics and health promotion activities like awareness creation. Project activities will, however, be aligned and integrated into the Covid-19 response activities for synergies to be realized. The project implementers recognize that if the COVID-19 pandemic results in staff being temporarily unable to report to work, some activities if possible can be undertaken virtually and the team would be able to restart activities immediately when circumstances or instructions regarding restrictions change. The proposal addresses specific system gaps that align to the Covid-19 response such as strengthening hygiene and infection prevention and control through capacity building for professionals which are core public health and safety measures. The awareness raising and capacity building on both IPC and appropriate use of antibiotics is aligned to the Covid-19 response.

2.6 Communication, Advocacy and Lesson Learning

Advocacy efforts will be built upon the evidence generated from various findings, particularly from the data collected from fieldwork activities. The approaches used by national regulatory authorities to engage the pharmaceutical private sector, in order to ensure compliance with regulatory requirements relating to AMR, including the sharing of data on quantities of antimicrobial agents produced and distributed across the human and animal health sectors. Additionally, organizations in the private and faith-based sectors (human health) will be engaged in awareness creation and advocacy, and these activities will provide opportunities for lessons-learning. Dissemination of policy briefs generated from synthesis of knowledge, attitudes, and practices (KAP) surveys and the One-Health study will be done strategically to target the policy makers. Some of the lessons learned and gaps identified at mid-year review of the project will be used to inform interventions and to create the year two action commitment together with working partners. This will also be considered for high-level strategic influencing, communication, and advocacy.

Targeted awareness raising tools will be developed from results of knowledge, attitudes, and practices surveys conducted in public health, animal health, and the environment. Results will be collated into “One-Health inspired awareness campaigns. Specifically, KAP study results that showcase the interconnectivity of people, animals, and the environment in patterning AMR will be emphasized. Youth will be targeted, especially within various universities One Health Clubs to amplify results emanating from this project and on AMR in general. Annual involvement in WAAW celebration, annual competition (debate, paintings, song, film, etc.), creating opportunities for field visits), and activities to boost participation could be considered. Friendships and partnerships built from the various activities will be good grounds for future One Health coordination in Kenya.

Efforts will be made to create dialogue with the private sector, pharmaceutical companies, feed producers, etc., to raise awareness on the dangers of AMR and both public and private sector to explore possible solutions or joint collaborations to still encourage profit-making activities, apply innovation, yet keeping a safer environment for AMR risk mitigation.

Given the relevance of One-Health studies in holistic approaches to address AMR, a report of “One-Health Studies: Lessons-learned” will be written and shared with government and non-governmental partners. We expect the report will focus on lessons learned in the 1) development of One-Health proposals, 2) creating in multidisciplinary teams, and 3) maintaining multidisciplinary collaboration across the project cycle. In the human health sector specifically, a key focus of the MPTF programme is to scale up AMR stewardship, which is already ongoing in selected hospitals. The MPTF funding will facilitate six (6) more health facilities to implement comprehensive AMR stewardship, using existing tools (e.g. guidelines, EML) and expertise (e.g. trainers). In this respect, the human health sector has developed the proof of concept for the planned scale-up, and the programme will enable the documentation of experiences and lessons for other countries. In addition, the MPTF programme has included selected interventions relating to the development and/or review of legislation aimed at strengthening AMR-related functions (e.g. AMR stewardship) in both the animal and human health sectors. These activities will entail engagement with key actors, including parliamentarians, and the legal sector. Such activities also provide opportunities for lessons-learning, both in terms of the approaches used (which may vary between the 2 sectors), and the actual legislative and regulatory instruments developed.

3 Programme implementation

3.1 Governance and implementation arrangements

The MPTF programme in Kenya is anchored on the global AMR Tripartite collaboration between FAO, OIE and WHO. These agencies have collaborated on AMR at global and regional levels, and the MPTF programme provides the first opportunity for formal collaboration at country-level. In this respect, the MPTF programme will align with the principles of the global Tripartite, as well as the agency-specific structures that exist for country-level representation and engagement; including the existing mechanisms for partnership with the Government of Kenya and with other partners.

