The Antimicrobial Resistance (AMR) MULTI-PARTNER TRUST FUND

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

Country Proposal Submission

1. Full proposal overview

Project title	**One Health approach to manage Antimicrobial Resistance (AMR) and Antimicrobial Use (AMU) in Mongolia**
Implementing organisations	• World Health Organization – WHO Mongolia • Food and Agriculture Organization of the United Nations – FAO Mongolia • World Organisation for Animal Health (WOAH, founded as OIE) Regional Representation for Asia and the Pacific
Timeframe	*36 months – (1 Jan 2023 to 31 Dec 2025 [1])*
Lead Tripartite Focal Point	
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Other Implementing Partners	• Ministry of Health (MoH) including Medicine and Medical Device Regulatory Authority (MMDRA) and the National Centre for Communicable Diseases (NCCD); the National Centre for Zoonotic Diseases (NCZD) • Ministry of Food, Agriculture and Light Industries (MoFALI) including the General Authority of Veterinary Services (GAVS) and State Central Veterinary Laboratory (SCVL); • Ministry of Environment and Tourism (MoET) • Institute for Veterinary Medicine (IVM) • Mongolian University of Life Sciences, Ministry of Education and Science; • General Agency for Specialized Inspection (GASI); • "Medicine" association • Wildlife Conservation Society

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

Budget	
Total amount (USD) based on budget summary in Annex	999,818
Total amount (USD) allocated to each Tripartite and UNEP partner	WHO: 374,992 FAO: 360,000 WOAH: 264,825
Background	***Describe the national AMR situation, including which sectors are important for AMR and why. It should also detail how they have been involved in the response to date.*** According to the WHO Report on Surveillance of Antimicrobial Consumption, 2016-2018 the antibiotic consumption (AMC) in Mongolia was estimated to be 64.4 expressed as Daily Defined Dose (DDD) per 1000 inhabitants (2015 data) which was the highest among 65 countries and areas globally (1). In 2018, it was decreased to 50.68 DDD (2) following government's policies and actions to restrict the sale of antimicrobials over the counter and improve public awareness on AMR. Mongolia's unique country conditions include a large herder population and an even greater livestock population that outnumbers the human population by a factor of 20. Winters in Mongolia are harsh and extend between November to May. Nomadic herders live isolated and far from health centres and veterinary clinics located in district or province centers district town. This has caused nomadic herders to be self-reliant and herders often self-diagnose and self-medicate with antimicrobials their livestock. Currently, antimicrobial susceptibility testing in veterinarian hospitals and facilities are randomly performed and mostly funded by external resources while lacking a systematic and sustainable approach. A 2018 assessment of staff competency which was carried out by the Institute of Veterinary Medicine (IVM) found that only six percent of 47 laboratory staff was able to perform the disk diffusion susceptibility testing indicating the need for skills training on AMR surveillance. There are no standard operating procedures on AMR Surveillance or detection of pathogenic contamination even for those accredited food laboratories. ***What has the national response been to date, what are the priority sectors and value chain in the National Action Plan for AMR?*** Since 2010, a number of multi-sectoral coordination efforts have been initiated including, but not limited to an establishment of zoonoses mechanisms between the human and animal sectors guided by Tripartite partners. In 2013, it was expanded to the Zoonotic Diseases Coordination Committee which was later integrated with the Disaster Risk Management (DRM) system. Recognizing AMR as an emerging health threat, MOH and MoFALI developed and endorsed a first joint Multi-sectoral National Action Plan (MNAP) 2017-2020 with six objectives: 1) Establish a governance and ensure multisectoral role to combat antimicrobial resistance, sustainable investment and functioning; 2) Strengthen

	surveillance and diagnostic capacity for AMR and research; 3) Reduce the spread of infections through better infection prevention and control; 4) Ensure quality and safety of antimicrobial medicines; 5) Optimize the use of antimicrobials in the human and animal sectors; and 6) Raise awareness and understanding of AMR and rational use of the general public, herdsmen and health professionals. A rapid assessment of the MNAP was conducted in 2021 prior to the development of the 2nd MNAP. A working group, which consisted of representatives from MoH, MoFALI, Medicine and Medical Devices Regulatory Authority (MMDRA), General Authority for Veterinary Services (GAVS), National Center for Communicable Diseases (NCCD), the First Clinical Hospital, WHO and FAO was established to draft the 2nd MNAP. The 2nd MNAP was endorsed on 22 May 2022 after submission of this proposal. ***What have the main achievements been to date for AMR control in the country? What are the main gaps?*** MOH and MoFALI established a respective ad-hoc technical working group (aTWG) to provide technical advice for the MNAP implementation. The aTWG reviewed the MNAP implementation and provided recommendations for the next MNAP. National conferences were jointly organized in 2017 and 2019 to endorse and review the 1st MNAP. Restriction of the sale of antimicrobials is imposed resulting in dispensing of antimicrobials only by prescription hence to a steady reduction of AMC in the country. The Law on Medicines and Medical Products is currently being amended by Government to improve the legal environment pertaining to the use and sale of antimicrobials in the human and animal sector after which the amended Law will be submitted to the Parliament. The Law on Animal Health was approved in 2017 including requirements regarding prudent use of antimicrobials in the animal sector. The microbiology laboratories in both human and animal sectors were accredited with national standards in 2020. These include: NCCD Microbiology Laboratory with MNS ISO 15189:2015, and the State Central Veterinary Laboratory (SCVL) with MNS ISO/EIC 17065:2013 and MNS ISO/EIC 17025:2018. The detection of drug- resistant tuberculosis has been improved in hospitals across 21 provinces across the country through the Global Fund's donation of GeneXpert machine to 14 tuberculosis laboratories. A system to report any suspected or confirmed incidence of hospital-acquired infection (HAI) to the provincial health department and NCCD has been established in accordance with the 'Guideline to report the incidence of HAI. Moreover, in 2019 a Guideline on detection, surveillance and IPC measures for drug resistant pathogens (covering methicillin-resistant staphylococcus aureus, vancomycin-resistant enterococcus, drug resistant enterobacterium, multi-drug-resistant Acinetobacter, pseudomonas aeruginosa) was revised. WHO guidelines on AMC and antimicrobial stewardship implementation were translated into the Mongolian language and disseminated to health facilities. AMC monitoring systems are

	established at the national level and Mongolia has submitted three consequent AMC data to WPRACSS (Western Pacific Regional Antimicrobial Consumption Surveillance System). According to the rapid assessment, implementation of the 1st MNAP activities (total of 69) was found as below (the report is available upon request): - Fully implemented - 40; - Partially implemented - 20; - Not implemented - 9. Overall, the main gaps in MNAP 2017-2020 implementation were: lack of AMR pathogen and consumption/use surveillance; lack of trainings on surveillance network, insufficient usage of WHONET and laboratories of animal sector and lack of enforcement of AMR-related regulation. These activities, especially trainings have been affected by the COVID-19. These gaps were reported in the previous evaluation and performance of the Tripartite, namely the Joint External Evaluation, 2017 by WHO and the Performance of the Veterinary Services, follow-up mission, 2019 which emphasized that the need of a sustainable and coordinated approach for addressing the following areas: 1. Strengthen the implementation of coordination and collaboration between Ministries with respect to public health including AMR and AMU; 2. Establish systematic and ongoing AMR surveillance (as opposed to research- or project-based AMR studies); 3. Complete and implement prescription regulations (needed in the animal health sector); 4. Build workforce capacity at all levels (national and sub-national); 5. Improve awareness and communication on prudent use of antimicrobials tailored to targeted risk-groups including herders, farmers and veterinarians. This recommendation is also relevant to minimize the presence of residues in food products. Therefore, the MPTF proposal aims to address most of these gaps. ***Relation of the AMR programme to national planning and policy instruments and strategy (e.g. health sector strategy, One Health strategic framework).*** **The Long-term Development Policy of Mongolia – Vision 2050** (3) sets the ambitious goals to prosper its social development, economic growth, and its citizens' quality of life: - Objective 2.2: Nurture citizens with healthy habits and active lifestyle and evolve a quality, accessible and efficient health system; - Objective 2.5: "Creation of a healthy and comfortable living environment" This section includes the determination to improve food safety standards; - Objective 8.3: Develop agriculture as a leading sector of the economy that is environmentally friendly, adaptable to climate change, resilient, responsive to social development trends, needs and requirements, responsible, highly productive and sustainable. **The State Policy on Health for 2017-2026** (4) includes the following objective 2.4.6.2:

	- to prevent and control antimicrobial resistance and ensure proper use of pharmaceuticals in health and agricultural sectors; and - to carry out routine surveillance of quality and safety of drugs in the market. **The Government Plan of Action for 2020- 2024** (5): - to ensure the quality and safety of medicine and medical devices and create e-registration and e-monitoring system which also include antimicrobials under human development and health plans (2.1.8). ***Summary of ongoing or recently completed AMR efforts and the principal local, national and international actors involved in the issue.*** In recent years, several AMR control related activities were undertaken including policy development, testing AMR in food products, training of laboratory staff and raising awareness on AMR and AMC/AMU. MNAP's implementation was evaluated, and the new MNAP (2022-2025) was endorsed involving representatives from central and local institutions and international agencies. A number of these activities were supported by external funds made available by the Tripartite, see next sub-chapter. Regulation for the marketing authorization and sale of antimicrobials has been developed, revised and implemented. For registration and marketing authorization of antimicrobial and their raw materials, the following ministerial orders are currently being used for each sector: - Food, Agriculture and Light Industries Minister's Order No. A49, 2017: Regulation on registration of medicines and raw materials in the animal sector; - Health Minister's Order No. A295, 2019: Revised Regulation on registration of medicines and raw materials used in the human sector. Health professionals were trained about standard operating procedures in microbiological laboratories, biosafety, active surveillance of hospital-acquired infections, sterilization, decontamination and disinfection of surgery instruments, including re-used tools with support of the Fifth Health Sector Development project funded by ADB since 2019. Also, WHO has been supporting nationwide cascade trainings on IPC and patient triage which covered about 10, 000 health care workers. MOH with support from Western Pacific Regional Antimicrobial Consumption Surveillance System (WPRACSS) has been generating longitudinal national level antimicrobial consumption data, which visualizes a decrease in antimicrobial consumption as a whole and especially for intravenous antibiotics. The Veterinary Institute organized four trainings for skill advancements in susceptibility testing for more than 50 microbiologists. These trainings were performed in over 20 laboratories located in Zavkhan, Selenge provinces and Ulaanbaatar city.

GAVS organised a national AMU monitoring workshop for the animal health sector in 2019 through support of the WOAH in 2019 that enhanced the monitoring of antimicrobials used in animals and improved reporting of AMU data to the WOAH global AMU database.

In the animal sector, professionals practising in this field, as well as public veterinary professionals were informed and trained about antibiotic residuals in meat and poultry, and the consequences of non-prudent use of antibiotics.

The World Antimicrobial Awareness Week (WAAW) is organized since 2015. WAAW activities included conferences, informing the journalists and media representatives about the rational use of antibiotics, dissemination of information packages and leaflets, and advocacy and awareness sessions for health care professionals and the public.

How have the Tripartite organisations supported this work, and what work is ongoing? Is AMR incorporated in the strategic frameworks of each organisation?

The Tripartite has been providing technical and financial support to develop and implement national policies, strategies plan and guidelines on AMR and organize trainings and awareness raising activities.

A vision for WHO's work with Member States and partners in the Western Pacific Region (For the Future, 2020) (6), and WHO Asia Pacific Strategy for Emerging Diseases and Public Health Emergencies (APSED III, 2017) (7), are regional strategies and frameworks to guide the Member State on implementation of public health emergency including AMR in the Western Pacific Region. These regional strategies align with WHO 13th General Programme of Work (GPW13) (8) for the output 1.3.5. (Countries enabled to address antimicrobial resistance through strengthened surveillance systems, laboratory capacity, infection prevention and control, awareness-raising and evidence-based policies and practices) under 1 billion more people benefiting from Universal Health Coverage (UHC). Moreover, the Framework for Accelerating Action to Fight Antimicrobial Resistance in the Western Pacific Region (AMR Framework) was endorsed by the Member States in 2019 to guide countries to avert the impact of AMR and secure the health, social development and future of the people in the Western Pacific Region (9). It guides the formulation of sustained and future-oriented solutions through broad local and societal actions including: (i) to strengthening systems as foundation for sustainable actions; (ii) Championing health beyond the health sector; (iii) working backwards from a longer-term goal; and (iv) building solutions from the ground up, while ensuring country impact.

