USAID
FROM THE AMERICAN PEOPLE

Assessment on

PUBLIC HEALTH EMERGENCY MANAGEMENT IN ETHIOPIA

FINAL REPORT

February 2020

This publication was produced at the request of the United States Agency for International Development. It was prepared independently by Million S. Tadesse, Eshete Y. Tefera, and Addis K. Mulat.

PUBLIC HEALTH EMERGENCY MANAGEMENT IN ETHIOPIA

FINAL REPORT

February 2020

USAID Contract No. 7200AA19M00019; Assignment Number: 011

This document is available online at the GH-TAMS website at http://www.ibtci.com/projects-app/global-health-technical-assistance-and-mission-support-project-gh-tams. Documents are also made available through the Development Experience Clearinghouse (http://dec.usaid.gov). Additional information is available from:

Global Health Technical Assistance and Mission Support
1319 F Street NW, Suite 204
Washington, DC 20005
Phone: (1-202) 991-8300
Fax: (1-703) 749-0110
http://www.ibtci.com/projects-app/global-health-technical-assistance-and-mission-support-project-gh-tams

This document was submitted by GH-TAMS to the United States Agency for International Development under USAID Contract No. 7200AA19M00019.

CONTENTS

ACRONYMS

CERF	Central Emergency Response Fund
CDCS	Country Development Cooperation Strategy
DHIS2	District Health Information System 2
DO	Development Objective
DRM	Disaster Risk Management
ECHO	European Commission for Humanitarian Operations
EHF	Ethiopian Humanitarian Fund
ENCU	Emergency Nutrition Coordination Unit
EOC	Emergency Operation Center
EPHI	Ethiopian Public Health Institute
EPRP	Emergency Preparedness and Response
EPSA	Ethiopian Pharmaceutical Supply Agency
EWARS	Early Warning and Alert Response System
EWS	Early Warning System
FMOH	Federal Ministry of Health
GHSC-PSM	USAID Global Health Supply Chain Program – Procurement and Supply Management
HSTP	Health Sector Transformation Plan
IHR	International Health Regulation
IP	Implementing Partners
JEE	Joint External Evaluation
NAPHS	National Action Plan for Health Security
NDRMC	National Disaster Risk Management Commission
OPM	Oxford Policy Management
PHE	Public health emergency
PHEM	Public Health Emergency Management
RAPHS	Regional action plan for health security
RHB	Regional Health Bureau
UNICEF	The United Nations Children's Fund
VRAM	Vulnerability and Risk Assessment and Mapping
WBP	Woreda Based Planning

1. EXECUTIVE SUMMARY

Public Health Emergency Management (PHEM) has begun receiving the growing attention it deserves, with the overall PHEM system evolving, albeit slowly, to a stature where it can prevent, detect, and respond to emergencies more effectively. Initiatives geared towards improving preparedness, response, and recovery – targeting the major health disaster risks are underway with joint efforts by the government and key stakeholders.

USAID/Ethiopia commissioned this assessment with the purpose of identifying the challenges facing the system and the gaps that might require intervention. Principally, it seeks to identify key priorities to strengthen the health system's resilience to maintain core functions during crisis and to explore possibilities to enhance the nexus between PHEM and health development endeavors. It contributes to development objectives one and four of the USAID/Ethiopia's Country Development Cooperation Strategy (CDCS).

The assessment reviews and analyzes current challenges for effective public health emergency management in Ethiopia and presents ways to overcome them. It is a qualitative study based on a review of relevant documents, key informant interviews (KII), focus group discussions, and field visits. A one-day consultative workshop was conducted to fill in any additional issues not identified by the data collection.

The major issues that surfaced include inadequate coordination mechanisms, ambiguous delineation of roles and responsibilities, absence of a policy and legal framework, inefficient emergency supply-chain management system, limited attention to preparedness, weak early warning/surveillance system, poor governance and leadership, and lack of subject matter expertise on specific hazards. Overall, the humanitarian community focuses almost entirely on response through longstanding parallel systems undermining the leadership role of EPHI/PHEM, except for few partners that are directly supporting and building the capacity of PHEM to prevent, detect, and respond to public health emergencies.

Based on the major issues and challenges summarized above, the team has identified the following priority intervention areas for the Mission's consideration. The team has cautiously defined these recommendations as gaps with utmost care to avoid potential overlaps with existing partners' programs/activities, including those that are in the pipeline. The team has packaged the recommended actionable items into the following three groups:

1) ***Gaps that can be addressed directly through a new investment/activity:*** These include: developing a surge roster for human resources tracking, harnessing technology to enhance PHEM coordination and timely response, woreda capacity building, institutionalization of post-response review, defining minimum standards for preparedness at all levels of the health system, gender mainstreaming, and initiating the culture of drills to improve preparedness and response.

2) ***Gaps that the Mission can consider addressing through existing USAID investments in health.*** These include enhancing crisis modifiers, addressing bottlenecks in Public Health Emergency (PHE) supply systems, domestic resource mobilization for PHEM.

3) ***Broader issues that USAID can and should contribute to as part of its engagement in the PHEM landscape*** via the above two approaches as well as other in-house expertise in collaboration with partners leading on specific areas of need. These include supporting the development of the PHEM strategy and the legal framework mentioned above.

2. BACKGROUND AND INTRODUCTION

BRIEF OVERVIEW OF PUBLIC HEALTH EMERGENCY MANAGEMENT (PHEM) IN ETHIOPIA

Despite decades of humanitarian, resilience-building, and development-oriented investments in health and other sectors, Ethiopia still suffers from the impacts of recurrent natural and human-made hazards. Ethiopia still grapples with the impact of several hazards with public health consequences on its vulnerable populations. The country continues to spend billions of dollars of foreign aid on humanitarian operations that have successfully averted excess mortality and human suffering. Unfortunately, it continues to respond to those humanitarian needs with little progress, if any, toward building a resilient system that can absorb shocks and mitigate their impact— putting development gains at risk.

The National Disaster Risk Management Commission (NDRMC) is a central governance and coordination structure that is mandated to coordinate multi-hazard, multi-sectoral disaster risk preparedness, response, and recovery activities within the context of sustainable development. The 10-year strategic plan that the Commission launched in 2013 has "mainstreaming of disaster risk management into the development plans and programs of all sectors and implemented at all levels" as one of its strategic objectives.[1]

The national disaster risk management (DRM) strategy aspires to establish a comprehensive and coordinated DRM system, an early warning and disaster assessment information to guide timely and appropriate responses, and decentralized DRM, along with the mainstreaming into sectoral institutions; it also seeks to establish a technology-supported DRM information management and communication system, strengthened implementation capacity, and clearly defined guiding principles outlining government leadership and utilization of domestic resources, among other things. The DRM Council, a multi-sectoral body comprising the lead sectors, provides overall leadership, while a DRM Coordination mechanism designates the respective sectors as leads for their sector-specific hazards/disasters at all hierarchies of the government structure. The health sector is, thus,

represented by the PHEM Center at the Ethiopian Public Health Institute (EPHI).

INTRODUCTION TO THE PHEM CENTER

The health impacts of disease outbreaks, drought, conflict, floods, and other disasters have demonstrated the need for strengthening the PHEM systems to better cope with these threats. The threats are growing in frequency and severity, and so is the need for building resilient public health systems to strengthen preparedness, response, and recovery. PHEM, as a growing public health field of practice for effective management of complex health events, has been operational since 2009, first as a case team, and now as a PHEM Center under the auspices of EPHI.

The Health Sector Transformation Plan (HSTP) identifies public health DRM as one of the primary strategic objectives of the sector, affirming its commitment to risk assessment, early warning, forecasting, and preparedness leading up to coordination of response and recovery. The HSTP strives for a health system that can cope with existing and emerging disease epidemics, acute malnutrition, and natural disasters of national and international concern.[2] The EPHI strategy

---

1 The Federal Democratic Republic of Ethiopia, National Disaster Risk Management Commission. 2013. National Policy and Strategy on Disaster Risk Management.

