

DRAFT FINAL

# The Tripartite Workplan on antimicrobial resistance

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Food and Agriculture  
Organization of the  
United Nations



World Health  
Organization

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# Acronyms

<b>AMC</b>	Antimicrobial Consumption
<b>AMR</b>	Antimicrobial Resistance
<b>AMU</b>	Antimicrobial Use
<b>APW</b>	Approval for performance of work
<b>ESBL</b>	Extended-spectrum Beta-lactamase
<b>FAO</b>	Food and Agriculture Organization
<b>GAP</b>	Global Action Plan
<b>IACG</b>	United Nations Interagency Coordination Group on Antimicrobial Resistance
<b>M&amp;E</b>	Monitoring and evaluation
<b>MoU</b>	Memorandum of Understanding
<b>MPTF</b>	Multi-Partner Trust Fund
<b>NAP</b>	National Action Plan
<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>OIE</b>	World Organisation for Animal Health
<b>SDGs</b>	Sustainable Development Goals
<b>SOP</b>	Standard Operating Procedure
<b>T-AGISAR</b>	Tripartite Advisory Group on Inter-sectoral Support on AMR
<b>TeLP</b>	Tripartite e-learning Platform on AMR
<b>TISSA</b>	Tripartite Integrated Surveillance System on AMR/AMU
<b>TrACSS</b>	Tripartite AMR Country Self-Assessment Survey
<b>UNEP</b>	United Nations Environment Programme
<b>UNGA</b>	United Nations General Assembly
<b>WAAW</b>	World Antibiotic Awareness Week
<b>WHA</b>	World Health Assembly
<b>WHO</b>	World Health Organization

# Foreword

Antimicrobial resistance (AMR) represents a major global threat across human, animal, plant, food, and environmental sectors. Limiting the emergence of AMR is critical to preserve our ability to treat diseases in humans, animals, and plants, and protect both health and food security. To achieve this, intersectoral collaboration is essential to support the coordination of human, animal, plant, and environmental policies.

In this context, the Food and Agriculture Organization of the United Nations (FAO), the World Organisation for Animal Health (OIE), and the World Health Organization (WHO) have come together to support governments, health care workers, veterinary and plant professionals, and other stakeholders, to promote the responsible use of antimicrobials in humans, animals, and plants. In May 2018, the WHO, FAO, and OIE signed a Memorandum of Understanding (MoU) signaling our joint cooperation and strong focus on AMR in the context of the “One Health” approach. Following the MoU, we have also engaged closely with the United Nations Environment Programme (UNEP) to strengthen the integration of environment in our collective work.

In this context, the WHO, FAO, and OIE, have collaborated to develop a Tripartite Workplan (the Workplan) on antimicrobial resistance, with the involvement of UNEP to ensure that relevant dimensions are considered. This document outlines the Workplan, with indicative activities in ten pilot countries implementable during an initial two-year time period, noting that full implementation of activities requires a long-term horizon for measurable impact. The Workplan describes how, at this stage through collaboration with UNEP, we will unite to support countries in implementing multisectoral national action plans, and contribute to the fight against AMR in support of the Global Action Plan on antimicrobial resistance.

The current Workplan does not preclude other agencies from joining our efforts in the future; we envision and welcome other agencies and partners embracing a collaborative and multisectoral approach towards stemming the tide against AMR.

Lastly, the Workplan will be funded through a Multi-Partner Trust Fund (MPTF), which calls for resources for a ten-year period to counter the global threat of AMR in support of achieving the Sustainable Development Goals (SDGs).

Signatures from the three organizations (to come)

# Background

The emergence of AMR is due to misuse and overuse of antimicrobials – agents used to treat bacterial, viral, fungal, and parasitic infections – in humans, animals, and plants. Rising rates of AMR are compromising our ability to treat or prevent these infections. As a result, AMR now presents a critical threat to modern medicine, the sustainability of an effective global human, animal, and plant public health response, and food security worldwide.

In response to the significant threat of AMR, the 68th World Health Assembly (WHA) adopted the Global Action Plan on Antimicrobial Resistance (GAP) in May 2015, developed by the World Health Organization (WHO) in collaboration with the Food and Agriculture Organization of the United Nations (FAO), and the World Organisation for Animal Health (OIE).<sup>1</sup> The accompanying resolution called for strengthened collaboration between the FAO, the OIE, and the WHO to address AMR to achieve a holistic and multisectoral “One Health” approach. In May 2018, these organizations agreed to strengthen their long-standing partnership as a Tripartite<sup>2</sup> in a Memorandum of Understanding (MoU). The MoU recognizes the need for coordinated and collaborative efforts across the sectors to address health risks at the animal-human-ecosystem interface, and has a strong focus on AMR. The Tripartite has also been engaging closely with the United Nations Environment Programme (UNEP) to define collaborative pathways to strengthen the integration of environment in the current Tripartite efforts to combat AMR.

