

[Name of Fund or Joint Programme]  
**MPTF OFFICE GENERIC FINAL PROGRAMME<sup>1</sup> NARRATIVE REPORT**  
**REPORTING PERIOD: FROM Jan 2021 TO June 2023**

| <b>Programme Title &amp; Project Number</b>   | <b>Country, Locality(s), Priority Area(s) / Strategic Results<sup>2</sup></b>   |
|---|---|
| <ul style="list-style-type: none"> <li>Programme Title:<br/>AMR MPTF: Combating AMR in Indonesia through multi-sectoral approaches to infection reduction and improved stewardship FAO, WOA and WHO</li> <li>Programme Number (if applicable)</li> <li>MPTF Office Project Reference Number:<sup>3</sup></li> </ul> | <p>(if applicable)<br/>Country/Region<br/><b>INDONESIA</b></p> <hr/> <p>Priority area/ strategic results<br/>IPC-WASH, AMS, AMR NAP, Communication Strategy, Environment, and Multi sector coordination on AMR control</p>  |
| <b>Participating Organization(s)</b>  | <b>Implementing Partners</b>  |
| <ul style="list-style-type: none"> <li>Organizations that have received direct funding from the MPTF Office under this programme</li> <li>WHO</li> <li>FAO</li> <li>WOAH</li> </ul>   | <ul style="list-style-type: none"> <li>Coordinating Ministry of Human Development and Cultural Affairs</li> <li>Ministry of Health</li> <li>Ministry of Agriculture</li> <li>National Agency for Drug and Food Control</li> <li>Ministry of Marine Affairs and Fisheries</li> <li>Ministry of Environment and Forestry</li> <li>National Antimicrobial Resistance Control Committee</li> <li>Local Governments</li> <li>Associations (Indonesian Medical Association, Indonesian Veterinary Medical Association, Indonesian Pharmacists Association, Poultry Farmers Associations, Indonesian Animal Drug Producers Association, Indonesian Hospitals Association),</li> <li>Civil Society Organizations (YOP, CIVAS)</li> <li>Private Sector (Poultry farmers, Poultry companies)</li> <li>Academia</li> </ul> |
| <b>Programme/Project Cost (US\$)</b>  | <b>Programme Duration</b>   |

<sup>1</sup> The term “programme” is used for programmes, joint programmes and projects.

<sup>2</sup> Strategic Results, as formulated in the Strategic UN Planning Framework (e.g. UNDAF) or project document;

<sup>3</sup> The MPTF Office Project Reference Number is the same number as the one on the Notification message. It is also referred to as “Project ID” on the project’s factsheet page on the [MPTF Office GATEWAY](#).

|   |  |
|---|--|
| <p>Total approved budget as per project document: <b>USD 1,000,000 339,753(FAO) / 173,048 (WOAH) / 487,199 (WHO)</b></p> <p>MPTF /JP Contribution<sup>4</sup>:</p> <ul style="list-style-type: none"> <li>• by Agency (if applicable)</li> </ul> <p>Agency Contribution</p> <ul style="list-style-type: none"> <li>• by Agency (if applicable)</li> </ul> <p>Technical, operational, Communication, logistic,</p> <p>Government Contribution (if applicable) Endorsement, technical, sustainability planning</p> <p>Other Contributions (donors) (if applicable) – <i>Human resources (?)</i></p> <p><b>TOTAL:</b></p> <p><b>Programme Assessment/Review/Mid-Term Eval.</b></p> <p>Evaluation Completed<br/> <input type="checkbox"/> Yes <input type="checkbox"/> No Date: dd.mm.yyyy</p> <p>Evaluation Report - Attached<br/> Yes No Date: dd.mm.yyyy</p> | <p>Overall Duration (32 months)</p> <p>Start Date<sup>5</sup> (dd.mm.yyyy)<br/> October 2020 – 30 June 2023<br/> (with Government : January 2021 – 30 June 2023)</p> <p>Original End Date<sup>6</sup> (30 September 2022)</p> <p>Actual End date<sup>7</sup>(30 June 2023)</p> <p>Have agency(ies) operationally closed the Programme in its(their) system? Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>Expected Financial Closure date<sup>8</sup>:</p> |
|   | <p><b>Report Submitted By</b></p> <p>○ Name:</p> <p>○ Title:</p> <p>○ Participating Organization (Lead):</p> <p>○ Email address:</p>   |