In 2019, the WOAH supported the General Authority of Veterinary Services (GAVS) of MoFALI in organising the first workshop on monitoring of antimicrobial usage (AMU) in livestock sector. This workshop included key stakeholders from the public and private sector that are involved in the collection and submission of AMU data to GAVS. The workshop discussed the current situation and the way forward to strengthen AMU data collection and AMU monitoring. The WOAH has

	organised seminars for national focal points of veterinary products to enhance reporting of AMU data from animal health sector of Mongolia (10). In close collaboration with FAO, WOAH also supported translation of AMR communication materials into Mongolian language targeting policy makers, veterinarians, and veterinary drug distributors which were used during the WAAW events. Moreover, a training on laboratory-based AMR surveillance in food animals for Mongolia was organized at the WOAH Collaborating Centre in Japan in 2016, 2018 and 2019. In 2021, FAO-Mongolia conducted an AMR mapping (or situation analysis) with funds made available by the Food Safety department at FAO-Headquarters. In addition, four Knowledge-Attitude-Practices (KAP) surveys amongst herders, dairy farmers, private and public veterinarians and veterinary pharmacists were conducted. In November 2021, FAO-Mongolia in its role as Technical Service Agency for the Livestock Commercialization Project (LCP – based on a loan from the World Bank) organized the workshop on the Progressive Management Pathway for AMR control (PMP-AMR). The results of the PMP-AMR workshop (report available with FAO-Mongolia) formed the basis for development of the National Action Plan on AMR (NAP-AMR) 2022-2025 for the Agricultural sector. This NAP-AMR was integrated into the Multi-Sector National Action Plan for the control of AMR (MNAP) 2022-2025 which was approved by both Ministries in May 2022. In June 2022, the Tripartite organizations organized the National Bridging Workshop which resulted into the draft Roadmap on One Health for Mongolia. One of 15 objectives of this Roadmap addressed the needs for controlling AMR and increasing AMU and AMS. The FAO ATLASS mission was carried out in June 2022, under the ACT project (AMR Codex Text (see page 8/9), assessing the AMR surveillance capacity of laboratories in the food and agriculture sectors. In October 2022, WHO/WPRO conducted a similar mission on AMR surveillance and laboratory capacity in the human health sector. Work on AMR by the Tripartite organizations is guided by the Global Action Plan on Antimicrobial Resistance, 2015 (11) and implementation of this MPTF proposal will be directed by the recent Together One Health: Strategic Framework for Collaboration on Antimicrobial Resistance, 2022 (12). ***Is AMR included in the UN Sustainable Development Cooperation Framework? If not, is there scope to facilitate this through this programme?*** The United Nations Sustainable Development Cooperation Framework (UNSDCF) Mongolia, 2023-2027, is endorsed in May 2022 closely aligned with the national development agenda as articulated in the Vision 2050. It identifies three strategic priorities: Human Development and Well-being, Green, Inclusive and Sustainable Growth and People-centred governance, rule of law and human rights. It will work towards a more holistic healthcare system based on the 'one health' principle that recognises that human health is dependent on animal and environmental health. Through this, UN will support food-based approaches

	to nutrition and health including promoting food safety and dietary diversity including protective people's right to adequate food. The interventions under this strategic priority will particularly focus on the population groups excluded and will work with national and local governance structures. *Brief summary of other actors present in AMR related initiatives in the country (e.g. donor supported action)?* Under the Fifth Health Sector Development Project (funded by ADB loan), 20 microbiology laboratories were renovated, laboratory equipment was supplied, and trainings were provided for staff from tertiary level hospitals and national specialized centers. This support also included the revision of IPC regulations and standard-operating procedures for routine microbiology and antimicrobial susceptibility testing and renovation and improvement of ventilation system of a sterilization service department of 27 hospitals. The Institute of Veterinary Medicine (IVM) Mongolian University of Life Sciences, Ministry of Education and Sciences, conducts research activities upon request by its own Ministry, the Ministry of Food, Agriculture and Light Industries and other organizations. The State Central Veterinary Laboratory (SCVL), GAVS is the leading laboratory for the national veterinary diagnostic laboratory network. Its primary task is to confirm suspect cases of priority animal diseases (transboundary animal diseases and zoonotic infections). In addition, its food-safety department performs tests to detect drug residues in agricultural raw materials and products. Regarding AMR surveillance, SCVL has the role to enhance AMR surveillance at both national and subnational level and conduct training for laboratory staff in the laboratory network. The General Agency for Specialized Inspection (GASI) is responsible for ensuring the safety and quality of raw materials and food products as well as medical products. Although it currently is not performing routine tests on AMR, GASI will establish AMR testing in food products with support of the ACT project (next paragraph). In January 2022, the Government of Republic of Korea through FAO-Mongolia initiated the AMR Codex Standards (ACT) project with aims to promote the Codex Alimentarius standards, in particular those related to food-borne AMR. This project has three components 1. Promotion of the Codex Alimentarius standards; 2. Surveillance for AMR in the food chain; 3. Raising awareness and promoting good practices with priority sectors in the food chain. Under the Livestock Commercialization Project (World Bank loan), support on advocacy to control AMR and raising awareness on prudent use of antimicrobials is available. Concrete activities for 2022 and 2023 are planned according to the NAP-AMR 2022-2025 for the Agricultural sector.

Status of National Action Plan for AMR	*When was the National Action Plan for AMR developed?* A first national strategy on antimicrobial resistance and rational use of antibiotics in Mongolia, 2012-2016 with 6 strategic objectives was endorsed in 2012 by MOH. Recognizing the need of collaboration between human and animal and agriculture sectors, a first National Multi-sectoral Action Plan to combat AMR, 2017-2020 was endorsed jointly by MOH and MoFALI in May 2017 aligned with the WHO Global Action Plan on Antimicrobial Resistance. The second MNAP is already endorsed in May 2022. Recently, a Multi-sectoral Coordination Committee (MSCC) is established by a joint order (A/531 and A/331) of the minister of health and the minister of agriculture on 24 October 2022. The main role of the MSCC is to ensure implementation of the MNAP 2022-2025 through multi-sectoral involvement and participation. A first meeting of the MSCC will be organized during the 2022 WAAW in November. *When was the last progress report?* There is a government mechanism to evaluate national plans and programmes which progress, and result is reported to the Cabinet and respective Ministers. A rapid assessment of the MNAP implementation was carried out in 2021 with support of the Tripartite organizations and its preliminary results are released. The overall implementation was 87% (40 activities fully and 20 activities partially implemented) while nine out of 69 activities were not implemented. The gaps included the AMR pathogen and consumption/use surveillance including capacity building on surveillance network, insufficient usage of WHONET and laboratories of animal sector and enforcement of AMR-related regulation. Most of these activities were affected by the COVID-19. *Are there plans to refresh the NAP (if so when and over what time frame)?* The 2nd Multi-sectoral National Action Plan (MNAP) for 2022-2025 was developed under coordination of the multi-sectoral working group which was established by the health minister in agreement with other ministries, in close collaboration with the Tripartite agencies. This 2nd MNAP was endorsed by MoH and MoFALI on 22 May 2022. *How often does the AMR coordination committee meet?* On 24 October 2022, a Multi-Sectoral Coordination Committee (MSCC) is established by the joint order of health and agriculture ministers (A521/A331). The main role of the MSCC is to ensure implementation of the MNAP 2022-2025 through with multi-sectoral involvement and participation. A first meeting of the committee will be organized during the 2022 WAAW. In line with regulation for MSCC, a meeting will be held every 6 months to review a progress of the MNAP implementation. *Which sectors are actively engaged in the committee?* Both the human and agricultural sector are actively engaged in the MSCC. From the human health sector, the following organizations and institutes are represented:

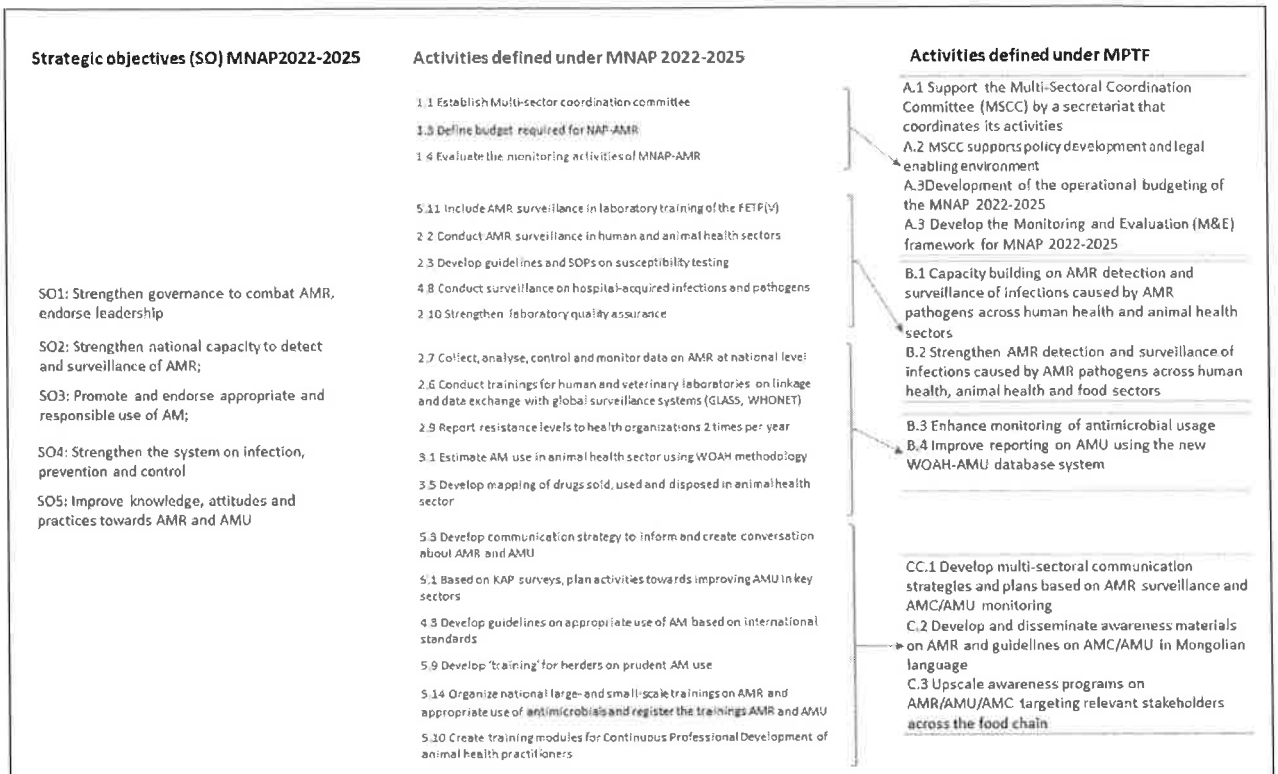
	• Ministry of Health:
	  o Medical Service Department;
	  o National Centre for Communicable Disease (NCCD);
	• Medicine and Medical Device Regulatory Authority
	
	From the agricultural sector, the following organizations and institutes are represented:
	• Ministry of Food, Agriculture and Light Industries;
	• General Authority for Veterinary Services;
	
	Moreover, the 2nd MNAP emphasizes the importance of inclusion of the environmental sector for coordination and governance of AMR. Coordination and collaboration is much sought-after with regard to reviewing the AMR-related legislation on the protection of the environment. In particular, protection from waste-management by health facilities, industries, food producers and animal health service providers. In addition, the need for raising awareness and advocacy of the environmental impacts of AMR. When necessary, changes made in the legislation to involve environmental sector in the coordination and governance of AMR the joint ministries order on MSCC can be revised accordingly.
	
	In addition, the Ministry of Education and Sciences, represented by the Institute for Veterinary Medicine, the General Agency for Specialized Inspection are directly represented.
	
	To which entity does the AMR national coordination committee report?
	The MSCC will report to the respective ministers who report to the Cabinet and the Prime Minister. The committee's roles and responsibilities are developed and approved by joint ministers' order.
	
	Is the private sector involved?
	Private health care providers (private hospitals and private veterinary clinics) are involved especially in the MNAP with respect to strengthening their capacities to use antimicrobials prudently. All health care facilities (public and private) must be accredited in order to be eligible for health insurance funding. Accreditation indicators include AMR (such as establishment of antimicrobial stewardship program in hospitals) activities undertaken in health care facilities.
	
	Is civil society involved?
	The "Medicine" association (NGO representing human medicines producers and wholesalers) is involved, especially in advocacy and awareness raising among its members. Relevant medical and veterinary associations representing Family health and Soum (district) doctors, and private veterinarians, are involved to use antimicrobials prudently and to raise awareness with patients and herders on the risks of AMR.
	
	The Society of Consumer Protection (each province) and Coalition of Society of Consumer Protection monitor implementation and enforcement of the Law of Consumer Protection. Amongst others, activities of consumer protections groups can include making claims to the court to protect rights of the consumers whose legitimate rights have been infringed and make proposals and demands to the

	government agencies and business entities to improve the quality and ensure the safety of products and services and services in all sectors. ***Is academia involved?*** Academia is involved in two different areas: - AMR research: the National Center for Public Health and NCCD are involved for the health sector while IVM is involved for the agricultural sector; - AMR Awareness: The Mongolian National University of Medical Science, the University of Life Sciences and the School of Veterinary for the WAAW, curriculum development and education of under-graduates on AMR-related areas. ***How do the Tripartite organisations support the NAP committee and national coordination?*** The Tripartite intends to support the work of MSCC by providing technical backstopping support to the secretariat as indicated in this proposal. Besides, the Tripartite will work closely with their relevant members of the MSCC in each sector in implementing activities in the MNAP. The Tripartite organisations provide latest information on AMR/AMU at global and regional levels and other technical guidance related to AMR/AMU to the MSCC.
Project Summary	
Impact	1. Countries make explicit commitments (policies, investment plans, programmes, legal frameworks, resources allocations) on AMR based on evidence and quality data 2. AMU associated behaviours and practices sustainably improved in critical sectors
Outcome(s)	1. Risks and benefits of AMR are reflected in the national budget and in development/multi-lateral partner sector-wide investments 2. Evidence-based data on AMR/AMU improved for policymakers and sectors implementing AMU practices 3. Improved understanding of AMR risks and response options by targeted groups
Outputs and Key activities	**Output A.** Improved capacity for designing and implementing AMR-related policy frameworks, investment plans and programmes Rationale: the functionality of multi-sectoral coordination needs to be made more effective and coordinated through the support of a Secretariat. A.1 Support the Multi-Sectoral Coordination Committee (MSCC) by a secretariat that coordinates its activities A.2 MSCC supports policy development and legal enabling environment A.3 Development of the operational budgeting of the MNAP 2022-2025 A.4 Development of the Monitoring and Evaluation framework for MNAP **Output B.** Systems for generating, analysing, and interpreting data on resistance and consumption/use patterns developed Rationale: Capacity and surveillance on AMR needs to be established across national laboratories and expended to provincial laboratories. Concurrently, the use of antimicrobials needs to be well mapped to allow for AMU monitoring in key sectors.

