Attachment A – Program Description

Prime-Recipient: FHI 360

Sub-Recipient: Group for Technical Assistance (GTA)

Title: Fleming Fund Country Grant for Nepal Phase II
Period of Performance: August 1, 2024 – September 30, 2025

I. Subrecipient Background and Capacity

Group for Technical Assistance (GTA) is a non-government and non-profit organization established in Nepal in 1998. GTA has been working in the field of public health, education, environment, and development sectors through a community-based development approach. The GTA team is comprised of subject matter experts and professionals with years of experience across various sectors, including public health, epidemiology, vaccination, antimicrobial stewardship (AMS), One Health, maternal and child health, communicable and non-communicable diseases, environment, education, quality assurance standards development, organizational development, systems strengthening, health supply chain management, training and capacity building, community development and awareness programs implementation. GTA has a national and an international advisory team to maintain the quality of the products and performances. With its highly motivated and experienced team of experts, GTA offers a competitive edge in effectively supporting organizations and their development initiatives in Nepal. GTA maintains a strong working relationship with the Government of Nepal (GoN), Ministry of Health and Population (MoHP), Nepal Agricultural Research Council (NARC), universities, and other stakeholders, thereby nurturing a strong network within the country. GTA has provided technical support to the GoN in assessing urban and rural health conditions and implementing various interventions. At the international level, GTA has partnered with institutions such as Henry Ford Health, Pennsylvania State University, Rotary International, World Health Organization (WHO), United Nations Children's Fund (UNICEF), Program for Appropriate Technology in Health (PATH), John Snow, Inc. (JSI), Give2Asia, Liverpool School of Tropical Medicine (LSTM), Action Contre la Faim (ACF), and Johns Hopkins Bloomberg School of Public Health. GTA is passionate about bringing positive changes to the public health sector. GTA is accountable, and possesses strong management skills, flexibility, and robust public relations capabilities.

GTA has a solid track record and expertise in fulfilling the Scope of Work (SoW) in the field of Antimicrobial Resistance (AMR) and AMS. With over a decade of experience in programs related to quality improvement of health services, GTA has successfully executed numerous projects focused on AMS and infection prevention and control (IPC). GTA's experience spans both hospital and community levels, demonstrating their versatility.

Notably, GTA's collaboration with the Henry Ford Health Global Health Initiative and the Division of Infectious Disease (HFH) on more than 10 projects related to AMR and IPC, including the training of over 750 healthcare workers, is a testament to their capabilities. GTA's partnerships with MoHP, WHO, and various healthcare facilities in Nepal further underscore their competence in delivering the SoW.

GTA's extensive experience in delivering projects related to the SoW is characterized by a strong history of collaboration and impactful outcomes. Their work on projects such as the AMS and IPC Training for hospital- and community-based nurses and midwives, WHO Toolkit Assessments and Trainings, and the Feasibility Study of the WHO Toolkit on 'Antimicrobial Stewardship for Health Facilities', highlights their

commitment to improving healthcare services in Nepal. GTA's programs also include innovative initiatives like the Global Learning in Antimicrobial Resistance (GLAMR), which demonstrates their ability to adapt to evolving challenges.

II. Background

GTA, in collaboration with FHI 360, has been entrusted with the responsibility of field implementation, logistics, and management support to achieve two critical outcomes: generating quality data on AMR, Antimicrobial Use (AMU), and Antimicrobial Consumption (AMC), and sharing quality analyses with decision-makers. This section outlines the strategies, activities, and methodologies designed to accomplish these objectives.

GTA will coordinate and implement one round of active AMR surveillance in poultry and cattle. This involves conducting interactive workshops with poultry entrepreneurs, dairy and poultry farm owners, and other related stakeholders, as well as planning and designing of surveillance protocols, collecting data and samples, performing laboratory tests, and analyses, and ensuring robust AMR data in the animal health sector. Subsequently, GTA will establish a farm-level AMU surveillance system across all seven provinces to collect data on antimicrobial usage in poultry farms. It will be helpful in planning the program and regulatory mechanism on responsible antimicrobial use and reducing the risk of resistance emergence. Additionally, GTA will conduct a point prevalence survey (PPS) at 12 sites, with the potential to expand to an additional provincial site if required. This survey will provide a snapshot of AMU in healthcare settings. For integrated AMR data collection, GTA will implement various approaches, including the Tricycle model, to collect data on AMR, AMU, and AMC, ensuring data quality and accuracy. For human health AMC data, GTA will collaborate with the Department of Drug Administration (DDA) to collect and report data on AMC to ensure the responsible use of antibiotics in healthcare settings. The organization will ensure the maintenance of surveillance equipment and a continuous supply of consumables across all sectors to prevent any disruption in data collection and analysis.

