



Food and Agriculture
Organization of the
United Nations



World Health
Organization



Annual Progress Report 2020

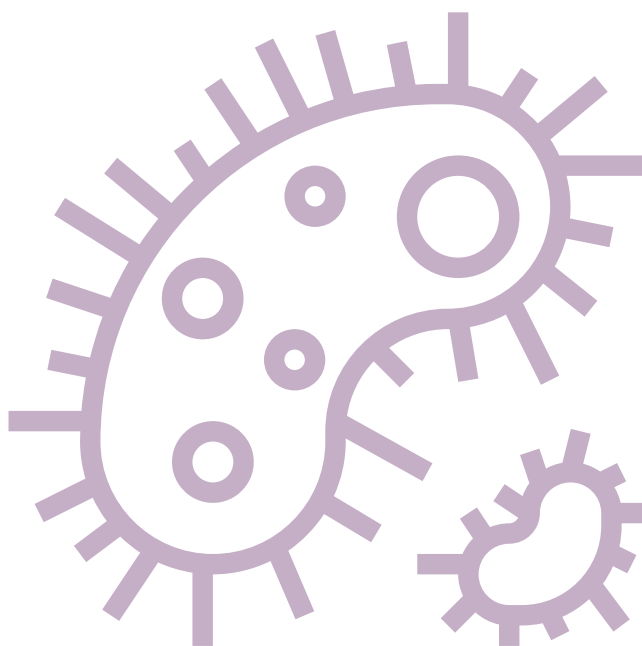
Antimicrobial Resistance Multi-Partner Trust Fund

Forging Tripartite collaboration for urgent global and
country action against antimicrobial resistance (AMR)

Administered by



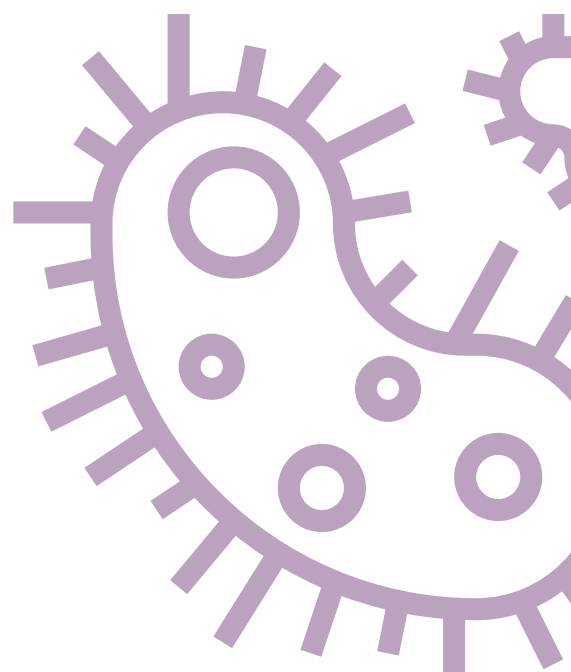
United Nations
MPTF Office



Annual Progress Report 2020

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Acronyms and abbreviations

AgriWASH	Agricultural water, sanitation and hygiene
AMR	Antimicrobial resistance
AMS	Antimicrobial stewardship
AMU	Antimicrobial use
ASEAN	Association of Southeast Asian Nations
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
GAP	Global Action Plan on Antimicrobial Resistance
GDP	Gross domestic product
HAI	Healthcare associated infection
IACG	Interagency Coordination Group
IPC	Infection prevention and control
KAP	Knowledge, attitude and practice
MAFF	Ministry of Agriculture, Forestry and Fisheries
M&E	Monitoring and evaluation
MPTF	Multi-Partner Trust Fund
NAP	National Action Plan
NASIC	National Antimicrobial Stewardship Interagency Committee
OIE	World Organisation for Animal Health
ONSSA	Moroccan National Office of Food Security
SDG	Sustainable Development Goal
TISSA	Tripartite Integrated Surveillance System on AMR
TrACCS	Tripartite AMR country self-assessment survey
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
WASH	Water, sanitation and hygiene
WHO	World Health Organization



Foreword

Throughout 2020, the Tripartite – the long-standing partnership between the Food and Agriculture Organization of the United Nations (FAO), the World Organisation for Animal Health (OIE) and the World Health Organization (WHO) – made great strides in bringing the Antimicrobial Resistance Multi-Partner Trust Fund (AMR MPTF) from design to implementation. Despite the disruption of COVID-19, the Fund encouraged robust collaboration between the Tripartite organizations at global, regional and country level, as well as with our AMR MPTF resource partners.

While the Tripartite had to adapt delivery to the constraints of COVID-19 and the risk that political momentum behind the fight against AMR might wane, the Tripartite was quick to respond. We have created overarching governance structures beyond the MPTF Steering Committee, such as the Global Leaders Group on AMR, to keep AMR high on the political agenda. An Independent Panel on Evidence will be established to boost the collection and utility of evidence for policy actions to mitigate the threat of AMR. Moreover, COVID-19 has made strikingly clear the risk of untreatable infections and the urgent need for robust global and local health systems to manage AMR.

The multi-partner trust fund is helping to translate this global momentum into action at country level. With 80 percent of funding going to support country-level action, the AMR MPTF has demonstrated the power of the Tripartite to support countries in driving forward the One Health AMR agenda. The needs are great. While most countries have National Action Plans in place, many have yet to turn these into action with dedicated resources, and the multisectoral aspects have been particularly challenging.

The AMR MPTF has prioritized the Tripartite support in 11 low-and middle-income countries, working with governments and national AMR committees to identify priorities and needs from a One Health perspective and develop models of operation. Six of these country proposals have already been approved, with successful launch meetings involving government and key stakeholders, as well as regional and headquarters-based Tripartite teams. This has all been done remotely to comply with COVID-19 measures and restrictions, with the additional benefits of minimal carbon emissions and cost savings.

The remaining 20 percent of the AMR MPTF supports global programmes, fostering cooperation among headquarters-based teams to advance the One Health approach to AMR in key areas such as the environment, integrated surveillance, monitoring and evaluation, and legal and regulatory frameworks, as well as to link these efforts to country-level interventions. Crucially, this work has enabled a broadening of our global partnerships, including a collaboration with the United Nations Environment Programme (UNEP) on the environmental aspects of combating AMR.

The Tripartite is committed to supporting countries in developing robust One Health approaches to address AMR and the MPTF provides the support to catalyse action in countries. The fund is on firm footing for robust implementation and in an excellent position to scale up its efforts over the coming years. We look forward to sharing further results and lessons learned from this investment. .

Dr Keith Sumption

Chief Veterinary Officer/
Leader of the Animal Health
Programme, Food and
Agriculture Organization of
the United Nations (FAO)

Dr Matthew Stone

Deputy Director-General,
World Organisation for
Animal Health (OIE)

Dr Haileyesus Getahun

Director, AMR Global
Coordination Department;
and Tripartite Joint
Secretariat on AMR, World
Health Organization (WHO)



Introduction

Antimicrobial resistance (AMR) is a major global threat to humans, animals, plants, food systems and the environment. AMR is already affecting lives and livelihoods. Limiting its emergence and spread is critical to preserving the world's ability to treat diseases in humans, animals and plants, to ensuring food security and food safety and to maintaining progress towards the Sustainable Development Goals (SDGs).

Although resistance to antimicrobials can develop naturally over time, misuse and overuse of these agents in humans, terrestrial and aquatic animals, plants and crops are greatly accelerating its development and spread. Antimicrobial resistance is also impacted by the lack of access to clean water, sanitation and hygiene (WASH) for humans and animals; poor infection and disease prevention and control in healthcare facilities, a lack of adequate biosecurity measures and good hygiene practices on farms and along the food production chain; limited access to quality, affordable medicines, vaccines and diagnostics; and a lack of awareness and professional advice. Compounding these challenges is a lack of resources, scientific innovation, with too few new antimicrobials, vaccines, diagnostic tools and alternatives to antimicrobials for use in humans, animals and plants in the research and development pipeline.

Because AMR has many drivers, it needs to be tackled on many fronts. Consequently, the **One Health** approach is essential to ensure that all sectors and stakeholders engaged in human, terrestrial and aquatic animal health, plant health, food and animal feed production, food safety and the environment communicate and work together to design and implement programmes, policies, regulations and research.

This annual report highlights progress made since the establishment of the Antimicrobial Resistance Multi-Partner Trust Fund (AMR MPTF) in June 2019, charting the developments in Tripartite collaboration, national and global programmes and fund governance, and outlining the MPTF's next steps and vision for the future.



A worker gives to drink a calf at the dairy cattle farm in the village of Yachevo, some 100 km south of Minsk, Belarus



Strengthening collaboration for joint action and results

2.1 Tripartite collaboration

In 2015, the World Health Assembly recognized the urgency of AMR by adopting the Global Action Plan on Antimicrobial Resistance (GAP) developed by WHO in collaboration with FAO and OIE. The accompanying resolution called for stronger collaboration between the three organizations to advance a multisectoral One Health approach.

In response, the Tripartite agreed to strengthen its long-standing collaboration on health risks across the animal–human–ecosystem interface in a Memorandum of Understanding (2018) with a strong focus on AMR. It collectively developed a joint two-year workplan for collaboration at global and country level in five areas: (1) supporting the implementation of National Action Plans (NAPs) on AMR; (2) awareness-raising and behaviour change; (3) surveillance and monitoring of AMR and antimicrobial use (AMU); (4) stewardship and optimal use of antimicrobials; and (5) monitoring and evaluation (M&E). The Tripartite has also engaged with UNEP to boost the integration of the environmental aspects of AMR into its joint work.

