

TERMS OF REFERENCE

Job Title: National consultant: Antimicrobial Resistance Expert (Environmental Health): Case study on a One Health approach to Antimicrobial Resistance in Bac Giang province of Viet Nam, and recommendations to strengthen this from provincial to local levels

Duty Station: Hanoi and site visit or visits to Bac Giang province

Duration: July 2018 – September 2018

Reporting: National Project Director, SCOH2 project

1) General Background

Viet Nam is located in a relatively high-risk region for emerging infectious diseases (EIDs), including zoonotic diseases arising from the interaction of humans, livestock, wild animals and ecosystems. Addressing risky practices related to bio-security of livestock and wildlife farming, trade and consumption will require a long-term effort.

Over the past several years, the Government of Viet Nam (GoVN) has been progressively strengthening the application of a One Health approach to zoonotic emerging infectious diseases (EIDs). Current national efforts are set out in the Viet Nam One Health Strategic Plan for Zoonotic Diseases (OHSP), 2016-2020, which sets out a five-year plan for reducing the health and other impacts of zoonotic diseases. The OHSP addresses seven key focus areas, including One Health capacity building, and the application of One Health approaches for managing human disease emergencies of animal origin, zoonotic agents with pandemic potential that are yet to emerge, zoonotic influenza viruses with pandemic potential, rabies, antimicrobial resistance (AMR), and other priority zoonotic diseases. The OHSP is available here: <http://onehealth.org.vn/documents/the-viet-nam-ohsp-2016-2020-final/203.html>.

The OHSP notes that AMR is a growing global concern, including in Asia as a region and in Viet Nam.¹ Management and containment of AMR requires a One Health approach, encompassing action in the human sector to reduce the number of untreatable bacterial infections both in and out of hospitals, in the animal sector to reduce the high levels of resistance in bacteria in animals, especially in livestock farms and aquaculture, and also addressing environmental dimensions related to the presence of antimicrobial drugs and resistant organisms in human and animal waste-water. Effective coordination and collaboration between sectors is also required.

The second phase of the Strengthening capacity for the implementation of One Health in Viet Nam project (SCOH2), implemented by the Ministry of Agriculture and Rural Development (MARD) in cooperation with the Ministry of Health (MOH), with funding from USAID via UNDP, supports the Viet Nam One Health Partnership for Zoonoses (OHP) and its Secretariat located within MARD. A key activity of the SCOH2 project is to commission research to support One Health policy-making in Viet Nam. The topics for this research are identified by the OHP Secretariat under the guidance of key technical agencies within MARD

¹ Viet Nam One Health Strategic Plan for Zoonotic Diseases (OHSP), 2016-2020 – Technical Annex, p39.

and MOH as well as other national and international experts within the project's Technical Advisory Committee (TAC).

In order to support the development of clear information and recommendations to national policy makers and other key stakeholders on the status of One Health capacity building, collaboration and efforts on key zoonotic diseases and AMR at the provincial and lower levels, the SCO2 will commission a series of studies on one selected province, contributing to building up a provincial profile on selected key One Health issues as a basis for identifying recommendations for strengthening One Health capacity and efforts at the provincial level.

This series will include the following study: *Case study on a One Health approach to Antimicrobial Resistance in Bac Giang province of Viet Nam, and recommendations to strengthen this from provincial to local levels.*

Drawing on both qualitative and quantitative data, the study will identify antibiotic stewardship in the human health and agriculture sectors, as well as key AMR risks and prevention and control efforts across related sectors, from provincial to commune levels.

Key questions to be answered by the study include:

- What is the status of coordination mechanisms and plans on antibiotic use and AMR prevention and control in the province?
- What is the overall profile for antibiotic use in the province (brief overview of human health, animal health/livestock production and probably/confirmed use of AMR based on studies and fieldwork)?
- What are the key mechanisms for antibiotic stewardship in the province in the human health, animal health or other sectors?
- What is the status of surveillance for antibiotic use and AMR in these sectors? How does the provincial experience compare to the CIRAD/NIVR mapping of AMR One Health surveillance at the national level in Viet Nam?
- What is the status of legal regulations and enforcement on antibiotic use in the agriculture sector?
- What are the key AMR risks identified in the province?
- What are key recommendations for strengthening antibiotic stewardship and addressing AMR through policies, resources and actions at all levels in Viet Nam based on the lessons from this province?