The institutional hosts of the MPTF programme in Kenya are the three Heads of Agencies (HOA):

- FAO County Office – FAO Representative to Kenya
- OIE Sub-Regional Office – Office of the OIE Sub-Regional Representative, Eastern Africa, and the Horn of Africa
- WHO Country Office – Office of the WHO Representative in Kenya

The HOAs will be responsible for oversight and management decisions relating to the MPTF programme in Kenya. The HOAs will consult often on critical matters relating to the MPTF programme, to ensure that their individual and collective actions are supportive of the objective of the MPTF, as well as other key partnerships objectives at country, regional global levels.

Each agency has a technical expert assigned the role of AMR focal point on full-time basis, and these staff will be responsible for the day-to-day implementation of the programme activities assigned to each agency, and the associated monitoring and reporting as well as the technical support needed. These AMR focal points will form the core technical team of the Tripartite. In this role, each agency will collaborate closely with their regional AMR focal points, to ensure holistic support to the country, and to generate the needed experiences and lessons learning.

Programme Coordination

Among the three agencies, OIE has taken up the role of coordination for the Kenyan AMR-MPTF project. In this role, the OIE Sub-regional Representation for Eastern Africa and Horn of Africa based in Nairobi, Kenya is the Tripartite contact point – both to the AMR MPTF Secretariat, and to the Government. In this role, OIE will ensure collective responsibility and decision-making by the HOAs on the MPTF programme, or other related matters. At the technical level, the AMR focal points will coordinate the roles of their respective agencies, including the disbursement of funds for project implementation and the technical and financial accountability during implementation. They will also liaise closely with the AMR focal points within the government ministries and agencies, and with the NASIC partners.

Implementation arrangements

Cognisant of stronger leadership, advocacy, coordination and accountability that One Health response to antimicrobial resistance requires; the implementation of this project will build on the strong political commitment from the Kenyan government, including the One Health collaborative approach to AMR containment through the NASIC; and the core and shared roles and responsibilities of the respective Tripartite agencies (WHO, OIE and FAO) based on their mandates in their respective sectors. The Tripartite and government teams have worked together to identify gaps in funding of priority interventions in the implementation of the AMR NAP that will be addressed in this proposal.

Composition and Responsibilities of the Country AMR MPTF Team

The AMR MPTF project implementation team in Kenya comprises of the members from the WHO and FAO country offices, OIE Sub-regional Representation for Eastern Africa and Horn of Africa office, Ministry of Health, Ministry of Agriculture, Livestock and Fisheries. The country team is led by the AMR coordinators for the Human Health and Animal health sectors while the Tripartite team is composed of a management team made up of leaders of the Tripartite offices participating in the AMR MPTF project and a technical team comprising of AMR officers in WHO, FAO and OIE.

The Tripartite management team has been responsible for reaching out to the political and senior government officials for goodwill on the project implementation and are expected to strengthen that collaboration and continue engaging with relevant stakeholders for decision making when necessary for the success of the project. This communication will be channelled to the Ministries responsible in consultation with the sector AMR coordinators. The leaders will be responsible for ensuring that the AMR MPTF project is supported within the institutional framework; by assigning dedicated technical persons to coordinate the project on behalf of the agency and for timely execution of activities within the agreed time frames. The leaders will provide foresight and guidance throughout the project implementation process and hold the technical person accountable for implementation of the Tripartite agencies' activities. The Tripartite leaders will also provide the linkage with their respective Regional and Headquarter offices for required support in project implementation.

The Tripartite technical team will work together with the country AMR sector coordinators in planning and implementing interventions according to the workplan. They will develop a monitoring and evaluation framework which they will use to assess and regularly report on the project implementation progress to the Tripartite management team. The Tripartite technical team together with the project coordinator will ensure the smooth running of the project to the best of their ability. Each Tripartite agency will take lead on the implementation and reporting back on the progress of assigned activities.