2.2 The AMR MPTF

The Tripartite launched the AMR MPTF in 2019 to support the One Health approach to AMR at all levels. The funding mechanism aims to secure consistent and coordinated financing to enable the development and implementation of AMR NAPs, Tripartite workplans on AMR and the follow-up work of the ad hoc Interagency Coordination Group (IACG) on AMR. The AMR MPTF finances catalytic, coordinated policy advice, technical assistance and capacity-strengthening programmes that Member States have requested from the Tripartite to combat AMR. In 2020, 80 percent of the AMR MPTF was dedicated to country support, while 20 percent was dedicated to global programmes. Over the course of 2020, the Tripartite developed and put in place the necessary frameworks, tools and standards needed to select countries and develop global programmes supported by the fund.

The collaboration enables the three organizations to leverage their mandates, resources, expertise and programming in a One Health response to AMR. By focusing on areas where collaboration adds value, the Tripartite contributes to more integrated

and coordinated approaches, helps to reduce silos and duplication, enables more coordinated partnerships and promotes a more comprehensive understanding of challenges and opportunities in key areas. The AMR MPTF is a key instrument in funding this collaborative action and putting the One Health approach into operation.

Established for an initial five-year period (2019–2024) with a view to influencing and contributing to the achievement of the 2030 Agenda, the AMR MPTF supports joint and coordinated action based on the Tripartite workplans on AMR at global, regional and country level to catalyse national interventions and achieve results.

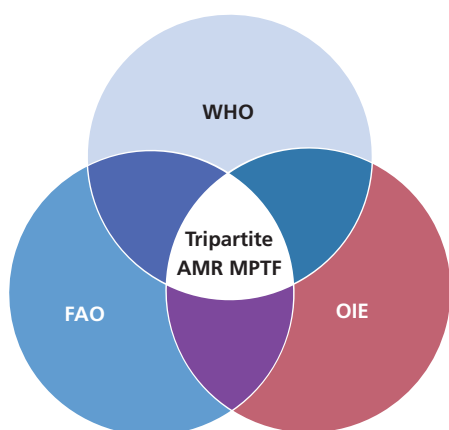


Figure 1: The Tripartite AMR MPTF



General feature in an hospital in Uganda. Nurses prepare medication for distribution to patients at the pharmacy in the Ibanda hospital.

Aiming for sustainable development results

3.1 SDGs and AMR MPTF results matrix

Addressing AMR is integral to achieving the SDGs. High levels of AMR will make achieving the goals on health, poverty reduction and food production more difficult. Conversely, progress on many of the goals, such as water and sanitation and sustainable production and consumption, will help to tackle it. The SDG indicator for measuring AMR is 3.d.2—the percentage of bloodstream infections due to selected antimicrobial-resistant organisms—but achieving it will require broad action across sectors and among stakeholders. By strengthening surveillance systems, the MPTF is building national capacity to report on this indicator.

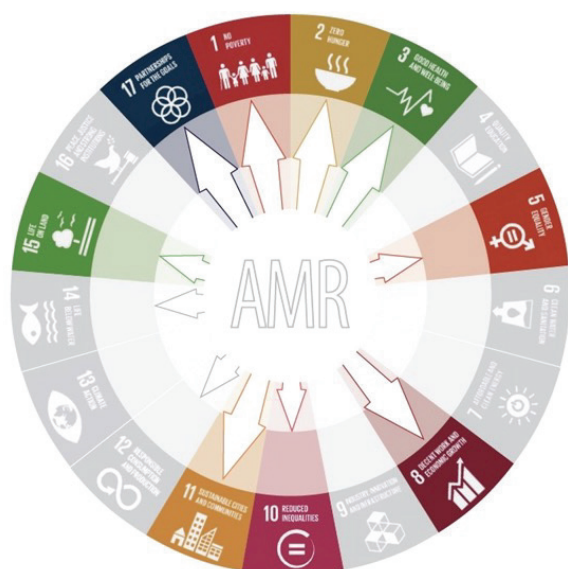


Figure 2: The emergence and spread of AMR will impede progress towards the 2030 agenda, with SDGs 15 ,11 ,10 ,8 ,5 ,3 ,2 ,1 and 17 particularly at risk. *Source: World Bank (2019)*



Figure 3: Progress made on some SDGs will contribute to containing AMR, in particular, progress on SDGs 16 ,15 ,14 ,10 ,6 ,2 and 17. *Source: World Bank (2019)*

In-country MPTF activities and objectives will contribute to achieving SDGs 1 (eradicate poverty), 2 (zero hunger), 3 (good health and well-being), 8 (decent work and economic growth), 11 (sustainable cities and communities) and 17 (partnerships for the goals). More specifically, the AMR MPTF gives countries policy support and technical assistance in the following areas (see Figure 4 for details):

- designing and implementing One Health NAPs;
- awareness raising and catalysing behaviour change;
- strengthening AMR surveillance and monitoring, antimicrobial sales and AMU;
- strengthening antimicrobial stewardship and the optimal use of antimicrobials; and
- ensuring robust M&E of AMR activities.

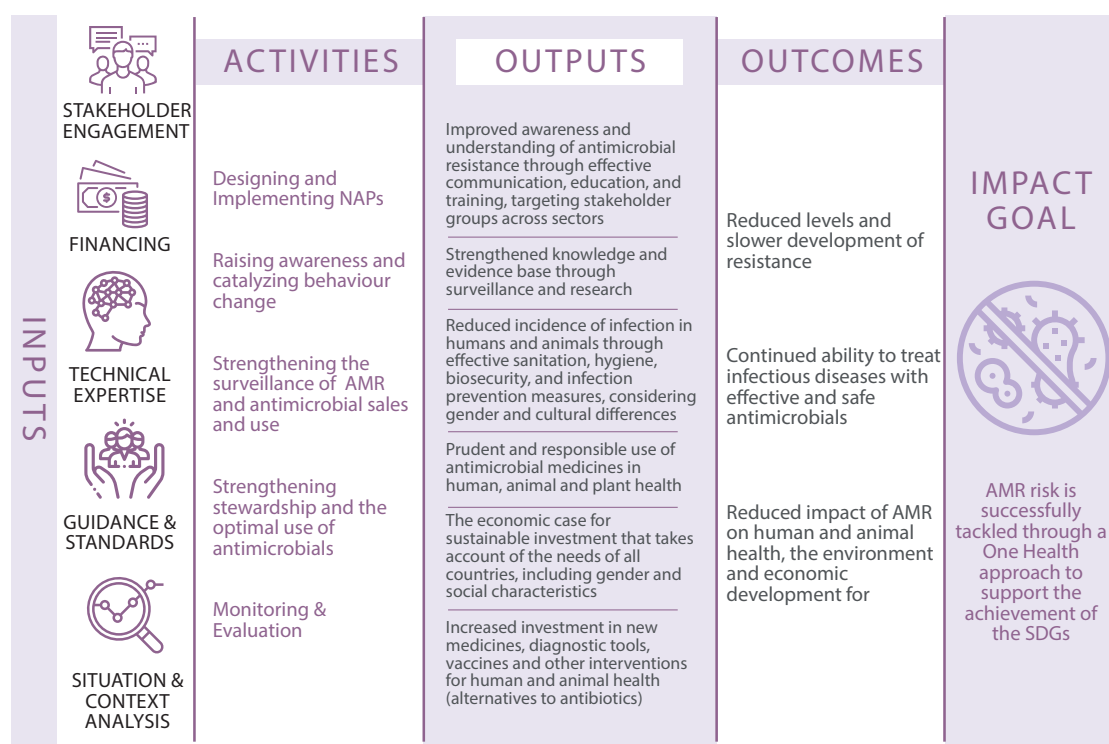


Figure 4: The MPTF results matrix

3.2 Progress and achievements in 2020

Addressing AMR is integral to achieving the SDGs. High levels of AMR will make achieving the goals on health, poverty reduction and food production more difficult. Conversely, progress on many of the goals, such as water and sanitation and sustainable production and consumption, will help to tackle it. The SDG indicator for measuring AMR is 3.d.2—the percentage of bloodstream infections due to selected antimicrobial-resistant organisms—but achieving it will require broad action across sectors and among stakeholders. By strengthening surveillance systems, the MPTF is building national capacity to report on this indicator.

The AMR MPTF is a key instrument in funding this collaborative action and supporting the One Health approach. Despite the COVID-19 pandemic, 2020 saw work advance at both the global and country level. Six country proposals have already been approved by the AMR MPTF Steering Committee, four countries have received funding to kick-start programme implementation, the global programme has been initiated, the MPTF coordination programme has been set up and the Tripartite is collaborating closely to mobilize additional resources to expand its work to other countries and to develop the necessary global tools and frameworks. With regards to the MPTF coordinator, he/she has been recruited in November 2020 based on an open selection process and is sitting in WHO.

Table 1: Timeline of Steering Committee meetings and decisions in 2020

Steering Committee meetings	Decision
March 2020	Twelve concept notes submitted, nine approved, two require revision, one rejected. Budget to support fund coordination is approved.
June 2020	Five global concept notes submitted and approved for development into full proposals.
September 2020	Four final country proposals submitted, three fully approved and one approved with conditions.
October 2020	Six final country proposals submitted, four fully approved and two approved with conditions. Four global projects approved, with a decision to merge them into one umbrella programme.

Ahead of inviting countries to submit proposals to the AMR MPTF, specific selection criteria were established (see Table 2). To ensure that Fund investments address country needs, but maintain a clear focus on sustainability, the headquarters-based Tripartite team works closely with its regional and country-level counterparts. Global programmes are likewise developed by applying stringent selection criteria (see Table 2).

