

The Antimicrobial Resistance (AMR) MULTI-PARTNER TRUST FUND

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

Country Proposal Submission TEMPLATE

1. Full proposal overview

Project title	AMR MPTF: Support the implementation of the AMR National Action Plan in Tunisia using One Health Approach (AMR-MPTF-TUNISIA)
Implementing organisations	FAO : Food and Agriculture Organization WOAH : Word Animal Health Organization WHO : World Health Organization
Timeframe	(January 2023 ¹) 36 months
Lead Quadripartite Focal Point	
Name	Philippe Ankers
Organization	Food and Agriculture Organization (FAO)
Title	FAO Tunisia Representative Coordinator FAO Sub-Regional Office for North Africa
E-mail	Philippe.Ankers@fao.org
Telephone number (include country and city code)	Tel: +216 70145700 - Fax : +216 71861960
Address	Rue du Lac Winnipeg, 1053 les Berges du Lac 1 – Tunis
Counterpart Quadripartite Focal Points	
Name	Rachid Bouguedour
Organization	WOAH : Word Animal Health Organization
Title	Representative of WOAH - Sub-regional Office for North Africa
E-mail	r.bouguedour@oie.int / r.bouguedour@woah.org
Telephone number (include country and city code)	+ 216 71 237 400
Name	Ibrahim El-Ziq
Organization	World Health Organization
Title	WHO Tunisia representative
E-mail	elziqi@who.int
Telephone number (include country and city code)	Tel:+216 71155604 Fax : +216 71155634
Name	Levis KAVAGI
Organization	UNEP
Title	Africa Coordinator, Ecosystems and Biodiversity Programme
E-mail	Levis.kavagi@un.org
Telephone number (include country and city code)	+254738934938 (cell phone) +254207623145 (office-landline)
Other Implementing Partners	<ol style="list-style-type: none"> Ministry of Health <ul style="list-style-type: none"> Directorate of Pharmacy and Medicine National Drugs Control Laboratory National Agency for Sanitary and Environmental Control of Products

¹ note that the programme will in any case officially start on the date that the funds are disbursed


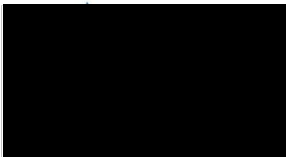
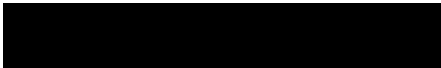
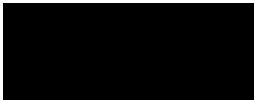
	<ul style="list-style-type: none"> - National Instance of Food Safety - Department of Environmental Hygiene and Environmental Protection <p>2. Ministry of Agriculture, water resources and fisheries</p> <ul style="list-style-type: none"> - General Directorate of Veterinary Services - General Directorate of Plant Health and Control of Agricultural Inputs - National veterinary school - Veterinary Research Institute - National Agricultural Extension Agency (AVFA) - National Zoosanitary Surveillance Center (CNVZ) <p>3. Ministry of Environment</p> <ul style="list-style-type: none"> - International Center for Environmental Technologies of Tunis (Centre International des Technologies de l'Environnement de Tunis/ CITET) - General Directorate for the Environment and Quality of Life <p>4. Non-Governmental Organizations</p> <ul style="list-style-type: none"> - Agri-food technical center - Tunisian Farmers Unions (UTAP, SYNAGRI) - National Council of the Order of Physicians - National Council of the Order of Pharmacists - National council of the Order of veterinarians - National Council of the Order of Dentists - Consumers associations - Farmers associations
Budget	
<i>Total amount (USD) based on budget summary in Annex</i>	1,002,721*
<i>Total amount (USD) allocated to each Quadripartite partner</i>	<p>WHO: 263,436</p> <p>WOAH: 262,367</p> <p>FAO: 374,197</p> <p>UNEP: 102,720</p>
Background	<p>For decades, antimicrobials have helped cure infections and save human and animal lives.</p> <p>The overuse and misuse of antimicrobials has contributed to the development and spread of microorganisms that have become resistant to antimicrobials.</p> <p>Antimicrobial resistance presents a serious threat to human lives, animals, plants and well-being. It is also a threat to food security, production systems, environment and sustainable economic development.</p> <p>The increase and spread of AMR will hamper achieving Sustainable Development Goals (SDGs), especially those related to health, poverty reduction, food security and economic growth.</p>

	<p>Therefore, fighting against AMR is a core component for achieving Sustainable Development Goals (SDGs). There is a growing recognition of the links between the sectors of human health, animal health, plant production, food security and the environment, both in terms of the evolution of the AMR problem and the solutions to this issue. In order to effectively combat AMR, it is necessary to adopt a "One Health" approach.</p> <p>Antimicrobial resistance is a neglected serious public health problem in Tunisia. Indeed, for the past fifteen years, Tunisia has faced an overall increase in microbial resistance. This is mainly due to the overconsumption and misuse of antimicrobials, reducing available therapeutic arsenal, especially for the most vulnerable patients. In human health, antimicrobial resistance surveillance showed that resistance of <i>Escherichia coli</i> to 3rd generation cephalosporins increased from 4% in 2004 to 17% in 2014 while resistance of <i>Klebsiella pneumoniae</i> to carbapenems increased from zero before 2004 to 6% in 2014.(1,2,3)</p> <p>In animal health, several studies have shown significant resistance in certain livestock sectors, particularly in poultry where the rate of <i>Escherichia coli</i> strains resistant to 3rd generation cephalosporins is on average 30%. In addition, significant resistance to tetracycline and fluoroquinolones is also noted in various animal species.(1,4)</p> <p>This alarming situation has motivated the human health and animal health sectors to join the global efforts to combat AMR.</p> <p>In 2019, Tunisia developed its National Action Plan (NAP) on AMR, mainly addressing awareness, surveillance and infection prevention involving human health, animal health, and food security.</p> <p>The aim of this project is to streamline actions of the four organizations (FAO, WOA, WHO and UNEP) in support to NAP implementation in Tunisia mainly through improved governance, data generation and management.</p>
<p>Status of National Action Plan for AMR</p>	<p>In 2019, Tunisia developed its National Action Plan (NAP) on AMR, mainly addressing awareness, surveillance and infection prevention. The NAP was prepared jointly by the Ministry of Health and the Ministry of Agriculture, represented by the veterinary services but plant protection and environment sectors were not involved. This project will allow participation of those sectors in revising and implementing the NAP. At the structural level, the Minister of Health created the Technical Committee on AMR on 2 January 2015. It is composed of volunteer experts: infectiologists, general practitioners, resuscitators, microbiologists, veterinarians, pharmacists, representatives of the national orders of doctors, veterinarians, pharmacists and dental medicine, the deans of the faculties of medicine, pharmacy and dentistry and veterinary medicine, learned scientific societies and representatives of concerned ministries. On April 10, 2018, the Ministry of Agriculture created a scientific committee on AMR and AMU. The members of this committee, in collaboration with other eminent</p>