To support the implementation of multisectoral National Action Plans (NAPs) on AMR in line with the GAP, the Tripartite and UNEP have developed a concrete two-year Workplan focused on ten pilot countries, defining a coordinated and collaborative multisectoral One Health approach across the human-animal-plant-food-environment interface (see Annex 1). The pilot countries were selected as part of a wider agenda to focus AMR support in countries where impact is likely to be greatest. The list was agreed through an iterative process of discussion between technical and strategic leads at the headquarters of the Tripartite organizations, and decentralized/regional offices from the different agencies. By focusing on these pilot countries, the focused impact of a One Health approach will leverage multi-organization efficiencies to gain valuable experience, ensure course correction, and broaden the approach to a large range of countries in a step-wise approach.

## The Tripartite Workplan

The Tripartite (with UNEP) Workplan is comprised of five interrelated focus areas to support: 1) the implementation of NAPs; 2) awareness and behavioural change; 3) surveillance and monitoring of

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<sup>1</sup> Global Action Plan on AMR - [http://apps.who.int/iris/bitstream/10665/193736/1/9789241509763\\_eng.pdf?ua=1](http://apps.who.int/iris/bitstream/10665/193736/1/9789241509763_eng.pdf?ua=1)

<sup>2</sup> [http://www.who.int/influenza/resources/documents/tripartite\\_concept\\_note\\_hanoi\\_042011\\_en.pdf?ua=1](http://www.who.int/influenza/resources/documents/tripartite_concept_note_hanoi_042011_en.pdf?ua=1)

antimicrobial resistance and use; 4) stewardship and optimal use of antimicrobials; and 5) monitoring and evaluation.

The Workplan sets out cost estimations for each of the five focus areas, based on priority activities established by the Tripartite with UNEP. Further descriptions and full projects will be developed with cost estimations encompassing human resource requirements and funds to develop and integrate tools, pilot in-country work, conduct workshops and training, and collate, analyze, and publish findings. As funds accumulate within the Multi-Partner Trust Fund (MPTF), and allocations are determined through the formal governance structure of the MPTF, refined activity and implementation costs will be formalized in close collaboration with the Tripartite, UNEP, and regional and/or country offices.

## **Focus area 1: Implementation of National Action Plans**

Supporting the successful implementation of NAPs is a core focus of the Workplan, and is critical for facilitating cross-sectoral collaboration at the country level, and achieving the GAP objectives. While to date 117 countries have national action plans, implementing at scale and sustaining action remains a major challenge. Cross-sectoral support and guidance is needed to facilitate the development and implementation of NAPs through a One Health approach. This will require effective coordination and monitoring, alignment of policy and resources, and adequate investment across sectors, which may be particularly challenging in non-human sectors, where resources and capacity may be even more limited. Sustained political engagement will require thorough understanding of the economic implications of resourcing decisions in combatting AMR, and the cost of inaction. To achieve progress in this area, the Tripartite and UNEP will provide: 1) in-country support to implement NAPs in ten pilot countries; 2) evidence and tools to support implementation and evaluation of NAPs; 3) assessments of the economic benefits of reducing AMR; and 4) guidance on the analysis of legal frameworks and regulatory options.

### **Output 1.1 In-country support to implement multisectoral National Action Plans in pilot countries**

Enhanced Tripartite and UNEP coordination will support the implementation of NAPs in ten pilot countries (see Annex 1), and cross-sectoral coordination at the national and regional level. Dedicated support to pilot will also provide strategic and technical support to strengthen cross-sectoral engagement, and the implementation of NAPs.

The work carried out within this output will support the development of effective coordination mechanisms, robust implementation plans to scale up priority AMR actions, and functional monitoring systems. In addition, the work will facilitate the prioritization of AMR within regional economic communities, and the integration of key AMR actions into relevant programmes and budgets. A methodology for One Health AMR programme reviews, supported by peer learning, will also be developed and piloted in these pilot countries, which will support the development of policies and systems to address AMR, and the identification and dissemination of lessons learnt.

Indicator(s)	<p>Number of countries with effective coordination mechanisms, robust implementation plans for sustainable scale up of priority AMR actions, and demonstrable action in key areas of the GAP</p> <p>Number of countries with functional monitoring systems</p> <p>Number of regional economic communities in which AMR is prioritized as an issue</p> <p>Number of country programme reviews undertaken.</p>
Timeline	Two years
Cost estimation	<p>Cost per country: USD 800 000, depending on size and scope of support.</p> <p>Regional coordination: USD 300 000 per region.</p>

### **Output 1.2 Evidence and tools to support the implementation and evaluation of multisectoral National Action Plans**

In order to facilitate the successful implementation of NAPs, support will be provided to prioritize key activities on the basis of risk, need, and feasibility, and integrate AMR work within broader sectoral investment plans and strategy. This will be achieved through the production of context-specific guidance and tools for priority countries, developed through literature reviews, expert consultation, lessons learnt, and engagement with priority countries.