Table 2: Selection criteria for country and global programmes

For country programmes	<ul style="list-style-type: none"> • Government willingness and interest in addressing AMR through an existing multisectoral approach, with assessment based on the presence of a NAP, levels of commitment and engagement as assessed by the Tripartite and the feasibility of the government making positive progress over an 18-month period • The need for support to advance the One Health approach and the likelihood of the country being an exemplar for the region or sub-region • Whether the Tripartite organizations have a strong presence in the country and demonstrate significant impact and added value short term • The identification of synergies and coordination with existing country programmes on AMR to ensure that the AMR MPTF is invested as a catalytic fund to leverage existing resources to achieve greater impact • A focus on low- and middle-income countries where resources to address AMR are limited
For global programmes	<p>Contribution to the AMR MPTF's theory of change and results matrix (see Annex)</p> <ul style="list-style-type: none"> • Importance of the activity to One Health implementation at country level and sustaining the momentum for AMR at global level • Demonstrating Tripartite capacity and comparative advantage • Capacity to implement and deliver meaningful results in an 18-month period • Strategic cohesiveness with the overall Tripartite workplan • Likelihood that it will catalyse further action and results • In addition to considering these criteria, the Secretariat recommends that the global programme rationally allocate resource and responsibility for leadership and delivery among the three organizations. <p>For this first phase, the Secretariat recommends:</p> <ul style="list-style-type: none"> • a focus on those areas where there is most confidence in collaborative delivery • the generation of strategically important results • investing in areas that are ready to implement in the current context

3.2.1 Progress of country programmes

MPTF beneficiary countries will receive USD 1 million over a two-year period (shared equitably between the three Tripartite organizations) to undertake the priority activities outlined in their proposals (see Table 3 for key activities and outputs by country). Of the six country proposals approved in 2020, Cambodia, Indonesia, Kenya and Morocco have started to implement their proposed activities (in late 2020 or early 2021). While all countries have been affected by the ongoing COVID-19 pandemic, they have all put in place mechanisms to navigate potential restrictions on mobility and social gatherings such as organising virtual meetings and workshops.

	CAMBODIA	GHANA	INDONESIA	KENYA	MOROCCO	ZIMBABWE
Activities/outputs						
NAP implementation review		○			○	
Strengthening multisectoral governance mechanisms	○	○			○	
AMR regulation (mechanisms, regulatory frameworks and legislation)	○				○	
Strengthening M&E for the AMR NAP	○	○	○		○	
Undertaking a cost-benefit analysis		○			○	
Strengthening integrated surveillance		○			○	
One Health approaches to AMU and antimicrobial consumption	○	○	○			
Strengthening infection prevention		👤🐮	👤	👤🐮	👤🐮	👤🐮
Strengthening stewardship	👤🐮	🐮	👤🐮	👤		
Developing communication strategy and materials	○	○		○	○	○
Knowledge, attitude and practice (KAP) studies					○	○
Lead implementing agency	WHO	WHO	WHO	OIE	FAO	WHO
Status of project						
Status	Proposal approved	Proposal approved, but subject to amendment	Proposal approved	Proposal approved	Proposal approved	Proposal approved, but subject to amendment
Launch date	December 2020	Pending, tbc in 2021	November 2020	January 2021	March 2021	Pending, tbc in 2021

3.2.2 Progress of global programmes

In 2020, the Steering Committee approved four global projects. It also decided to merge them under a single global umbrella programme, which came into effect in February 2021. A workshop to link global and country projects took place early March 2021. During the workshop, the scope, objective and current status-quo of the four global projects was presented to country representatives who were able to ask more detailed questions. Countries were then invited to reach out to the MPTF Secretariat to be linked up with the focal points of the respective global projects directly.

Table 4: Overview of the global projects initiated in 2020

PROJECT	TISSA* PROPOSAL	MONITORING & EVALUATION	LEGAL AND REGULATORY FRAMEWORKS	ENVIRONMENT
Details	<ul style="list-style-type: none"> Developing, populating and publicizing the TISSA platform – a global web-based repository on published AMR and AMU data from FAO, OIE and WHO, spanning humans, animals, the food and agriculture sectors 	<ul style="list-style-type: none"> Technical advisory service for country-level multisectoral M&E of NAP implementation Global monitoring and aggregation of indicator data at sectoral level Tripartite biennial global reporting on AMR under the GAP M&E framework and annual reporting of Tripartite AMR country self-assessment survey (TrACCS) results 	<ul style="list-style-type: none"> Development of a Tripartite One Health assessment tool for AMR-relevant legislation Finalization, piloting and validation of the tool 	<ul style="list-style-type: none"> Strategic global-level governance advocacy initiatives on AMR Improved national capacity for designing and implementing AMR-related policy frameworks, investment plans and programmes Engagement with critical stakeholder groups
Lead agency	WHO	OIE	FAO	FAO

* *Tripartite Integrated Surveillance System on AMR*

3.2.3 Progress of MPTF coordination programme

The Steering Committee approved an allocation of US\$ 786 450 to cover costs associated with MPTF services and overall coordination. These allocations are referred to as 'direct costs'. The MPTF coordinator was appointed in November 2020.

3.3 Resource mobilization

In 2020, the Department of Health and Social Care of the United Kingdom of Great Britain and Northern Ireland made an additional contribution to the AMR MPTF of USD 5 879 000, boosting the resources provided by the Netherlands (USD 4 979 455) and Sweden (USD 2 086 147) in 2019. The Department of Health and Social Care of the United Kingdom of Great Britain also committed to an additional contribution of USD 1,787,704 USD, bringing the AMR MPTF budget for 2021 to USD 14 732 306.

In November 2020, during World Antimicrobial Awareness Week, the European Union (EU) hosted an Infopoint event on “Stemming the tide of AMR: Investing in a One Health approach”. All participants highlighted the importance of investing in the fight against AMR and, to this end, welcomed the establishment of the AMR MPTF. The EU voiced its strong support for the work of the Tripartite and the fund.

To guide resource mobilization efforts, the Tripartite is pursuing a joint resource mobilization action plan to raise resources commensurate with its contribution to the AMR GAP, IACG recommendations and associated Tripartite workplans. The AMR MPTF is the preferred mechanism for channelling these funds, as it is based on equal partnership. The unearmarked nature of the AMR MPTF allows flexibility, with constant oversight from the Steering Committee, to allocate funds to where they are needed most. This includes work at country level to support NAPs and at global level to ensure AMR remains high on the global agenda, enabling the Tripartite to give countries critical technical backstopping support.

The Tripartite’s resource mobilization action plan, in the first instance, aims to expand the AMR MPTF partner base to scale up country and global operations, broadly to:

1. Leverage the collective expertise of the Tripartite and its networks collaborating on AMR through a One Health approach to bring about change at global, regional and national level.
2. Enhance lesson learning internationally and locally (what can work and why).
3. Catalyse greater public and private investments in One Health and AMR, particularly at country level, including through international financial institutions, national budgets and private-sector investment.

To magnify the impact of these efforts, the Tripartite will work to ensure that the AMR MPTF complements funding channelled (to the three Tripartite organizations) through other means, all hinged on an overarching Tripartite programme of work.



An agronomist inspects a tomato plantation at the Minsk Vegetable Factory.

©FAO/Sergei Gapon



Fund governance

The governance arrangements of the AMR MPTF are based on standard governance arrangements for pass-through MPTFs per United Nations Sustainable Development Group (UNSDG) policy. The governance arrangements provide an efficient and effective decision-making and oversight framework, ensuring streamlined allocation processes and clear lines of accountability. These arrangements are built on and informed by the principles of inclusiveness, transparency, accountability and consensus-based decisions.

4.1 The Steering Committee

The AMR MPTF is governed by a Steering Committee, which acts as the principal governing and decision-making body. It is responsible for providing oversight, defining the fund's strategic direction, prioritizing workplans and approving funding allocations. The Steering Committee is composed of a senior-level principal representative, or their nominated alternate, from each of the three organizations and three to five resource partner representatives, with the Administrative Agent and Secretariat as ex officio members. The Steering Committee meets twice a year (at a minimum) and is chaired by one of the Tripartite organizations on an annual rotating basis. In 2020, OIE assumed the role of Chair. The Tripartite Joint Secretariat on AMR provides Secretariat support.

4.2 MPTF Office Gateway/Fund dashboard

The AMR MPTF is administered by the MPTF Office, based in UNDP in New York. The MPTF Office Gateway (<http://mptf.undp.org/factsheet/fund/AMR00>) is a public website that provides real-time financial information on the fund as well as information on the fund overall and all the approved programmes. The Gateway provides information on the terms of reference of the fund, the amount contributed by each resource partner, the funding transferred to the Participating Organizations and related expenditures and the projects approved by the Steering Committee.

Table 5: Fund dashboard**COUNTRY PROGRAMMES¹**

	Budget allocated per organization (USD)		
Countries (USD)	FAO	OIE	WHO
Cambodia (998 681)	275 147	337 799	385 735
Ghana (1 000 000)	303 888	302 857	393 255
Indonesia 1 000 000)	339 753	173 048	487 199
Kenya (1 000 000)	300 000	400 000	300 000
Morocco (997 267)	346 680	204 905	445 682
Zimbabwe (999 951)	327 858	317 531	354 562

GLOBAL PROGRAMMES

	Budget allocated per organization (USD)		
Global projects (USD)	FAO	OIE	WHO
TISSA (660 702)	109 006	109 006	442 690
M&E (81 100)	256 800	417 300	107 000
Legal and regulatory frameworks (40 695)	224 047	202 926	213 722
Environment (753 136)	276 451	85 065	210 255
	+ UNEP: 181 365		

COORDINATION PROGRAMME

	Budget allocated per organization (USD)		
Coordination programme	FAO	OIE	WHO
	74 900	74 900	636 650

As of December 2020, the Steering Committee had approved USD 5 782 398 in funding and USD 4 782 398 had been transferred to the three organizations to kick-start implementation.