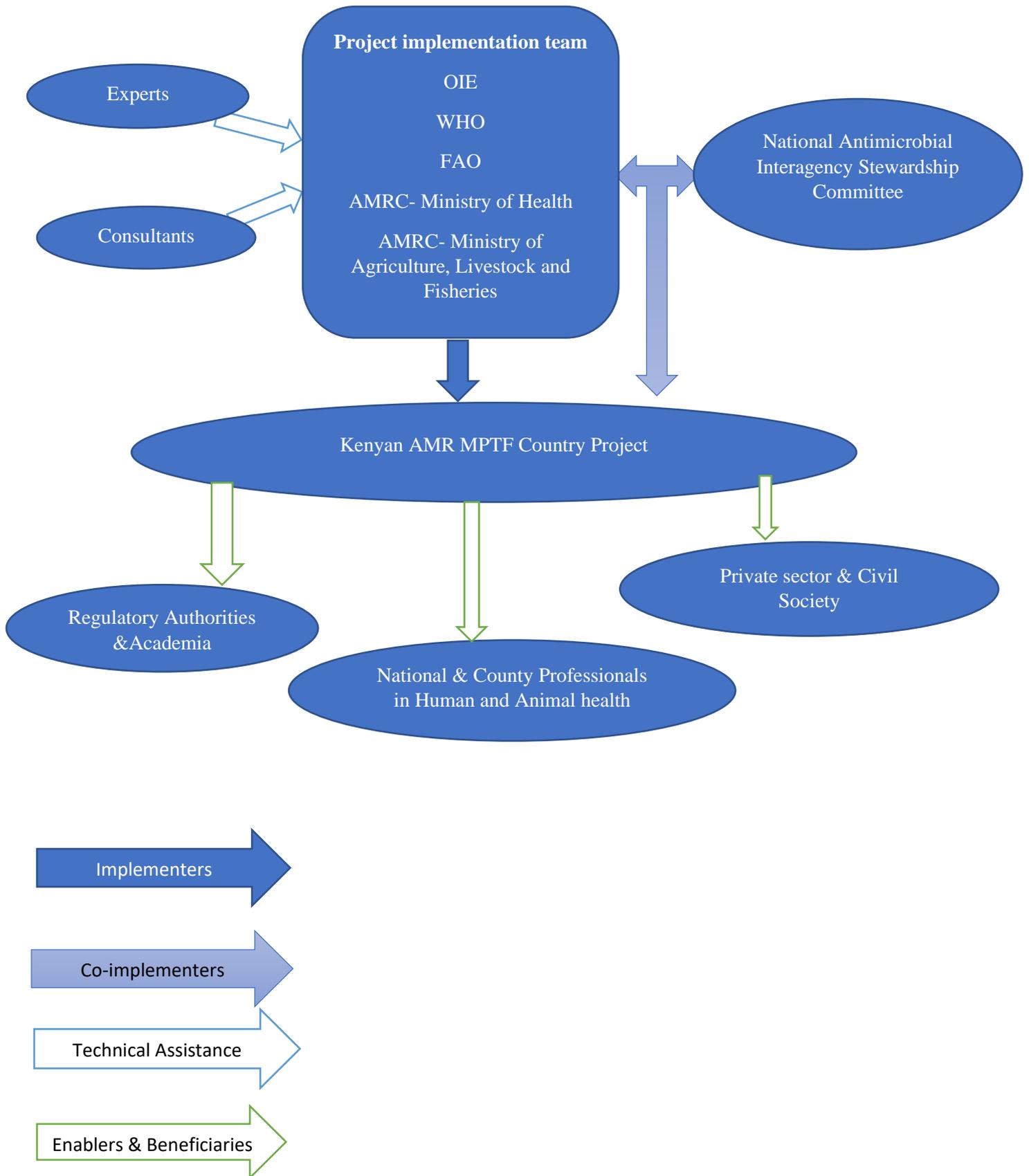
Coordination and implementation of the AMR MPTF project will be managed by the Tripartite working jointly with the country team through the *National Antimicrobial Stewardship Interagency Committee* (NASIC) Secretariat. There will be systematic involvement of private sector, academia, industry actors and civil society groups through appropriate mechanism as key stakeholders in the One Health response to antimicrobial resistance for enhanced action at national and county levels.

The AMR coordinators from the human health and animal health sectors will champion the cause of the AMR project in the country and make regular reports to their Ministerial leaders as part of their commitment and accountability for the project implementation. They will support the Tripartite heads in facilitating and mediating the linkage between the AMR MPTF project and the political and or senior government leadership support necessary for implementation of the project in Kenya. They will also be responsible for mobilising and organising the human resource at the national and county levels required for timely implementation of the proposed activities in collaboration with the NASIC. The AMR coordinators will identify and link all public and private actors with the Tripartite needed for collaborative efforts in the project implementation. The partnership formed between the Tripartite agencies and the Kenyan Government in accelerating the implementation of the AMR NAP will improve the working relationship and enhance the country's ownership of the various interventions that will be undertaken as supported by the Tripartite and strengthen the fight against AMR. It is expected that engagement with the private sector and civil societies will advance the efforts started by the government to contain and prevent AMR and likely to spur investment in the new areas of focus initiated within this project.