	<p>academics and scientists, have already carried out several actions raising awareness on AMR at different levels.</p> <p>The Technical Committee of the ministry of health is very active at the national and local level to implement AMR activities related to human health in collaboration with WHO but the role of this committee remains advisory without decision-making power. While the Ministry of environment and the national environment protection agency are crucial in the fight against AMR by mainstreaming the environmental dimensions of AMR across sectors, surveillance and reporting, and pollution control and enforcement, etc. the participation of the ministry in the NAP coordination mechanism requires strengthening.</p> <p>Therefore it is crucial to create a multisectoral national committee with high political support and mandate to coordinate and implement the NAP.</p>						
Project Summary							
Impact	<p><i>1. Countries make explicit commitments (policies, investment plans, programs, legal frameworks, resources allocation) on AMR based on evidence and quality data</i></p> <p><i>2. AMU associated behaviors and practices sustainably improved in critical sectors</i></p>						
Outcome(s)	<p><i>1. Risks and benefits of AMR reflected in national budgets and in development/multi-lateral partner sector wide investments</i></p> <p><i>2. Evidence base/representative data on AMR/AMU improved for policy makers and sectors implementing AMU practices</i></p> <p><i>3. Improved understanding of AMR risks and response options by targeted groups</i></p>						
Outputs and Key activities	<table border="1"> <thead> <tr> <th colspan="2">Project Outputs and Main Activities</th></tr> </thead> <tbody> <tr> <td> output 1.1.1 Improved capacities for designing and implementing AMR-related policy frameworks, investment plans and programs </td><td> <p>1.1.1.1 Support the establishment and functioning of the national inter-ministerial AMR steering committee in Tunisia.</p> <p>1.1.1.2 Strengthen the management and monitoring capacities of NAP activities through joint workshops on AMR Management. (assessment of NAP 2019, identification of gaps, suggestions for improvement)</p> <p>1.1.1.3 Revise the NAP 2019 to include environmental health and plant health and to update activities</p> <p>1.1.1.4 Assess current legal and institutional frameworks governing AMR in the human health, animal health, plant protection and environment sectors and propose the necessary amendments to meet AMR challenges using quadripartite tool.</p> </td></tr> <tr> <td> output 1.2.1 Systems for generating, analyzing and </td><td> <p>1.2.1.1. Assess human, technological and material capacities of human, animal, plant and environmental health laboratories working on AMR, support networking and provide reagents</p> </td></tr> </tbody> </table>	Project Outputs and Main Activities		output 1.1.1 Improved capacities for designing and implementing AMR-related policy frameworks, investment plans and programs	<p>1.1.1.1 Support the establishment and functioning of the national inter-ministerial AMR steering committee in Tunisia.</p> <p>1.1.1.2 Strengthen the management and monitoring capacities of NAP activities through joint workshops on AMR Management. (assessment of NAP 2019, identification of gaps, suggestions for improvement)</p> <p>1.1.1.3 Revise the NAP 2019 to include environmental health and plant health and to update activities</p> <p>1.1.1.4 Assess current legal and institutional frameworks governing AMR in the human health, animal health, plant protection and environment sectors and propose the necessary amendments to meet AMR challenges using quadripartite tool.</p>	output 1.2.1 Systems for generating, analyzing and	<p>1.2.1.1. Assess human, technological and material capacities of human, animal, plant and environmental health laboratories working on AMR, support networking and provide reagents</p>
Project Outputs and Main Activities							
output 1.1.1 Improved capacities for designing and implementing AMR-related policy frameworks, investment plans and programs	<p>1.1.1.1 Support the establishment and functioning of the national inter-ministerial AMR steering committee in Tunisia.</p> <p>1.1.1.2 Strengthen the management and monitoring capacities of NAP activities through joint workshops on AMR Management. (assessment of NAP 2019, identification of gaps, suggestions for improvement)</p> <p>1.1.1.3 Revise the NAP 2019 to include environmental health and plant health and to update activities</p> <p>1.1.1.4 Assess current legal and institutional frameworks governing AMR in the human health, animal health, plant protection and environment sectors and propose the necessary amendments to meet AMR challenges using quadripartite tool.</p>						
output 1.2.1 Systems for generating, analyzing and	<p>1.2.1.1. Assess human, technological and material capacities of human, animal, plant and environmental health laboratories working on AMR, support networking and provide reagents</p>						

	interpreting data on resistance and consumption/use patterns developed or strengthened	<p>and expendables to support joint surveillance program.</p> <p>1.2.1.2. Support the national AMR/AMU surveillance system in Tunisia for better monitoring planning, data collection, processing and dissemination to key stakeholders</p> <p>1.2.1.3. Assess, design and support implementation of traceability system of antimicrobials in human health, animal health, plant protection and environment sectors.</p> <p>1.2.1.4.: Carry out a study on the causes and environmental impacts of AMR in Tunisia</p>
	Output 2.1.1 Improved capacity to design awareness raising, behavior change and educational activities	<p>2.1.1.1. Develop and implement a joint communication plan to raise awareness on AMR by ensuring equitable participation between men and women and by respecting the participation of people with disabilities</p> <p>2.1.1.2. Organize training of key stakeholders in human health, animal health, plant protection and environment on AMR, good practices, biosecurity and infection control and prevention by ensuring equitable participation between men and women and by respecting the participation of people with disabilities</p> <p>2.1.1.3. Organize training sessions on the appropriate use of antimicrobials for the human, animal and plant health sectors by respecting the gender approach.</p> <p>2.1.1.4. Promote Integrated Pest Management for reducing use of antimicrobials in the plant health sector by respecting the gender approach</p> <p>2.1.1.5. Advocate for the development of an updated AMR training modules in veterinary, medical, environment, dentistry, pharmacy and paraprofessional</p> <p>2.1.1.6. Organize a joint training workshop on negotiation and advocacy</p>
Link to National Action Plan	<p>Tunisia is facing financial challenges to fully implement its NAP on AMR, especially with the covid-19 crisis and its health and financial impacts. The AMR-MPTF-Tunisia project will support Competent Authorities to concretely revise and implement their National Action Plan through multisectoral and One Health approach by fully involving the human health, environment and agriculture sectors.</p> <p>The Tunisian AMR NAP includes 13 strategic objectives (SO):</p>	

	<ol style="list-style-type: none"> 1. Awareness and communication on antimicrobial resistance and antibiotics 2. Strengthen knowledge on antimicrobial resistance and the risks associated with it by updating initial and continuing education programs 3. Promote and plan communication and behavior change activities on AMR and related risks 4. Establishment of the national resistance surveillance and monitoring system 5. Lab upgrades 6. Lead epidemiological research 7. Strengthen the quality control system 8. Set up a national structure for hygiene, prevention and control of nosocomial infections/ Strengthen biosecurity in the veterinary environment by upgrading animal breeding buildings 9. Improving preventive medicine in the community: Vaccines 10. Ensure continued access to high-quality ATBs 11. Ensure regular monitoring of the consumption of ATBs in human and animal health 12. Ensure rational use of antibiotics in human health 13. Guarantee rational and prudent use of antibiotics in animal health <p>All MPTF activities are anchored to the AMR NAP and have been selected, discussed, prioritized, agreed on and budgeted in close collaboration with WHO, FAO, WOA, UNEP and the Ministry of Health, Ministry of Agriculture, Water resources and fisheries, and Ministry of Environment.</p> <p>The Tunisian Government needs support of the project for strengthening multisectoral collaboration, involvement of environment and plant protection, capacity building, strengthening AMR surveillance and improving AMR knowledge and practices.</p>
<p>Link to country's development priorities</p>	<p>The Tunisian AMR National Action Plan is consistent with the government's priorities. Indeed, Tunisia has validated its National Health Policy by 2030, which puts the citizen at the heart of health systems and which, aims to guarantee a healthier environment and behaviours protecting the health of families and communities with a more effective and efficient health system. The objectives of the NAP are also in line with the objectives of the five-year plan of the Ministry of Health 2016-2020 revised in 2021, especially the following strategic areas: 1. Prioritize prevention and act on the determinants. 3. Innovation 4. New governance for a more efficient health policy. The NAP is also in line with the priorities of the Ministry of Agriculture and the strategy of the veterinary services (2019-2030) mainly focusing on two priorities :</p> <p>(i) fight against animal diseases and (ii) veterinary public health protection including rationalization of the use of veterinary antimicrobials, their traceability and surveillance and control of their residues in food.</p> <p>The NAP further aligns to the mandate of the Ministry of Environment which inter alia seeks to ensure the fulfilment of international</p>

	obligations in the fields of pollution control, protection against, and limitation or elimination of, environmental risks, environment protection and sustainable development
<p>We the responsible officers of the Quadripartite 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</p>	
Signatures of responsible Quadripartite representatives²	
Name: <i>Philippe Ankers</i> FAO Tunisia representative	
Name: <i>Rachid Bouguedour</i> WOAHA Sub Regional Representative	
Name: <i>Ibrahim El-Ziq</i> WHO Tunisia representative	
Name: Frank Turyatunga UNEP Regional Director and Representative for Africa	
<i>NB: Government endorsement of the programme is required before the proposal can be submitted to the Steering Committee. Please send a letter of support from the government with this proposal.</i>	

Joint Programme Description

1 Baseline and situation analysis

1.1 Problem statement (max 1 page)

Antimicrobial resistance is a serious public health problem in Tunisia. Indeed, during the past fifteen years, Tunisia has faced an overall increase in bacterial resistance to antimicrobial agents. This is mainly due to the overconsumption and misuse of antimicrobials, thus reducing the available therapeutic arsenal, especially for the most vulnerable patients. In human health, antimicrobial resistance surveillance showed that resistance of *Escherichia coli* to 3rd generation cephalosporins increased from 4% in 2004 to 17% in 2014 to 18.8% in 2019 and resistance of *Klebsiella pneumoniae* to carbapenems, which did not exist before 2004, increased to 6% in 2014 to 22.4% in 2019. This resistance does not spare Gram-positive cocci, in particular staphylococci, which have developed resistance to methicillin (17.6% in 2019). (1, 2, 3, 5)

² Electronic signatures are authorised

In animal health sector, there is no structured AMR surveillance program but several ad hoc studies have shown significant resistance, particularly in poultry sector where the rate of *Escherichia coli* strains resistant to 3rd generation cephalosporins is on average 30% (1, 4). Resistance involving extended-spectrum beta-lactamase-producing Enterobacteriaceae has also been described in cases of bovine mastitis (6). Significant resistance to tetracycline and fluoroquinolones is also noted in various animal species (7).

Though mandated under the environmental protection act, AMR surveillance in the environment is limited, and not structured. It also lacks coordination with the other sectors such as agriculture and human health.