Table 6: Funding approvals and transfers (as of October 2020)

Organization	Approved budget	Transfers
OIE	USD 1 493 509	USD 1 190 652
FAO	USD 1 739 370	USD 1 435 482
WHO	USD 2 549 519	USD 2 156 264



A refugee from Democratic Republic of Congo, works at her vegetable crops

©FAO/Luis Tato



Next steps and vision for the future

AMR has continued to garner attention and gain momentum at the highest political levels. As one of the most pressing global threats to health, food security and food safety, the Tripartite needs to steadily build up its work with key partners internationally and locally and expand its operations based on the good work begun through the MPTF. The COVID-19 pandemic has underlined the close connections on the human– animal– plant–environmental interface and highlighted that a One Health approach needs to be taken and strengthened at all levels. The AMR MPTF is a highly valuable mechanism for organizational, regional and country-level collaboration and coordination. It has the ability to ensure catalytic, sustainable and long-lasting change through multisectoral, coordinated actions on AMR. Particular at country level, its work encourages government engagement and commitment, mobilizes multiple stakeholders (including the private sector and civil society) and can leverage further financing for countries to scale up efforts to tackle AMR.

Over the coming year, the AMR MPTF will consolidate and reflect on its efforts, particularly as country and global results are reported. Over the next three years (years 3–5 of the fund), it aims to have even greater impact through replenishments from existing and expanded partnerships. In particular, it will focus on:

- lessons learned, best practices for upscaling efforts in existing countries and expanding to more countries based on strategic criteria, building on engagement with regional and national institutions;
- maintaining strong links between country and global programmes for fast and efficient technical backstopping, as well as to collect evidence of what works on the ground;
- a stronger regional dimension for regional relevance and backstopping, as well as synergies with other programmes;
- pooled knowledge and experiences for broader dissemination and capacity development, including at regional and global level and through South–South Cooperation;
- sharing and advocating indicators of success at the highest level, including through the Global Leaders Group, the Independent Panel on Evidence and other forums;
- leveraging wider AMR/One Health investment (from funding to financing), including through international financial institutions and domestic finance (government budgets) to ensure continued NAP implementation and the sustainability of actions; and
- working for cost effectiveness and low carbon emissions through lessons learned from COVID-19 restrictions.

In conclusion, to scale up the current scope of the AMR MPTF considerably and achieve meaningful progress in numerous countries, greater funding and sustainable partnerships will be essential. Equipping countries now with the necessary capacity, systems and skillsets to address AMR will yield benefits in the long term in the form of a sustainable One Health approach that goes well beyond the initial five-year scope of the AMR MPTF.



Annex 1

Consolidated Annual Financial Report of the Administrative Agent for the Antimicrobial Resistance MPTF

for the period 1 January to 31 December 2020

Multi-Partner Trust Fund Office Bureau for Management Services United
Nations Development Programme

GATEWAY: <http://mptf.undp.org>

31 May 2021

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PARTICIPATING ORGANIZATIONS

Food and Agriculture Organization of
the United Nations

World Organisation for Animal Health

World Health Organization

CONTRIBUTORS

NETHERLANDS, Government of

SWEDEN, Government of

UK-Dept Health and Social Care

DEFINITIONS

Allocation

Amount approved by the Steering Committee for a project/programme.

Approved Project/Programme

A project/programme including budget, etc., that is approved by the Steering Committee for fund allocation purposes.

Contributor Commitment

Amount(s) committed by a donor to a Fund in a signed Standard Administrative Arrangement with the UNDP Multi-Partner Trust Fund Office (MPTF Office), in its capacity as the Administrative Agent. A commitment may be paid or pending payment.

Contributor Deposit

Cash deposit received by the MPTF Office for the Fund from a contributor in accordance with a signed Standard Administrative Arrangement.

Delivery Rate

The percentage of funds that have been utilized, calculated by comparing expenditures reported by a Participating Organization against the 'net funded amount'.

Indirect Support Costs

A general cost that cannot be directly related to any particular programme or activity of the Participating Organizations. UNDG policy establishes a fixed indirect cost rate of 7% of programmable costs.

Net Funded Amount

Amount transferred to a Participating Organization less any refunds transferred back to the MPTF Office by a Participating Organization.

Participating Organization

A UN Organization or other inter-governmental Organization that is an implementing partner in a Fund, as represented by signing a Memorandum of Understanding (MOU) with the MPTF Office for a particular Fund.

Project Expenditure

The sum of expenses and/or expenditure reported by all Participating Organizations for a Fund irrespective of which basis of accounting each Participating Organization follows for donor reporting.

Project Financial Closure

A project or programme is considered financially closed when all financial obligations of an operationally completed project or programme have been settled, and no further financial charges may be incurred.

Project Operational Closure

A project or programme is considered operationally closed when all programmatic activities for which Participating Organization(s) received funding have been completed.

Project Start Date

Date of transfer of first instalment from the MPTF Office to the Participating Organization.

Total Approved Budget

This represents the cumulative amount of allocations approved by the Steering Committee.

US Dollar Amount

The financial data in the report is recorded in US Dollars and due to rounding off of numbers, the totals may not add up.

INTRODUCTION

This Consolidated Annual Financial Report of the **Antimicrobial Resistance MPTF** is prepared by the United Nations Development Programme (UNDP) Multi-Partner Trust Fund Office (MPTF Office) in fulfillment of its obligations as Administrative Agent, as per the terms of Reference (TOR), the Memorandum of Understanding (MOU) signed between the UNDP MPTF Office and the Participating Organizations, and the Standard Administrative Arrangement (SAA) signed with contributors.

The MPTF Office, as Administrative Agent, is responsible for concluding an MOU with Participating Organizations and SAAs with contributors. It receives, administers and manages contributions, and disburses these funds to the Participating Organizations. The Administrative Agent prepares and submits annual consolidated financial reports, as well as regular financial statements, for transmission to contributors.

This consolidated financial report covers the period 1 January to 31 December **2020** and provides financial data on progress made in the implementation of projects of the **Antimicrobial Resistance MPTF**. It is posted on the MPTF Office GATEWAY (<http://mptf.undp.org/factsheet/fund/AMR00>).

The financial data in the report is recorded in US Dollars and due to rounding off of numbers, the totals may not add up.

2020 FINANCIAL PERFORMANCE

This chapter presents financial data and analysis of the **Antimicrobial Resistance MPTF** using the pass-through funding modality as of 31 December **2020**. Financial information for this Fund is also available on the MPTF Office GATEWAY, at the following address: <http://mptf.undp.org/factsheet/fund/AMR00>.

1. SOURCES AND USES OF FUNDS

As of 31 December **2020**, **3** contributors deposited US\$ **12,944,602** in contributions and US\$ **133,201** was earned in interest.

The cumulative source of funds was US\$ **13,077,804**

Of this amount, US\$ **4,782,398** has been net funded to **3** Participating Organizations, of which US\$ **23,994** has been reported as expenditure. The Administrative Agent fee has been charged at the approved rate of 1% on deposits and amounts to US\$ **129,446**. Table 1 provides an overview of the overall sources, uses, and balance of the **Antimicrobial Resistance MPTF** as of 31 December 2020.

Table 1. Financial Overview, as of 31 December 2020 (in US Dollars)

	Annual 2019	Annual 2020	Cumulative
Sources of Funds			
Contributions from donors	7,065,602	5,879,000	12,944,602
Fund Earned Interest and Investment Income	15,186	118,015	133,201
Interest Income received from Participating Organizations	-	-	-
Refunds by Administrative Agent to Contributors	-	-	-
Fund balance transferred to another MDTF	-	-	-
Other Income	-	-	-
Total: Sources of Funds	7,080,789	5,997,015	13,077,804
Use of Funds			
Transfers to Participating Organizations	-	3,995,948	3,995,948
Refunds received from Participating Organizations	-	-	-
Net Funded Amount	-	3,995,948	3,995,948
Administrative Agent Fees	70,656	58,790	129,446
Direct Costs: (Steering Committee, Secretariat...etc.)	-	786,450	786,450
Bank Charges	45	316	361
Other Expenditures	-	-	-
Total: Uses of Funds	70,701	4,841,504	4,912,205
Change in Fund cash balance with Administrative Agent	7,010,088	1,155,511	8,165,599
Opening Fund balance (1 January)	-	7,010,088	-
Closing Fund balance (31 December)	7,010,088	8,165,599	8,165,599
Net Funded Amount (Includes Direct Cost)	-	4,782,398	4,782,398
Participating Organizations' Expenditure (Includes Direct Cost)	-	23,994	23,994
Balance of Funds with Participating Organizations			4,758,405

2. PARTNER CONTRIBUTIONS

Table 2 provides information on cumulative contributions received from all contributors to this Fund as of 31 December **2020**.

