



Food and Agriculture  
Organization of the  
United Nations

UN  
environment  
programme

World Health  
Organization



World Organisation  
for Animal Health  
Founded as OIE



©WHO/Quinn Mattingly

# Antimicrobial Resistance Multi-Partner Trust Fund

## Annual report 2023

Administered by



United Nations  
MPTF Office





Food and Agriculture  
Organization of the  
United Nations



World Organisation  
for Animal Health  
Founded as OIE

# **Antimicrobial Resistance Multi-Partner Trust Fund**

## **Annual report 2023**

Antimicrobial Resistance Multi-Partner Trust Fund: annual report 2023

ISBN (WHO) 978-92-4-009607-3 (electronic version)

ISBN (WHO) 978-92-4-009608-0 (print version)

ISBN (FAO) 978-92-5-138997-3

DOI (WOAH) <https://doi.org/10.20506/woah.3532>

**© World Health Organization, Food and Agriculture Organization of the United Nations, United Nations Environment Programme and World Organisation for Animal Health, 2024**

Some rights reserved. This work is available under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 IGO licence (CC BY-NC-SA 3.0 IGO; <https://creativecommons.org/licenses/by-nc-sa/3.0/igo/>).

Under the terms of this licence, you may copy, redistribute and adapt the work for non-commercial purposes, provided the work is appropriately cited, as indicated below. In any use of this work, there should be no suggestion that the World Health Organization (WHO), the Food and Agriculture Organization of the United Nations (FAO), United Nations Environment Programme (UNEP) or World Organisation for Animal Health (WOAH) endorse any specific organization, products or services. The use of WHO, FAO, UNEP or WOAH logos is not permitted. If you adapt the work, then you must license your work under the same or equivalent Creative Commons licence. If you create a translation of this work, you should add the following disclaimer along with the suggested citation: "This translation was not created by the World Health Organization (WHO), the Food and Agriculture Organization of the United Nations (FAO), United Nations Environment Programme (UNEP) or World Organisation for Animal Health (WOAH). WHO, FAO, UNEP and WOAH are not responsible for the content or accuracy of this translation. The original English edition shall be the binding and authentic edition".

Any mediation relating to disputes arising under the licence shall be conducted in accordance with the mediation rules of the World Intellectual Property Organization <http://www.wipo.int/amc/en/mediation/rules>.

**Suggested citation.** Antimicrobial Resistance Multi-Partner Trust Fund: annual report 2023. Geneva: World Health Organization, Food and Agriculture Organization of the United Nations, United Nations Environment Programme and World Organisation for Animal Health; 2024. Licence: [CC BY-NC-SA 3.0 IGO](https://creativecommons.org/licenses/by-nc-sa/3.0/igo/).

**Cataloguing-in-Publication (CIP) data.** CIP data are available at <http://apps.who.int/iris>.

**Sales, rights and licensing.** To purchase WHO publications, see <https://www.who.int/publications/book-orders>. To submit requests for commercial use and queries on rights and licensing, see <http://www.who.int/copyright>.

**Third-party materials.** If you wish to reuse material from this work that is attributed to a third party, such as tables, figures or images, it is your responsibility to determine whether permission is needed for that reuse and to obtain permission from the copyright holder. The risk of claims resulting from infringement of any third-party-owned component in the work rests solely with the user.

**WHO Photographs.** WHO photographs are copyrighted and are not to be reproduced in any medium without obtaining prior written permission. Requests for permission to reproduce WHO photographs should be addressed to: <https://www.who.int/about/policies/publishing/permissions>.

**General Disclaimers.** The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO, FAO, UNEP or WOAH concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products, whether or not these have been patented, does not imply that they are endorsed or recommended by WHO, FAO, UNEP or WOAH in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by WHO, FAO, UNEP and WOAH to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall WHO, FAO, UNEP and WOAH be liable for damages arising from its use.

# Contents

---

<b>Acronyms and Abbreviations</b>	iv
<b>Executive Summary</b>	v
<b>1 Introduction</b>	1
<b>2 About the MPTF</b>	3
2.1 Background	3
2.2 Approach	3
2.3 MPTF Governance	4
2.3.1 Steering Committee	4
2.3.2 Quadripartite Joint Secretariat on AMR	5
2.3.3 Administrative Agent: UNDP Multi-partner Trust Fund Office	6
<b>3 Achievements in 2023</b>	7
3.1 Overview of Fund Implementation	7
3.2 Results by Results Matrix Output	10
<b>4 Optimization of the MPTF</b>	22
<b>5 Challenges, lessons learned and recommendations</b>	23
5.1 Challenges	23
5.2 Lessons learned	23
5.3 Recommendations	23
<b>6 Next steps and future vision</b>	24
<b>7 Financial situation in 2023</b>	25
Annex 1: Theory of change for the Strategic Framework for collaboration on AMR and the AMR MPTF Results Matrix	26
Annex 2: One-page summaries of country projects and Global Programme Components in 2023	27

---

# Acronyms and Abbreviations

<b>ACT</b>	Action to Support the Implementation of Codex AMR Texts
<b>AMR</b>	antimicrobial resistance
<b>AMU</b>	antimicrobial use
<b>ANIMUSE</b>	Animal antimicrobial USE
<b>ATLASS</b>	Assessment Tool for Laboratories and AMR Surveillance Systems
<b>BMZ</b>	Federal Ministry for Economic Cooperation and Development (Germany)
<b>FAO</b>	Food and Agriculture Organization of the United Nations
<b>GISSA</b>	Global Integrated System for Surveillance on AMR and Antimicrobial Use
<b>GIZ</b>	German Agency for International Cooperation
<b>InFARM</b>	International FAO Antimicrobial Resistance Monitoring
<b>IPC</b>	infection prevention and control
<b>M&amp;E</b>	monitoring and evaluation
<b>MPTF</b>	Antimicrobial Resistance Multi-Partner Trust Fund
<b>NAP</b>	National Action Plan
<b>OHLAT</b>	One Health Legislative Assessment Tool
<b>PPS</b>	point prevalence survey
<b>TrACSS</b>	Tracking AMR Country Self-assessment Survey
<b>SDG</b>	Sustainable Development Goal
<b>Sida</b>	Swedish International Development Cooperation Agency
<b>UNDG</b>	United Nations Development Group
<b>UNDP</b>	United Nations Development Programme
<b>UNEP</b>	United Nations Environment Programme
<b>UNGA</b>	United Nations General Assembly
<b>WAAW</b>	World AMR Awareness Week
<b>WHO</b>	World Health Organization
<b>WOAH</b>	World Organisation for Animal Health



# Executive Summary

Antimicrobial resistance (AMR) is a pervasive global threat that endangers human health, as well as that of animals, plants and food systems. The global threat of AMR requires urgent action to safeguard our ability to treat human, animal, and plant diseases, ensure food safety, foster economic development and equity, and protect the environment.

The AMR Multi-Partner Trust Fund (MPTF) was established in 2019 to combat the threat of AMR through strategic collaboration in the fields of human, animal, plant and environmental health. The MPTF promotes a One Health approach to combatting AMR – based on the recognition that the health of humans, domestic and wild animals, plants and the wider environment (including ecosystems) are inter-dependent.

In 2023, the MPTF supported activities in Bangladesh, Cambodia, Ethiopia, Ghana, Indonesia, Kenya, Madagascar, Mongolia, Morocco, Peru, Senegal, Tajikistan, Tunisia and Zimbabwe. The MPTF also supported four components of the Global Programme, on: Monitoring and Evaluation (M&E); AMR Surveillance on Antimicrobial Resistance and Use; Environment; and Legal.

The country projects were coordinated by national Quadripartite partners and working with ministries of health, agriculture, environment and other key sectors – supporting countries in carrying out National Action Plans (NAPs) on AMR. Global Programme components strengthened implementation of the Global Action Plan on AMR and supported country projects – providing tools and guidance for national-level implementation, which in turn enhanced Global Programme results.

Implementation of both country projects and Global Programme components contributed to: national governance systems around AMR surveillance and coordination action; government capacity and public awareness for tackling AMR; preventing infections and promoting alternative therapies; stronger collaboration among government actors, private-sector and other national stakeholders; and joint action among national, regional- and global-level members of the Quadripartite.

During 2023, MPTF optimization included a strategic review, which recommended a review of the funding proposal application process aimed at ensuring a more rigorous and critical assessment of new country proposals. Given the positive results the MPTF has produced in terms of strengthening collaboration through the One Health approach, there are opportunities to further scale up the Fund and expand its impact.



# 1 Introduction

Antimicrobial resistance (AMR) is a grave and pervasive global threat. Its impact on lives and livelihoods takes many forms, and new evidence suggests that this threat is even more urgent and severe than previously thought. Combating AMR requires action to protect human health, animals, plants, food systems and the environment.

The AMR Multi-Partner Trust Fund (MPTF) was founded in 2019 to combat the threat of AMR through strategic collaboration among diverse actors in the fields of human, animal, plant and environmental health through Sustainable Development Goal (SDG)-focused responses that support National Action Plans (NAPs) on AMR.

The MPTF dedicates funding and technical support to: promoting a One Health approach (integrating the health of people, animals and the environment); and supporting countries in carrying out NAPs on AMR. MPTF activities aim to raise awareness of AMR worldwide and promote One Health advocacy on AMR by human, animal, plant and environment practitioners, as well as the general public (the largest consumer group for antimicrobials).

Collaborative action on MPTF-supported activities in 2023 promoted multi-sector coordination across sectors, bringing together national- and global-level members of the Quadripartite: the Food and Agriculture Organization of the United Nations (FAO); the United Nations Environment Programme (UNEP); the World Health Organization (WHO); and the World Organisation for Animal Health (WOAH) – along with national experts from different ministries and other stakeholders for a focused One Health response to AMR.

Activities and outputs of MPTF-supported country projects and four Global Programme components in 2023 are presented by MPTF Results Matrix Output. MPTF-supported country projects are designed to be integrated into the activities of the ministries of health, agriculture, environment and other key sectors, bringing together diverse stakeholders from different areas – sometimes for the first time.

In addition to strengthening implementation of the Global Action Plan on AMR, the Global Programme components on Monitoring and Evaluation (M&E), Surveillance on Antimicrobial Resistance and Use Environment and Legal support implementation of country projects by providing frameworks, assessment tools, data systems and greater capacity for action.

Implementation of the Global Programme and country projects were mutually supportive through legal assessment and M&E frameworks, capacity building on AMR and the environment, and the continued development of an AMR surveillance information system. In providing tools and guidance for country project implementation, the Global Programme laid the foundation for national-level outputs while strengthening implementation of the Global Action Plan on AMR.





*The participatory meeting at sub-national level to validate the practically of the treatment guidelines in Cambodia*

## ▼ Success Story | CAMBODIA

In Cambodia, the MPTF was the only funding available for implementing the country's Multi-sector Action Plan on combating AMR. These funds allowed Cambodia's Government to go beyond organizing meetings and workshops, to implement more robust activities such as developing treatment guidelines and training manuals for animal producers to minimize the risks associated with the use of antimicrobials. This guidance has been disseminated nationwide, providing 101 provincial and district veterinarians and 103 village animal health workers with the support they need to use antimicrobials properly. In addition, MPTF support enabled the introduction of a Laboratory Information Management System to ensure that laboratory data adheres to international standards.

These results led to a US\$34 million investment from the KfW Development Bank to combat AMR through multi-sector collaboration among the Ministries of Health, Agriculture and Environment. In the last year of Cambodia's MPTF project, the Quadripartite was able to support the transition of the country's AMR Inter-ministerial Cross-sector Committee into a broader One Health governance framework.