The most critical gaps to be addressed are:

- Limited coordination between national stakeholders for designing and implementing AMR related policy frameworks, investment plans and programs
- Lack of structured and integrated AMR surveillance systems that brings together all sectors
- Lack of coordination in generating, analyzing and interpreting data on AMR and AMU/AMC
- Lack of involvement of plant protection and environment sectors in national AMR activities
- Limited capacity to design coordinated awareness campaigns

The project is therefore proposing actions to improve coordination between different stakeholders from different sectors on policy and data generation aspects and to raise awareness on AMR in Tunisia by developing communication and advocacy products targeting different audiences. In addition, the project focuses on enhancing sectorial surveillance systems of AMR and supporting laboratory networking.

Addressing AMR using One Health approach requires engagement of multi-sectoral stakeholders, political commitment, appropriate policy and legislative frameworks.

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

OUTPUT 1.1.1.	Improved country's capacities for designing and implementing AMR-related policy frameworks, investment plans and programs
ACTIVITIES for achieving output 1.1.1.	
Title	Description

<p>ACTIVITY 1.1.1.1.:</p> <p>Support the establishment and functioning of the national inter-ministerial AMR steering committee in Tunisia.</p>	<p>Launch a three-month national consultation to:</p> <ul style="list-style-type: none"> - Establish a diagnosis of the current situation and map the stakeholders involved in AMR - Develop coordination mechanisms that facilitate integrated, multi-sector and multi-stakeholder governance to address AMR. - Establish the terms of reference and the mandate of the national interministerial steering committee for AMR in Tunisia (political support, regulatory text, committee members, committee chairman, committee secretary, quorum, frequency of meetings, notice of meeting, minutes of meetings, resolutions, , duties, responsibilities, reports, monitoring and evaluation, authority...) - Organize a joint national workshop to present and validate the results - “Leadership skills workshop” developed by WHO for multisectoral coordination will be organized - Review 2022 TrACSS Survey for joint completion and then respond to the next TrACSS surveys. (Global Database for the Tripartite Antimicrobial Resistance (AMR) Country Self-assessment Survey (TrACSS) (amrcountryprogress.org)
<p>ACTIVITY 1.1.1.2.:</p> <p>Strengthen the management and monitoring capacities of NAP activities through joint workshops on AMR Management.</p>	<p>Applying the Progressive Management Pathway for Antimicrobial Resistance (PMP-AMR) through two in-country workshops within three-days and once a year. These workshops bring public and private stakeholders together; and in the presence of specifically trained PMP-AMR facilitators to help participants assess the level of NAP implementation in their country and agree on actions to escalate AMR management to a higher stage as required. Using the PMP-AMR tool, stakeholders define the specific activities they need to implement next as they work toward the better management of AMR risks and the more prudent use of antimicrobials.</p> <p>WHO NAP implementation handbook and other WHO tools will be used as well as any additional available tools (WOAH and UNEP)</p>
<p>1.1.1.3 Revise the NAP to include environmental health and plant health and to update activities</p>	<p>Lunch a consultation to:</p> <ul style="list-style-type: none"> - Revise the NAP based on the PMP AMR assement , WHO NAP implementation handbook and other available tools - Draft version 2 of the NAP - Organize workshops with different stakeholders to redact the NAP - develop a guidance note to be submitted to the government for the next few years - Organize a joint workshop to validate the new version of the NAP and the guidance note

ACTIVITY 1.1.1.4.: Assess current legal and institutional frameworks governing AMR in human health, animal health, plant protection and environment sectors and propose the necessary amendments to meet AMR challenges using the quadripartite legal tool	Launch a legal consultancy (national consultant and international consultant) for two months to undertake the following tasks: - Assessment of the existing national legislation with regards to AMR using the quadripartite One Health AMR Legal Assessment Tool. This will analyze the current legal framework for human health, animal health, plant protection and environment sectors based on national legislation and international standards of FAO, WOAH, WHO and UNEP and pay special attention to the regulatory framework for laboratories. - Propose recommendations to improve the legal framework relevant to human, animal, plant and environmental health under a One Health approach, including laboratories, to meet the challenges of AMR. - Organize a joint workshop to review and validate the results of the report.
OUTPUT 1.2.1.	Systems for generating, analyzing and interpreting data on resistance and consumption/use patterns developed or strengthened
ACTIVITIES for achieving output 1.2.1.	
Title	Description
ACTIVITY 1.2.1.1.: Assess human and material capacities of human health, animal health, plant protection and environment laboratories working on AMR, support networking and provide reagents and expendables to support joint surveillance program.	National consultation for two months to : - Assess human, technological and material capacities of human, animal, plant and environmental health laboratories working on AMR by using available tools of the Quadripartite - Set up a supporting plan (accompanying) to involve relevant laboratories in the AMR surveillance network through the national reference lab for AMR - Support their networking: designing the architecture of the lab network - Organize four training sessions for responsible of human health, animal health, plant protection and environment sectors -A FAO ATLASS mission to map and evaluate labs capacities in the agriculture and environment sectors (animal, plant, and environment) will support this consultation. Provide reagents and expendables to support the initiation of a joint AMR monitoring program.

<p>ACTIVITY 1.2.1.2.:</p> <p>Support the national AMR surveillance system in Tunisia for better monitoring planning, data collection, processing and dissemination to key stakeholders</p>	<p>Conduct a national consultation to undertake the following actions:</p> <ul style="list-style-type: none"> - Analyze existing antimicrobial resistance surveillance systems in each sector, review data quality, analyze current technical capabilities, identify gaps and propose alternatives. - Suggest improvements of the human health AMR surveillance system - Design and implement the animal health AMR surveillance system - Support the implementation of an active AMR surveillance plan in the animal health sector: in connection with lab activity 1.2.1.1. - Propose an AMR surveillance protocol in the environmental and plant protection sectors - Facilitate a workshop on the implementation of the animal health AMR surveillance system. - Propose a procedure for exchanging and communicating surveillance data between the different sectors involved: technical specifications of national AMR data exchange system - Facilitate a national workshop on the national AMR surveillance system
<p>ACTIVITY 1.2.1.3.:</p> <p>Assess, design and support implementation of traceability system of antimicrobials in human, veterinary, phytosanitary and environment sectors.</p>	<p>Conduct a national consultation : to undertake the following actions:</p> <ul style="list-style-type: none"> - Analyze existing antimicrobial traceability systems in Human health, animal health, plant protection and environment: review data quality, analyze current technical capabilities identify gaps and propose alternatives. - Propose improvements in the traceability system for antimicrobials in human health - Propose the design of a traceability system of antimicrobials in animal health (imported antimicrobials and antimicrobials produced locally since importation of raw material to delivery to the final consumer) - Facilitate a training workshop on the implementation of the traceability system of antimicrobials in animal health. - Propose the design of the traceability system of antimicrobials in plant protection (imported antimicrobials and antimicrobials produced locally since importation of raw material to delivery to the final consumer) - Facilitate a training workshop on the implementation of the traceability system of antimicrobials in plant protection. - Propose a model of an integrated traceability system of antimicrobials for all sectors. <p>The main outcome of this activity is to build the framework for the establishment of an integrated "Drug Traceability System" (e.g. a central database) in order to monitor the medicines placed on the market in Tunisia throughout the distribution cycle to which each actor in the supply chain is required to provide and transmit information on the handling of packages of medicinal products.</p>

ACTIVITY 1.2.1.4.: Carry out a study on the causes and environmental impacts of AMR in Tunisia	<p>Conduct a national consultation within 60 days to undertake the following actions:</p> <ul style="list-style-type: none"> - Compile current knowledge on contamination and characterization of the various environmental compartments by resistant germs - Carry out a field survey to identify the possible presence of resistant germs such as slaughterhouse waste water, swimming pool water, waste water from healthcare establishments, river water near livestock farms, water from frequented beaches, gardening, poultry manure, ruminant manure, fish farming water, aquaponics breeding water - Identify the causes of development and spread of AMR in the environment and map out the sectors at risk - Identify gaps and develop operational or research actions to address the gaps - Elaborate a risk based control plan of AMR in the environment
OUTPUT 2.1.1.	Improved capacity to design awareness raising, behavior change and educational activities
ACTIVITIES for achieving output 2.1.1.	
Title	Description
ACTIVITY 2.1.1.1.: Develop and implement a joint communication plan to raise awareness on AMR	<p>Conduct a national Consultation within three months to:</p> <ul style="list-style-type: none"> - Elaborate and implement the joint and sectorial AMR communication plan. - Contract with a communication company to elaborate communications supports. - Organize a national workshop to kick off the project. - Communication on the project activities and results. - Organizing a three-day joint workshop gathering together all stakeholders to validate joint and sectorial communication plan for AMR - Support awareness activities - Support the celebration of World Antibiotic Awareness Week every year - Organize communication events to exchange successes with other countries: Provide support to partnerships at national and international level through a communication event around the launch and implementation of the NAP (remotely) - Organize awareness days in veterinary, medical, dental, pharmaceutical, plant, environment and paraprofessional establishments. - production of communication tools, editing of spots, capsules, banners, posters, visuals - printing of biosecurity guides and guides of good use of antimicrobials

