Memorandum of Understanding

between

SECRETARY OF STATE FOR HEALTH AND SOCIAL CARE

and

FOOD AND AGRICULTURE ORGANIZATION (FAO)

Ref: 2022_036b

Contents

This Memorandum of Understanding ("**MoU**") is made on 1st October 2022

BETWEEN

1. **SECRETARY OF STATE FOR HEALTH AND SOCIAL CARE** of 39 Victoria Street, London, SW1H 0EU (the "**Authority**");

AND

2. **FOOD AND AGRICULTURE ORGANIZATION** of Via delle Terme di Caracalla 00153 Rome, Italy, (the "**Recipient**")

BACKGROUND

(A) The Fleming Fund represents the UK Government's investment into improving laboratory capacity for diagnosis and surveillance of anti-microbial resistance (AMR) in low-income countries where AMR has a disproportionate impact (the "**Fleming Fund**"). The Fleming Fund will do this through support to implementation of AMR National Action Plans by making investments in:

- building laboratory capacity;
- collecting drug resistance data;
- enabling the sharing of drug resistance data locally, regionally and internationally;
- collating and analysing data on the sale and use of antimicrobials medicines, particularly antibiotics;
- advocating the application of these data to promote the rational use of antimicrobials for human health, animal health and agriculture; and shaping a sustainable system for AMR surveillance and data sharing.

The recipient will implement projects in the food and agriculture sectors in Sub-Saharan Africa, and South and South-East Asia to generate data-for-action to combat antimicrobial resistance using a One Health approach.

The Project will use a "One Health" approach which encompasses work in human, animal (agriculture) and environmental health. This approach recognises that the nature of drug resistant infections and their spread often involved pathogens which spread to and from animals (for example, pigs and poultry) to humans; and that environmental exposure to antimicrobial agents is a key factor in driving the emergence and spread of drug resistant infections.

(B) The Authority may approve a Fleming Fund Grant for the purposes of undertaking the Project Proposal in accordance with this MoU.

AGREED TERMS

1. DEFINITIONS AND INTERPRETATION

1.1 In this MoU the following terms shall have the following meanings:

"Budget Proposal"	means the proposal in Schedule 2;
"Confidential Information"	means any information which has been designated as confidential by either party in writing or that ought to be considered as confidential (however it is conveyed or on whatever media it is stored) including information the disclosure of which would, or would be likely to, prejudice the commercial interests of any person, trade secrets, intellectual property rights and know-how of either party and all personal data and sensitive personal data;
"Days"	All references to days in this MoU shall mean calendar days unless otherwise stated;
"Effective Date"	shall mean 1st October 2022;
"Employee"	shall mean all directors, officers, employees, agents, consultants and contractors of the Recipient and/or of any Sub-Recipient engaged by the Recipient in the performance of the Recipient's obligations under this MoU;
"Grant" or "**Fleming Fund Grant**"	the sum of $7,867,494 (£ 6,034,368)[1] to be paid to the Recipient in accordance with this MoU;
"Grant Payment"	Payments made to the Recipient from the total Grant in accordance with this MoU;

[1] UN Operational exchange rate of 14 April – USD 1 = GBP 0.767

"Grant Period"	as specified in Paragraph 17.1;
"Intellectual Property Rights"	all patents, copyrights and design rights (whether registered or not) and all applications for any of the foregoing and all rights of confidence and know-how however arising for their full term and any renewals and extensions;
"MoU"	shall mean this Memorandum of Understanding and shall include the following: • Schedule 1: the Technical Proposal; • Schedule 2: the Budget Proposal; • Schedule 3: the Work Plan; • Schedule 4: the Reporting Requirements; • Schedule 5: Invoicing, Payment Plan & Bank Details; • Schedule 6: Representatives of the Parties;
"Prohibited Act"	means: • offering, giving or agreeing to give to any servant of the Authority any gift or consideration of any kind as an inducement or reward for: o doing or not doing (or for having done or not having done) any act in relation to the obtaining or performance of this MoU or any other contract with the Authority; or o showing or not showing favour or disfavour to any person in relation to this MoU or any other contract with the Authority; • entering into this MoU or any other contract with the Authority where a commission has been paid or has been agreed to be paid by the Recipient or on its behalf, or to its knowledge, unless before the relevant contract is entered into particulars of any such commission and of the terms and conditions of any such contract for the payment thereof have been disclosed in writing to the Authority; or • defrauding or attempting to defraud or conspiring to defraud the Authority;
"Project" or **"Project Proposal"**	the project described in Schedule 1;

"Project Manager"	the individual who has been nominated to represent the Authority for the purposes of this MoU, as set out in Schedule 6;
"Recipient's Representative"	means the individual who has been nominated to represent the Recipient for the purposes of this MoU, as set out in Schedule 6;
"Work Plan"	means the plan in Schedule 3.

2. GENERAL

2.1 The headings to this MoU do not and will not by implication form any part of this MoU.

2.2 Unless the context requires otherwise references in this MoU to a paragraph or schedule are references respectively to a paragraph or schedule of this MoU.

2.3 This MOU is not intended to be legally binding and no legal obligations or legal rights shall arise between the Parties from the provisions of the MOU. The Parties enter into the MOU intending to honour all their obligations and, notwithstanding the foregoing, the Parties undertake to strictly observe the provisions of Paragraphs 10, 23 and 25 of this MOU.

3. PURPOSE

The Recipient shall use the Grant only for the delivery of the Project and in accordance with the provisions set out in this MoU. The Grant shall not be used for any other purpose without the prior written agreement of the Authority.

4. PAYMENT OF GRANT

4.1 The Recipient shall issue a request for a Grant Payment to the Authority in accordance with the agreed budget and costs (in Schedule 2), the work plan (in Schedule 3), the reporting requirements (in Schedule 4) and payment plan (in Schedule 5). For the second and all subsequent requests for a Grant Payment the Recipient shall also submit to the Authority a standard FAO financial report that sets out clearly actual expenditure against the funds previously disbursed and the approved programme budget, a payment request for the subsequent period, and forecasted expenditure for the calendar and financial year (31 March) in accordance with the budget format provided in Schedule 2.

4.2 Upon receipt of a satisfactory request for a Grant Payment, the Authority may make the Grant Payment to the Recipient.

4.3 Subject to Paragraph 4.4 and 18, the Authority shall, subject to its own governance and approvals processes, pay the Grant Payment to the Recipient in accordance with the payment plan (in Schedule 5).

4.4 No Grant Payment shall be paid to the Recipient unless and until the Authority is satisfied that such payment will be (or for monies previously received, has been) used for proper expenditure in the delivery of the Project.

4.5 The total amount of the Grant shall not be increased in the event of:

[4.5.1] any overspend by the Recipient in its delivery of the Project; or

[4.5.2] any liabilities arising during and or at the end of the Project that are not part of the agreed budget and costs in Schedule 2.

4.6 All grant payments would be made into the bank account specified in Schedule 5 (the schedule may need to be updated as necessary) and will be administered through the Recipient's system, in a manner that they can be traced and acknowledged as being provided by the Authority (or whomever is considered the donor), including through separate accounting records. When making payments the Authority (updated as necessary) should advise FAO Headquarters as to the amount deposited and the FAO project name/symbol for which the funds are being deposited.

4.7 In line with UK Government financial regulations, the Authority will not make payments in advance of need, however on the basis that the Recipient must receive funds in order to commence project activity, tranche payments will be released to the Recipient on an annual basis, in advance of expenditure.

4.8 The Recipient shall not commence any activities until the payments referred to above have been received by the Recipient and it shall not be required to assume any liability in excess of the funds paid into the account referred to above.

4.9 The Recipient agrees and accepts that it will not apply for duplicate funding in respect of any part of the Funded Activities or any related administration costs that the Authority is funding in full under this MoU.

5. DELAYS

If the Recipient's progress against the Work Plan at Schedule 3 is impeded or delayed, the Recipient shall notify the Authority of the circumstances and probable effects together with full proposals for mitigating the delays. Any variation in the Grant Period will only be accepted in accordance with Paragraph 29. Any expenditure claimed against the Grant outside of the agreed Grant Period will not be reimbursed.

6. GENERAL & FINANCIAL REPORTING REQUIREMENTS

6.1 The reporting requirements of the Grant are set out in detail in Schedule 4. All reports must be submitted to the Authority in the format presented in Schedule 2. Where the Authority requests changes to the report format, the time required to implement such changes and the type of changes will be subject to approval by both parties to this agreement.

6.2 The Recipient shall, on request and with reasonable notice, provide the Authority with such further information and explanations as the Authority may reasonably require in order for it to establish that the Grant has been used properly in accordance with this MoU.

6.3 The Recipient must notify the Authority of any expected delay in the submission of reports against the agreed timetable as soon as possible, providing a written explanation of the reasons for the delayed submission.

6.4 If the Recipient submits a report which is deemed by the Authority as not in accordance with the requirements of Schedule 4, it may request the Recipient to re-write and re-submit the report.

6.5 Where the appropriate reports have been delayed or do not meet the requirements, the Authority may suspend or discontinue Grant funding until such reports have been adequately provided.

6.6 In addition to regular reporting requirements, the Authority may undertake in-grant monitoring throughout the Grant Period to verify technical progress against the aims and objectives of the Project, as set out in Schedule 1 (Technical Proposal). The Recipient shall provide all reasonable assistance to the Authority with monitoring the technical progress.

6.7 The Recipient shall address any enquiries about this MoU and its performance, in the first instance, the Authority shall address any enquiries about this MoU and its performance, in the first instance, to the Recipient's Representative. Initial appointments for the Project Manager and the Recipient's Representative are set out in Schedule 6. Both parties may substitute alternative representatives by written notice served upon the other.

6.8 The Recipient will within 3 months of the end of each financial year (31 March) provide the Authority with project annual financial reports to 31 March each year, in US Dollars. This report will be certified by the Recipient Trust Fund Financial Unit (CSFE) and will be in the format presented in the schedule 2 the Budget Proposal.

6.9 Upon completion of the project, the Recipient will submit within six months of the end date of the project, unless otherwise agreed, a financial report in US Dollars and certified by the Recipient Trust Fund Financial Unit (CSFE). The format of the final financial report will be the same as that of the schedule 2 the Budget Proposal.