This report presents a summary of activities and outputs of both MPTF-supported country projects and Global Programme components in 2023 by Results Matrix Output area (the MTFP Results Matrix is shown in Figure 1). For more information about the Fund, MTFP-supported projects and the evolution of the MPTF, visit [mptf.undp.org/fund/amr00](https://mptf.undp.org/fund/amr00).

To learn more about the Quadripartite Joint Secretariat on AMR and MPTF, visit <https://www.qjsamr.org/multi-partner-trust-fund/about>.

## 2 About the MPTF

### 2.1

#### Background

The AMR Multi-Partner Trust Fund was founded in 2019 by the Tripartite organizations FAO, WHO and WOAH. Initially established for a five-year period (2019-2024), in 2021, it was extended to 2030 to align with the SDG agenda and timeline. Also that year, UNEP joined as an MPTF partner – member organizations are now known as the Quadripartite.

The MPTF has been recognized by the United Nations Secretary-General as the mechanism to secure consistent and coordinated financing for addressing AMR through a One Health approach. The Fund's objective is to provide crucial technical assistance and targeted funding to participating countries for multi-sectoral initiatives aimed at combatting AMR. It also supports a Global Programme that paves the way for sustained collaboration around AMR-focused legal, environmental, M&E and data sharing frameworks worldwide, and supports national efforts in these areas.

The Fund's resources support joint and coordinated actions based on the AMR Quadripartite work plans at global, regional and country levels. These initiatives catalyze national-level action to achieve sustainable results. Specifically, countries are provided with policy support and technical assistance in:

- Designing and implementing One Health NAPs;
- Raising awareness and catalyzing behaviour change across all sectors;
- Strengthening surveillance and monitoring of AMR and antimicrobial sales and use across all sectors;
- Strengthening stewardship and the responsible use of antimicrobials across all sectors; and
- Building capacity for robust monitoring and evaluation and regulatory frameworks.

### 2.2

#### Approach

Since its launch in 2019, the Fund has supported the Quadripartite in efforts to demonstrate effective One Health approaches to AMR, complementing the Fund's resource partners' sector-strengthening work. The Fund's prime focus is accelerating progress of One Health approaches to AMR in low- and middle-income countries, especially by supporting the implementation of AMR NAPs. The Fund promotes Quadripartite collaboration by adding value at the interface between sectors, enhancing learning, reducing the duplication of work, coordinating partnerships and allowing for a more comprehensive understanding of challenges and opportunities in key areas.

Annex 1 presents the Theory of Change for the Strategic Framework for Collaboration on AMR along with the Results Matrix for the Fund (shown in Figure 2 below), which illustrates ways in which the MPTF contributes to the common indicators of success.



## 2.3

### MPTF Governance

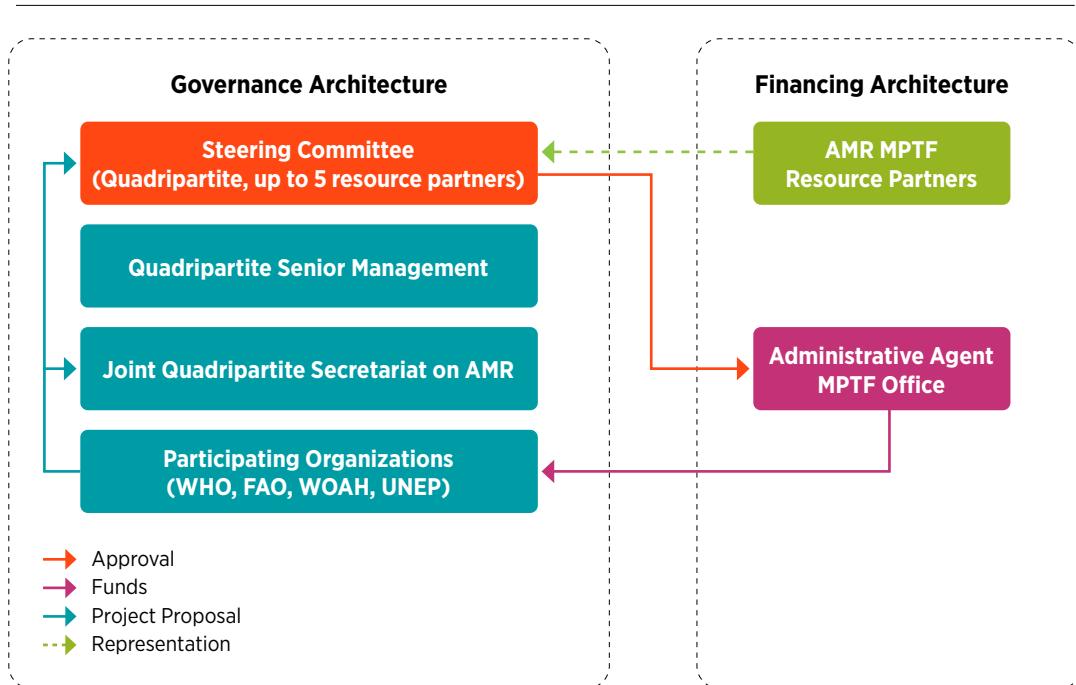
The Fund governance structure established consists of the:

- Steering Committee (governing body);
- Secretariat (hosted at WHO);
- Administrative Agent (UNDP, the Fund's trustee), responsible for administering contributions.

The Fund's governance arrangements are based on the standard arrangements for a pass-through multi-partner trust fund and United Nations Development Group (UNDG) best practices.

The Fund's governance and financing architecture is depicted in Figure 1 below.

Figure 1:  
**MPTF Governance and financing architecture**



#### 2.3.1 Steering Committee

The MPTF Steering Committee is the Funds primary governance structure. The Steering Committee is composed of a senior-level principal representative, or their nominated alternates, from each of the four Quadrupartite members, and representatives of MPTF resource partners. In 2023, the Steering Committee met twice, in March and December.

The main functions of the Steering Committee include programmatic oversight; appraisal and approval of projects; monitoring and reporting; and resource mobilization. The Steering Committee takes decisions by consensus and is chaired by one of the Quadrupartite organizations on a rotational basis. During the 9th Steering Committee meeting at FAO Headquarters in Rome in March 2023, the role of the Steering Committee Chair was passed from FAO to WHO. In December 2023, during the 10th Steering Committee meeting (held virtually), the role of Steering Committee Chair was passed from WHO to WOAH.

The Steering Committee membership and representation in 2023 is shown in Table 1 below.

Table 1:  
**MPTF Steering Committee members and representatives during 2023**

<b>Germany (BMZ, GIZ)</b>	<b>Nicola Watt</b> , Component Lead, International Collaboration, GIZ <b>Daniel Eibach</b> , Senior Policy Advisor One Health, Ministry for Economic Cooperation and Development, <b>Constanze Bönig</b> , Global Programme Pandemic Prevention and Response, One Health GIZ
<b>Sweden (Sida)</b>	<b>Mats Aberg</b> , Senior Programme Manager <b>Sofia Norlin</b> , Senior Program Specialist
<b>United Kingdom of Great Britain and Northern Ireland (Fleming Fund)</b>	<b>Mwaanga Kayuma</b> , Global Programmes Lead, Fleming Fund <b>Holly Rhyner-Jones</b> , Head of the Fleming Fund <b>Akinola Gandonu</b> , Programme Officer, Fleming Fund
<b>The Netherlands</b>	<b>Rosa Peran</b> , Senior Advisor, Ministry of Health, Welfare and Sport
<b>European Commission DG SANTE</b>	Health and Consumers Directorate-General, Unit A1 – Antimicrobial Resistance – Human Nutrition
<b>European Commission DG INTPA</b>	Direktorate-General for International Partnerships
<b>FAO</b>	<b>Keith Sumption</b> , Chief Veterinary Officer, Animal Production and Health Division <b>Thanawat Tiensin</b> , Animal Production and Health Division Director, & Chief Veterinary Officer
<b>UNEP</b>	<b>Jacqueline Álvarez</b> , Chief, Chemicals and Health Branch
<b>WHO</b>	<b>Dr Yukiko Nakatani</b> , a.i. Assistant Director-General, Antimicrobial Resistance Division <b>Dr Hanan Balkhy</b> , Assistant Director-General, Antimicrobial Resistance Division <b>Dr Haileyesus Getahun</b> , Director, Global Coordination and Partnership, AMR Division
<b>WOAH</b>	<b>Montserrat Arroyo</b> , Deputy Director General International Standards and Science
<b>MPTF Office, UNDP</b>	<b>Jennifer Topping</b> , Executive Director <b>Olga Aleshina</b> , Senior Portfolio Manager, ex-officio

### 2.3.2 Quadripartite Joint Secretariat on AMR

The Quadripartite Joint Secretariat on AMR provides coordination of the MPTF. Composed of dedicated staff from each of the Quadripartite organizations (FAO, UNEP, WHO and WOAH), the Joint Secretariat is tasked with supporting the AMR MPTF Steering Committee and overseeing the overall operation of the AMR MPTF. This includes ensuring that all aspects of the MPTF workplan are delivered and escalating any significant issues or concerns.

### **2.3.3 Administrative Agent: UNDP Multi-partner Trust Fund Office**

---

The Multi-Partner Trust Fund Office (MPTF Office) of the United Nations Development Programme (UNDP) serves as the Administrative Agent of the Fund.

The MPTF Office is responsible for a range of fund management services, including the: (i) receipt, administration and management of contributions; (ii) transfer of funds approved by Steering Committee to Participating Organizations; (ii) reporting on the source and use of contributions received; (iv) synthesis and consolidation of the individual financial progress reports submitted by each participating organization for submission to contributors through the Steering Committee; and (v) ensuring transparency and accountability of AMR MPTF operations. It does this by making available a wide range of operational information through the [MPTF Office GATEWAY](#). The MPTF Office Gateway is a public website that provides real-time financial information on the Fund as well as information on the Fund and its country and global projects.

# 3 Achievements in 2023

## 3.1

### Overview of Fund Implementation

In 2023, the Fund launched new country projects in Bangladesh, Madagascar, Mongolia and Tunisia. While the Tunisia project document was signed by the Quadripartite on 31 March 2023 and was submitted for the official signature on behalf of the Government shortly after in 2023.

In addition, four country projects were completed in Cambodia, Indonesia, Kenya and Morocco. Implementation continued in the other six country projects, as well as Global Programme components on M&E, Surveillance, Environment and Legal, contributing data systems, frameworks and advocacy tools for national implementation.

Country project activities and outputs (detailed below) highlighted the MPTF's impact in increasing awareness of AMR and bringing together diverse stakeholders to implement the One Health response.

Progress made towards the outputs of both the country projects and Global Programme components is summarized in Table 1, and detailed below by Results Matrix Output (the Results Matrix is shown in Figure 2). One-page profiles of each country project and Global Programme components can be found in Annex 2.