All data collection will be conducted in electronic format to enhance the timeliness of monitoring and evaluation. GTA will ensure that the AMR/AMU/AMC data collected are promptly and effectively disseminated to the relevant sites, stakeholders, and practitioners in human health (HH), animal health (AH), aquaculture, environment, and food sectors. Through provincial-level engagement, GTA will promote the rational use of drugs among selected service providers and users in the animal health sector. This includes training, workshops, awareness, advocacy, and data-driven interventions aimed at reducing irrational antimicrobial use.

Through continuous stakeholder engagement and close collaboration with local and national stakeholders, including government agencies, healthcare professionals, farmers, and policymakers, GTA will ensure that the data and analyses meet their specific needs and are effectively utilized in decision-making processes. Working closely with subject matter experts, GTA will provide evidence-based policy recommendations and strategies to mitigate the impact of AMR, fostering a sustainable and responsible approach to antimicrobial use across all sectors. The organization will develop a robust monitoring and reporting system to track progress and evaluate the impact of interventions, ensuring that data-driven decisions lead to positive outcomes.

III. Goal and Objectives Goal:

To effectively manage and mitigate AMR by producing and disseminating high-quality data on AMR, AMU, and AMC in Human health (HH), Animal Health (AH), and the environmental sector, thereby informing and influencing policy and practice for sustainable and responsible antimicrobial use.

General Objectives:

- To generate quality AMR, AMU, and AMC data of HH and AH for strengthening surveillance systems
- To analyze and prepare report of AMR, AMU and AMC data
- To share comprehensive AMR, AMU and AMC evidence and findings with stakeholders and decision-makers.

Specific Objectives:

1. To conduct one round of active AMR surveillance in poultry and cattle, including stakeholder workshops, data and sample collection, laboratory testing, and analysis to ensure robust AMR data in animals.
2. To establish a comprehensive farm-level AMU surveillance system across all seven provinces, focusing on responsible usage practices to reduce the risk of resistance emergence.
3. To execute a PPS at 12 healthcare sites, with the potential to include an additional provincial site, to provide a snapshot of AMU in healthcare settings.
4. To implement integrated surveillance approaches, such as the ESBL *E.coli* Tricycle method, to gather high-quality AMR, AMU, and AMC data across HH, AH and environment.
5. To support DDA in collecting and reporting quality AMC data in HH, promoting responsible antibiotic use in healthcare settings.
6. To ensure timely electronic data collection, and promptly disseminate AMR/AMU/AMC data to relevant stakeholders.
7. To engage provincial stakeholders in promoting rational drug use in the AH sector through workshops, awareness, and advocacy.

IV. Detailed Description of Activities and Results

To meet these objectives, GTA will achieve the expected results by providing the below services. Each service is further detailed as a discrete activity under Section IV.

Result 1.1. Active AMR surveillance in poultry and cattle conducted and final report disseminated to stakeholders.

Activity 1.1.1: To initiate and conduct active AMR surveillance in poultry and cattle, a comprehensive plan will be developed. Initially, active surveillance will begin through coordination meetings with the Department of Livestock Services (DLS) and the Central Veterinary Laboratory (CVL). These meetings aim to establish a solid foundation for the surveillance activities, ensuring all stakeholders are aligned and all necessary preparations are in place. Once the coordination is complete, formal approval for the surveillance sites for both poultry and cattle will be sought and secured, confirming that all selected sites meet the required standards. With the sites approved, active AMR surveillance in poultry and cattle will officially begin.

The surveillance of poultry will be conducted through seven participating laboratories. Coordination meetings will be held with these laboratories to ensure smooth operation and data collection processes. Following the completion of the surveillance activities in poultry, a final report detailing the findings will be compiled and disseminated to stakeholders, providing them with valuable insights into the AMR situation in poultry.

