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Report No: PAD2493

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT PAPER

ON

A PROPOSED SECOND ADDITIONAL GRANT

IN THE AMOUNT OF SDR 143.9 MILLION
(US$200 MILLION EQUIVALENT)

TO THE

UNITED NATIONS CHILDREN'S FUND

AND THE

WORLD HEALTH ORGANIZATION

AND A PROPOSED RESTRUCTURING

FOR THE

YEMEN EMERGENCY HEALTH AND NUTRITION PROJECT

AUGUST 14, 2017

Health, Nutrition and Population Global Practice
Water Global Practice
Middle East and North Africa Region

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CURRENCY EQUIVALENTS

(Exchange Rate Effective June 30, 2017)

| | | |
|---|---|---|
| Currency Unit | = | Yemeni Rials (YER) |
| YER 250.15 | = | US$1 |
| US$1 | = | SDR 0.72 |

FISCAL YEAR
January 1 – December 31

ABBREVIATIONS AND ACRONYMS

| | |
|---|---|
| AF | Additional Financing |
| AWD | Acute Watery Diarrhea |
| BCR | Benefit Cost Ratio |
| BOQ | Bills of Quantities |
| CEN | Country Engagement Note |
| CERC | Contingency Emergency Response Component |
| CFR | Case Fatality Rate |
| CHV | Community Health Volunteer |
| CRW | Crisis Response Window |
| CTC/DTC | Cholera/Diarrhea Treatment Center |
| DCT | Direct Cash Transfer |
| EHNP | Emergency Health and Nutrition Project |
| ESMF | Environmental and Social Management Framework |
| GARWSP | General Authority for Rural Water and Sanitation Project |
| GRS | Grievance Redress Service |
| FCV | Fragility, Conflict and Violence |
| FM | Financial Management |
| HACT | UN Harmonized Approach to Cash Transfers |
| IDP | Internally Displaced Person |
| IFR | Interim Unaudited Financial Reports |
| LCs | Local Corporations |
| NGO | Non-governmental Organization |
| OCV | Oral Cholera Vaccine |
| OP | Operational Policy |
| ORP | Oral Rehydration Point |
| ORS | Oral Rehydration Solution |
| PCA | Partnership Cooperation Agreement |
| RRT | Rapid Response Team |
| SAM | Severe Acute Malnutrition |
| SAP | Safeguards Action Plan |

| | |
|---|---|
| TOR | Terms of Reference |
| TPM | Third Party Monitoring |
| UNICEF | United Nations Children's Fund |
| WASH | Water, Sanitation and Hygiene |
| WSS | Water and Sanitation Services |
| WHO | World Health Organization |
| WWTP | Waste Water Treatment Plant |

| | |
|---|---|
| Vice President: | Hafez Ghanem |
| Country Director: | Asad Alam |
| Senior Global Practice Director: | Timothy Evans /Guang Zhe Chen |
| Practice Managers: | Ernest Massiah / Steven Schonberger |
| Task Team Leader: | Moustafa Abdalla / Yogita Mumssen |

**REPUBLIC OF YEMEN**
**EMERGENCY HEALTH AND NUTRITION PROJECT**
**SECOND ADDITIONAL FINANCING AND RESTRUCTURING**

**CONTENTS**


I. Introduction ........ 9
II. Background and Rationale for the Proposed Additional Financing ........ 10
III. Proposed Changes ........ 17
IV. Appraisal Summary ........ 21
V. World Bank Grievance Redress ........ 25
Annex 1. Results Framework ........ 26
Annex 2. Revised Costing Table ........ 31
Annex 3. Detailed Description of Additional Activities and Targeting Mechanism ........ 32
Annex 4: Safeguards Action Plan ........ 38

**ADDITIONAL FINANCING DATA SHEET**

*Yemen, Republic of*

*Yemen Emergency Health and Nutrition Project Second Additional Financing (P164466)*