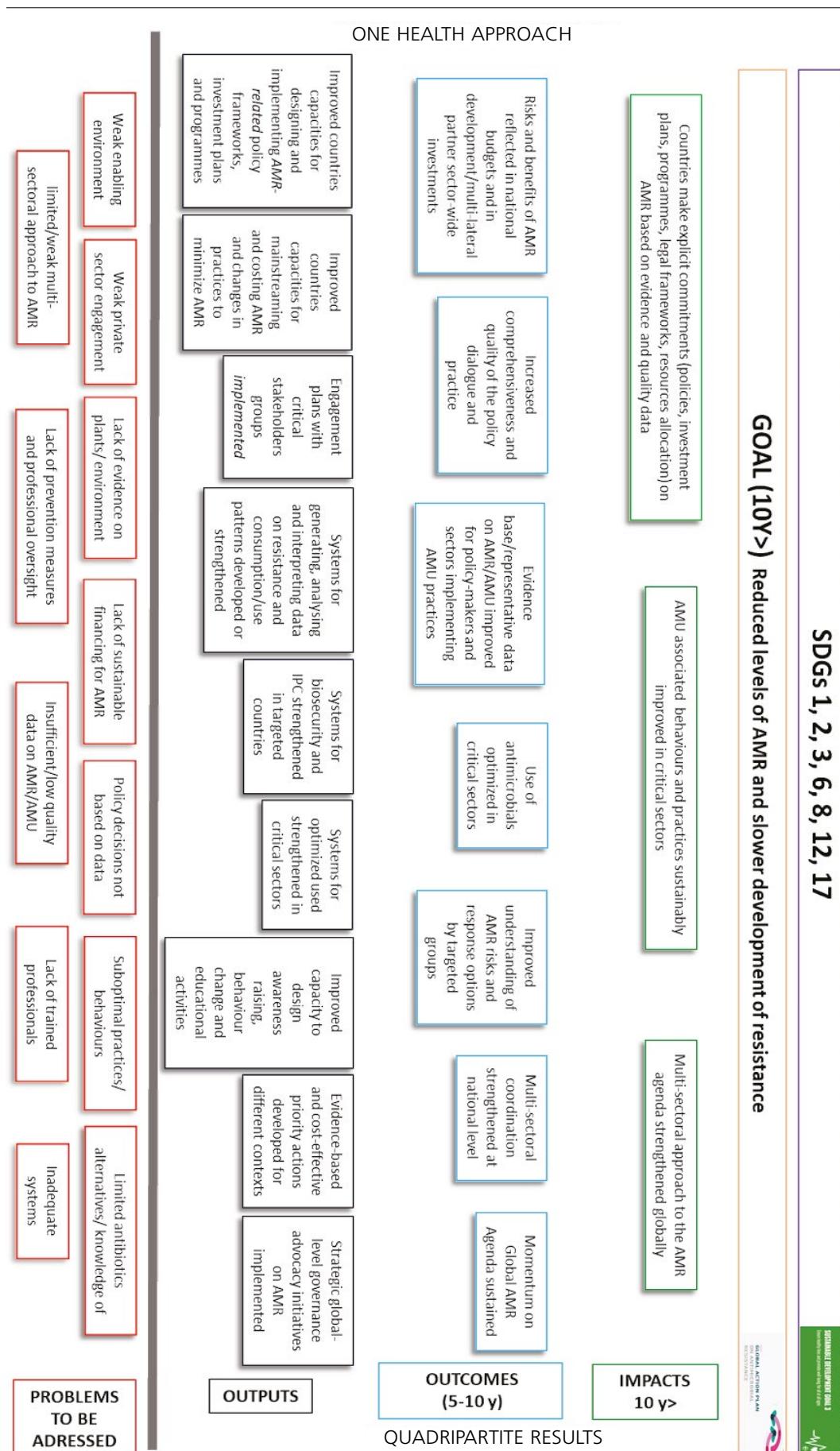


*Warm-up event for WAAW in Phnom Penh on 6 October 2023, targeting university students (Cambodia)*

Table 2:  
**Progress made towards country projects and Global Programme Components**

Outputs	Bangladesh	Cambodia	Ethiopia	Ghana	Indonesia	Kenya	Madagascar	Mongolia	Morocco	Peru	Senegal	Tajikistan	Zimbabwe	Global
Improved capacities for designing and implementing AMR-related policy frameworks, investments plans and programmes	✓			✓			✓	✓	✓	✓		✓		✓
Improved capacities for mainstreaming and costing AMR as well as changes in practices to minimize AMR				✓										
Engagement plans with stakeholder groups implemented		✓			✓								✓	
Systems for generating, analysing and interpreting data on AMR, AMU/AMC patterns developed or strengthened	✓	✓	✓	✓			✓		✓	✓	✓	✓		✓
Systems for biosecurity and IPC strengthened					✓	✓	✓		✓		✓	✓	✓	
System for optimized use of antimicrobials strengthened in critical human/animal sectors	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓		
Improved capacity to design awareness- raising, behaviour change and educational activities	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Evidence-based, cost-effective priority actions developed for different contexts														
Strategic global-level governance advocacy initiatives on AMR implemented													✓	

Figure 2.  
**Results matrix for the AMR MPTF**



## Results by Results Matrix Output

### Improved AMR-related policy frameworks, investments plans and programmes

The first step in the fight against AMR is building awareness within governments, along with the policy frameworks, investment plans and programmes for surveillance, monitoring and timely action to address AMR.

It is also critical to promote preventative actions across sectors to reduce discharges and the need for antimicrobials while promoting their sustainable and appropriate use, development of alternative treatment options and infection prevention and control (IPC) measures. Such initiatives require coordinated efforts among diverse stakeholders including governments, pharmaceutical companies, healthcare providers, farmers, environmental fieldworkers and community, international organizations and the public.

#### Country Projects

In **Cambodia**, representatives of the Ministries of Health; Agriculture, Forestry and Fisheries; and Environment were trained in M&E in tandem with the development of a draft national M&E framework on AMR. This is a prime example of the synergies that can be achieved by the Global Programme's targeted technical assistance to strengthen country-level M&E and reporting. Following a review of the framework's final draft, it was launched in October 2023.

Cambodia's Government was also engaged in validating the report on implementation of the One Health Legislative Assessment Tool (OHLAT) on AMR, which was developed through the Global Programme's Legal component. A legal analysis of national human health legislation relevant to AMR was undertaken and the results shared with the Government.

**Mongolia** is establishing a national AMR surveillance system. A pivotal milestone was achieved in 2023 with the development of the Action to Support the Implementation of Codex AMR Texts (ACT) tool to monitor the implementation of Codex standards related to AMR. The recommendations on this tool's development, provided by the implementing partners, aided in advancing national AMR legislation across sectors.

In **Morocco**, the country team, with support from the Global Programme's Legal component, utilized OHLAT to review the country's legal frameworks for human and veterinary and environmental systems related to AMR. This review served as a pilot study on the successful use of OHLAT across countries, yielding recommendations to improve the national legislation and regulations. The review provided input towards a robust multi-sector governance mechanism to support AMR policies and programmes in the country, including M&E of the National Strategic Plan for Prevention and Control of AMR.



*Implementation Committee in Peru*

## ▼ Success Story | PERU

Recognizing the need for legal support on AMR governance, Peru's Government requested support with the development of a proposed law that enables decision makers to develop cross-sectoral One Health activities. Developed with assistance from the FAO Legal Office, the MPTF team supported its formulation. Peru's national AMR Multisector Commission has committed to oversee its approval and implementation beyond the duration of the MPTF project. If this law is approved, it will provide legal tools to government agencies that previously did not have the capacity to develop AMR containment actions.

In addition to strengthening Peru's legal framework for combating AMR, these activities have increased the visibility of AMR as an important issue in the country, bringing together different actors that supported the development of the Draft Law for AMR Containment. It has also opened new possibilities for multi-sector partnerships aimed at combating AMR – essential for coordinated national action. These results could only have been achieved through the Quadripartite's support to the AMR Multi-sector Commission, which promoted unprecedented participation among the public entities that comprise it.

A core part of **Zimbabwe's** MPTF-supported country project was building capacity for M&E of the new National Action Plan (NAP) (2024-2028). Supported by the Global Programme's M&E component, this included the development of a results framework, a baseline for data collection and reporting tools. The MPTF also supported training on M&E of the NAP for 25 officials from government ministries, academia and research institutions.

In addition, Government experts in animal and environmental health from Zimbabwe attended the Africa Regional Lessons-learned Workshop for implementing NAPs on AMR in Senegal from 10 to 13 July. This peer-to-peer learning event offered opportunities for South-South cooperation, as officials from Zimbabwe shared their milestones achieved through the MPTF project with other governments from across the region, along with lessons learned for AMR governance.

## Global programme

OHLAT enables countries to assess legislation important for addressing AMR across multiple sectors through a One Health approach and to identify opportunities for strengthening their governance and legal frameworks. Comprising information and assessment questions derived from international standards, it was developed by the Quadripartite through an extensive process of review and consultation.

OHLAT's seven chapters correspond to different One Health sectors, including a cross-sectoral chapter on governance. Piloted in Cambodia, Morocco and Zimbabwe, it was officially launched in November 2023. Each pilot country produced a national report identifying areas of improvement in their national legal frameworks relevant to AMR, which were presented to national stakeholders (in Cambodia in August and Zimbabwe in November 2023).

Through the development of OHLAT, the MPTF Legal component brought together stakeholders from different ministries and other government authorities for the first time to highlight the importance of sound policy frameworks in addressing AMR through a One Health approach.

In addition, while the NAPs of nearly all countries cover human and animal health, the inclusion of the environment varies. The Global Programme's Environment component worked with MPTF-supported countries to better understand their environmental status and priorities, in order to provide guidance for integrating environmental considerations into NAPs.

To develop awareness and capacity related to the environment in addressing AMR, the Environment component mapped out topics, audience segmentation and delivery modes, and created a calendar with dates for global and regional AMR-related events. The Environment component also developed a simple rapid assessment tool to support countries in identifying priority AMR and environment actions for NAPs.

## Improved capacities for mainstreaming and costing AMR as well as changes in practices to minimize AMR

In order to prevent and combat AMR, control measures must be integrated into public health policies, human and animal healthcare systems, waste and wastewater management and other environmental interventions. This includes guidelines for the appropriate use and disposal of antimicrobial agents, and the development of alternative therapies to reduce the reliance on antimicrobials.

It is also important to assess the economic impact of AMR, including the cost of treating AMR infections and developing new antimicrobial agents, and the indirect costs of lost productivity and increased mortality. By understanding the economic burden of AMR, policymakers can make informed decisions about allocating resources to address the issue.

## Country Projects

A Knowledge, Attitude and Practices (KAP) study was undertaken in **Kenya**, enabling the Government to better understand antimicrobial use (AMU) in crops, identify areas of concern related to AMR and share best-practice interventions. Contrary to expectations, farmers were using alternative methods to antimicrobials to control crop diseases and pests. However, raw manure was being used as fertilizer in farms, which can lead to AMR through the spread of resistant microorganisms, contaminating the food chain.

In **Zimbabwe**, a vaccine production and implementation plan for Theileriosis was finalized and adopted, and 89,750 doses of Theileriosis vaccine (Bolvac) were produced in 2023. Of these, approximately 46,000 doses were distributed, and approximately 163,800 doses of Bolvac remain in stock.



*Training and experience exchanging on the sequencing of the genomes (Tajikistan)*

## ▼ Success Story | TAJIKISTAN

Implementing partners arranged a training visit to Iran for a delegation of 17 experts from Tajikistan on implementation of the Tricycle protocol, which recommends the sequencing of certain *E. coli* genomes to better understand of the interconnectedness between human, animal and environment, and AMR genes. Laboratory specialists were trained during the mission, and specialists from the two countries were given the opportunity to exchange experiences.

The exchange of knowledge with Iran, which had already sequenced these genomes, led to a significant step forward for the team from Tajikistan. While the two countries are in different geographic regions, they share the same language, which paved the way for a fruitful collaboration. This inter-country collaboration also brought together experts from Tajikistan's Ministries of Environment, Agriculture and food safety, and Health. Pending the availability of funding, there is interest in continuing this collaboration focused on data management.

