

Promoting Public Education on Ebola in Ghana through the Media
FINAL PROGRAMME NARRATIVE REPORT
REPORTING PERIOD: FROM 01.2015 TO 06.2016

<p>Programme Title & Project Number</p> <ul style="list-style-type: none"> • Programme Title: UN EVD Joint Programme Support to Ghana Government • Programme Number • MPTF Office Project Reference Number: 	<p>Country, Locality(s), Priority Area(s) / Strategic Results</p> <p><i>Country/Region</i> Ghana/West Africa</p>
<p>Participating Organization(s)</p> <ul style="list-style-type: none"> • Organizations that have received direct funding from the MPTF Office under the no - cost extension period: UNDP, FAO 	<p><i>Priority area/ strategic results</i></p> <ol style="list-style-type: none"> 1. surveillance, and coordination, 2. social mobilization and risk communication, supporting prevention and preparedness measures in partnership with government
<p>Programme/Project Cost (US\$)</p> <p>Total approved budget as per project document: US\$9,289,144</p> <p>MPTF /JP Contribution¹:</p> <ul style="list-style-type: none"> • <i>FAO US\$270,000</i> • <i>ILO US\$165,000</i> • <i>IOM US\$381,000</i> • <i>UNAIDS US\$ 237,000</i> • <i>UNDP US\$200,878</i> • <i>UNESCO US\$ 100,000</i> • <i>UNFPA US\$ 170,000</i> • <i>UNICEF US\$160,000</i> • <i>WHO US\$ 687,000</i> <p style="text-align: right;">US\$ 2,370,878</p> <p>Agency Contribution</p> <p>Government Contribution</p> <p>Other Contributions Government of Canada – DFATD US\$ 2,370,878</p> <p>TOTAL: US\$ 2,370,878</p>	<p>Implementing Partners</p> <p>MoFA, NADMO, Ghana Health Service, MoH</p>
	<p>Programme Duration</p> <p>Overall duration: 18 Months</p> <p>Start Date: 1 January, 2015</p> <p>Original End Date: Current 30 June 2016</p> <p>End Date:</p>

¹ The MPTF or JP Contribution, refers to the amount transferred to the Participating UN Organizations, which is available on the [MPTF Office GATEWAY](#)

Programme Assessment/Review/Mid-Term Eval.Assessment/Review - if applicable *please attach* Yes No Date: 24. November.2016 Yes No Date: dd.mm.yyyy**Report Submitted By**

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This Consolidated Progress Report under the Joint Program “UN Program on Ebola Virus Disease Preparedness in Ghana: covers the period from 1 January 2015 to 30 June 2016 and in conjunction with the 2015 Report is the final Report for the entire Project. This report is in fulfillment of the reporting requirements set out in the Standard Administrative Arrangement (SAA) concluded with the Donor. In line with the Memorandum of Understanding (MOU) signed by Participating UN Organizations, this Report consolidates information submitted by Participating Organizations. The report therefore provides a comprehensive overview of achievements and challenges associated with the Joint Program.

EXECUTIVE SUMMARY

In March 2015, Canada contributed US\$ 2,370,878 for the UN Joint Programme on Ebola Preparedness in Ghana. This fund was to be utilized according to an MOU signed with the donor by the end of the year – December, 2015.

This contribution enhanced UN support to the Government of Ghana to prepare for early detection and containment of Ebola Virus Disease (EVD). However, the context for the programme had improved considerably by the time the funds were received and implementation launched, in the sense that the breakout of Ebola had not spread to Ghana. The Government and UN agencies agreed, however, that there was no room for complacency, and that the work that remained to be done constituted a substantive contribution to national preparedness capabilities for future epidemics.

The end-2015 report documents activities completed and their impact, in both building capacity of the health system and in facilitating community-level awareness and prevention actions. As of end-November 2015, the programme had a budget balance of US\$ 310,422. A six month no-cost extension was requested by the UN, through end-June 2016, which was agreed by the Canadian Government.