2 The Federal Democratic Republic of Ethiopia, Ministry of Health. HSTP Health Sector Transformation Plan, October 2015

document (2015/2016–2019-2020) also gives due emphasis to PHEM focusing on the full cycle of DRM preparedness, response, and recovery. [3]

Furthermore, EPHI/PHEM is accountable to the International Health Regulation (IHR 2005) that provides an international legal framework that went into force in 2007 to ensure global public health security. IHR, as a legally binding instrument, requires countries to implement and maintain the capacities necessary for detecting and responding to public health threats, including reporting on those that may constitute a potential public health emergency of international concern.[4]

In 2017, the IHR Committee conducted a Joint External Evaluation (JEE) on Ethiopia's capacities to detect, prevent, and respond to national, regional, and international public health risks, including threats from infectious diseases, and chemical and radiological incidents. Based on the recommendations of the JEE, EPHI developed a National Action Plan for Health Security (NAPHS). NAPHS is a multi-sectoral, multi-year, country-owned planning process that guides evidence-based priority actions to accelerate the implementation of IHR core capacities. Ethiopia launched its NAPHS (2019–2023) earlier this year based on the results of the JEE. The plan identifies three strategic pillars—i) preparedness and coordination, ii) detection capacity and communication, and iii) response capacity—as its priority objectives to achieve the IHR core capacities.[5]

The PHEM Center plans to adopt and replicate the JEE to the regional PHEM structures, and it plans to develop a regional action plan for health security (RAPHS) based on the results of the evaluation. The RAPHS will, then, be used to tailor and streamline the Center's capacity building activities.

Structural Arrangements

Housed at EPHI, the PHEM Center has structurally evolved and expanded through time to take its current shape. It started with two case teams; currently, the Center has five directorates and 22 case teams under them. (See Annex II for the organizational structure.) The sub-national level structures, however, are still sub-optimal and vary significantly. Amhara replicates the national structure, with the regional public health institutes hosting PHEM, while all other regions house PHEM within the regional health bureaus. The Amhara Public Health Institute/PHEM appears to be the strongest, well-organized, and well-staffed at regional, woreda, and health facility levels. Intra-regional differences within Amhara, however, are not uncommon. In Somali Regional Health Bureau (RHB), on the other hand, PHEM is a directorate with four sub-processes (case teams): Early Warning, Preparedness and Capacity Building, Response and Recovery, and Emergency Nutrition, with nearly 30 technical staff in total. In general, there appears to be no standardized approach/structure to organize PHEM at regional and sub-regional levels. Similarly, there are also no minimum structures defined for health centers and general and tertiary care hospitals. Please refer to Annex II for an overview of the regional PHEM structures.

The PHEM Center has Emergency Operation Center (EOC), a flexible arrangement for incident management that gets activated (based on pre-defined threshold criteria) for coordination of response, including logistics, resource, and information management. The PHEM Center activates an EOC and assigns an Incident Manager for a confirmed public health emergency that meets the trigger

threshold of the particular hazard. Once activated, EOCs remain operational through the end of the recovery operations and get de-activated when the situations stabilize. Regions have their own EOCs that get activated to respond to emergencies within their capacity while liaising with the PHEM Center for technical and financial support as appropriate.

---

3 Ethiopian Public Health Institute. The 2ndBSC Based Strategic Management Plan | 2015/2016-2019/2020.

4 https://www.afro.who.int/health-topics/international-health-regulations

5 The Federal Democratic Republic of Ethiopia. National Action Plan for Health Security | 2019-2023.

3. ASSESSMENT PURPOSE AND OBJECTIVES

USAID/Ethiopia commissioned this assessment with an overall objective of identifying key strategic and investment priorities for its Health Office to support the management of public health emergencies. Notably, it seeks to identify key priorities to strengthen the health system's resilience to maintain core functions during crisis and to ensure linkages with other development endeavors. In so doing, the Country Development Cooperation Strategy (CDCS), the overall strategic framework of USAID Ethiopia, guides the assignment. This assessment is expected to contribute to Development Objectives (DOs) I, II, and IV. (DO1: Risks and impact of disasters reduced; DOII: Resilience of vulnerable populations to key shocks increased; DOIV: Sustained improvement in essential service delivery outcomes focused on women and girls.)[6]

OBJECTIVES

The specific focus of the assessment revolves around the following three broad areas: a) the effectiveness of PHEM—preparedness, response, and recovery; b) landscape analysis of key actors; and c) identifying priority areas for support.

Accordingly, it aims to understand the effectiveness of policies, strategies, and implementation guidance on public health emergency (PHE) preparedness, mitigation, response, and recovery. Specifically, it looks into the functionality, strengths, gaps, and programmatic challenges related to Early Warning Systems/Early Warning and Alert Response Systems (EWS/EWARS); health information systems; service delivery; risk communication; community health systems; and supply chain management systems.

It also aims to understand who the major players are on the PHEM landscape in the country, including a description of their strategic/operational focus and investment priorities. In so doing, it tries to identify and highlight the gaps and critical areas for support on PHEM based on USAID/Ethiopia Health Office's comparative advantage and linkages with current health investments.

[6] USAID Ethiopia, Ethiopia Strategic Results Framework Paper, 2019

4. METHODS

Qualitative: This assessment was principally qualitative with an element of quantitative study. The qualitative study component consisted of a preliminary desk review of data sources relevant to PHE and DRM, including a scoping review of the literature and published papers on the Ethiopian context. It also included semi-structured key informant interviews and group consultations. We used purposive sampling to obtain a breadth of views from various stakeholders involved in public health DRM. The team developed a preliminary list of organizations and respondents as potential key informants to interview based on their experience and current engagement in emergency management in Ethiopia. Refer to the list of individuals and organizations consulted in Annex III. Thirdly, it included site visits to learn from the field—to obtain their perspectives, experiences, lessons, and challenges in PHEM to be able to see the whole picture.

Participants were contacted by e-mail and telephone with summary information on the objectives of the assessment. Based on their consent, we set a mutually agreed date, time, and venue for the consultations/interviews. Consent was obtained to record the discussions, which the assessment team transcribed for subsequent use. The data was then analyzed using a data-driven inductive approach of the thematic analysis framework to identify and further explore critical thematic areas.

Consultative workshop: with support from EPHI/PHEM, we conducted a one-day consultative workshop that intended to deliberate on key issues surrounding public health emergencies in the country. It was designed to complement the limitations associated with data collection described below and to gather additional inputs on identifying the major challenges/issues, gaps, and possible recommendations.

Limitations: Given its specific objectives and defined scope, this exercise does not delve into a depth of literature review. However, it has covered the critical policy and program documents of the government and those of the key partners supporting EPHI, such as CDC, WHO, and OPM. The list of key informant interviews for this assessment could have been broader. We had to prioritize the critical stakeholders and limit the list to stay within our timeframe. We did, however, try to compensate through the consultative workshop described above.

5. SUMMARY OF MAJOR CHALLENGES / ISSUES IDENTIFIED

5.1 Inadequate coordination mechanisms: A fundamental challenge highlighted by PHEM is the prevailing confusion surrounding the coordination of public health DRM. As the responsible government body mandated to lead and coordinate PHEs, the PHEM Center should be in charge or at least aware of all existing platforms and their terms of reference. Currently, that is not the case. Moreover, there is a limited engagement and access to these coordination mechanisms. Thus, significant humanitarian community-led coordination mechanisms are functioning parallel to Government systems. Left unchecked, such fragmented and disconnected coordination mechanisms could ultimately undermine the Government's ownership and leadership role. It can also result in ineffective responses, duplications, and an uneven distribution of resources in many instances.

5.2 Ambiguous delineation of roles and responsibilities: The discussion on who should lead emergency nutrition has been around for more than a decade. There are still ambiguities around roles and responsibilities that have resulted in duplication of efforts. NDRMC/Emergency Nutrition Coordination Unit (ENCU), Federal Ministry of Health (FMOH), and EPHI/PHEM Center all have teams working on emergency nutrition. ENCU (funded by the United Nations Children's Fund [UNICEF]) and the PHEM Center are both collecting surveillance data, and EPHI/PHEM Center is engaged in the development of an emergency nutrition guideline, although there is one already in use (though it needs updating). These ambiguities do have a negative implication on the emergency nutrition landscape, are causing wastage of limited resources, and in the long run, can hamper the growth of the system. Emergency nutrition must remain the responsibility and specialty of one center for all technical, operational, and strategic undertakings involving the management of acute malnutrition.