<p>ACTIVITY 2.1.1.2.: Organize training of key stakeholders in human, animal, plant and environment health on AMR, good practices on biosecurity and infection control and prevention.</p>	<p><u>Animal health</u> Conduct three national consultations respectively for aquaculture, aviculture, and dairy production sectors. Each consultation will last 30 days to undertake the following task:</p> <ul style="list-style-type: none"> - Elaborate Good Practices guidelines on Biosecurity and Infection Control and Prevention (ICP) for aquaculture, aviculture, and dairy production sectors - Organize 3 three-days training of trainers' workshops respectively on aquaculture, aviculture, and dairy production sectors' biosecurity. for professional organizations (veterinarians and actors of the value chain) - Support to organize 10 regional training sessions on biosecurity for aquaculture (2 sessions), poultry (4 sessions), and dairy (4 sessions) sectors <p><u>Plant protection</u> Organize a three-day training workshop on AMR assessment and management program in the process of Antimicrobial Pesticide Registration</p> <p><u>Environment</u> - Organize a series of webinars to raise the awareness of the staff of the ministry of environment, the environment protection agency, and other relevant sectors (water, industry etc) on AMR issues</p> <p>- Organize a two-day training workshop on the management of antimicrobial traces in the environment (wastewater and solid waste) for all key environmental stakeholders (national consultant or members of national AMR committee will provide the training)</p> <p><u>Human health</u> Organize training workshops on the IPC.</p>
---	---

<p>ACTIVITY 2.1.1.3.: Organize training sessions on the appropriate use of antimicrobials for human health, animal health, plant protection and environment sectors.</p>	<p>Conduct two national Consultations in animal health and plant protection sectors for one month each to undertake the following tasks:</p> <ul style="list-style-type: none"> - Elaborate standards and guidelines on the responsible and the appropriate use of antimicrobials in animal and plant sectors as well as their safe disposal - Organize a TOT training workshops for veterinarians and engineers and technicians (private, public, academicians....) on the responsible and the appropriate use of antimicrobials - Organize regional training workshops for veterinarians and engineers and technicians (private and public....)on the responsible and the appropriate use of antimicrobials <p>Environment conduct a national consultation in environment sector for one month to undertake the following tasks the same consultant of activity 1.2.1.4</p> <ul style="list-style-type: none"> - Elaborate a guideline on the responsible and the appropriate use of antimicrobials in environment as well as their safe disposal - Organize a one day national training workshop for the environment staff (centralized and decentralized staff= 30persons) on the responsible and the appropriate use of antimicrobials <p><u>Human health</u> Training on good Antimicrobial management including the AMS core principles and the AWARe classification/antibiotic book Training on therapeutic protocols</p>
<p>ACTIVITY 2.1.1.4.: Promote Integrated Pest Management for reducing use of antimicrobials in the plant health sector</p>	<ul style="list-style-type: none"> - Develop standards and guidelines for Integrated Pest Management (IPM) and risk mitigation related to the use of agricultural pesticides - Organize a training workshop on Integrated Pest Management (IPM) and Risk Mitigation of Agricultural Pesticides (regional and central level)
<p>ACTIVITY 2.1.1.5.: Advocate for the development of an updated AMR training modules in veterinary, medical, dentistry, pharmacy and paraprofessional.</p>	<p>organize a national AMR awareness day that targets deans of veterinary, environmental studies, medical, dental, agricultural, pharmacy and paraprofessional schools</p>
<p>ACTIVITY 2.1.1.6.: Organize a joint training workshop on negotiation and advocacy</p>	<p>Organize a joint training workshop on negotiation and advocacy techniques for the members of the national steering committee</p>

2 Programme strategy

2.1 Overall strategy (max 2 pages)

a) *why it is transformational (will deliver results at scale)*

The AMR MPTF project will accelerate the sustainable implementation of the AMR National Action Plan in Tunisia by providing catalytic support through advice on the planning, management and implementation of AMR-related activities. The project will provide technical assistance to improve capacities for the assessment, design and implementation of policy frameworks and programs related to AMR. It will support the country mainly in the areas of governance, surveillance, behavior change, training and infection prevention and control in the relevant sectors (human health, animal health, plant protection and environment). The project will enable capacity development of various government staff and other stakeholders who will participate in the implementation process for posterity.

Multisectoral collaboration, joint communication on AMR, improved data collection and analysis, and application of good biosecurity and infection prevention practices will result in transformative practices and innovative solutions and enable evidence-based decisions that will scale up and accelerate country efforts to fight against AMR through a One Health approach. MPTF fund will be used to assess and identify existing gaps and coordinate multisectoral responses to prevent control antimicrobial resistance at national, departmental and local levels

b) *why it is better than alternative approaches;*

This approach is better in terms of harnessing the expertise of the Quadripartite for a collective purpose while sharing resources. It is also better because it is based on specific objectives prioritized by the country in a one health approach; it will make it possible to involve sectors other than human health and animal health, mainly the sectors of plant protection and the environment. The collaboration will be reflected initially by inter-agency collaboration: Quadripartite and then at the national level by the involvement of the three concerned ministries.

c) *how it contributes to accelerate the progress on achieving the NAP;*

The Quadripartite Program aims at supporting and improving One Health collaboration mechanisms and capacities among the various stakeholders involved. It will help to enhance multi-sector collaboration, involve sectors that have not previously involved, better understanding of the AMR problematic and the role that each sector should play. This project will strengthen the capacity of national staff involved in AMR. The implementation of field activities will improve the understandings, practices and AMR behaviour that helps to accelerate progress in achieving NAP goals.

d) *what will be the added value of the Quadripartite;*

Addressing the drivers and the impact of AMR presents significant challenges, for countries and the international community alike. It requires both multisectoral coordination and strong sector-specific responses. The project will be implemented through the joint force provided by the Quadripartite due to the long-standing partnership, combined technical knowledge and commitment to share responsibility in coordination and risk management. The Quadripartite, while providing leadership, advocacy and coordination will ensure that the implementation of the NAP AMR at the national level is in line and consistent with the Global Action Plan and the work plans of each agency.

The strength of the quadripartite lies in the long-standing partnership, the combined technical knowledge and the global unifying power of the four organizations.

In Tunisia, FAO, WHO and WOAH use to collaborate actively in the management of zoonotic diseases and AMR, they supported Tunisia in the development of the NAP in 2019 and are working together on a series of other topics, at the human-animal-environment ecosystems interface. This expertise will be further strengthened with the adhesion of UNEP to the global AMR program and the AMR MPTF project by addressing the environment activities.

The four organizations are fully committed through technical and normative skills of each and through the Global Action Plan already published and the tools developed for its implementation and monitoring.

There is strong commitment from FAO, WOAH, WHO and UNEP to work together to implement the global action plan on antimicrobial resistance and to ensure coherent approaches, while taking into account the different governance structures and mandates of each organization. The organizations are already collaborating on antimicrobial resistance to varying degrees across technical areas at global, regional and country levels. Furthermore, in North Africa the three agencies are already implementing MPTF-AMR project in Morocco, and will be able to draw upon lessons learnt.

e) how it relates to AMR GAP priorities and initiatives;

The 5 objectives of the Global Action Plan on AMR are: 1. improve awareness and understanding of AMR communication, education and training, 2. strengthen the knowledge and evidence base through surveillance and research, 3. reduce the incidence of infection through effective sanitation, hygiene and infection prevention measures, 4. optimize the use of antimicrobial medicines in human and animal health and 5. develop the economic case for sustainable investment that takes account of the needs of all countries, and increase investment in new medicines, diagnostic tools, vaccines and other interventions.

The project aims at combatting AMR in Tunisia through coordinated actions and by enhancing the country's response in reducing antimicrobial resistance and accelerating implementation of national action plan using One Health approach as recommended by the Interagency coordination Group (IACG) on AMR. Budget allocation intend to strengthen awareness and understanding of AMR, strengthen data collection and analysis to enhance the surveillance of AMR, reduce the incidence of infection through prevention and biosecurity measures.

f) how the programme would support government, and how government will sustain and scale results

The AMR MPTF programme will support the Tunisian government by providing the strategic technical assistance that will be provided by the international organisations. The allocated budget will catalyse AMR activities in the country and set up a governance mechanism including sustainable funds from Gouvernement. Government staff will be trained in different areas, training of trainers will be organized in order to have a pulse of experts who can continue to transmit knowledge, and train field agents. In addition; the development of tools; training materials, updated regulatory framework and strengthen the capacities of staff of the three sectors will create the conditions to sustain AMR programme over time.

g) how this programme fits with existing work of quadripartite organisations and other development partners.