<sup>4</sup> The MPTF/JP Contribution is the amount transferred to the Participating UN Organizations – see [MPTF Office GATEWAY](#)

<sup>5</sup> The start date is the date of the first transfer of the funds from the MPTF Office as Administrative Agent. Transfer date is available on the [MPTF Office GATEWAY](#)

<sup>6</sup> As per approval of the original project document by the relevant decision-making body/Steering Committee.

<sup>7</sup> If there has been an extension, then the revised, approved end date should be reflected here. If there has been no extension approved, then the current end date is the same as the original end date. The end date is the same as the operational closure date which is when all activities for which a Participating Organization is responsible under an approved MPTF / JP have been completed. As per the MOU, agencies are to notify the MPTF Office when a programme completes its operational activities. Please see [MPTF Office Closure Guidelines](#).

<sup>8</sup> Financial Closure requires the return of unspent balances and submission of the [Certified Final Financial Statement and Report](#).

## **FINAL PROGRAMME REPORT FORMAT**

### **EXECUTIVE SUMMARY**

The Multi-sector Antimicrobial Resistance (AMR) Control Programme under the Multi Partner Trust Fund (MPTF) Project in Indonesia was implemented from January 2021 to June 2023. The Ministry of Agriculture and the Ministry of Health as the main partners of the MPTF project involved relevant ministries and institutions on AMR control with One Health Approach, mainly Coordinating Ministry of Human Development and Cultural Affairs (CMHDCA), Ministry of Marine Affairs and Fisheries (MoMAF), National Food and Drug Control Agency (NFDCA) and Ministry of Environment and Forestry (MoEF). FAO, WOA and WHO provided technical support to the MPTF project in implementing nine main activities with the main output on strengthening infection prevention and control and optimizing the use of antimicrobial systems in critical sectors, including increasing engagement plans with key stakeholder groups in AMR control programmes with the One Health approach.

The main result achieved from the MPTF project is strengthening cross-sectoral coordination in controlling AMR, especially increasing understanding of AMR risks through strengthening Antimicrobial Stewardship (AMS) and Infection Prevention and Control - Water Sanitation and Hygiene (IPC-WASH) implementation in health care facilities and farms. The cross-sectoral coordination meetings also agreed on the joint pilot areas, namely Boyolali and Karanganyar Regencies in Central Java Province as well as Malang and Blitar Regencies in East Java Province for the MPTF project implementation.

The MPTF project produced communication strategies and educational materials on IPC-WASH and AMS for professionals' community and farmers. The education materials have been utilized in the training for professionals and farmers to improve farm certification, focusing on hygiene and sanitation in layer poultry farms and prudent use of antimicrobials in poultry farms. To promote prudent and responsible antimicrobial use for professionals from various sectors, MPTF project conducted training and awareness raising referencing to the AWARe classification. In addition, joint inspection guidelines for the human and animal health sectors have been developed and utilized by the MoA and NFDCA to prevent the misuse and overuse of antimicrobials along their distribution chain from upstream to downstream. A joint commitment declaration was held to increase awareness and commitment of the poultry industry in reducing the use of antimicrobials as well as a media briefing as part of World AMR Awareness Week (WAAW) campaign. Furthermore, to raise awareness of AMR control, the MPTF project organized a discussion and knowledge-sharing event at the International Livestock, Dairy, Meat Processing, and Aquaculture Exposition Indonesia (ILDEX) and World Food Safety Day (WFS) to educate professionals and farmers on best AMS and IPC-WASH practices. This project also supported the development of the 2020-2024 NAP Monitoring and Evaluation (M&E) tool and the formation of a Multisectoral AMR Control Task Force working group which is a form of success in encouraging the government to take leadership in AMR control nationally.