5.3 Absence of PHEM Policy and Legal Framework: There is an overarching national DRM policy developed by NDRMC and a health policy that governs the health sector. However, EPHI does not have a PHE policy that governs its strategies, resource mobilization, and program operations. It assumes a mandate of multi-sectoral coordination pre-, during, and post-emergency operations—without a legal framework that enforces accountability with clearly defined roles and responsibilities of other sectors. It is done based on goodwill and mutual understanding, which can falter under duress.

The need for a legal framework also extends to the Center's interaction with the regions and sub-regional structures. With the existing arrangement, the PHEM mechanism cannot enforce the system for effective coordination of preparedness, response, and recovery. Hence, the critical need for a PHE policy and a clear legal framework with accountability mechanisms for effective country-wide and multi-sectoral engagement.

5.4 Inefficient PHE supply chain management systems: Public health disaster risk management, particularly during response, is marred by an inefficient supply chain management that necessitates a system overhaul.

The USAID Global Health Supply Chain Program-Procurement and Supply Management (GHSC-PSM) has recently concluded a landscape assessment, including a simulation

exercise of the emergency supply system. Some of the critical bottlenecks that surfaced include:

5.4.1 The absence of policy guidance for a flexible system to facilitate emergency procurement. Hence, emergency procurements must go through a lengthy procedure meant for routine procurements. On the flip side, this is a reflection of the weakness of planning and preparedness, which could have otherwise avoided the need for emergency procurement.

5.4.2 Lack of budget of government source for emergency procurement, often leading to complete dependence on development partners. Currently, all supplies needed for emergency nutrition response and supplies for disease outbreaks go through a parallel procurement via the United Nations and Implementing Partner (IP) systems.

5.4.3 Lack of ownership and institutionalization of emergency procurement by the Ethiopian Pharmaceutical Supply Agency (EPSA), which usually remains unengaged in coordination platforms.

5.4.4 EPSA has limited logistic capacity for the distribution of supplies to remote areas. During emergencies, IPs on the ground provide logistics support to distribute supplies.

Given the preceding points, delays in supply are commonly one of the leading causes of delayed response.

GHSC-PSM is working with EPSA to create an end-to-end supply chain with the state-of-the-art management information system and overall systems strengthening to improve the supply chain of emergency health commodities.

5.5 Limited attention to PHE preparedness: The Ethiopia PHE landscape appears to be characterized by a systemic lack of preparedness. Emergency health resources are almost always mobilized reactively when a health emergency is declared. The policy instruments and guidelines emphasize a full-cycle approach (preparedness, response, and recovery) as their guiding principle. However, those claims and strategies are not backed by resources for pre-disaster activities. Public financing of emergency preparedness is usually at the low-to-none- at-all levels of the system, including in areas known to have frequent health-related crises.

Lack of preparedness is affecting the effectiveness and quality of responses, and poor preparedness compounds negatively on routine service delivery, contributing to the depletion of resources for primary care. Recent experience of a health center in Tikil Dingai town in Lay Armacheho woreda of Central Gondar Zone, Amhara region, where the health center used the entirety of its revenue for the procurement of supplies for internally displaced persons, is an excellent example of the consequences poor planning and preparedness have on routine service delivery. The resulting delays in response also caused unnecessary human suffering. Woreda

Health Office personnel claim that they usually prioritize PHEs and preparedness high during Woreda Based Planning (WBP), an annual planning and budgeting exercise of the health sector, but it gets de-prioritized during resource allocation because of various reasons.

On the other hand, the prevailing practice of repetitive short-term funding of humanitarian donors to support the Community Management of Acute Malnutrition (CMAM) and other health emergencies through IPs that often last three to six months, for example, does not seem to have the desired impact on sustainability. Worse still, these short-term grants may even be harming the system, causing attrition (since agencies usually recruit locally) and dependency as they usually tend to be in "replacement mode" rather than assisting. The PHEM system and development partners need to rally behind a strategic shift toward flexible longer-term health system resilience-building approaches emphasizing preparedness.

5.6 Weak early warning/surveillance and health information systems: The lack of robust surveillance and information management system has a significant impact on the effectiveness of PHEM. With 23 immediately and weekly reportable diseases and events of national and international public health concern, EPHI/PHEM Center has the ultimate responsibility to set in place a robust EWARS that informs its preparedness and response action plans.

Currently, there are well over 22,000 health facilities engaged in surveillance through a hierarchically aggregated data flow all the way up to the PHEM Center. With limited-to-no use of technologies, this system is characterized by delays and worrisome quality issues, or lately, improved timeliness against a deteriorating level of quality. Poor data analysis, interpretation, and use, particularly at the regional and sub-regional levels, have been increasingly affecting timeliness and effectiveness of the response. In the case of data on emergency nutrition, data can be up to six weeks old by the time it reaches the Center.

Understanding of the concept of early warning as a tool for early action seems to be waning as we go further down the hierarchy. Emergency nutrition information management still runs parallel (and duplicated—reported both to the PHEM Center and ENCU) to the national health information system, District Health Information System 2 (DHIS2). FMOH and UNICEF are working on the missing emergency nutrition indicators in DHIS2. Once incorporated, DHIS2 relinquishes the need for the existing parallel and duplicate surveillance system.

Having a strong EWS is also a means to forecast and prepare for future emergencies. NDRMC has an EWS that covers a wide range of data that could be of interest to the PHEM Center. The Center, on the other hand, has Vulnerability and Risk Assessment and Mapping (VRAM) under its Preparedness and Capacity Building Directorate. However, there is currently no mechanism to link and triangulate the two data/early warning systems, which could benefit the PHE preparedness, risk communication, and response operations.

In summary, weak EWS, poor data quality, lack of knowledge in data analysis and interpretation, and limited availability of data are all contributing to delays and quality of responses.

5.7 Lack of disease and event-specific PHE professionals: Critical shortage of PHE professionals is a significant constraint for the operations of the PHEM Center and regional structures. The majority of the existing professionals are field epidemiologists who, as generalists, do not necessarily have the depth of the knowledge base required for managing or advising a specific disease or event of public health concern. Having a Human Resources mapping and tracking system of available expertise in this regard would be an alternative solution for the Center to fill its gaps. Currently, there is no such mechanism, and EPHI does not have a database of any sort whatsoever. Existing tradition is to turn to partners for secondment, which, although serving the immediate needs, does not contribute to long- term system building.

5.8 Poor governance and leadership: While political commitment and leadership is improving, weaknesses remain at all levels, leaving emergency responses to the humanitarian community. This pervading tendency of the government, particularly at the lower levels, of systematic de-prioritizing of emergencies has the serious consequences of aggravating further donor dependency. It also leads to missing the opportunity to gain efficiency by addressing systemic issues – putting development gains at risk of being derailed during emergencies. Recent initiatives of the government to take the lead on financing DRM, as stated in the most recent Humanitarian Requirements Document, is encouraging, but it is yet to materialize.

In summary, the impact of health emergencies on the health system, in general, and health facilities, in particular, has universally been detrimental. Health facilities and woreda health offices that experienced public health emergencies in all the regions visited had their revenues depleted (and rarely replenished) affecting health care financing, had their health workforce deployed leaving primary care services vacant, community-based health insurance enrolments dwindling, and depletion of their supplies affecting routine care. This was evident in many instances of the woredas visited where outbreaks weakening the basic care have increased vulnerabilities and exposed the community to yet another outbreak or crisis. A typical example is a routine immunization program compromised by emergency response increasing the vulnerability of the under-five population for outbreaks such as measles. Addressing the major issues and factors identified through this assessment could play an important role in improving the resilience of the health system in the face of crisis.