*MIDDLE EAST AND NORTH AFRICA*

*GHN05*

| **Basic Information – Parent** | | | |
|---|---|---|---|
| Parent Project ID: | P161809 | Original EA Category: | B - Partial Assessment |
| Current Closing Date: | 31-Jan-2020 | | |

| **Basic Information – Additional Financing (AF)** | | | |
|---|---|---|---|
| Project ID: | P164466 | Additional Financing Type (from AUS): | Restructuring, Scale Up |
| Regional Vice President: | Hafez Ghanem | Proposed EA Category: | B |
| Country Director: | Asad Alam | Expected Effectiveness Date: | 15-Sep-2017 |
| Senior Global Practice Director: | Timothy Grant Evans, Guang Zhe Chen | Expected Closing Date: | 30-Jun-2020 |
| Practice Manager/Manager: | Ernest E. Massiah, Steven Schonberger | Report No: | PAD2493 |
| Team Leader(s): | Moustafa Mohamed ElSayed Mohamed Abdalla,Yogita Mumssen | | |

| **Borrower** | | | | |
|---|---|---|---|---|
| Organization Name | Contact | Title | Telephone | Email |
| United Nations Children's Fund | Meritxell Relaño | Representative UNICEF Yemen | 00967 712223363 | mrelano@unicef.org |
| World Health Organization | Nevio Zagaria | Representation WHO Yemen | 00967 734348384 | zagarian@who.int |

| **Project Financing Data - Parent (Emergency Health and Nutrition Project-P161809) (in USD Million)** | | | | | | | |
|---|---|---|---|---|---|---|---|
| Key Dates | | | | | | | |
| Project | Ln/Cr/TF | Status | Approval Date | Signing Date | Effectiveness Date | Original Closing Date | Revised Closing Date |
| P161809 | IDA-D1630 | Effective | 17-Jan-2017 | 04-Feb-2017 | 06-Feb-2017 | 31-Jan-2020 | 31-Jan-2020 |
| P161809 | IDA-D1640 | Effective | 17-Jan-2017 | 04-Feb-2017 | 06-Feb-2017 | 31-Jan-2020 | 31-Jan-2020 |
| P161809 | IDA-D1950 | Effective | 19-May-2017 | 30-May-2017 | 30-May-2017 | 31-Jan-2020 | 31-Jan-2020 |
| P161809 | IDA-D1960 | Effective | 19-May-2017 | 30-May-2017 | 30-May-2017 | 31-Jan-2020 | 31-Jan-2020 |

Disbursements

| Project | Ln/Cr/TF | Status | Currency | Original | Revised | Cancelled | Disbursed | Undisbursed | % Disbursed |
|---|---|---|---|---|---|---|---|---|---|
| P161809 | IDA-D1630 | Effective | XDR | 56.35 | 56.35 | 0.00 | 44.68 | 11.67 | 79.29 |
| P161809 | IDA-D1640 | Effective | XDR | 91.45 | 91.45 | 0.00 | 81.72 | 9.73 | 89.36 |
| P161809 | IDA-D1950 | Effective | XDR | 45.30 | 45.30 | 0.00 | 22.48 | 22.82 | 49.62 |
| P161809 | IDA-D1960 | Effective | XDR | 15.40 | 15.40 | 0.00 | 6.07 | 9.33 | 39.43 |

**Project Financing Data - Additional Financing Yemen Emergency Health and Nutrition Project Second Additional Financing ( P164466 )(in USD Million)**

[ ] Loan [ ] Grant [X] IDA Grant
[ ] Credit [ ] Guarantee [ ] Other

| Total Project Cost: | 200.00 | Total Bank Financing: | 200.00 |
|---|---|---|---|
| Financing Gap: | 0.00 | | |

| Financing Source – Additional Financing (AF) | Amount |
|---|---|
| IDA Grant | 200.00 |
| Total | 200.00 |

**Policy Waivers**

| Does the project depart from the CAS in content or in other significant respects? | No |
|---|---|

Explanation

| Does the project require any policy waiver(s)? | Yes |
|---|---|

Explanation

The following three waivers are sought under the proposed additional financing: i) the criteria on eligible recipients under the IDA Crisis Response Window (CRW), to allow UNICEF and WHO to be the grant recipients; ii) paragraph 20 of BP 10.00 waiving the application of the anticorruption guidelines for IDA grants to UNICEF and WHO; and iii) the application of the IDA commitment charge to UNICEF and WHO for the duration of the project.

| Has the waiver(s) been endorsed or approved by Bank Management? | Yes |
|---|---|

Explanation

The decision to seek the Board approval for the waivers was endorsed by the Vice President for Operations, as well as the Managing Director and Chief Finance Officer.