Indicator(s)	<p>Evidence-based guidance on governance, coordination, and multisectoral working is produced.</p> <p>Guidance on prioritization and phasing of activities with optimized return on investment in different context is developed.</p> <p>Guidance on costing AMR and linking with broader sectoral investment plans is produced.</p> <p>Country guidance note on AMR monitoring produced.</p> <p>Country-specific prioritized list of progress indicators developed.</p>
Timeline	Two years
Cost estimation	USD 1 000 000

### **Output 1.3 Assessment of the economic benefits of reducing AMR**

A key objective of the GAP is to develop the economic case for sustainable investment to tackle AMR. In order to promote the implementation of NAPs in priority countries, and gain political and financial commitment across sectors, evidence is needed to demonstrate the economic benefits of reducing AMR at a national level. To strengthen the evidence-base in this area, economic impact assessments and reviews of the political economy will be carried out in selected countries. These will be conducted in a range of different contexts, which will assist countries to build a case for investment based on information that more closely reflects their own situation. This output will be delivered in conjunction

with other organizations, including the World Bank, and Organisation for Economic Co-operation and Development (OECD).

Indicator(s)	Country-level economic impact assessments undertaken in selected countries (TBD), with tripartite engagement endorsed by national governments. Findings and implications for other countries widely disseminated.
Timeline	Two years
Cost estimation	USD 500 000

#### **Output 1.4 Guidance on the analysis of legal frameworks and regulatory options to address AMR**

In order to effectively and sustainably implement NAPs, a clear understanding of legal frameworks and regulatory options relevant to AMR and antimicrobial use/antimicrobial consumption (AMU/AMC), as well as import/export requirements and structures, and key areas for strengthening, is needed across all countries. The work conducted within this output will support countries to develop a robust methodology to analyse national and regional frameworks on AMR and AMU/AMC in line with internationally agreed principles and standards, and identify regulatory options to strengthen these frameworks. This will be achieved through Tripartite and UNEP collaboration, as well as consultation with relevant stakeholders at national, regional, and international levels.

Key activities within this output include: 1) the development of a methodology to analyse national and regional frameworks on AMR related areas, in line with internationally agreed principles and standards; and 2) the identification of regulatory options to strengthen national and regional legal frameworks relating to antimicrobial use and disposal, disease prevention, and reduction in the need for antimicrobials, with a focus on human and animal health, plant production, and the environment.

Indicator(s)	A Tripartite and UNEP methodology to analyse national legislation relevant for AMR is finalized and made available to countries. A document on regulatory options to strengthen AMR-related legislation is developed, discussed and validated with countries and other stakeholders.
Timeline	Two years
Cost estimation	USD 800 000

## **Focus area 2: Awareness and behavioural change**

In order to support the effective implementation of NAPs, there is an immediate need to raise awareness of AMR worldwide, and promote behavioural change. This aligns with the clear objective set out in the GAP to strengthen understanding of AMR across sectors. Improving awareness of AMR and



effecting behavioural change requires effective communication across sectors to translate evidence, guidance, and policy into action. Targeting relevant stakeholder groups across sectors concurrently, including both professionals and the public, can promote awareness and commitment to change for the benefit of people, animals, agriculture, and the environment at the national, regional, and global level. The key activities across the Tripartite outlined in this output will support countries in achieving their targeted priorities towards raising awareness, implementing behavioural change, enabling collective action, and strengthening monitoring and accountability.

**Output 2.1 Open source global repository of One Health resources on AMR communications and behavioural change**

This output will build country capacity by providing an open access repository of communications materials, tested key messages, behavioural change methodologies, and implementation tools, so that governments, civil society organizations, local level partners, and stakeholders can access best practices. This global resource has been requested by Member States and other partners, and will be achieved by conducting a global mapping of AMR One Health communications and behavioural change tools, followed by the development of an online repository, with continued addition of resources to maintain and update the repository at appropriate intervals.

This will be supported by a communication campaign to promote the public launch of the global repository. In addition, a Community of Practice will be created to support the repository by sharing best practices, and providing a wider support network to address challenges and amplify campaigns. As part of this, a global workshop will be held to bring together global, regional, and national experts to gather tools and resources to build the repository.

Indicator(s)	Publicly available global repository. Number of communications materials, tested messages, behavioural change tools, and key information products.
Timeline	Two years
Cost estimation	USD 750 000

**Output 2.2 Workshop series to build behavioural change capacity and assess core needs**

To assess core needs and build capacity to support behavioural change, a workshop series will be delivered to share guidance, tools, and lessons learnt, and support the development of behavioural change priorities at a national level. This work will be cross-sectoral, promoting a One Health approach.

Two workshops will be held with the Tripartite to share knowledge and build capacity. A priority will be to strengthen behavioural change capacity in the human, animal, and environment sectors. Guidance is currently being developed for animal and human health, and these workshops will assist in the development and dissemination of this guidance, and build a bridge to connect stakeholders across sectors through a One Health approach.

Indicator(s)	Number of regional workshops conducted. Number of participants, countries, and represented sectors and stakeholders attending the workshops.
Timeline	Two years
Cost estimation	USD 750 000

### **Output 2.3 Feasibility report on One Health awareness assessment tool**

In this output, work will be carried out to support the assessment of feasibility for the future development of a One Health quantitative awareness assessment tool. Existing Tripartite and UNEP assessment tools will be analysed to identify synergistic, missing, and potential linkages across the survey tools for each sector. This will be supported by recommendations on how to optimize knowledge across human, animal, plant, food, and environment sectors. This information will be synthesized to generate a feasibility report outlining the development of a potential One Health awareness assessment tool.