These terms of reference are for selection of a National Consultant as Environmental Health Expert for this study (hereinafter referred to as 'the Contractor').

Three separate National Consultants will be mobilized by the project to contribute specific expertise and deliverables as inputs to the overall study, including:

- a Lead Researcher and Antimicrobial Resistance Expert a Health Systems Expert, as team leader for the study;
- a Health Systems Expert, to assess antibiotic stewardship and the AMR situation and potential risks in the health system; and
- an Animal Health Expert, to assess antibiotic stewardship and the AMR situation and potential risks in animal value chains (livestock and wildlife farming and trading).

The Contractor will contribute to the overall case study through designing and implementing

an assessment of environmental dimensions related to antibiotic use and AMR, including the presence of antimicrobial drugs and resistant organisms in human and animal waste-water, as a basis to identify relevant information to address key research questions of the case study, including the formulation of recommendations to strengthen a One Health approach to Antimicrobial Resistance in Bac Giang province from provincial to local levels.

2) Objective of the assignment

The objective of the assignment is to contribute expertise and specific outputs, focused on an assessment of environmental dimensions related to antibiotic use and AMR, including the presence of antimicrobial drugs and resistant organisms in human and animal waste-water, contributing to an overall case study on a case study on on a One Health approach to Antimicrobial Resistance in Bac Giang province of Viet Nam, and recommendations to strengthen this from provincial to local levels. The study report will incorporate the results of desk review of available materials as well as fieldwork undertaken directly in Bac Giang province and addressing comments from provincial, national and international stakeholders.

3) Scope of work

The following are the key tasks expected of the selected Contractor under this assignment:

1. Based on the initial consultations, contribute key inputs to the preparation of an inception report and detailed work plan for the preparation of the provincial profile, including the design of the proposed detailed study contents and methodology. The plan should be tailored to the specific study locations and should be sent to the SCO2 project and UNDP for review. Once finalized, it should be sent to Bac Giang province well in advance of the field work.
2. Contribute key inputs to the collection and desk review of related information and studies, including meetings and follow up with related national and international organizations, projects and programmes in Hanoi to collect information and documents.
3. Develop and test the proposed interview and survey tools and questionnaires for the conduct of the assessment of environmental dimensions related to antibiotic use and AMR, and revise the tools based on the results of field testing and comments from the SCO2 project and UNDP.
4. Carry out the assessment of environmental dimensions related to antibiotic use and AMR, which is expected to include structured interviews and questionnaires with relevant officials (People's committee representatives, human, animal and environmental health officials, etc.), and relevant stakeholders in the areas of animal production and wastewater management.
5. Collate and analyze the qualitative and quantitative data that was collected during the desk review and the assessment of environmental dimensions related to antibiotic use and AMR.
6. Contribute to the presentation of the draft study findings to a workshop of key stakeholders. This workshop will be organized by the SCO2 project, either in Hanoi or the study province.
7. Taking into account feedback from the Project and related stakeholders both directly and at the workshop, contribute to the preparation of the full draft report, including

drafting of the section on the assessment of environmental dimensions related to antibiotic use and AMR and related recommendations. Provide comments on the other sections of the report.

8. Taking into account feedback from the Project and related stakeholders, contribute to the preparation of the final report, including revision of the section on the assessment of environmental dimensions related to antibiotic use and AMR and related recommendations, and comments on the other sections of the report.

4) Duration of assignment, duty station and expected places of travel

The duration of the assignment is 25 work days during the period from July 2018 to September 2018.

This service is home-based, in Hanoi with site visits to Bac Giang province, and some visits to the SCOH2 Office, MARD, UNDP office or other locations within Hanoi which will be agreed upon in advance. The Contractor is expected to spend at least 8 working days for 2 missions to Bac Giang province.

The bidder must include travel costs including travel to the field locations in their financial proposal.

5) Final Products

The Contractor is responsible for the following outputs, to be delivered in English and Vietnamese.

- The section of the inception report detailing the approach, methodology and work-plan in implementing the assessment of environmental dimensions related to antibiotic use and AMR, and comments on other sections of the inception report.
- Written comments on the list of proposed specific study locations (districts/communes) with a clear rationale.
- Survey and interview questions, checklists and other tools for implementing the assessment of environmental dimensions related to antibiotic use and AMR.
- Contributions to the overall study report, including drafting and final versions of the section on the assessment of environmental dimensions related to antibiotic use and AMR and related recommendations, and written comments on the other sections of the draft and final overall report.
- Excel spreadsheets containing data and analysis of the results from the field work.
- Relevant supporting documents including list of workshop participants, introduction letters, copies of presentations, etc. and written notes and comments of consultation meetings and consultations with the project, the consultation workshop, and meetings with study stakeholders; photos taken and data collected during the site visits.
- List of references outlining information collected and analyzed during the desk review and field work.