**Team Composition**

**Bank Staff**

| Name | Role | Title | Specialization | Unit |
|---|---|---|---|---|
| Moustafa Mohamed ElSayed Mohamed Abdalla | Team Leader (ADM Responsible) | Health Specialist | Public Health | GHN05 |
| Yogita Mumssen | Team Leader | Senior Infrastructure Economist | Water and Sanitation | GWA05 |
| Jamal Abdulla Abdulaziz | Procurement Specialist (ADM Responsible) | Senior Procurement Specialist | Procurement | GGO05 |
| Moad M. Alrubaidi | Financial Management Specialist | Sr Financial Management Specialist | Financial Management | GGO23 |
| Alex Woodhouse Turingan | Team Member | Program Assistant | Legal | LEGAM |
| Amal Talbi | Team Member | Sr Water & Sanitation Spec. | Water and Sanitation | GWA05 |
| Amer Abdulwahab Ali Al-Ghorbany | Environmental Specialist | Environmental Specialist | Environmental Safeguards | GEN05 |
| Amr Elshalakani | Team Member | Health Specialist | Public Health | GHN05 |
| Jasna Mestnik | Team Member | Finance Officer | Disbursement | WFALN |
| Edith Ruguru Mwenda | Counsel | Senior Counsel | Legal | LEGAM |
| Ebrahim Yehia Al-Harazi | Team member | Communication Analyst | Communication | MNAEC |
| Ibrahim Ismail Mohammed Basalamah | Safeguards Specialist | Social Development Specialist | Social Safeguards | GSU05 |
| Mariam William Guirguis | Team Member | Program Assistant | Administration | GHN05 |
| Miyuki T. Parris | Team Member | Operations Analyst | Operations | GHNGE |
| Naif Mohammed Abu-Lohom | Team Member | Sr Water Resources Spec. | Water Resources | GWA05 |
| Raghada Mohammed Abdelhady Abdelhamied | Team Member | Team Assistant | Administration | MNCEG |

**Extended Team**

| Name | Title | Location |
|---|---|---|
| | | |

**Locations**

| Country | First Administrative Division | Location | Planned | Actual | Comments |
|---|---|---|---|---|---|
| | | Republic of Yemen | | | |

| **Institutional Data** |
|---|
| **Parent (Emergency Health and Nutrition Project-P161809)** |
| **Practice Area (Lead)** |
| Health, Nutrition & Population |
| **Contributing Practice Areas** |
| |
| **Additional Financing Yemen Emergency Health and Nutrition Project Second Additional Financing (P164466)** |
| **Practice Area (Lead)** |
| Health, Nutrition & Population |
| **Contributing Practice Areas** |
| Water |

| **Consultants (Will be disclosed in the Monthly Operational Summary)** |
|---|
| Consultants Required: Consulting services to be determined |

# I. Introduction

1. This Project Paper seeks the approval of the Executive Directors to provide a second additional grant in the amount of SDR 143.9 million (US$200 million equivalent) to the United Nations Children's Fund (UNICEF) and the World Health Organization (WHO), in support of the Yemen Emergency Health and Nutrition Project (EHNP) (P161809) for the benefit of the Republic of Yemen. The proposed grant will help scale up delivery of integrated health and water and sanitation services (WSS) in response to the unprecedented cholera outbreak in Yemen. The amount of US$200 million equivalent is financed by the IDA grant Crisis Response Window (CRW). Board approval is also sought for a restructuring of the project development objective and the results framework.

2. The parent project with a total commitment of SDR 147.8 million (US$200 million equivalent) (SDR 91.45 million, US$123.75 million equivalent, to UNICEF; SDR 56.35 million, US$76.25 million equivalent, to WHO) was approved by the World Bank Group's Board of Executive Directors on January 17, 2017. The first Emergency Health and Nutrition Additional Financing (AF1) of SDR 60.7 million (US$83 million equivalent) (SDR 45.3 million, US$62 million equivalent, to UNICEF; SDR 15.4 million, US$21 million equivalent, to WHO) supporting the provision of a nutrition package in response to the food insecurity and nutrition crisis in the country was approved on May 19, 2017. The project is implemented by WHO and UNICEF together with local health institutions, and has rapidly achieved significant implementation progress since its effectiveness.