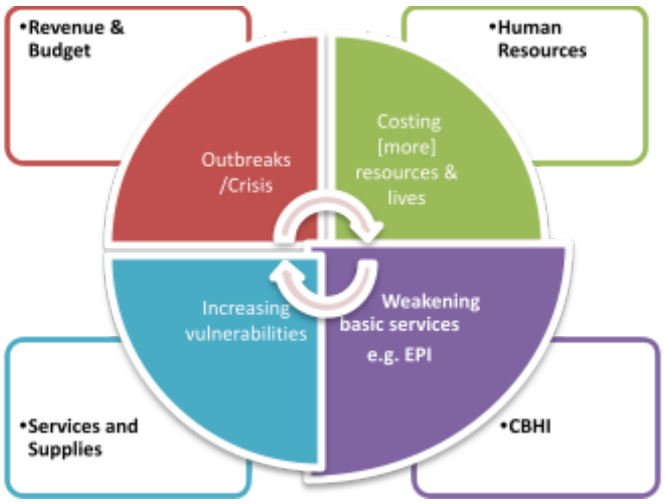


Figure I: impact of health emergencies on health system and basic care

6 RECOMMENDED INVESTMENT PRIORITIES FOR USAID'S CONSIDERATION

Based on the major issues and challenges summarized above, the team has identified the following priority intervention areas for the Mission's consideration. The team has cautiously defined these recommendations as gaps with utmost care to avoid potential overlaps with existing partners' programs/activities, including those that are in the pipeline. The team has packaged the recommended actionable items into the following three groups: 1) Issues that can be addressed directly through a new investment case/Activity. 2) Issues that the Mission can consider addressing through existing USAID investments in health. 3) Broader issues that USAID can and should contribute to as part of its engagement in the PHEM landscape via the above two approaches or directly via its in-house expertise.

6.1 ISSUES TO BE ADDRESSED THROUGH A NEW ACTIVITY

Below is an outline of important actionable items as our specific recommendations that the Mission can potentially consider packaging into one activity.

6.1.1 Developing a Surge Roster: Human Resource (HR) is a critical element in any effective emergency response, and ensuring surge capacity during crises that exceed the limits of the available workforce is a critical measure to protect basic services from being compromised. The PHEM system in Ethiopia needs to have a database of its trained personnel that it can easily track and mobilize during crises. We recommend USAID support the development of a surge roster with mapping of personnel that can be located, analyzed, and easily updated in support of the PHEM Center's effort to establish a pre-disaster HR preparedness system for responding to potential health emergencies. When developed, this Roster will be instrumental in mapping the human resources nationally, per region, per city, and expertise. Further considerations can include making the envisaged Roster interactive allowing health personnel to self-register and regularly update their availability/status.

6.1.2 Harnessing Technology/Social Media to enhance PHEM coordination: The PHEM system in Ethiopia has already initiated the use of social media with varying degrees of engagement at various levels of the government. Anecdotal reports from these experiences in some areas such as Afar indicate better performance in woredas actively using the existing telegram group that connects the PHEM Directorate with the 32 woredas in the region. Success stories from SNNPRS, Halaba zone health department that has used its

Facebook page for risk communication with the community for an impending flood hazard are promising initiatives that, if supported, can be harnessed to strengthen emergency coordination and risk communication at various levels. We recommend USAID's engagement in streamlining and strengthening the existing telegram platforms already established in various parts of the country for effective coordination, reporting, and information sharing between regional PHEM and sub-regional health offices as well as for risk communication as appropriate. A potential investment could also consider expanding on existing platforms for multi-sectoral coordination and coordination between neighboring regional states.

6.1.3 Woreda capacity building: One of the critical observations of the assessment is the need for capacity development of woreda health offices (WrHO) across all regions visited. Transform PHC is playing an important role in creating local capacity to address health emergencies in a broader sense. It is, however, not sufficient enough to meets the specific needs of woredas for emergency preparedness. In light of this, investing in woreda capacity to improve preparedness, response, and recovery with emphasis on surveillance, data management, data utilization, leadership and management, gender-sensitive response and recovery as well as on risk communication would contribute to the national effort of ensuring a resilient health system. The overall objective would be to support the strengthening of an emergency-ready sub-regional health system that is adaptable to the changes in their external environment and responsive to the needs and priorities within their context. USAID can consider implementing this activity in selected woredas affected by recurrent outbreaks.

6.1.4 Promoting the institutionalization of post-response review: The PHEM system in Ethiopia needs a rigorous and systematic evaluation of its operational functions post-response to identify opportunities for improvement and further technical support. Every outbreak response is a test of preceding preparedness and an opportunity to learn from and improve in the event of subsequent outbreaks. A systematic approach with a clearly defined learning framework can help maximize the learning from such an exercise. USAID can consider supporting the development of a post-response audit/review guideline to support regions and sub-regional structures to contribute to continuous improvement and to guide technical support needs.

6.1.5 Need to define minimum standards for preparedness at all levels: The existing policy instruments, including the NAPHS, emphasize the need to work on the entire cycle of DRM with pre-, during, and post-disaster action plans. The reality on the ground,

however, is different. The system still suffers from a lack of preparedness and pre-positioning of needed supplies and budget— affecting the timeliness and quality of response. EPRP, in the absence of financial commitments, remains a futile exercise.
As highlighted above, preparedness appears to stand out as one of the major issues calling the attention of both the government and its partners. Although current actors are all playing their part in improving preparedness at higher levels, defining a minimum package of what entails preparedness at various levels of health facilities (HP, HC, primary hospital, etc.) appears to be a gap the PHEM system has yet to address. USAID can play an important role in supporting defining the minimum package of what constitutes a 'well prepared' health facility and respective health offices in a given geographic area considering their respective risk profiles.

6.1.6 Gender mainstreaming: Disasters affect women and children disproportionately with increased risks of mortality, morbidity, sexual assault, and other forms of gender-based violence. Reviews of the Guji-Gedeo crisis reveal that there were significant gaps in ensuring the protection of women and girls from sexual and other forms of violence, and in providing tailored services for victims. A USAID investment in PHEM could consider building a core capacity on gender in emergencies. The key recommended focus area includes incorporating gender mainstreaming in public health disaster risk management to ensure gender-sensitive risk profiling, gender-sensitive response, as well as gender-responsive recovery.

6.1.7 Initiate the culture of drills to improve preparedness and response – Simulation exercise helps to improve readiness by identifying and addressing systemic issues and gaps before an actual emergency occurs. It is a form of practice or evaluation of response capabilities involving a hypothetical emergency, to which a hypothetical response is simulated. According to WHO, simulation exercises play a key role in the validation of core capacities and gaps in the development and implementation of preparedness and response measures. USAID could consider and support regular drills, in collaboration with the government and key stakeholders, to use as a continuous quality improvement tool to enhance preparedness and to help develop individual capacities as well as to test functional capabilities of PHEM systems and procedures to manage disaster risks.[1]

6.2 LEVERAGING EXISTING USAID INVESTMENTS

[1] WHO Simulation Exercise Manual. Geneva: World Health Organization; 2017. License: CC BY-NCSA 3.0 IGO.

In addition to addressing the above priorities through direct investment, USAID can leverage its existing investments in health and make significant contributions in the effort to strengthen public health emergency management and enhance the nexus between health emergencies and development.

6.2.1 Enhancing Crisis Modifiers: Humanitarian response in Ethiopia has become the norm due to the protracted nature of emergencies. These responses, albeit essential, are often ill-planned and delayed due to protracted short-term grant application and approval processes. Increasing the practice of multi-year funding, with built-in crisis modifier systems to allow partners to adapt to changing circumstances without undergoing time-consuming formal applications for new grants, can bolster flexibility and speed. It is already noticeable that crisis modifiers embedded in development programs show better timeliness of responses and more accountability than entirely emergency-focused short-term granting processes.