6) Tentative Implementation Plan:

The Contractor will be expected to undertake the following tasks and deliver the required outputs (in English and Vietnamese) as specified. Below is the suggested timeline for key outputs.

Task Assigned/Output	Deadline
1. Contributions to the inception report and detailed work plan, including design of the proposed detailed study contents and methodology for the assessment of environmental dimensions related to antibiotic use and AMR	06 July 2018
2. Collection and desk review of related information and studies	15 July 2018
3. Prepare, test and finalize the interview and survey tools and questionnaires for the assessment of environmental dimensions related to antibiotic use and AMR	20 July 2018
4. Carry out the study activities in the field	10 August 2018
5. Collate and analyze the qualitative and quantitative data	17 August 2018
6. Slides on the preliminary findings from the assessment of environmental dimensions related to antibiotic use and AMR and related recommendations, for inclusion in the overall presentation of draft study findings	27 August 2018
7. Report on the assessment of environmental dimensions related to antibiotic use and AMR and comments on the full draft Case Study report	11 September 2018
8. Report on the assessment of environmental dimensions related to antibiotic use and AMR and comments on the full draft Case Study report	25 September 2018

7) Provision of monitoring and progress control

- The Contractor will work closely with and under the guidance of the SCOH2 PMU (OHP Secretariat), including overall reporting to the NPD and day-to-day reporting to the Secretariat Manager.
- The Contractor will respond timely (within 24 hours, preferably) to technical requirements and other communications from the NPD and the Secretariat Manager.
- The deliverables shall be submitted to the SCOH2 PMU (OHP Secretariat) for review and approval. All deliverables are subject to technical clearance and approval from the NPD, the International Partnership Advisor, and the UNDP Programme Officer for the SCOH2 project.

8) Qualification and work experience

The Contractor should have extensive experience in conducting environmental health assessments and related studies in relevant areas in Viet Nam.

The requirements for the Contractor are as follows:

- Postgraduate degree in a relevant area. The academic requirements can be lowered/waived if possessing greater experience in this area.
- At least 10 years of recent experience in field studies in relevant sectors. Experience with public health and One Health will be preferred.
- Strong analytical skills.

- Strong communication and writing skills in English and Vietnamese.
- Flexibility to operate in various cultural settings and with a variety of stakeholders.
- Proven excellent skills in the development of UN reports.

Se	Criteria	Score
1	Postgraduate degree in a relevant area. The academic requirements can be lowered/waived if possessing greater experience in this area	150
2	At least 10 years of recent experience in field studies in relevant sectors. Experience with public health and One Health will be preferred.	350
3	Strong analytical skills.	200
4	Strong communication and writing skills in English and Vietnamese	100
5	Flexibility to operate in various cultural settings and with a variety of stakeholders	100
6	Proven excellent skills in the development of UN reports	100
		1000

9) Quality review and payment terms

Payments are based upon output, i.e. upon delivery of the services specified in the TOR. The Contractor shall receive payment in installments as follows:

- First payment of 10% of the contract value will be paid upon submission and acceptance of the inception report and list of recommended study locations;
- Second payment of 20% of the contract value will be paid upon submission and acceptance of the study tools for the institutional assessment;
- Third payment of 40% of the contract value will be paid upon submission and acceptance of the preliminary findings and the draft report;
- Last payment of 30% will be paid upon submission and approval of all products under the contract.

10) Administrative support and reference documents

Administrative support will be provided by the OHP Secretariat in its capacity as the PMU for the SCOH2 Project. Copies of relevant documents and reports will be made available to the Contractor upon commencement of the assignment. The PMU will facilitate logistical arrangements for meetings with key stakeholders in Hanoi, and for the arrangement of the workshop to present the preliminary study findings. The PMU will support the provision of official letters to key stakeholders at the provincial level to request their agreement and support to the study and the visits to the field locations.

11) Consultant presence required on duty station

NONE PARTIAL INTERMITTENT FULL-TIME