During the initiative, ten human doctors, ten veterinarians, and three pharmacists received collaborative training and seminars on antimicrobials prescribing based on AWARE classification, which was adapted from the Bangladesh AMR Response Alliance (BARA). This approach has improved the communication and information sharing among professionals in human and animal health sectors. As a result of the environmental AMR survey conducted by ministries, institutions, and universities, a position paper on AMR in the environmental sector was produced as a roadmap for accelerating support for AMR responses in the environment, which will be an important input for the development of the 2025-2029 AMR NAP.

## I. Purpose

The Antimicrobial Resistance (AMR) Control Programme under the Multi Partner Trust Fund (MPTF) project was an AMR control programme with a One Health approach that involved Quadripartite organizations (FAO, WOA, WHO and UNEP) and relevant multi sector stakeholders in its implementation. Indonesia along with eight other selected countries received a grant from the global MPTF to the amount of USD 1,000,000 for this project for the first two years starting January 2021. The cross-sectoral AMR control project through MPTF funds in Indonesia was expected to have an impact, namely on the Antimicrobial Use (AMU) behaviors and practices sustainably improved across all critical sectors, with two outcomes namely the use of antimicrobials optimized in critical sectors and the improved understanding of AMR risks and response options by targeted groups (Increased comprehensiveness and quality of the policy dialogue and practice).

These two outcomes were expected to be achieved through three outputs namely, 1) Systems for biosecurity and IPC strengthened in critical sectors, 2) System for optimized use of antimicrobials strengthened in critical human and animal sectors and 3) Implement engagement plans with critical stakeholder groups. Furthermore, the three outputs were planned to be achieved with nine main activities, as follows: 1) Joint review of infection prevention and control (IPC – including WASH) in human and animal sectors in pilot areas, 2) Develop and pilot implementation of IPC initiatives in healthcare facilities and farming systems using complementary parallel approaches on WASH, AgriWASH, IPC, and farm biosecurity, 3) Joint review/ assessment of AMS practices in humans and animals in pilot areas, 4) Develop Antimicrobial Stewardship guidelines for human and animal health, 5) Develop standard treatment guidelines and a user-friendly application (for both human and animal health) using AWaRe classification for health care professionals and veterinarians/ veterinary paraprofessionals, 6) Create coordination mechanism for monitoring and inspection of antimicrobial use in human and animal health, 7) Joint assessment of implementation of AMU stewardship in selected farms and communities through Knowledge Attitude Practices Survey (KAP) towards the end of the project, 8) Develop monitoring and evaluation plans for NAP implementation in pilot areas and 9) Develop communication and advocacy strategy for engagement with key stakeholders (farmers, veterinarians, food sectors, pharmaceutical manufacturers and sellers, investors and development partners, civil society, academia).

The project was aimed to support the following NAP Strategic Objectives:

1. Improve awareness and understanding of antimicrobial resistance through effective communication, education, and training;
2. Reduce the incidence of infection through sanitation, hygiene, and infection prevention and control;
3. Optimize antimicrobial use in humans, animals, fish, and plants; and
4. Build integrated governance and coordination in antimicrobial resistance control

## II. Assessment of Programme Results

### i) Narrative reporting on results:

#### ● Outcomes:

The outcome of MPTF project in Indonesia is increased awareness of the government's needs regarding the importance of multi-sector coordination in controlling AMR. This outcome can be seen from the increasing number of government cross-sectoral initiatives to organize AMR control

activities together, especially in the preparation of the regulation of the CMHDCA Regulation Number 7 of 2021 concerning the National Action Plan for AMR Control for the period 2020-2024. Apart from that, the Ministry of Health has also issued a Decree of the Director General of Health Services-MoH No. HK 02.02/I/4126 of 2022 concerning the 2020-2024 AMR Control Task Force Working Group. These two regulations are built on strong inter-sectoral coordination and communication in controlling AMR with the One Health approach referring to Presidential Instruction No. 4 of 2019. Based on these regulations CMHDCA has carried out its function as a leader in coordinating across ministries and institutions, in monitoring and evaluating the implementation of NAP AMR until 2023.