The Tripartite will provide guidance, technical and financial support for implementation of the project. This will be done jointly for joint activities or sector wise with regards to the specificity of activities to be undertaken in line with the Tripartite organisational mandates. These will include preparation of training and other project materials; planning and conducting seminars, training and workshops; determination of conference locations, payment of conference costs, accommodation and daily subsistence allowance for the participants.

The day to day program operations will be coordinated through a project coordinator based at the OIE office in Nairobi but working closely with the project implementing team. The consultations between the Tripartite and government colleagues during the concept note development, joint planning and selection of activities for proposal development for the AMR country program considered a fit-in with the ongoing activities of the government, the Tripartite, and other donors by scaling up initial efforts or building foundations for future advancements. This eliminates the risk of duplication or introducing parallel structures. The diagram below shows the organisational arrangement for the project implementation.

Organisational Arrangement



3.2 Monitoring, reporting and evaluation

Reporting on the AMR MPTF will be Results-Oriented, and evidence based. Each Tripartite organisation will provide the Convening/Lead Agent with the following narrative reports prepared in accordance with instructions and templates developed by the Tripartite Joint Secretariat on AMR:

- Annual narrative progress reports, to be provided no later than three (3) months (31 March) after the end of the calendar year, and must include the results matrix, updated risk log, and anticipated activities and results for the next 12-month funding period;
- Mid-term progress review report to be submitted halfway through the implementation of the Joint Programme¹¹ (depending on timing this may merge with the annual report);
- Final consolidated narrative report, after the completion of the joint Tripartite programme, to be provided no later than three (3) months after the operational closure of the activities of the Joint Tripartite programme.

As a minimum, the Tripartite Joint Secretariat on AMR will prepare and report on the activities funded through the AMR MPTF on a 6-month monitoring basis. Additional insights (such as policy papers, value for money analysis, case studies, infographics, blogs) might need to be provided, per request of the Tripartite joint Secretariat on AMR. The joint Tripartite programme will allocate resources for monitoring and evaluation in the budget.

Data for all indicators of the results framework will be shared with the Joint Tripartite Secretariat on AMR on a regular basis, in order to allow the Fund Secretariat to aggregate results at the global level and integrate findings into reporting on progress of the AMR MPTF.

You will be required to include information on complementary funding received from other sources for the activities supported by AMR MPTF, including in-kind contributions and/or South-South Cooperation initiatives, in the reporting done throughout the year.

Headquarters' level shall provide the Administrative Agent (UNDP MPTF Office) with the following statements and reports prepared in accordance with its accounting and reporting procedures, consolidate the financial reports, as follows (*more information on the reporting will be provided at the later time*):

- Annual financial reports as of 31 December each year with respect to the funds disbursed to it from the AMR MPTF, to be provided no later than four months after the end of the applicable reporting period; and
- A final financial report, after the completion of the activities financed by the AMR MPTF and including the final year of the activities, to be provided no later than 30 April of the year following the operational closing of the project activities.

In addition, regular updates on financial delivery might need to be provided, per request of the Fund Secretariat.

The joint Tripartite programme may be subjected to a Programme Review (methodology to be determined) or joint final independent evaluation (JFEI) by the United Nations Evaluation Group's (UNEG) Norms and Standards [for Evaluation in the UN System, using the guidance on Joint Evaluation and relevant UNDG guidance on evaluations. Evaluation results will be disseminated amongst government](#), development partners, civil society, and other stakeholders. A joint management response will be produced upon completion of the evaluation process and made publicly available on the evaluation platforms or similar of PUNOs.

¹¹ This will be the basis for release of funding for the second year of implementation

3.3 Accountability, financial management, and public disclosure

Standard text – do not change.