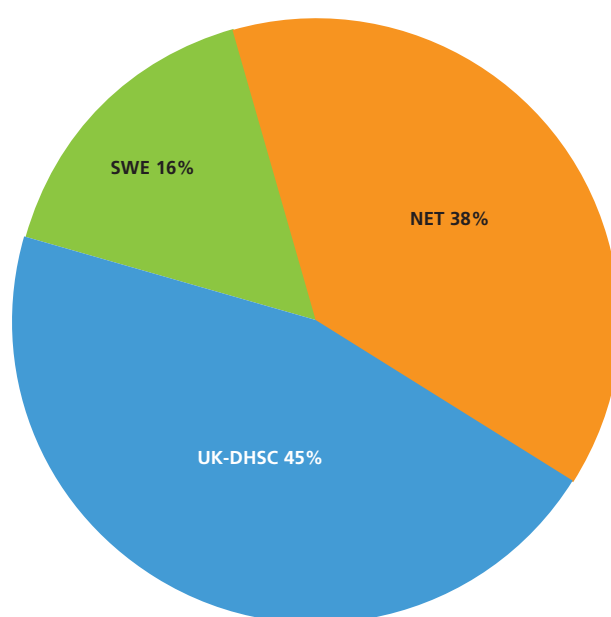
The **Antimicrobial Resistance MPTF** is currently being financed by **3** contributors, as listed in the table below.

The table below includes commitments made up to 31 December **2020** through signed Standard Administrative Agreements, and deposits made through **2020**. It does not include commitments that were made to the fund beyond **2020**.

Table 2. Contributors' Commitments and Deposits, as of 31 December 2020 (in US Dollars)

Contributors	Total Commitments	Prior Years	Current Year	Total Deposits
		as of 31-Dec-2019 Deposits	Jan-Dec-2020 Deposits	
NETHERLANDS, Government of	4,979,455	4,979,455	-	4,979,455
SWEDEN, Government of	2,086,147	2,086,147	-	2,086,147
UK-Dept Health and Social Care	5,879,000	-	5,879,000	5,879,000
Grand Total	12,944,602	7,065,602	5,879,000	12,944,602

Figure 1: Deposits by contributor, cumulative as of 31 December 2020



3. INTEREST EARNED

Interest income is earned in two ways: 1) on the balance of funds held by the Administrative Agent (Fund earned interest), and 2) on the balance of funds held by the Participating Organizations (Agency earned interest) where their Financial Regulations and Rules allow return of interest to the AA.

As of 31 December **2020**, Fund earned interest amounts to US\$ **133,201**. Details are provided in the table below.

Table 3. Sources of Interest and Investment Income, as of 31 December 2020 (in US Dollars)

Interest Earned	Prior Years as of 31-Dec-2019	Current Year Jan-Dec-2020	Total
Administrative Agent			
Fund Earned Interest and Investment Income	15,186	118,015	133,201
Total: Fund Earned Interest	15,186	118,015	133,201
Participating Organization			
Total: Agency earned interest			
Grand Total	15,186	118,015	133,201

4. TRANSFER OF FUNDS

Allocations to Participating Organizations are approved by the Steering Committee and disbursed by the Administrative Agent. As of 31 December **2020**, the AA has transferred US\$ **3,995,948** to **3** Participating Organizations (see list below).

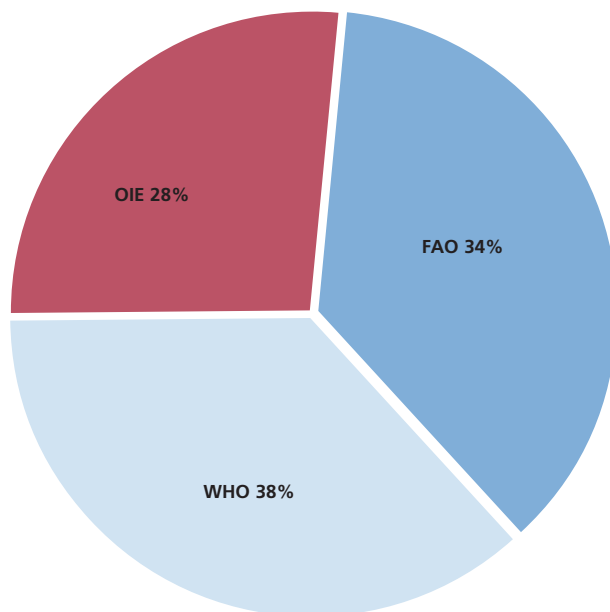
4.1 TRANSFER BY PARTICIPATING ORGANIZATION

Table 4 provides additional information on the refunds received by the MPTF Office, and the net funded amount for each of the Participating Organizations.

Table 4. Transfer, Refund, and Net Funded Amount by Participating Organization, as of 31 December 2020 (in US Dollars)

Participating Organization	Prior Years as of 31-Dec-2019			Current Year Jan-Dec-2020			Total		
	Transfers	Refunds	Net Funded	Transfers	Refunds	Net Funded	Transfers	Refunds	Net Funded
FAO				1,360,582		1,360,582	1,360,582		1,360,582
OIE				1,115,752		1,115,752	1,115,752		1,115,752
WHO				1,519,614		1,519,614	1,519,614		1,519,614
Grand Total				3,995,948		3,995,948	3,995,948		3,995,948

Figure 2: Transfers amount by Participating Organization for the period of 1 January to 31 December 2020



5. EXPENDITURE AND FINANCIAL DELIVERY RATES

All final expenditures reported for the year 2020 were submitted by the Headquarters of the Participating Organizations. These were consolidated by the MPTF Office.

Project expenditures are incurred and monitored by each Participating Organization, and are reported as per the agreed upon categories for inter-agency harmonized reporting. The reported expenditures were submitted via the MPTF Office's online expenditure reporting tool. The 2020 expenditure data has been posted on the MPTF Office GATEWAY at <http://mptf.undp.org/factsheet/fund/AMR00>.

5.1 EXPENDITURE REPORTED BY PARTICIPATING ORGANIZATION

In **2020**, US\$ **3,995,948** was net funded to Participating Organizations for programmes, and US\$ was reported in expenditure.

Table 5.1. Net Funded Amount, Reported Expenditure, and Financial Delivery by Participating Organization, as of 31 December 2020 (in US Dollars)

Participating Organization	Approved Amount	Net Funded Amount	Expenditure			Delivery Rate %
			Prior Years as of 31-Dec-2019	Current Year Jan-Dec-2020	Cumulative	
FAO	1,664,470	1,360,582				0
OIE	1,418,609	1,115,752				0
WHO	1,912,869	1,519,614				0
Grand Total	4,995,948	3,995,948				0

5.2. EXPENDITURE BY PROJECT

Table 5 displays the net funded amounts, expenditures reported and the financial delivery rates by Participating Organization.

Table 5.2. Expenditure by Project within Country, as of 31 December 2020 (in US Dollars)

Country / Project No. and Project Title		Participating Organization	Approved Amount	Net Funded Amount	Expenditure	Delivery Rate %
Cambodia						
00124430	Cambodia-Enhancing Governance	FAO	275,147	275,147		0
00124430	Cambodia-Enhancing Governance	OIE	337,799	337,799		0
00124430	Cambodia-Enhancing Governance	WHO	385,735	385,735		0
Cambodia Total			998,681	998,681		0
Ghana						
00124433	Ghana One Health AMR MPTF Proj	FAO	303,888			0
00124433	Ghana One Health AMR MPTF Proj	OIE	302,857			0
00124433	Ghana One Health AMR MPTF Proj	WHO	393,255			0
Ghana Total			1,000,000			0
Indonesia						
00124431	Indonesia-Combatting AMR throu	FAO	339,753	339,753		0
00124431	Indonesia-Combatting AMR throu	OIE	173,048	173,048		0
00124431	Indonesia-Combatting AMR throu	WHO	487,199	487,199		0
Indonesia Total			1,000,000	1,000,000		0
Kenya						
00124994	Kenya-Preventive Approaches to	FAO	300,000	300,000		0
00124994	Kenya-Preventive Approaches to	OIE	400,000	400,000		0
00124994	Kenya-Preventive Approaches to	WHO	300,000	300,000		0
Kenya Total			1,000,000	1,000,000		0
Morocco						
00124432	Morocco-Supp the Implementatio	FAO	445,682	445,682		0
00124432	Morocco-Supp the Implementatio	OIE	204,905	204,905		0
00124432	Morocco-Supp the Implementatio	WHO	346,680	346,680		0
Morocco Total			997,267	997,267		0
Grand Total			4,995,948	3,995,948		0

5.3 EXPENDITURE REPORTED BY CATEGORY

Project expenditures are incurred and monitored by each Participating Organization and are reported as per the agreed categories for inter-agency harmonized reporting. In 2006 the UN Development Group (UNDG) established six categories against which UN entities must report inter-agency project expenditures. Effective 1 January 2012, the UN Chief Executive Board (CEB) modified these categories as a result of IPSAS adoption to comprise eight categories. All expenditure incurred prior to 1 January 2012 have been reported in the old categories; post 1 January 2012 all expenditure are reported in the new eight categories. See table below.

2012 CEB Expense Categories

- Staff and personnel costs
- Supplies, commodities and materials
- Equipment, vehicles, furniture and depreciation
- Contractual services
- Travel
- Transfers and grants
- General operating expenses
- Indirect costs

Table 5.3. Expenditure by UNDG Budget Category, as of 31 December 2020 (in US Dollars)

Category	Expenditure			Percentage of Total Programme Cost
	Prior Years as of 31-Dec-2019	Current Year Jan-Dec-2020	Total	
Staff and personnel cost	-	-	-	
Supplies, commodities and materials	-	-	-	
Equipment, vehicles, furniture, depreciation	-	-	-	
Contractual services	-	-	-	
Travel	-	-	-	
Transfers and grants	-	-	-	
General operating	-	-	-	
Programme costs total	-	-	-	100.00
¹ Indirect support costs total	-	-	-	
Total	-	-	-	

¹ **Indirect Support Costs** charged by Participating Organization, based on their financial regulations, can be deducted upfront or at a later stage during implementation. The percentage may therefore appear to exceed the 7% agreed-upon for on-going projects. Once projects are financially closed, this number is not to exceed 7%.