7. AUDIT & ACCOUNTS

7.1 The Recipient shall maintain full, separate, accurate and up-to-date records and accounts of the receipt and expenditure of the Grant monies under this MoU (the "**Grant Expenditure**") for a period of seven (7) years after completion of the Project Proposal. Such records must isolate the Grant Expenditure claimed under this MoU from the Recipient's day-to-day and normal business operations such that those records may be inspected and/or audited independently by an organisation commissioned by the Recipient pursuant to the Recipient's financial rules and regulations.

7.2 The Project funded by contributions from the Authority will be exclusively subject to the external and internal audit procedures provided for in the Recipient's financial regulations, rules and policies. The audit reports of the Recipient's independent external auditors conducted at organisational level are public documents and are available on the Recipient's Web site as per the following link (http://www.fao.org/aud/48639/en/). The Recipient's internal audit reports are available upon request in accordance with the Recipient's policy for disclosure of reports of the Office of the Inspector-General (OIG), as set out in section D of the Charter of OIG as per the following link (http://www.fao.org/aud/36713-066c8bc2e3599240868b408bc537243a0.pdf). In the event that an audit report contains observations directly relevant to a contribution or its utilization, the Recipient will advise the Authority and provide it either with the relevant Web site locator address, or a copy of the report in accordance with the disclosure policy. In the event that the Authority becomes aware of information that would indicate a need for further and closer scrutiny of the Project funded by contributions from the Authority under this Framework Arrangement, the Authority agrees to bring this information promptly to the attention of the Recipient's OIG. In such cases, the Parties agree to adopt the following procedures:

(a) the Recipient will, in accordance with its accountability framework and any other the Recipient Rules and Regulations, take such action as it determines is appropriate, in a timely, appropriate and effective manner;

(b) at the sole discretion of the Recipient's OIG, action under the previous subparagraph may include, without limitations, additional action by the Recipient's OIG which may include additional internal audit, investigations or other forms of review;

(c) in cases where the additional action entails an audit of a national institution or a Non-governmental Organization (NGO), the disclosure of the related audit report to the Authority will be subject to the Recipient obtaining written consent from the concerned entity, in accordance with the Recipient's procedures;

(d) in cases where the additional action entails an internal audit of the Recipient, where considered appropriate by the Recipient's OIG, it may retain the services of a private audit firm to provide any necessary services to assist OIG under its direct and sole supervision. If the Recipient intends to request the Authority to bear some or all of the cost of such additional action (whether incurred directly by OIG or through a private audit firm) it will involve the Authority in the process, e.g. through engagement with the Authority auditors, input to the Terms of Reference and early access to the final version of the report. Insofar as such action results in the issuance of an internal audit report, the Parties take note that such report will be made available to the Recipient's member countries, in accordance with the Recipient Rules and Regulations, including policies and practice relating to the disclosure of confidential information.

8. ASSETS & INVENTORY

8.1 The Recipient shall maintain an inventory of all goods purchased and claimed under this MoU that cost more than USD 500.

8.2 A copy of the inventory must be made available to the Authority on request.

8.3 The Recipient will ensure that all procurement activities undertaken under the Grant will comply with its procurement rules and procedures. The Recipient's procurements are generally undertaken on the basis of competition and are based on the fundamental principles of best value for money, fairness, transparency and economy.

8.4 All items purchased using the Grant may only be used by the Recipient for the delivery of the Project and shall be safely kept and maintained by the Recipient for the duration of the Grant Period. Such items cannot be disposed of or transferred to any other organisation or individual by the Recipient either during or after the Grant Period without the express consent of the Authority. Should the Recipient wish to seek such consent, then it should provide a written explanation to the Authority providing the rational and benefit to the Fleming Fund.

8.5 The ultimate disposal or transfer of all items purchased using the Grant at the completion of the Project shall be proposed by the Recipient for the Authority to give final approval.

9. CONFLICT OF INTEREST

The Parties agree that it is important to take all necessary precautions to avoid conflicts of interest and corrupt practices. To this end, the Recipient shall continue to maintain standards of conduct that govern the performance of its staff, including the prohibition of conflicts of

interest and corrupt practices in connection with the award and administration of contracts, grants, or other benefits, as set forth in the Recipient's Staff Regulations, Staff Rules and the Standards of Conduct for the International Civil Service which are included in the Recipient's Administrative Manual, the Recipient's Financial Regulations and rules, and the Recipient's Procurement Procedures.

10. CONFIDENTIALITY

10.1 Subject to Paragraph 11, each party shall, during the term of this MoU and thereafter, keep secret and confidential all Intellectual Property Rights, Confidential Information, and any other business, technical or commercial information disclosed to it as a result of this MoU and shall not disclose the same to any person, save to the extent necessary to perform its obligations in accordance with the terms of this MoU or save as expressly authorised in writing by the other party.

10.2 Confidential Information includes information provided by individual beneficiaries and beneficiary country(ies). Disclosure of such information is subject to the prior written consent of, and only to the extent explicitly permitted by, the individuals or Governments concerned;

10.3 The obligation of confidentiality contained in this Paragraph 10 shall not apply or shall cease to apply to any Intellectual Property Rights, or other business, technical or commercial information which:

10.3.1 at the time of its disclosure by the disclosing party is already in the public domain or which subsequently enters the public domain other than by breach of the terms of this MoU by the receiving party;

10.3.2 is already known to the receiving party as evidenced by written records at the time of its disclosure by the disclosing party and was not otherwise acquired by the receiving party from the disclosing party under any obligations of confidence; or

10.3.3 is at any time after the date of this MoU acquired by the receiving party from a third party having the right to disclose the same to the receiving party without breach of the obligations owed by that party to the disclosing party.

11. FREEDOM OF INFORMATION

11.1 Without prejudice to the Recipients immunities and privileges, he Recipient acknowledges that the Authority is subject to the requirements of the Freedom of Information Act 2000 ("FOIA") and the Environmental Information Regulations 2004 ('EIRs').

11.2 Without prejudice to the Recipient's immunities and privileges and without submitting to the laws of any jurisdiction, the Recipient shall give due consideration, in accordance with its rules and procedures, to any request for assistance as reasonably requested by the Authority to respond to a request for information in the context of Paragraph 11.1.

12. DATA PROTECTION

12.1 The Recipient shall comply with general data protection principles, namely it shall ensure that information is:

12.1.1 used fairly, and transparently;

12.1.2 used for specified, explicit purposes;

12.1.3 used in a way that is adequate, relevant and limited to only what is necessary;

12.1.4 accurate and, where necessary, kept up to date;

12.1.5 kept for no longer than is necessary; and

12.1.6 handled in a way that ensures appropriate security, including protection against unlawful or unauthorised processing, access, loss, destruction or damage.

13. AMR DATA SHARING

The Recipient, in accordance with its rules, regulations and policies, shall take any reasonable steps necessary to facilitate the principle of data sharing to strengthen Antimicrobial Resistance (AMR) data publication and usage in line with the objectives of the Fleming Fund and Paragraph 23 (Intellectual Property). Where data relates to beneficiary countries or individual beneficiaries, their written consent must be obtained prior to disclosure.

14. ETHICAL CONDUCT OF THE PARTIES

14.1 Subject to the Recipient's accountability and oversight framework and to its Rules and Regulations, it will cooperate with the Authority to facilitate the proper administration of justice in a manner consistent with the Convention on Privileges and Immunities of the Specialized Agencies, and in accordance with relevant resolutions of the United Nations General Assembly.

14.2 The Parties have a zero tolerance approach towards fraud and other corrupt practices that may lead to the misuse of funds and will recover misused funds whenever possible. The Recipient will promptly and without undue delay inform the Authority of any credible allegations of fraud or other corrupt practices related to the projects carried out by the Recipient and financed in full or in part by the Authority, where such notification will not jeopardize the proper conduct of the investigation into such allegations or the due process rights of the individuals involved. The Recipient is responsible for investigating such allegations and will take timely and appropriate action to investigate all such credible allegations in accordance with its internal Rules, Regulations and policies, and will keep the Authority informed of the status of such investigations, where such notification will not jeopardize the proper conduct of the investigation into such allegations or the due process rights of the individuals involved. Both parties will facilitate working level consultation, information exchange and, where appropriate, technical support between their investigation units to assist with such investigations by the Recipient.

14.3 All the Recipient's activities under this MoU shall be made in accordance with the Recipient's Rules, Regulations and policies, which conform to generally accepted principles of good procurement practice, including safeguards against corrupt and illegal practice, and that no offer, gift, payment or benefit of any kind, which would or could be construed as an illegal or corrupt practice can be accepted, either directly or indirectly, as an inducement or reward for the award or execution of procurement contracts. To this end, the Recipient shall ensure that it applies and enforces its relevant rules regarding corrupt and illegal practices.

14.4 In cases of credible allegations of or actual fraud or corruption established in accordance with the Recipient's Rules and Regulations, the Authority reserves the ability to suspend or terminate funding with immediate effect, in preference to the standard notice period. In such cases, the parties will agree on measures for the orderly conclusion of ongoing activities, including with respect to any related commitments and liabilities.

14.5 The Authority reserves the ability to recover funds that have been subject to proven fraud or corruption and will work with the Recipient to do so in accordance with the Recipient's Rules and Regulations. In respect of amounts which the Recipient has been able to recover from the perpetrator of a fraudulent or corrupt act, such recovered amounts will be returned to the Project for which the recovered amounts were intended, or returned to the Authority – as may be agreed by them. Where the Project for which the recovered amounts were intended have been concluded or terminated, the amount shall be reprogrammed at the Authority's instructions or returned to the Authority at such bank account as determined by the Authority. In respect of such amounts that have not been recovered, the Recipient recognizes the importance to the Authority that such funds be recovered and, when it has been established under the Recipient Rules and Regulations that the Recipient personnel or suppliers have engaged in fraudulent or corrupt practices, the Recipient shall cooperate with national authorities on a case-by-case basis, in accordance with generally accepted principles of law, with a view to ensuring recovery of such amounts. The Recipient further agrees to consult with the Authority, with a view to determining a mutually agreeable solution, including the return of such funds when a loss is attributable to a failure in the Recipient's internal control mechanisms, and shall discuss such issues on a case-by-case basis.