FAO, WHO, WOAH and UNEP have been working for decades to address risks to humans, animals, plants and the environment. As part of their mandates, each organization has a AMR action plan that is aligned with the overall global action plan. The achievement of the project objectives is part of the achievement of the strategic objectives already set by each agency.

Since 2018, the three agencies have joined forces as Tripartite to strengthen their longstanding partnership, with a renewed focus on tackling antimicrobial resistance (AMR) from a One Health approach. This was further reinforced by the Tripartite Work Plan (2019-2020) which supported the implementation of the Global Action Plan on Antimicrobial Resistance endorsed by the Tripartite partners. This has been further strengthened by the United Nations Environment Program (UNEP) engagement in AMR in 2022.

h) what is the anticipated situation after this phase of the joint Quadripartite programme is effectively completed?

After the implementation this project, an official multi-sectoral unit that deals with AMR activities in Tunisia will be functional. Stakeholders are made aware of the AMR issue and more engaged in the implementation of the NAP. Multisectoral coordination is improved and the capacities of government staff are enhanced.

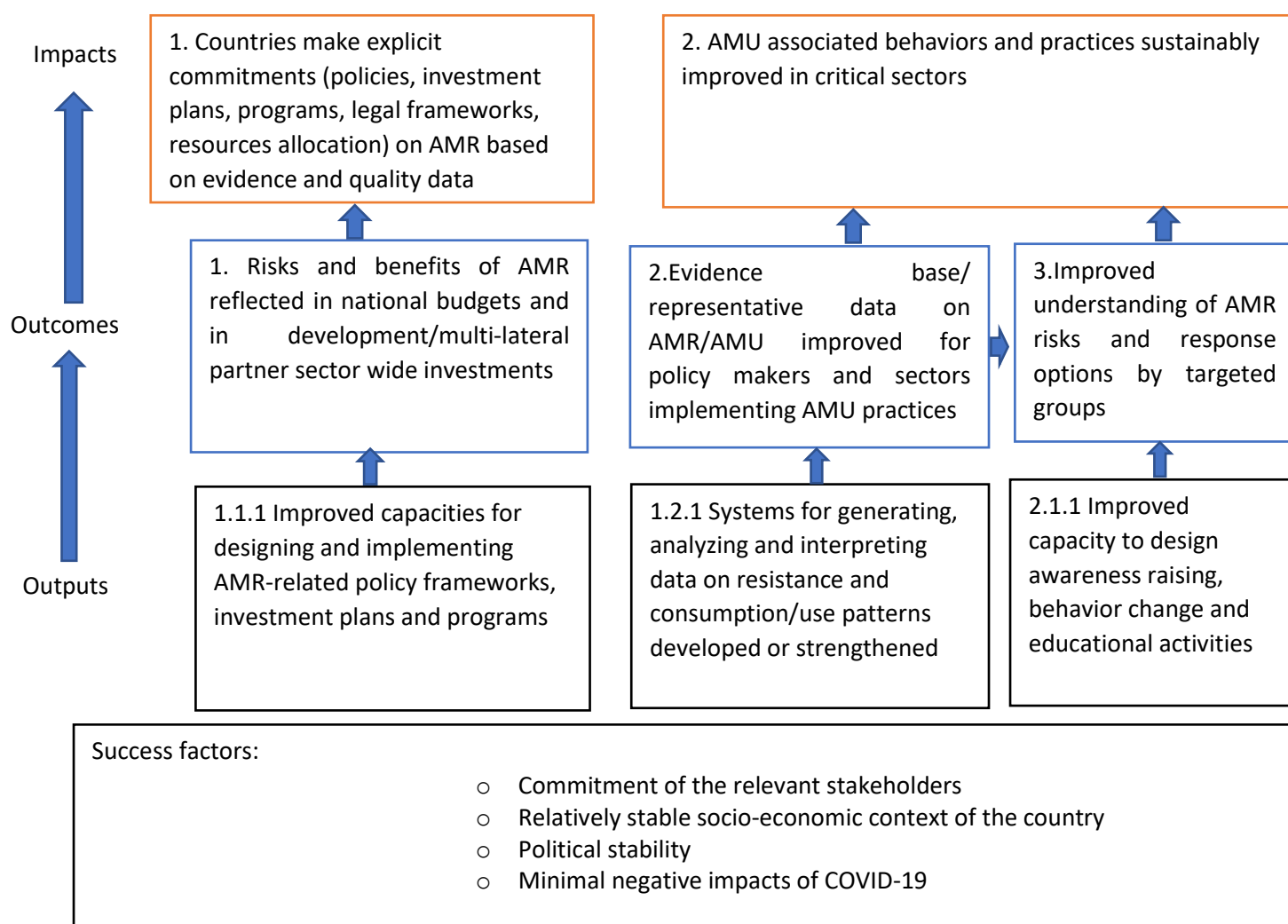
The response to AMR is led through the One Health

2.2 Theory of Change (max 2 pages)

During the preparation and planning phase of programs, the intended change process are of technical, organizational and behavioral nature:

- Governance arrangements for AMR are in place and functioning.
- A functional monitoring and evaluation framework on National Action Plan is in place.
- Advocacy to include AMR is included within national budget
- Data on AMR/AMU/ AMC is generated, collected, analyzed and used across relevant sectors
- Awareness on AMR is raised among decision-makers, consumers, medical care services, veterinary services, farmers, industries...
- Technical capacities of all stakeholders improved

Theory of Change



This Quadripartite proposal will achieve the three outcomes of the AMR MPTF Results Matrix: 1. Risks and benefits of AMR reflected in national budgets and in development/multi-lateral partner sector wide investments, 2. Evidence base/ representative data on AMR/AMU improved for policy makers and sectors implementing AMU practices, 3. Improved understanding of AMR risks and response options by targeted groups. The project will support the creation of the multisectoral coordination committee (MCC) and support it in carrying out its mandate. Once created officially with a text that describes its mandate, its composition, its quorum and the frequency of these meetings, the coordination committee will be the reflection and decision-making task force on AMR. The MCC will monitor the implementation of the project and all activities related to AMR in a multi-sectoral approach.

An assessment of the level of implementation of the NAP in Tunisia will be carried out at the start of the project. It will make it possible to have a map of existing activities and to consult on future actions to be implemented. The project will also assess the current legal and institutional frameworks governing antimicrobial resistance in the human health, animal health, plant protection and environmental sectors and propose necessary amendments to address the challenges of resistance to antimicrobials, mapping of laboratories and AMR surveillance is also planned.

The main change will include multisectoral governance of AMR, coordinated surveillance and data collection, strengthened capacities of the staff of the different sectors. New multisectoral approach for raising awareness on AMR

2.3 Expected results and Narrative (max 2-3 pages, excluding tables)

The project was formulated based on a participatory approach with the quadripartite and the national stakeholders. It addresses the main constraints for the implementation of the national Action Plan on AMR. Activities identified are critical for the implementation of the NAP and the appropriate budget calculated for each activity will catalyze the available regular budget allocated by the Government. The Tunisian government has allocated a budget for the implementation of certain NAP activities such as in human health and discussions have been initiated within the Ministry of Agriculture have been initiated to allocate a budget for AMR to the animal health sector from 2024. The funds allocated by the project will make it possible to expand the implementation of activities already in progress and to implement new activities, mainly the governance, capacity building, communication and monitoring of AMR

The process of prioritization of activities was based on one health approach, technical feasibility, long-term sustainability and short-term impact.

More than 70% of the proposed activities are joint activities consistent with One Health approach and will be implemented in close collaboration between the four international organizations and the sectors. Joint activities mainly concern the assessment of the legal framework governing AMR in the various sectors, development and implementation of an integrated monitoring system for AMR and AMU/AMC including a common exchange of data and AMR surveillance action by strengthening the existing surveillance program in human health and by initiating a surveillance program in other sectors.

The budget allocations are balanced to mainly address the issues related to Governance/Stewardship/ Legal framework/ data and evidence/ communication and awareness/ IPC and Biosecurity.

The first activity of the project will be the establishment of the national inter-ministerial AMR steering committee in Tunisia. A national consultant will be recruited to establish a diagnosis of the current situation and map the stakeholders involved in AMR and to develop coordination mechanisms that facilitate integrated, multi-sector and multi-stakeholder governance to address AMR. Before starting the implementation of the several activities, an assessment of the implementation of the NAP in the country will be conducted through a Progressive Management Pathway for Antimicrobial Resistance workshop (PMP-AMR). These workshops will bring public and private stakeholders together to discuss, assess the level of NAP implementation in the country and agree on actions to be taken to escalate AMR management to a higher stage as required. Using the PMP-AMR tool, stakeholders define the specific activities they need to implement next as they work toward the better management of AMR risks and the more prudent use of antimicrobials. After this activity an assessment of the existing national legislation with regards to AMR using the quadripartite One Health AMR Legal Assessment Tool will be conducted. This will analyze the current legal framework for human, animal, plant and environmental health based on national legislation and international standards of FAO, WOAH, UNEP and WHO and will propose amendments to improve the legal framework relevant to human, animal, plant and environmental health under a One Health approach.