During the no-cost extension period, the remaining funds were applied to the following activities:

- validation of research findings, enabling the participating UN agencies to extend the vetting of research studies conducted on the potential impact of EVD prevention and preparedness on agriculture, food security (including bush meat alternatives) and livelihoods;
- publication and dissemination of manuals targeting local communities following extensive approval processes from the national health authorities: a *training tool on guiding principles for Journalists* when reporting on Ebola, relevant to effective media reportage on infectious diseases in general; and a *cartoon booklet on Ebola* with cultural- and gender-sensitive content conveying key messages about EVD produced and disseminated through public institutions, schools and health facilities;
- assistance to the Government in assessing the status of Ghana’s EVD Preparedness Plan, and the contributions of this joint program to its implementation, working through the Sector Working Group on Health and with the Ministry of Health (MOH) and the Ghana Health Service (GHS).

I. Purpose

The no-cost extension period was intended to enable some of the implementing partners to complete work originally envisaged for 12 months with funds that were received from the Canadian Government in 2015.

The specific objectives of the program activities of the no-cost extension were:

- To assess the challenges and gaps encountered during response to recent Public Health Emergencies (PHE) of Cholera, Meningitis, and EVD preparedness;
- To publish and disseminate manuals developed during the EVD Programme implementation phase and;
- To validate the research findings on the potential impact of EVD prevention and preparedness on agriculture, food security (including bush meat alternatives) and livelihoods

II. Results

As at end of 2015, surveys of bush meat exploitation (based on animals traded in key markets and hunters' catch) at known major bush meat markets, as well as questionnaire surveys to obtain information on bush meat consumption in selected surrounding communities had been conducted for only two 2 sites in the Greater Accra and Eastern regions. However, during the extension period, 3 additional sites (covering the Northern, Western, and Volta regions) have been surveyed providing an up to date national picture / evidence base on the bush meat exploitation and consumption including potential risks for EVD.

The surveys also highlighted that, though bush meat trade (and consumption) is linked to culture, meat preference and taste, it is also driven by livelihood issues (poverty, employment and income generation). Therefore, supporting alternative livelihood sources, including farming of the favorite species (such as the grass-cutter) may not only reduce the pressure on wildlife but also reduce the potential risks for EVD.

The review report on Public Health Emergencies (PHE) response and preparedness in Ghana elaborated the level of achievements of planned interventions and the extent to which the various interventions contributed to strengthening preparedness and response to PHE especially for EVD. This report was vetted and validated at the National Technical Coordination Committee (NTCC) meeting on 24 November 2016. The recommendations are summarized in the Annex below and the validation meeting minutes are available.

MOH/GHS further intends to utilize the documented lessons and experiences gathered by the report in various reviews, assessments, evaluations, simulations exercises and post outbreak reviews during an upcoming Joint External Evaluation (JEE) of International Health Regulation (IHR) capacities workshop to develop an All-Hazards PHE preparedness and response plan

Some 3,000 copies each of 5 key documents were published and disseminated to public institutions including schools and hospitals during this period to be used as training manuals and for reference purposes.

A planned outcome of the program was to build the capacity of agricultural extension agents, animal surveillance staff, forestry authorities, farmer groups, traditional authorities, forest users, women and youth groups on the risk involved in the interface between human, animals with regards to EVD infection. Most persons in these target groups had a general perception of Ebola being an outdated issue. This perception had however changed by end of public education and training programs initiated for them.

At the time of reporting, the Ministry of Food and Agriculture (MoFA) / Veterinary Service Directorate (VSD) and Wildlife Division of the Forestry Commission had acquired an in-depth knowledge and an up to date national picture / evidence on bush meat exploitation and consumption including potential risks for EVD. This knowledge motivated an adoption of appropriate attitude in their daily interaction with forest users and serving as role models in the various communities.