The rapid response fund and crisis modifiers instituted into existing USAID investments, such as the Transform PHC program, are positively contributing to emergency response in all the regions visited. As part of its overall support system, Transform PHC is also contributing to preparedness mainly through its capacity building activities. Taking this commitment a step further and incorporating risk-informed preparedness, including through building the capacity of local governments to forecast and detect emergency risks, can play a critical role both in protecting lives and the long term investments themselves. Not supporting preparedness could be more costly as disasters could derail development gains, affecting implementation, and jeopardizing on-going activities – as experience from the Gedeo-Guji crisis revealed. USAID can, thus, consider enhancing its crisis modifier funds with little or no additional investment by incorporating preparedness. While crisis modifiers/rapid response funds have already proved beneficial, the inclusion of risk-informed preparedness through innovative funding mechanisms – such as 'top-ups' to existing USAID health development programs from humanitarian sources such as OFDA – would play a significant role in strengthening the nexus between health development and emergency investments. Overlaying emergency response funds on on-going development investments is a missed opportunity that development partners could capitalize on and counter the in-effective short-term emergency funding to new IPs. (See section 5.5)

6.2.2 Addressing bottlenecks in PHE supply systems: This is a work in progress. The PSM landscape assessment, mentioned above, came up with three critical recommendations based on a global framework for an effective end-to-end emergency supply system. These are:

a) Leadership and governance: addresses policy level issues related to emergency procurement, budget allocations for preparedness procurement, and higher-level coordination and political commitment to make the system work.

b) Commodity planning: to maximize the benefits of quality and quantity through planned procurement, and

c) Logistics, distribution, and waste management: [7] having identified the issues and priority recommendations, along with a revised system to address them, GHSC-PSM has submitted their document to the respective government offices—EPSA and EPHI/PHEM Center—to implement.

Given the limited capacity in these organizations, USAID can consider playing a role in supporting the implementation of these recommendations.[2]

6.2.3 PHEM in DHIS2: Need to continue supporting the PHEM app in DHIS2. The PHEM Center has managed to incorporate a separate PHEM application in DHIS2 to address the existing inefficiencies in its surveillance system and in an attempt to modernize reporting and data management. However, it is going to share the challenges DHIS2 is facing, namely, poor IT infrastructure, poor internet connectivity, power interruptions, and capacity issues, among others. Leveraging existing investments such as the Data Use Partnership (DUP) and Digital Health Activity (DHA) that endeavor to support the Information Revolution vision with a focus on cultivating an information culture; digitalization and the scaling-up of priority Health Information Systems (HIS) including information technology systems and data repository at all levels, and strengthening HIS governance.

Nonetheless, supporting the system at large, or more specifically, the "PHEM app" and its use, would go a long way in strengthening public health DRM. The PHEM system as a whole would benefit from a systemic approach to capacity building in data management and reporting. It could take the form of conventional training to data managers and clerks, or instituting a continuous mentoring, coaching, and feedback mechanism through the retention of qualified personnel in regional PHEM offices.

[2] Ethiopia's Emergency Supply Chain Management Landscape Assessment. EPHI-PHEM and EPSA, Addis Ababa. September 2019

6.2.4 Minimizing the impact of health emergencies on health care financing: Despite this critical and huge responsibility of EPHI, the domestic budget allocated to PHEM is minimal. Such budget shortfalls constrain EPHI from meeting its own needs at the Center and the needs /requests of the regional PHEM offices. The budget constraint can exacerbate the prevailing parallel humanitarian financing system in the country. EPHI, with support from DFID through OPM, is working on identifying mechanisms for mobilizing domestic resources for health emergencies. The assessment team has observed that the negative impact of recent emergencies on the achievements of health facility revenue and community-based health insurance is significant. USAID needs to document, through its health financing project, the impacts of emergencies on health financing and explore remedial measures where appropriate. Furthermore, it would be critical to consider the implementation of the health financing reforms in hot spot and drought-prone areas.

6.3 COLLABORATION WITH KEY STAKEHOLDERS

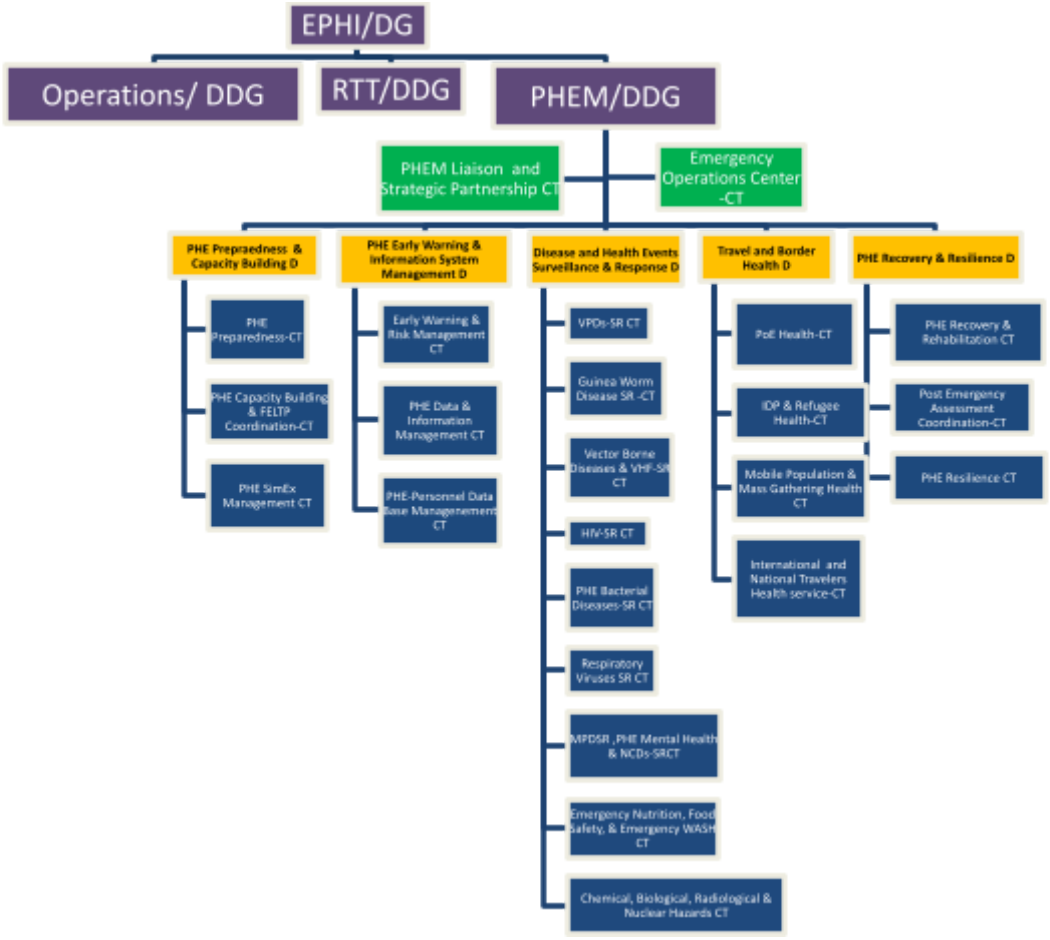
As a long-term strategic partner of the health sector, as well as its ensuing interest to engage in the PHEM landscape, USAID can have significant contributions to the development of critical policy documents that are being funded and supported by other partners.

6.3.1 Support the development of the PHEM strategy: High dependence on technical and financial support based on cyclic short-term relief funding has been the defining feature of public health DRM in Ethiopia. In light of the dwindling funding scenario for emergency response, the need for increased political commitment and allocation of government resources based on a robust strategy is indispensable. Recognizing the need to formulate a comprehensive and costed national PHEM strategy, EPHI/PHEM has already embarked on the development process of the strategy with support from the Oxford Policies Management (OPM). By their very nature, such processes are widely consultative and do go through a broader engagement and consultation with all key stakeholders, including the regional governments. Given its extensive experience and engagement in the national health policy landscape, USAID is best placed to engage and contribute in a meaningful manner.

6.3.2 Support the development of a legal framework: The current working arrangement based on individual and institutional goodwill is an apparent policy vacuum. EPHI needs policy provisions and a legal framework that empowers the PHEM Center in its effort to coordinate public health DRM with other sectors and the regional governments. The current lack of legal provisions and laws concerning the PHEM system as a whole implies an apparent lack of accountability at all levels.