	B.1 Capacity building on AMR detection and surveillance of infections caused by AMR pathogens across human health and animal health including environment sectors B.2 Strengthen AMR detection and surveillance of infections caused by AMR pathogens across human health, animal health, environment, and food sectors B.3 Enhance monitoring of antimicrobial usage B.4 Improve reporting on AMU using the new WOAH-AMU database system **Output C.** Improved capacity to design awareness raising, behaviour change and educational activities Rationale: An over-arching communication strategy on AMR and AMC/AMU will help to guide the development and dissemination of awareness campaigns for key sectors. C.1 Develop multi-sectoral communication strategies and plans based on AMR surveillance and AMC/AMU monitoring C.2 Develop and disseminate awareness materials on AMR and guidelines on AMC/AMU in Mongolian language C.3 Upscale awareness programs on AMR/AMU/AMC targeting relevant stakeholders across the food chain

Link to National Action Plan	***Paragraph summarizing the expected contribution to the achievement and indicating relevant objectives of National Action Plan*** A rapid assessment of the National Multi-Sectoral Action Plan on AMR (MNAP) (2017-2020) implementation conducted in 2021 identified main gaps and challenges that have been set as priority areas in the MNAP. These include amongst others, need for stronger governance and coordination between and within Ministries; partnerships and financing; need of public awareness and advocacy on antibiotic use and implementation of good practices on agriculture; disease prevention in animal and human sectors as reflected in the previous and current updated draft of the MNAP. The current, second MNAP for 2022-2025 have the following strategic objectives (SO): SO1. To strengthen AMR governance mechanism with focus on establishing a multi-sectoral committee to develop and discuss annual action plan to implement MNAP, monitor implementation of the planned activities SO2. Improve the detection and surveillance of antimicrobial resistance, to strengthen the capacity to collate, analyse and inform data on antimicrobial resistance on national level. SO3. Control the use of antimicrobials, reduce inappropriate use of antimicrobials, and strengthen responsible use of antimicrobials by implementing effective stewardship programs. SO5. Raise awareness of antimicrobials among community, professionals, incorporate the training modules in high school curricula, improve knowledge and assure the practice In Table 1, the relation between the activities defined under the MNAP 2022-2025 (under the defined strategic objectives) and the proposed activities under MPTF 2022-2025 are illustrated

Table 1. Relation between strategic objectives and activities defined under the National Multi-sector Action Plan for AMR control 2022-2025 and the proposed activities under the MPTF proposal



Link to country's development priorities	**"Vision-50" Long-Term Development Policy of Mongolia** (4) has a vision to build safe environment to ensure the population's good health and well-being. The Vision has 3 stages with specific strategic objectives: - Health vision is defined under human development part (2.2): Habituate citizens with healthy habits and active lifestyle and develop quality, accessible and efficient health system. It ensures evidence-based diagnostics and treatments and focused on creating and promoting healthy environment and lifestyle; - Human-friendly living environment strategic objective (2.5) has goals to ensure safe food production and supply, reducing air, water and soil pollution, proper waste management; - Sustainable agriculture vision is to develop agriculture as a leading sector of the economy that is environmentally friendly, adaptable to climate change, resilient, responsive to social development trends, needs and requirements, responsible, highly productive and sustainable with strategic objective (8.3) to protect the livestock and animal health, meet hygiene and sanitation requirements of animal raw materials and products, protect the public health. **The State Policy on Health for 2017-2026** (5) includes the following objective 2.4.6.2: - to prevent and control antimicrobial resistance and ensure proper use of pharmaceuticals in health and agricultural sectors; and

	- to carry out routine surveillance of quality and safety of drugs in the market. **The Government Plan of Action for 2020- 2024** (6): - to ensure the quality and safety of medicine and medical devices and create e-registration and e-monitoring system which also include antimicrobials under human development and health plans (2.1.8).
We the responsible officers of the Tripartite organisations take responsibility for the efficient delivery of this proposal. We confirm that the proposal has been developed in close collaboration with government counterparts and that it is aligned with the wider agenda around the Sustainable Development Goals. We will work to ensure that addressing AMR is appropriately included in the United Nations Sustainable Development Cooperation Framework, and that there is a strategy to sustain and scale up the outputs of this work	
Signatures of responsible Tripartite and UNEP representatives[3]	
Name Vinod Ahuja FAO Mongolia representative	[redacted]
Dr Hirofumi Kugita WOAH Regional Representative	[redacted]
Dr Anuzaya Purevdagva Officer in charge of WHO Representative	[redacted]
NB: Government endorsement of the programme is required before the proposal can be submitted to the Steering Committee. Please sent a letter of support from the government with this proposal.	

Joint Programme Description

1 Baseline and situation analysis

1.1 Problem statement (max 1 page)

Explain the problem to be addressed. Outline how Tripartite and UNEP action will support national efforts to address such challenges and accelerate progress towards sustainable implementation of the National Action Plan for AMR. This section should emphasize the most critical needs / gaps that the joint Tripartite and UNEP programme will address. Draw on relevant analysis and information from national and international sources.

Mongolia was reported to have the highest antibiotic consumption in the Western Pacific Region, with an estimated 64.4 DDD per 1000 inhabitants per day. Mongolia heavily depends on importation as almost 70% of all required essential medicines are imported from overseas, an estimated 30% of total medicines used were antimicrobials. Mongolia introduced the multi- sectoral national action plan (MNAP) to combat antimicrobial resistance in May 2017.

[3] Electronic signatures are authorised

For more than 10 years, the Government of Mongolia has realized the need for better coordination in the area of One Health. It has established a coordination mechanism under the Disaster Risk Management system across multiple sectors that included the control of AMR.

A major achievement to set the framework for multi-sectoral collaboration was the development of the "Regulation on Information Exchange between Sectors and Rapid Response during Potential Disasters and Public Health Emergencies", approved by the Deputy Prime Minister in 2017.

As a result, the MNAP 2017-2020 was implemented through different Ministries and Agencies while it was realized that coordination and collaboration between sectors is not existing in a way to progress AMR control substantially. The second NAP-AMR or MNAP 2022-2025 emphasizes the importance of environmental sector in the area of coordination and governance of AMR as an important player in the multisectoral committee.

The external evaluation of the International Health Regulations (WHO-JEE 2017) and the Veterinary Services (OIE-PVS 2019) are key-documents for Mongolian public health and veterinary authorities to strengthen and improve its functionalities and performances. Both evaluations and the recent PMP-AMR workshop provided clear recommendations and actions points to consider improving the control of AMR and prudent use of antimicrobials (Table 2).

Table 2. Overview of identified gaps on AMR control and 28 proposed activities under the Mongolian MPTF project

Gaps	MPTF proposal activities
Mechanisms and practices for information sharing and risk assessment across sectors (human health, environmental and tourism sector, wildlife sector, other sectors) and at sub-national level are not sufficiently in place	**A.1 Support the Multi-Sectoral Coordination Committee (MSCC) by a secretariat that coordinates its activities** A.1.1 Assessment of current multi-sectoral coordination mechanism (gaps and needs identification) A.1.2 Completion of the annual TrACSS survey A.1.3 Annual and advocacy meetings using results of A.3 and A.4 **A.2 MSCC supports policy development and legal enabling environment** A.2.1Review of current legislation and policies on AMR in all relevant sectors
National Multi-sectoral Action Plan for control of AMR 2022-2025 (MNAP) lacks operational budgeting and an monitoring and evaluation framework	**A.3 Development of the operational budgeting of the MNAP 2023-2025** A.3.1: Train secretariat staff on operational budgeting A.3.2 Operational plan is budgeted for by secretariat A.3.3 Operational plan and budget of MNAP is reviewed and agreed by MSCC **A.4 Develop the Monitoring and Evaluation (M&E) framework for MNAP** A.4.1 Train secretariat staff on developing a M&E framework A.4.2 M&E framework for MNAP is developed by secretariat A.4.3 M&E framework is reviewed and agreed by MSCC
Capacity and capability for systematic AMR surveillance in human- and animal health sectors lacks	**B.1 Capacity building on AMR detection and surveillance of infections caused by AMR pathogens across human health and animal health including environment sectors** B.1.1 Development of policy document on AMR surveillance of infections caused by AMR pathogens across human health, animal health and food sectors and develop training materials on AMR surveillance B.1.2 Conduct training of trainers at national level of human and animal health sectors B.1.3 Integrate training with existing Field Epidemiology Training Programme (FETP) for human health, animal health and environment health through update curriculum of FETP with AMR surveillance B.1.4 Roll out training to relevant national level institutes
Current AMR activities are project based, there is lack of systematic AMR surveillance in both	**B.2 Strengthen AMR detection and surveillance of infections caused by AMR pathogens across human health, animal health, environment, and food sectors** B.2.1 Establish AMR surveillance in national (5 laboratories) a – diseased humans and animals b – priority pathogens in the food-chain and environment

human, and animal health sector.	by development and adoption of standardized and integrated operating procedures for sampling, testing and analyses B.2.2 Development and introduction of national standardized methods for antimicrobial susceptibility testing, including quality assurance (internal and external); B.2.3 Development of proper data collection, management, analysis and reporting across multiple sectors (human health, animal health, food) to contribute information to the Tripartite Integrated System for Surveillance of AMR/AMU (TISSA), WHONET and GLASS
There is no systematic reporting of AMR results within Mongolia and with international organizations Lack of mapping of antimicrobial usage in animal health sector, in particular with regard to disposal of antimicrobials	**B.3 Enhance monitoring of antimicrobial use** B.3.1 Add an online functionality to the Mongolian Animal Health Information System (MAHIS) for private sector to record procurement and use of antimicrobials B.3.2 Organize follow-up workshop (WOAH 2019) on the use and disposal of antimicrobials in both human and animal health areas
Within animal health sector, regulations on by-prescription-only need to enforcement	**B.4 Improve reporting on AMU using the new WOAH-AMU database system** B.4.1 Develop training on using the WOAH -AMU database system for the Mongolian context and in Mongolian language B.4.2 Conduct training to populate and report on AMU using the new WOAH AMU database system
No multi-sectoral communication strategy on AMR and AMU exists	**C.1 Develop multi-sectoral communication strategies and plans based on AMR Surveillance and AMC/AMU monitoring** C.1.1 National consultation workshops to identify the key communication gaps and activities on AMR/AMU/AMC C.1.2 Development of national AMR/AMU/AMC communication strategy for Mongolia
There is insufficient awareness and coordination with all stakeholders on prudent use of antimicrobials	**C.2 Develop and disseminate awareness materials on AMR and guidelines on AMU/AMC in Mongolian language** C.2.1 Designing and development of AMR/AMU/AMC communication materials in Mongolian language targeting prudent use of antimicrobials in human, animal and environmental sectors; promoting alternatives to antimicrobials such as vaccination, biosecurity, good husbandry practices. C.2.2 Translation, printing, and distribution of the joint IEC materials on AMR and AMC/AMU **C.3 Upscale awareness programs on AMR/AMU/AMC targeting relevant stakeholders across the food chain** C.3.1 Conduct awareness activities during WAAW using the IEC materials at national and sub-national levels C.3.2 Private sector seminar on responsible and prudent use of antimicrobials targeting relevant livestock sectors including herders C3.3 Seminars for Veterinary Education Establishments (VEE) on WOAH Standards on Veterinary Education Curriculum for containment of AMR

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

List the Outcome(s), Output(s) adopted from Tripartite and UNEP Results Matrix (Appendix 3) and Activities that are designed with the focus of this joint Tripartite and UNEP programme and identify indicators and baseline data that can be used to measure programme progress.

The activities defined under Outputs A, B and C are defined in 11 work-areas (A.1-A.4, B.1-B.4 and C.1-C.3). For each output, one or more indicators are defined. See Table 3.

Table 3. Proposal results matrix: Outcome, output, activities and indicators.