## Global Programme

To identify areas to strengthen global capacity and actions related to the environmental dimensions of AMR into NAPs, national policies and global partnerships, the Global Programme's Environment component produced the document 'Roles and Cooperation on Environmental Dimensions of AMR across the Quadripartite: A Guide', which was disseminated to Quadripartite organizations at the regional and country levels. Also through the Environment component, capacity development activities on the safe disposal of antimicrobials were rolled out in five countries Indonesia, Morocco, Peru, Tajikistan and Zimbabwe.

## Engagement plans with critical stakeholder groups implemented

Multi-stakeholder collaboration on reducing AMR requires engagement with critical stakeholders. Engagement plans are necessary to ensure that healthcare professionals, veterinarians, environmental practitioners, policymakers, regulators, farmers, patients, the private sector, civil society, and the public are included in dialogue and targeted activities.

By raising awareness and promoting a better understanding of the challenges related to AMR, stakeholders can work together on implementing strategies to minimize it.

### Country Projects

A May 2023 event in **Indonesia** focused on AMR in the environment, supported by the Global Environment component. Involving key stakeholders in the fields of AMR and environmental health, it aimed to integrate AMR in the environment into the upcoming NAP. Recommendations included: strengthening the engagement of the Ministry of Environment and Forestry in AMR surveillance; the development of a policy paper by all ministries participating in the NAP to outline their roles and actions regarding AMR in the environment; and incorporating environment into the NAP by focusing on prevention, control, and surveillance.



Leadership retreat in Madagascar

### ▼ Success Story | MADAGASCAR

In October 2023, the Quadripartite brought together 30 government One Health AMR focal points in the human, animal, plant and environmental health sectors from Seychelles, Mauritius, Comoros and Madagascar for training aimed at strengthening multi-sector coordination for joint planning, decision-making and implementation of AMR NAPs.

The three-day training course gave participants a better understanding of what works and what does not in each context, and improved inter-sector collaboration through the use of new communication and problem-solving tools. This unique hands-on learning experience focused on building trust and strengthening relationships to facilitate future multi-sectoral collaboration – enabling participants to practice interpersonal skills in the face of real-world challenges. Ultimately, these skills supported the planning and implementation of AMR NAPs in their respective countries.

In **Morocco**, a multi-stakeholder Technical Coordination Committee met monthly to monitor the implementation MPTF-supported activities and make necessary adjustments to implementation plans. The Committee brought together the four Quadripartite organizations with government ministers from key sectors for implementing a One Health approach in the country. These regular meetings built mutual trust among experts from diverse sectors and established strong personal bonds, boosting inter-sector coordination on implementing the MPTF workplan.

A high-level meeting was held on 27 October to take stock of progress and convey lessons learned from MPTF-supported initiatives to high-level decision makers. This includes: Morocco's implementation of OHLAT (the first country to do so) and use of the Assessment Tool for Laboratories and AMR Surveillance Systems (ATLASS).

## Global Programme

The global Environment team engaged with the One Health Global Leaders Group on AMR in 2023, providing inputs to the '[Call to Action by the Global Leaders Group on Antimicrobial Resistance: Reducing Antimicrobial Discharges from Food Systems, Manufacturing Facilities, and Animal and Human Health Systems into the Environment](#)'.

## Systems to generate, analyse and interpret data on AMR, AMU/AMC developed or strengthened

One important reason why AMR has not been tackled in a more profound and coordinated manner is the scarcity of reliable data to inform policies and mitigation actions. This includes a lack of gender-disaggregated data that would enable a more nuanced understanding of how AMR impacts different population groups. Robust systems for generating, analyzing and interpreting data on AMR and AMU are essential.

By identifying emerging threats, monitoring progress, improving decision making, enhancing surveillance and guiding resource allocation, data systems play a critical role in ensuring that antimicrobials remain effective for years to come.

## Country Projects

In **Ethiopia** the MPTF supported the provision of equipment for AMR surveillance to national and sub-national animal health laboratories. AMR surveillance annual review and experience-sharing events were held along with the finalization of a Mentorship Manual for animal health and food safety laboratory staff.

**Ghana** instituted a monitoring mechanism for the use of antimicrobials in terrestrial animals, fisheries and plant health. Templates were developed, validated, and migrated into a mobile app. The app was tested and is now in use for on-farm data collection from farms and veterinary clinics.

In **Indonesia**, an assessment of AMR in wastewater was undertaken in 64 healthcare facilities across the country, since wastewater treatment plants are significant reservoirs for the development and spread of AMR. In addition to establishing baseline data for planning actions aligned with the AMR NAP, the research aimed to raise awareness among health officials about the significance of sanitation and wastewater management in combating AMR – and build capacity for environmental surveillance of AMR in healthcare facilities.

In **Peru**, a series of training sessions and learning events strengthened laboratory technicians' capacity for AMR surveillance, including in AMR diagnostic methods and ATLASS. Other learning events focused on: a multi-sector approach to address the impact of AMR on the environment; and molecular and genomic diagnosis of resistant microorganisms in genomic diagnosis.

An investigation into the management of AMU among prescribers, livestock farmers and aquaculture managers in **Senegal** aimed to establish a correlation between AMU in animal health and the emergence of AMR. The data collected will contribute to the creation of a database enabling the tracking of antibiotics over time.

National focal points for veterinary products in **Tajikistan** were trained to use the ANimal antiMicrobial USE (ANIMUSE) database, which provides the expertise necessary to generate qualitative and quantitative data on antimicrobial use across the country. This activity sought to address gaps in data accuracy and reporting in the country, building essential capacity for implementation of the ANIMUSE system in Tajikistan.

## Global Programme

The Global Integrated System for Surveillance on Antimicrobial Resistance and Use (GISSA) information platform aims to provide robust data on patterns and trends in AMU and AMR in humans, animals, food, plants and the environment. In 2023, the technical construction of the GISSA platform was completed; its launch was delayed to allow Quadripartite organizations to secure data from their members and finalize the testing of safe data sharing through the platform.

In 2023 the GISSA platform was ready for deployment pending: the decision on a name change from TISSA to GISSA, to reflect the addition of UNEP into the Quadripartite (thereby removing 'Tripartite' from the name); the integration of environment data into the system; and future governance and funding of the platform.



Veterinary Training in Zimbabwe

## Systems for biosecurity and infection prevention and control (IPC) strengthened in critical sectors

Strengthening systems for biosecurity and IPC in critical sectors is essential for preventing and combating AMR. By implementing effective biosecurity and IPC measures, the spread of infectious diseases can be reduced and the discharges to the environment, which can in turn reduce the use of antimicrobials – a major driver of AMR.

Measures to reduce the spread of infectious diseases and the need for antimicrobials include: improved water, sanitation and hygiene; promoting the appropriate use of personal protective equipment; and regular monitoring and surveillance. Strengthening the systemic use of these measures helps to protect health and ensure that antimicrobials remain effective in the future.

## Country Projects

In **Ethiopia**, training was provided to 28 poultry producers and animal healthcare providers on biosecurity, disease prevention and good farming practices. A subsequent training course identified gaps through the assessment of farm biosecurity, infection-prevention and AMU among commercial poultry producers. As a result, Ethiopia's Government drafted national biosecurity, AMU and AMR management guidelines for poultry production (including good animal husbandry; effective biosecurity, vaccination, and use of alternatives to antimicrobials).

Building on the national biosecurity guidelines for pig production and aquaculture, approved at the end of 2022, the team in Ghana developed a training manual in 2023 to build farmers' and other stakeholders' capacity for biosecurity certification based on uniform standards. This training and certification process aimed to boost adherence to the biosecurity guidelines, aimed at reducing the inappropriate use of antimicrobials.

In 2023, the MPTF supported training of healthcare workers in **Kenya** in IPC and antimicrobial stewardship. A pre- and post-training assessment in the six implementation sites showed remarkable improvement in handwashing compliance and the use of personal protective equipment following the training – the foundation for control of hospital-acquired infections.

**Madagascar** launched the MPTF-supported National IPC Programme in 2023 with a One Health approach. Comprising a Strategic Plan, Operational Plan and M&E plan, its aim is to provide national guidelines to improve the safety of staff and patients across the country.

In **Senegal**, an assessment of ten medical biology laboratories was undertaken with a view to strengthen the detection and identification of bacterial pathogens, and AMR monitoring. Carried out from January to March, these assessments enabled the laboratories to identify needs to ensure optimal performance of bacteriological analyses under satisfactory biosafety conditions.

**Zimbabwe's** national IPC strategy and policy were developed in 2023, and are ready for launch in 2024. Tools and training materials for a pilot on surveillance of healthcare-associated infections were developed, and two pilot hospitals were identified for initial data collection. Post-typhoid-vaccination surveillance was also carried out, with 1,129 suspected and 50 confirmed cases identified – most of them in the Western District.

## Systems for optimized use of antimicrobials strengthened in critical human and animal sectors

The fight against AMR requires strong systems for the optimized use of antimicrobials in critical sectors for humans, animals and plants. Such systems reduce the need for antimicrobials, and ensure that they are used and disposed of appropriately, only when necessary and in a way that maximizes their effectiveness and minimizes the pollution from discharges into the environment.

Optimizing the use of antimicrobials preserves the effectiveness of antimicrobials, and ensures that they remain effective for future generations.

## Country Projects

An assessment of the national programme on antimicrobial stewardship in **Cambodia** and training of trainers was completed in March 2023 with staff of five provincial hospitals. Point prevalence surveys (PPS) were conducted in 18 hospitals, followed by an experience-sharing event. In addition, AMS guidelines were rolled-out in five provincial hospitals that had not previously participated in this intervention. PPS data from these five hospitals showed that between 50 and 71 percent of surveyed patients were on antimicrobials, and that between 31 and 57 percent were guidance compliant.

In **Ghana**, a training curriculum for veterinary personnel on responsible use of antibiotics in terrestrial animals and aquaculture was developed and validated in 2023. Ghana also adapted the WHO classification list for antimicrobials to the country context. National stakeholders produced an infectious diseases update to the WHO Essential Medicines List and Standard Treatment Guidelines, which is being incorporated into the Ghana's national Essential Medicine List and Standard Treatment Guidelines.

The Integrated Guide for the Responsible Use of Antimicrobials for Animal Health, Agriculture, and the Environment was produced in **Peru**, including sections on the use of antimicrobials in terrestrial and aquatic animals, and crop production. The Guide includes topic sheets that focus on common practices and include local species such as South American camelids and guinea pigs.

Animal Health Training on AMR and AMU in livestock was held in **Tajikistan** for veterinarians. Focused on AMR risks and prudent use of antimicrobials in livestock, it included 30 Government veterinarians working at the national and regional levels. The MPTF also supported training on the use of antimicrobials in bee farming in Tajikistan, including common bee diseases and the use of antibiotics in honey production.

## Improved capacity to design awareness-raising, behaviour change and educational activities

Improved capacity to raise awareness of the dangers of AMR, change key behaviours and educate stakeholders about how to reduce AMR is crucial. These activities need to target a variety of audiences, including healthcare providers, farmers, veterinarians, pharmacists, environmental practitioners, antimicrobial manufacturers and the public. Every year, World AMR Awareness Week (WAAW) provides an opportunity for countries to raise awareness of AMR – and the importance of combatting it – among a variety of stakeholders, including the public – the largest consumer group for antimicrobials.

In addition to raising awareness about the misuse and overuse of antimicrobials, promoting preventative measures such as good hygiene, biosecurity and IPC is key. Education and behaviour change campaigns can help to reduce inappropriate antimicrobial use, promote the responsible use and disposal of antimicrobials, and prevent the emergence and spread of antimicrobial-resistant infections.

## Country Projects

During WAAW 2023, awareness rallies were organized throughout **Bangladesh**, with approximately 800 participants including government officials, veterinarians, animal health workers, farmers and feed and veterinary medicine sellers. A One Health seminar was organized for ministry officials and partners in the livestock, fisheries and human health sectors. More than 50,000 posters and leaflets were produced and distributed across the country during WAAW.