RESOLVE, an in-coming partner of EPHI/PHEM, is pledging to lead the development of this missing legal framework for PHEM's multi-sectoral, cross-boundary, and private sector engagement, as well as engagement with the regional governments. The process needs to ensure that the resulting document has the buy-in of all key stakeholders and is substantive enough to empower EPHI/PHEM to engage at all levels – vertically and horizontally. Given the critical nature of this assignment, we recommend supporting EPHI, in collaboration with RESOLVE, to add value to the development of a comprehensive framework.

ANNEX I. ORGANIZATIONAL STRUCTURE OF EPHI/PHEM



ANNEX II. PHEM REGIONAL STRUCTURES

REGION[3]	CURRENT STRUCTURE	REMARK
Tigray	• PHEM is placed within the Regional Health Bureau (RHB) – as a ***Case Team*** within the Disease Prevention and Health Promotion Core Process. • Has two teams (EW and Response, and Capacity Building) with 11 staff members total. • Working to upgrade it to a Core Process on its own. • WrHO: one dedicated focal person (PHEM Officer)	There is a Tigray Public Health Institute (TPHI). TPHI has two staff working on PHEM – the interaction with the earlier one is not clear.
Afar	• PHEM is placed within the RHB as a ***Directorate*** • Has a total of 12 staff members • Working to establish a public health institute. • WrHO: No dedicated focal person	On process to establish a regional public health institute
Amhara	• PHEM is placed in Amhara ***Public Health Institute*** (APHI). APHI was established by proclamation and has direct budget support from the regional government as an independent institution. • Has four directorates: EW and Preparedness, Response and Recovery, Malaria and other vector borne diseases, and Capacity building. • Has a total of 35 staff members • WrHO: one PHEM Officer and separate malaria officer (total two)	APHI is serving as a model for the other regions. Visited by Oromia, SNNP, and Afar for experience sharing.
Oromia	• PHEM is placed as a ***Directorate*** within the RHB. • Working on establishing their version of Oromia Public Health Institute (OPHI). PHEM will move to OPHI once established. • WrHO: one PHEM Officer	On process to establish a regional public health institute
Somali	• PHEM is placed as a ***Directorate*** (Core Process) within the RHB. Has four case teams (sub-processes): EW, Preparedness and capacity building, Response and Recovery, and Nutrition case teams. • Has a total of 30 staff members • WrHO: No dedicated PHEM focal	

[3] Data covers regions visited only

SNNP	• PHEM is placed as a ***Directorate*** within the RHB. • It is being upgrade to an institute • It has about eight staff and using interns to fill gaps. • WrHO: one PHEM Officer	On process to establish a regional public health institute

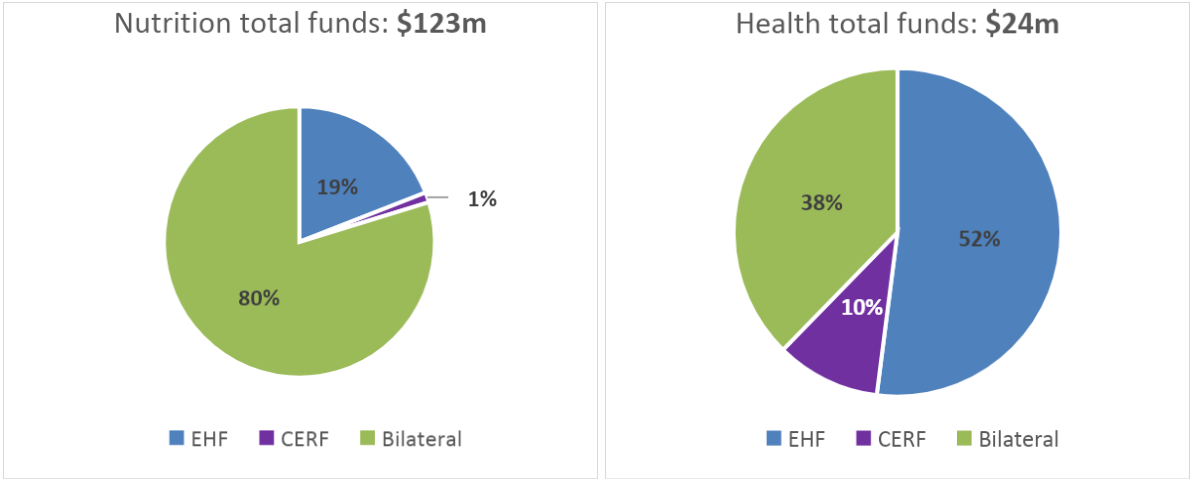
ANNEX III. KEY PHEM PARTNERS

A. General

The Ethiopia Humanitarian Fund (EHF) serves as the main source of funding for emergency health. Emergency nutrition, on the other hand, is largely financed by bilateral donors such as USAID/OFDA and the European Commission Humanitarian Office (ECHO). It is, however, difficult to draw a clear line as it is not uncommon for EHF to finance emergency nutrition and the latter on emergency health. The EHF is a Humanitarian Pooled Fund (HPF), established by the UN and managed by OCHA. It operates through cluster systems such as the Health and Nutrition Clusters, among others. UNICEF coordinates the Nutrition Cluster and WHO leads Health. It provides short term grants, usually lasting six months, to implementing partners during crisis. PHEM's engagement in this process is very minimal, if at all.

An examination of the composition of OFDA funding in 2018 demonstrates that health was a low priority, receiving only 4 percent of its disbursement; while nutrition receives a higher proportion of the overall funding, at 16 percent. Nearly a third of OFDA's available funding in 2018 was pooled into EHF. OFDA's nutrition support goes mainly through WFP and UNICEF for the management of acute malnutrition, both MAM and SAM activities and commodities.

Source of humanitarian funding in 2018, Nutrition and Health



Source: FTS, 2019.

B. Key PHEM Partners' Programs

FUNDING PARTNER	IMPLEMENTING PARTNER	ACTIVITY DESCRIPTION	REMARK
CDC(US)	EPHI (PHEM)	• Lab capacity: on-going support to federal and regional laboratory services • Laboratory/microbial surveillance • Health Emergency Workforce development: supports advanced Field Epidemiology Training Program (FETP) – Mater's level training, and the frontline FETP – a three-month training for woreda PHEM focal persons	
DFID	OPM (BRE Project)	• Development of PHEOC strategy and Resilient Health Systems Framework and Strategy • Develop business case for PHEOC and prepare annual EPRP • Strengthen existing mechanisms for better alignment of external resources; and explore disaster risk financing within the health	New project started recently

		financing strategy revision process • Develop processes, structures and tools for EOCs • Enhance capacity to maintain adequate and quality health care surge.	Plans to engage mainly at federal level
WHO	**EPHI (PHEM)**	• WHO Leads the Health Emergency Cluster through allocating health emergency grants to implementing partners • Supports early warning & surveillance • Development of short-term field epidemiological training • Other direct technical support such as staff secondment • Containment of outbreaks: cholera, measles, polio, acute malnutrition, dengue fever, meningococcal... • Inputs for in-patient care of SAM	
UNICEF	**NDRMC**	• UNICEF Leads the Emergency Nutrition Coordination Unit (ENCU): allocating emergency nutrition grants to IPs secured from EHF (OCHA), coordination of response, inputs for OTP • Leads on nutrition surveys and rapid assessments • Working on surveillance of acute malnutrition • leads on hotspot woreda prioritization in support of NDRMC/EW Directorate	
UNICEF	**FMOH**	• Develop, produce and disseminate job aids, treatment guidelines and protocols, training manuals on SAM, MAM, IYCF in emergencies, etc. and overall guidance and support for strengthening the capacity of HEP and community platforms on Emergency response • Enhance national capacity on vulnerability risk assessment, mapping, and response to specific humanitarian events. • Support building resilience in refugees and host communities in five identified regions (BG, Gambella, Tigray, Afar and Somali)	
USAID	**Pathfinder International**	• Transform: PHC supports health emergencies through its Rapid Response Fund mechanism. Its overall technical support and capacity strengthening work is contributing to emergency preparedness	

ANNEX IV. DATA COLLECTION TOOL

National and Regional level stakeholders

Semi-structured key-informant interview questions for government agencies

and other stakeholders at national/regional levels

Date of visit_____

1) Team Introduction

2) Introduction of the Objectives of the assignment

The overall objective of this exercise is to understand the major issues surrounding Public Health Emergencies Management (PHEM) through the entire spectrum from preparedness to recovery, review the landscape, and to identify any potential strategic and investment priorities for USAID's support – with particular emphasis on the nexus between emergencies and development programming.