III. Qualitative Assessment:

The no-cost extension also brought about some additional long-term results. For instance, during the no-cost extension period, program activities pursued contributed additionally to many Ghanaians, especially people living in rural and forest districts, gaining access to quality and reliable information about the Ebola Virus Disease and preventive practices.

The activities during the no-cost extension also served as a good reminder for all stakeholders that Ebola is still a relevant issue. When Agricultural extension agents, animal surveillance staff, forestry authorities, farmer groups, traditional authorities, forest users, women and youth groups were initially contacted and invited for the training, there seemed to be a general perception of Ebola being an outdated issue. This perception had however changed by end of the extension period.

IV. Partnerships:

During the no cost extension period, UN Agencies continued working with partners to ensure long-term impact and results. Ministry of Food and Agriculture (MOFA), GHS, MoH who were involved in the program are already long-standing partners of the UN. Agricultural extension agents, animal surveillance staff, forestry authorities on the other hand are also long standing beneficiaries of training organised by the FAO/MoFA. The value-added was that the program strengthened the already existing partnerships between the UN and its Implementing partners by enabling them to work together on a program for more than 12 months at a go.

Indicator Based Performance Assessment: For No - Cost Extension period

	<u>Achieved</u> Indicator Targets	Reasons for Variance with Planned Target (if any)	Source of Verification
OUTCOME 1.0 Enhanced capacity of stakeholders in the agricultural sector (on EVD Preparedness in the food /wildlife sectors)	EVD impacts on agriculture, food security (including bush meat alternatives) and livelihoods identified	None	Assessment report
Output 1.1 Survey undertaken in 5 regions base on bush meat exploitation and consumption including potential risks for EVD and findings documented into a report. In addition, SWOT Analysis of current national surveillance system has been completed.	Capacity assessment conducted in 5 regions (Greater Accra, Volta, Eastern, Western) and 390 partners from these regions trained in the collection of wildlife epidemiological data.	None	Programme report
OUTCOME 2.0 Health officials gained insights into how to improve response to public health emergencies; thus, enhancing health delivery	Health officials in the Ministry of Health and the Ghana Health Service in 10 regions received copies of the PHE assessment report	None	Evaluation final report available (title: <u><i>Review of Public Health Emergency Response, Preparedness and Resources in Ghana; Achievements, Challenges and Directions</i></u> , in all regional health institutions National Technical Coordinating Committee's Minutes

<p>Output 2.1 A comprehensive nationwide evaluation conducted on system-wide preparedness and response during PHE and final report available</p>	<p>Consultant interviewed all PUNOs, Ghana Health Service and Points of Entry officials</p>	<p>None</p>	
<p>OUTCOME 2. 2 Social workers/medical practitioners have their knowledge and confidence levels enhanced with the provision of EVD reference documents in their institutions</p>	<p>Social workers/medical practitioners in 10 regions privy to recommendations from the assessment on general preparedness and response to PHE</p>	<p>None</p>	<p>Copies of documents available: Titles –</p> <ul style="list-style-type: none"> • <i>EVD WORKPLACE ACTION CHECKLIST</i> • <i>FINAL KAP STUDY REPORT REV,</i> • <i>GHANA / REGIONAL EVD PREPAREDNESS CHECKLIST</i> • <i>TRAINING BOOKLET ON EVD</i> • <i>WHO EVD POCKET GUIDE FOR WEB</i>
<p>Output 2.2 MoH approved reference documents on EVD (developed by UN Agencies) published for the health and other institutions/ practitioners in Ghana for usage</p>	<p>3000 each of 5 standard reference and training documents published and distributed to health institutions and other stakeholders in all the 10 regions of Ghana</p>	<p>None</p>	<p>Copies of documents</p>

Key findings and recommendations of the assessment of public health emergency response, preparedness and resources in Ghana