Outcome	Output	Activities (short text)	Indicators (MPTF)
Risks and benefits of AMR are reflected in the national budget and in development/ multi-lateral partner sector-wide investments	A. Improved capacity for designing and implementing AMR-related policy frameworks, investment plans and programmes	A.1 Support of the MSCC by a secretariat that coordinates its activities A.2 MSCC supports policy development and legal enabling environment A.3 Development of an operational budget of the Multi-sectoral National Action Plan on AMR 2022-2025 (MNAP) A.4 Development of a Monitoring and Evaluation (M&E) framework for MNAP	Fully functional AMR Multi-sectoral Coordination Group established and supported by a Secretariat (1a, MNTF = TrACSS 4.1D) Review of AMR legislation and policies in relevant sectors Operational plan for implementing national action plan on AMR developed and updated with associated budget consideration (1c, MPTF = TrACSS 5D) M&E framework for NAP-AMR
Evidence-based data on AMR/AMU improved for policymakers and sectors implementing AMU practices	B. Systems for generating, analysing and interpreting data on resistance and consumption /use patterns developed	B.1 Capacity building on AMR detection and surveillance of infections caused by AMR pathogens across human health, animal health, and environment and food sector	A pool of trainers at national level is capable to train provincial laboratory staff on AMR surveillance
		B.2 Strengthen AMR detection and surveillance of infections caused by AMR pathogens across human health, animal health, environmental and food sectors	Increased number of laboratories (5 at national level) have capacity to perform antimicrobial susceptibility testing and bacterial isolation and identification according to international standards (4b. MPTF)
		B.3 Enhance monitoring of antimicrobial use.	MSCC is supported by Tripartite to review data and data quality on AMU/AMC and AMR in relevant sectors (4a, MPTF)
		B.4 Improve reporting on AMU using the new WOAH -AMU database system	GAVS can submit to the WOAH reporting Option 3 level of AMU data for animal sector (4c, MPTF)
Improved understanding of AMR risks and response options by targeted groups	C. Improved capacity to design awareness raising, behaviour change and educational activities	C.1 Develop multi-sectoral communication strategies and plans based on AMR surveillance and AMC/AMU monitoring	A national AMR/AMU communication strategy developed and implemented targeting priority stakeholder groups based on stakeholder analysis and targeted messages within sectors (7b, MPTF; TrACSS 6.1E)
		C.2 Develop and disseminate awareness materials on AMR and guidelines on AMC/AMU in Mongolian language	Appropriate AMR/AMU communication materials developed and disseminated for nationwide awareness campaigns (7b, MPTF; TrACSS 6.1E)

	C.3 Upscale awareness programs on AMR/AMU/AMC targeting relevant stakeholders across the food chain	National and sub-national awareness events held including the WAAW campaigns (7a, MPTF; TrACSS 6.1D)

2 Programme strategy

2.1 Overall strategy (max 2 pages)

Summarize the strategy of the joint Tripartite and UNEP programme, including:

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

b) why it is better than alternative approaches;

The Tripartite (FAO-WOAH-WHO) organizations are well positioned to support this project having worked together on one health, zoonoses and on AMR/AMU in the Asia Pacific Region for many years. We are committed to working together aligning our activities and priorities in addressing health threats at the animal-human- ecosystems interfaces and in doing so have developed tools, guidelines and strategies to support its implementation. The emergence of new and existing animal diseases, including zoonoses, the growing threat of transboundary animal diseases, the impact of environmental changes and globalization, as well as new societal demands related to food security, food safety, public health and animal welfare, emphasize the critical need for collaboration between the three organizations by applying a comprehensive One Health approach (13). This One Health approach was further stressed and elaborated during the National Bridging Workshop that was organized by the Tripartite on 15-17 June 2022 involving the Ministry of Environment and Tourism.

The proposed MPTF proposal activities are directly in line with Mongolia's MNAP 2022-2025 to combat AMR which emphasises the use of one health approach towards addressing AMR in Mongolia, see Table 1, page 13.

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

The Tripartite and UNEP will reinforce the concept of one health and multisectoral collaboration in developing and implementing the MPTF project activities in close consultation with the key stakeholders in Mongolia. As the MNAP-2022-2025 was endorsed at the time of finalizing this MPTF proposal, the Tripartite had regular and intensive consultations with the multi-sectoral working group to align the objectives and activities well with the MPTF project objectives and activities. This resulted in the current MPTF project proposal in which the proposed activities and requested funds are directly supporting the defined MNAP 2022-2025 activities. In addition, this MPTF project aims to support strong governance of AMR control by government stakeholders and continue joint planning and implementation of the MNAP activities in close collaboration of relevant stakeholders and the MSCC.

d) what will be the added value of the Tripartite and UNEP;

The Tripartite and UNEP is well placed to add value to MPTF project designing and implementation in Mongolia given its expertise at global and regional AMR activities. FAO, WHO, WOAH and UNEP have access to global and regional networks working on AMR and has strong relationship with the government in Mongolia. The Tripartite along with other development partners has been supporting Mongolia in their efforts to develop and implement policies, strategies and guidelines on combating AMR.

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

The WHO Global Action Plan on AMR emphasises the multisectoral approach in addressing AMR and therefore the Tripartite and UNEP is well positioned to catalyse multisectoral approach in development, implementation and monitoring of the MPTF project for Mongolia. The quadripartite strategic framework for collaboration on AMR 2022 also emphasises the use of one health in addressing AMR.

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

One of the key activities listed in the proposed MPTF project is the strengthening of governance mechanisms for implementation of Mongolia's MNAP on AMR by setting up a high level multisectoral coordination committee supported by a secretariat. The approach of such multisectoral coordination committee (MSCC) was supported during the National Bridging Workshop (15-17 June 2022) and positioned as a technical working group under the National One Health Coordination Committee (NOHC) chaired by the Deputy Prime Minister. The NOHC will secure sustainable funding mechanism to implement One Health activities, including the AMR coordination activities. This is in line with how the newly endorsed MNAP 2022 – 2025 aims to secure governance of AMR control activities.

Although initially the Secretariat will be established and supported technically and financially by the project, the Tripartite AMR-MPTF team intends to strengthen the roles and responsibilities of the Secretariat thus ensuring sustainability of implementation of MNAP. As the government has recently ordered the establishing of the MSCC AMR, an indication that is willing to invest in a governance mechanism. A clear monitoring and evaluation framework will also enable decision making and better transparency of ownership.

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

Following the Global Action Plan, FAO developed an action plan for Antimicrobial Resistance 2021–2025 support the food and agriculture sectors in implementing the Global Action Plan on Antimicrobial Resistance. There are four focus areas: i) improve awareness on antimicrobial resistance and related threats; ii) develop capacity for surveillance and monitoring antimicrobial resistance and antimicrobial use in food and agriculture; iii) strengthen governance related to antimicrobial use and antimicrobial resistance in food and agriculture; and iv) promote good practices in food and agriculture systems and the prudent use of antimicrobials. WHO Framework for Accelerating Action to Fight Antimicrobial Resistance in the Western Pacific Region was endorsed by the Member States in 2019 to guide countries to avert the impact of AMR and secure the health, social development and future of the people in the Western Pacific Region (10). It guides the formulation of sustained and future-oriented solutions through broad local and societal actions including: (i) to strengthening systems as foundation for sustainable actions; (ii) Championing health beyond the health sector; (iii) working backwards from a longer-term goal; and (iv) building solutions from the ground up, while ensuring country impact. In 2016, the WOAH Strategy on Antimicrobial Resistance and the Prudent Use of Antimicrobials was published to outline strategies in the animal health sector (OIE 2016). FAO, WHO, WOAH and UNEP recently released the "Strategic Framework for Collaboration on Antimicrobial Resistance" which again emphasises the use of one health approach in addressing AMR threats at human-animal-environment interface at the global, regional and country level.

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

It is anticipated that through this MPTF project the implementation of the MNAP 2022-2025 will be advanced at the levels of at least four out of five strategic objectives (governance, AMR surveillance, prudent use of antimicrobials, better (if not best) practices of antimicrobial use) by adopting a multi-sectoral, coherent, comprehensive and integrated approach towards suitable prevention and containment of antimicrobial resistance in Mongolia.

2.2 Theory of Change (max 2 pages)

There is no standard methodology for developing a Theory of Change (ToC). However, any ToC should address how the envisaged broader systemic change is expected to emerge, and what the contribution of the joint Tripartite programme is expected to provide.

The ToC is not a plan or a results framework but the description of the rationale behind those. The ToC provides the basis for managing for results. Managing for results starts during the preparation and planning phase of programmes. The ToC can be described as the intended change process and depicts how the causally related results occur in the programmes environment. It captures a shared understanding of the path that leads to the desired objective (change), in a form that is understandable to all actors. The ToC addresses the following questions:

- *What results (please refer to Tripartite Results Matrix) are the Tripartite collaboration trying to achieve?*

Through this proposal on One Health Approach to AMR control and prudent use of antimicrobials, the Tripartite organizations in close collaboration with local public health and veterinary authorities aim to extend the understanding on risks to antimicrobial resistance and improve behaviours and practices about the use of antimicrobials. The MPTF offers an unique opportunity for key stakeholders (both local and international) to improve the national capacity for implementing the newly defined MNAP 2022-2025, to establish a systematic approach to AMR surveillance, to enhance the monitoring of antimicrobial use and consumption in different sectors and to address the need to better inform primary users of antimicrobials on the risks of antimicrobial resistance caused by over- and misuse of antimicrobials.

The engagement of key stakeholders is evidenced by the fact that the MNAP 2022-2025 was endorsed in May 2022 and that the MSCC was established by a joint order of the Ministry of Health and the Ministry of Food, Agriculture and Light Industry.

At the end of this project, it is expected go through the established and functional multi-sectoral coordination committee evidence-based data support to set out long-term policies to combat AMR. Evidence-based data are generated by systematic AMR surveillance in the human- and animal health sectors through standard operating procedures that are monitored for their quality and in line with international standards. These data are shared with international databases to allow the Tripartite to have a good understanding of the AMR and AMU/AMC situation in Mongolia. Having data shared will potentially allow the Tripartite to seek additional funds to deepen some of the work-areas of this proposal and/or to complement other activities under the MNAP 2022-2025.

This project also aims to initiate changes on the use/prescription of antimicrobials by general practitioners, hospital doctors, veterinary practitioners and local herdsmen (herders). To this end, a multi-year communication strategy will be developed, and relevant materials to raise awareness for different target audiences will be produced.

- *What is the priority objective from the perspective of project partners?*

With the MSCC recently approved, the primary objective is to support a secretariat that fully enacts the objectives and targets of the MSCC. The Tripartite will use its good networking and influence to realize the importance of functioning of intersectoral coordination mechanisms and therefore the effective implementation of the MNAP 2022-2025. The Tripartite will provide their technical expertise and will continue motivating stakeholders to remain engaged on the coordination and implementation of the activities.

From the perspective of the project partners, it is important that the results of this MPTF will match and complement the outcomes of other ongoing and future projects. This is another area where the role of the MSCC is pivotal.

There is no question as to the importance of addressing the risks of AMR and AMU in Mongolia. However, there is a clear need to have policy makers address these risks at both highest (advocacy) and lowest levels

(awareness raising) and to have the Government of Mongolia commit itself for long-term engagement through. In this respect, the project is clearly aimed at supporting the newly developed MNAP 2022-2025 through aligning the defined activities directly with the strategic objectives and activities defined in the MNAP.

Under output B, the main result expected is that this project establishes the systematic surveillance of AMR in livestock and in humans and also AMU/AMC monitoring. Until now, AMR testing is conducted project-based thus lacking consistency and uniform structure.

Under output C, the project aims to define a long-term communication strategy for multiple target audiences. Having such communication strategies developed, will immensely support the direction of who (relevant stakeholders) to communicate on what (key message), when, and how (methodology).

- *How do different results relate to each other?*

Twenty-eight activities are defined under this project. These come under 11 focus areas that are related to three defined outputs and three defined outcomes. Outcomes are directly related to one-another and to the MNAP 2022-2025 (see Table 1, page 13).

- *What does the project assume responsibility for?*

The Tripartite partners assume responsibility for the correct planning, implementation and monitoring of the defined activities and the defined indicators (under Annexes 1 and 4). In addition, the Tripartite partners have long-standing relations with the key stakeholders (MoH, MoFALI, MoET and their related agencies and institutes, as well as private sector stakeholders such as private vets and herders. These relationships will be used to influence and support key stakeholders to establish One Health approach on AMR control. The project will advocate the importance of inter-sectoral coordination to safeguard the sustained control of AMR.

- *What contributions do partners make towards achieving results?*

The Tripartite partners contribute to achieving results through providing technical support on AMR related areas including, but not limited to surveillance antimicrobial stewardship and effective communication strategies. The national partners will coordinate and implement the activities by applying their knowledge and experiences so far acquired in the fields of AMR and AMU. In addition, the national partners have a good understanding of the needs and gaps that need to be addressed for each of the three defined outputs.