In **Cambodia**, two videos were produced on the prudent use of antibiotics in poultry and fish farms (in Khmer with English subtitles). Another video focused on using the One Health approach to address AMR. In addition, six posters, four leaflets and three social media infographics increased public awareness on AMR and provided strategic messaging on the responsible use of antimicrobials across the supply chain, from policy makers to end users of antimicrobials.

In tandem with WAAW 2023 events in **Ethiopia** with the theme of 'Preventing Antimicrobial Resistance Together', FAO, WHO and WOAH drafted, reviewed and validated a communication package and stakeholder engagement strategy on One Health AMR prevention and containment. Quadripartite members also assisted the Government in sharing communication materials for WAAW with a broad audience.



World AMR Awareness Week 2023  
Campaign in Mongolia

## ▼ Success Story | MONGOLIA

In Mongolia, implementing organizations worked with the Government to develop a joint plan for WAAW, including a campaign to raise awareness of AMR and promote One Health best practices. The campaign was developed for social media as part of the 2023 commemoration of WAAW, 'Preventing Antimicrobial Resistance Together'. People joined in 'Go Blue for WAAW Mongolia' to show their support for combating AMR by changing their Facebook profiles, and posters about AMR were distributed to healthcare organizations during WAAW. In addition, an AMR awareness-raising event was held for high school pupils.

The initiative provided knowledge on AMR biology, responsible use of antibiotics and One Health principles. It featured influential figures popular among children who actively engaged with participants. Team-based activities included drawing sessions and a picture book on the history of AMR, initiated during WAAW 2023.

During WAAW 2023, **Madagascar** hosted an AMR awareness event with the participation of Quadripartite members, government representatives and other stakeholders involved in managing AMR in the public health, animal, phytosanitary, environmental, agriculture and food safety sectors. Awareness was also raised through site visits, including to the pharmacy unit of the Regional Reference Hospital Center of Vakinankaratra, a phytosanitary and veterinary product retailer, a private poultry breeder and a dairy production center.

In **Morocco**, the MPTF supported the development of a joint communication plan and tools for raising awareness on the importance of AMR and IPC during 2023. The WAAW celebration included public messages about AMR on billboards, television and radio, along with flyers, webinars and national conferences on AMR and human health, agriculture and environment for a variety of audiences. In addition, the MPTF supported the development of a report on AMR best practices and a video demonstrating best practices for strengthening the One Health response to AMR.

## **Evidence-based and cost-effective priority actions developed for different contexts**

A coordinated, evidence-based approach is needed to fight the growing threat of AMR, using cost-effective interventions developed for antimicrobial manufacturing facilities, hospitals, communities, livestock farms, crop production sites and other contexts.

Employing evidence-based strategies leads to the more effective use of resources and interventions tailored to specific populations and contexts. This can increase the impact and co-benefits of tackling AMR while safeguarding health, food safety and security, economic development and equity, and protecting the environment.

### **Global Programme**

The main objective of this output is to sustain the momentum of the global AMR agenda. The Global Programme component on Surveillance (Global Integrated System for Surveillance on AMR and Antimicrobial Use-GISSA) is dedicated to providing data to inform the global response. This involves the integration and sharing of data from the International FAO Antimicrobial Resistance Monitoring (InFARM) platform and the WOAH ANIMUSE Global Database. This integrated platform will enable global access to AMR and AMU data across the human, animal, plant, food systems and environmental sectors.

The Global Programme component on M&E provided support to developing national-level M&E initiatives in three pilot countries (Cambodia, Ethiopia, Zimbabwe) to strengthen implementation of their NAPs on AMR. Country project focal points in these countries were an integral part of the Global M&E component delivery team.

In 2023, the M&E component published an AMR M&E Country Guidance document in English, French, Spanish and Arabic.

The M&E component also supports countries in monitoring implementation of NAPs as well as the Global Action Plan (GAP) on AMR through the Tracking Antimicrobial Country Self assessment Survey (TrACSS). In 2023, 177 countries responded to this survey – an increase from 166 in 2022. Country-level focal points coordinated the provision of TrACCS data towards GAP M&E – an example of Country Projects and the Global Programme working together to strengthen NAPs and GAP implementation. In addition, training was provided in 2023 in Ethiopia (March) and Zimbabwe (May) for senior government officials. The training equipped these national-level AMR stakeholders with M&E knowledge, skills and tools necessary to oversee the implementation of multi-sector NAPs and strengthened M&E systems.

## Strategic global-level governance advocacy initiatives on AMR implemented

Global-level advocacy is critical to prevent and minimize AMR, promote the responsible use and disposal of antimicrobials around the world, strengthen surveillance and monitoring systems, and support research and development of alternative treatments. This not only prevents the development and spread of AMR, but ensures that available treatments are effective, ultimately saving lives.

In addition, there is a need to increase public awareness of the risks associated with AMR and invest in research and development to better inform decision-making on combatting AMR.

### Global Programme

The Global Programme's Legal component focused on developing and piloting OHLAT in 2023. The success of the OLHAT pilot in Cambodia, Morocco and Zimbabwe highlighted national stakeholders' interest in contributing to a One Health response to AMR, and the importance of the Global Programme's support to national efforts. Several countries have engaged the Legal component team for legal support on AMR governance and interventions in their countries.

Providing resources to support MPTF activities at the country level enabled the M&E component to strengthen global outputs, including implementation of the GAP on AMR. By driving the implementation of both the global and national M&E frameworks simultaneously, the Global M&E component contributed high-quality evidence for improved decision making and advocacy across countries. This included targeted training on performance management for the implementation of the multi-sectoral NAPs, development of M&E guidance (downloaded 1,030 times as of December 2023), TrACSS reports providing a snapshot of AMR NAP implementation and trends across sectors, an e-Learning programme on M&E frameworks and support on M&E of MPTF-supported country projects.



*Laboratory in Tajikistan*



AMR MPTF Project Inception  
Workshop in Bangladesh

In 2023, 14 countries were implementing projects supported by the MPTF, including four new countries – Bangladesh, Madagascar, Mongolia, and Tunisia. The expansion of this work over the past few years has raised questions regarding the Fund's future strategic direction, its role in the One Health response to AMR and the selection criteria and process for new countries to apply for funding.

The optimization of the AMR MPTF initiative aims to strengthen the effectiveness and efficiency of the Fund through: unlocking bottlenecks and accelerating the Fund's success; intensifying resource mobilization through a joint resource mobilization strategy and action plan; disseminating success stories to garner public and partners support; and demonstrating results to reinforce resource partner confidence and secure increased investment to maximize impact.

During 2023, a strategic review of the MPTF by an independent external consultant recommended a review of the funding proposal application process aiming at ensuring a more rigorous and critical assessment of country proposals. The resulting review outlined a streamlined process that: engages the Quadripartite regional teams in the AMR MPTF proposal development process; omits the concept note step for country projects; increases the inclusion of governments in project design; requires a clear and convincing exit strategy (or significant milestone achievement) and sustainability elements; and mainstreams gender and health, and equity dimensions throughout projects.

# 5 Challenges, lessons learned and recommendations

## 5.1

### Challenges

Political instability and insecurity in some countries hindered travel and the coordination and commitment of national stakeholders. In other countries, national elections and changes in government created disruptions in workplans and delays in planned support for events and activities. Changes in government personnel necessitated considerable time to orient the new leadership to MPTF-supported activities and sensitize them to their importance.

The allocation of responsibilities for addressing AMR in human and animal health, and particularly in the environment, was sometimes scattered across several ministries and directorates. This presented challenges related to planning, coordination and implementation, hindering cohesive efforts.

Government participation in MPTF-supported activities tended to be concentrated in sectors of traditional involvement (i.e. human health and agriculture).

Some country projects were extremely ambitious with plans for the use of funds across a wide variety of areas that required intervention in the country, which diluted their impact.

Procurement of needed supplies such as laboratory equipment was hampered by a lack of reliable transport routes and reliable suppliers.

In some countries, there was inadequate capacity and resources for training professionals at the scale needed to produce an impact.

## 5.2

### Lessons learned

When challenges arose, continuous advocacy with high-level policymakers in the government was important to accelerate implementation. Activities needed to be flexible to meet the government's urgent needs while remaining within the scope of project plans.

To ensure continuation of activities and effective implementation, it was important to include representatives from the Quadripartite and national ministries in the core project team.

When planning training activities, it was crucial to consider the number and profile of people that needed to be trained across the country in order to achieve the desired impact. This may include budgeting for training of trainers.

Quadripartite country teams' engagement was not limited to government partners. These teams needed to engage a range of other stakeholders – including the private sector and the public – to embed awareness and capacity on AMR widely on a national scale.

## 5.3

### Recommendations

In order to maximize the impact of projects beyond the duration of MPTF support, countries should encourage the broader participation in the One Health response to AMR from government offices other than those traditionally involved in AMR initiatives as well as the academia, civil society and the private sector.

By focusing project funds on fewer activities, country-level activities can be scaled up for maximum impact beyond the project duration. Country teams can focus project budgets on the areas assessed to have the greatest potential for impact beyond the project – including training trainers that can instill capacity for scaling up interventions nationwide.

Plans and budgets for procurement should be adapted to the country context, including potential challenges with transport and security. Tailored mitigation plans for logistics challenges should be included in project plans.

# 6 Next steps and future vision

One of the most impactful aspects of the MPTF is cross-organizational and cross-sector collaboration – bringing together human, animal, plant and environment health practitioners from across the Quadripartite and other organizations towards a common objective.

The MPTF has been extended to 2030 to align with the SDGs and the collective goals of the four organizations. Hence, the mid-term evaluation for MPTF is planned for 2024 after the MPTF Steering Committee decision in 2023 and the evaluation is expected to provide concrete recommendations for future strategic improvements and positioning of the Fund.

The advocacy and communication on MPTF are being promoted with the increase in visibility through the AMR QJS website launched by QJS in 2023 and through multiple events leading to UNGA HLM advocating MPTF as a potential funding mechanism to AMR response.



*Floating fish farm, Senegal*

# Financial situation in 2023

For a detailed overview of the MPTF Financial Situation, refer to the 2023 Annual Financial Report, which will be shared with partners.



World AMR Awareness Week 2023 Campaign in Mongolia



World AMR Awareness Week campaign in Ghana



Distribution of AMR awareness posters to pig farmers in Kep province in Cambodia

# Annex 1: Theory of change for the Strategic Framework for collaboration on AMR and the AMR MPTF Results Matrix

**GOAL:** To preserve antimicrobial efficacy and ensure sustainable and equitable access to antimicrobials for responsible and prudent use in human, animal and plant health contributing to achieving the SDGs

## OBJECTIVE 1:

Optimize the production and use of antimicrobials along the whole life cycle from research and development to disposal

## OBJECTIVE 2:

Decrease the incidence of infection in humans, animals and plants to reduce the development and spread of AMR

**IMPACT:** Countries have the capacity to design and sustainably implement evidence-informed One Health responses to AMR

### OUTCOME 1:

Policy and law support effective country-owned One Health AMR responses

- Countries have the capacity to ensure policy coherence across sectors.
- Countries recognise AMR as a priority in the broader development agenda, acknowledging the need for sector-specific and joint action from all AMR-related sectors.
- Countries have the capacity to identify and strengthen their AMR-relevant legislation and regulation aligned with international standards/policies.
- Countries have the capacity to consider, research and analyze the effects of the incentives and disincentives of legal regulation when designing laws and policies.