- **Outputs:**

The MPTF project has produced AMS and IPC-WASH assessment tools in human and livestock and animal health facilities that adapt best practices from international and national instruments related to AMS and IPC-WASH guidelines that have been prepared in the human health sector. The AMS and IPC-WASH assessment for the animal health sector was implemented to assess 160 targeted poultry farms, 90 dairy farms and eight animal health centers for the baseline data before intervention. The results of the AMS and IPC-WASH assessments in poultry farms were followed up with intervention activities in 80 assisted poultry farms for 12 months by 21 trained animal health officers from local government and private sectors. The interventions resulted to nine layer poultry farms receiving Veterinary Control Number (NKV) certification and 32 poultry farms implementing AMS and IPC-WASH by the end of the project period. This series of intervention activities included training for officers and farmers, preparation of communication strategies and materials, development of standard treatment guidelines for veterinarians, awareness raising and advocacy meetings with the local government and private sectors regarding AMR control programme. In addition, Knowledge, Attitude, Practice (KAP) studies for assisted farmers were carried out at pilot locations to provide an overview of farmers' understanding, commitment challenges and areas for improvement in implementing AMS and IPC-WASH at the farm level, as an important input to the intervention programme. The results of the AMS and IPC-WASH assessments on micro- and small-scale dairy farms are still low in terms of facilities, infrastructure and operations, so they still need guidance from the government and other relevant stakeholders.

As for the sustainability of the programme, a private sector engagement has been built during WAAW 2022 with active participation from large companies in the livestock and pharmaceutical production sectors in Indonesia, resulting in a joint statement (signed by six firms) to curb AMR with a One Health approach. Their joint statement aimed to implement a policy of responsible use of antimicrobials in current and future operations. The joint statement was also signed and acknowledged by the Ministry of Agriculture. A set of communication materials was developed to mitigate AMR. It included posters, leaflets, social media messages, comics and infographics that cover animal, human and environmental health sectors. A media training organized with AJI (Alliance of Journalists in Indonesia) gathered 42 journalists/editors. Shortly after the training, journalists published information on AMR. A comprehensive communication and advocacy strategy for AMR mitigation was developed based on previous and existing initiatives.

Meanwhile, AMS and IPC-WASH assessments in the human health sector were carried out in 18 hospitals and 33 community health centers. The results of the AMS and IPC-WASH assessments in health facilities stated that the majority of human health institutions were rated as "intermediate" or "advanced" in IPC-WASH implementation, but there were budget constraints and staffing issues in some rural locations. AMS implementation was higher in hospitals than health centers, with gaps in budgeting and awareness of guidelines. The MPTF project also developed the joint inspection guidelines for the antimicrobial distribution chain between the MoA and the NFDCA which oversees the distribution of antimicrobials from large pharmaceutical companies to distributors and their marketing chains. The guideline has been endorsed by the government and has been used to prevent illegal switching of antimicrobials which results in misuse and overuse of antimicrobials in the field.

Another multi-sectoral coordination in reducing misuse and overuse was conducted through joint training and workshops involving ten doctors, ten veterinarians and three pharmacists regarding antimicrobial prescribing which referred to the AWARE classification and adapted learning from the Bangladesh AMR Response Alliance (BARA). This approach improved the communication and information sharing among professionals in human and animal health sectors.

Environmental AMR was addressed by involving ministries, institutions and universities (Nossal Institute, University of Melbourne), resulting in a position paper on AMR in the environmental sector as a roadmap for accelerating support for AMR responses in the environment, which will be an important input for the preparation of the 2025-2029 AMR NAP.