- *Can the objectives be achieved using the resources that the partners are able to provide?*

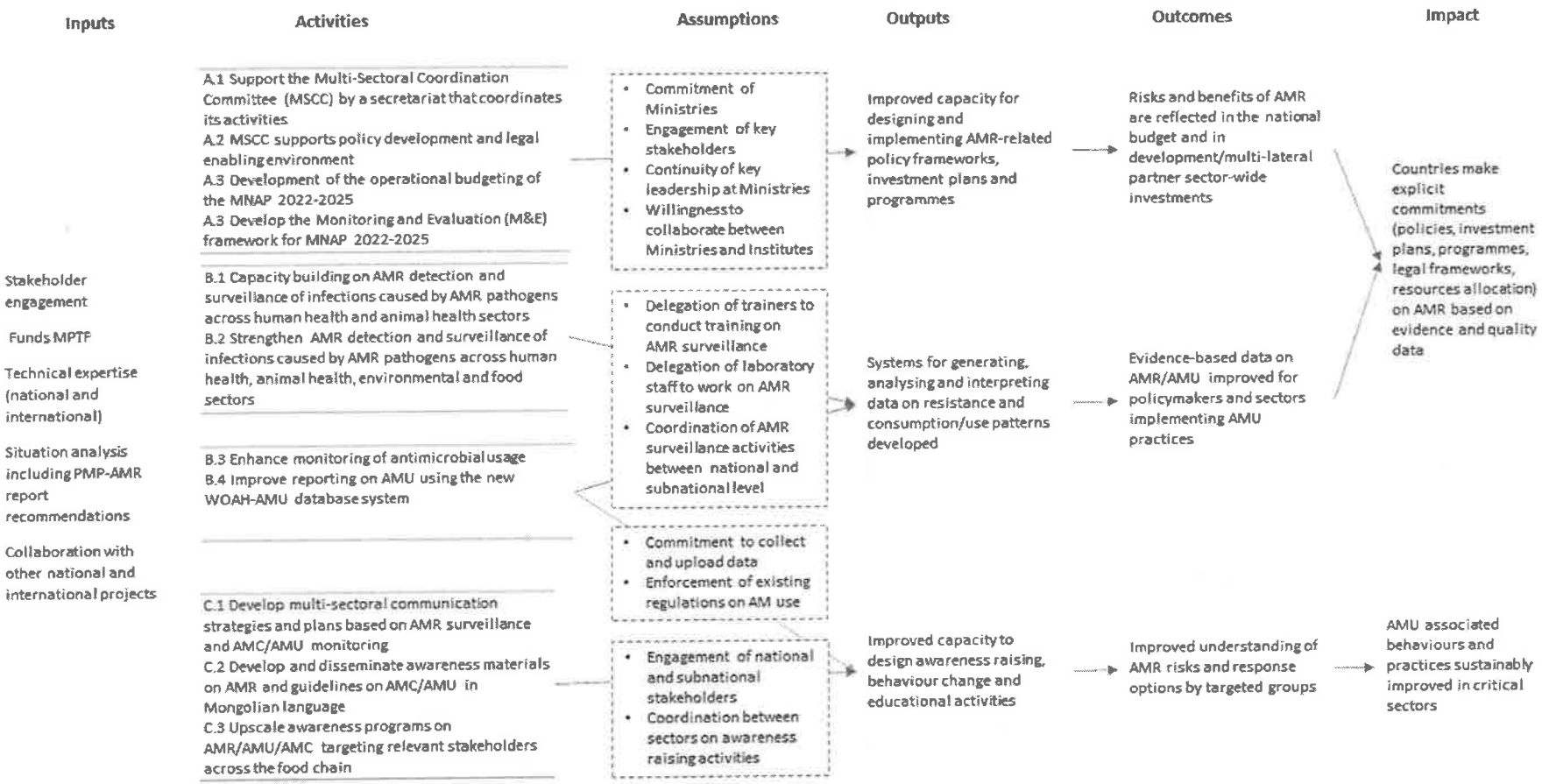
The project activities are implemented by a network of organizations, both international and national. The oversight is with the Tripartite and its national partners. With the funds available under this project, the project partners feel confident and are keen to achieve the project expected results with the resources available.

The results of the project are also dependent on a number of key assumptions underlining the Theory of Change:

- To have government stakeholders responsive to required changes to law and regulations to make an One Health approach on AMR and prudent use of antimicrobials work;
- To have continuity of key leadership at the different Ministries;
- To have policy makers, health care practitioners, dispensers and other key stakeholders commit to applying, promoting and monitoring the prudent use of antimicrobial agents based on the evidence, and guidelines generated through the activities

- To consider that the communication strategies and identified activities are the most appropriate way to engage target groups and to increase their understanding of AMR risks and AMU behaviours.
- To have stakeholder's understanding that any changes in understanding of AMR risk also contributes to changes in behaviours for optimized AMU in critical sectors

Table 4. Theory of Change of MPTF proposal



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

- *Describe the Tripartite and UNEP activities and outputs and outline the interrelationship between them and how they can contribute to the outcome.*

The 28 activities defined under this proposal are related to 11 focus or working areas.

A.1 Support establishment of the Multi-Sectoral Coordination Committee (MSCC) by a secretariat that coordinates its activities

A.1.1 Assessment of current multi-sectoral coordination mechanism (gaps and needs identification)

A.1.2 Completion of the annual TrACSS survey

A.1.3 Annual and advocacy meetings using results of A.3 and A.4

A.2 MSCC supports policy development and legal enabling environment

A.2.1 Review of current legislation and policies on AMR in all relevant sectors

A.3 Development of the operational budgeting of the MNAP 2022-2025

A.3.1: Train secretariat staff on operational budgeting

A.3.2 Operational plan is budgeted for by secretariat

A.3.3 Operational plan and budget of MNAP is reviewed and agreed by MSCC

A.4 Develop the Monitoring and Evaluation (M&E) framework for MNAP

A.4.1 Train secretariat staff on developing a M&E framework

A.4.2 M&E framework for MNAP is developed by secretariat

A.4.3 M&E framework is reviewed and agreed by MSCC

B.1 Capacity building on AMR detection and surveillance of infections caused by AMR pathogens across human health and animal health sectors

B.1.1 Development of policy document on AMR surveillance of infections caused by AMR pathogens across human health, animal health and food sectors and develop training materials on AMR surveillance

B.1.2 Conduct training of trainers at national level of human and animal health sectors

B.1.3 Integrate training with existing Field Epidemiology Training Programme (FETP) for human health, animal health and environment health through update curriculum of FETP with AMR surveillance

B.1.4 Roll out training to relevant national level institutes

B.2 Strengthen AMR detection and surveillance of infections caused by AMR pathogens across human health, animal health and food sectors

B.2.1 Establish AMR surveillance in national (5 laboratories)

a – diseased humans and animals

b – priority pathogens in the food-chain and environment

by development and adoption of standardized and integrated operating procedures for sampling, testing and analyses

B.2.2 Development and introduction of national standardized methods for antimicrobial susceptibility testing, including quality assurance (internal and external);

B.2.3 Development of proper data collection, management, analysis and reporting across multiple sectors (human health, animal health, food) to contribute information to the Tripartite Integrated System for Surveillance of AMR/AMU (TISSA), WHONET and GLASS

B.3 Enhance monitoring of antimicrobial use

B.3.1 Add an online functionality to the Mongolian Animal Health Information System (MAHIS) for private sector to record procurement and use of antimicrobials

B.3.2 Organize follow-up workshop (WOAH 2019) on the use and disposal of antimicrobials in both human and animal health areas

B.4 Improve reporting on AMU using the new WOAH-AMU database system

B.4.1 Develop training on using the WOAH-AMU database system for the Mongolian context and in Mongolian language

B.4.2 Conduct training to populate and report on AMU using the new WOAH AMU database system

C.1 Develop multi-sectoral communication strategies and plans based on AMR Surveillance and AMC/AMU monitoring

C.1.1 National consultation workshops to identify the key communication gaps and activities on AMR/AMU/AMC

C.1.2 Development of national AMR/AMU/AMC communication strategy for Mongolia

C.2 Develop and disseminate awareness materials on AMR and guidelines on AMU/AMC in Mongolian language
C.2.1 Designing and development of AMR/AMU/AMC communication materials in Mongolian language targeting prudent use of antimicrobials in human, animal and environmental sectors; promoting alternatives to antimicrobials such as vaccination, biosecurity, good husbandry practices.
C.2.2 Translation, printing, and distribution of the joint IEC materials on AMR and AMC/AMU
C.3 Upscale awareness programs on AMR/AMU/AMC targeting relevant stakeholders across the food chain
C.3.1 Conduct awareness activities during WAAW using the IEC materials at national and sub-national levels
C.3.2 Private sector seminar on responsible and prudent use of antimicrobials targeting relevant livestock sectors including herders
C3.3 Seminars for Veterinary Education Establishments (VEE) on WOAH Standards on Veterinary Education Curriculum for containment of AMR

The activities support directly on three defined outputs:

A. Improved capacity for designing and implementing AMR-related policy frameworks, investment plans and programmes;
B. Systems for generating, analysing and interpreting data on resistance and consumption/use patterns developed;
C. Improved capacity to design awareness raising, behaviour change and educational activities.

The interrelation between outputs is that there is an obvious need for multi-sectoral coordination and collaboration as pointed out in multiple national and international assessments (rapid assessment NAP-AMR 2017-2022) and evaluations (OIE-PVS 2019, WHO-JEE 2017). A good start for this multi-sectoral coordination was made in 2021 by the PMP-AMR workshop involving multiple sectors and actors. Late 2021, there was a Ministerial order to merge the National Action Plan for AMR control developed by MoH with the one developed by MoFALI under the MNAP 2022-2025. And most recently, the MSCC was established by a joint order of MoH and MoFALI. These are very positive signs that Mongolia is committed to an One Health approach to AMR control.

This project aims to actively support the MSCC by establishing a secretariat. This secretariat will consist of one to two persons who will keep all members of the MSCC well informed and updated while concurrently these persons will be trained on preparing an implementation plan with budget for the MNAP. Another important task for the secretariat is to develop the monitoring and evaluation framework of the MNAP to allow timely and efficient modifications to the MNAP.

These modifications will be guided by the results of activities under outputs B and C. Under output B "Systems for generating, analysing and interpreting data on resistance and consumption/use patterns developed", the project will generate surveillance data on AMR in both the animal and the human health sectors. The surveillance will be conducted by a number of national and subnational laboratories. The project aims to safeguard the quality of surveillance through the development of standard operating procedures and through quality assurance mechanisms. In addition, the project will initiate systematic data collection of the AMR surveillance results, and sales and uses of antimicrobials to make these accessible for both national and international organizations.

Under output C "Improved capacity to design awareness raising, behaviour change and educational activities", through the project aims to develop communication strategies on prudent use of antimicrobials for different target audiences including human and animal health professionals, and herders. With the communication strategies further developed, there may be a need for modification of the approaches defined under the new MNAP. While, over time, with more information becoming available on the AMR patters (result of output B), the communication strategies may have to be adapted as well.

These interrelations between outputs will also reflect on the three outcomes of this project:

1. Risks and benefits of AMR are reflected in the national budget and in development/multi-lateral partner sector-wide investments
2. Evidence-based data on AMR/AMU improved for policymakers and sectors implementing AMU practices
3. Improved understanding of AMR risks and response options by targeted groups

For the outcome of "Risks and benefits of AMR are reflected in the national budget and in development/multi-lateral partner sector-wide investments", risks of AMR will become clearer based on outputs B (AMR surveillance) and C (development of communication strategies and IEC materials). These results in turn, will support the monitoring and evaluation of the MNAP and may provide required adaptations to the annual operational plan.

- *Indicate which Tripartite and UNEP partner(s) will be accountable for the delivery of specified results at activity and output level.*

For the activities under output A and B, both WHO and FAO will be accountable. For few activities under output B and all the activities for output C, WOAH is accountable. However, for all 11 focus areas, the Tripartite will safeguard optimal coordination and collaboration. The Tripartite realizes very well that when they can demonstrate an united approach to AMR and AMU, that the Mongolian ministries and institutes will follow.

- *Identify capacity needs and precondition requirements of government to sustain results.*

Over the years, a number of coordination mechanisms across sectors were established through Ministerial order. Even so, technical coordination, monitoring and information sharing were not managed ideally. The project foresees that the newly established MSCC needs the support of a secretariat to manage the coordination and collaboration of multiple stakeholders in this field of work, on a daily basis.

The secretariat will relate to the different Task Forces, Working Groups that reside under the different Ministries and with the Tripartite partners. It is further envisioned that the secretariat will monitor the MNAP and MPTF implementation progress and ensure their continuity.

- *Indicate trans-boundary and regional issues and opportunities where relevant*

AMR is also a regional issue given the growing movement of animals and people across the region and also growing trade of animals and animal products. The benefits from the project will have wider positive implications in the region given the transboundary nature of AMR.

- *Briefly outline the expected progress towards the selected outcome(s) from Tripartite and UNEP AMR result matrix.*

It is expected to achieve the following progress towards the selected outcomes:

- The multi-sector coordination committee (MSCC) realizes better coordination and collaboration between key stakeholders on the control of AMR and prudent use of AMs in line with the defined strategic objectives of the MNAP 2022-2025;
- The MNAP 2022-2025 has an operational budget and a framework to allow monitoring and annual evaluation of its progress implementation;
- Surveillance on AMR in both the human and animal health sector is established;
- The results of AMR surveillance support the MSCC on policy making while it informs organizations communicating on the risks of AMR on key messages and good practices for users of antimicrobials;
- The use of antimicrobials in different sectors is well mapped, data are collected and reported both nationally and internationally;

- Awareness materials on AMR and AMU are disseminated nationwide

- *Describe the changed situation with respect to AMR management in the country at the end of this phase of investment. Do it in the form of storytelling, as a future scenario for early 2025 (not longer than half a page).*

At the end of this project, the MSCC is a fully functional high-level inter-ministerial coordination group and it safeguards that existing and upcoming (inter)national projects on AMR control and prudent use of antimicrobials are aimed at interventions that are complementary to the MNAP 2022-2025. Its secretariat supports the different working groups and task forces that exists with different ministries, agencies and institutes. It collates and combines planned activities into an annual workplan, defines its budget and applies monitoring and evaluation to address gaps and needs, and to allow for timely modification of the MNAP.

During the project years, the secretariat has increasingly involved the environmental sector through support of a newly established working group at the Ministry of Environment and Tourism (MoET). In addition, the secretariat and the project partners have facilitated workshops and meetings to enhance the One Health approach on AMR including the environmental sectors.

By the end-date of this project, AMR surveillance is no longer project-based but systematic and government supported. AMR surveillance is performed by the national laboratories. There are plans to further extend to all provinces to allow for nationwide surveillance of AMR in all priority sectors. In addition, to AMR surveillance in live animals and patients, surveillance will extend to the food chain in line with Codex Alimentarius standards and with the support of AMR Codex Standards project funded by South-Korea.

Through quality assurance programs based on international standards, the results of AMR surveillance in different laboratories are comparable. This will allow for direct comparison of surveillance results between laboratories and across Mongolia.