3) Verbal Consent

This interview is not a test of your knowledge; it is a tool for learning more about your office's current activities that relate to PHEM. In particular, we would like to learn from the knowledge and experience that you have gained through working in PHEM in the country. We will treat your answers with confidentiality. The interview will take about 60 minutes, and you are free to opt-out at any time during the interview. Please let us know when you are ready to proceed.

Name of the ministry, organization, department, or unit:

_____

Respondents:

Name: _____

Position: _____

Mobile: _____

Name: _____

Position: _____

Mobile: _____

Section 1: PHEM Overview and Priorities

1.1 What do you see as the major PHEM issues in Ethiopia? [top level policy, strategy, systems, and program issues – not specific hazards]

Section 2: PHEM policies and activities

2.1 What are the key policies, strategies, and action plans of importance to PHEM in the country?

(Ask to receive a copy of any policy documents not included in the desk review)

2.2 Do you feel that these identified policies, strategies, and action plans adequately address the PHEM issues that you mentioned earlier? If no, what do you think is missing?

2.4 What specific PHEM related actions and/or interventions does your agency implement?

Section 3: Budget and Funding

3.1 Is PHEM included in your agency's annual budget? If yes:

3.1.1 If implementing agency, what are the sources of funding for PHEM activities implemented by your agency?

Main donors to PHEM budget	Remark / Types of activities

3.1.2 If a donor agency, who are the main recipients of your funds, and what kind of PHEM programs or activities do you support?

Main recipients of funds for PHEM	Types of activities funded

3.2 Do you feel that there is adequate funding available to tackle the PHEM challenges the country is facing?

If no, which specific plans or ideas are under-funded?

Section 4: PHEM Coordination System

4.1 Are there any coordination mechanisms (e.g., committees, task force or technical working groups) that address PHEM at the national level?

4.3 What do you see as the major strengths of the current system for coordinating PHEM activities in the country?

4.4 What do you see as the major problems/challenges of the coordination of PHEM activities that should be improved?

4.5 Does your agency also operate at regional and sub-regional levels? If yes, how do you coordinate activities at regional/sub-regional levels?

4.6 Community health systems at woreda and kebele levels

Section 5: Human resources for PHEM

5.1 What's the overall strategy for human resources for PHEM? Do current plans reflect adequate preparedness for surge staff?

5.2 If PHEM services were to be scaled up in the event of a major crisis, what kind of capacities would be required, and how could those capacities be deployed? [probe to maintain core functions and attend to the emergency services]

5.3 Do you offer any pieces of training on PHEM? If yes, please provide details (topic, duration, participants, training material) related to these training programs.

Section 6: PHEM information system

6.1 How does your agency collect and use data relevant to PHEM? Please give us an overview of the public health emergency surveillance structures.

6.1.1 What types of information and data does your agency collect? PHEM indicators collected and how often data are collected.

6.1.2 How does your agency use these data? How does the system ensure that the reporting entities use these data?

6.1.3 Please describe your experience of the Early Warning System (EWS)/Early Warning and Alert System (EWAS): quality of information generated, use for early action, coordination, and information exchange with DRMC/MOH.

What's working well, and what needs to be improved?

6.1.4 Please describe the level of integration and utilization of HIS and EWS information for preparedness and response

6.2 Please describe the risk communication strategy and structure at the national/regional level in the event of an emergency. [*Probe for main media outlets used, use of new technologies such as social media*]

6.2.1 What is working well? Can you share key lessons from the recent crisis?

6.2.2 What's not working well, and why? How would you improve it?

Section 7: Emergency supply chain management

7.1 Please describe the emergency Supply Chain Management system.

7.2 What's not working well, and why? How would you improve it?

7. How do you evaluate the current emergency supply system and your recommendation?

Section 8: Concluding questions

8.1 In your opinion, what should this country's top priority be to manage public health emergencies effectively?

8.2 Any additional recommendations to improve the efficiency and effectiveness of emergency responses?

ANNEX V. LIST OF PERSONS INTERVIEWED

S/N	Name of Participant	Organization	Role	Email
1	Daniel Tadesse	Global Health Supply Chain Program (GHSA-PSM)	Country Director (CD)	dtadesse@ghsa-psm.org
2	Tesfaye Seifu	"	D/CD	tseifu@ghsc-psm.org
3	Elias Geremew	"	Learning and Innovation Mgr	
4	Edmealem Ejigu	"	HSS Director	eejigu@ghsc-psm.org
5	Zelalem Habtamu	Save The Children International (SCI)	Health & Nutrition (H&N) Director	Zelalem.Habtamu@savethechildren.org
6	Miraf Solomon	"	H&N Specialist	miraf.solomon@savethechildren.org
7	Adebabay Wale	"	Technical Advisor-Newborn & Child Health	Adebabay.wale@savethechildren.org
8	Dr. Mengistu Asnake	USAID Transform: PHC	Chief of Party (COP)	masnake@pathfinder.org
9	Yared Abebe	"	Senior Nutrition Advisor	yared_abebe@et.jsi.com
10	Binnyam Fekadu	"	DCOP	bdesta@jsc.com
11	Dr. Yohannes Chanyalew	World Vision Ethiopia (WVE)	Head of Health Technical Program	Yohannes.chanyalew@wvi.org
12	Samuel Tilahun	"	Head of Nutrition & Emergency Affair Unit	Samuel_tilahun@wvi.org
13	Alemshet Aschalew	"	Health & Nutrition Grant Projects Manager	Alemshet_Aschalew@wvi.org
14	Derebe Tadesse	USAID Transform HDR	M&E Director	derebe.tadesse@amref.org
15	Murida Kemal	"	Program Director	murida.kemal@amref.org
15	Yared Abera	"	Technical Director	Yared.Abera@Amref.org
17	Koutrey Russow	USAID Mission	USAID DRM Team Leader	krusow@usaid.gov
18	Dubale Admasu	USAID Mission	Resilience Advisor	dadmasu@usaid.gov

19	Cecile Basquin	DRMC Emergency Nutrition Coordination Unit (ENCU)	Team Leader	cbasquin@unicef.org
20	Dr. Beyene Moges	EPHI/PHEM	Deputy Director General (DDG)	beyenem@ephi.gov.et
21	Dr. Kassaye	OCHA	Technical Advisor	
22	Muhyedin Ahmed	Somali DPPB/ENCU	Head of ENCU	encuimosr@gmail.com
23	Abdulfeta	Somali DPPB/ EWS	Head of EWS	
24	Abubakar	Somali Regional Health	PHEM Core	isdalmar@gmail.com