<p>FINDINGS</p>	<p>Analysis of the Response and Preparedness Plans</p> <ul style="list-style-type: none"> • Most of the Strategic Plans available are disease specific (Influenza or EVD). • The National EVD Plan is very strong in multi-sector, multi-disciplinary and ethical perspectives but weak in zoonotic perspective. • The draft all-hazard National Strategic Plan prepared in 2015 under National Disaster Management Organisation (NADMO) with funding from WHO appears not to be known and endorsed despite its wide participatory process during its development. • All the strategic Plans for PHE envisage NADMO as agency mandated overall to coordinate all PHE. • The ethical criterion is not articulated much in all the Plans and standard Operating Procedures (SOPs) except in the National EVD Plan of 2014. <p>Description and analysis of achievements including the capacities built for PHE.</p> <ul style="list-style-type: none"> • A major achievement has been the provision of an enabling policy environment through the development of Public Health Act and Integrated Disease Surveillance and Response (IDSR) to implement International Health Regulations (IHR) as well as other National Strategic Plans to provide guidance for preparing and responding to PHE. <p>Human resource capacity</p> <ul style="list-style-type: none"> • Capacity in risk assessment has been built at the national level for PHE to enhance prevention, preparedness and response readiness. • Short term in-service trainings have been organized for various categories of health and other staff in surveillance, preparedness and response (including case management) to PHE, though the scope and scale have been limited mainly due to limited funding. • Longer term human resource capacities have been built over the years in the areas of epidemiology, zoonotic disease investigations, and laboratory investigations through the Field Epidemiology and Laboratory Training Programme (FELTP) at School of Public Health and Ghana College of Physicians courses on Epidemic Intelligence Service (EIS).
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- A number of guidelines and SOPs on PHE have been developed for case management for specific disease conditions, specimen collection and transportation, and for safe and dignified burial of patients.

Laboratory Strengthening

- Capacity of Noguchi Memorial Institute for Medical Research (NMIMR) has been strengthened to provide diagnostic referral support for both viral and bacterial infections including Influenzas, EVD, Lassa fever, Marburg, Yellow fever, Dengue, West Nile and anthrax. It has a P3 laboratory in place for AI diagnosis as well as P2 laboratory for HI diagnosis.
- Currently, Kumasi Centre for Collaborative Research (KCCR), Public Health Reference Laboratory (PHRL) and all regional hospitals have the capacity to provide laboratory support for common bacterial diseases in Ghana. There are however varying laboratory capacity in district hospitals and health centres, including for cholera and meningitis confirmation.
- During the preparation for the Highly Pathogenic Avian Influenza (HPAI), the Accra Veterinary laboratory received support from the USAID to setup a facility for diagnosis of avian influenza up to the use of polymerase chain reaction method. Subsequently, additional facilities have been added – a section for the production of Newcastle disease vaccine. It has the capacity to produce other poultry vaccines. Three new additional biosafety level 3 laboratories – one for Accra, Takoradi and Pong Tamale have been provided by the Canadian government. Though some of these facilities were initiated before 2014, they have strengthened the long-term capacity at the national level for diagnosis of zoonotic diseases.
- In 2016, the testing and specimen handling protocol among PHRL, KCCR, NMIMR and animal health laboratories have been harmonized as part of efforts to improve laboratory support for PHE.
- The Government of Ghana with funding from Japanese government is currently in the process of establishing two P3 laboratories in Ghana and the sod cutting is expected to take place this year.

Risk communication/Social Mobilization

- Heightened awareness of PHE has been countrywide due to recurrent cholera and meningitis outbreaks, and the EVD scare.
- Capacity of media has been enhanced through focused media training

Logistic and infrastructure Support

- Provision of Personal Protective Equipment (PPEs), laboratory reagents, medicine for case management, detergents and other short term logistic support has been enhanced though not in adequate amounts and not timely procured.
- Longer term infrastructure support has also been enhanced. Infra-red walk through scanners and mobile hand held thermometers have been procured and installed at major port of entry to enhance surveillance at ports of entry.
- Construction of holding rooms to isolate suspected cases at ports of entry is a major achievement which adds to long-term capacity for responding to PHE.