An assessment of laboratory capacities will be carried out in parallel, it will allow to assess human and material capacities of human, animal, plant and environmental health laboratories working on AMR, support networking and provide reagents and expendables to support joint surveillance program by supporting AMR human surveillance and initiating AMR pilot surveillance in the animal health sector.

To accompany these reforms, training sessions for trainers and training of actors at the central and regional levels in the various sectors will be organized. These training will be maintained after the project thanks to the training of a pulse of trainers in the different institutions and laboratories involved. Also training sessions on the prevention of infections and biosecurity and on good practices for the use of antimicrobials in the various sectors will be organized.

A joint communication plan will be developed and implemented throughout the duration of the project and awareness-raising activities will be maintained after the project thanks to the tools that will be developed, the trained professionals and the exchange events experiences on a national or even regional and international scale.

The project will support the country in the achievement of the SDGs based on international right to good health, food and sustainable environment. Gender approach will be adopted in the implementation of all activities (recruitment, training, advocacy meeting...) favoring participation of women and youths.

The gender approach will be considered in the various project activities. The project will ensure that gender approach is respected in access to knowledge and capacity as well as in the benefits of project investments. Gender approach will be considered in the establishment and functioning of the national inter-ministerial AMR steering committee, in planning meetings and in decision making. All relevant matters arising during implementation will take gender balance into account. The project's capacity building activities, communication strategy, awareness programs, studies and advocacy will be gender sensitive, ensuring, as much as possible, equal access and equal representation of the needs of women stakeholders.

Finally, in all activities, measures will be applied to determine the success of women's equitable participation in all national, regional and local activities and in reflection and decision-making meetings. Gender balance indicators will also be monitored in the recruitment of consultants and specialists.

All activities will be implemented according the work plan taking to account inter-relationship between activities and time line.

2.4 Budget, sustainability and value for money (max 2 pages)

The project was formulated based on a participatory approach with the quadripartite and the national stakeholders. Activities identified are critical for the implementation of the NAP and the appropriate budget calculated for each activity will catalyze and optimise further and the available regular budget allocated by the Government in each Ministry.

The value for money has been improved by taking into account number of considerations:

- Better coordination between the Quadripartite and the national stakeholders: allows an economy of scale and streamline available human and financial resources.
- Improvement of AMR and AMU policy, including legal framework, institutional set up and investment through the government budget
- Strengthening capacities of national institutions
- Improvement of data generation and sharing between all stakeholders (integrated surveillance system, functional One Health Multi-Sectoral Coordination Group (MCG)
- Joint raising awareness and communication
- Training of trainers (TOT) approach will sustainably improve the capacities of stakeholders and reduce the cost of implementing the NAP.

- *Justify the budget in terms of “value for money.” Give specific examples of how costs have been contained (economy) and how the joint Quadripartite programme design represents the most efficient approach. Outline the options considered to identify the most efficient and effective intervention to address the problem.*

Coordination between the Quadripartite and the national party will allow economies of scale and rationalize the human and financial resources available. Available national budgets will be catalyzed by the AMR MPTF budget which will accelerate the implementation of NAP activities while prioritizing activities according to the needs of the country. For example, capacity building of national institutions such as laboratory capacity will make it possible to initiate an AMR surveillance program in all sectors , a training program will target laboratory managers in the various areas concerned who will be paired with a support program by the human reference laboratory, which will make it possible to solicit national expertise and optimize financial and human resources. The training of trainers will make it possible to have a pulse of trainers who will transmit knowledge and know-how to other colleagues and will make it possible to save on the costs of training and the implementation of the NAP

- *Sustainability: Describe how the approach to delivery will enhance the chances that impact and benefits will be sustained after the end of the joint Quadripartite programme. Please include any ‘phasing out’ activities (meetings, workshops etc.) that could be carried out following the official closure of the project to help sustain the benefits achieved.*

Implementation of the AMR MPTF Quadripartite Project at the national level builds on the existing mechanism and staff that formulated the National AMR Action Plan. The existing governance mechanism will be formalized and strengthened by the creation of the Multisectoral Coordination Committee (MCC) whose missions and operating methods will be clearly defined in consultation with all stakeholders. The planned capacity building of human health, animal health, plant protection and environmental professionals through the training of trainers is one of the ways to ensure sustainability. Indeed, government employees trained during project implementation could be used to train others long after the project ends. Trained professionals will continue to spread knowledge. The training and good practice guides developed for the priority sectors within the framework of this project will allow the dissemination and continuity of good practices in the various sectors concerned. Decentralized training and local training will ensure a level of knowledge and know-how on AMR in the different regions of Tunisia. The development of an integrated AMR surveillance system and an integrated antimicrobial traceability system will allow the collection, analysis and exchange of data on AMR after the closure of the project. The MCC will meet at defined frequencies as needed and will continue to meet after project closure to discuss and decide on AMR-related issues. A network of laboratories will be created including human, animal, plant, environment laboratories led by a reference laboratory.. National meetings and workshops on AMR continue to be organized and the celebration of the global week on antimicrobial resistance will continue to be organized and celebrated jointly by all stakeholders to keep communication and awareness on AMR as a priority.

- *Demonstrate how long-term financial sustainability will be secured at the end of the programme.*

One of the main task of the MCC is to ensure the sustainability of funds to implement activities planned in all sectors involved in the AMR prevention and response. Outcomes of this project will help to advocate for the importance of the prevention, control and response of AMR and therefore decisions makers will be sensitised to mobilize funds. The project will catalyse the planification and implementation of national activities in different sectors that in turn will be followed by the allocation

of governmental funds. The multisectoral NAP budgeting tool and the capacity developed there of inducing that on advocacy will be used to prepare annual costed work plans for resource mobilisation both from national budget and other sources.

- *Demonstrate how the intervention supports equitable and sustainable outcomes.*

The project will support the country in the achievement of SDGs based on international right to good health, food and sustainable environment and will adopt the UN gender approach in the implementation of all activities (favouring participation of women and youths, monitoring indicators for gender balance in consultants' recruitment, in training attendance and in awareness activities...).

2.5 Partnership and stakeholder engagement (max 2 pages)

The involvement of the key stakeholders from the onset of the project through consultative process will be catalytic for enabling both the partnerships related to the project implementation and to nurturing the trust and ownership. Private sector actors and partners (animal, human and plant health) will be involved too in all stages of the project (planning, implementation, monitoring and evaluation)

The quadripartite has formulated the project with national focal points officially designated by the main Ministries: human health, animal health, plant protection and environment. Several meetings were organized with the quadripartite and the designated focal points. This approach will be pursued and quarterly meetings will be organized for monitoring the project activities. A steering committee will be established including representatives of the quadripartite and the designated focal points. Technical backstopping of project activity will be jointly ensured by the experts of the quadripartite.

The engage of UNEP has been secured through the Regional Office for Africa and its sub-regional Office based in Abidjan.

Sectors initially not involved in the drafting of the NAP have taken part in project meetings and discussions and focal points representing these sectors have been officially appointed to represent their ministries in the various activities related to AMR.

The creation of the multisectoral coordination committee will bring together all the stakeholders in an official framework to work on AMR. Communication and advocacy has already started since the formulation of this project to advocate for multisectoral engagement at national and international levels through the consortium WHO, FAO, WOA and UNEP.

The national workshop to assess the progress of the implementation of the NAP which will be organized will bring all the stakeholders involved in AMR together and will allow several discussion on AMR in Tunisia. The integrated surveillance and traceability system that will be developed will make it possible to generate, analyze and interpret data on AMR and AMU, which will provide elements of advocacy with political decision-makers in favor of better AMR management policies.