MPTF provided support for the formation of a cross-sectoral AMR control task force/working group led by the Director General of Health Services-MoH and supported by CMHDCA in carrying out its function of monitoring and evaluating NAP AMR through the preparation of the 2020-2024 NAP AMR The Monitoring and Evaluation (M&E) tool in accordance with CMHDCA Regulation No.7/2021 to improve the implementation of the NAP AMR control programme in Indonesia was supported by MPTF. The tool was adopted and used by CMHDCA in the 2020-2024 NAP AMR M&E.

- **Qualitative assessment:**

The MPTF project in Indonesia was well implemented, having met the set indicator targets. The deviation in achievement was mainly caused by external factors that influenced results, such as the COVID-19 pandemic which limited activities, competition with other government priority programmes, for example the FMD and ASF outbreaks. Apart from that, there were important factors that had become challenges in implementing activities, namely the absence of a clear mechanism regarding the involvement of the private sector in controlling AMR and changes in the organizational system in the government which has responsibility for controlling AMR.

Moreover, the MPTF project succeeded in strengthening cross-sectoral coordination in controlling AMR with a One Health approach, namely the involvement of the Coordinating Ministry for Human Development and Cultural Affairs, the Ministry of Agriculture, the Ministry of Health, the Ministry of Maritime Affairs and Fisheries, the Ministry of Environment and Forestry, the National Agency for Drug and Food Control. Regulations and policies at the national level have been formed as the legal basis for cross-ministerial and institutional coordination in AMR.

The MPTF project produced recommendations for the government and private sector to continue this programme using national resources, especially that several hospitals in pilot locations have committed to finance the implementation of IPC-WASH and AMS in health service facilities, laying hen farmers and animal husbandry agencies have financed the certification process for livestock, and the central government has carried out monitoring and evaluation activities on the implementation of NAP AMR by sharing the central budget.

MPTF activities also built stronger communication and coordination between quadripartite organizations (FAO, WHO, WOA and UNEP) in AMR control activities covering the human health, animal health and environmental health sectors.

Using the **Programme Results Framework from the Project Document / AWP**s - provide details of the achievement of indicators at both the output and outcome level in the table below. Where it has not been possible to collect data on indicators, clear explanation should be given explaining why.

|   | <b><u>Achieved</u> Indicator Targets</b>   | <b>Reasons for Variance with Planned Target (if any)</b>  | <b>Source of Verification</b>                                   |
|---|--|---|---|
| <b>Outcome 1<sup>9</sup></b> Use of antimicrobials optimized in critical sectors<br><br><b>Indicator:</b> Number of provinces (pilot area) that implemented one or more (additional) international instruments on AMR in the health, animal or plant sector.<br><b>Baseline:</b> 0<br><b>Planned Target:</b> 2 provinces  | Two provinces have implemented AMS guidelines (Pilot areas: East Java and Central Java Provinces).               | The results of the AMS assessment in the human health sector have not been followed up with intervention activities.      | 1. AMS Assessment report<br>2. Monitoring and Evaluation report |
| <b>Output 1.1</b> Use of Systems for biosecurity and IPC strengthened in targeted countries<br><br><b>Indicator 1.1.1</b> Number of province (pilot area) that are supported to implement and/or scale up minimum requirements for infection prevention (e.g. husbandry and biosecurity) for food animal production, in accordance with international standards (GAP M&E Framework 3.d).<br><b>Baseline:</b> 1 province<br><b>Planned Target:</b> 2 provinces<br><br><b>Indicator 1.1.2</b> Number of province (pilot area) IPC programmes supported in line with IPC core components<br><b>Baseline:</b> 0<br><b>Planned Target:</b> 2 Provinces | 3 layer poultry farmers in two provinces (pilot areas) have been certified with Veterinary Control Number (NKV). | The results of the AMS assessment in the human health sector have not been followed up with intervention activities.      | 1. Monitoring and Evaluation report<br>2. Certified farms       |
|   | 32 poultry farmers in two provinces (pilot areas) have implemented AMS and IPC-WASH guidelines.                  | The results of the IPC-WASH assessment in the human health sector have not been followed up with intervention activities. | Monitoring and Evaluation report                                |
| <b>Output 1.2</b> System for optimized use strengthened in the critical sectors.  |  |   |   |