The AMR MPTF will be using a pass-through fund management modality where UNDP Multi-Partner Trust Fund Office will act as the Administrative Agent (AA) under which the funds will be channelled for the MPTF through the AA. Each Tripartite organisation receiving funds through the pass-through has signed a standard Memorandum of Understanding with the AA.

Each Tripartite organisation shall assume full programmatic and financial accountability for the funds disbursed to it by the AA of the AMR MPTF (Multi-Partner Trust Fund Office). Such funds will be administered by each Tripartite Agency, in accordance with its own regulations, rules, directives and procedures. Each Tripartite agency shall establish a separate ledger account for the receipt and administration of the funds disbursed to it by the AA.

Indirect costs of the Tripartite Organizations recovered through programme support costs will be 7%. All other costs incurred by each Tripartite agency in carrying out the activities for which it is responsible under the Fund will be recovered as direct costs.

Funding by the AMR MPTF will be provided on annual basis, upon successful performance of the programme.

Procedures on financial transfers, extensions, financial and operational closure, and related administrative issues are stipulated in the Operational Guidance of the AMR MPTF.

Each Tripartite organisation will take appropriate measures to publicize the AMR MPTF and give due credit to the other Tripartite agencies. All related publicity material, official notices, reports and publications, provided to the press or Fund beneficiaries, will acknowledge the role of the host Government, donors, Tripartite partners, the Administrative Agent, and any other relevant entities. In particular, the AA will include and ensure due recognition of the role of each Participating Organization and partners in all external communications related to the AMR MPTF.

***Legal Clause:** Please indicate if a UNDAF or UNSDCF containing Legal Context information exists currently in the country, if yes, please provide a copy; if no, please include FAO Legal Provisions as appendices (Appendices 2.1 and 2.2) to the document before signing with the Government.

Yes

No

Annexes

Annex 1 - Log Framework Template

AMR MPTF Log framework		Name of country Kenya	
Impact: AMU associated behaviours and practices sustainably improved in critical sectors			
Objectives	Indicators	Sources of verification	Key assumptions and risks
<p>MPTF Outcome Objectives</p> <p>Use of antimicrobials optimized in critical sectors</p>	<p>Indicator 1:</p> <p>Tools for Country level AMC/AMU data collection developed for human and animal health.</p> <p>Baseline value:</p> <p>some country level AMC/AMU data collection tools are available but more needs to be adopted from the global tools</p> <ul style="list-style-type: none"> •AMU annual reporting to the OIE global database on AMU occurs but with lots of challenges •AMR and AMU data available from pilot sites <p>Target value:</p> <p>2 sets of tools for AMU and AMC developed for use in human and animal Health</p>	<p>1. <i>Data collection templates</i></p>	<ul style="list-style-type: none"> • <i>Pharmacy and poisons Board and the Veterinary medicines Directorate will support the processes.</i> • <i>All stakeholders required for this process will be willing to participate</i>
	<p>Indicator 2:</p> <p>AMC/AMU databases developed in the MoH and MoALFC</p>	<p>2. <i>Database for AMC/AMU data available</i></p>	<ul style="list-style-type: none"> • <i>There will be adequate capacity to develop the databases in a timely manner</i>

AMR MPTF Log framework		Name of country Kenya	
Impact: AMU associated behaviours and practices sustainably improved in critical sectors			
Objectives	Indicators	Sources of verification	Key assumptions and risks
	<p>Baseline value:</p> <p>AMC data for human health is being compiled (by PPB) for prior years</p> <p>There is no post market surveillance plan for antimicrobials in animal health.</p> <p>The AMU/AMC databases for humans and animal health do not exist</p> <p>VMD has been compiling annual import data on antimicrobials intended for use in animals for reporting to the OIE global database</p> <p>Target value:</p> <p>Databases developed in the MoH and MoAFC</p>	<p>3. Annual AMC/AMU reports</p> <p>A post market surveillance plan for AMU in animals</p>	<ul style="list-style-type: none"> • <i>Annual reports will be generated</i>
<p>2.Improved understanding of AMR risks and response options by targeted groups</p>	<p>Indicator 1:</p> <ul style="list-style-type: none"> •National and county targeted AMR awareness campaigns established. <p>Baseline value:</p> <p>Outreach for Targeted Awareness campaigns have been limited to national level and two counties in earlier campaigns.</p>	<p>AMR campaign reports</p> <p>AMR awareness survey reports</p>	<ul style="list-style-type: none"> • <i>Stakeholders from counties will be willing to participate in the awareness campaigns</i> • <i>Respondents will be willing to participate in the assessment</i>