6. COST RECOVERY

Cost recovery policies for the Fund are guided by the applicable provisions of the Terms of Reference, the MOU concluded between the Administrative Agent and Participating Organizations, and the SAAs concluded between the Administrative Agent and Contributors, based on rates approved by UNDG.

The policies in place, as of 31 December **2020**, were as follows:

The Administrative Agent (AA) fee: 1% is charged at the time of contributor deposit and covers services provided on that contribution for the entire duration of the Fund. In the reporting period US\$ **58,790** was deducted in AA-fees. Cumulatively, as of 31 December **2020**, US\$ **129,446** has been charged in AA-fees.

Indirect Costs of Participating Organizations: Participating Organizations may charge 7% indirect costs. In the current reporting period US\$ was deducted in indirect costs by Participating Organizations. Cumulatively, indirect costs amount to US\$ as of 31 December **2020**.

7. ACCOUNTABILITY AND TRANSPARENCY

In order to effectively provide fund administration services and facilitate monitoring and reporting to the UN system and its partners, the MPTF Office has developed a public website, the MPTF Office Gateway (<http://mptf.undp.org>). Refreshed in real time every two hours from an internal enterprise resource planning system, the MPTF Office Gateway has become a standard setter for providing transparent and accountable trust fund administration services.

The Gateway provides financial information including: contributor commitments and deposits, approved programme budgets, transfers to and expenditures reported by Participating Organizations, interest income and other expenses. In addition, the Gateway provides an overview of the MPTF Office portfolio and extensive information on individual Funds, including their purpose, governance structure and key documents. By providing easy access to the growing number of narrative and financial reports, as well as related project documents, the Gateway collects and preserves important institutional knowledge and facilitates knowledge sharing and management among UN Organizations and their development partners, thereby contributing to UN coherence and development effectiveness.

8. DIRECT COSTS

The Fund governance mechanism may approve an allocation to a Participating Organization to cover costs associated with Secretariat services and overall coordination, as well as Fund level reviews and evaluations. These allocations are referred to as 'direct costs'. In the reporting period, direct costs charged to the fund amounted to US\$ **786,450**. Cumulatively, as of 31 December **2020**, US\$ **786,450** has been charged as Direct Costs.

Table: Direct Costs

Participating Organization	Net Funded Amount	Expenditure	Delivery Rate
FAO	74,900		
OIE	74,900		
WHO	636,650	23,994	4%
Total:	786,450	23,994	3%

Annex 2

Country profiles

CAMBODIA

Key statistics

Population: 16.5 million¹

Human Development Index: 0.594 (rank: 144)²

Income level (gross domestic product (GDP) per capita in current USD): 1,643.1³

AMR situation

While the true extent of its AMR burden is unknown, Cambodia's concerns about AMR first gained global attention when resistance to antimalarial drug artemisinin was reported in 2009 along the Cambodian–Thai border. Since then, monitoring and surveillance efforts to understand and manage resistance to antimalarial medicines and other antibiotics have been stepped up. Initial results of Cambodia's AMR surveillance system, piloted on human health in 2017, suggested high rates of antibacterial resistance in isolates of *Escherichia coli* (penicillins, cephalosporins, fluoroquinolones and gentamicin), *Salmonella* (fluoroquinolones) and *Staphylococcus aureus* (methicillin).

National response to AMR

The National Policy to Combat Antimicrobial Resistance (Kingdom of Cambodia, 2014a) and the National Strategy to Combat Antimicrobial Resistance (2015–2017) (Kingdom of Cambodia, 2014b) were the first documents to set out the purpose, vision, mission and scope of AMR efforts in Cambodia. The Ministry of Agriculture, Forestry and Fisheries (MAFF) also established an AMR Technical Working Group in October 2017 and developed a NAP to reduce the threat of AMR related to agriculture, fisheries, food and livestock production and agri-food processing (2016–2020). The One Health joint AMU/AMR roadmap for Cambodia (2017–2021) was developed in collaboration with the agriculture and environment sectors and, ultimately, transformed into the Multisectoral Action Plan on AMR (2019–2023) in 2019, involving MAFF and the Ministries of Health and Environment (Kingdom of Cambodia, 2019).

Project: Enhancing governance and coordination mechanisms to reduce antimicrobial resistance in Cambodia (ID: 00124430)⁴

- Duration: 24 months

Cambodia's activities under the MPTF project focus on strengthening governance and coordination between and within ministries, regulating AMU in the human and animal health sectors and increasing public awareness and advocacy. Its key activities include:

- supporting the establishment of an Inter-Ministerial Coordination Committee on AMR;
- developing a national M&E framework for the NAP;
- rolling out national AMS guidelines in healthcare facilities developing responsible use guidelines for the animal health sector; and
- developing national multisectoral AMR communication strategies and materials.

Budget

USD 998 681 – USD 275 147 (FAO); USD 337 799 (OIE); USD 385 735 (WHO)

¹ World Bank (2020c)

² UNDP (2020f)

³ World Bank (2020d)

⁴ MPTFO (2020b)

Expected outcomes

At the end of the MPTF project, Cambodia's management of the AMR situation should have seen progressive improvement with a view to effective collaboration between different sectors, government institutions and technical working groups on human health, agriculture and the environment. Linking and integrating project activities to planned activities and tasks set out in Cambodia's Multisectoral Action Plan on AMR is one of the priorities of the Royal Government of Cambodia and of the United Nations Development Assistance Framework, 2019–2023. The government will consider greater engagement and the allocation of more funds to core AMR management activities should this project produce the requisite evidence.

Main challenges

Due to the unprecedented COVID-19 situation, the implementation of the Multisectoral Action Plan has been stalled since its launch in December 2019. The MPTF project aims to get the Action Plan initiatives and activities back on track by encouraging the relevant ministries to collaborate on implementing the project activities in question. The Tripartite will also recruit consultants and technical staff to provide hands-on technical support to the various ministries and technical working groups on implementing the proposed activities.

Progress

Since the AMR MPTF Secretariat approved the proposal in November 2020, the following progress has been made:

The three organizations have all received funds for project implementation.

The Tripartite organizations launched the project at all levels at the end of 2020.

The MPTF was officially introduced to Ministry of Health AMR technical working group on 29 December 2020.

- Stakeholder meetings (on 13 and 18 January 2021) were held to discuss putting into practice the National Guidelines for Implementation of Antimicrobial Stewardship in health facilities. Participants included Cambodia's Diagnostic Microbiology Development Programme, the National University of Singapore and the United States Centers for Disease Control and Prevention in a bid to streamline support in this area.

Outlook for 2021

FAO will initiate and implement the following activities:

- March–October: A literature review of KAP surveys, studies, reports and publications on AMU and AMR in Cambodia and a review of existing guidelines for the responsible use of antimicrobials to provide recommendations for AMU guideline development and AMR surveillance in the animal health sector.
- November–December: A stakeholder forum and consultation workshop for guideline development on responsible and prudent use of guidelines in the animal health sector.

GHANA

Key statistics

Population: 30.4 million⁵

Human Development Index: 0.611 (rank: 138)⁶

Income level (GDP per capita in current USD): 2 202.1⁷

AMR situation

A situation analysis of AMU and AMR patterns in Ghana, published in 2017, found that a weak regulatory environment and non-adherence to practice standards may have contributed to increased and unregulated access to antimicrobials and, thus, rising levels of AMR.⁸ In the human health sector, a few studies in Ghana have confirmed the existence of resistance to commonly used antimicrobials such as tetracycline, co-trimoxazole and ampicillin. In the veterinary, food, fisheries and aquaculture sectors, strains of *Campylobacter*, *Escherichia coli* and *Salmonella* have likewise been found to be resistant to commonly used antimicrobials.

National response to AMR

In 2012, Ghana formalized a multisectoral, multidisciplinary national AMR platform to drive efforts to tackle AMR. Its five-year national policy and NAP on AMR were approved in 2018 (Government of Ghana, 2017). In 2020, a WHO-supported rapid desk review of implementation of the NAP showed that, out of more than 144 strategic activities, 34 percent are ongoing while 60 percent had not started due to funding constraints.⁹ The government has also established an AMR Secretariat and Inter-Ministerial Committee on AMR with clear terms of reference to oversee activities on AMR. In addition, the FAO, in collaboration with the Ministry of Food and Agriculture and the Veterinary Services Department have established Farmer Field Schools aimed at improving responsible use of antimicrobials in farm animals. The Veterinary Services Department also contributes annual data to the OIE on the use of antimicrobials in animal health.

Project: Ghana One Health AMR MPTF Project (ID: 00124433)¹⁰

- *Duration: 24 months*

Ghana's ambitious MPTF project emphasizes activities to strengthen the country's surveillance and data-analysis capacity, support the development of biosecurity standards, improve prudent AMU and design communication and awareness-raising activities. Its main activities include:

- establishing surveillance systems for AMU in humans, animals, crops and the environment;
- assessing laboratory capacity for conducting culture and sensitivity testing, as well as capacity for hospital-based surveillance;
- developing national biosecurity standards to enhance AMS at farm level;
- developing guidelines for the use of national surveillance data for rational selection and responsible use of antimicrobials in human and animal health; and
- developing Information, Education and Communication materials for targeted groups and the public.