14.6 The Authority may request direct consultations at a senior level with the Recipient in order to obtain assurance that the Recipient's oversight and accountability mechanisms have been and are being fully applied in connection with any actual wrongdoing, or credible allegation, as described in paragraph 14.2.

15. SAFEGUARDING

15.1 Both parties commit to taking reasonable steps to prevent sexual exploitation, abuse and misconduct. With respect to allegations of misconduct including sexual exploitation and abuse (SEA), sexual harassment and abuse (SHA), corrupt, fraudulent, collusive, or coercive practices, the Recipient shall take timely action as it determines to be appropriate, including full investigation of all credible allegations. Where such action involves the conduct of an investigation, such investigation will be conducted by the Recipient, in accordance with its regulations, rules, policies and procedures, and the relevant resolutions or decisions of the General Assembly and in a manner consistent with its privileges and immunities. Where such action involves the conduct of an audit, the terms of Article III shall apply.

15.2 The Recipient shall, in accordance with its relevant regulations, rules, administrative issuances, policies and procedures, inform the Authority of the outcome of investigations concerning credible allegations of sexual exploitation and abuse (SEA), sexual harassment and abuse (SHA), corrupt, fraudulent, collusive, or coercive practices in relation to the Project, provided that such information does not jeopardize the proper conduct of the investigation or the due process rights of the individuals involved.

15.3 Where an investigation has concluded that misconduct has occurred, the Recipient shall:

(a) Use reasonable efforts to recover any part of the Contribution, which the Recipient has established on the basis of its investigation as having been lost as a result of prohibited conduct;

(b) Give proper consideration to referring matters deemed appropriate by the Recipient to the appropriate Member State authorities, in-connection with subparagraph (a) of this Paragraph.

16. LIABILITY FOR EMPLOYEES AND OTHERS ENGAGED IN IMPLEMENTATION OF THIS MOU

16.1 The Parties acknowledge and agree that the Authority is not responsible for the employment of any person engaged by the Recipient, whether as an Employee or a consultant, in connection with this MoU, and this applies to any costs incurred by the Recipient in terminating the employment or engagement of such person or persons.

16.2 The Authority does not assume any responsibility for security arrangements in relation to this MOU, including the occupational health, safety and security of any person employed or otherwise engaged by the Recipient in the implementation of the Funded Activities, including for those employed or engaged by any downstream partners. Responsibility for such security arrangements shall be as provided in the contractual arrangements concluded between the Recipient and those individuals or entities employed or otherwise engaged by it to implement the Funded Activities.

17. DURATION

17.1 This MoU will commence on the Effective Date and last for a period of 30 calendar months (the "**Grant Period**").

17.2 Any of the Parties' obligations under this MoU that remain unfulfilled following the expiry or termination of this MoU shall survive such expiry or termination and continue in full force and effect until they have been fulfilled.

18 TERMINATION

18.1 Either party may terminate this MoU at any time by giving three (3) months' notice in writing to the other. In such an event, the Recipient will be entitled to claim all costs properly and necessarily incurred in line with this MoU prior to the date of termination. The Recipient shall exercise its best endeavours to minimise such costs under such termination and may apply any unutilized portion of the contribution to permit the orderly conclusion of the Project, including the completion of final reports, the withdrawal of personnel, funds and property, settlements of accounts between the parties, and the settlement of contractual commitments or liabilities relating to or in connection with the Project, including in respect of any implementing partners, contractors, sub-contractors, consultants or supplies.

18.2 The Authority may, upon reasonable notice, suspend any payment of the Grant or terminate this MoU if:

18.2.1 it has concerns that the recipient is failing to comply with any of the terms of this MoU; it being understood that the Recipient shall not be considered to be in breach of this MoU if it is prevented from fulfilling its obligations under this MoU by Force Majeure.

18.2.2 any claim against the Grant is based on misleading information or falsified documentation or is made in respect of falsified costs that have not been or will not be incurred;

18.2.3 the Recipient, without the consent in writing of the Authority, assigns or transfers to or causes to be assigned or transferred this MoU or any part, share or interest herein other than to another UN specialized agency or other than for operational reasons including the signature of Letters of Agreement and procurement of goods and services where approach is previously agreed by the Authority.

18.3 The Recipient uses the Grant funding for any purpose other than the delivery of the Project. If any of the circumstances set out in Paragraph 18.1 occur, the Authority will notify the Recipient of its concerns and, following consultations between the Authority and the Recipient, the Authority will provide the Recipient with a reasonable period of time to address them. If within that period, the Authority or the Recipient reasonably believe that no satisfactory resolution is reached and there is no reasonable prospect that such a resolution is imminent, the Authority or the Recipient may terminate this MoU with immediate effect. In such cases, the Authority and the Recipient will agree on measures for the orderly conclusion of ongoing activities, including with respect to any related commitments and liabilities.

18.4 Notwithstanding any other provision of this Paragraph 18, the Authority reserves the right to suspend or terminate this MoU with immediate effect as provided in Paragraph 14.4 if the Project is affected by suspected or actual fraud or corruption.

19 EXIT PLANNING

19.1 The Recipient will prepare an exit plan within the first three months of the signing of this MoU or a timescale proportionate to the Grant Period, whichever is shorter, to allow the cessation or seamless transfer of the Project.

19.2 As part of the exit plan, the Authority will jointly agree a plan for communicating with all partners and employees during the exit period, in a way that avoids any detrimental impact on the respective Parties' organisations resulting from the closure or transfer, and shares responsibilities between the respective Parties.

20 REPAYMENT OF GRANT

20.1 In the event that, following discussion with the Recipient, the Authority requires all or part of the Grant to be repaid in accordance with this Paragraph 20, the Recipient shall pay such amount to the Authority immediately upon demand, unless otherwise agreed between the Parties.

20.2 The Recipient shall promptly repay to the Authority any money incorrectly paid to it either as a result of an error or any other reason. This includes (without limitation) situations where either an incorrect sum of money has been paid or where Grant monies have been paid in error before all conditions attaching to the Grant have been complied with by the Recipient.

20.3 Should any part of the Grant remain unspent at the end of the Grant Period, the Recipient shall ensure that any unspent monies and any interest accrued are returned to the Authority.

21 DELIVERY CHAIN MAPPING

21.1 The Recipient will maintain an up to date and accurate record of downstream partners in receipt of Authority funds and/or Authority funded inventory or assets. This delivery chain map should demonstrate how funds flow from the initial source to end beneficiaries.

21.2 The delivery chain map should be updated regularly by the Recipient and when there are material changes to delivery partners in the chain. As a minimum the Recipient will provide

the Authority with an updated delivery chain map at the following intervals: within 6 months of the commencement of this MOU; annually, and at the end of the project.

22 ACKNOWLEDGEMENT AND PUBLICITY

22.1 The Recipient shall acknowledge the Grant in its annual report and accounts, including an acknowledgement of the Authority as the source of the Grant, in accordance with the Recipient's rules and regulations.

22.2 The Recipient shall not publish any material referring to the Project and the Authority without the prior written agreement of the Authority. The Recipient shall acknowledge the support of the Authority in any materials that refer to the Project and in any written or spoken public presentations about the Project. Such acknowledgements (where appropriate or as requested by the Authority) shall include the Authority's name and logo (or any future name or logo adopted by the Authority) using the templates provided by the Authority from time to time.

22.3 The Parties agree not to use in any press release, memo, report or other published disclosure related to this MoU, any of the other Parties' name and logo without prior written agreement by the party concerned.

22.4 The Recipient agrees to participate in and co-operate with promotional activities relating to the Project that may be instigated and/or organised by the Authority, in accordance with the Recipient's rules and regulations.

22.5 The Authority shall consult with the Recipient to agree the principles by which any external communications can be made around the Recipient's involvement in the Project.

22.6 The Recipient shall comply with all reasonable requests from the Authority to facilitate visits, provide reports, statistics, photographs and case studies that will assist the Authority in its promotional and fundraising activities relating to the Project.

23 INTELLECTUAL PROPERTY RIGHTS

23.1 The Authority and the Recipient agree that all Intellectual Property Rights in or to any information, data, reports, documents, procedures, forecasts, technology and know-how developed by either party during the Grant Period ("**Grant-funded Material**") or owned by either the Authority or the Recipient before the Effective Date, shall remain the property of that party.

23.2 In signing this MoU, the Recipient will be entitled to all intellectual property and other proprietary rights, including but not limited to, patents, copyrights, and trademarks, with regard to products, processes, inventions, ideas, know-how, or documents or other materials developed under this MoU and hereby grants to the Authority a perpetual, worldwide, non-exclusive irrevocable and royalty-free licence to use all the Grant-funded Material for non-commercial purposes, where "**use**" shall mean, without limitation, the reproduction, publication, transfer and sub-licence to the Authority of all the Grant-funded Material and the intellectual property therein, including the reproduction of the Grant-funded Material and products incorporating the same, for use by any person or other dealing anywhere in the world. Permission for re-use of such materials for commercial purposes may be granted on a case by case basis and shall not be unreasonably withheld.

23.3 Where either Party has provided the other Party with any of its Intellectual Property for use in connection with the Project (including without limitation its name and logo), the recipient Party shall, on termination of this MoU, cease to use such Intellectual Property immediately and shall either return or destroy such Intellectual Property Rights as requested by the provider Party.

24 NOTICES

All notices and other communications in relation to this MoU shall be in writing and shall be deemed to have been duly given if personally delivered or mailed to the address of the relevant party, as referred to in Schedule 6 or otherwise notified in writing. If personally delivered all such communications shall be deemed to have been given when received and if mailed all such communications shall be deemed to have been given and received on the second working day following such mailing (except that where such communication is received on a day which is not a working day in the country in which the notice is being delivered or after normal business hours for said country they shall be deemed received on the next working day).

25 IMMUNITIES AND PRIVILEGES

Nothing in this MoU, or in any document or activity relating thereto, shall be construed as a waiver of the privileges and immunities of the Recipient**,** nor as conferring any privileges or immunities of the Recipient to the Authority or to their personnel.

26 DISPUTE RESOLUTION

The Parties will use their best efforts to settle amicably through direct negotiations any dispute, controversy or claim arising out of, or in relation to this MoU.