Indicator(s)	Feasibility document synthesizing survey tools used across the Tripartite and UNEP and outlining potential One Health awareness assessment tool.
Timeline	One year
Cost estimation	USD 400 000

### **Output 2.4 Development of communication resources for resource-limited countries**

To raise awareness and reduce the emergence and spread of antimicrobial resistant microorganisms in humans, animals, plants, food, and the environment, this output will be delivered by developing communication resources for resource-limited countries, informed by best practice and guidance across the Tripartite and UNEP. To achieve this, two projects will be piloted, facilitating engagement between selected countries and the Tripartite and UNEP over a one-year period to develop strategic, long-term, One Health national AMR awareness campaigns. As part of this, the Tripartite and UNEP plan to develop simple standard operating procedures (SOPs) for the campaigns to guide stakeholder assessment, and campaign development, testing, deployment, monitoring, and evaluation. Resources relevant to each of the sectors will be aggregated, and shared in the open access repository and with the community of practice.

Indicator(s)	<p>Guidance and SOPs with two country case studies (Kenya and the Philippines as potential options to be confirmed), shared through open source global repository and community of practice.</p> <p>Increased participation in World Antibiotic Awareness Week (WAAW) with the support of Tripartite and UNEP resources.</p> <p>Number of One Health multimedia case studies produced.</p> <p>Number of languages into which materials are translated.</p>
Timeline	1.5 years
Cost estimation	USD 1 150 000

### Focus area 3: Surveillance and monitoring of antimicrobial resistance and use

In order to inform effective strategies to tackle AMR across sectors, and successfully implement NAPs, there is a need for robust data on patterns of AMR and AMU/AMC. Data on the incidence, prevalence, and range of pathogens, how antimicrobials are prescribed and used, and the development and spread of AMR across humans, animals, plants, and the environment, is critical to guide the development of tools, policies, and regulations, and monitor the effectiveness of AMR activities. Furthermore, where not available, there is a need to standardize the collection of such data to ensure data are robust and internationally comparable. This calls for the development and implementation of integrated surveillance systems to generate data on AMR and AMU/AMC across human, veterinary, and plant sectors, and develop frameworks to support data sharing across sectors. Through this workplan, the Tripartite and UNEP aim to strengthen surveillance to support the generation of data to inform action and capacity building at the national, regional, and international level across sectors. This focus area will provide technical support to assist countries in establishing and running national programmes on surveillance of AMR and the use of antimicrobials, and capturing and sharing information using integrated surveillance systems.

#### **Output 3.1 Development and strengthening of Tripartite and UNEP guidance to foster surveillance and monitoring on AMR and AMU/AMC**

This output will be achieved by providing countries with guidance on the development of national One Health surveillance systems. The Tripartite and UNEP will develop and harmonize standardized protocols for surveillance on AMR across the human-animal-plant-food-environment interface to define data collection (including epidemiological, clinical, and socio-demographic data), sampling strategy, and microbiological analysis of relevant microorganisms. The Tripartite and UNEP will also develop and harmonize protocols for surveillance on AMU/AMC relevant to the human-animal-plant-food-environment interface where needed. Where possible, the protocols will build on existing international

standards and guidance, and in particular, the ones already developed by FAO, OIE, and WHO. Whilst country level activities have general priority, the development of this guidance should have a high priority, as it will be critical for the overall success of this focus area.

Indicator(s)	Number of harmonized Tripartite plus protocols issued.
Timeline	Two years
Cost estimation	USD 450 000

### **Output 3.2 National cross-sectoral data on AMR and AMU/AMC**

The Tripartite and UNEP will work together to support selected countries to develop national surveillance systems to monitor AMR and AMU/AMC across the human-animal-plant-food-environment interface. In this core output of this focus area, support will be provided to countries to implement surveillance and monitoring systems for capturing and reporting AMR and AMU/AMC data in humans, animals, plants, food, and the environment. Generating and facilitating the accessibility of such data will support countries in monitoring patterns of AMR and AMU/AMC, developing effective AMR response strategies, and gaining financial and political commitment. Furthermore, access to robust and harmonized data on AMR and AMU/AMC across humans, animals, plants, food, and the environment will strengthen cross-sectoral responses to AMR at the national, regional, and global level.