Similarly, the active AMR surveillance in cattle will also be conducted through two participating laboratories. Coordination meetings with these laboratories will be crucial for the effective execution of the surveillance activities. Upon completion, a final report on the active AMR surveillance in cattle will be prepared and shared with stakeholders. This report will provide comprehensive data and analysis, enabling stakeholders to make informed decisions based on the surveillance findings. The results from these activities are expected to be achieved by the specified deadline, ensuring timely and effective dissemination of critical AMR data.

Outcomes:

- One round of active AMR surveillance in poultry conducted and findings disseminated with stakeholders.
- One round of active AMR surveillance in cattle is conducted and findings disseminated with stakeholders.

Result 2.1 Orientation package, including the training materials, developed for equipment management and inventory management for microbiology

Activity 2.1.1 This involves several key steps to enhance inventory and equipment management in microbiology across the sites supported by the Fleming Fund Country Grant for Nepal (FFCGN). An orientation package for inventory management specific to microbiology will be developed in coordination with the National Public Health Laboratory (NPHL), CVL, Department of Food technology and Quality Control (DFTQC) and department of environment (DoEnv).

Outcome: Orientation package developed for strengthening the capacity of laboratory staff to manage the inventory of equipment and consumables (microbiology).

Result 2.2 Site staff received orientation on equipment management and inventory management", Microbiology equipment optimally used (monthly working status updated

Activity 2.2.1 Orientation will be conducted for laboratory and logistics staff on equipment management and inventory management (all sector laboratories). A total of 37 participants will attend the training session, including from HH (26), AH (7), and the food (2) and environment sectors (2). The training will cover the optimal use of microbiology equipment, with its working status updated monthly. This regular update ensures that all equipment is functioning efficiently and allows for timely interventions if any issues arise.

Outcome: Orientation conducted for capacity building of laboratory staff to manage the inventory of equipment and consumables (microbiology).

Result 2.3. Annual biosafety equipment Calibrated for participating laboratories and equipment parts maintained (HH, AH, food)

Activity 2.3.1. Continuous monthly updates and provide consultant's support for equipment maintenance (whenever needed), with a specified deadline to achieve the desired outcomes.

Outcome: Maintained the optimal usage of equipment

Result 3.1. AMU PPS conducted at 12 sites and findings disseminated.

Activity 3.1.1. In close collaboration with the Quality Standard and Regulation Division (QSRD), MoHP, the list of AMU PPS sites will be finalized, ensuring all selected sites meet the necessary criteria for inclusion. Concurrently, the required approvals from the National Health Research Council (NHRC) for conducting the AMU PPS will be obtained and subsequently renewed as needed to maintain compliance with ethical standards. Coordination meetings for the AMU PPS will be organized regularly, starting with five sites, and expanding to include seven sites, facilitating effective communication, and planning among all stakeholders. Detailed orientations for project staff and site-specific training sessions will be conducted. With the technical support of the FHI 360 team, AMU PPS orientations and surveys will also be conducted, including an initial training/orientation session (online) for the GTA and onsite training to the targeted sites. The AMU PPS will be implemented at 12 sites, with findings systematically collected and disseminated to all sites. All findings will be reported and utilized in a timely manner for continuous improvement in antimicrobial use practices.

Outcomes:

- AMU PPS orientation conducted at 12 sites (HH)
- AMU PPS conducted at 12 sites and findings disseminated

Result 4.1. AMU survey in poultry and AMU pilot survey in dairy cattle conducted and final report disseminated to stakeholders.

Activity 4.1.1. The AMU survey in poultry will be initiated, marking a significant step in monitoring, and improving antimicrobial practices in the poultry industry. For this, GTA will coordinate with the Veterinary Standards and Drug Regulatory Laboratory (VSDRL) and DLS to update the survey plan and will acquire approval for the specific sites for the AMU survey in poultry. Once initiated, data collection will commence, and a comprehensive report and findings disseminated. Simultaneously, a pilot AMU survey in dairy animals will begin. This will involve a coordination meeting with VSDRL and DLS to develop and finalize the survey plan, followed by the approval of the pilot survey sites. Through the pilot survey, essential data will be gathered and upon completion, a detailed report will be finalized and disseminated. Timely reporting of findings will be done to inform future policies and practices in AMU in livestock.