<sup>9</sup> Note: Outcomes, outputs, indicators and targets should be **as outlines in the Project Document** so that you report on your **actual achievements against planned targets**. Add rows as required for Outcome 2, 3 etc.

|   |   |  |                                      |
|---|---|--|--------------------------------------|
| <p><b>Indicator 1.2.1</b> Guidelines for responsible and prudent use of antimicrobials based on international standards are developed or revised.</p> <p><b>Baseline:</b> 0<br/> <b>Planned Target:</b> 2 (AMS guidelines in human and animals, Standard treatment guideline Apps in human and animals)</p>           | <ol style="list-style-type: none"> <li>1. A collaborative communication forum was held between professionals in the human and animal health sectors adopting the BARA Model regarding antimicrobial prescribing which referred to the AWaRe classification implemented.</li> <li>2. Standard Treatment Guidelines for Poultry Diseases for veterinarians were developed.</li> <li>3. Joint inspection guideline for antimicrobial Supply Chain between human and animal health sector was developed and endorsed by MOA and NFDCA.</li> <li>4. A position paper on AMR in the environmental sector as a roadmap for accelerating support for AMR responses in the environment was developed.</li> </ol> |  | <p>Project report and guidelines</p> |
| <p><b>Output 1.3</b> Engagement plans with critical stakeholder groups implemented.</p> <p><b>Indicator 1.3.1 :</b> Number and list of stakeholders engagement plans developed and/or implemented at the national level</p> <p><b>Baseline:</b> 0<br/> <b>Planned Target:</b> 1 (a comprehensive engagement plan)</p> | <p>Two national engagement plans in AMR control that had been implemented were CMHDCA's involvement in the monitoring and evaluation for the 2020-2024 AMR NAP. This involved multi-sector AMR control stakeholders and the task force working group led by the Ministry of Health, and comprised of MoA, NFDCA, MoEF, MoMAF, BRIN, universities, professional associations, farmer associations, private sector and other development partners.</p>  |  | <p>Project report and tools</p>      |



### iii) Evaluation, Best Practices and Lessons Learned

#### Assessment/evaluation reports and utilization

IPC/WASH report in the human health sector: the findings showed that in all four districts the hospitals had significantly higher scores than local health care center (*Puskesmas*). However, there were no significant differences for other characteristics such as district comparison, location (urban vs rural), ownership (public vs private), hospital classification (class A-D), and *Puskesmas* classification (inpatient vs outpatient). The assessment results generally yielded high scores for environment, equipment, and materials to support WASH practices. The assessment also showed that health facilities in the four districts have followed the standard requirements for IPC structure and process and have invested in improving capacity to monitor and audit the IPC implementation. However, the issue of lack of budget to support implementation and monitoring persists. Health staff ratio remains a challenge, and rural areas still experience more issues related to implementing WASH, particularly for hygiene services. Blitar and Karanganyar are more challenged in terms of limited water supply for WASH implementation compared to the other two districts, which suggests a potential area for improvement to prioritize infrastructure support.

IPC/WASH report in the animal health sector: Based on the IPC-WASH assessment and monitoring report in poultry farming, we found good lessons from the field mainly availability and implementation of cleaning and disinfection SOPs for hands, equipment and footwear, as well as SOPs for 3-zone biosecurity and non-medical waste; Isolation SOPs for introduction new animals and sick animals; and SOPs for movement control and handling for eggs, feed, water, warehouses and workers. These IPC-WASH good practices have resulted in a reduction in the incidence of disease and the use of antimicrobials on farms, indirectly increasing safe and healthy of livestock products for the community. These good IPC-WASH practices support and help farmers to obtain a Veterinary Control Number (NKV) certificate which guarantees the safety of animal products.