27 NO PARTNERSHIP OR AGENCY

This MoU shall not create any partnership or joint venture between the Authority and the Recipient, nor any relationship of principal and agent, nor authorise any party to make or enter into any commitments for or on behalf of the other party.

28 ASSIGNMENT

The Recipient may not, without the prior written consent of the Authority, assign, transfer, sub-contract, or in any other way make over to any third party the benefit and/or the burden of this MoU or, except as contemplated as part of the Project, transfer or pay to any other person any part of the Grant. The Authority may not unreasonably withhold its consent.

29 VARIATIONS

29.1 This MoU may be modified by written consent between the Parties. Such amendments shall enter into force one month following notifications of consent by both Parties.

29.2 Should the Recipient wish to amend the approved Project Proposal, the Recipient must submit a written explanation of the change explaining why the changes are necessary and what impact, if any, they may have on the Budget Proposal and Work Plan first to the Authority.

29.3 Where a variation in the Project Proposal is accepted by the Authority, this MoU will be amended in accordance with Paragraph 29.1.

30 GOVERNING LAW AND JURISDICTION

30.1 The present MOU and any document or arrangement relating thereto shall be **interpreted in accordance with** general principles of law, to the exclusion of any single national system of law. Any disputes or differences arising between the Parties shall be addressed as provided in this MOU.

31 ENTIRE AGREEMENT

This MoU shall constitute the whole understanding between the parties and shall supersede any previous arrangements whether in writing or oral in respect of the Project Proposal.

For and on behalf of the Authority:

Name: Nick Adkin

Position: Deputy Director, Global Health Security- International Directorate

Signature: [redacted]

Date: 20 September 2022

For and on behalf of the Recipient:

Name: Laurent Thomas

Position: [redacted]

Signature:

Date:

Schedule 1: Technical Proposal

Project Title: Engaging the food and agriculture sectors in Sub-Saharan Africa, and South and South-East Asia to generate data-for-action to combat antimicrobial resistance using a One Health approach.

Recipient Countries: Sub-Saharan Africa, and South and South-East Asia

Expected EOD: 1st October 2022

Expected NTE: 31st March 2025

Total Budget: USD 7,867,494 (GBP 6,034,368)

1. Problem Statement

There is not enough quantity and quality antimicrobial resistance (AMR), antimicrobial use (AMU), and antimicrobial consumption (AMC) data to support effective decision-making at all levels of the food, agriculture, and environment sectors.

Limitations in the quantity and quality of AMR data (e.g., data from antimicrobial susceptibility testing, whole genome sequencing, transmission pathways, risk factors, etc.), AMU, AMC and antimicrobial residues data, constrain informed decision-making across the food, agriculture, and environment sectors, in particular but not only, in low- and middle-income countries (LMICs). Within these countries, deficiencies in evidence across the food production continuum hamper AMR-related informed decision making, and the development of strategy and policy at all levels (community, national, regional, and global). The impact of these data limitations is compounded by weak legal regulatory frameworks, inadequate human resources to undertake key tasks, and low motivation to act, especially when AMR driven issues are not priority areas for authorities at national, regional, and global scales.

This limitation makes it difficult for policy makers to justify the need to prioritize actions on AMR – particularly in the food and agriculture sectors – over other equally important health and development issues. It also can lead to actions being taken that are ineffective at addressing the current problems (e.g., treatment failures, production challenges, antimicrobial misuse), that squander funding, and ultimately constrain future efforts to address AMR by failing to demonstrate the benefits of investing in AMR control. In addition, a lack of data across public and animal health, food, and the environment sectors, results in a lack of visibility on the need to include AMR as a matter for One Health collaboration at all levels (among sectors, among countries, etc…).

The underlying causes of data limitations on AMR, AMU, and AMC include: 1) a lack of funding to collect data, 2) sparse awareness on the need to collect data, 3) a lack of knowledge on the types of data to collect (e.g., AMR in environment), 4) limitations in the means for analysis and sharing of data at country, regional and global levels, 5) ill-equipped surveillance capacities (e.g., laboratories not well stocked) and, 6) poor regulatory frameworks that do not encourage data production and utilization.

With significant support from the Fleming Fund, the Food and Agriculture Organization of the United Nations (FAO) has begun to address the challenges underlying data limitations on AMR, AMU, AMC antimicrobial residues. Significant progress towards addressing the challenges highlighted above has been made in project focus countries, and this progress has cascaded to other countries within the

focus regions through regional interventions and collaborative initiatives. An enabling environment for data generation as a first and necessary step in combating AMR in the food and agriculture sectors has been created through limited but strategic, awareness raising, pilot evidence generation, highlighting (through assessments) priority areas for strengthening AMR-relevant governance, and pilots for the implementation of targeted good practices. Overall, FAO intends to ensure the consolidation of achievements, continuity to the ongoing initiatives to the extent possible, and expand the depth and breadth of data generation, including capacity building, and application of these capacities at sub-national, national, regional, and global levels.

Building upon achievements made during the past 6 years, the current proposal will support the development/implementation of AMR national action plans (NAPs) (Food and Agriculture components, focusing on activities that target data generation and utilization), support AMR surveillance platforms/communities at national, regional, and global levels, and promote sustainability and co-ownership of interventions with national and regional counterparts. A strong justification for these activities will be made through the development of an economic case that will highlight the costs of use/non-use/prudent use of antimicrobials, and alternatives. The pros and cons of strategies advocated from this economic assessment will be explored through participatory approaches.

2. Background

FAO has been an active player on AMR at global, regional, national, and sub-national levels, with key roles in the Global AMR Action Plan (GAP), AMR Quadripartite agreement, AMR Multi-Partner Trust Fund (MPTF), as well as regional and national level interventions. The organization has implemented a five-year AMR Action Plan, with a new plan (building off the success and lessons from the former) adopted for the 2021-2025 period. FF has been a key partner in FAO's efforts to address the emergence and transmission of AMR by supporting work in target LMICs for the last six years. Significant progress has been achieved in project focus countries and regions, including the cascading of effects on other (non-project focus) countries through regional interventions and collaborative initiatives in the focus regions. Through these efforts, an enabling environment to generate and put data into action to combat AMR in the food and agriculture sectors has been created. Notable achievements include strategic awareness raising, pilot evidence generation, highlighting (through assessments) priority areas for strengthening AMR-relevant governance, and interventions to promote the adoption of good practices among those who use, prescribe, sell, and regulate antimicrobials.

In 2021, the FAO Council 166 approved the new (and already launched) FAO Action Plan 2021-2025 including a revised set of activities for a renewed vision to progressing the fight against AMR. One of the key activities under the Action Plan is to develop and operationalize the International FAO Antimicrobial Resistance Monitoring (InFARM) data platform. This platform will collect and compile AMR data from animals, food and eventually AMU in crops. It will also enable FAO in submitting data into the global Tripartite Integrated System for Surveillance of AMR/AMU (TISSA).

Going forward, FAO intends to consolidate these achievements in focus countries and regions, providing continuity to the ongoing initiatives to the extent possible and expand the depth and breadth on data generation (capacity building, and application of these capacities at sub-national, national, regional, and global levels) and applying lessons learnt. Some core focus areas include supporting the implementation of multisectoral OH AMR NAPs (Food and Agriculture components, with special focus on activities that strengthen data generation and utilization), support AMR surveillance and analysis, support platforms/communities of practice at national, regional and global

levels, strengthen governance and regulation of antimicrobials (including substandard and falsified veterinary products), and promote sustainability and ownership of AMR interventions by national and regional level stakeholders. A framework for the economic argument will be developed and applied to generated evidence on the economics of use/non-use/prudent and non-prudent use of antimicrobials, and alternatives and their implications for AMR, its impacts on health, production and productivity in the agriculture and food sectors, to inform decision making, policy and best practice.

3. EXPECTED RESULTS

Specific outcomes and outputs are detailed below. However, two expected cross-cutting results are embedded in all the five outcomes:

a) Greater focus on gender and inclusion

FAO as an organisation, and in FAO's FF project in particular, gender and equality are a continue effort that we will keep in the second Phase. However, while we recognize that those efforts are successfully implemented, we learned that a proper monitoring and reporting on this area is a gap that needs to be closed in the new project. Data on this matter will be gathered and analysed to support our practices within the project, and to profile what the situation is within the AMR environment in the food and agriculture sectors where we intervene. Gender elements will be factored into all interventions (to the extent possible), including predetermined gender disaggregation of data (as applicable). This will ensure that the gender specific impacts of AMR will be highlighted, to enable appropriate actions. A clear process to monitor and report gender and inclusion will be developed and implemented.

The project will also explore widening the scope through collaboration with other partners, (see below)

b) Collaboration and partnership

The project will maximize the collaboration with other organizations, partners and initiatives as a feature embedded in all sections as mentioned. The aim is to synergize, avoid duplication, and maximize the return for all the parts collaborating in each area. In some cases, collaboration will intensify and or expand as a continuation of current one (e.g.: AMU or surveillance), but also, new areas will be introduced such as gender and inclusion, the economic case, or support to partners in focus countries not covered by this project.

<u>Targeted Countries</u>

In line with the Fleming Fund (FF) focus for continuation of FF Phase I interventions in building FF Phase II, the following 12 countries are targeted for inclusion:

- Sub-Saharan Africa: Ethiopia, Ghana, Kenya, Sudan, Tanzania, Zambia, and Zimbabwe
- South and South-east Asia: Bangladesh, Cambodia, Lao PDR, Philippines, and Vietnam

Additional countries may be included from the remaining current FF focus countries.

The project expected **impact** is to contribute to the availability of quality data, which aids in keeping antimicrobials working, and makes the agrifood systems more resilient to the impact of AMR.

The project **outcome** is to increase and improve data generation (specific and sensitive), its analysis, sharing, and utilization for evidence-based decision making within the food and agriculture sector.