Outcomes:

- Farm-level AMU surveillance in poultry in seven provinces conducted, and report disseminated.
- AMU pilot survey in dairy cattle in two provinces conducted, and report disseminated.

Result 5.1. Quality AMC data from human health gathered and reported

Activity 5.1.1. AMC data for the year 2023 will be obtained in an appropriate format from manufacturers and importers. Coordination meetings with DDA will be held to discuss data recording formats and/or software requirements. Additional coordination meetings with manufacturers, importers, and distributors will ensure effective collection of necessary data. The collection of AMC data for FY 2023 will be initiated using an Excel template, with all relevant parties contributing to the effort. This data will then be reported to DDA for the Global Antimicrobial Resistance and Use Surveillance System (GLASS). For FY 2024, AMC data will be collected through specialized software in the required format from manufacturers and importers. Evidence of the reported AMC data to GLASS, such as photos or emails, will be compiled and submitted within a specific deadline to ensure timely and accurate reporting of antimicrobial consumption data.

Outcome:
AMC data (2023) obtained in appropriate format from manufacturers and importers. AMC data (2023) reported in GLASS AMU platform.

Result 6.1 Integrated AMR surveillance conducted, and results disseminated.

Activity 6.1.1. A comprehensive protocol for integrated surveillance will be developed, with approval secured from the NHRC. A coordination meeting will be conducted with representatives from HH, AH, the environment sector, and other relevant stakeholders to revise, adapt, and finalize the protocol. Following this, a coordination meeting will be held to select and finalize sites for the study. The integrated study will be then conducted, and the results analyzed. A detailed report will be developed and disseminated. The process includes sample collection, transportation and processing, data collection, analysis, and finalization of reports. Documentation of all processes will be maintained. The deadline for achieving these outcomes will be a priority, ensuring that findings are completed, disseminated, and communicated in a timely manner.

Outcome:

- Protocol for integrated surveillance developed.
- AMR data produced from various approaches to integrated AMR surveillance including Tricycle.
- Findings disseminated.

Result 7.1. Respective Departmental websites host content with AMR/AMU/AMC information and data shared through workshops and a conference.

Activity 7.1.1. Content related to AMR, AMU, and AMC will be hosted on the respective departmental websites. This information is also shared and uploaded by relevant stakeholders to ensure widespread accessibility and engagement. The AMR newsletter and AMU bulletin will be regularly printed and disseminated. Additionally, information, education, and communication (IEC) materials will be included in

this distribution, ensuring that all relevant information is available to stakeholders. This dissemination process will be consistently repeated to maintain high levels of awareness and knowledge dissemination. Data regarding AMR, AMU, and AMC will be actively shared through various workshops at the provincial, national, and practitioner levels. A One Health conference will be organized for wider sharing. These workshops serve as crucial platforms for information exchange and discussion among stakeholders.

Outcomes:

- Relevant government departments host the AMR/AMU/AMC related information on the website.
- AMR/AMU/AMC data shared with respective sites, stakeholders, and practitioners.
- One Health conference organized for evidence sharing.

Result 7.2 AMR/U/C data sharing workshops held, AMR data sharing workshop held with stakeholders and practitioners across sectors (Aqua., food, env.)

Activity 7.2.1. GTA will work closely with the FFCGN and stakeholders to Identify and prioritize the pertinent data on AMR/AMU/AMC for cross-sharing with specific sites, respective stakeholders, and practitioners for sectors including environment, aquaculture and food. To facilitate the data sharing, GTA will support to conduct a national level workshop for cross-sharing AMR/AMU/AMC data. In addition, GTA will support to the government to conduct a national level one health conference on AMR/AMU/AMC. Furthermore, GTA will support to produce AMR/AMU/AMC bulletin and update the information on the respective stakeholder's website. In addition, GTA will print and disseminate the AMR/AMU/AMC related IEC materials.

Outcome: AMR/U/C national level cross-sharing workshop conducted and another national level One Health conference conducted

Result 7.3 Treatment guideline printed/uploaded in mobile app and utilized by prescribers, workshops with veterinary practitioners and Argo vet owners "on promoting rational use" conducted, AMU data from veterinary hospitals reviewed, AMU surveillance findings shared for improvement in prescribing and use.