### OUTCOME 2:

Systems and structures, including institutional capacities, are in place to support effective implementation of country-owned AMR responses

- National action plans on AMR regularly updated and national AMR multisectoral coordinating mechanisms strengthened.
- Access to good-quality antimicrobials strengthened for all sectors.
- Guidelines up to date and implemented to encourage responsible and prudent use measures across all sectors.
- Monitoring and surveillance of AMR and AMU are undertaken.
- Strategies employed to prevent and detect infection in humans, animals, and plants and to reduce food safety risks.

### OUTCOME 3:

Increased, sustained resourcing is in place for country-owned One Health AMR responses

- National action plans on AMR, representative of all sectors, are prioritised and resourced.
- Priority actions from national action plans on AMR mainstreamed into national plans and budgets.

### INTERMEDIATE OUTCOME 1:

With Tripartite support, country-owned, sustainable One Health governance ensures effective and balanced national AMR responses

- Multisector coordination facilitates a One Health approach to AMR and understanding of its drivers
- Effective multistakeholder coordination underpins AMR responses through AMR national action plans

### INTERMEDIATE OUTCOME 2:

The global response to AMR is supported through effective Tripartite leadership and coordination, working through constituencies and Members to influence global investment and scale up of actions on AMR

#### Demonstrated political engagement and resourcing

- Increased resourcing for sustained joint One Health and sector-specific AMR responses.
- AMR included in the development agenda with increased activity and scale up by international financial institutions and development organisations.
- Strengthened, long-term commitment to joint One Health and sector-specific AMR responses, including in international and regional political and economic fora.

### OUTPUT 1:

The capacity and knowledge of countries are strengthened to prioritise and implement context specific collaborative One health approaches to control AMR in policies legislation and practice

1a Tripartite and UNEP support One Health approaches to AMR in low- and middle-income countries	1b Guidance, tools and technical standards and guidelines on One Health approaches to AMR developed
---	---

- One Health technical support and capacity development provided;
- Technical standards and guidelines developed;
- Convening, advising and advocacy for One Health responses to AMR;
- Impact assessments on the effects of AMR;
- Monitoring and evaluation

### OUTPUT 2.1:

Global and regional initiatives and programmes influence and support One Health responses to AMR

- Tripartite and UNEP global and regional action and mechanisms strengthened.
- Tripartite and UNEP Joint Secretariat on AMR resourced and functions effectively to support coordinated action.
- Global guidance on AMR provided and regularly updated.
- AMR Multi-Partner Trust Fund scaled-up to maximise impact of investments.
- Global and regional partnerships in place to strengthen effectiveness of the multisectoral AMR response.
- Advocacy on AMR strengthened and coordinated.
- One Health research & development and innovation agenda on AMR shaped.

### OUTPUT 2.2:

Global Governance structures are established, resourced and function effectively

- Global Leaders Group
- Independent Panel on Evidence for Action on AMR
- Partnership Platform for Action on AMR

Applied to GAP pillars	Awareness & behaviour change	Surveillance & research	Prevention of infections	Optimised use	Research & sustainable investment	Governance
------------------------	------------------------------	-------------------------	--------------------------	---------------	-----------------------------------	------------

## Annex 2: One-page summaries of country projects and Global Programme Components in 2023

This annex comprises - a one-pager summary showing each country and global programme headlines – key dates, activities summary, key milestones, highlights in 2023 and main challenges.

The detail country and global programme specific summary with the detail progress and activities implemented, challenges and a listing of the log frame outputs and indicators for which there has been some progress, can be found in AMR MPTF gateway and AMR-QJS website.

### Bangladesh

#### Project start and end dates:

17 January 2023 to 16 January 2026 (36 months)

#### Objective:

Sustainable improvements in AMU behaviors and practices in critical sectors, along with countries' explicit commitments regarding AMR, based on evidence and quality data.

#### Activities:

- Strengthening systems for optimized antimicrobial use in critical sectors
- Enhancing capacity to design awareness-raising, behavior change, and educational activities
- Developing or strengthening systems for generating, analyzing, and interpreting data on resistance and consumption/use patterns

#### Key milestones in 2023:

Following several collaboration meetings among Quadripartite partners to kick off the country programme, it was agreed to hold an inception workshop with the government and key stakeholders on 13 December. The workshop was attended by 50 national stakeholders from Directorate General of Health Services, Directorate General of Drug Administration, Department of Livestock Services, Department of Fisheries, Department of Environment, and Forestry Department. Quadripartite representatives outlined the project's One Health approach and work plan.

The competitive procurement process for consultants for national-level coordination and communication resulted in the selection of national consultants to lead both of these functions.

During WAAW2023, awareness rallies at central and district levels were attended by approximately 800 participants. One Health Seminar was held ministry officials as well as partners in the livestock, fisheries and human health sectors. In association with WAAW2023, more than 50,000 posters & leaflets were distributed across the country.

#### Challenges/lessons learned:

Conflicting partner schedules and priorities among made it challenging to ensure timely logistical arrangements and promote stakeholder involvement and feedback.

#### Next steps in 2024:

Development of an AMR consultation strategy using One Health approach.

WAAW 2024 activities to be based on this strategy and benefitting from broader engagement with diverse One Health stakeholders.

# Cambodia

## Project start and end dates:

19 October 2020 to 19 October 2023 (36 months, including a 12-month no-cost extension)

## Objective:

Strengthening governance and coordination among ministries, regulating antimicrobial use in the human and animal health sectors, and increasing public awareness and advocacy.

## Activities:

- Improving countries capacities for designing and implementing AMR-related policy frameworks, investments, plans and programmes
- Systems for optimized use strengthened in critical sectors
- Review of AMU and development of guidelines for responsible use in animal health and antimicrobial stewardship
- Capacity building for the design of awareness raising, behaviour change and educational activities

## Key milestones in 2023:

Representatives of the three ministries received M&E training from the Global Programme M&E component in June. These ministries reviewed the final draft of the national M&E framework, and it was provisionally launched in October 2023. In August, national stakeholders met to validate the report on implementation of the One Health Legislative Assessment Tools for AMR. Several recommendations have been made as a result and the next steps highlighted.

An assessment of antimicrobial stewardship in four hospitals and training of trainers were completed in March 2023. During the national implementation experience-sharing workshop, participants noted they needed further training on doing Point Prevalence Survey. Refresher training was conducted in August 2023 for provincial hospitals.

As part of WAAW, awareness-raising events were organized at the national and sub-national levels, and a One Health approach video was produced. In September, a seminar was held in Phnom Penh to highlight the roles of veterinarians, veterinary students, veterinary paraprofessionals, and village animal health workers in addressing the threat of AMR.

## Challenges/lessons learned:

Communications activities highlighted the enormous need to build awareness among the Government, health professionals and in communities since many still do not understand the impact of AMR.

## Next steps in 2024:

The project concluded in 2023, but the progress it demonstrated led to a major investment in combatting AMR from KFW Development Bank.

# Ethiopia

---

## Project start and end dates:

25 May 2021 to 25 May 2024 (36 months, including 12-month no-cost extension)

---

## Objective:

The design and implementation of systems strengthening in policy and programmes; generating, interpreting and using evidence-based data for decision-making; and changing behaviours associated with antimicrobial use.

---

## Activities:

- Supporting the multi-sectoral and multi-disciplinary AMR prevention and containment advisory committee and technical working groups
- Developing a One Health communication, stakeholder analysis and engagement strategy, and behavior change materials
- Establishing sustainable human and animal antimicrobial sensitivity testing (AST), AMR surveillance systems and data capture
- Strengthening healthcare associated infection (HAI) prevention and control, scaling up AMR prevention and containment evidence (including antimicrobial stewardship), and good practices guided by AMR surveillance
- Developing and implementing user-friendly animal species-specific treatment guidelines based on international recommendations

---

## Key milestones in 2023:

Implementing partners supported 2023 WAAW events, including an awareness-raising workshop with media professionals, training for secondary school students, experience-sharing opportunities and an on-site visit to an Animal Product and Input Quality Testing Center. National One health AMR focal points and national AMR advisory committee members were trained in AMR M&E.

Quadrupartite members contributed to drafting of the Governance Framework for Antimicrobial Resistance Prevention and Containment as well as the second National Action Plan for Health Security and the One Health AMR prevention and containment communication and stakeholder engagement strategy.

---

## Challenges/lessons learned:

Insecurity and travel restrictions delayed some of the activities. Due to extensive stakeholder consultations, it took longer than anticipated to complete the One health AMR communication and stakeholder engagement strategy.

---

## Next steps in 2024:

In February 2024, agrifood sector stakeholders attended a workshop to develop methods and tools for farm-level AMU and AMC data collection.

## Project start and end dates:

24 May 2021 to 24 February 2024 (34 months, including a 9-month no-cost extension)

## Objective:

Strengthening governance and coordination between the Quadripartite and intergovernmental agencies in One Health.

## Activities:

- Building capacity for reflecting the risks of AMR in national budgets
- Improving the body of representative data on AMR/AMU for policy makers and sectors implementing AMU practices.
- Optimizing the use of antimicrobials in critical sectors.
- Improving targeted groups' understanding of AMR risks and response options

## Key milestones in 2023:

A monitoring mechanism was implemented for the use of antimicrobials in terrestrial animals, fisheries and plant health; templates were developed, validated, and migrated into a mobile app. The app was tested and is now in use for on-farm data collection from farms and veterinary clinics. Building on the national biosecurity guidelines for pig production and aquaculture, approved in 2022, a training manual was developed to build capacity for biosecurity certification based on uniform standards.

Training curricula for veterinary personnel on responsible use of antibiotics in terrestrial animals and aquaculture was developed and validated. Ghana also adapted the WHO classification list for antimicrobials to the country context. National stakeholders adapted the WHO classification list and produced an infectious diseases update to the WHO Essential Medicines List and Standard Treatment Guidelines, which is being incorporated into the Ghana's national guidelines.

In addition to building government capacity, important steps were taken to educate the public about the responsible use of antimicrobials. Building on the momentum generated by WAAW, education activities were carried out in churches, mosques, schools and other civic spaces.

## Challenges/lessons learned:

The project plan was very ambitious in its intention to use the funds for many areas of intervention. Inflation exacerbated this issue, and funding for some activities was not adequate. As a result, local co-funding was sought to complete some planned activities.

## Next steps in 2024:

Planned activities were completed and the project ended on 24 February 2024.

# Indonesia

## Project start and end dates:

19 October 2020 to 30 June 2023 (32 months, including a 9-month no-cost extension)

## Objective:

Strengthening IPC and optimizing the use of antimicrobial systems in critical sectors, including increasing engagement plans with key stakeholder groups in AMR control programmes with the One Health approach.

## Activities:

- Supporting the multi-sectoral and multi-disciplinary AMR prevention and containment advisory committee and technical working groups
- Joint review of Antimicrobial Stewardship (AMS) practices in humans and animals in pilot areas
- Developing Antimicrobial Stewardship guidelines for human and animal health
- Establishing standard treatment guidelines and a user-friendly application (for human and animal health) using the AWaRe classification
- Create a coordination mechanism for monitoring and inspection of antimicrobial use
- Jointly assess implementation of AMU stewardship in selected farms and communities
- Develop M&E plans for NAP implementation in pilot areas
- Develop communication and advocacy strategy for engagement with key stakeholders

## Key milestones in 2023:

Joint inspection guidelines for the antimicrobial distribution chain were developed for the Ministry of Agriculture and the agency that oversees the distribution of antimicrobials. A May event focused on positioning antimicrobial resistance in the environment, supported by the Global Environment component. Involving key stakeholders in the fields of AMR and environmental health, it aimed to integrate AMR in the environment into the upcoming NAP.