Indicator(s)	Number of countries where a national system for the surveillance and monitoring of AMR and AMU/AMC in human, animal, plant, food and environment sectors exists.  Number of countries where data generated by national system for the surveillance and monitoring of AMR and AMU/AMC in human, animal, plant, food and environment sectors are publicly available and accessible.
Timeline	Three years [at least three years are needed, but work would start within the Workplan timeframe]
Cost estimation	USD 3 300 000 / country

### **Output 3.3 Compilation of cross-sectoral data on AMR into the *Tripartite Integrated Surveillance System on AMR/AMU (TISSA)* platform**

The ultimate vision is a Tripartite Integrated Surveillance System on AMR/AMU (TISSA), where data on use and resistance are integrated from the human, animal, plant, food, and environment sectors. An intermediate step towards TISSA is the establishment of a dynamic Tripartite platform (“TISSA Platform”) linking and referring current initiatives for AMR and AMU/AMC surveillance data across sectors at the regional and global levels.

This will be achieved by undertaking an IT needs assessment, under WHO leadership, to link relevant AMR and AMU/AMC data from FAO, OIE, WHO, and UNEP (where available) in a common IT platform. A document detailing the functional and technical requirements, including design mock-ups of how AMR

and AMU/AMC data could be assessed and displayed, will be developed. The document will provide the interoperability standards, and include agreed monitoring targets and timelines defined during the IT needs assessment (to be shared with internal developers or external vendors for bidding purposes), the technological options, and respective costs and human resource requirements to link relevant data from the Tripartite and UNEP into a common IT platform. Work on this would be linked to other current developments in surveillance data collection and analysis, and data generated in this focus area would be displayed in this platform.

Indicator(s)	Feasibility document containing functional and technical requirements, including design mock-ups of how AMR and AMU/AMC data could be assessed and displayed from the Tripartite and UNEP.  TISSA Platform launched.
Timeline	Two years (needs analysis will be done in 6 months Sept 2018-Feb 2019)
Cost estimation	USD 300 000

### **Output 3.4 Improved understanding of AMR risks to the environment**

In order to inform effective response strategies to reduce the impact of AMR at the human-animal-plant-food-environment interface, there is a need to strengthen understandings of the impact and risks of the use of antimicrobials in humans, animals, and plants for the environment. In this output, the Tripartite will carry out work at the country level in collaboration with UNEP, and national laboratories and academia in the human, animal, plant, food, and environmental sectors, to carry out assessments of antimicrobial residues and AMR at critical control points in the manufacture, distribution, use, and disposal of antibiotics to the environment from the human, animal, food, and plant sectors. This work will be carried out in selected priority countries initially, and would link to existing data collection activities and sources.

As part of this output, a global survey on Extended-spectrum Beta-lactamase Escherichia coli (ESBL Ec) and AMC/AMU in the food chain and in the environment (ESBL Ec Tricycle project) will be carried out, facilitated by enhanced collaboration across the Tripartite and UNEP. Currently, six countries<sup>3</sup> in four WHO Regions are piloting and participating in this ESBL Ec Tricycle project.<sup>4</sup>

Indicator(s)	Number of countries enrolled in and implementing the ESBL Ec Tricycle project.
Timeline	Two years
Cost estimation	USD 130 000 / country + USD 102 150 (coordination)

<sup>3</sup> Pilot countries for the ESBL Ec Tricycle project: Ghana, Indonesia, Madagascar, Malaysia, Pakistan, and Senegal.

<sup>4</sup> Within the next 3 years, the global survey should aim to cover at least 20% of countries (i.e. 38 countries) from different regions.

### **Output 3.5 Explore the feasibility of collecting data on substandard and falsified antimicrobial products**

In order to strengthen antimicrobial stewardship and regulations, and reduce the emergence of AMR, robust data are needed on substandard and falsified antimicrobial products across sectors. Currently, the WHO has a functioning system to monitor the existence and circulation of falsified or substandard antimicrobial products in the human sector. The OIE has also included this in the focal point trainings. In this output, the Tripartite and UNEP will explore the feasibility of expanding the current WHO Global Surveillance and Monitoring System on substandard and falsified antimicrobial products, to include data on related products used in animals (OIE).

Indicator(s)	Report on the feasibility and usefulness of extending the existing WHO system to include veterinary drugs, and the pros and cons/costs and benefits.
Timeline	One year
Cost estimation	USD 400 000

## **Focus area 4: Stewardship and optimal use of antimicrobials**

There is a critical need to strengthen stewardship and the optimal use of antimicrobials to reduce misuse and overuse, and preserve their effectiveness in order to limit the emergence of AMR. The work in this focus area will support progress towards the fourth objective of the GAP, including fostering research and development to support Member States to strengthen stewardship and optimize use of antimicrobials. This will include developing and supporting practical measures to minimize the need for antimicrobials (e.g. improved hygiene, biosecurity, vaccination programs, etc.), reduce the use of antimicrobials (e.g. implementing good practice and identifying alternatives to antimicrobials), and prevent the spread of AMR or residues (e.g. good hygiene practices).