Activity 7.3.1. This includes several crucial steps aimed at improving the rational use of antimicrobials in veterinary practice. Firstly, in close coordination with the FHI 360 team and regional grantees (RGs), and relevant stakeholders the treatment guidelines will be printed and uploaded into a mobile application to be utilized by prescribers, ensuring convenient access to standardized protocols for veterinary practitioners. Following this, a series of workshops will be conducted with veterinary practitioners and agro-vet owners, focusing on promoting the rational use of antimicrobials. These workshops aim to educate and encourage best practices among stakeholders. Additionally, meetings will be held with central veterinary hospitals and one veterinary hospital in seven provinces to collect AMU data. The findings from AMU surveillance will be shared to drive improvements in prescribing and usage practices. The results will be disseminated with specific deadlines to ensure timely action and accountability, thereby fostering a culture of continuous improvement and adherence to best practices in antimicrobial use.

Similarly, GTA will closely work with FHI 360 for IT support to strengthen the AMR secretariat and NCC for developing a One Health database, dashboard, and website.

Outcomes:

- Treatment guidelines printed/uploaded to mobile app and utilized by prescribers
- Workshops conducted for veterinarians and agro-vet owners for promoting rational antimicrobial use.
- AMU data from veterinary hospitals reviewed.
- AMU surveillance findings shared to improve prescribing and use.

Cross-cutting activities and coordination:

- GTA will closely coordinate project activities with FHI 360 and the consortium of FFCGN partners.
- GTA will participate in monthly, quarterly, and annual partner review calls led by FHI 360, where technical leads from all organizations will discuss progress, issues, and upcoming collaborations.
- GTA will contribute to the development of annual project work plans and Activity Monitoring, Evaluation, and Learning Plan (AMEL) by supporting indicator development, target-setting, and coordinated data collection practices.
- GTA will engage in the development of the project's Gender Equity and Social Inclusion (GESI) Strategy and will agree on methods to integrate GESI considerations into activity implementation.

V. Deliverables –

SR	Deliverable	Due Date	Submitted to
1.	**Monitoring and Evaluation Plan** (Project background, objective, Logical Framework Analysis (LFA) and indicator matrix, target distribution-match, Reporting mechanism, information flow and feedback mechanism, learning, data management (collection, analysis, backup, data dissemination, ToR of related positions)	15 days prior to the beginning of each program year	Program Director, Senior Strategic Information (SI) Specialist, Monitoring and Evaluation (M&E) Specialist
2.	**Annual Workplan** The work plan should follow template provided by FHI360 and will contain, at a minimum, the following information: • Summary of semiannual progress Description of major activities, by objective and outputs. • An AMEL plan including documentation and communication Plan. • Description of how gender will be integrated into program activities.	30 days prior to the beginning of each program year	Program Director, Senior SI Specialist

SR	Deliverable	Due Date	Submitted to
	• Staffing and STTA plans for the upcoming year; and • Plans for preparing case studies or success stories to highlight work.		
3.	**Quarterly Progress Reports:** Reports will summarize progress in relation to agreed-upon targets contained in the annual work plan, describe specific problems encountered and indicate resolutions or proposed corrective actions; describe the status of activities and deliverables and the date of their completion/submission; discuss changes to personnel and other relevant issues. In lieu of quarterly progress report for the 4th quarter of the program year, the sub-recipient will submit an annual progress report. • Value for money • Significant achievement • Learning review reports • Case studies (TBD), • Best practices (One Health-related) • Significant achievement, • Coordination with stakeholders, • Sustainability/institutionalization/ownership	Latest by five calendar days after the end of each program quarter	Program Director, Senior SI Specialist
4.	**Annual Reports:** The report will summarize program progress, provide an analysis of program impact based on activities completed or in progress, identify success stories and case studies, and suggest resolution of any outstanding issues.	Latest by 15 calendar days after the end of each program year.	Program Director, Senior SI Specialist
5.	**Monthly Progress Report:** - Program accomplishments and plan (with supporting docs) - Financial Progress (Burn rate) - Admin, logistics, and HR - Risk and Challenges - Lesson learned	Latest by five calendar days of the following month	
6.	**Quarterly Financial Report:**	Latest by five calendar days after the end of each program quarter	Program Director, Finance Director
7.	**Field Trip Report:**	Within 10 days of return or latest by five calendar days of	Program Director, Senior SI Specialist