Resource Mobilisation

- A total amount of about \$19,550,980 were mobilized by partners to support PHE activities from 2014-2016 (Table 1).

Value Addition of UN EVD Joint Program

The following is a summary of the value addition of the UN EVD Joint Program to preparedness and response capacity in Ghana in general:

1. ***Improved coordination of preparedness and response activities among UN agencies and MOH/GHS and others.*** A key contribution of the JP project is enhanced coordination of preparedness and response activities among UN agencies and between them and Ministry of Health/ Ghana Health Service (MOH/GHS) and other partners. The UN agencies spoke with one voice and each had pre-assigned areas of focus based on their comparative strengths. While the impact of coordination is difficult to measure, evidence of the effective implementation of preparedness activities in Ghana can be seen in the rapid progress made on the WHO EVD Preparedness Checklist. For instance, the percentage of activities completed by Ghana more than doubled from 27% in November 2014 to 64% in October 2015.
2. ***High advocacy for PHE especially EVD*** Related to the above, the project also achieved high advocacy value by sensitizing and bringing on board a number of Civil Society Organisation/Non-Governmental Organisation (CSOs/NGOs), traditional leaders and the government machinery for PHE.
3. A major value addition of the project is enhancing the capacity for preparedness and response at various ***ports of entry*** through training, establishment of early warning system for case detection,

simulation exercises at these ports.

4. Mobilization of funding through JP UN EVD project of about \$2,370,878 (12.1%) of the estimated total funding for PHE during 2014-2016. It indirectly contributed to providing platform for other partners to contribute additional funds.
5. Sensitization of the public and social mobilization was enhanced through *collaborative initiatives with media, NGOs* (e.g. Red Cross) and other partners. High public awareness has been created for EVD.
6. *Capacity of health care providers* has been built in active surveillance, early investigation, diagnosis and contact tracing, as well as for safe and dignified burial, and new guidelines have been prepared.
7. Enhanced *ability to mobilise a wide array of partners* to put their collective strengths to address particular PHE. In relation to the interventions deployed, they were found to be very appropriate for preparedness and response to PHE, but the scale/scope for a number of them was fair to good while the impact is understandably low except for interventions at airports, due to its short duration. The potential impact is however expected to be high in the long run.

Assessment of the timeliness and effectiveness of the response to recent public health emergencies of cholera, and meningitis.

Cholera Outbreak

1. *Preparedness*: The nation was certainly not prepared for the cholera outbreak in 2014/2015 despite continuing sporadic cases in 2013. Early warning signals such as prolonged draught followed by intense rains were ignored especially when heaps of refuse were left in Accra and major towns uncleared.
2. *Case detection*. Though the index case was on 10 June 2014 in Greater Accra Region, it took over a month to realize that there was an outbreak. The standard, according to IDSR 2011 guidelines, is to declare a confirmed case of cholera as an outbreak but this was not done, hence response measures were not timely.
3. *Case management*. Due to inadequate cholera Rapid Diagnostic Tests (RDTs) and culture

media initially, suspected cases could not be quickly confirmed for prompt treatment. Effective case management with appropriate drugs and Intravenous (IV) fluids was not always possible due to shortages as these essential drugs and medications were not procured in advance and prepositioned before the outbreak. A major underlying problem was lack of funding and inadequate logistics management.

4. *Increased person to person transmission.* The congestion at the wards coupled with inadequate hygiene and infection control practices and education of relatives who took care of patients led to on-going spread of infection after discharge.
5. *IEC.* Though a number of public education measures were initiated, they were not sustained and scaled up for effect due partly to inadequate mobilization and release of funds for operational activities.
6. The combined effect of all the above resulted in the outbreak lasted for over a year with a high incidence rate covering all regions.

