

## **National Consultant for Regional Research on COVID-19 Medical Waste Management (Myanmar)**

### **TERMS OF REFERENCE**

**Services/Work Description:** Coordinating in-country research activities and support for regional research on COVID-19 Medical Waste Management in 5 countries (Cambodia, Laos, Myanmar, Nepal and Philippines)

**Project/Programme Title:** Learning from China's Experience to Improve the Ability of Response to COVID-19 in Asia and the Pacific Region

**Consultancy Title:** National Consultant for Regional Research on COVID-19 Medical Waste Management (Myanmar)

**Duty Station:** Myanmar

**Duration:** January 20 – May 31 2022 (in total 30 working days)

**Expected start date:** January 20 2022

### **BACKGROUND**

COVID-19, with its highly contagious and transmissible nature, has led to the exponential increase of healthcare waste generated in healthcare and quarantine facilities, medical laboratories and biomedical research facilities. Additionally, the increase in the amount of personal protective equipment (PPE) used during the COVID-19 pandemic, compared to normal circumstances, has further contributed towards the increase in healthcare solid waste. For example, recent research estimated that every minute 3 million facial masks are thrown away globally<sup>1</sup> and in some cities in the Asia and the Pacific the volume of medical waste has been increased by 500% on average compared with before COVID-19 figures.<sup>2</sup>

If not properly treated and managed, such large amount of waste will pose serious risks of disease transmission to waste pickers, waste workers, health workers, patients, and the community in general through exposure to infectious agents. In addition, unmanaged or poor-managed waste will also cause pollution and create new environmental risks.

COVID-19 has put significant additional burden on all phases of medical waste management systems, from segregation, collection, storage, transportation, treatment to final disposal. In light of the serious issue, international organizations such as WHO have developed a series of guidelines to support the countries manage healthcare waste resulting from the current pandemic. Many countries have also formulated policies, plans and SOPs on COVID-19 medical waste management at national and local levels. However, institutional and capacity gaps continue to persist, such as shortage of waste treatment equipment and

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1 Elvis Genbo Xu, Zhiyong Jason Ren. *Preventing masks from becoming the next plastic problem*. *Frontiers of Environmental Science & Engineering*, 2021, 15(6): 125

2 ADB. [Managing Infectious Medical Waste during the COVID-19 Pandemic](#), 2020.

facilities, lack of technologies for safe transportation and disposal, lack of professional workers and expertise for safe operations and the need for awareness-raising and behavioral changes towards better management of COVID medical waste etc.

UNDP, in partnership with the Government of China, is undertaking a regional project to support COVID-19 medical waste management capacity building in 5 countries: Cambodia, Laos, Myanmar, Nepal and Philippines. Under the project, the Disaster Risk Reduction and Resilience Building Team at UNDP Bangkok Regional Hub (BRH), in collaboration with Country Offices in the project countries, aims to conduct a series of research to better understand the most pressing issues of medical waste management in 5 project countries through the systems approach, fostering changes in mindset, perceptions, behaviors and actions, towards more systematic and risk-informed medical waste management practices.

The research will take a phased approach, with baseline and benchmarking assessment as the initial step to map out the pinpoints that call for most attention and efforts of interventions, accompanied by a systems thinking workshop for each country to facilitate systems thinking and design among stakeholders supervising or working on multiple medical waste management stages. Based on the findings of baseline and benchmarking assessment, a research and experimentation will be conducted by applying behavioral insights (BI) to nudge for better changes in COVID medical waste management.

UNDP Myanmar is hiring a national consultant to support 1) an international consultant working on Health Care Waste (HCW) baseline and benchmarking assessment, and 2) an international consultant working on HCW behavioral insights, in terms of in-country data collection, stakeholder coordination and other research-related activities in close coordination with UNDP Bangkok Regional Hub (BRH).

## **SCOPE OF WORK, RESPONSIBILITIES AND DESCRIPTION OF THE PROPOSED WORK**

Under the overall guidance of Deputy Resident Representative and the supervision of Project Manager, UNDP Myanmar and in close coordination with international consultants and UNDP BRH, the Consultant is expected to undertake the below roles and responsibilities:

- Supporting the international consultant on baseline and benchmarking assessment to collect relevant data and statistics of Myanmar, including coordinating and organizing focus group discussions, stakeholder interviews, questionnaires and consultations etc. ;
- Supporting the international consultant on baseline and benchmarking assessment to organize 1 online systems thinking workshop with key stakeholders in Myanmar, such as professionals and practitioners of multiple HCW management stages to communicate the research results and facilitate system thinking on the causal dynamics and feedback loops within and between medical waste management stages for more coordinated, coherent and systematic future design and action;
- Supporting the international consultant on HCW behavioral insights to design and implement the behavioral experiment, including collecting relevant data and coordinating stakeholder meetings, experiment activities etc.;

- Supporting the communications of the research in the country, including preparing communications material and products (photos, videos, newsletters, tweets, blogs etc.)
- Any other tasks as assigned by Project Manager, UNDP Myanmar.