SR	Deliverable	Due Date	Submitted to
		following month for the last month of every quarter	
8.	**Equipment Inventory Report:** List of assets procured under the award tracked, and submitted in the template provided by FHI 360	Within 30 calendar days after the end of each program year	Program Director, Senior SI Specialist
9.	**Activity 1.1**.1 Report on a. Farm-level AMU surveillance in seven provinces b. AMU pilot surveillance report in dairy c. Active AMR surveillance d. AMU PPS e. Surveillance reports shared in country. f. Integrated study report shared. g. AMR AMU AMC newsletter, bulletin shared. GTA will prepare a comprehensive report on the following activities: ***The Farm Level AMU Surveillance in broilers*** in 7 Provinces report will detail the surveillance of antimicrobial use (AMU) at the farm level across seven provinces, highlighting the methodologies, findings, and implications for antimicrobial resistance (AMR). ***The AMU Pilot Surveillance Report in Dairy*** will cover the pilot surveillance of AMU in dairy farms, including data collection methods, results, and recommendations for improving AMU practices in the dairy sector. ***The Active AMR Surveillance in Poultry and Cattle*** report will document the active surveillance of AMR, including the testing and analysis of samples from various sources, and will provide insights into the current state of AMR. ***The AMU PPS*** report will summarize the findings from the AMU PPS, detailing the prevalence of AMU at specific points in time, the patterns of use, and any notable trends observed. **The AMU data from veterinary hospitals** report will present the analysis of AMU data collected from veterinary hospitals, including the review process, key findings, and feedback provided to improve AMU practices in veterinary settings. ***The AMC data*** report will provide a comprehensive overview of the data gathered on AMC in humans, focusing on the quality and reliability of the data, and the implications for public health. ***The comprehensive surveillance reports*** will compile all surveillance reports shared within the country,	Within 30 working days following the completion of the tours	Program Director, Senior SI Specialist

SR	Deliverable	Due Date	Submitted to
	summarizing the key findings and the impact of these reports on national AMR, AMU, and AMC. ***The Integrated Study Report*** will detail the findings of integrated studies conducted across all sectors (HH, AH, environment, sectors, and relevant stakeholders), including methodologies, results, and the implications for integrated AMR/AMU surveillance and management. ***AMR, AMU, AMC newsletter and bulletin*** will be shared that will include updates on AMR, AMU, and AMC activities, research/surveillance findings.		
10.	**Project Close Out Plan** A plan for the phase-out of activities includes: (1) dates for final delivery of all goods and services procured under this subcontract, and a timetable of final activities disseminating the Activity's lessons learned and best practices.	Four months prior to the expiration of the subcontract	Program Director, Contracting Officer
11.	**Project Completion Report** At the conclusion of the work, the sub recipient shall prepare and submit to the FHI 360 technical lead a final report that will summarize the accomplishments of the project. The final report will summarize the accomplishments of the subaward, the methods used, and the products developed, including a discussion of findings and notation of successes and/or strategies that did not achieve the anticipated effect.	Within 30 calendar days after the expiration or termination of the subcontract	Program Director, Senior SI Specialist

Monitoring and Evaluation (M&E) Plan

This M&E plan will ensure that the proposed activities are effectively monitored, and the intended results are achieved. It describes the collection, analysis, and use of specific data to measure and document project achievements, informing program planning and decision-making.

Through M&E, we will continuously:

- Track the progress of field implementation, logistics, and management of support activities.
- Review the quality and timeliness of AMR, AMU, and AMC data.
- Develop a monitoring checklist for each proposed outcome based on the LFA.
- Ensure timely and accurate dissemination of analyses to decision-makers.
- Facilitate continuous improvement through data-driven insights.