Meningitis Outbreak

1. Preparedness. The Brong Ahafo region (BAR) (and for that matter the country) was not prepared for the pneumococcal meningitis outbreak as that was possibly the first outbreak of meningitis caused by pneumococcus in the country. Hence, there was no early warning system in place for predicting such an outbreak.
2. Diagnosis. There was delayed diagnosis with initial misdiagnosis of first few cases as malaria without differential diagnosis of possible meningitis. The index case was first seen at the Community Health Planning and Services (CHPS) compound and died 7 days later without referral and laboratory investigations. Obviously, the Community Health Officer (CHO) lacked technical capacity but should have referred if adequately trained on IDSR SOPs.
3. Delayed reporting. Regional level was officially informed after a month of onset and after Tain district was in epidemic phase. The standard is to report all suspected cases of meningitis to regional level immediately before even laboratory confirmation.
4. Logistics Management/Case management. There was inadequate supply of antibiotics, lumbar puncture sets, logistics (Pastorex, gram stain, culture) at lower levels to support case management and it required the intervention of various partners to address this problem. The standard is to preposition such items as we approach the dry season when meningitis outbreak usually occurs.
5. Coordination. There was good multi-sector support from partners but there was ineffective

	<p>coordination of effort with parallel interventions going on by health sector, NADMO, CSOs, and Local government at frontline and district levels.</p> <p>6. Funding. There were inadequate operational funds for contact tracing and public education and this partly contributed to the spread of the outbreak from contacts due to poor follow up and education.</p>
<p>RECOMMENDATIONS</p>	<p>Based on the review findings and gaps identified, the following recommendations are suggested to improve planning, coordination and effectiveness of future preparedness and response to PHE in the country.</p> <p><i>A) Policy, Planning and Legal Framework</i></p> <ol style="list-style-type: none"> 1. [MOH/GHS/NADMO/VET SERV] Develop a National One-Health Strategic Plan which should be translated into an implementation plan for PHE by bringing together and harmonizing all existing Plans 2. GOG [MOH/NADMO] Harmonise all administrative structures currently in existence for PHE especially reconciling NADMO Act/Management Plan/Contingency plan/SOP with proposed or current structures in various documents, including Public Health Act and IHR to avoid conflicts. Terms of Reference of the harmonized structures should be developed. Where necessary appropriate Legislative instruments (LIs) or administrative instruments should be enacted to provide legal backing. <p><i>B) Preparedness/Prevention</i></p> <ol style="list-style-type: none"> 1. [MOH/GHS] Invest in developing early warning systems through establishment of real time inter-operative data collection and reporting surveillance systems for all hazards for preparedness and early response. 2. [MOH/GHS] Enhance community based surveillance of PHE by using the extensive network of CHPS and building the capacity of CHOs to link with other community based structures (such as Red Cross network) for early detection and reporting of all unusual events of public Health (PH) importance. 3. [MOH/GHS] Strengthen infection prevention and control and occupation health and safety in non-Ebola health services to ensure the protection of health workers and the community. Support the downstream training in IPC and move it to scale. 4. [NADMO/MOH/GHS] Undertake regular systematic national simulation exercises involving all partners to test preparedness and response readiness.

5. **[MOH/GHS]** Finalise comprehensive strategic logistics plans for PHE
6. **[MOH/GHS]** Invest in overall health system strengthening for sustainability and resilience during PHE. As discussed above most of the funding support went into short term activities and not much for long term health system strengthening. Focus should be on accelerating and intensifying longer term capacity building and health system strengthening through renewed attention to IHR capacities.
7. **MOH/GHS.** Strengthen Port Health services through regular training and adequate funding.
8. **[PARTNERS].** Support social mobilization of communities to improve demand and access to PHE services by reviewing and scaling up the Ghana Red Cross community mobilization and education model as described in the report.
9. **[PARTNERS]** Support the establishment of an effective real-time logistics management system by linking UN inter-agency Internet technology (IT) platform among UN agencies (to include NADMO) to improve communication.
10. **[PARTNERS]** Support GOG and NADMO to procure and preposition essential logistics and equipment such as Personal protective equipment (PPE), cell phones, ambulances and infrastructure for effective response.
11. **[PARTNERS]** Support mobilization of sustainable funding for PHE both internally and externally using approaches suggested in proposed resource mobilization strategy below.