AMR MPTF Log framework		Name of country Kenya		
Impact: AMU associated behaviours and practices sustainably improved in critical sectors				
Objectives	Indicators	Sources of verification		Key assumptions and risks
	<p>Target value: AMR campaigns held Six (6) counties</p> <p>level of understanding of AMR risks and response by targeted groups assessed</p> <p>Baseline value: Assessment of understanding of AMR risks and response has not been done</p> <p>Target value: 10% increase in AMR awareness and response by target group</p>			
MPTF Output Objectives	Indicator	Source of Verification	Key Activities	Key Assumptions and Risks
<i>1. Systems for biosecurity and IPC strengthened</i>	<p>Indicator A.1: <i>National IPC and good practices guidelines developed and/or disseminated</i></p> <p>Baseline value:</p> <ul style="list-style-type: none"> •There are no national biosecurity guidelines developed •MOH IPC guidelines are available but with limited distribution and implementation. 	<p>A.1. IPC and Biosecurity guideline documents</p> <p>2. Dissemination reports for the IPC and biosecurity guideline documents</p>	<p><i>Activities A:</i></p> <p><i>1. Build capacity of 6 county IPC committees on HAI surveillance and the WHO Multimodal strategies for IPC in 6 county referral hospitals</i></p> <p><i>2. Scale up continuous quality improvement approach for facility IPC committees on HAI surveillance and the WHO Multimodal strategies for IPC and Waste management & Hand Hygiene 6 county Referral Hospitals</i></p> <p><i>3. Develop farm biosecurity guidelines and interventions in</i></p>	<ul style="list-style-type: none"> • <i>Adequate stakeholder engagement will be achieved take</i> • <i>The COVID-19 situation will be under control and will not interfere with the process of development and dissemination.</i> • <i>Funding for implementation will be available in a timely manner to support all objectives</i> • <i>Selected sites will be willing and ready to participate</i>

AMR MPTF Log framework		Name of country Kenya		
Impact: AMU associated behaviours and practices sustainably improved in critical sectors				
Objectives	Indicators	Sources of verification		Key assumptions and risks
	<p>Target value:</p> <p>Biosecurity guidelines available and disseminated</p> <p>IPC guidelines disseminated</p>		<p>reference to existing regulations, international standards and best practice for high-risk food chains where high AMU predisposes to AMR.</p>	<ul style="list-style-type: none"> • Availability and willingness of stakeholders to participate in the documentation and validation processes
	<p>Indicator A.2:</p> <p>Number of trained professionals on IPC and Biosecurity</p> <p>Baseline value: 200 personnell trained in hospitals on IPC</p> <p>There has been no biosecurity trainings</p> <p>Target value: 3090 trained on IPC</p> <p>Two trainings on biosecurity targeted.</p>	<p>A.2</p> <p>Participants training lists and mentorship reports Biosecurity guideline documents for the poultry, pig and Dairy value chains</p>	<p>Reports on training</p>	<ul style="list-style-type: none"> • Participants would avail themselves for training and take up and implement the IPC and biosecurity guidelines after training
<p><i>Output B</i></p> <p><i>Systems for optimized use strengthened</i></p>	<p>Indicator B.1:</p> <p>Number of regulatory framework for AMC/AMU in human and animal health revised/ developed/updated</p> <p>Baseline value:</p> <ul style="list-style-type: none"> •Gaps in the regulatory framework to support optimized AMU/AMC have been identified <p>Target value</p> <p>Three (3) legislative reviews targeted</p>	<p>B.1</p> <p>Legal notice on prohibition of use of antimicrobials AMU as growth promoters</p> <p>Regulatory schedules</p>	<p>Activities B:</p> <p>1. Scale up enforcement of regulation along the distribution chain of antimicrobials</p> <p>2. Update and operationalize regulatory schedules of antimicrobial agents to align with AWARE categorization</p> <p>3. Develop a reporting system and database to support country level antimicrobial consumption in humans.</p> <p>4. Scale up implementation of the National AMS guidelines through existing medicines and</p>	<p>Lack of control over the legislative review process</p> <ul style="list-style-type: none"> • Adequate stakeholder engagement will be achieved • Availability and commitment of stakeholders • The database will be used by the stakeholders • The county medicines and therapeutics committees will be willing and committed to