AMR surveillance results are regularly presented to policy makers that make up the MSCC to continue to improve the regulation of antimicrobial use and residues. The use of antimicrobials in the human and animal health sectors are clearly mapped and data on the use are regularly collected, collated, uploaded and analysed in the appropriate databases (TISSA, WOAH). The newly-develop functionality in MAHIS will allow to monitor the sales and use of AM by private vets. This functionality will be extended to be used by pharmacists that sell veterinary drugs.

Based on the communication strategies developed under this project, policy makers are well informed on the risks of AMR while the public in general and herders, private practitioners (both in the medical and in the veterinary sectors) have raised awareness on the risk of indiscriminate use of antimicrobials. Awareness materials with clear key messages and guidelines on good-management practices on prudent use of antimicrobials have been developed and were disseminated.

In the years following this project, the awareness campaigns will continue to these key sectors and extend its reach to relevant stakeholders in the food chain.

It is envisaged that during the years of this MPTF project, the project results and outcomes will leverage funds through additional multi- and bilateral projects on AMR and AMU.

- *Describe how the joint Tripartite and UNEP programme will contribute to strengthened gender and equity issues (avoiding disadvantage to vulnerable groups). Please include a short statement which summarises mandatory organisational policies relating to rights-based approaches, gender, climate and equity.*

The need to take a gender and equity focus on all efforts to protect and improve population health is widely acknowledged in a variety of global mandates and instruments. This includes, for example, the Sustainable Development Goals (SDGs), the UN Development Assistance Framework (UNDAF) and WHO's Constitution and overarching strategic plan. "Leave no one behind" is a core principle of the Sustainable Development Goals (SDGs). Equity, human rights and gender equality are central to all the goals, while SDG 3 calls for universal health coverage and health and well-being for all at all ages.

MPTF will contribute to strengthened gender and equity issues by undertaking applying the following integrated approaches:

- Leverage discussions on gender and equity in human and animal health systems during the development M&E framework for the MNAP 2022-2025, guidelines and materials for raising awareness taking into account the UNDAF and the WHO Working Paper "Tackling Antimicrobial Resistance Together: Enhancing the focus on gender and equity" (2018);
- Understand and acknowledge patient-related and socio-economic determinants on how men and women, and different groups in society, may be differently at risk of or impacted by AMR and use evidence to address barriers on gender and equity. This includes, but not limited to point-prevalent survey, antimicrobial consumption, consolidation of the KAP surveys and IEC materials as well as public awareness campaign;
- Build capacity among technical staff and dedicating adequate resources to promote gender equality and gender mainstreaming in tacking AMR in Mongolia.

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

- *Justify the budget in terms of "value for money." Give specific examples of how costs have been contained (economy) and how the joint Tripartite and UNEP programme design represents the most efficient approach*

According to Global burden of bacterial antimicrobial resistance in 2019: a systematic analysis, the global burden associated with drug-resistant infections assessed across 88 pathogen–drug combinations in 2019 was an estimated 4.95 million deaths, of which 1.27 million deaths were directly attributable to drug resistance. Reducing exposure to antibiotics unrelated to treating human disease is an important potential way to reduce risk and will contribute to improved health and economic outcomes. From the WHO priority pathogens, the prevalence of isolates resistance in Mongolia is described below (raw data):

- methicillin-resistant Staphylococcus aureus (MRSA) ≥ 80%
- isoniazid and rifampicin co-resistant (excluding XDR) Mycobacterium tuberculosis <5%
- third-generation cephalosporinresistant Escherichia coli 60 to 70%
- carbapenem-resistant Acinetobacter baumannii ≥ 80%
- fluoroquinolone-resistant E coli: 50-60%
- carbapenem-resistant Klebsiella pneumoniae: 5-10% and
- third-generation cephalosporin-resistant K pneumoniae: 50-60%.

The proposal will contribute directly and indirectly to five dimensions of Value for Money as per indicators.

From conceptualisation and planning of activities to implementation, the Tripartite wants to demonstrate the true multisectoral nature of this project in consultation with the stakeholders in Mongolia. Instead of working in isolation in addressing AMR, the Tripartite worked very closely with members of the working group on the MNAP 2022-2025 and focal points from MoH and MoFALI. This has resulted in a MPTF proposal that fully aligns with the strategic objectives and the defined activities under the MNAP 2022-2025.

The commitment of the Mongolian government to strengthen coordination and collaboration on One Health related objectives and activities (as defined by the Roadmap on One Health) extends to the area of AMR and AMU as well. With the MNAP 2022-2025 endorsed, the Ministries of Health and Agriculture, Food and Light Industries are committed to secure the governance of AMR objectives and activities including AMR policy development, AMR surveillance and raising awareness on the prudent use of antimicrobials.

This translates into a big "value for money".

The key stakeholders working on AMR in Mongolia will have one point of contact (the secretariat of the MSCC), instead of approaching Ministries, agencies and institutes separately. This will ensure harmonisation of activities, and effective use of time and resources to produce tangible outputs that directly addresses AMR and AMU issues. Except for few new staff to be recruited, the project will make use of the existing human resources available in the Tripartite and the key stakeholders (MoH, MoFALI, MoET) to implement the project activities.

- *Outline the options considered to identify the most efficient and effective intervention to address the problem.*

As per recent assessments, there is a need to strengthen intersectoral coordination at the policy and decision makers' level in Mongolia to effectively address AMR/AMU issues. The Tripartite will leverage its influence and inputs optimally to ensure productive engagement of the high-level officials in the key ministries. It is proposed that at the launching ceremony, the Tripartite will participate with delegation representing global, regional and country offices and conduct separate meetings with the key ministries.

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

The activities on strengthening intersectoral coordination mechanisms (Output A) will directly contribute to the establishment of a functional governance mechanism for continued implementation of AMR focusing on antimicrobial use activities and development of regulations for antimicrobial use. The activities on generating resistance data and patterns of antimicrobial usage will provide data that could be used to convince policy makers for government funding to continue AMR/AMU activities after the project ends. The communication activities under Output C will enable widespread information sharing about AMC/AMU amongst the stakeholders which is then expected to bring about behavioural changes in the way how AMR issues are considered.

In addition, it is envisaged that the activities and subsequent results of this project will leverage additional support through multi- and bilateral projects. This will thus extend the options for extending and expanding the surveillance activities started under this project. In a similar fashion, to extend and expand raising awareness in the food-chain and environmental sector.

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

One of the key principles of the MPTF project is to showcase to the stakeholders in Mongolia the benefits of intersectoral coordination in addressing AMR/AMU with the government leading by example.

It is envisaged that the Government of Mongolia will value the outcomes of this project and its One Health, inter-ministerial approach. The project aims to demonstrate the efficiency and effectiveness of such approach by demonstrating the complementary impact of initiatives in addressing AMR/AMU issues. In addition, the project aims to demonstrate the importance of addressing One-Health through partnership with the private

sector (civil organizations). At the National Bridging Workshop (June 2022) this need for partnership was emphasized once more, motivating the public stakeholders to seek sustainability both in terms of governance as well as in term of finances.

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

The MPTF activities are targeted to engage all stakeholders responsible directly or indirectly in addressing AMR/AMU issues such as policy and decision makers, technical staff, private sector (herders, drug importers, wholesalers, distributors, retailers, animal feed manufacturers), clinicians, diagnosticians, academicians, and the public. At the end of the project, people in Mongolia will have better appreciation of the impacts of AMR and their roles in addressing it. Therefore, the benefits of this project are expected to be broader and thus equitable.

2.5 Partnership and stakeholder engagement (max 2 pages)

- *Briefly explain:*
  - *how this joint Tripartite and UNEP programme would support the work of the National AMR coordination committee;*
  - *which government departments would be involved in programme delivery and what is their role; and*
  - *the unique contribution of the Tripartite and UNEP.*

The Tripartite Focal Points (FPs) at country level (WHO, FAO) and Regional WOAH will closely work with the MoH, MoFALI, MoET and other key stakeholders including the private sectors, academia in planning and implementing the activities.

WHO will primarily work with the Ministry of Health through the National Centre for Communicable Disease (NCCD), Medicine and Medical Device Regulatory Authority (MMDRA), the National Centre for Zoonotic Diseases (NCZD). FAO and WOAH will work with MoFALI through General Authority of Veterinary Services (GAVS), State Central Veterinary Laboratory (SCVL) and with the Institute for Veterinary Medicine (IVM) on agriculture and food component. The Tripartite will also work with the MoET for environmental related issues related to AMR, and General Authority for Specialized Inspections (GASI) as external evaluator and quality control.

For the activities under output C, civil organizations and health professional associations (medical and veterinary) will be involved in activities under work-area C.3 to upscale awareness programs on AMR/AMU for stakeholders across the food sector.

- *Strategic contributions from other partners and the ways in which other stakeholders (including the financial sector and private investors/capital) will be involved and/or consulted.*

The Tripartite and UNEP will continue to conduct adequate consultation meetings with the relevant stakeholders (government and private sectors) including development partners to develop and implement the joint road map of AMR and AMU in Mongolia as laid out in the MNAP 2022-2025. Contributions from other stakeholders relate to the defined activities under the Outputs A, B and C. For multi-sectoral coordination (Output A), contributions are sought from Governmental and Ministerial level to endorse the structure and role of the MSCC and its supporting Secretariat. For capacity building and surveillance on AMR (Output B), contributions are sought with agencies under MoH, MoFALI and MoET as well as with institutes of IVM and GASI. Whereas under Output C, contributions are sought from the private sectors in the human-, animal and environmental sectors.

- *Explain how the joint Tripartite and UNEP programme will pool and mobilize expertise from across the Tripartite at country, regional and global levels*

The Tripartite is in a unique position to pool and mobilise experts on AMR/AMU from country, regional and global levels. Additionally, with its pool of expertise from the network of AMR leading institutions in the Asia Pacific Region, the tripartite can coordinate provision of expertise/consultations needed for the planning, implementation, and monitoring of the MPTF activities.

- *Explain how you plan to engage with existing AMR donors delivering assistance at country level in areas related to the joint Tripartite and UNEP programme taking advantage of potential synergies and avoiding overlaps*
- *If there is a risk that there might be double counting of results between existing programmes explain how this will be avoided.*

There are several donors and agencies working on AMR/AMU and interesting to support directly to the national stakeholders of the MoH, MoFALI and MoET at the national level and sub-national level. The Tripartite will encourage the relevant implementers to share the activities work plan supported by the Tripartite and others with potential donors to avoid duplication. Monthly or quarterly technical meeting will be conducted to provide progress of activities implementation and additional update of external supports.

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

- *Explain how programme implementation may be affected by COVID 19.*

As of 15 April 2022, a total of 920,241 confirmed cases and 2,108 deaths have been reported from Mongolia, which a continued decreasing trend in cases and healthcare utilization in Ulaanbaatar and 21 provinces. The daily confirmed cases were less than 100 cases, and there is no signal of large-scale community transmission. Therefore, the Government has announced de-escalation of heightened state alert from level 2 to 1 since 14 Feb 2022 except for some districts with points of entry to neighbouring countries. These remain in heightened alert level 2. As of 29 March, over 92% of the population of 12 years and over was fully vaccinated, 53% had received a booster. Of the priority groups – over 97% of healthcare workers and 100% of the elderly were fully vaccinated. Pre-departure testing and quarantine are no longer required for all travellers, but vaccination proof is required.

Despite the current situation of COVID-19 in Mongolia is stable, however the trend should be interpreted with caution as several factors such as changing COVID-19 testing strategies, resulting in lower overall numbers of tests performed and consequently lower numbers of cases detected. SARS-CoV-2 virus continues to evolve and will not disappear. The Omicron variant remains the dominant variant circulating globally including Mongolia and several countries in the Western Pacific Region. Therefore, the Government has considered to develop long term plan of moving from pandemic to sustained management of COVID-19 and beyond. The implementation of programme will be affected by activities of sustained management COVID-19 plan if there is limited human resource with multi-tasking of the Tripartite and implementing partners.

- *Identify how you plan to mitigate any COVID 19 related risks.*

In order to mitigate any COVID-19 related risks, the Tripartite will recruit consultants and technical staff who will provide technical support to relevant Ministries and technical working groups for the implementation of the programme activities. The recruited consultants will develop a monitoring system to tract on the progress, early identify gaps and suggest solutions. The Tripartite will discuss with relevant Ministries to nominate focal points for coordination, and suggest surge capacity if necessary to avoid delaying activities implementation.

- *Explain aspects of the proposed programme that have changed from the concept note to align more closely with the national COVID 19 response.*

The concept note has proposed the National Emergency Management Agency (NEMA) to coordinate between Ministries. However, NEMA was dropped from the full proposal due to the Government priorities on sustained management COVID-19 long tern plan. There was no change of any outputs and main activities.

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

- *Identify opportunities for advocacy within the joint Tripartite and UNEP programme.*

The MPTF Mongolia project could serve as a good example of how One Health approach can be actually used in a country-level project demonstrating successful implementation of activities in addressing AMR. Already at the time of preparation of this proposal, the Tripartite in collaboration with the focal points of different Ministries and agencies, sent out a very clear signal to the Ministries involved that the newly MNAP 2022-2025 is fully supported by the international community.

The One Health approach of this project will be demonstrated through actions defined under this project (see A.1.4, B.2.4, activities under work-area C.3) that fully underscore the MNAP 2022-2025 strategic objectives 1, 2 3 and 5.

In addition, the Tripartite has good experience in working with multiple platforms that can be used such as national television, national radio, social media, official communication, etc. to promote the MPTF activities in Mongolia. Maximum publicity was garnished during the mapping of coordination and collaboration of multi-sectoral activities at the National Bridging Workshop. The defined outputs and activities of this MPTF can be showcased to demonstrate the need for One Health approach to a critical yet silent epidemic in Mongolia.