Budget

USD 1 000 000 – USD 303 877 (FAO); USD 302 856 (OIE); USD 393 255

⁵ World Bank (2020e)

⁶ UNDP (2020a)

⁷ World Bank (2020f)

⁸ Yevutsey et al. (2017)

⁹ Jimah and Ogunseitan (2020)

¹⁰ MPTFO (2020c)

Expected outcomes

Given country policy priorities, gaps in the deployment of AMR initiatives, and ongoing AMR interventions in Ghana, the MPTF project's activities will complement and drive implementation of the AMR NAP, and offers stakeholders a good opportunity to work with the Tripartite in all affected sectors in Ghana (human, animal, plant and environment) to implement priority and pressing activities. Successful project implementation will bolster the resilience of the national health system when it comes to managing infections, skills that should come in useful during pandemics such as COVID-19.

Main challenges

Ghana is systematically easing the restrictions on movement and physical gatherings that became necessary due to the spread of COVID-19. Should Ghana experience a second wave of COVID-19 infection, plans are in place to reprioritize activities and protocols to set up virtual meetings instead of face-to-face consultations.

Outlook for 2021

Ghana hopes to begin active implementation in the second quarter of 2021. It aims to demonstrate a One Health process backed by strong governance mechanisms to achieve the results expected in this first phase.

INDONESIA

Key statistics

Population: 270.6 million¹¹

Human Development Index: 0.718 (rank 107)¹²

Income level (GDP per capita in current USD): 4 135.6¹³

AMR situation

Despite a lack of formal data, levels of AMR are thought to be high and rising in Indonesia due to the country's high burden of infectious diseases, especially malaria, tuberculosis and HIV/AIDS. As a major hub for international travel and trade, as well as close interaction between animals and humans, the country is also at risk of emerging infectious diseases. While data have been patchy, a few studies give an idea of the extent of the country's AMR burden. An Asia–Pacific regional surveillance study found that Indonesia has far higher extended spectrum beta lactamase (ESBL)-producing *E. coli* than other countries in the region.¹⁴

National response to AMR

The Indonesian government has taken essential steps in recent years to bolster its efforts to tackle AMR. In 2015, the Ministry of Health established the National AMR Control Committee to coordinate all AMR activities within departments in the human health sector. The Ministry of Agriculture issued several laws and regulations – Law No. 18/2009, Law No. 41/2014, Regulation No. 14/2017 and Decree No. 9736/2020 on veterinary drug classification – prohibiting the use of antimicrobials for growth promotion, the use of Colistin for animals, as it is a critically important antibiotic for humans, and the use of antibiotics without a veterinary prescription.

Eventually, in 2017, the government developed a multisectoral NAP on AMR, initially for 2017–2019 – a collaborative effort between the Ministries of Health and Agriculture, the National Agency for Drug and Food Control, the Ministry of Marine Affairs and Fisheries, the Ministry of Environment and Forestry, the National AMR Control Committee and professional organizations. The NAP has since been updated to cover 2020–2024. It also established a national AMR surveillance platform and mechanism in 2019 to contribute data to the Global Antimicrobial Resistance Surveillance System. It has further developed guidelines on antibiotic use, adopting the WHO AWaRe (Access, Watch or Reserve) classification, which are expected to be approved by Ministry of Health decree. The animal health sector has established a national AMR surveillance system for the general broiler poultry population.

Project: Combating AMR in Indonesia through multisectoral approaches to infection reduction and improved stewardship (ID: 00124431)¹⁵

- Duration: 24 months

Indonesia's activities under the MPTF project have a strong focus on establishing M&E plans for NAP implementation, improving AMU behaviours and practices, and infection prevention and control (IPC). Some of Indonesia's main activities include:

- developing M&E plans for NAP implementation;
- reviewing AMS practices and developing AMS guidelines for human and animal health;
- developing standard treatment guidelines both human and animal health using the AWaRe classification for healthcare professionals and veterinarians/para-veterinarians;
- creating a coordination mechanism for monitoring and inspecting AMU in human and animal health; and
- reviewing IPC in the human and animal sectors in pilot areas and developing and piloting IPC (incl. AgriWASH) initiatives in healthcare facilities and farming systems.

¹¹ World Bank (n.d.)

¹² UNDP (2020b)

¹³ World Bank (2020g)

¹⁴ Mendes et al. (2013)

¹⁵ MPTFO (2020d)

Budget

USD 1 000 000 – USD 339 753 (FAO); USD 173 048 (OIE); USD 487 199 (WHO)

Expected outcomes

The proposed activities will make a significant contribution to meeting the goals outlined in the 2020–2024 NAP and to bolstering the One Health approach of FAO, OIE, WHO government agencies, academia and private-sector organizations in the effort to tackle AMR. It will also tie-in with and contribute to the country's NAP on Health Security, in which AMR has been identified as one of the key challenges. Lastly, the project will provide valuable lessons for neighbouring countries and other AMR-specific initiatives in Association of Southeast Asian Nations (ASEAN) countries.

Main challenges

All provinces of Indonesia have reported cases of COVID-19 and have been mobilizing all available resources in response to the pandemic. This situation is likely to affect the implementation of the proposed MPTF activities. As most ministries will be busy with COVID-19 at the central level, some of the proposed activities could be carried out in districts where the COVID-19 workload is lower. Some activities may still need to be adapted to the country's COVID-19 epidemiological situation. On a positive note, the COVID-19 pandemic has significantly raised awareness of the need for IPC and WASH-related activities, which will be leveraged for project purposes.

Progress

Since the AMR MPTF Secretariat approved the project proposal in November 2020, the following progress has been made:

- The Tripartite organizations have received funds for project implementation.
- The project was launched at the end of 2020, attended by representatives of the Ministries of Health and Agriculture.
- The implementation of the first activity has started.

Outlook for 2021

The ongoing COVID-19 pandemic in Indonesia is set to remain a challenge, particularly in the first half of 2021. Continued public health and social measures and the rollout of vaccines will progressively have an impact on reducing COVID-19 transmission in the country. Against this backdrop, the first phase of the planned MPTF activities will largely be carried out in online preparation meetings. Field visits to pilot areas will be conducted depending on the level of COVID-19 transmission in those areas, however, the coordination meetings between in-country Tripartite organizations, ministries and partners can be conducted virtually. In early 2021, three activities will be rolled out:

- a joint review of IPC (including WASH and AgriWASH) in the human and animal sectors in pilot areas;
- a joint review/assessment of AMS practices in humans and animals in pilot areas; and
- the development of AMS guidelines for human and animal health.

The FAO, OIE and WHO Regional Offices and headquarters continue to provide backstop support on the development of a concept note on these activities.

KENYA

Key statistics

Population: 52.5 million¹⁶

Human Development Index: 0.601 (rank: 143)¹⁷

Income level (GDP per capita in current USD): 1 816.5¹⁸

AMR situation

In Kenya, the use of antimicrobials in food production will increase in response to a rapidly growing human population and the associated increased pressure this will place on food systems. The country will witness a commensurate increase in levels of resistance to commonly used antimicrobials, a scenario that does not augur well for the treatment and management of infections in humans or animals. This is particularly important in the case of commensal and zoonotic bacteria and AMR genes that can be transmitted between humans and animals.

Numerous fragmented reports from different stakeholders point to high levels of AMR in Kenya in humans, livestock and the environment, but the true burden of AMR on human health, as well as the social and economic impacts, remain unknown. The main causes of AMR and the barriers to addressing it include poor infection control practices in hospitals and the community, and a high burden of disease in animals, generally associated with poor husbandry practices and low vaccination coverage levels. In food production, inadequate regulatory oversight along the food production chain and inadequate private-sector engagement on AMR containment raise the risk of food contamination. A lack of herd health programmes has contributed to poor disease prevention and control, as has the misuse of antibiotics in animal husbandry without professional oversight, to cover for poor hygiene and the transmission of resistant pathogens in food production, storage, distribution and preparation.

In addition, a lack of evidence on AMU in plants suggests an urgent need to profile antimicrobial plant protection products and their use to reduce the likelihood of misuse and contamination of the environment. This will also pave the way for the establishment of guidelines on their regulation and use. The few studies available show a rising trend in AMR in key Gram-positive and Gram-negative bacterial pathogens including methicillin-resistant *Staphylococcus aureus* from hospitalized patients, the reduced susceptibility of community-acquired pneumococci, multi-drug resistant extended spectrum beta lactamase-producing *Salmonella typhimurium* and *Vibrio cholerae*. Although various pieces of legislation exist on the regulation of antimicrobials in human and animal health and crop protection in Kenya, they are fragmented and enforcement is weak.

National response to AMR

The Ministries of Health and Agriculture, Livestock, Fisheries and Cooperatives launched Kenya's national policy and NAP on the prevention and containment of AMR in November 2017 (Republic of Kenya, 2017). The government also established the National Antimicrobial Stewardship Interagency Committee (NASIC), a multisectoral One Health platform to coordinate implementation of the policy. A similar governance structure, the County Antimicrobial Stewardship Interagency Committee, has been established at county level to coordinate implementation of the policy.

¹⁶ World Bank (2020a)

¹⁷ UNDP (2020c)

¹⁸ World Bank (2020b)

Project: Preventive approaches to containment of AMR (ID: 00124994)¹⁹

- Duration: 24 months

Kenya's activities under the MPTF project set out to strengthen biosecurity and IPC, monitor antimicrobial consumption, improve AMS, raise AMR awareness among different stakeholders and audiences and conduct educational activities. Kenya's main activities include:

- capacity building on healthcare associated infection (HAI) surveillance and strategies for IPC;
- developing and disseminating farm hygiene and biosecurity guidelines;
- developing a reporting system and database to support county-level AMU in humans, as well as to improve reporting of AMU in animals;
- scaling up implementation of national AMS guidelines; and
- developing and publishing newsletters and peer-reviewed articles on AMR progress and NAP implementation.