AMR MPTF Log framework		Name of country Kenya		
Impact: AMU associated behaviours and practices sustainably improved in critical sectors				
Objectives	Indicators	Sources of verification		Key assumptions and risks
	<p>Baseline value</p> <p>National Guideline on AMS in health care settings developed</p> <p>Target value:</p> <p>in 6 counties</p>		<p><i>therapeutics committees in 6 counties</i></p> <p>6. <i>Improve reporting on AMU in animals</i></p> <p>7. <i>Capacity building of county veterinary services on implementation of the NAP and prudent use of antimicrobials</i></p> <p>8. <i>Conduct a socio-anthropological study to help design interventions that will influence behaviour change across the public health and veterinary service providers (One Health study)</i></p> <p>9. <i>Profile AMU in crops with reference to use of clinically important antimicrobials in crop production disease and pest control</i></p>	<p><i>implement the AMS guideline</i></p> <ul style="list-style-type: none"> • <i>The relevant stakeholders along the veterinary medicine supply chain will support the process</i> • <i>The trained staff will spearhead AMR NAP implementation at the county</i> • <i>Targeted stakeholders will be willing to participate in the study</i> • <i>The consultant will timely deliver the assignment</i>
	<p>Indicator B.2:</p> <p>Guidelines for prudent use of antimicrobials in animals disseminated</p> <p>Baseline value:</p> <p>Guidelines for prudent use of antimicrobials in animals and National Guideline</p>	B.2 Dissemination reports		<ul style="list-style-type: none"> • <i>Guidelines will be internalised and used appropriately to influence AMU behaviour</i>

AMR MPTF Log framework		Name of country Kenya		
Impact: AMU associated behaviours and practices sustainably improved in critical sectors				
Objectives	Indicators	Sources of verification		Key assumptions and risks
	<p>on AMS in health care settings have been developed but with limited dissemination to stakeholders</p> <p>Target value: Establish AMS programs</p>			
<p><i>Output C</i></p> <p><i>Improved capacity to design awareness raising behaviour change and educational activities</i></p>	<p>Indicator C.1:</p> <p><i>Support delivery of two (2) nationwide AMR campaign targeting stakeholders' groups based on targeted messaging within sectors</i></p> <p>Baseline value:</p> <p>Awareness raising among target audience has been limited to national level celebrations and three counties.</p> <p>Target value:</p> <p>Six counties participating in AMR awareness campaigns</p>	<p>C.1</p> <p>AMR campaign reports</p> <p>Targeted messages developed for identified stakeholders</p>	<p><i>Activities C:</i></p> <p><i>1. support for the world antibiotic awareness Week</i></p> <p><i>2. Quarterly publication/development of newsletters and peer articles on AMR progress and NAP implementation</i></p>	<ul style="list-style-type: none"> • <i>Target stakeholders will be willing to engage and participate in campaigns</i> • <i>Timely collecting and compilation of reports for publication.</i>
	<p>Indicator C.2: <i>The Implementation of the communication strategy harmonised</i></p> <p>Baseline value:</p> <ul style="list-style-type: none"> • There has been disjointed implementation of the communication strategy <p>Target value:</p> <p>Harmonised targeted messages to different</p>	<p>C.2</p> <p><i>Joint awareness creation events</i></p>		

AMR MPTF Log framework		Name of country Kenya		
Impact: AMU associated behaviours and practices sustainably improved in critical sectors				
Objectives	Indicators	Sources of verification		Key assumptions and risks
	stakeholders with regular publication of AMR reports			

Annex 2 - Risk Matrix Template

Risk description	Risk Category: Contextual Programmatic Institutional	Worst case consequence for the project	Risk Score		Mitigating action	Action owner
			Impact	Likelihood		
The Covid-19 pandemic will persist into the implementation period interfering with the project implementation.	Contextual	The proposed interventions will not be implemented	High	Moderate	<ul style="list-style-type: none"> Identify alternative ways of implementing proposed interventions Aligning project interventions with relevant covid-19 response plans 	Project implementers
Delayed funding	Programmatic	Failure of the project to start as planned	High	Low	<ul style="list-style-type: none"> Timely planning and coordination 	Funder
Organisational changes affecting key project personnel	Institutional	Interruptions/delayed implementation	Moderate	moderate	<ul style="list-style-type: none"> Build capacity of the project team 	Project implementers
Lack of control over the legislative review process	Institutional	Stalemate between stakeholders and legislators	Low	Low	Consensus building and advocacy	Government