#### **EXPECTED OUPUTS AND DELIVERABLES**

<b>Deliverables/Outputs</b>	<b>Due Dates</b>
1. Support provided to the development of 1 baseline and benchmarking assessment report in terms of in-country data collection, stakeholders coordination, organizing consultation meetings and other necessary research activities;	25 March 2022
2. Support provided to the organization of 1 systems thinking workshop in Myanmar;	13 April 2022
3. Support provided to the design, implementation and results documentation of 1 behavioral insights experiment in Myanmar in terms of in-country data collection, stakeholders coordination, organizing briefings and consultation meetings and other related activities;	15 May 2022
4. Relevant communications materials and products.	15 May 2022

#### **INSTITUTIONAL ARRANGEMENT**

The Consultant will report directly to the Project Manager under the overall guidance of Deputy Resident Representative, UNDP Myanmar. He/She will also work closely with 2 international consultants and DRT, UNDP BRH.

#### **DURATION OF THE WORK**

This assignment will start on January 2022 and complete on 31 May 2022, for 30 working days.

#### **DUTY STATION**

In Myanmar

International travel is not required

#### **EXPERIENCE AND QUALIFICATIONS**

##### **Educational Qualifications**

Bachelor's Degree or above in public administration, international relations, political science, development studies, medical science, environmental science, public health, medical waste management, or relevant.

##### **Experience**

- Minimum seven years of relevant work experience.
- Minimum five years of experience working with relevant public sectors, research institutions, medical waste management agencies or development partners.
- Proven experience and knowledge of medical waste management in the COVID-19 context.
- Proven experience and knowledge of existing medical waste management system and challenges in Myanmar.

### Language

Fluency in English and Myanmar language.

### Competencies

- Displays cultural, gender, religion, race, nationality and age sensitivity and adaptability;
- Displays integrity and fairness - embodies UN values and promotes the well-being of all individuals regardless of gender, religion, race, nationality, or age;
- Results-driven, initiative-taking, ability to work under pressure and to meet deadlines;
- Ability to work under minimum supervision;
- Highly motivated with a positive attitude and problem-solving approach;
- Good interpersonal and networking skills, supports and encourages open communication.

### SCOPE OF PRICE PROPOSAL AND SCHEDULE OF PAYMENTS

The method of payment is output-based scheme. The payments shall be released upon satisfactory submission of the required deliverables by or before the due dates, or as otherwise agreed with UNDP Myanmar.

The required review time is between two to four weeks after submission of the deliverables.

In the event of unforeseeable travel not anticipated in this ToR, payment of travel costs including tickets, lodging and terminal expenses should be agreed upon, between the respective business unit and the Individual Consultant, prior to travel and will be reimbursed at actual documented cost.

#### Schedule of payments:

Schedule	Deliverables/Outputs	Due Dates
First payment of 30%	Upon completion and approval of Deliverable 1	25 March 2022
Second and final payment of 70%	Upon completion and approval of Deliverable 2, 3 and 4	15 May 2022

#### EVALUATION OF CANDIDATES:

Individual consultants will be evaluated based on the following methodology:

**Cumulative Analysis:** The candidates will be evaluated through Cumulative Analysis method. When

using the weighted scoring method, the award of the contract will be made to the individual consultant whose offer has been evaluated and determined as:

- Responsive/compliant/acceptable; and
- Having received the highest score out of set of weighted combine technical evaluation of desk review and interview (70%), and financial criteria (30%). Financial score shall be computed as a ratio of the proposal being evaluated and the lowest priced proposal received by UNDP for the assignment.

#### **Technical Criteria for Evaluation – 70% (Maximum 70 points)**

- Criteria 1: Bachelor’s Degree or above in public administration, international relations, political science, development studies, medical science, environmental science, public health, medical waste management, or relevant – **(Max 10 points)**
- Criteria 2: Minimum seven years of relevant work experience – **(Max 20 points)**
- Criteria 3: Minimum five years of experience working with relevant public sectors, research institutions, medical waste management agencies or development partners – **(Max 20 points)**
- Criteria 4: Proven records of experience working in minimum 1 project on medical waste management in the COVID-19 context – **(Max 10 points)**
- Criteria 5: Proven records of experience working in minimum 1 project related to existing medical waste management system and challenges in Myanmar – **(Max 10 points)**

**\*\*Only candidates obtaining a minimum of 70% of the total technical points would be considered for the Financial Evaluation.**

#### **Financial Evaluation (30%)**

Financial proposals from all technically qualified candidates will be scored out 30 marks based on the formula provided below. The maximum marks (30) will be assigned to the lowest financial proposal. All other proposals will receive points according to the following formula:

- $p = y (\mu/z)$ .

Where:

- $p$  = points for the financial proposal being evaluated;
- $y$  = maximum number of points for the financial proposal;
- $\mu$  = price of the lowest priced proposal;
- $z$  = price of the proposal being evaluated.