Following the outputs and activities planned to be delivered:

Output 1: Strengthen laboratory and surveillance capacities and related data management infrastructures of the food and agriculture sector to generate, collect, and share data on AMR, AMC, and antimicrobial residues, and actively contribute to integrated AMR surveillance

Over the past six years, FAO has identified priority areas of improvement through assessment missions using the FAO Assessment Tool for Laboratories and AMR Surveillance Systems (FAO-ATLASS) and to develop capacities to establish functional AMR surveillance systems in food and agriculture. Capacity building and development has been provided for national and sub-national selected laboratories within the food and agriculture sectors, including food safety and environment laboratories, based on the needs assessed through FAO-ATLASS assessments. These laboratories have further benefited from equipment, renovation, and training provided through the Fleming Fund country and regional grants programs, and activities delivered by other Quadripartite organizations and funding mechanisms. As a result, capacities for AMR surveillance, including the generation of AMR data obtained from food-producing animals and antimicrobial residues testing, have been improved compared to the situation at the start of FF Phase I. Regional initiatives have been started to support standardization of AMR testing capacities and ensure laboratories are able to generate reliable AMR data that are comparable and repeatable.

After the approval of the new FAO Action Plan on AMR 2021-2025, FAO has initiated the work to develop the International FAO Antimicrobial Resistance Monitoring (InFARM) data platform hosting AMR data from animals and food (as immediate priority) and AMU in crops. The main objectives of the data platform are i) to support countries in collecting, analysing, and using their AMR/AMU data, and ii) To support countries willing to publicly share AMR data from food and agriculture sectors for global surveillance, as a public good for international advocacy and action against AMR. This includes the support of FAO submitting data into the TISSA. The development of the first InFARM platform prototype has just started and is planned to be delivered by end of 2022. An IT company has been contracted for this purpose and voluntary piloting countries will actively contribute and guide the development to ensure that InFARM fits their needs. The initial scope of InFARM will be to host AMR data in priority bacteria of interest for public health, animal health, and indicator bacteria from animals and food, according to international standards and recommendations from Codex Alimentarius guidelines for integrated monitoring and surveillance of foodborne AMR and the World Organisation for Animal Health (OIE) Animal Health Codes (terrestrial and aquatic). Global rollout of InFARM and expansion to additional surveillance programs is planned after 2022 upon successful completion of the pilot phase.

This output of the project will focus on supporting and utilizing the laboratory capacities in the network laboratories to increase the national levels of AMR surveillance and antimicrobial residue monitoring, within the food and agriculture sectors. Data generation and processing capacities will be upscaled to other laboratories to increase the generation and collection of data within various food production value chains. National laboratory networks will be further strengthened, and selected laboratories with higher level of technical and analytical capacity will be used to lead networks at country level. This will increase the participation in AMR surveillance activities of other currently underrepresented sectors (plant, environment) and sub-national public and private laboratories.

Furthermore, support will be provided to build regional/sub-regional laboratory networks to foster the harmonization of AMR data generation and analysis, cross-border collaboration, and data sharing. FAO is targeting all twelve focus countries for providing in-depth support, maximizing the collaboration with other organizations and partners.

The work on residue monitoring will continue to be implemented in collaboration with the joint FAO-IAEA (International Atomic Energy Agency) program at country level, and other ongoing work to strengthen monitoring of residues of veterinary drugs will be leveraged further. Under this project, eight countries will receive direct support to strengthen their residue-monitoring programme. AMU and AMC data generation at farm level will be upscaled in these eight countries.

Within this context, the following activities are proposed to be implemented at country, regional and global level to deliver this output:

Activity 1.1. **Develop tools and guidance at global level** to support countries and regions in the collection, analysis, and reporting of harmonized AMR/AMU/AMC data in food and agriculture sectors complying with international recommendations

Activity 1.2 **Assess AMR/AMU/residues surveillance capacities using/refining FAO tools for developing tailor made plans for progressive improvement.** This includes conducting follow-up assessments using FAO-ATLASS in project countries to measure progress, identify remaining gaps in individual laboratories and national surveillance systems. Data generated by FAO-ATLASS assessments will be stored in the FAO laboratory assessment database to provide tools for countries to store and analyse data and inform interventions.

Activity 1.3 **Strengthen AMR Communities of Practice for data generation and utilization in relevant areas of intervention in food and agriculture** (Community of AMR Laboratory and Surveillance experts; community of ATLASS Assessors; community of Farmer Field School Facilitators; Regional/Sub-regional AMR Technical Advisory Groups – TAGs)

Activity 1.4 **Strengthen laboratory capacities to generate quality AMR data in food and agriculture sectors** through deployment of trainings, provision of materials and facilitation of involvement in quality assurance programs

Activity 1.5 **Support for accessing data management services** for strengthened AMR and AMU/AMC data management, analysis and sharing at country, regional, and global levels. This includes support to countries to participate in global surveillance initiatives sharing data into InFARM and support to install and operationalize laboratory information management systems and data software (SILABFA, WHONET, etc.)

Activity 1.6. **Strengthen operationalization and functionality of InFARM for roll out in project focus countries and regions.** This includes support in the launching of global data calls and expansion of InFARM to additional AMR/AMU surveillance programs in food and agriculture (e.g., aquaculture, AMU/AMR in crops, AMR in animal/agriculture environments).

The country level project activities will support and supplement the integrated AMR surveillance work being implemented through the Fleming Fund country and regional grants programs, and the implementation of surveillance activities under the OH NAP-AMR. Whenever possible, FAO will also leverage on the collaboration with the FAO Reference Centres for AMR for synergizing activities to improve surveillance data quality and use.

The exchange and compilation of surveillance data will be supported by the InFARM data platform (when it is rolled-out), the FAO Laboratory Assessment database (when it is rolled out), and the application of WHONET and SILABFA at facility level. Integrated AMR surveillance data platforms established at country level will also be supported and promoted for use within food and agriculture sectors.

Output 2: Antimicrobial use practices and good practices that reduce AMR transmission along the food chain promoted in food and agriculture.

Data on antimicrobial use and related practices generated through multi-country Analysis of knowledge, attitudes, and practices (KAPs) surveys during FF Phase I, have demonstrated a critical observation, in that those efforts to address AMR knowledge and awareness of AMR among users, prescribers and sellers of antimicrobials, do not necessarily mean that these stakeholders engage in the behaviours needed to address AMR. That is, while raising awareness is often a necessary step, it is likely not sufficient to motivate the required behavioural changes. The disconnect between knowledge, attitudes, and practices, is in part due to sociocultural, economic, and structural barriers. Identification of these barriers is critical to elaborate the intervention strategies capable of changing and sustaining positive behavioural changes. A forceful example of the benefits of this approach come from ongoing interventions that have used barriers to change identified within KAP study, to inform the design of Farmer Field Schools (FFS). While maintaining emphasis on the promotion of good practices through innovative, participatory, and interactive learning approaches, these modified FFS are specifically targeted at addressing AMR and integrate insights from behavioural economics. Initial impact assessments have provided evidence that farmers who graduate from FFS had more tendencies towards adoption of better practices on their farms, including reductions in the use of antimicrobials.

This output is aimed at promoting practices on the farms that lead to reductions in antimicrobial use and more prudent use when antimicrobials are needed. In addition, interventions will be developed and targeted at stakeholders operating within key supply chains for farm inputs (specifically related antimicrobial veterinary medicinal products), and food value chains from the farm to market. The modified FFS approach will be upscaled in at least eight project countries, to reach a larger geographic scope and expanded to cover other livestock production value chains within the focus countries. Recommendations will be made to create an enabling regulatory environment for data collection and sharing and to facilitate the implementation of good AMU practices.

Implemented across the production cycle, FFS are well suited to address the complex and interacting suite of practices that FAO's KAP studies and previous research link to the emergence and transmission of AMR. Such practices include hygiene throughout the food chain, husbandry practices, including those related to therapeutic treatment, feeding, animal welfare, biosecurity and biosecurity, engagement with animal health professionals, and practices related to waste management.

To promote sustainability of the FFS approach, and to support graduates of the FFS, the private sector (e.g., feed and drug companies) will be engaged in the design and implementation stages to ensure that good practices and guidelines are further disseminated and utilized. In addition, sustainability will be achieved through strategic engagements of influential local leaders.

Finally, and critical to the achievement of overall project goals is that the modified FFS intervention is well suited to collecting reliable and longitudinal data on AMU, data on the economics of production

and farm business models and can serve as sites for AMR surveillance. AMU and consumption data collected during deployment of FFS will be collated at national level, to contribute to the data collected through the OIE AMU data collection system.

Data generated in the deployment and evaluation of FFS will be used to publish manuscripts in peer reviewed open-access scientific journals to maximize continued strategic communication of AMR and AMU best practices to wider audiences.

The following activities are proposed to be implemented, regional and global levels to deliver this output:

Activity 2.1 Support provided to collect, analyse, interpret, and disseminate information from AMU/AMR data, and to create an enabling regulatory environment to implement good AMU practices

Activity 2.2 Support the design and deployment of surveys in priority food and agriculture value chains to generate actionable information and data on AMU, AMR, AMC, including substandard and falsified (SF) veterinary products and identify barriers of behavioural change.

Activity 2.3 Extend/Upscale standardized AMR data collection approaches and behaviour change pilot studies through the FFS approach to poultry, pig, cattle, aquaculture, and beekeeping/apiculture value chains (specific to each country depending on current focus value chains).

Activity 2.4 Support the analysis, publication, and dissemination of data on best practices and success stories towards the prevention and control of AMR in agrifood systems.

Activities will be country focused and harmonized at the regional level where appropriate. Experience sharing among countries will be promoted to ensure communities of best practices emerge at regional and global levels. Several value chains will be targeted, and standardized data collection, analysis, interpretation, and dissemination approaches will be shared among the current project focus countries to enable collation and comparability of data at regional and global levels.

Output 3: Evidence based AMR economic argument in the food and agriculture sectors developed and documented to support decision making

It is paramount to understand the economics involved in the use, as well as in the non-usage, of antimicrobials within the wider spectrum of industries involved (e.g., AM consumers, AM producers, AM suppliers, etc.). Tracking the costs and benefits of use is critical across the OH spectrum, but it is of greater consideration in animal health, where usage patterns are driven largely by economic considerations. Some of these considerations may for instance relate to feed manufacturing, agro-veterinary level (business models, profit margins of AMs vis a vis those of disinfectants, costs of compliance with prescriptions and other regulations); farmer (farm business models, profitability, how compliance with use regulations and biosecurity impact profitability, market incentives required to drive compliance); costs of accessing animal health services; production losses associated with AMR/AMU at slaughter (pigs, poultry) – slaughter business models and impacts on biosecurity and hygiene on profitability; consumers (decision making on product, impact of AMU product certification on consumer prices). These considerations lead to usage patterns, such as using antimicrobials for growth promotion, that are meant to increase the economic value of livestock and perhaps crops.