### **Output 4.1 The Tripartite and UNEP Global Development and Stewardship Framework to Combat AMR**

In line with the mandate provided by the United Nations General Assembly (UNGA), the Tripartite and UNEP are developing a Global Development and Stewardship Framework to Combat Antimicrobial Resistance. The goal of the framework is the promotion and protection of the health of humans, animals, plants, food, and the environment in line with a One Health approach. The framework will also serve as an example of enhanced multisectoral collaboration, which is needed to successfully combat cross-sectoral phenomena such as AMR, and achieve the UN SDGs. However, consultations with Member States and numerous stakeholders showed that there is no consensus on which form such a framework should take. Based on the feedback received, the recommendations of the UN Interagency Coordination Group on Antimicrobial Resistance (IACG), and further guidance by governing bodies of

WHO, OIE, and FAO, the Tripartite will readjust the process and scope of the framework. Further development will depend on the guidance received. The below budget is calculated based on the assumption that the development of the framework is pursued.

Indicator(s)	Draft framework
Timeline	Two years
Cost estimation	USD 3 500 000 or higher (full framework)

#### **Output 4.2 Tripartite Advisory Group on Intersectoral Support on AMR (T-AGISAR)**

The Tripartite has agreed to have a single technical advisory body working toward the holistic One Health perspective. The aim of this output is to establish the Tripartite Advisory Group on Intersectoral Support on AMR (T-AGISAR). Such an advisory body will provide continuing support from a community of experts, which can provide insight from different backgrounds, and translate common understanding of the challenges and objectives across each sector into joint action. It is expected that this advisory group will provide technical guidance and input for the activities at the human-animal-plant-food-environment interface, aimed at the containment of antimicrobial resistance.

Indicator(s)	Terms of reference adopted. Areas of required expertise identified, and members selected accordingly. Annual meeting of the T-AGISAR. Ad hoc meetings as needed.
Timeline	Two years
Cost estimation	USD 1 000 000

#### **Output 4.3 Guidance for maintaining the cross-sectoral efficacy of antimicrobials**

In order to support stewardship and optimized use of antimicrobials across sectors, there is a need for evidence-based guidance to support countries to maintain the efficacy of critically important antimicrobials. This output will be achieved by developing and publishing Tripartite and UNEP guidance for maintaining the efficacy of critically important antimicrobials for humans, animals, and plants. The guidance will be informed by a situation analysis and technical expert meetings, and will take into consideration the OIE list of antimicrobials of veterinary importance, the latest update of the WHO list of Critically Important Antimicrobials, and other lists and guidance. This guidance will play a key role in strengthening stewardship and optimizing the use of antimicrobials at the national, regional, and global level, and ultimately support efforts to reduce the impact of AMR in humans, animals, plants, food, and the environment.

Indicator(s)	Road map developed. Situation Analysis undertaken. Two technical expert meetings hosted. A draft guidance document developed. Guidance published.
Timeline	Two years
Cost estimation	USD 1 500 000

#### **Output 4.4 Development of a Tripartite e-learning Platform (TeLP) on AMR**

Developing a platform within which data and resources relevant to training on AMR can be stored and accessed is essential for supporting intersectoral collaborations and coordinated action at the national, regional, and global level. This output will be closely aligned with Output 2.1 and the development of an open source global repository of One Health resources to support key stakeholders to access information and resources, and share best practice.

This specific output will be achieved through the establishment of a Tripartite and UNEP Web Portal to share training resources. In addition, a Tripartite and UNEP e-learning course will also be developed on the prudent use of antimicrobials and environmental approaches relevant across each sector. A joint educational alliance will be established both to develop content for the e-learning platform, and to promote the e-learning courses.

Indicator(s)	Feasibility document containing functional and technical requirements. A Tripartite and UNEP Web Portal developed and launched. Two Tripartite and UNEP e-learning courses developed. Two Tripartite and UNEP webinars to introduce the new e-learning courses
Timeline	Two years
Cost estimation	USD 1 500 000

### **Focus area 5: Monitoring and evaluation**

Robust monitoring and evaluation are needed in order to measure progress towards the delivery of the GAP objectives, and achievements and persisting gaps across human, animal, plant, food, and environment sectors in efforts to tackle AMR. In this focus area, there are two high-level outputs proposed to define key monitoring and evaluation functions that need to be carried out by the Tripartite and UNEP in the coming two years to gauge and report progress across sectors in the implementation of the GAP at the national, regional, and global level.



## **Output 5.1 Development and operationalization of the GAP monitoring and evaluation framework**

The Tripartite have co-developed a monitoring and evaluation (M&E) framework for the GAP, which aims to generate data to assess the delivery of GAP objectives, and inform operational and strategic decision making on AMR for the next five years. The framework includes two parallel tracks of M&E activities. Track 1 focuses on the inputs, activities, and outputs of the GAP. It is designed to monitor the progress of different stakeholders in implementing the GAP, and to evaluate how to improve the collective response. Track 2 focuses on GAP outcomes and impact goals. It is designed to assess the effectiveness of GAP implementation efforts, including monitoring their results, and evaluating their impact on, for example, AMR, appropriate use of antimicrobials, and burden of disease.

The framework includes recommended core indicators that have been agreed across the Tripartite, including a specific indicator on environmental standards proposed by UNEP, which needs to be collected and monitored at national, regional, and global levels. The framework also includes country level evaluations, monitoring of research and development, and a proposed global-level independent evaluation. The framework will bring together monitoring data gathered through activities across the organizations (some of which are detailed elsewhere within the workplan, e.g. TISSA).