C) Response

- **[MOH/GHS]** Increase the number of functional ambulances and ensure that the various emergency response teams are adequately trained and resourced for effective response to PHE.
- **[MOH/GHS]** Expand the scope of trained health staff and other supporting health-related workers in all aspects of preparedness and response to PHE.
- **[MOH/GHS] Strengthen** Emergency Operation Centre at national level manned by a small team of highly dedicated technical and administrative staff appropriately equipped and with access to real-time surveillance data for PHE. The Terms of Reference (TOR) and administrative relations with other structures should be clearly defined.
- **MOH/GHS.** Strengthen Laboratory support to PHE. Establish procedures and agreements to ensure rapid and safe transportation and testing of laboratory samples. Finalise the draft laboratory policy and the draft antimicrobial resistance policy to guide antimicrobial use in the country. In addition, establish quality assurance system for laboratories.
- **[NADMO].** Review and operationalise the Contingency Plan and SOP in light of current issues

	<p>since their development in 2010. Special effort should be made to make functional its proposed NADMO EOCs at national, regional and district levels.</p> <ul style="list-style-type: none"> • [NADMO] Finalise SOPs and guidelines for managing chemical, nuclear & radiological events.
Challenges	<ul style="list-style-type: none"> • Risk Communication/Social Mobilization and Behavioural Change Communication (SBCC) programme activities which have been used over the years are not able to change inherent socio-cultural practices necessary for Infection Prevention and Control (IPC) especially in wake of EVD. • There is also inadequate funding to move piloted successful SBCC programme activities to scale. • Misinformation about common epidemic prone diseases by the media is common.
Lessons learned	<ul style="list-style-type: none"> • Social mobilization on Ebola has been mainly left to the health sector alone in Ghana and this should be expanded to address the societal needs to prevent, detect and report an epidemic. Social mobilization is a very critical prevention and response mechanism. • Effective leadership plays a central role in a country's response to public health emergencies/threats. • Advance preparation and essential policy alignment is important for long-term investment in epidemic management and systemic capacity development. It is always advisable to avoid panic driven measures that are not evidence driven and lack a comprehensive approach in dealing with epidemics.

Appendix 2

List of Acronyms

CDC	Centers for Disease Control
CFR	Case Fatality Rate
CHO	Community Health Officer
CHPS	Community Health Planning & Services
DMR	Disaster Management and Response
EOC	Emergency Operations Centre
EVD	Ebola Virus Disease
FELTP	Field Epidemiology and Laboratory Training Programme
GHS	Ghana Health Service
GOG	Government of Ghana
IHR	International Health Regulation
IPC	Infection Prevention and Control
JP	Joint Programme
MOFA	Ministry of Food and Agriculture
MOH	Ministry of Health
MRC	Medical Research Council
NADMO	National Disaster Management Organization
NMIMR	Noguchi Memorial Institute for Medical Research
NSOP	National Standard Operation Procedures
NTCC	National Technical Coordinating Committee
PH	Public Health
PHE	Public Health Emergencies
PHEIC	Public Health Emergencies of International Concern
PHRL	Public Health Reference Laboratory
PPE	Personal Protective Equipment
RDT	Rapid Diagnostic Test
RHD	Regional Health Directorate
SBCC	Social Behavioural Change Communication
TOR	Terms of Reference
UN	United Nations
WHO	World Health Organisation