Gathering economic data on antimicrobial use will support wider AMR governance activities as the data provides policy makers with robust information to determine the costs and benefits of antimicrobial use regulations and interventions. More broadly, collection of this data across the spectrum of livestock value chains is critical to determine how policies and regulatory frameworks to address AMR/AMU, through downstream impacts on AMR, may stimulate economic growth. Determining the costs of mitigation are also needed to plan for within-country funding schemes when donors leave. These include considerations to leverage private sector funding and market led incentives targeting feed manufacturers, farmers, and food processors, to sustain changes practices. Attention will also be paid to the regulatory environments for the collection and sharing of such data.

Furthermore, this output will focus on supporting specific recommendations that would create enabling regulatory environments to facilitate the data generation, utilization, and sharing of policy and regulatory elements relevant for AMR at national, regional, and global levels.

The following activities are proposed to be implemented in two focus countries, 1 region, and at global level as part of a pilot phase to test the delivery of this output:

Activity 3.1 Tools to collect economic AMU/AMR data within the food, agriculture and environment sectors designed, piloted, and deployed in project countries. Data from these tools will be analysed to construct the economic case for AMR action in food and agriculture sectors at sub-national, national, regional, and global levels.

Activity 3.2 Provide support for the collection and analysis (aggregation) of AMR/AMU/AMC data including the trends, health and economic implications for the food and agriculture sector at national and regional levels

Activity 3.3 Use Farmer Field Schools to conduct cost-benefit (economic) analyses of intervention strategies to motivate the prudent use of antimicrobials in livestock production (e.g., increased investments in biosecurity, enhanced interactions with animal health professionals)

Activity 3.4 Provide support for the aggregation of production and economic data at national and regional levels to analyse trends and the impacts of AMR.

Activity 3.5 The case for investment in national regulatory reform to reduce non-therapeutic use of antimicrobials and to prevent the availability of/access to sub-standard and falsified veterinary products (SFs) will be documented, published, and disseminated for advocacy

Activity 3.6 Develop guidance for countries and regional organizations to facilitate the collection and sharing of AMU/AMR data, paying attention to (i) regulatory responsibilities and obligations for all actors in the chain to collect and share data; (ii) data protection and ownership.

Tools developed, taking into consideration the synergies and interactions with similar work by WHO, OIE, the World Bank, and others, will be applied initially at country level, starting with four focus countries. After the economic case for AMR mitigation is constructed in the initial four countries, the approach will be modified using initial experiences and extended to an additional four focus countries. Consolidation of economic data across countries will be completed to develop an economic case for AMR mitigation at the regional level and to contribute to the global economic case for AMR.

Output 4: Antimicrobial policies and governance enhanced to minimize the role of sub-standard and falsified (SF) antimicrobials in food and agriculture

During FAO FF Phase I, FAO legal specialists undertook cross-sectoral analyses of the direct and indirect (but relevant) laws and regulations in all the areas of the food and agriculture domain relevant for AMR and AMU. Repository of relevant legislations has been developed. Specific country reports of legal reviews have been developed, with specific recommendation for legislation and regulatory changes included. Relevant national and regional legislation have also been made accessible globally through FAOLEX. FAO also engaged with Regional Economic/Inter-Governmental Bodies to promote and support regulatory harmonization within these regional groupings.

This output will focus on supporting specific recommendations that would create enabling regulatory environments to facilitate the data generation, utilization, and sharing of policy and regulatory elements relevant for AMR at national, regional, and global levels. Specifically, the output will focus on collecting data related to the quality, labelling and packaging of veterinary products, and to identify the availability and use of SFs in the market. The data will be analysed against the existing legislation, to formulate recommendations for improving regulatory control, prevent, and phase out SF veterinary products.

The following activities are proposed to be implemented in two focus countries, 1 region, and at global level as part of a pilot phase to test the delivery of this output:

Activity 4.1 Provide support to develop and roll-out frameworks/tools to collect, analyse, document and share data on substandard and falsified antimicrobials (access, consumption, controls, capacities, quality assurance etc.) for priority food and agriculture value chains

Activity 4.2 Use the Farmer Field School (FFS) platforms to collect farm level data on Substandard and falsified antimicrobials (SFs) to scope the prevalence of SFs access, consumption, controls etc.

Activities at national level will be used to inform regional approaches towards harmonization of legislation and regulatory and governance frameworks for AMR and antimicrobial veterinary medicinal products (through support to interventions such as regional regulatory harmonization on VMPs through initiatives like ZAZIBONA in Southern Africa). Support will be focused on ten of the project focus countries, and regional initiatives will also be supported to cover a broader number of countries beyond the project focus countries.

Output 5: Country owned processes and collaborative initiatives for implementation of multi-sectoral One Health AMR National Action Plans (NAPs) supported

AMR National Action Plans (NAPs) revision, inclusion of monitoring and evaluation frameworks, and implementation, costing and promotion for support and funding by inclusion within food and agriculture sector budgets will be key areas for strategic support. FAO will use its comparative presence and influence at country level within the food and agriculture sectors to promote AMR NAPs and advocate for national support and investment in AMR. This will include support for actions in the environment sector at national and regional levels. It will also pay attention to the multisector governance mechanisms put in place by countries to implement their NAPs. Finally, it will support the

revision and update of national policies and regulatory frameworks to facilitate the sustainable implementation of the NAPs.

The following activities are proposed to be implemented at country, regional and global level to deliver this output:

Activity 5.1 Support participatory country owned AMR PMP - Progressive Management Pathway (PMP) assessments (initial assessment + biennial follow-up assessments) at national level to evaluate progress on AMR actions in the food and agriculture sectors and identify priority areas of intervention

Activity 5.2 Support the review of OH multisectoral AMR NAPs in countries implementing their NAPs to include costing, prioritisation, logical phased approaches to implementation, governance mechanisms, regulatory reform needed, and M&E frameworks

Activity 5.3 Support evidenced-based advocacy and strategic engagement of policy makers and influencers in the food and agriculture sectors at national, regional, and global levels to promote the use of generated data for action

Activity 5.4 High-level advocacy campaigns for a OH multisectoral approach to AMR supported at national, regional, and global levels/Collaborative work on selected cross-sectoral issues enhanced to increase coherence of interventions and maximize benefits to all stakeholders at national, regional, and global levels

Activity 5.5 Country owned sustainable One Health AMR coordination mechanisms established/ supported/strengthened at national and regional levels, and backed with the appropriate regulatory frameworks

Activity 5.6 Multisectoral One Health governance strengthened at subnational, national, regional, and global levels, and backed with the appropriate regulatory frameworks

Activity 5.7 Environmental dimensions of AMR in the Food and Agriculture system assessed and its implications for sustainable AMR prevention and control, public health and resilience of the food system documented to inform AMR policy and practice.

4. Cross-cutting Actions and Activities

While high-level description of the activities under the outputs above aim to cover the relevant Fleming Fund strategic shifts for the next phase, this section addresses some programmatic shifts and the areas of collaboration that feature a strong cross-cutting nature. Indeed, activities in these areas are not stand-alone but instead embedded in activities under the above 5 specific outputs, and the results, a recollection of what is done within those specific outputs.

A. Gender and Inclusion

The project will document for the time of its duration how gender inclusion, age, academic/professional qualifications, among others, is represented at two levels:

a. Within the internal delivery structure, which includes FAO HQ, Regions, subregions, and country staff.
b. Within the on-the-ground specific activities under each of the high-level activities above (e.g.: during the implementation of Farmer Field Schools, focus on empowering the woman and youth working in the farms that are mostly not recognized as core-contributors within the local settings).

With the information gathered above, two reports are expected to be completed:

- An interim report, halfway through the project, with a view to find and implement specific gender targets in the workforce for the remaining lifetime of the project where possible.
- A final report at the end of the project including all the information gathered and achievements.

A third report is intended to be developed in conjunction with WHO and OIE to reflect a wider OH representation of the gender and inclusion situation in the AMR project delivery context. This third report is expected to be outlined during the preparation of the project document.

B. Sustainability and country ownership

The FF project is a strong reference within FAO in relation to AMR. In further commitment to ensure sustainability of the proposed interventions, FAO continues prioritizing the initiatives that started through the previous and current FF support, embedding them into subsequent projects and programmes. Indeed, based on the FAO Action Plan on AMR, FAO is following a programmatic approach in the technical implementation of all projects including the FF. For instance:

- FF has supported the development of the International FAO Antimicrobial Resistance Monitoring (InFARM) data platform that is being funded through FAO regular budget as well as other extra budgetary resources such as the TISSA component of MPTF global project, the AMR Codex standards project supported by the Republic of Korea, and the US ARPA project. This ensures that despite the use of this platform during the FF project, the impact on data will be sustained beyond the project's lifetime.
- In addition, FAO has a One Health programme Fund, a multi-lateral US$10million project which has included an AMR outcome, outputs, and activities, and these are certainly complementary to the FF project.
- The organization plans on utilizing FAO regular budget to provide platforms where training and tools can be made available in a digital format for implementation and easy access by countries. In this regard, all training materials and tools developed for use in AMR-related activities (including ATLASS, PMP-AMR, Famer Field School training materials, Laboratory, and surveillance training materials, etc.) will be made accessible to the global community, ensuring wider usage beyond the current project.
- In addition, tools developed with support of FF project, like the one developed by FAO for legal assessment, are being used as the bedrock for the development of Quadripartite One Health tools.
- Application of the Farmer Field Schools and other social science approaches have been successfully piloted through the FF project, and these approaches are being included in most upcoming FAO projects on AMR. As FFS is not exclusive to AMR and has been in use for over 40 years in other FAO programs and projects, the organization will further mainstream the FFS work on AMR, which is funded by FF project, into the wider FAO FSS initiatives.

Furthermore, the programmatic approach implemented by FAO, which includes cost-share human resources across complementary programmes, will facilitate that once FF is no longer providing funding, the human resource will continue carrying out the work.