In order to support the coordination, validation, and delivery of the framework, a detailed workplan will be jointly developed by the Tripartite and UNEP. Since the implementation of the framework requires close cooperation with countries, the workplan will include targeted joint testing of the framework in selected countries. The framework will then be refined based on lessons learnt through this collaboration and testing.

The global Tripartite AMR Country Self-Assessment Survey (TrACSS) will also continue to be delivered annually, with increased focus on analysis and publication of the data submitted. Aligned with the indicators of the framework, this forms one arm of monitoring GAP delivery. In addition, the Tripartite and UNEP will develop options for, and agree, the design and process for periodic independent evaluation. It is anticipated that the GAP will be updated after an agreed period based on evidence gathered through the framework.

Indicator(s)	Number of countries that collect and share core national-level M&E indicators. Number of countries reporting or submitting data in line with global indicators. Report on the testing of the validity, feasibility, and suitability of the M&E framework, and indicators from four countries per year.
Timeline	Two years
Cost estimation	USD 2 000 000 – for Tripartite and UNEP Coordination of M&E activities

**Output 5.2 UNGA Report and the first Tripartite Biennial Global Report on AMR**

The political declaration of the UNGA high level meeting on AMR in September 2016 requested the UN Secretary General to report on progress in 2019. The Tripartite will jointly develop and draft this report.

The Tripartite will develop an outline and project plan for the report, with detailed timelines and responsibilities for each organization. A focal point will also be appointed to coordinate the data collection, analysis, drafting of relevant sections, and clearance of draft texts. This will be essential to ensure timely development, drafting, editing, approval, and publication of a quality document. The Tripartite will also consult with other stakeholders on the initial drafts of the report. If and when necessary, separate studies can be commissioned to supplement the report.

The GAP and specific World Health Assembly (WHA) resolutions commit WHO and the Tripartite to produce a biennial global report on AMR that provides an update on the implementation of the GAP. The Tripartite will develop and draft this report. Data gathered through the Country Self-Assessment Survey (TrACSS), and the implementation of the M&E framework, in the future, will contribute directly to the production of the global AMR report.

The Tripartite will develop a joint approach to publicizing the release of the report, and promoting the content widely, to draw attention to and encourage action on the findings. Where specific additional capacity building and other resource needs are identified through the report, the Tripartite will highlight the case for investment in these areas.

Indicator(s)	UNGA Report to the UN Secretary General. The First Tripartite Biennial Global Report on AMR.
Timeline	12 months**
Cost estimation	USD 360,000* for Tripartite and UNEP coordination of the UNGA Report and the First Biennial Global AMR Report 2019 - development, finalization, dissemination.  * The costs for developing and producing the two reports are based on the use of limited, existing, and readily available data, and streamlined content. The costs of producing the report might need to be adjusted if a more substantial biennial report is requested by Senior Management.  ** The timeline and associated costs would need to be adjusted if more data collection and analysis will have to be initiated and conducted in 2020 to help develop the Second biennial global AMR report due in 2021.

## Implementation mechanism

The Tripartite and UNEP will implement this Workplan at national, regional, and global levels in alignment with the GAP, strengthening existing implementation mechanisms to increase the impact at country level, and facilitate engagement of under-resourced sectors through the establishment of a Multi-Partner Trust Fund (MPTF). Coordination and collaboration across the Tripartite and UNEP, and with other relevant stakeholders, will be critical for each focus area. While some of the activities currently being carried out by the Tripartite and UNEP are already contributing towards the outputs in this Workplan, mobilization of both human and financial resources is critical to ensure full implementation and achievement of all outputs included in this Workplan, and more widely, the GAP. Furthermore, the allocation of adequate resources will ensure sustainability and continuity of action.

The AMR MPTF is administered by the MPTF Office in New York, serving implementing agencies and partners to pool funds for joint action. The fund is conceptualized through a dynamic theory of change to deliver sustainable outcomes. The MPTF's governance structure outlines how the funds will be managed, disbursed, and the impact measured. Partner representation on the Advisory Board forms part of the governance structure. Detailed terms of reference for the fund are available.

## Further reading

- WHO, 2015. Global Action Plan on Antimicrobial Resistance. Available at [http://apps.who.int/iris/bitstream/10665/193736/1/9789241509763\\_eng.pdf?ua=1](http://apps.who.int/iris/bitstream/10665/193736/1/9789241509763_eng.pdf?ua=1)
- FAO, 2015. FAO Action Plan on AMR. Available at <http://www.fao.org/3/a-i5996e.pdf>
- OIE, 2016. OIE Strategy on Antimicrobial Resistance and the Prudent Use of Antimicrobials site on Antimicrobial Resistance. Available at [http://www.oie.int/fileadmin/Home/eng/Media\\_Center/docs/pdf/PortailAMR/EN\\_OIE-AMRstrategy.pdf](http://www.oie.int/fileadmin/Home/eng/Media_Center/docs/pdf/PortailAMR/EN_OIE-AMRstrategy.pdf)
- UNEP, 2017. Frontiers 2017 – Emerging Issues of Environmental Concern. Available at [https://wedocs.unep.org/bitstream/handle/20.500.11822/22255/Frontiers\\_2017\\_EN.pdf?isAlloved=y&sequence=1](https://wedocs.unep.org/bitstream/handle/20.500.11822/22255/Frontiers_2017_EN.pdf?isAlloved=y&sequence=1)