Annex 3 - Outline of Budget

Categories	FAO	OIE	WHO	TOTAL
1. Staff and other personnel costs ¹²	75,000	100,000	79,000	254,000
2. Supplies, Commodities, Materials ¹³	5,000	22,842	25,260	53,102
3. Equipment, Vehicles and Furniture including Depreciation ¹⁴	0	0	0	0
4. Contractual Services ¹⁵	3,750	54,000	63,509	121,259
5. Travel ¹⁶	181,624	188,290	110,805	480,719
6. Transfers and Grants Counterparts ¹⁷	0	0	0	0
7. General Operating and Other Direct Costs ¹⁸	15,000	8,700	1,800	25,500
Total Direct Costs	280,374	373,832	280,374	934,580
8. Indirect support costs (Max. 7% of overall budget) ¹⁹	19,626	26,168	19,626	65,420
TOTAL	300,000	400,000	300,000	1,000,000
Please indicate which organisation will receive pre-financing facility²⁰				None

¹² Staff and other personnel costs: Includes all related staff and temporary staff costs including base salary, post adjustment and all staff entitlements. This includes the costs of a full-time project coordinator, based either in one of the organisations or the National coordination committee.

¹³ Supplies, Commodities, Materials: Includes all direct and indirect costs (e.g. freight, transport, delivery, distribution) associated with procurement of supplies, commodities and materials. Office supplies should be reported as "General Operating".

¹⁴ Equipment, Vehicles and Furniture including Depreciation: The procurement of durable equipment is not eligible for the AMR MPTF and this budget line should therefore not be used.

¹⁵ Contractual Services: Services contracted by an organization which follow the normal procurement processes. It used for procurement of services requiring provision of intellectual or specialization services not foreseen under works and construction contracts such as, but not limited to, maintenance, licensing, studies, technical, training, advisory services. These are ruled by FAO policy MS 502 or MS 507 ruling LoA.

¹⁶ Travel: Includes staff and non-staff travel paid for by the organization directly related to a project.

¹⁷ Transfers and Grants to Counterparts: Includes transfers to national counterparts and any other transfers given to an implementing partner (e.g. NGO) which is not similar to a commercial service contract as per above. Please reference FAO policy MS 502.

¹⁸ General Operating and Other Direct Costs: Includes all general operating costs for running an office. Examples include telecommunication, rents, finance charges and other costs which cannot be mapped to other expense categories. In addition, desk work from Headquarters (including from the project lead technical officer) should also be factored in these categories.

¹⁹ Indirect Support Costs: (No definition provided).

²⁰ Max 25,000 USD fund can be used as pre-financing. More detailed information can be found in the guiding notes

Appendices

Appendices are attached as separate attachments to the email received containing this guidance.

- Appendix 1 – Details of Budget template (excel sheet)
- Appendix 2.1 – FAO legal document cover page
- Appendix 2.2 – FAO Legal document clause
- Appendix 3 – Tripartite Results Matrix

Checklist before submission

1. *Country Proposal Submission Template*
2. *Log Framework Template (see Annex 1) (use of SMART output methodology up to the activity level)*
3. *Risk Matrix Template (see Annex 2)*
4. *Outline of Budget Templates (see Annex 3)*
5. *Work Plan Template (see Annex 4)*
6. *Details of Budget Template (see Appendix 1)*
7. *Legal clause (please see paragraph 3.3 Accountability, financial management, and public disclosure and Appendices 2.1 and 2.2)*

Please also attach the supporting documents:

8. *AMR National Action Plan*
9. *Any AMR progress reports or other relevant documentation (the recent 3 years)*
10. *Endorsement of AMR National Coordination Committee*
11. *Letter of support from key line ministries (at least Ministry of Health and Ministry of Agriculture)*
12. *Submission letter signed by heads of Tripartite organisations*