S/N	**Name of Participant**	**Organization**	**Role**	**Email**
	Sh/Adem	Bureau-	Process Owner	
25	Ahmed Ibrahim	Somali region USAID Transform HDR-Jigjiga	T/HDR Manager	Ahmed.Ibrahim@amref.org
26	Abdi Ali Mohammed	Horafedi Health Post	Health Extension Worker (HEW)	
27	Moumin Ahmed	Aweberre Health Center (HC)	Medical Director	muuminAhmed@444@gmail.com
28	Abdilali Yasin	"	OPD	Gele489@gmail.com
29	Malar Ibrahim Hassan	TogoChallee HC	Medical Director	mskirIbrahim@gmail.com
30	Abdirahman Hassen	"		Gurcyhassan123@gmail.com
31	Abdurahman Ali	Kologee IDP 2 Center	Health Officer	
32	Ahmed Abdurahma n	UNICEF-Amhara Region	Head of Program	aabdurhman@unicef.org
33	Worku Berhe	"	M&E	wberhe@unicef.org
34	Selamawit Zewdu	"	WASH Specialist	syetemegn@unicef.org
35	Alamerew Minlaregeh	Disaster Prevention & Food Security Program Coordination (DPFSPCO)	DRR Expert	azmeraw27@gmail.com
36	Amsalu Belay	"	TSF Coordinator	Amsalubelay95@gmail.com
37	Birhanu Zewdu	"	Early Warning monitoring	bremul26@gmail.com
38	Ashenafi Ayalew	Amhara Public Health Institute (APHI) PHEM Director		ashenafi@gmail.com
39	Dr Sisay Mellese	USAID Transform PHC	Regional manager	smellese@transformphc.org
40	Elalem Abera	"	Nutrition Officer	zabera@transformphc.org
41	Getnet Nigatu	Lay Armachiho Woreda Health Office	Head	getnetnigatu@gmail.com
42	Aklew Alemye	"	V/Head	
43	Nega Adamtie	T/PHC Gondar	Coordinator	nadmife@pathfinder.org
44	Michael Negus	Lay Armachiho Woreda Health Office	Curative Case Team	Mickael8888@gmail.com

PART II GH TAMS-International Business and Technical Assistance (IBTCI) USAID sponsored Public Health Emergency Management (PHEM) Assessment				
PHASE II				
S/N	**Full Name**	**Organization**	**Role**	**Email**
1	Dr Ayana Yeneabat	OPM DFID	HEALTH MANAGER	ayana.y@bre-ethiopia.org
2	William Grahaim	OPM	OPM Team Leader	ayanayene@gmail.com
3	Haile Bekele	International Medical Corps (IMC)	Senior Health Advisor	hbekele@internationalmedicalcorps.org
4	Abebe Alemu	IMC	Public Health Emergency Specialist	aalemu@inernationalmedicalcorps.org
5	Loko Abrham	Ethiopia Pharmaceutical Supply Agency(EPSA)	Director General	Loko77@yahoo.com
6	Dr. Meseret Zelalem	Federal Ministry of Health (FMOH)	Maternal and Child Health and Nutrition Department (MCHND)	meseret.zelalem@moh.gov.et
7	Tegbar Yigzaw	JHPIEGO	Deouty Chief of Party(DCOP)	Tegbar.yigzaw@jhpiego.org
8	Numery Abdulhamid	Mercy Corps	Emergency Advisor	nabdulhamid@mercycorps.org
9	Gemechu Shume	Oromiya Regional Health Bureau (ORHB)	PHEM Director	milkigeme@gmail.com
10	Ganta Gamea	SNNPR DRMB	Disaster Risk Management Commissioner	gantagemea@yahoo.co
11	Solomon Berhane	USAID Transform PHC-SNNPR	Coordinator	
12	Tadele Kibrom	SNNPR DRMC ENCU	Emergency Nutrition Coordinator	encu.snnpr.nut@gmail.com
13	Asnakech Adola	SNNPR DRMC ENCU	SNNPR ENCU Nutrition Expert	asnakechadola@gmail.com

14	Endashaw Shibru	SNNPR Health Bureau (RHB)	PHEM Program Officer	endashawshibru@gmail.com
15	Aknaw Kawza	SNNP Regional Health	Head	
16	Reita Aemero	Save the Children	FOM	Rita.aemero@savethechildren.org
17	Beyda Mudino	SNNPR Halaba Zone HO	SNNPR Zone Health Office; Deputy Head	beyedamundino13@gmail.com
18	Dakela Darjeba	SNNPR Halaba Zone HO	SNNPR Zone Health Office-PHEM Coordinator	darkela2007@gmail.com
19	Nuredin Nwiro	Halaba Health Center (HC)	SNNPR Head of Halaba Health Center (HC	
20	Asefa Hafido	"	SNNPR Halaba HC MCH Focal Person	dfishasefaw@gmail.com
21	Zehara Bedna	Gedeba Health Post	SNNPR Halaba Zone, Gedeba Health Post HEW	
22	Selamawit	Gedeba Health Post	Halaba Zone, Gedeba Health Post HEW	
23	Aman Kedir	Oromia egion Siraro Woreda Health Office	Head, Siraro Woreda Health Office	simafobsonen@gmail.com
24	Ararso Hordofa	Siraro Woreda Health Office	Deputy Head, Siraro Woreda Health Office	ararso.hordofa@yahoo.com
25	Kemal Churiso	TransformPHC	Program Officer	kemal_churiso@jsi.com
26	Gemechu Haji	TransformPHC	Program Officer	gemechuhaji@jsi.et.com
27	Berhane Getachew	Rope Senta Health Post	Health Extension Worker(HEW)	
28	Gete Huffo	Rope Senta Health Post	Health Extension Worker(HEW)	
29	Tuke Gizaw	Ropi Sraro Health Center	PHCUD	
30	Aaddis Andualem	SNNPR DillaZuria Woreda HO	Head, DillaZuria Woreda HO	

31	Seyoum Gelaple	Chuchu Health Center	Head, Chuchu Health Center	seyoumgalgale47@yahoo.com
32	Anezier Ebrahim	IOM	Head of Dilla IOM Sub Office	eanezier@iom.int
33	Kedir Loale	Afar DPFSPCO RENCU	Nutrition Specialist	encuafar@gmail.com
34	Abdella Mohammed	Afar Region USAID Transform-PHC	RMNCH Regional Adviser	amohammed@projecthope.org
35	Anwar Abdu	DPFSPCO	ENCU IMO	anusemer@gmail.com
36	Mohammed	DPFSPCO	EWS Case team	mohammedsaihl@gmail.com
37	Mahie Ali	DPFSPCO	ENCU	mahealill69@gmail.com
38	Hamedu Ahmed	RHB /AFPHI	AFPHI	Hamedu.ahmed@gmail.com
40	Abdu Ali	RHB/AFPHI	AFPHI	Rageabdu2008@gmail.com
41	Dr Mohammed Yuusif	Dubti Hospital	CEO	myusuf305@gmail.com
42	Solomon Tadele	Dubti Hospital	PHEM	solomontadele@gmail.com
43	Dr yayyib Abdu	Dubti Hospital	MD	
44	Samuel Aregay	Tigrai RHB	PHEM Officer	samuelaregai@gmail.com
45	Gidey G/Libanos	TRHB	PHEM Coordinator	gideylibanos@yahoo.com
46	Dawit Mulu	WHO	Data Manager	davefun4@yahoo.com
57	Ruth Gebresellasie	Transform PHC, Tigray	CHD Officer	rghebresellasi@transformphc.org
58	Woldegerima G.Mariam	PHEM Tigray	PHEM Expert	Weldegerima21@gmail.com
59	Lijalem Kahsay	DRMB EWS & Emergency Resp. Tigray	Team Leader	lijalemkahsey@gmail.com
60	Mcibrahtiu Embakcrsu	Health Center/Tigray	PHEM Supervisor	
61	Kalseyu Meles	Health Center	Director	
62	Medhin G/Huwt	Freweni HP	HEW	
63	Anessa Meressa	Frewni HP	HEW	
64	Awala Wquar	Pathfinder T-PHC/Tigray	Regional Manager	aequar@pathfinder.org
65	Mohammed Jemal	Mekele Hospital	PHEM AWD Coordinator	
69	Kathleen	CDC-Ethiopia	Program	

	Gallagher		Director/Global Health Protection	
70	Dr Berhanu Amare	CDC-Ethiopia	Global Health Protection team	

For more information, please visit

http://www.ibtci.com/projects-app/global-health-technical-assistance-and-mission-support-project-gh-tams

Global Health Technical Assistance and Mission Support
1319 F Street NW, Suite 204
Washington, DC 20005
Phone: (1-202) 991-8300
Fax: (1-703) 749-0110
http://www.ibtci.com/projects-app/global-health-technical-assistance-and-mission-support-project-gh-tams