## Related links

- FAO thematic site on Antimicrobial Resistance: [www.fao.org/antimicrobial-resistance](http://www.fao.org/antimicrobial-resistance)
- WHO site on Antimicrobial Resistance: [www.who.int/topics/antimicrobial\\_resistance/en/](http://www.who.int/topics/antimicrobial_resistance/en/)
- OIE site on Antimicrobial Resistance: [www.oie.int/en/our-scientific-expertise/veterinary-products/antimicrobials](http://www.oie.int/en/our-scientific-expertise/veterinary-products/antimicrobials)

# Annex 1

## **Pilot Countries: The Tripartite Workplan on antimicrobial resistance 2019-2020**

### **Why have pilot countries been selected?**

In response to the significant threat of AMR, the 68th World Health Assembly (WHA) adopted the Global Action Plan on Antimicrobial Resistance (GAP) in May 2015, developed by WHO in collaboration with FAO and OIE. In the subsequent political declaration of the UN General Assembly (UNGA) in 2016, a key role for the member organizations of the “Tripartite” - FAO OIE and WHO - was set out in providing technical and strategic support to member states as they implement their national action plans from a One Health perspective.

Subsequently, in 2018 the Tripartite signed a Memorandum of Understanding (MoU) that clarified how the three agencies would strengthen their coordinated action, and that they would seek to collaborate more closely with UNEP.

The Tripartite Workplan sets out a two-year programme of work, which will demonstrate how the organizations, working together, can deliver One Health support to countries. This support will focus on an agreed group of pilot countries, and aims to foster cross-sectoral work, enable the sharing of experiences, and demonstrate the benefits of linking across sectors and programme areas.

A One Health approach is important in all countries, and it is recognized that many countries need support in this regard. The Tripartite organizations have identified ten countries in which to focus efforts during this initial two-year period to demonstrate clearly what can be achieved by working through a One Health basis, as well as the added value that collaboration among the Tripartite (and other agencies) can bring to country support.

### **How were the pilot countries selected?**

Clear criteria were used to select the pilot countries:

1. A willingness and interest on the part of the government to address AMR from a multisectoral perspective, as demonstrated and articulated within their national action plan, and as assessed as feasible by the Tripartite.
2. The clear need for support from the Tripartite in order to progress a One Health approach, and the potential for the country to become an exemplar for the region or sub-region.
3. The likelihood that the collaborative support of the Tripartite agencies will have significant impact at the country level, and add value in the short term.
4. Low- or middle-income countries, representing all geographic regions and including francophone, anglophone, and Spanish-speaking countries.

The list of pilot countries reflects those countries that are likely to benefit from technical support. However, other countries have been identified as having significant strategic importance that also warrants the support of the Tripartite. China, India, Brazil, and Nigeria have all been identified as

countries where an effective One Health approach to AMR is essential. In these countries, the role of the Tripartite may differ from the pilot countries, with a greater focus on high-level strategic and political engagement, rather than on technical support. It is possible that demonstrable impact in these large countries may take longer to achieve.

Some other countries are already successfully advancing the One Health agenda, and are less likely to require or benefit from the specific support of the Tripartite (although the Tripartite remains committed to ongoing involvement with these countries, and to assist in the dissemination of lessons learnt, if resources are available).

The selection of pilot countries is part of a wider agenda to focus AMR support in countries where impact is likely to be greatest. The list was agreed through an iterative process of discussion between technical and strategic leads at the headquarters of the Tripartite organizations, and decentralized/regional offices from the different agencies.

### **What support will the Tripartite provide to the pilot countries?**

The scope of support that can be delivered by the Tripartite will be determined by the level of resources available. It will also be dependent upon other factors at the country level. Changes in governance or personnel, as well as other unforeseen events, may have significant impact, and as such, impact may vary across countries.

Subject to the availability of funds, capacity within the Tripartite organizations will focus on providing support to the coordination of national action plans (NAPs), and the development of multisectoral implementation plans, as well as other elements critical to delivery, such as monitoring, costing, and legislative reviews. There would also be support to mainstream priority One Health issues, as outlined elsewhere in the other chapters of the Workplan.

### **What about those countries that are not selected?**

Individual members of the Tripartite will continue their sector-specific work with all countries, particularly on aspects not covered by the plan. If funding allows in the mid- and long-term, the Tripartite will continue to explore how it can work more effectively, and support a One Health approach in all countries, including those where the local capacities and focus of the individual agencies are more limited.

### **Proposed countries for Technical Support**

Argentina	Burkina Faso	Cambodia
Indonesia	Kenya	Peru
Philippines	Senegal	Tajikistan
Zimbabwe		