Another good lesson learned is the importance of empowering the private sector, in particular the large firms, to play a stronger role in programme sustainability, because they are the main actors in the livestock business. Therefore, advocacy activities were carried out for the government and private sector to increase their commitment to increasing the number of livestock farmers who implement biosecurity practices (IPC-WASH) and obtain NKV certification, thereby reducing the use of antimicrobials and the risk of antimicrobial resistance.

The efficiency of raising awareness on AMR through cooperation with a large association has yielded positive outcomes. The Association of Independent Journalists expressed particular interest in organizing media training for journalists and editors, given that AMR currently lacks visibility in the mass media. In addition, journalists and editors admitted to experiencing a knowledge gap in this area. The cooperation with AJI facilitated access to a network of relevant participants, resulting in the publication of content on AMR shortly after the training. Targeting a specific stakeholder group that is not the usual audience for IEC materials proved to be one of the best practices for raising awareness.

AMS assessment report in the human health sector: Similar to the results of the IPC WASH assessment, statistical analysis found significant differences in comparisons based on the type of health facility (hospital vs community health center). Hospitals have much higher score compared to Community Health Centers (p-value 0.012), but there are no significant differences for other characteristics. To improve AMS practices, recommendations include initiating policies and regulations at the national,

provincial, and district levels. This must be followed by comprehensive communication, education, and monitoring and evaluation efforts. The Ministry of Health is in the process of updating the AMS policy to include the primary health center level in AMS implementation.

In the field of animal health, the results of AMS assessments in poultry farms showed good learning on AMS in the farms, especially the availability and implementation of SOPs for treatment using antimicrobials, responsible veterinarians in the farms, handling medical waste, vaccination programmes, use of registered antimicrobials and treatment records. The presence of a responsible veterinarian on the farm is very important for farmers in selecting and using antimicrobials according to the diagnosis, dose, duration and in administering appropriately, wisely and responsibly. Education for veterinarians about antimicrobial prescribing is very important in increasing knowledge and skills in providing advice and prescriptions to farmers.

However, some farmers still use antibiotics on young chickens (Day Old Chicks) as it is anticipated that the chickens have become infected while in the hatchery or during transportation. This instability in DOC quality is what triggers farmers to use antimicrobials for prevention. The government must increase monitoring programmes at breeding farms and hatcheries to ensure that the DOC distributed meets government requirements.

The results of the KAP for health service facility officers and poultry farmers resulted in the main recommendations, including: strengthening pre- and post-education training to increase understanding and awareness of antibiotic resistance, its spread and impact, with a focus on wise use of antibiotics; strengthening implementation and monitoring of antimicrobial consumption, use and resistance and implement AMS at all levels including primary health care and the private sector; optimizing the antimicrobial resistance control programme by providing adequate human resources, facilities and infrastructure; strengthening monitoring of antibiotic use, emphasizing compliance with antibiotic prescribing guidelines; conduct of further research to map the practice of prescribing/administering antibiotics among health workers, including prophylactic measures by specialist doctors and preferences of health workers in prescribing certain classes of antibiotics; development of and wide dissemination of clear guidelines and protocols for prescribing and administering antibiotics, with particular emphasis on prophylactic use; and, encouraging uniform implementation and compliance with these guidelines across healthcare facilities.