The pressing urge to tackle antimicrobial resistance, makes AMR a very dynamic working environment, where more often than not, new initiatives are occurring at relatively short periods of time. For instance, the MPTF didn't exist when the FAO FF project was already running, however, both closely

synergized before the project finished. Indeed, MPTF country projects are already designed in collaboration with FF country projects, other FAO country programs, and implementation partners.

The project will focus on further improving this formalized collaborative arrangement to ensure sustainability in all intervention. Furthermore, the project will remain flexible during its lifetime to collaborate with other initiatives that may arise and can provide long term funding, both in their development and implementation. Currently, although not fully implemented/developed, there are new initiatives in the horizon like the AMR Multi-stakeholder platform, and development of others may also start soon.

C. Value for money and collaboration

Value for Money (VfM)

The project will actively pursue two lines of efficiency:

- Resources: in addition to carefully selecting the precise roles required for the successful delivery of the project, their funding will be cost-shared, as it has been so far, whenever possible, with other projects and initiatives happening in countries, regions or at global level. This includes, but not only, cost sharing with ECTAD, ACT program, MPTF or FAO regular program. In this respect, attention will be put to new opportunities that it may arise during the duration of the project.
- Activity delivery: Through a proactive collaboration component, the project will seek the way to implement activities in partnership with others (e.g., including WHO, WOAH/OIE, UNEP, UK AMR reference Centre and other programs or initiatives already mentioned). The project will actively seek the surge of new initiatives (such as the announced Multi-stakeholders Partnership Platform) to find collaboration opportunities that further contribute to higher VfM.

Collaboration

The FAO FF project has already been actively collaborating with both, multilateral organisations (Quadripartite), and other FF initiatives, such as the Country Grants and MPTF, achieving in both cases valuable efficiencies in the two aspects mentioned under VfM above.

The Quadripartite collaboration, either with each organisation individually, with some or all of them as required, will continue on the current active areas. New areas of collaboration will be added that will contribute to the new FF shifts. Among these are the economic case, gender and inclusion, substandard and falsified (SF) medicines or AMU.

The new project will strengthen this collaboration by expanding to other FF initiatives such as FF Fellowships, and more importantly, embedding the collaboration in the routine work of country and regional coordinators, which will result in regular reporting. This will facilitate to optimize further the potential opportunities for collaboration.

The project will also work with the FAO's AMR Reference Centre in the UK (DEFRA) in delivering specific activities, such as provision of training and capacity building under specific outputs, without duplication of costs.

The FAO global team will explore further collaborative initiatives at country level, particularly with the other FF delivery partners and the FF management agent. Furthermore, it will explore the possibility

to collaborate within those countries that, although are not among the 12 target countries, foster other FF initiates delivered by FF partners.

Finally, the project will dynamically assess successes and failures, as well as use learnings to build on what is working and reassess what does not. To that end there will be regular monitoring of the context in which the project is operating, regularly assessing and adapting activities accordingly. Indeed, the project will incorporate the local stakeholders' voice in the decision-making through the country teams, with which the global team currently holds bimonthly meetings, already a safe space for honest conversations. Similar approach will be used at global level with multilateral organisations and global partners, which will be defined based on the bulk collaboration with each of them, and detailed in the final project document.

Project Logical Framework Matrix

Results Chain	Indicators	Means of Verification (MOV)	Assumptions
Impact Quality data that contributes to keeping available antimicrobials working for as long as possible and makes the food and agriculture systems more resilient available	Trends showing prevalence of antimicrobial resistant microorganisms in food, feed, animals, environment generated Rational use of antimicrobial drugs in food producing animals and agricultural sector demonstrated overtime.	FAO global data (source InFARM/TISSA). FAO/OIE data (source InFARM/TISSA).	High-level technical and political commitment sustained.
Outcome AMR-related (specific and sensitive) data generation, analysis, sharing, and utilization for evidence-based decision making in the food and agriculture sector is increased and improved	Proportion of project countries and regions using AMR data for decision making Proportion of countries with improved capacity to detect and track antimicrobial resistant microorganisms, and quantify antimicrobial residues, use and consumption. Proportion of targeted countries scoring "on track" with the implementation of NAPs in food and agriculture sectors. Proportion of legislative and regulatory frameworks/approaches for AMR harmonized at regional level	Country project reports Consolidated Project reports TrACSS repots Quadripartite reports Regional agreements/Strategies; national legislation (decree, law, statutory instruments, guidelines etc.).	Government and key stakeholders are willing to collaborate on data sharing and reporting. Adverse events (political and environmental) do not disrupt implementation of national action plans. Project resources flow smoothly to facilitate implementation processes

Results Chain	Indicators	Means of Verification (MOV)	Assumptions
	Data system on antimicrobial use in the agriculture sector aligned at national, regional, and global levels. Proportion of targeted key stakeholders reporting change in practices and behaviours related to the use of antimicrobials.	InFARM/TISSA evidence KAP survey	
Output 1 Laboratory and surveillance capacities and related data processing infrastructures of the food and agriculture sector are strengthened to collect and share data on AMR, AMC, and residues, and actively contribute to integrated surveillance on AMR.	Number of countries generating, utilizing, and sharing food and agriculture sector AMR related data Number of countries supported to strengthen national AMR surveillance systems/activities Number of AMR communities of practice focusing on the food and agriculture sector supported/strengthened Number of interoperable system/s for surveillance and laboratory data for which programme technical support has been provided	Country Project reports Scientific Publications Consolidated Project reports ATLASS reports Testing protocols Quadripartite reports PVS assessments TORs of the mechanism (e.g., working group, platform, committee, etc.) Evaluation repots (mid and end term)	Governments and key stakeholders in the agrifood system collaborate in data collection, management utilization and sharing/reporting Laboratory capacity is adequate to be able to carry out all the required diagnostic tests Government allows access to field sites and national data

Results Chain	Indicators	Means of Verification (MOV)	Assumptions
Output 2 Antimicrobial use practices promoted in food and agriculture to reduce/optimize use of antimicrobials	Number of improved antimicrobial practices and mechanisms to optimize AMU adopted in project countries Number of sector specific guidance and tools available (in a repository of 'good practices') to support assessment of current practices and implementation of 'good practices' relevant to responsible use A collection of success stories from the field	Country Project reports Repository evidence Scientific publications Consolidated Project reports Training logs Midterm review reports Evaluation report Field stories	Linkages with all relevant sectors are established and sustained within the country Political and economic conditions allow the smooth implementation of project activities
Output 3 Evidence based AMR economic argument in the food and agriculture sectors developed and documented to support decision making	Number of advocacy documents on the economic case of AMR Number of economic AMR data collection tools developed and piloted A country-level publication of the case for investment in antimicrobials control	Consolidated project reports Evaluation repots (mid and end term) Country project reports	Favourable conditions exist for the implementation of project activities in target countries Government allows access to field sites and national data

Results Chain	Indicators	Means of Verification (MOV)	Assumptions
Output 4 Antimicrobial policies and governance enhanced to minimize the role of sub-standard and falsified (SF) antimicrobials in food and agriculture	Number of countries where legal assessments are conducted Number of initiatives to strengthen SFs regulatory frameworks Number of evidence/data-based advocacy initiatives supported at national, regional, and global levels	Country project reports Consolidated project reports Midterm review report Evaluation report Policy briefs	Government is willing to collaborate on the policy reform and to share needed data Political turnover does not compromise the slow gains in policy/regulatory reform
Output 5 Country owned processes and collaborative initiatives for implementation of multi-sectoral One Health AMR National Action Plans (NAPs) supported	Number of countries updating NAPs to include costing and M&E Number of evidence-based AMR strategic advocacy initiatives supported at national, regional, and global levels Number of regional and global AMR OH governance mechanisms/frameworks adopted	Country project reports Consolidated project reports Quadripartite reports Advocacy campaigns TrACSS reports RECs reports Evaluation repots (mid and end term)	Adverse events (political and environmental) do not disrupt development of national action plans Internal political country processes are up to speed to ensure adopted NAPs by May 2017 or shortly thereafter. Stakeholders cooperate, participate in and sustain project supported AMR activities

Schedule 2: the Budget Proposal

The proposed budget (USD 7,867,494 equivalent to GBP 6,034,368) is intended to deliver the project activities/outputs as described in the proposal. The resources would allow for the implementation of the project in the 12 target countries and 2 regions, building on the ongoing project. In line with the current project geographical share, the new proposed action plans allocate around half of the total contribution to regional and national level activities.

Personnel – Professional and General Services and Consultants – Project Coordinator responsible for managing all technical aspects of the project, programming national and regional interventions (stakeholder out-reach), data capture and analysis, and preparation of technical reports, as required. National level coordinators to manage activities at national level, and ensure inter-agency linkages, including those of OIE and WHO. Programme, Operations, Administrative and M&E support staff, responsible for the project financial management, operations, monitoring and evaluation. AMR Officers (Animal Health, Food Safety) to contribute on specific work areas (Epidemiology, Surveillance Systems, Bioinformatics and Data Systems management/implementation) and specialists in food and agriculture production/processing systems experts to support the production of studies and methodological guidelines (including best practices). Laboratory specialist(s) to support ATLASS implementation/updating, capacity development activities, and laboratory collaborative initiatives at all levels. Communication staff support for the development, editing and translation of awareness and communication material and products Legal specialist(s) to support the strengthening of AMR/AMU regulatory frameworks in a harmonized manner, including support towards policy and legal frameworks for data sharing, management and security. Economist (Agricultural/Animal Health) specialist to operationalize activities related to building the economic case.

Contracts – Letters of Agreement with specialized no-profit organizations, NGOs or FAO Reference Centers, institutes and universities to support the project activities including the legislative studies, gap analysis, economic and social science studies, highly technical capacity building interventions.

Travel – Support to non-staff government persons to attend regional and national trainings, workshops and meetings (ATLASS, legal missions, etc.). Backstopping missions by project staff to target countries and regions and support for attendance to strategic meetings at all levels.

Training – Regional/national training/workshops/meetings logistics (e.g., venue, equipment hire, ad-hoc preparation of materials, refreshments, etc.) targeting government and other stakeholders' national/regional personnel, including rental of venue and overall related meeting logistics costs.