Similar opportunities for advocacy are with the World AMR Awareness Week, Food Safety Day and World Food Day and many other UN-organized celebrations.

- *Identify aspects of the programme that might be particularly interesting for targeted communication and lessons learning.*

Typically, the issue of AMR control and prudent use of antimicrobials requires communication for a wide variety of target groups. On the one-hand, there is need for advocacy with politicians, with decision makers of multiple Ministries and agencies and with private sectors (Output A with work-areas A.1 and A.3). On the other hand, awareness raising on the risks of AMR and the need for prudent use of antimicrobials with consumers, herders, health professionals are detrimental (Output C with work-areas C.1, C.2 and C.3). For the latter, there is no single approach to awareness raising not in the least because of the great differences in target audiences.

For these reasons, the MPTF proposal puts great effort in defining and developing an overall multi-sectoral communication strategy and subsequently develop awareness programs, develop and train on guidelines for prudent use of antimicrobials, and develop and disseminate awareness materials. The AMR MPTF team will make use of experiences and lessons learned in other countries in Asia through its Tripartite networks. Next, it aims to develop messages that are relevant and communicable for the Mongolian situation: Messages on responsible and prudent use of antimicrobials; conservation of critical antimicrobials and phasing out of growth promoters; improving hygiene and biosecurity of farms, and responsibilities of each stakeholder in the food animal production chain.

- *Identify opportunities for high-level strategic influencing, communication and advocacy.*

The activities under output A and C are directly aimed at raising the agenda of AMR/AMU for high-level strategic influencing and advocacy at the highest levels in the governance structure. The proposed national

multi-sectoral AMR communication strategy should provide the strategic direction to focus for AMR/AMU advocacy in Mongolia.

3 Programme implementation

3.1 Governance and implementation arrangements (max 3 pages)

- *Explain the composition, roles and responsibilities of Country AMR MPTF Team, including the implementation arrangements, roles and responsibilities of each Tripartite organisation.*

The Mongolia AMR MPTF team would consist of a core team from the Tripartite, representatives of human health, animal health, and environment sector and the staff of the MSCC secretariat. The role of this team is to implement the workplan of this MPTF proposal while coordinating with the other implementing partners under the different Ministries, related agencies and organizations (GASI, IVM, civil organizations).

The overall responsibility of this MPTF Mongolia project is with WHO. Through WHO, the required reporting will be submitted to the MPTF secretariat.

The activities under the three defined outputs and working areas are divided across the Tripartite. WHO will take the lead responsibility for work-area A.1: Support of the MSCC secretariat under output A – Improved capacity for designing and implementing AMR-related policy frameworks, investment plans and programmes and for work-area B.2 Strengthen AMR detection and surveillance of infections caused by AMR pathogens across human health, animal health and food sectors under output B Systems for generating, analysing and interpreting data on resistance and consumption/use patterns developed.

Under the same output B, WOAH will take the lead responsibility for work-area B.3 Enhance monitoring of antimicrobial use in livestock sector and B.4 Improve reporting on AMU using the new WOAH-AMU database system. In addition, WOAH will have the lead responsibility for the three work-areas under output C Improved capacity to design awareness raising, behaviour change and educational activities.

Under output A, FAO will take lead responsibility for work area A.2 Development of an operational budget of the National Multi-sectoral Action Plan on AMR 2022-2025 (MNAP) and A.3 Development of a Monitoring and Evaluation (M&E) framework for MNAP. Under output B, FAO's lead responsibility is with work area B.1 Capacity building on AMR detection and surveillance of infections caused by AMR pathogens across human health and animal health sectors.

Where WOAH and WHO do not directly have shared activities, FAO have shared activities under each of the work-areas of outputs A, B and C.

Each of the Tripartite organizations will appoint a staff to safeguard timely and complete implementation of defined activities. In addition, these staff will have very regular communication and coordination with the focal points of the different Ministries, agencies and other implementing partners. The role of the MSCC Secretariat will intensify over time once this Secretariat is endorsed and well trained. From then on, the Secretariat will be the main body to communicate and coordinate between the Tripartite and the Mongolian implementing partners, as it will do for other AMR- and AMU-related projects.

- *Explain how the day-to-day programme operations will be coordinated (through the appointment of a national coordinator based in one of the agencies, or in the national coordination office).*

For the day-to-day programme operations, the MPTF project staff in FAO and WHO country offices and the WOAH regional focal point are the key contact points. This staff will ensure the coordination for implementation of MPTF activities in close consultation and coordination with the key agencies in MOH, MOFALI, and MOET. To achieve this, the Mongolia AMR MPTF team will be established to act as core team for

this project. It is envisaged that once the MSCC Secretariat is endorsed and well trained, it will be part of this core team and takes on the overall coordination and communication.

For the animal health sector, the MPTF team will liaise closely with GAVS and the AMR technical working group of MoFALI to implement the activities whereas for human health sector, the MPTF team will work with the National Centre for Communicable Diseases.

- *Explain the role of the leaders of Tripartite and UNEP Organisations in providing strategic oversight in raising AMR as a political and development issue with government and other stakeholders, and in engaging relevant stakeholders in decision making when necessary.*

The Tripartite will continue to use its outstanding relations with the different decision-making bodies (Ministerial and Agency levels) to promote AMR control and support policy making on prudent and restricted use of antimicrobials. In addition, the Tripartite organizations have extensive experience on promotion activities in the areas of human and public health. It will use these experiences to reach out on the subject of AMR control and prudent use of AMU through the governmental bodies, professional associations and eventually the general public.

Under outputs A, B and C, there are activities scheduled to engage with decision makers (activity A.1.4 – annual and advocacy meetings), with professionals (activity B.2.4 – sharing surveillance and research results through publications and meeting) and with users of antimicrobials (activities under C.3 – upscaling awareness on AMR and AMU). These activities will ensure that government and stakeholders are informed and able to be part of decision making on the direction of the project.

- *Explain government-level engagement and leadership including how the results of the joint Tripartite and UNEP programme will be internalised and sustained by government and other stakeholders.*

Stakeholders (both public and private) have expressed on multiple occasions that multi-sectoral coordination needs to be intensified to follow-through defined activities under the MNAP, to avoid duplication of activities and to make sure that different projects complement one-another. These views were also expressed in the various international evaluation (OIE-PVS, WHO-JEE).

As a result, key government stakeholders have taken responsibility for controlling AMR and started by establishing sectoral working-groups. Last year, the multi-sectoral working group was established with the task to merge sector-specific national action plans into the MNAP 2022-2025.

Concurrently, the outputs and related activities in this MPTF proposal were defined in close consultation with technical working groups on AMR from the human- and the animal-health/agriculture sectors as well as with the multi-sectoral working group.

Under output A – fully functional AMR MSCC supported by a Secretariat – consultation, coordination and collaboration between the Mongolia AMR MPTF team will be further internalized and consolidated by a body endorsed by the Mongolian government. Through its support to the MSCC, the Secretariat will be responsible for monitoring and evaluation of the MNAP 2022-2025. Under the MNAP 2022-2025, the MPTF project intends to support activities for a number of defined strategic objectives. It is envisaged that other externally financed projects and future projects on AMR/AMU also contribute to executing MNAP 2022-2025. This MPTF project is thus by no means a stand-alone project. It is another building brick to a national multi-sectoral action plan to put AMR control and prudent use of antimicrobials on the agenda, to start systematic surveillance of AMR, to collect and share data on the use of antimicrobials and to extensively communicate about the risks of AMR.

- *Explain how the AMR MPTF country programme will fit with ongoing activities of government, the tripartite and UNEP and other donors, and, where appropriate, how this avoids duplication or*

introducing parallel structures. Do not explain the accountability for specific outputs and outcomes because it should be covered in the previous section. Focus on coordination, decision-making, reporting.

The MNAP defines five strategic objectives (Figure 1) including 1] strengthening governance, 2] strengthening capacity to detect and surveillance AMR, 3] promote and endorse appropriate and responsible use of AM, 4] strengthening systems on infection, prevention and control and 5] improve knowledge, attitude and practices towards AMR and AMU. Focal points from the ministries (MoH, MoFALI) that were members of the multi-sectoral group on preparing the MNAP 2022-2025 have contributed to the development of this MPTF proposal both in the concept note phase and in the current detailed proposal phase.

The activities defined under the three outputs A, B and C have a direct relation with the activities defined under the MNAP 2022-2025 (Figure 1). The work on preparing both MNAP 2022-2025 and MPTF project have resulted in very close working relations between Tripartite organizations and with representatives of the Mongolian stakeholders (public and private). This has resulted in a better understanding of the status of affairs in different sectors (thus the gaps and needs) and the roles and responsibilities of different Ministries and agencies with regard to coordination, capacity building, surveillance, data-management and communication.

Considering the above, the defined working areas and activities in this MPTF proposal fit directly with the objectives and activities defined under the MNAP 2022-2025.

3.2 Monitoring, reporting and evaluation

Sections 3.2 and 3.3 are standard text required for UN trust fund management. Country teams should note these arrangements.

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

- Annual narrative progress reports, to be provided no later than three months (31 March) after the end of the calendar year, and must include the results matrix, updated risk log, and anticipated activities and results for the next 12-month funding period;
- Final consolidated narrative report, after the completion of the joint Tripartite and UNEP programme, to be provided no later than three months after the operational closure of the activities of the Joint Tripartite and UNEP programme.

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

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

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

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

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

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

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

3.3 Accountability, financial management, and public disclosure

Standard text – do not change.

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

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

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

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

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

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

Yes[4] ☑

No

☐

[4] at the time of writing, the UNSDCF is formulated but not yet finally signed by the government in which it is expected that the old clause is updated.

Annexes

Annex 1 – Log Framework Template

<table>
<tr><td colspan="2">AMR MPTF Log frame</td><td colspan="3">Mongolia</td></tr>
<tr><td colspan="5">Impact:
1. Mongolia commits (policies, investment plans, programs, legal framework, resources) on AMR based on evidence and quality data
2. AMU associated behaviours and practices sustainably improved in critical sectors</td></tr>
<tr><td>Objectives</td><td>Indicators</td><td colspan="2">Sources of verification</td><td>Risks</td></tr>
<tr><td rowspan="3">MPTF Outcome Objectives

1. Risks and benefits of AMR are reflected in the national budget and in development/multi-lateral partner sector-wide investments

2. Evidence-based data on AMR/AMU improved for policymakers and sectors implementing AMU practices

3. Improved understanding of AMR risks and response options by targeted groups</td><td>Indicator 1:
Mongolia has a functional monitoring and evaluation framework on the MNAP in place
Baseline value: 0
Target value: 1</td><td colspan="2" rowspan="3">1. Project completion report

2. Annual report on AMR and AMU from key sectors

3. Communication strategy report</td><td rowspan="3">Key assumptions across the project
Timely release of budget;
Covid situation normalised;
Continued engagement of key ministries;
Timely implementation of activities by stakeholders</td></tr>
<tr><td>Indicator 2:
The MSG reviews and uses data on AMR/AMC and AMR across relevant sectors to support policy and practice.
Baseline value: 3
Target value: 6</td></tr>
<tr><td>Indicator 3:
Mongolia drafted and implemented a national AMR/AMU Communication Strategy
Baseline value: 0
Target value: 1</td></tr>
<tr><td>MPTF Output Objectives</td><td>Indicator</td><td>Source of Verification</td><td>Key Activities</td><td>Risks</td></tr>
</table>

AMR MPTF Log frame		Mongolia		
Impact: 1. Mongolia commits (policies, investment plans, programs, legal framework, resources) on AMR based on evidence and quality data 2. AMU associated behaviours and practices sustainably improved in critical sectors				
Objectives	**Indicators**	**Sources of verification**		**Risks**
Output A. Improved capacity for designing and implementing AMR-related policy frameworks, investment plans and programmes	Indicator A.1: Fully functional AMR Multi-sectoral Coordination Group established and supported by a Secretariat (1a, MNTF = TrACSS 4.1D) Baseline value: 0 Target value: 1 Indicator A.1.4: Decision list of recommendations	A.1 approval note from relevant Ministries	**A.1 Support establishment of the Multi-Sectoral Coordination Committee (MSCC) by a secretariat that coordinates its activities** A.1.1 Assessment of current multi-sectoral coordination mechanism (gaps and needs identification) A.1.2 Completion of the annual TrACSS survey A.1.3 Annual and advocacy meetings using the results of activities A.3 and A.4	Contextual COVID-19 situation worsens Programmatic Delay in fund release Institutional Inadequate coordination amongst key stakeholders Absence of continuity of leadership at Ministries Non-commitment of key stakeholders to collaborate on AMR/AMU issues
		A.2 Report of legislation and policy review on AMR	A.2.1 Review of current legislation and policies on AMR in all relevant sectors	
	Indicator A.2: Operational plan for implementing national action plan on AMR developed and updated with associated budget consideration (1c, MPTF = TrACSS 5D) Baseline value: 0 Target value: 1	A.3 Budget plan of the MNAP 2022-2025	**A.3 Development of the operational budgeting of the MNAP 2022-2025** A.3.1: train secretariat staff on operational budgeting making use of the WHO AMR costing and budgeting tool A.3.2 Operational plan is budgeted for by secretariat A.3.3 Operational plan and budget of MNAP is reviewed and agreed by MSCC	