- Explain challenges such as delays in programme implementation, and the nature of the constraints such as management arrangements, human resources etc. What actions were taken to mitigate these challenges? How did such challenges and actions impact on the overall achievement of results? Have any of the risks identified during the project design materialized or were there unidentified risks that came up?
  - Disruptions due to the COVID-19 pandemic during the first year of implementation cumulatively impacted implementation in 2022.
  - There were obstacles in obtaining donor and project registration under the Ministry of Finance.
  - There was difficulty in obtaining clearances for international projects.
  - The FMD (Foot and Mouth Disease) and LSD (Lumpy Skin Disease) outbreak in Indonesia disrupted the implementation of AMR control activities in the animal health sector, including the inappropriate use of AM during the outbreak.
  - With Indonesia's G20 presidency in 2022, preparing for AMR side events during the G20 became the Ministry of Health's and all related AMR programme stakeholder's top priority.

- The 2022 Ministry of Health's health transformation agenda led to organizational restructuring within MoH.
- The responsibilities for AMR in human and animal health are scattered across several DGs, adversely affecting planning, coordination and implementation.
- Report key lessons learned and best practices that would facilitate future programme design and implementation, including issues related to management arrangements, human resources, resources, etc. Please also include experiences of failure, which often are the richest source of lessons learned.

The AMR control programme will not be successful without the involvement and commitment of the main actors in the production, distribution and use of antimicrobials, especially the government, private sector/industry, societies, farmers, academics, associations and professionals. Therefore, a strong partnership between the government and the private sector was really needed, guided by regulations and under the strong leadership from the government as the regulator.

An important thing that must be considered is that not all activities in the human health and animal health sectors can be carried out together in the field due to different stakeholder targets. More cross-sector collaboration at the output and outcome level is needed, such as regulations/policies at the central level or ensuring the safety of animal products and a healthy environment for the community.

#### iv) A Specific Story (Optional)

- This could be a success or human story. It does not have to be a success story – often the most interesting and useful lessons learned are from experiences that have not worked. The point is to highlight a concrete example with a story that has been important to your Programme.
- In ¼ to ½ a page, provide details on a specific achievement or lesson learned of the Programme. Attachment of supporting documents, including photos with captions, news items etc, is strongly encouraged. The MPTF Office will select stories and photos to feature in the Consolidated Annual Report, the GATEWAY and the MPTF Office Newsletter.

**Problem / Challenge faced:** Describe the specific problem or challenge faced by the subject of your story (this could be a problem experienced by an individual, community or government).

- The MPTF's challenge was the lengthy registration process with the government, which delayed the project implementation. However, steps were done to expedite the registration process
- During implementation, the global COVID-19 pandemic occurred, thus, many activities were carried out virtually/online without field activities. However, starting 2022, activities returned to normal and field activities were authorized.
- Activities were delayed due to conflicts with other government priority programmes.

**Programme Interventions:** How was the problem or challenged addressed through the Programme interventions?

The issues that arose were addressed through advocacy to high-level policymakers in the government to immediately accelerate programme implementation. The technical step taken was to adapt activities to meet the government's urgent needs while remaining within the scope of the project. Another effort was to approach the private sectors to support the implementation of this project.

Meanwhile, challenges caused by the global COVID-19 epidemic were addressed by conducting online activities and hybrid meetings to ensure that all activities ran smoothly.

**Result (if applicable):** Describe the observable *change* that occurred so far as a result of the Programme interventions. For example, how did community lives change or how was the government better able to deal with the initial problem?

A significant change from observations of project results was the adoption of best practices by the government and the private sector, especially in the implementation of IPC-WASH, AMS; joint inspection guidelines for cross-sector antimicrobial distribution chains; joint declarations between the government and the private sector in controlling AMR; M&E Tools for NAP AMR 2020-2024; as well as communication strategies and materials developed during the project.

**Lessons Learned:** What did you (and/or other partners) learn from this situation that has helped inform and/or improve Programme (or other) interventions?

- Cross-sector coordination requires clear leadership, mechanisms and regulations.
- The sustainability of the programme must be able to empower the private sector as the main actor in the use of antimicrobials besides the government.
- Strengthening food security and eradicating stunting can become national issues to support AMR control activities, especially on AMS, IPC-WASH and farm certification.