AMS and IPC water, sanitation and hygiene (WASH) assessments in the human health sector were carried out in 18 hospitals and 33 community health centers. An assessment of AMR in wastewater was undertaken in 64 healthcare facilities across the country, since wastewater treatment plants are significant reservoirs for the development and spread of AMR.

## Challenges/lessons learned:

Disseminating IPC-WASH good practices resulted in a reduction in the incidence of disease and the use of antimicrobials on farms. These practices also helped to obtain Veterinary Control Number certificates, which guarantee the safety of animal products. Empowering the private sector was critical for sustainability, since private farmers are important in livestock production.

## Next steps in 2024:

The project in Indonesia was completed in June 2023.

## Project start and end dates:

1 December 2020 to 31 May 2023 (29 months)

## Objective:

Strengthening AMR governance and coordination between and within government ministries and their stakeholders in regulating AMU in the human and animal health sectors, and increasing public awareness and advocacy.

## Activities:

- Scaling up enforcement of regulations along the supply and distribution chain of antimicrobials in human and animal health
- Strengthening the Inter-Ministerial Coordination Committee on AMR.
- Capacity building for health workers on IPC and rolling out national antimicrobial stewardship guidelines in healthcare facilities.
- Developing a reporting system and database to support county-level antimicrobial consumption in humans and Improve reporting on AMU in animals
- Undertake KAP surveys.
- Improving capacity to design awareness-raising behaviour change and educational activities

## Key milestones in 2023:

A KAP study was undertaken on the use of antimicrobials in crops, enabling the Government to identify areas of concern related to AMR and share best-practice interventions. Data were collected and a report on the findings was issued in 2023.

Support was provided to the animal health and the veterinary pharmaceutical industry in developing a post-market surveillance framework for veterinary medicines, to be used by the regulator in safeguarding the quality of veterinary antimicrobials. Regulations were also revised, empowering the Veterinary Medicines Directorate to better regulate veterinary medicines. A communication strategy for the post marketing surveillance and data collection tools for post-market surveillance was developed.

In addition, the MPTF supported training of healthcare workers on IPC and antimicrobial stewardship. A pre- and post-training assessment in the six implementation sites showed remarkable improvement in handwashing and the use of personal protective equipment.

## Challenges/lessons learned:

A change in key project team members delayed implementation of some activities. Including more than two representatives from the Quadripartite and national ministries on the core project team would ensure continuation of the project in case of staffing changes.

## Next steps in 2024:

The project in Kenya was completed in May 2023.

# Madagascar

---

## Project start and end dates:

16 January 2023 to 16 January 2026 (36 months)

---

## Objective:

Accelerate implementation of the NAP on AMR in order to achieve a sustainable improvement in AMU-associated behaviours and practices across all critical sectors.

---

## Activities:

- Strengthening data collection on AMR and AMU to inform policies and benefit sectors implementing rational AMR use practices
- Building capacity for reflecting the risks and benefits of AMR in national budgets and multilateral investments
- Improving the understanding of AMR risks and response options by targeted groups
- Optimizing the use of antimicrobials in critical sectors

---

## Key milestones in 2023:

The implementation kick-off ceremony in March brought together 50 stakeholders on AMR including the Multisectoral Coordination Committee for the Fight against AMR, whose members come from five key One Health Ministries.

In tandem with WAAW, an awareness event on AMR was held with representatives from government departments Quadripartite members and other stakeholders involved in AMR management. The event included site visits to the pharmacy unit of the Regional Reference Hospital Center of Vakinankaratra, a phytosanitary and veterinary product retailer and private poultry breeding and dairy production centres.

In September, KAP a survey was implemented to enhance understanding of antimicrobial use in poultry production, and AMR/AMU surveillance was initiated for poultry, dairy cows and market gardening. October featured a workshop on leadership skills for implementing multisectoral NAPs on AMR and a national even on tacking AMR took place in November towards promulgation of a new decree o implementation of the One Health platform in Madagascar.

---

## Challenges/lessons learned:

Due to the Presidential election in November, the implementing partners were not able to provide planned support to the annual WAAW celebration.

---

## Next steps in 2024:

Planned 2024 activities include an antimicrobial traceability strategy, support to validation of the AMR monitoring protocol, and the finalization and sharing of the results of KAP the survey and AMR monitoring activity.

# Mongolia

---

## Project start and end dates:

16 January 2023 to 31 December 2025 (36 months)

---

## Objective:

Combating the threat of AMR through strategic collaboration, sustainable streams of capital and SDG-focused responses that support a 'One Health' NAP

---

## Activities:

- Supporting the Multi-Sectoral Coordination Committee (MSCC) on implementation of the NAP by developing an operational budgeting and M&E framework, policies and an enabling legal environment
- Capacity building on AMR detection and surveillance of infections caused by AMR pathogens across human and animal health, including environment sectors
- Enhancing monitoring of antimicrobial use and improving reporting on AMU using the new WOAH-AMU database
- Supporting the development of multi-sectoral communication strategies and plans based on AMR surveillance and AMC/AMU monitoring, and upscale awareness programmes on AMR/AMU, targeting stakeholders across the food chain

---

## Key milestones in 2023:

Implementing partners supported the Government in conducting a Joint External Evaluation of national capacities related to the International Health Regulations – laying the foundation for implementation of the NAP M&E framework. The Codex AMR Texts (ACT) tool was designed to monitor the implementation of Codex standards related to AMR.

Internal proficiency testing (PT) for Antimicrobial Susceptibility Test (AST) was successfully conducted among five national laboratories from human health, veterinary, and food safety sectors and yielding satisfactory results that qualified them for participation in external AST-PT.

Quadrupartite organizations worked with the MSCC by developing joint plan for WAAW, including a campaign to raise awareness of AMR and promote One Health best practices. Targeting high-school students, the campaign provided information on AMR biology, responsible use of antibiotics and One Health principles.

---

## Challenges/lessons learned:

Delays in the recruitment of national experts following project startup in early 2023, along with turnover of government counterparts delayed the implementation of some activities.

---

## Next steps in 2024:

A roundtable discussion on AMR surveillance in the human health sector will be held in collaboration with the Ministry of Health, and a national strategy for AMR/AMU communication will be developed.

## Project start and end dates:

16 December 2020 to 31 October 2023 (34 months)

## Objective:

Catalyzing the attainment of the four Strategic Objectives of the AMR National Strategic Plan

## Activities:

- Risks and benefits of AMR reflected in national budgets and in development/multilateral partner sector-wide investments
- Evidence base/representative data on AMR/AMU improved for policy makers and sectors implementing AMU practices
- Use of antimicrobials optimized in critical sectors
- Improved understanding of AMR risks and response options by targeted groups

## Key milestones in 2023:

With support from the Global Programme's Legal component, the country team utilized OLHAT to review the country's legal frameworks for human and veterinary and environmental systems related to AMR. This review served as a pilot study on the successful use of OLHAT, yielding recommendations to improve national legislation and regulations.

A multi-stakeholder Technical Coordination Committee met monthly to monitor the implementation MPTF-supported activities and make necessary adjustments. The Committee brought together the four Quadripartite organizations with government ministers from key sectors for implementing a One Health approach.

A high-level meeting was held on 27 October to take stock of progress and convey lessons learned from MPTF-supported initiatives to high-level decision makers. This includes Morocco's implementation of OHLAT and use of ATLASS. The MPTF also supported the development of a joint communication plan and tools for raising awareness of AMR and IPC. The WAAW celebration included public messages about AMR on billboards, television, radio, flyers, webinars and national conferences.

## Challenges/lessons learned:

Regular meetings multi-stakeholder Technical Coordination Committee built mutual trust among experts from diverse sectors and established strong personal bonds, boosting inter-sector coordination. These meetings created space for virtuous exchange and knowledge sharing – the foundation for lasting national coordination.

## Next steps in 2024:

The project in Morocco concluded in 2023.

## Project start and end dates:

11 January 2022 to 11 March 2024 (24 months)

## Objectives:

Explicit commitments (policies, investment plans, programmes, legal frameworks, resources allocation) by the Government on AMR based on evidence and quality data; AMU associated behaviours and practices improved in critical sectors.

## Activities:

- Evaluation of implementation of the Multisectoral AMR Plan 2019-2021 and update of the Plan
- Application of a Quadripartite legal tool and development of draft Law for AMR containment
- Training courses for government laboratory staff in microbiological diagnosis, analysis and interpretation of information
- Development of guidance in the responsible use of antimicrobials for animal health, agriculture, and the environment
- Awareness and advocacy on AMR, including through (WAAW)

## Key milestones in 2023:

In 2023, there was an evaluation of the 2019-2021 Multisectoral AMR Plan 2019-2021 implementation, and update of the Plan. The proposed Multisectoral Plan 2024-2028 has been adopted by the Multisectoral Commission (MSC)-AMR. Applying a Quadripartite legal tool, at the request of the MSC-AMR, the project delivered a Draft Law for AMR containment. Six training activities were developed for laboratory technicians in microbiological diagnosis and analysis and interpretation of information, and a guide was produced on the responsible use of antimicrobials for animal health, agriculture, and the environment. In addition, a pilot plan for surveillance of antimicrobial use in the poultry sector was formulated and implemented to collect data on antimicrobial use in poultry farms. Finally, the project delivered a national AMR Awareness and Advocacy Strategy and supported Peru's participation in WAAW; awareness-raising content disseminated on social networks reached more than 10,000 people.

## Challenges/lessons learned:

Political instability was a consistent challenge, which hampered the commitment of some MSC-AMR stakeholders. There is also a need to ensure greater participation of the Ministry of Environment, and sectors not traditionally involved in combatting AMR, such as the: Ministries of Housing, Construction and Sanitation, Transport and Communications; private sector; academia; and civil society in promoting and development of actions related to AMR under the One Health approach.

## Next steps in 2024:

With the adoption of proposed Multisectoral Plan 2024-2028 by the MSC-AMR, the project team will continue to advocate for its approval under the Commission's leadership.

# Senegal

## Project start and end dates:

17 January 2022 31 January 2025 (36 months, including a 12-month no-cost extension)

## Objective:

Developing an integrated national AMR/AMU surveillance system across sectors, strengthening IPC and biosecurity measures, assessing the quality of antimicrobials and ensuring the rational use of antimicrobials.

## Activities:

- Building a monitoring, evaluation, and lesson learning M&E framework for AMR and AMU data collection
- Assessing the capacities of ten laboratories for AMR detection in the human, animal, and environment sectors using One Health approach
- Developing and implementing a surveillance strategy to support AMU/AMR data collection and reporting systems
- Supporting laboratory training on antimicrobial susceptibility testing, data analysis and reporting

## Key milestones in 2023:

Capacity assessment of ten medical laboratories was undertaken to strengthen their detection capabilities, identification of bacterial pathogens responsible for priority diseases and AMR monitoring. These assessments made it possible to identify what laboratories needed to achieve optimal bacteriological analysis.

From 28 to 30 August, a training activity was held to improve knowledge of the institutional environment for dispensing pharmaceutical products, including antimicrobials. This event provided an opportunity to share Senegal's mandatory legal provisions concerning medicinal drugs and legislation in Senegal.

An investigation into the management of AMU among prescribers and livestock farm and aquaculture managers aimed to establish a correlation between AMU in animal health and the emergence of AMR. The data collected will contribute to the creation of a database enabling the tracking of antibiotics used in livestock over time.

## Challenges/lessons learned:

Activities conducted through the National One Health platform facilitated collaboration between national counterparts and Quadripartite organizations, which in turn strengthened implementation of MPTF-supported activities.

## Next steps in 2024:

Assessment of laboratory capacities in 2023 paved the way for capacity strengthening in critical areas during 2024.