Procurement – Expendable and non-expendable - expendable equipment at country level, i.e., laboratory supplies and consumables as reagents for AMR surveillance and laboratory related information sharing software, data collection tools and sampling materials, and development of communication material. Funds for the procurement of laboratory equipment (non-expendable) of targeted country laboratories, and sampling and data collection tools and materials for field activities (e.g., Farmer Field Schools).

General Operating Expenses – HR Direct Support costs, security, office occupancy fees at HQ and regional offices (new Cost Recovery Policy), Financial Services, and Procurement Services. Additional costs elements under this line at the local level and related to the organization of meetings, includes printing material, communication, stationary, banner, etc.

Technical Support Services (TSS) – These cover evaluation and reporting costs as per FAO rules and regulations. FAO staff time from all involved department (Legal, Food Safety, Fisheries, etc.) contributing to the project through mission and/or deskwork. Also included standard reporting costs and project evaluation costs that is [redacted] of the total budget.

Indirect Support Costs – The standard Indirect Support Cost rate of [redacted] percent will be applied to the project

Schedule 3: the Work Plan

Activity	Year 1				Year 2				Year 3			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Output 1: Strengthen laboratory and surveillance capacities and related data management infrastructures of the food and agriculture sector to generate, collect, and share data on AMR, AMC, and antimicrobial residues, and actively contribute to integrated AMR surveillance												
Activity 1.1. Develop tools and guidance at global level (Community of AMR Laboratory and Surveillance experts; community of ATLASS Assessors; community of Farmer Field School Facilitators; Regional/Sub-regional AMR Technical Advisory Groups – TAGs)												
Activity 1.2 Assess AMR/AMU/residues surveillance capacities using/refining FAO tools for developing tailor made plans for progressive improvement. This includes conducting follow-up assessments using FAO-ATLASS in project countries to measure progress, identify remaining gaps in individual laboratories and national surveillance systems. Data generated by FAO-ATLASS assessments will be stored in the FAO laboratory assessment database to provide tools for countries to store and analyse data and inform interventions.												
Activity 1.3 Strengthen AMR Communities of Practice for data generation and utilization in relevant areas of intervention in food and agriculture (Community of AMR Laboratory and Surveillance experts; community of ATLASS Assessors; community of Farmer Field School												

Activity	Year 1				Year 2				Year 3			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Facilitators; Regional/Sub-regional AMR Technical Advisory Groups – TAGs)												
Activity 1.4 Strengthen laboratory capacities to generate good quality AMR data in food and agriculture sectors through deployment of trainings, provision of materials and facilitation of involvement in quality assurance programs												
Activity 1.5 Support for accessing data management services for strengthened AMR and AMU/AMC data management, analysis and sharing at country, regional, and global levels. This includes support to countries to participate in global surveillance initiatives sharing data into InFARM and support to install and operationalize laboratory information management systems and data software (SILABFA, WHONET, etc.)												
Activity 1.6. Strengthen operationalization and functionality of InFARM for roll out in project focus countries and regions. This includes support in the launching of global data calls and expansion of InFARM to additional AMR/AMU surveillance programs in food and agriculture (e.g., aquaculture, AMU/AMR in crops, AMR in animal/agriculture environments).												
Output 2: Antimicrobial use practices and good practices that reduce AMR transmission along the food chain promoted in food and agriculture												
Activity 2.1 Support provided to collect, analyse, interpret, and disseminate information from AMU/AMR data, and to create an enabling regulatory environment												

Activity	Year 1				Year 2				Year 3			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
to implement good AMU practices												
Activity 2.2 Support the design and deployment of surveys in priority food and agriculture value chains to generate actionable information and data on AMU, AMR, AMC, including substandard and falsified (SF) veterinary products and identify barriers of behavioural change.												
Activity 2.3 Extend/Upscale standardized AMR data collection approaches and behaviour change pilot studies through the FFS approach to poultry, pig, cattle, aquaculture, and beekeeping/apiculture value chains (specific to each country depending on current focus value chains).												
Activity 2.4 Support the analysis, publication, and dissemination of data on best practices and success stories towards the prevention and control of AMR in agrifood systems.												
Output 3. Evidence based AMR economic argument in the food and agriculture sectors developed and documented to support decision making												
Activity 3.1 Tools to collect economic AMU/AMR data within the food, agriculture and environment sectors designed, piloted, and deployed in project countries. Data from these tools will be analysed to construct the economic case for AMR action in food and agriculture sectors at sub-national, national, regional, and global levels.												
Activity 3.2 Provide support for the collection and analysis (aggregation) of AMR/AMU/AMC												

Activity	Year 1				Year 2				Year 3			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
data including the trends, health and economic implications for the food and agriculture sector at national and regional levels												
Activity 3.3 Use Farmer Field Schools to conduct cost-benefit (economic) analyses of intervention strategies to motivate the prudent use of antimicrobials in livestock production (e.g., increased investments in biosecurity, enhanced interactions with animal health professionals)												
Activity 3.4 Provide support for the aggregation of production and economic data at national and regional levels to analyse trends and the impacts of AMR.												
Activity 3.5 The case for investment in national regulatory reform to reduce non-therapeutic use of antimicrobials and to prevent the availability of/access to sub-standard and falsified veterinary products (SFs) will be documented, published, and disseminated for advocacy												
Activity 3.6 Develop guidance for countries and regional organizations to facilitate the collection and sharing of AMU/AMR data, paying attention to (i) regulatory responsibilities and obligations for all actors in the chain to collect and share data; (ii) data protection and ownership.												
Activity 3.7. Upscale the piloted activities (Activity 3.1 to Activity 3.6) for gathering economic data on AMR/AMU in additional 4 project focus countries.												
Output 4: Antimicrobial policies and governance enhanced to minimize the role of sub-standard and falsified (SF)												

Activity	Year 1				Year 2				Year 3			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
antimicrobials in food and agriculture												
Activity 4.1 Provide support to develop and roll-out frameworks/tools to collect, analyse, document and share data on substandard and falsified antimicrobials (access, consumption, controls, capacities, quality assurance etc.) for priority food and agriculture value chains												
Activity 4.2 Use the Farmer Field School (FFS) platforms to collect farm level data on Substandard and falsified antimicrobials (SFs) to scope the prevalence of SFs access, consumption, controls etc.												
Activity 4.3 Collect and analyse data on the national regulatory frameworks to control substandard and falsified antimicrobials in the market and develop recommendations to improve regulatory controls at national and regional levels												
Activity 4.4 Provide support to strengthen and enforce legal provisions to reduce access and limit the circulation of SF antimicrobials and to enforce such legislation.												
Activity 4.5 Provide support to the national regulatory authorities responsible for quality assurance of medicine/medical products to test and prohibit entry into the market, of substandard and falsified products and to enforce such legislation												
Activity 4.6 Support evidenced-based advocacy and strategic engagement of policy makers and influencers in the food and agriculture sectors at												

Activity	Year 1				Year 2				Year 3			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
national, regional, and global levels to promote the use of generated data for action												
Output 5: Country owned processes and collaborative initiatives for implementation of multi-sectoral One Health AMR National Action Plans (NAPs) supported												
Activity 5.1 Support participatory country owned AMR PMP - Progressive Management Pathway (PMP) assessments (initial assessment + biennial follow-up assessments) at national level to evaluate progress on AMR actions in the food and agriculture sectors and identify priority areas of intervention												
Activity 5.2 Support the review of OH multisectoral AMR NAPs in countries implementing their NAPs to include costing, prioritisation, logical phased approaches to implementation, governance mechanisms, regulatory reform needed, and M&E frameworks												
Activity 5.3 Support evidenced-based advocacy and strategic engagement of policy makers and influencers in the food and agriculture sectors at national, regional, and global levels to promote the use of generated data for action												
Activity 5.4 High-level advocacy campaigns for a OH multisectoral approach to AMR supported at national, regional, and global levels/Collaborative work on selected cross-sectoral issues enhanced to increase coherence of interventions and maximize benefits to all stakeholders at national, regional, and global levels												

Activity	Year 1				Year 2				Year 3			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Activity 5.5 Country owned sustainable One Health AMR coordination mechanisms established/ supported/strengthened at national and regional levels, and backed with the appropriate regulatory frameworks												
Activity 5.6 Multisectoral One Health governance strengthened at subnational, national, regional, and global levels, and backed with the appropriate regulatory frameworks												
Activity 5.7 Environmental dimensions of AMR in the Food and Agriculture system assessed and its implications for sustainable AMR prevention and control, public health and resilience of the food system documented to inform AMR policy and practice.												

Schedule 4: the Reporting Requirements

Progress Narrative Reports: The Recipients shall report bi-annually over the financial year period (April-March) on the 15th of October and 15th April respectively. Progress reports will cover the periods:

1 April – 30 September

1 October – 31 March

Financial reports will be prepared in USD and submitted in the FAO standard reporting format. The recipient shall submit:

a. An annual uncertified financial report by 15 April and along with the technical report. The report shall cover the period 1 April – 31 March. A certified annual financial report covering the same period shall be submitted within 3 months of the financial year end by 30 June.

b. A six-monthly uncertified financial by 15 October and along with the technical updates. The report shall cover the period 1 April – 30 September

In addition to bi-annual reporting, the Authority may ask for additional progress narrative reporting as reasonably required.

Schedule 5: Payment Plan & Bank Details

Payment Schedule

Payment 1: Following signature of the Grant Agreement a total of USD 3,946,883

Payment 2: 31st August 2023; grant instalment of USD 1,997,435

Payment 3: 31st August 2024; final grant instalment of USD 1,923,176

Banking Details:

Account Name: [redacted]

Bank Name: [redacted]

[redacted]

[redacted]

Swift/BIC: [redacted]

ABA/Bank Code: [redacted]

Account No. [redacted]

Schedule 6: Representatives of the Parties

The Authority
Department of Health and Social Care
Nick Adkin
Deputy Director, Global Health Security
International Directorate
39, Victoria Street SW1H 0EU
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Tel nr [redacted]
[redacted]

With copies to:
Department of Health and Social Care

Head of Fleming Fund, Global Health Security
39, Victoria Street SW1H 0EU
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Tel nr [redacted]
Email: [redacted]

The Recipient

Elizabeth Bechdol
Deputy Director-General
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00153 Rome, Italy
[redacted]

With copies to:
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