Each stakeholder contributes to the national program to fight AMR according to their area of activity, for example, within the Ministry of Health, the Directorate of Pharmacy and Medicine is the AMR focal directorate which manages all administrative aspects related to pharmacy, medicine and related activities. It coordinates the activities of the National Medicines Quality Assurance System and carries out Technical Controls on the Importation of medicines. The National Drugs Control Laboratory is also a key stakeholder, it is in charge of control of the quality of the medicines and their compliance with export, marketing and export standards. These two directorates in collaboration with other general directorates and departments in the ministry of health (National Agency for Sanitary and Environmental Control of Products, Department of Environmental

Hygiene and Environmental Protection...)will contribute to the collection of data on antimicrobials, their quantities, their traceability; they also contribute to the evaluation of legislation and the revision of the national action plan. Tunisia is in a phase of institutional reform, the National Instance of Food Safety is the new competent authority for the sanitary control of food products and animal feed; the agency is in the implementation phase, it will be involved in all project activities in parallel with the other competent directorates-general, mainly the General Directorate of Veterinary Services and the General Directorate of Plant Health and Control of Agricultural Inputs. The national veterinary school, the faculty of medicine of Tunis, the faculty of pharmacy, the faculty of dental medicine as well as the schools of engineers will be sensitized and consulted for the development of modules specific to RAM course; they will also be consulted for their technical expertise in the various activities. Veterinary Research Institute is the national laboratory of animal health it will benefit from the training of the laboratories and it will implement the active research of the RAM in the animal sector; Charles Nicolle Hospital is the national reference laboratory and will support other laboratories in training and upgrading to meet the challenges of RAM. Ministry of the environment will be represented by two main departments: International Center for Environmental Technologies of Tunis (International Center for Environmental Technologies of Tunis / CITET) and the General Directorate for the Environment and Quality of Life ; they will support activities related to AMR in the environment and coordinate studies and consultations related to AMR in the environment. Several Non-Governmental stakeholders will be involved in the project, especially for AMR surveillance and antimicrobial traceability activities. They are also direct and indirect beneficiaries of the project and will benefit from the awareness campaigns and training sessions, for example: Agri-food technical center, Tunisian Farmers Unions (UTAP, SYNAGRI), National Council of the Order of (Physicians, Pharmacists, veterinarians, Dentists), Consumers associations...

2.6 Programme implementation in the light of COVID-19 (max ½ page)

The implementation of project activities may be affected by movement restrictions and the ban on gatherings and face-to-face meetings, it may also be affected by the economic consequences of COVID-19 which could reduce the financial commitment of national institutions. .

The COVID-19 crisis can also influence the prioritization of the activities of the ministries involved, especially the Ministry of Health, which can allocate human and financial resources to manage the COVID-19 crisis.

Tunisia has implemented a vaccination program against COVID-19 which has significantly improved the health situation and reduced the number of cases, which has made it possible to ease restrictions on the movement and gathering of people.

To mitigate risks related to COVID-19, the project task force will adhere to country health recommendations. Therefore, if workshops are not allowed, the working group will opt for teleworking, including webinars, meetings, e-learning....

Stakeholder engagement, the creation of the technical project coordination committee, the recruitment of a permanent project coordinator, the support to finance activities will help to mitigate the risks of COVID-19 and to implement the activities of the project

2.7 Communication, Advocacy and Lesson Learning (max 1 page)

A communication plan will be developed to guide the overall thrust of the communications activities across the project. Key audiences and media will be engaged at various levels and as appropriate. The project activities that can be communicated are mainly the importance and missions of the multi-sectoral

coordination committee (MCC), awareness raising and behavior change activities, capacity building, the importance of generating data for the decision-making and lessons learned.

The communication opportunities at a high level will be mainly on the results and recommendations of the MCC, the WAW, the reports of the consultations, the final report of the project. A kick off meeting will be organized in the presence of the three ministers of agriculture, health and the environment.

Within this project, there are many opportunities for AMR advocacy and communication. starting with the formulation of this project which allowed the initiation of a multisectoral collaboration on AMR, indeed within the framework of the formulation of this project and the prioritization of the activities to be implemented, the representatives of the various ministries met on several occasions which allowed to know each other and to know the activities carried out by each sector in the framework of the RAM.

Programs for training, awareness and development of guides on biosafety and good therapeutic practices will be the opportunity to communicate with professionals (doctors, veterinarians, pharmacists, engineers, technicians, breeders...), this will enable specialist consultants to select appropriate messages targeting specific stakeholder audiences to enhance participation, contribution and achievement of project results.

The implementation of the joint program will provide opportunities for learning and exchange of tools and knowledge within the quadripartite and within the national project team. It will allow the national project team to communicate with the quadripartite and to be up to date with all the existing initiatives at the international level. The exchange of experience with other beneficiary countries of the fund is also one of the objectives of the MPTF fund.

The communication is a key component of the project at 2 levels:

1. Communication on the project activities: agencies of the quadripartite will assure the advocacy and the communication of the project. At the first time, it is planned to organize an inception workshop and press releases will be delivered. After that all activity workshops will be published on the web sites of the 3 organizations and the 3 Ministries. They will be also published on social media such as Facebook, YouTube, LinkedIn, Twitter,...
2. Communication on AMR: developing and implementing a joint communication AMR plan: edition of communication tools, organization of communication events, organization of awareness, support of the celebration of the World Antibiotic Awareness Week each year.

Feedback obtained from the communications activities will be used to re-calibrate the subsequent communications activities as well as the design of the other activities for the successful implementation of the project and to enhance the sustainability after the project.

The project will support the organization of training workshop on negotiation and advocacy techniques for the members of the national steering committee to use in the discussion with decisions makers and national stakeholders.

The project will also support share of information and lessons learnt from MPTF AMR projects in the other countries.

3 Programme implementation

3.1 Governance and implementation arrangements (max 3 pages)

The Taskforce of the project will be constituted by focal points of the 3 ministries (focal point of ministry of health, focal point of ministry of environment, two focal points of ministry of agriculture: animal health and plant protection) and the representatives of FAO, WOA, UNEP and WHO with support of headquarters units, Regional, Sub-Regional and Country offices.

Addressing AMR requires a multi-disciplinary multisector approach. This project contributes to the current global efforts to address AMR in line with the resolutions on this issue recently adopted by the governing bodies of FAO, WHO, UNEP and WOA. H.

The project will be directly implemented by WHO, FAO, UNEP and WOA. H. and involve headquarters units, Regional, Sub-Regional and Country offices.

To ensure a coordinated and timely implementation of the project activities, a Steering Committee (SC) will be established and will coordinate, facilitate and monitor involvement of participating organizations and institutions

The National Project Coordinator will be recruited by the project and will provide, under the joint supervision of WHO, FAO, UNEP and WOA. H., full technical support for the implementation of the AMR MPTF project, the follow up on the activities and the safety and performance of transactions. He/she will be recruited for 3 years to undertake the following tasks:

- Coordinate the project activities with relevant agencies or departments, the Office of FAO/ WOA. H. /WHO/ UNEP Programme Coordinators and the project staff including consultants to ensure smooth collaboration in the implementation of project
- Liaise as focal point of the project with the Quadripartite
- Facilitate the work of project staff including through contacts with relevant institutions and persons to be visited
- Provide overall guidance and supervision to project staff and coordinate with international consultants who will undertake various project activities
- Collaborate closely with national/ international consultants in accomplishing specific project tasks and implementing the work-plan
- Ensure timely provision of local inputs to the project, including office and administrative facilities, equipment, staffing, training and other operational funds, relevant data/ information
- Make all necessary local arrangements and provide logistics for various project activities according to the agreed upon work-plan and time schedule (including travel for project staff and consultants)
- In consultation with the FAO/ WOA. H. /WHO/ UNEP Programme Coordinator, review on a regular basis the timeliness, quantity and quality of inputs to be provided by FAO/ WOA. H. /WHO, MA, MH and ME
- Prepare progress reports of the project
- Assist in the preparation of the project draft Terminal Report
- Perform any other duty related to the project as required by FAO/ WOA. H. /WHO/UNEP and relevant Officers

WHO will monitor the implementation of lab network, communication activities and specific activities of the Ministry of Health. WOA. H. will monitor the implementation of legal consultation, integrated surveillance and traceability systems. FAO will monitor the global implementation of the project and training activities in animal health and plant protection sectors and UNEP will monitor the implementation of activities in environment sectors. All activities will be programmed, implemented and monitored in consultation between the four agencies and the focal points of the various ministries

3.2 Monitoring, reporting and evaluation

Reporting on the AMR MPTF will be results-oriented, and evidence based. Each Quadripartite organisation will provide the Convening/Lead Agent with the following narrative reports prepared in accordance with instructions and templates developed by the Quadripartite 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;
- Final consolidated narrative report, after the completion of the joint Quadripartite programme, to be provided no later than three (3) months after the operational closure of the activities of the Joint Quadripartite programme.

Regular progress meetings with the Quadripartite Joint Secretariat on AMR (usually every two months to start with and then every quarter) will also be held for which countries will be asked to complete tables on progress since previous meeting, planned activities for the next period, technical support required from regions and/or HQs, challenges encountered and lessons learned and communication opportunities;

Additional insights (such as policy papers, value for money analysis, case studies, infographics, blogs, success stories) might need to be provided upon request from the Quadripartite Joint Secretariat on AMR. The joint Quadripartite programme will allocate resources for monitoring and evaluation in the budget.

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 Quadripartite 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.

3.3 Accountability, financial management, and public disclosure

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 Quadripartite organisation receiving funds through the pass-through has signed a standard Memorandum of Understanding with the AA.