# Tajikistan

## **Project years:**

5 August 2021 to 05 August 2024 (36 months, including a 12-month no-cost extension)

## **Objective:**

One Health capacity building to support priority actions for combatting AMR in the country.

## **Activities:**

Supporting the establishment and strengthening of systems for:

- collecting, analyzing and interpreting data on AMR and use of antimicrobial medicines;
- the optimization and prudent use of antimicrobial medicines in critical sectors;
- biosecurity and IPC in the country to reduce the incidence of infections;
- targeted awareness raising, behaviour change and educational activities;
- coordination, development, implementation and monitoring of AMR related policy frameworks, investment plans and programmes.

## **Key milestones in 2023:**

In April, animal health training was provided to veterinarians on the prudent use of antimicrobials in livestock, and training on the use of antimicrobials in bee farming was held for beekeepers. AMR awareness materials translated into Tajik were distributed during these training events.

Veterinarians were also trained on use of the ANIMUSE system, with a focus on the antimicrobial calculation module – used to generate qualitative and quantitative data on antimicrobial usage. A two day training on assessing the national food control system was conducted and a meeting of the multi-sectoral Technical Working Group on NAP was held to complete NAP on AMR for 2023-2025.

In addition, a training visit took place to Iran for 17 experts from Tajikistan on implementation of the Tricycle protocol, which recommends the sequencing of certain *E. coli* genomes to better understand the interconnectedness between human, animal and environment, and AMR genes.

## **Challenges/lessons learned:**

Procurement of laboratory equipment was complicated by an absence of suppliers and transport limitations in a landlocked country with limited air and rail connections. This delayed the startup of AMR surveillance activities.

## **Next steps in 2024:**

Following up on the short-term NAP, the process of developing a longer-term AMR NAP for Tajikistan was initiated in 2023, aiming at finalization submission to the Government in 2024.

# Zimbabwe

## Project start and end dates:

21 May 2021 to 21 May 2025 (48 months including a 12-month no-cost extension)

## Objective:

Strengthening biosecurity and IPC, optimizing the use of antimicrobials, and improving capacity to design awareness-raising, behaviour change, and educational materials.

## Activities:

- Promoting the use of vaccines as an alternative to the irrational use of antibiotics for Theileriosis in cattle and Typhoid in humans
- Scaling up Farmer Field Schools in the broiler value chain to promote the adoption of good husbandry practices
- Revise national IPC Policy, IPC Strategy and M&E Framework, national IPC training modules and training guidelines to strengthen evidence-based practices for addressing AMR transmission
- Establishing a Healthcare Associated Infections surveillance pilot project in selected health facilities.
- Monitoring falsified, sub-standard and illegal medicines at ports of entry, especially northern border posts
- Piloting a behaviour change community of practice

## Key milestones in 2023:

Tools and training materials for pilot healthcare-associated infection surveillance were developed for two pilot hospitals. Post-typhoid vaccination surveillance continued, with 1,129 suspected and 50 confirmed cases identified. In 2023, 89,750 doses of Theileriosis vaccine (BOLVAC) were produced, with about 46,000 doses distributed. Ten new Farmer Field schools for poultry were initiated, bringing the national total to 16.

The country project also supported global AMR-MPTF initiatives that were piloted in Zimbabwe, including finalization of the OLHAT pilot and environmental capacity and developing guidelines for antimicrobial waste disposal. An M&E training course was held for 25 government officials involved in NAP implementation, at which an M&E Framework was developed for the new NAP.

## Challenges/lessons learned:

Implementation was slowed by national elections: considerable time was required for the One Health Secretariat to orient the new leadership to the project and its importance.

## Next steps in 2024:

An IPC strategy and policy documents were ready for launch in early 2024. Training for data collectors was planned so that healthcare-related infection surveillance could be carried out in two pilot hospitals before the project end date in May 2024.

# Global Environment component

---

## Start and end dates:

12 March 2021 to 30 June 2023 (27 months)

---

## Objective:

Strengthening capacity and actions on environment within AMR NAPs, sector policy and global partnership as part of a multi-organization cross-sectoral One Health Approach; increasing understanding of, cooperation in and capacity to act on the environmental dimensions of AMR among key stakeholders

---

## Activities:

- Clarifying roles and responsibilities among FAO, UNEP, WHO and WOAH on environmental dimensions of AMR in order to work together
- Demystifying the topic and increased technical awareness and capacity among AMR stakeholders globally on environmental dimensions of AMR
- Targeted capacity building to AMR MPTF countries
- Increasing political engagement and commitment by environment politicians and policymakers to tackle environmental dimensions of AMR

---

## Key milestones in 2023:

The Environment component worked with MPTF-supported countries to better understand their environmental status and priorities to provide guidance for integrating environmental considerations into NAPs, including an event in Indonesia involving key stakeholders in the fields of AMR and environmental health.

The Environment component mapped out topics, audience segmentation and delivery modes, and created a calendar with dates for global and regional AMR-related events. The document 'Roles and Cooperation on Environmental Dimensions of AMR across the Quadripartite: A Guide' was produced and disseminated to Quadripartite organizations. Capacity development activities on the safe disposal of antimicrobials were rolled out in five countries. A rapid assessment tool was developed to support countries in identifying priority AMR and environment actions for NAPs; it was piloted in the Philippines, Indonesia, Armenia and Jordan as part of NAP revision.

---

## Challenges/lessons learned:

While AMR awareness varies, the overall understanding of AMR in the environment remains lower than in other areas, particularly in contexts where resources are limited. Many countries still need to address environmental components of AMR in their NAPs.

---

## Next steps in 2024:

This component of the Global Programme was completed in June 2023.

# Surveillance on Antimicrobial Resistance and Use (GISSA) component

## Start and end dates:

12 March 2021 to 12 March 2024 (36 months)

## Objective:

Development and deployment of a Global Integrated System for Surveillance on Antimicrobial Resistance and Use (GISSA)

## Activities:

- Gathering data to establish requirements and define the high-level needs for the data platform.
- Procurement of an IT vendor
- Consultations among representatives of Quadripartite organizations to address any outstanding issues
- Following the testing and completion of the initial IT system, an initial maintenance phase
- Launch of the system and promotion to the public

## Key milestones in 2023:

Throughout 2023 the GISSA system was in standby, pending the decisions from Quadripartite members on the: (i) The name change of 'TISSA' to reflect the addition of UNEP into the Quadripartite and therefore remove 'Tripartite' from the name; (ii) date and scope of the launch; (iii) integration of environment data from UNEP into the system; and (iv) future governance and funding of the system.

## Challenges/lessons learned:

Challenges in implementing the GISSA component included:

- standardization of country and regional data among the Quadripartite organizations
- individual agreements between each organization and its Member States (some organizations require specific agreements to share data in GISSA in addition to their own platforms)
- submission of data and reporting
- alignment of organizations' data reporting periods.

## Next steps in 2024:

Following the Steering Committee meeting in February 2024, it was agreed to change the name from Tripartite Integrated System for Surveillance on Antimicrobial Resistance and Use (TISSA) to the Global Integrated System for Surveillance on Antimicrobial Resistance and Use (GISSA) and launch the system in November 2024, provided sustainable funding was secured. It was also decided to explore the possibility of integrating the GISSA system into the QJS website which is hosted on the SiteFinish website solution on WHO infrastructure.

# Global Legal component

---

## Years:

1 March 2021 to 1 March 2024 (36 months, including a 12-month no-cost extension)

---

## Objective:

Development and Piloting of a Quadripartite One Health Assessment Tool for AMR-relevant legislation

---

## Activities:

- Development of a One Health Legislative Assessment Tool (OHLAT) by international experts backstopped by FAO, WHO and WOAH, and with the support of UNEP
- conducting expert review meetings to support the finalization of OHLAT
- piloting OHLAT in three MPTF priority countries
- two multi-country workshops
- development of an e-learning method
- validation of OHLAT

---

## Key milestones in 2023:

OHLAT was piloted in three AMR MPTF countries: Cambodia, Morocco and Zimbabwe. Each pilot resulted in a national report identifying areas of improvement in the national legal frameworks relevant for AMR. In 2023, these reports were presented to the national stakeholders in Cambodia in August and Zimbabwe in November (the presentation in Morocco took place in 2022).

A multi-country workshop to present OHLAT was held in hybrid format in April 2023 in Senegal, with the participation of 30 countries in Africa. This second multi-country workshop (the first was in 2022) was held in tandem with a broader African Regional Lessons Learned Workshop for Implementation of AMR NAPs.

The virtual launch of OHLAT took place on 28 November 2023. The project team introduced the tool, its background and objectives along with its content and internal structure. This event was recorded and made available via YouTube for future reference.

---

## Challenges/lessons learned:

The technical, legal and structural complexity of OHLAT – and the number consultations required with many stakeholders – presented challenges with completing the project in the original timeframe. There were additional challenges related to diverse scientific understandings of AMR in relation to the interface between AMR and the environment, as well as the role of biocides and food additives in the development of AMR.

---

## Next steps in 2024:

Incorporating final revisions from UNEP, OHLAT was on track to enter the publication stream in March 2024.

# Global Monitoring and Evaluation component

## Start and end dates:

1 March 2021 to 30 September 2023 (30 months, including a 6-month no-cost extension)

## Objective:

Strengthening delivery of the Global Action Plan (GAP) on AMR through monitoring and evaluation (M&E) and reporting; and providing targeted Technical Assistance to strengthen country level M&E and reporting

## Activities:

- Strengthened delivery of GAP AMR M&E and reporting
- provision of targeted technical assistance to strengthen country level M&E and reporting
- Global level monitoring and aggregation of indicator data at the sectoral level
- Global reporting on AMR under the GAP M&E framework

## Key milestones in 2023:

In 2023, 177 country reports on TrACSS data were prepared and published (up from 166 in 2022). The Quadripartite conducted three training workshops in Ethiopia (March), Zimbabwe (May) and Cambodia (June), providing 67 senior government officials with training in planning, monitoring and evaluation. This training aimed to equip national AMR stakeholders with the knowledge, skills and tools necessary to implement the multi-sectoral NAPs on AMR, and strengthen AMR M&E systems.

Following up on this training, national plans were developed in Cambodia, Ethiopia and Zimbabwe to guide M&E of AMR NAPs. In addition, the Quadripartite published an M&E guidance document for NAP M&E in English; publication in French, Arabic and Spanish is pending. An e-learning course based on the M&E guidance document was also launched (in English) to support countries in developing NAP M&E frameworks.

## Challenges/lessons learned:

- The call for expression of interest for the consultancy positions to provide M&E consultancy were re-advertised several times before finding suitable candidates.
- Resignation of consultants (particularly in Cambodia and Peru) and the difficulty replacing them) made it very difficult to proceed with implementation.
- Challenges with coordinating schedules among stakeholders at the global, regional and national levels hindered the delivery of technical assistance in some countries.
- Financial resources were not sufficient to conduct country-level workshops, develop the planned e-learning module on M&E for AMR NAPs, and support annual TrACSS data submission, collation of data, publication of results online, and development of country reports.
- There was insufficient capacity within UNEP to engage in M&E activities during 2023.

## Next steps in 2024:

This component of the Global Programme was completed in September 2023.

For more information about the Fund, please visit:

**MPTF Gateway:**  
[mptf.undp.org/fund/amr00](http://mptf.undp.org/fund/amr00)

**Quadripartite Joint Secretariat on AMR:**  
[www.qjsamr.org/multistakeholder-partnership-platform/about](http://www.qjsamr.org/multistakeholder-partnership-platform/about)

Or email at:  
[AMR-MPTF@who.int](mailto:AMR-MPTF@who.int)