AMR MPTF Log frame		Mongolia		
Impact: 1. Mongolia commits (policies, investment plans, programs, legal framework, resources) on AMR based on evidence and quality data 2. AMU associated behaviours and practices sustainably improved in critical sectors				
Objectives	**Indicators**	**Sources of verification**		**Risks**
	Indicator A.3: M&E framework for MNAP Baseline value: 0 Target value: 1	A.4 Framework ofr monitoring and evaluation of the MNAP	**A.4 Develop the Monitoring and Evaluation (M&E) framework for MNAP 2022-2025** A.4.1 Train secretariat staff on developing a M&E framework A.4.2 M&E framework for MNAP is developed by secretariat A.4.3 M&E framework is reviewed and agreed by MSCC	
Output B. Systems for generating, analysing and interpreting data on resistance and consumption/use patterns developed	Indicator B.1 A pool of trainers at national level is capable to train provincial laboratory staff on AMR surveillance Baseline value: 0 Target value: 5 trainers	Curriculum of FETP including an AMR module Report on training of trainers Reports on training at provincial levels	**B.1 Capacity building on AMR detection and surveillance of infections caused by AMR pathogens across human health and animal health sectors** B.1.1 Development of policy document on AMR surveillance of infections caused by AMR pathogens across human health, animal health and food sectors and develop training materials on AMR surveillance B.1.2 Conduct training of trainers at national level of human and animal health sectors B.1.3 Integrate training with existing Field Epidemiology Training Programme (FETP) for human health, animal health and environment health through update curriculum of FETP with AMR surveillance B.1.4 Roll out training to relevant national level institutes	Contextual COVID-19 situation worsens Programmatic Delay in fund release Institutional Inclusion of AMR module in FETP training is not prioritized Inadequate coordination amongst key stakeholders Non-commitment of key stakeholders to collaborate training development and conduction
	Indicator B.2	Manual of standardized	**B.2 Strengthen AMR detection and surveillance of infections caused by AMR pathogens**	Contextual

AMR MPTF Log frame		Mongolia		
Impact: 1. Mongolia commits (policies, investment plans, programs, legal framework, resources) on AMR based on evidence and quality data 2. AMU associated behaviours and practices sustainably improved in critical sectors				
Objectives	**Indicators**	**Sources of verification**		**Risks**
	Increased number of laboratories (5 at national level) have capacity to perform antimicrobial susceptibility testing and bacterial isolation and identification according to international standards (4b. MPTF) Baseline value: 0 Target value: 5	operating procedures for sampling and testing Data sharing in Tripartite Integrated System for Surveillance of AMR/AMU (TISSA)	**across human health, animal health and food sectors** B.2.1 Establish AMR surveillance in national (5 laboratories) a – diseased humans and animals b – priority pathogens in the food-chain and environment by development and adoption of standardized and integrated operating procedures for sampling, testing and analyses B.2.2 Development and introduction of national standardized methods for antimicrobial susceptibility testing, including quality assurance (internal and external); B.2.3 Development of proper data collection, management, analysis and reporting across multiple sectors (human health, animal health, food) to contribute information to the Tripartite Integrated System for Surveillance of AMR/AMU (TISSA), WHONET and GLASS	COVID-19 situation worsens Programmatic Delay in fund release Institutional Inadequate coordination amongst laboratories from different sectors and different levels
	Indicator B.3: MSCC is supported by Tripartite to review data and data quality on AMU/AMC and AMR in relevant sectors (4a, MPTF) Baseline value: 0	B.3 Workshop report with recommended strategies on strengthening of national AMU monitoring system in animal health sector and AMC in human health sector	**B.3 Enhance monitoring of antimicrobial use** B.3.1 Add an online functionality to the Mongolian Animal Health Information System (MAHIS) for private sector to record procurement and use of antimicrobials	Programmatic Delay in fund release Institutional Inadequate coordination amongst key stakeholders

AMR MPTF Log frame		Mongolia		
Impact: 1. Mongolia commits (policies, investment plans, programs, legal framework, resources) on AMR based on evidence and quality data 2. AMU associated behaviours and practices sustainably improved in critical sectors				
Objectives	**Indicators**	**Sources of verification**		**Risks**
	Target value: 1		B.3.2 Organize follow-up workshop (WOAH 2019) on the use and disposal of antimicrobials in both human and animal health areas	
	Indicator B.4: GAVS can submit to the WOAH reporting Option 3 level of AMU data for animal sector (4c, MPTF) Baseline value: 0 Target value: 1	B.4 Global WOAH AMU report according to Option 3 level	**B.4 Improve reporting on AMU using the new WOAH-AMU database system** B.4.1 Develop training on using the WOAH-AMU database system for the Mongolian context and in Mongolian language B.4.2 Conduct training to populate and report on AMU using the new WOAH AMU database system	Contextual COVID-19 situation worsens Programmatic Delay in fund release Institutional Inadequate coordination amongst key stakeholders to collect and submit data on AMU Unwillingness to share AMU data
Output C. Improved capacity to design awareness raising, behaviour change and educational activities	Indicator C.1: A national AMR/AMU/AMC communication strategy developed and implemented targeting priority stakeholder groups based on stakeholder analysis and targeted messages within sectors (7b, MPTF; TrACSS 6.1E) Baseline value: 0	C.1 Developed communication strategies and activity reports	**C.1 Develop multi-sectoral communication strategies and plans based on AMR surveillance and AMC/AMU monitoring** C.1.1 National consultation workshops to identify the key communication gaps and activities on AMR/AMU/AMC C1.2 Development of national AMR/AMU/AMC communication strategy for Mongolia	**Risks** Contextual COVID-19 situation worsens Programmatic Delay in fund release Institutional Inadequate coordination and collaboration amongst key stakeholders and other Tripartite implemented projects on AMR/AMU

AMR MPTF Log frame		Mongolia		
Impact: 1. Mongolia commits (policies, investment plans, programs, legal framework, resources) on AMR based on evidence and quality data 2. AMU associated behaviours and practices sustainably improved in critical sectors				
Objectives	**Indicators**	**Sources of verification**		**Risks**
	Target value: 1			
	Indicator C.2: Appropriate AMR/AMU/AMC communication materials developed and disseminated for nationwide awareness campaigns (7b, MPTF; TrACSS 6.1E) Baseline value: 0 Target value: 15	C.2 Developed IEC materials on AMR/AMU/AMC and activity reports	**C.2 Develop and disseminate awareness materials on AMR and guidelines on AMC/AMU in Mongolian language** C.2.1 Designing and Development of AMR/AMU/AMC communication materials in Mongolian language targeting prudent use of antimicrobials in human, animal and environmental sectors; promoting alternatives to antimicrobials such as vaccination, biosecurity, good husbandry practices. C.2.2 Translation, printing, and distribution of the joint IEC materials on AMR and AMC/AMU	Contextual COVID-19 situation worsens Programmatic Delay in fund release Institutional Inadequate coordination amongst key stakeholders and other Tripartite implemented projects on AMR/AMU communication and awareness raising
	Indicator C.3: National and sub-national awareness events held including the WAAW campaigns (7a, MPTF; TrACSS 6.1D) Baseline value: 0 Target value: 15	C.3 Activity reports	**C.3 Upscale awareness programs on AMR/AMU/AMC targeting relevant stakeholders across the food chain** C.3.1 Conduct awareness activities during WAAW using the IEC materials at national and sub-national levels C.3.2 Private sector seminar on responsible and prudent use of antimicrobials targeting relevant livestock sectors including herders C3.3 Seminars for Veterinary Education Establishments (VEE) on WOAH Standards on Veterinary Education Curriculum for containment of AMR	Contextual COVID-19 situation worsens Programmatic Delay in fund release Institutional Inadequate coordination amongst key stakeholders including private sector

Annex 2 – Risk Matrix Template

Risk description	Risk Category: Contextual Programmatic Institutional	Worst case consequence for the project	Risk Score		Mitigating action	Action owner
			Impact	Likelihood		
COVID-19 situation	Contextual	Delay in implementation of the project activities on the ground	Medium	Medium	Convert some activities to virtual such as launching, national consultations etc.	Tripartite
Inadequate coordination amongst the key stakeholders	Institutional	Delay in implementation	Medium	Medium	Early engagement of the technical working groups and focal points in ministries	Tripartite
Political instability and changes in focal points	Institutional	Delays in implementation and changes in priorities	High	Medium	Involve all relevant stakeholders including policy technical and operational staff working on AMR/AMU to maintain continuity	Tripartite
Delay in fund release	Programmatic	Delayed implementation of project activities	Medium	Low	Continued follow-up and identification of national focal points and all levels of Tripartite organizations	Tripartite

Annex 3 – Outline of Budget

Categories	FAO	WOAH	WHO	Total
1. Staff and other personnel costs [5]	183,600	40,000	0	223,600
2. Supplies, Commodities, Materials[6]	20,000	20,000	18,600	58,600
3. Equipment, Vehicles and Furniture including Depreciation [7]	15,000	0	0	15,000
4. Contractual Services[8]	26,000	119,500	112,530	258,030
5. Travel [9]	33,960	48,000	17,800	99,760
6. Transfers and Grants Counterparts[10]	0	10,000	191,580	201,580
7. General Operating and Other Direct Costs [11]	57,889	10,000	9,950	77,839
Total Direct Costs	336,449	247,500	350,460	934,409
8. Indirect support costs (Max. 7% of overall budget)[12]	23,551	17,325	24,532	65,409
TOTAL	360,000	264,825	374,992	999,818
Please indicate which organisation will receive pre-financing facility [13]				

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

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

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

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

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

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

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

[12] Indirect Support Costs: (No definition provided).

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

Annex 4 – Mongolia Work Plan Template

Name of Project: One Health approach to manage Antimicrobial Resistance (AMR) and Antimicrobial Use (AMU) in Mongolia

Start Date: **1 January -2023**

Projected End Date: **31 December 2025**

	Lead Tripartite and UNEP Org	Implementing Partner	Month / YEAR 1												Month/YEAR2												Month/YEAR3											
			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	6	7	8
Output A. Improved capacity for designing and implementing AMR-related policy frameworks, investment plans and programmes	FAO/WHO	Tripartite MoFALI MoH MoET GASI																																				
A.1 Support of the MSCC by a secretariat that coordinates its activities	WHO	Tripartite MoFALI MoH MoET GASI	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
A.2 Review AMR legislation and policies	FAO	Tripartite MoFALI MoH MoET GASI	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
A.3 Development of an operational budget of the National Multi-sectoral Action Plan on AMR 2022-2025 (MNAP)	FAO	Tripartite MoFALI MoH MoET GASI				x	x	x						x	x	x										x												
A.4 Development of a Monitoring and Evaluation (M&E) framework for MNAP	FAO	Tripartite MoFALI MoH MoET GASI					x	x	x	x				x	x	x										x												

Output B. Systems for generating, analysing and interpreting data on resistance and consumption/use patterns developed	FAO/WHO	Tripartite MoFALI MoH MoET GASI																																				
B.1 Capacity building on AMR detection and surveillance of infections caused by AMR pathogens across human health and animal health sectors	FAO	Tripartite MoFALI MoH MoET GASI IVM SVM				x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
B.2 Strengthen AMR detection and surveillance of infections caused by AMR pathogens across human health, animal health, environment and food sectors	WHO	Tripartite MoFALI MoH MoET GASI IVM				x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
B.3 Enhance monitoring of antimicrobial use in livestock sector	WOAH	Tripartite MoFALI MoH GASI									x	x							x	x	x									x	x							
B.4 Improve reporting on AMU using the new WOAH-AMU database system	WOAH,	Tripartite MoFALI MoH GASI								x	x	x										x																
Output C: Improved capacity to design awareness raising,	WOAH,	Tripartite MoFALI MoH MoET																																				

behaviour change and educational activities		GASI																																							
C.1 Develop multi-sectoral communication strategies and plans based on AMR surveillance and AMU/AMC monitoring	WOAH	Tripartite MoFALI MoET MoH GASI	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x												
C.2 Develop and disseminate awareness materials on AMR and guidelines on AMC/AMU in Mongolian language	WOAH	Tripartite MoFALI MoH MoET GASI						x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x								
Activity C.3 Upscale awareness programs on AMR/AMU/AMC targeting relevant stakeholders across the food chain	WOAH	Tripartite MoFALI MoH MoET GASI								x	x	x	x	x		x					x	x	x	x	x				x	x	x								

For planning purposes, it may be helpful to insert the budget for each activity into the plan. This level of detail is not however required in the version submitted to the Secretariat. The outputs should align with the Tripartite and UNEP AMR results matrix and log framework. This workplan should align with the plans of the respective organizations.

References

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10. https://rr-asia.woah.org/en/projects/antimicrobial-resistance/regional-activities/amu-monitoring-wokrhshop/ (WOAH AMU Monitoring workshops)
11. Global Action Plan on Antimicrobial Resistance, WHO 2015
12. Together for One Health: Strategic Framework for Collaboration on Antimicrobial Resistance, WHO, FAO, OIE 2022
13. OIE, 2016. https://www.woah.org/app/uploads/2021/03/en-oie-amrstrategy.pdf

Appendices

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

- Appendix 1 – Details of Budget template (Excel sheet)
- Appendix 2 – Tripartite and UNEP Results Matrix

Checklist before submission

1. *Country Proposal Submission Template*
2. *Log Framework Template (see Annex 1) (use of SMART output methodology up to the activity level)*
3. *Risk Matrix Template (see Annex 2)*
4. *Outline of Budget Templates (see Annex 3)*
5. *Work Plan Template (see Annex 4)*
6. *Details of Budget Template (see Appendix 1)*
7. *Letter of endorsement from the government*