GTA will employ various methodologies to collect data across multiple activities. This includes active AMR surveillance by conducting one round of surveillance in poultry and cattle, involving stakeholder workshops, planning, sample collections, laboratory testing, and analysis. Additionally, GTA will establish and strengthen a surveillance system across all seven provinces to monitor responsible antimicrobial use in poultry farms. To capture a snapshot of AMU in healthcare settings, PPS will be conducted at 12 sites. Integrated AMR data collection approaches, such as the Tricycle, will be implemented to gather

comprehensive data on AMR, AMU, and AMC. Furthermore, GTA will collaborate with DDA, manufacturers, and importers to collect and report quality AMC data to GLASS. All data will be collected electronically to enhance the timeliness of monitoring and evaluation.

For quality assurance, GTA will implement several measures, such as ensuring validity by regularly reviewing and validating data using established tools and processes; maintaining reliability by standardizing data collection procedures across all sites and over time; protecting data integrity through the use of an in-house data management facility to prevent tampering or loss; achieving precision by employing validated data collection instruments to capture specific and accurate information; and ensuring timeliness through real-time data entry and prompt reporting to facilitate efficient analysis and decision-making. Data analysis will be performed using statistical analysis software and methodologies to identify trends, patterns, and insights. Findings will be documented in comprehensive reports to inform program planning and decision-making. GTA will also conduct regular data-sharing sessions, workshops, and publications to disseminate findings to relevant stakeholders.

Stakeholder Engagement: GTA will maintain close collaboration with local and national stakeholders, including government agencies, healthcare professionals, farmers, and policymakers. This will ensure that the data and analyses meet their specific needs and are effectively utilized in decision-making. Regular training, awareness campaigns, advocacy, and data-driven interventions will be conducted to promote the rational use of antimicrobials.

Reporting and Dissemination: The AMR/AMU/AMC data collected will be promptly and effectively disseminated to relevant sites, stakeholders, and practitioners across HH, AH, aquaculture, environment, and food sectors. Reports will include:

- AMR/AMU surveillance reports
- AMR, AMU, and AMC newsletters and bulletins
- Farm-level AMU surveillance in seven provinces
- AMU pilot surveillance report in dairy cattle
- AMU PPS
- Integrated study report
- AMR AMU AMC newsletter, OH bulletin

VI. Documentation and Communication Plan:

GTA will document all key project activities to maintain a thorough record of processes and lessons learned. This documentation will be crucial for both internal assessments and external reporting to the FHI 360/FFCGN team. Additionally, a robust communication plan will be developed for effective dissemination of information, data, and evidence within the organization and to external stakeholders.

The organization will focus on project-specific indicators outlined in the project's MEL Plan. The project manager will coordinate and communicate closely with FHI 360/FFCGN to standardize data collection and reporting practices and tools, share project insights, and actively participate in assessment and learning reviews. GTA will be responsible for timely and comprehensive reporting on all relevant project indicators and objectives, including crosscutting activities as requested by FFCGN. To streamline the data collection processes, GTA's project team will work with the FHI 360/FFCGN team to design and refine project surveys and other data collection instruments.

Timeline/Gantt Chart -- *A schedule of program activities, as listed in the 'Activities and Results' section above, to be completed by week or month. (See sample chart below, to be included as Annex 1)*

Annex 1: Project Activity Timeline: Workplan from August 2024 to September 2025

Activity	Months (August 2024 – September 2025)													
	Q_3		Q_4			Q_1			Q_2			Q_3		
	M 1	M 2	M 3	M 4	M 5	M 6	M 7	M 8	M 9	M 10	M 11	M 12	M 13	M 14
Result 1.1. Active AMR surveillance in poultry and cattle conducted and final report disseminated to stakeholders.														
Coordination meeting with DLS, CVL														
Coordination meeting with participating laboratories														
Initiate Active AMR surveillance in poultry and cattle														
Conduct Active AMR surveillance in poultry														
Conduct Active AMR surveillance in cattle														
Share Final Report of Active AMR surveillance in poultry and cattle														
Result 2.1 Orientation package, including the training materials, developed for equipment management and inventory management for microbiology.														
Conduct coordination meeting with NPHL on Orientation package development and SOP for inventory management development.														
Develop and finalize orientation package and SOP														
Result 2.2 Site staff received orientation on equipment management and inventory management", Microbiology equipment optimally used (monthly working status updated)														
Conduct orientation on logistic management (microbiology consumables/equipment) for site staff. And conduct training on equipment and inventory management														
Result 2.3. "Annual biosafety equipment Calibrated for participating laboratories and equipment parts maintained (HH, AH, food)"														
Report monthly working status of microbiology equipment.														
Consultant's – Biomedical Engineer's support for equipment maintenance (need base)														