Each Quadripartite 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 Quadripartite organization, in accordance with its own regulations, rules, directives and procedures. Each Quadripartite organization shall establish a separate ledger account for the receipt and administration of the funds disbursed to it by the AA.

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

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

Each Quadripartite organisation will take appropriate measures to publicize the AMR MPTF and give due credit to the other Quadripartite organizations. 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, Quadripartite 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 ☒

Annex 1 - Log Framework Template

28

AMR MPTF Log frame		Name of country: Tunisia		
Impact: 1. Countries make explicit commitments (policies, investment plans, programs, legal frameworks, resources allocation) on AMR based on evidence and quality data 2. AMU associated behaviors and practices sustainably improved in critical sectors				
Objectives	Indicators	Sources of verification		Key assumptions and risks
	Indicator A.2: Number of regulatory frameworks reviewed in line with the international standards on AMU and AMR, including antimicrobials used as pesticides Baseline value: 0 Target value: 1	A.2 Reviewed regulatory framework	1.1.1.3 Assess current legal and institutional frameworks governing AMR in human health, animal health, plant protection and environment sectors and propose the necessary amendments to meet AMR challenges using quadripartite tool	<i>Impact of covid-19</i> <i>Changing priorities at government level</i>
Output 1.2.1 Systems for generating, analyzing and interpreting data on resistance and consumption/use patterns developed or strengthened	Indicator B.1: Number of national monitoring systems strengthened for AMC/AMU or number of national surveillance systems supported for AMR Baseline value: 0 <i>(Fragmented surveillance)</i> Target value: 1 <i>(Integrated surveillance)</i>	B.1 sectoral surveillance reports	<i>Activities B:</i> ACTIVITY 1.2.1.2.: Support the national AMR surveillance system in Tunisia for better monitoring planning, data collection, processing and dissemination to key stakeholders ACTIVITY 1.2.1.3.: Assess, design and support implementation of traceability system of antimicrobials in human health, animal health, plant protection and environment sectors.	<i>Engagement of relevant stakeholders</i> <i>Stability of the socio-economic context of the country</i> <i>political stability</i> <i>Impact of covid-19</i> <i>Changing priorities at government level</i>
<i>Output C</i> <i>Output 2.1.1</i> <i>Improved capacity to design awareness raising, behavior change</i>	Indicator C.1 : Number and list of communications tools developed, or implemented to support improved capability for	C.1 communication tools including strategies	<i>Activities C:</i> 2.1.1.1. Develop and implement a joint communication plan to raise awareness on AMR	<i>Engagement of relevant stakeholders</i> <i>Stability of the socio-economic</i>

AMR MPTF Log frame		Name of country: Tunisia		
Impact: 1. Countries make explicit commitments (policies, investment plans, programs, legal frameworks, resources allocation) on AMR based on evidence and quality data 2. AMU associated behaviors and practices sustainably improved in critical sectors				
Objectives	Indicators	Sources of verification		Key assumptions and risks
<i>and educational activities</i>	communication and behavior change initiatives on AMR Baseline value: 0 Target value: 4			<i>context of the country</i> <i>political stability</i> <i>Impact of covid-19</i> <i>Changing priorities at government level</i>

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		
<p>Impact of Covid 19 outbreak</p> <ul style="list-style-type: none"> - Government resources (financial and staff) might be shifted due to the COVID-19 outbreak responses - Travel restrictions and restrictions on in-person events may delay implementation of activities. 	Contextual	May slow in the implementation of some activities	Moderate	moderate	<p>designation of focal points from the various ministries involved who will guarantee the continuity of activities</p> <p>joint implementation of activities which will allow the continuity of actions</p> <p>organize online meetings and training</p> <p>encourage the recruitment of national consultants to avoid travel</p> <p>coordinate with the headquarters of the Quadripartite to have remote support</p>	All stakeholders implementing AMR MPTF

Potential delay of hiring a project coordinator/ consultant/ or other service providers.	Programmatic	May slow in the implementation of some activities	Low	Low	the multisectoral coordination committee in collaboration with the Quadripartite will ensure the acceleration of the recruitment procedure	
Lack of collaboration / conflict between implementation stakeholders	Institutional	May slow in the implementation of some activities	Low	Low	the multisectoral coordination committee in collaboration with the Quadripartite will ensure that this risk is mitigated?	
Deadlines not met by the Quadripartite	Programmatic	May slow in the implementation of some activities	Low	Moderate	if necessary, call for a no cost extension	
Potential civil or political unrest	Contextual	May slow in the implementation of some activities	Low	Low	the multisectoral coordination committee in collaboration with the Quadripartite guarantee the continuity of the project	

Annex 3 - Outline of Budget

Categories	FAO	WOAH	WHO	UNEP	TOTAL
1. Staff and other personnel costs ³	253630	112000	54400	49000	469030
2. Supplies, Commodities, Materials ⁴	0	0	60000	12000	72000
3. Equipment, Vehicles and Furniture including Depreciation ⁵	0	0	0	0	0
4. Contractual Services ⁶	0	61180	90200	0	151380
5. Travel ⁷	32440	40240	18960	19000	110640
6. Transfers and Grants Counterparts ⁸	0	0	0	0	0
7. General Operating and Other Direct Costs ⁹	63647	30000	21200	16000	130847
Total Direct Costs	349717	243420	244760	96000	933897
8. Indirect support costs (Max. 7% of overall budget) ¹⁰	24480	17039	17133	6720	65373
TOTAL	374197	260459	261893	102720	999269
Please indicate which organisation will receive pre-financing facility ¹¹					

³ 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.

⁴ 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".

⁵ 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.

⁶ 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.

⁷ Travel: Includes staff and non-staff travel paid for by the organization directly related to a project.

⁸ 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.

⁹ 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.

¹⁰ Indirect Support Costs: (No definition provided).

¹¹ Max 25,000 USD fund can be used as pre-financing. More detailed information can be found in the guiding notes

Annex 4 - Country Work Plan Template

Name of Project

Start Date

Projected End Date

	Lead Quadri partite Org	Implem enting Partner	Year 1												Year 2												Year 3														
			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12			
Output 1.1																																									
Activity 1: 1.1.1.1	WOAH	MoH/ MoA/ MoE																																							
Activity 2: 1.1.1.2	FAO	MoH/ MoA/ MoE																																							
Activity 3: 1.1.1.3	WOAH	MoH/ MoA/ MoE																																							
Output Y1.2	.	.																																							
Activity 1: 1.2.1.1	WHO	MoH/ MoA/ MoE																																							
Activity 2: 1.2.1.2	WOAH	MoH/ MoA/ MoE																																							
Activity 3: 1.2.1.3	WOAH	MoH/ MoA/ MoE																																							
ACTIVITY 4 1.2.1.4	UNEP	MoH/ MoA/ MoE																																							
Output Z2.1	.	.																																							
Activity 1: 2.1.1.1.	WHO	MoH/ MoA/ MoE																																							

Annex 5 – References

1. Plan National de lutte contre la résistance des antimicrobiens Tunisie
2. Les données du Système National de Surveillance de la résistance bactérienne aux antibiotiques = L'Antibio-Résistance en Tunisie ou 'LART'
3. Société Tunisienne de Pathologie Infectieuse. Résistance bactérienne.
<https://www.infectiologie.org.tn/resistance.php>
4. Maamar E, Hammami S, Alonso CA, Dakhli N, Abbassi MS, Ferjani S, Hamzaoui Z, Saidani M, Torres C, Boutiba-Ben Boubaker I, 2016. High prevalence of extended-spectrum and plasmidic AmpC beta-lactamase-producing *Escherichia coli* from poultry in Tunisia. *Int J Food Microbiol.* 231:69-75.
5. Boutiba Ilhem, Laboratoire de Microbiologie – Hôpital Charles Nicolle de Tunis, Laboratoire National de Référence de la Surveillance de L'Antibio-Résistance en Tunisie : communication orale : Antibio-résistance en Tunisie:Surveillance, Etat des lieux, Moyens de prévention ; 22 octobre 2021.
6. Saidani M, Messadi L, Soudani A, Daaloul-Jedidi M, Châtre P, Ben Chehida F, Mamlouk A, Mahjoub W, Madec JY, Haenni M, 2018. Epidemiology, Antimicrobial Resistance, and ESBL producing Enterobacteriaceae in Clinical Bovine Mastitis in Tunisia. *Microb Drug Resist.* 24(8) :1242-1248.
7. Ecole Nationale de Médecine Vétérinaire, 2017-2019. Résultats non publiés du laboratoire de microbiologie, issus de plusieurs thèses de doctorat en médecine vétérinaire.

Appendices

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

- Appendix 1 – Details of Budget template (Excel sheet)
- Appendix 2 – quadripartite 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. *Letter of endorsement from the government*