Budget

USD 1 000 000 – USD 300 000 (FAO); USD 400 000 (OIE); USD 300 000 (WHO)

Expected outcomes

The AMR MPTF project has provided a platform for the coherent coordination and integration of the Tripartite in support of NAP implementation in Kenya. This is transformational, as it promotes synergy in the work of the Tripartite agencies in the country, thereby accelerating implementation and achievement of the NAP objectives to address the key drivers of AMR. The joint programme will enable the pooling of resources, the synergy of efforts and a direct focus on objectives to support the country. The project also offers the opportunity to share experiences and lessons learned on addressing AMU-associated behaviours and practices with other countries in the region.

Main challenges

Due to Kenya's challenging COVID-19 landscape, NAP implementation may slow if public health safety measures, such as restrictions on movement and gatherings, continue to be instituted across the country. Restrictions may affect planned meetings or scheduled training sessions that require inter-county travel.

Progress

Since the AMR MPTF Secretariat approved the proposal in November 2020, the following progress has been made:

- The Tripartite organizations have received funds for project implementation.
- Sectoral implementation plans have been harmonized, including timelines for the implementation of various activities, particularly for the first year of the project.
- The project has been presented to the NASIC Secretariat. The Tripartite was invited to present the AMR MPTF project to NASIC at a meeting on 10 February 2021. The aim of was to ensure adequate buy-in by the team, as well as to harmonize implementation timelines with those of Fleming Fund activities, to avoid conflict.
- The project was officially launched on 18 February 2021, with representatives of donors, the government, the Tripartite Secretariat and the three organizations in attendance.

Outlook for 2021

Based on discussions between the Tripartite and the NASIC Secretariat, the following are some of the activities that will be implemented or initiated in early 2021:

- the development of an M&E framework;
- the development of farm biosecurity guidelines;
- a baseline assessment of AMS and IPC in six county referral hospitals;
- improvements in reporting on AMU in animals; and
- updates of regulatory schedules of antimicrobial agents to align with AWaRe categorization (medicine schedules workshop).

¹⁹ MPTFO (2020a)

MOROCCO

Key statistics

Population: 36.5 million²⁰

Human Development Index: 0.686 (rank: 121)²¹

Income level (GDP per capita in current USD): 3 204.1²²

AMR situation

Over the past decade, Morocco has seen a substantial rise in the levels of AMR in humans, exacerbated by high rates of self-medication and over-prescription. Studies have found that *E. coli* has developed resistance to the most commonly used antimicrobials. Similar trends can be observed in other bacterial species, such as *Klebsiella*, *Pseudomonas Aeruginosa*, *Acinetobacter* and *Staphylococcus aureus*. The overuse and misuse of antimicrobials in agriculture, stock farming and veterinary medicine has also led to an increase in levels of drug-resistance. Notably, *Staphylococcus aureus* and *Salmonella* strains have developed considerable resistance to one or more antimicrobial agents.

National response to AMR

In 2019, Morocco endorsed its NAP on AMR (2019–2021) (Kingdom of Morocco, 2018), which addresses key focus areas (surveillance, awareness, good practices, governance) and involves partners from the human, animal, plant and food sectors. The next NAP is expected by 2022. In the area of animal and plant health, there has been a policy in place since 2008 to strengthen post-marketing control of AMR, spanning all steps in the medicines value chain. Since 2015, the National Office of Food Security (ONSSA), attached to the Ministry of Agriculture, has intensified its actions to monitor AMR and to promote the proper use of veterinary medicines in general and antibiotics, in particular, in the animal health and food chains. The ONSSA's 2020–2030 roadmap makes the fight against AMR as a priority.

Project: Support the implementation of the AMR NAP through a One Health approach in Morocco (ID: 00124432)²³

- Duration: 24 months

Morocco's activities under the AMR MPTF set out to improve the country's governance capacity, strengthen its surveillance and information systems, support systems for biosecurity and IPC, raise awareness and bring about behaviour change. Morocco's main activities include:

- developing a robust and effective governance mechanism to steer, monitor and sustain AMR policy;
- designing and implementing a national integrated surveillance network and information system;
- disseminating and implementing national standards and guidelines for responsible AMU;
- capacity building of professional organizations in animal and plant health to develop and implement norms, standards and good practice guidelines on biosecurity and IPC; and
- awareness-raising activities to improve sanitation, hygiene and infection control measures.

Budget

USD 997 267 – USD 445 682 (FAO); USD 204 905 (OIE); USD 346 680 (WHO)

Expected outcomes

The activities identified in the project are critical to the implementation of the NAP. Appropriate budgets for each activity will catalyse the government's regular budget allocation to each ministry. The next two years will provide an opportunity to achieve better mutual understanding and greater cooperation on AMR by providing broad-based information on trends and levels of resistance in human, animal and the environmental, and by raising awareness of AMR and strengthening processes and controls to ensure the optimal use of antimicrobials. It will also provide an opportunity to set up a sustainable AMR multisectoral committee to ensure greater accountability and to monitor and measure progress.

²⁰ World Bank (2020h)

²¹ UNDP (2020d)

²² World Bank (2020i)

²³ MPTFO (2020e)

Main challenges

The ongoing COVID-19 pandemic may lead to restrictions on movement and activity, however, the project taskforce is expected to overcome such disruptions by switching to virtual meetings and e-learning applications. Another challenge may be a lack of engagement with stakeholders across sectors due to low awareness of the issue of AMR. This will be addressed by an awareness-raising component of the project and a participatory approach to project implementation.

Progress

Since the AMR MPTF Secretariat approved the proposal in November 2020, the following progress has been made:

- The Tripartite organizations have received funds for project implementation.
- Several preparatory and coordination meetings between the Tripartite agencies have been taking place since January 2020.
- The three agencies have met with their national counterparts: the Ministry of Agriculture, the Ministry of Health and the Department of Environment.
- The governance mechanism of the project is being finalized.
- A kick-off meeting with the government is being prepared.

Outlook for 2021

In 2021, Morocco sets out to start the implementation of various key activities, including:

- establishing a robust and effective governance mechanism to steer, monitor and sustain AMR policy in the country;
- building management capacity to monitor NAP activities;
- supporting the implementation of a national integrated surveillance network and information system for monitoring and generating data on AMR and AMU;
- initiating an assessment and analysis of human, veterinary and environmental laboratory capacity, developing biosecurity capacity of farmers and professional organizations in critical sectors (poultry, aquaculture, dairy); and
- developing a communication strategy to raise awareness of AMR.

ZIMBABWE

Key statistics

Population: 14.6 million²⁴

Human Development Index: 0.571 (rank: 150)²⁵

Income level (GDP per capita in current USD): 1 464.0²⁶

AMR situation

A 2015 AMR situational analysis in Zimbabwe found significant and growing resistance to common infections such as tuberculosis, malaria, HIV, respiratory infections, sexually transmitted infections, urinary tract infections, meningitis and diarrheal diseases. In animals, resistance was detected in *Escherichia coli* to tetracyclines, cloxacillin, erythromycin, ampicillin and ciprofloxacin. Importantly, the analysis found that the overuse and misuse of antimicrobials in both humans and animals was a leading cause of AMR.

National response to AMR

The Zimbabwe One Health AMR NAP (2017–2021) was launched in September 2017 after a 2015's comprehensive analysis. To coordinate AMR mitigation activities, the NAP framework established the Zimbabwe AMR Core Group, a multisectoral group comprising 18 members from the ministries responsible for health, agriculture, environment and finance, WHO, FAO, OIE, the Medicines Control Authority, research and academic institutions and civil society. However, implementation of the NAP has stalled due to financial constraints.

Project: Combating AMR using a One Health approach in Zimbabwe²⁷

- Duration: 24 months

Zimbabwe's activities under the MPTF project focus on strengthening the country's systems for biosecurity and IPC, improving the prudent use of antimicrobials and raising awareness about the issue among the public and key stakeholders. Zimbabwe's main activities include:

- revising the national IPC policy and strategic plan, the national IPC guidelines and training programme;
- developing and implementing biosecurity and hygiene standards in animal husbandry;
- conducting supply-chain mapping of the distribution of human and veterinary medicines and securing the supply chain to prevent the entry of substandard and falsified medicines into the country;
- undertaking KAP studies to understand key drivers of AMR in the country; and
- designing and delivering targeted awareness-raising activities, training and education to key stakeholder groups.

Budget

USD 999 951 – USD 327 858 (FAO); USD 317 530 (OIE); USD 354 562 (WHO)

Expected outcomes

The MPTF project seeks to incorporate achievements and lessons learned from previous and ongoing interventions in the country. It aims to continue to enhance and harmonize AMR MPTF support with that of other development partners working in Zimbabwe. All activities under this project will be conducted in line with the guiding principles of the NAP.

²⁴ World Bank (2021)

²⁵ UNDP (2020e)

²⁶ World Bank (2020j)

²⁷ MPTFO (forthcoming), see <http://mptf.undp.org/factsheet/project/00124994>

Main challenges

The COVID-19 pandemic will invariably affect the implementation of the project by limiting the physical interactions of implementing partners, leading to delays in the procurement of essential materials and the associated additional costs of complying with national COVID-19 legal requirements. Some trainings, especially those targeting farmers and the general public, may not be possible due to limitations in physical interaction. The sustainability of the impact and benefits of this project are also highly dependent on the ability to continue mobilizing adequate resources to carry out essential activities. To sustain the impact of this project after the end of the programme, a cost recovery mechanism in the form of a revolving or privatized fund management system will be incorporated into the project.

Outlook for 2021

The proposal is being reviewed and refined to incorporate steering committee comments. Implementation should start in Q2 of 2021.

Annex 3

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