Activity	Months (August 2024 – September 2025)													
	Q_3		Q_4			Q_1			Q_2			Q_3		
	M 1	M 2	M 3	M 4	M 5	M 6	M 7	M 8	M 9	M 10	M 11	M 12	M 13	M 14
Procurement plan in place and used by Laboratory sites.														
Result 3.1. AMU PPS conducted at 12 sites and findings disseminated.														
Coordination with MoHP to finalize the list of AMU PPS sites														
Receive approval for AMU PPS Sites from MoHP and NHRC (FHI 360 to follow up/renewal/amendment request with NHRC)														
Coordination meeting with 12 AMU PPS sites														
Conduct orientation to GTA staffs and consultants on AMU PPS														
Conduct AMU PPS orientation in 12 sites														
Conduct survey on AMU in 12 sites														
Data analysis on AMU PPS														
Disseminate the findings on AMU PPS														
Result 4.1. AMU survey in poultry and AMU pilot survey in dairy cattle conducted and final report disseminated to stakeholders.														
Coordination with VSDRL and DLS, to revise the AMU survey plan in poultry and dairy animals														
Finalization of survey sites in poultry and finalization of pilot AMU survey sites in dairy animals														
Conduct AMU survey in poultry														
Conduct pilot AMU survey in dairy animals														
Data analysis and reporting														
Result 5.1. Quality AMC data from human health gathered and reported														
Coordination with DDA, and stakeholders (manufacturers, distributors, and importers)														
AMC data collection														
Development of data recording format and software development														
Report AMC data to GLASS														

Activity	Months (August 2024 – September 2025)													
	Q_3		Q_4			Q_1			Q_2			Q_3		
	M 1	M 2	M 3	M 4	M 5	M 6	M 7	M 8	M 9	M 10	M 11	M 12	M 13	M 14
Result 6.1 Integrated AMR surveillance conducted, and results disseminated.														
Coordination meeting with HH, AH, environment, sectors and relevant stakeholders on revision/adaptation and finalization of protocol for integrated surveillance.														
Obtain NHRC approval														
Conduct Integrated study														
Data analysis and results disseminated														
Result 7.1. Respective Departmental websites host content with AMR/AMU/AMC information and data shared through workshops and a conference.														
Conduct workshop to share AMR/U/C data at province level														
Conduct workshop to share AMR/U/C data at national level														
Design AMR/AMU/AMC bulletin														
IEC materials design														
IEC materials print														
Print and disseminate AMR/AMU/AMC bulletin														
Result 7.2 AMR/U/C data sharing workshops held, AMR data sharing workshop held with stakeholders and practitioners across sectors (Aqua., food, env.)														
Conduct AMR/AMU/AMC dissemination														
Conduct One Health conference														
Design AMR/AMU/AMC bulletin														
Upload Information on AMR/AMU/AMC on respective stakeholder's website														
IEC materials design														
IEC materials print														
Print and disseminate AMR/AMU/AMC bulletin														

Activity	Months (August 2024 – September 2025)													
	Q_3		Q_4			Q_1			Q_2			Q_3		
	M 1	M 2	M 3	M 4	M 5	M 6	M 7	M 8	M 9	M 10	M 11	M 12	M 13	M 14
Result 7.3 Treatment guideline printed/uploaded in mobile app and utilized by prescribers, workshops with veterinary practitioners and Argo vet owners "on promoting rational use" conducted, AMU data from veterinary hospitals reviewed, AMU surveillance findings shared for improvement in prescribing and use.														
Coordination meeting with CVH and hospital in 7 provinces														
Review data from each hospital and provide feedback														
Conduct workshop with veterinary practitioners, agrovet owners, and farmers														
Sharing of AMU surveillance findings for improvement in prescribing practices														
IT support for strengthening AMR secretariat and NCC for developing One health database, dashboard and website														
Submission of final technical and financial reports														