3. The Project Development Objective (PDO) will be modified to reflect additional WSS activities to be financed by the proposed AF2. Several new PDO-level and intermediate indicators are being added to account for the proposed package of interventions.

4. This proposed second additional financing (AF2) is prepared in accordance with paragraph 3(b) of Operational Policy (OP) 2.30, Development Cooperation of Conflict: if there is no government in power, Bank assistance may be initiated by requests from the international community, as properly represented (e.g. by UN agencies), and subject in each case to the prior approval of the Executive Directors.

5. The Board is requested to approve the following three waivers under the proposed additional financing: i) the criteria on eligible recipients under the IDA CRW, to allow UNICEF and WHO to be the grant recipients; ii) paragraph 20 of BP 10.00 waiving the application of the anticorruption guidelines for IDA grants to UNICEF and WHO; and iii) the application of the IDA commitment charge to UNICEF and WHO for the duration of the project. These waivers will facilitate the implementation of the proposed AF2 by UNICEF and WHO as recipients and implementing agencies.

6. Yemen is currently battling one of the world's worst cholera outbreaks of an unprecedented scale, adding to the devastation and suffering caused by the ongoing conflict. The first outbreak started in October 2016 and declined in February 2017, before the second wave of Acute Watery Diarrhea (AWD)/cholera outbreak hit the country on April 27, 2017. The recent outbreak has spread to almost all governorates, leading to the local health authorities' declaration of a state of emergency on May 14, 2017 and indicating that the health system is unable to contain the unprecedented health and environmental disaster. More than 1,900 Yemenis have died due to the disease since late April 2017, and more than 420,000 suspected cases of cholera have been recorded in 296 districts in 21 governorates, while as many as 500,000 people could become infected within a few weeks, according to WHO[1]. Millions of Yemenis are now at greater risk of death, as they face the "triple threat" of conflict, famine, and cholera, particularly in the most affected districts.

[1] As of July 25, 2017

7. To ensure a comprehensive, appropriate and timely response to the prevailing AWD/cholera outbreak in Yemen, an integrated package of appropriate health, water and sanitation interventions is deemed necessary. These interventions will be nationwide with a focus on the highly-affected areas identified by WHO and UNICEF epidemiological tracking and surveillance system supported by the EHNP. This prioritization will be based on: i) the number of reported cases; ii) the attack rate;[2] and iii) the case fatality rate (CFR).[3]

8. The proposed AF2 will complement the activities initiated under the parent project in scaling up the delivery of an integrated package of health and sanitation services. The proposed package will address three distinctive interlinked and parallel approaches: i) Response: to cater to the immediate needs of the affected areas and better control the outbreak; ii) Prevention: to address the demand and supply-side issues of infection and transmission; and iii) Institutional building: to support local health, water and sanitation institutions to better prevent, detect and control future disease outbreaks.

## II. Background and Rationale for the Proposed Additional Financing and Restructuring

9. **Political upheaval, severe security threats, port blockades for most imports, chronic market shortages for all basic commodities and severe fiscal disruptions have been the unfolding reality of the continuous conflict situation in Yemen**. The economic and social fabric is under severe pressure and the economy has contracted sharply since the conflict erupted. Gross Domestic Product (GDP) is reported to have plunged by 40 percent, underpinned by widespread disruptions of economic activities, with enterprises operating at half the capacity compared to the pre-conflict era. Unemployment rates are on the rise. An estimated 8 million Yemenis have lost their livelihoods or are living in communities with minimal to no basic services. Fiscal revenues are falling, deficit financing is increasingly leading to arrears build-up, undermining state functions and impairing the situation for the private sector. The financial sector is facing enormous difficulties with a rising share of non-performing loans. Moreover, oil and gas exports, a major source of fiscal revenues, have largely come to a halt.

10. The current upsurge of cholera cases is attributed to several risk factors including a disruption of basic water and sanitation services, contaminated water sources in affected communities, an inability to treat sewage given the challenges to operate Wastewater Treatment Plants (WWTP), and the absence of garbage collection systems. More than 14 million Yemenis require assistance to access safe drinking water and sanitation. Basic water and sanitation infrastructure is on the verge of near total collapse, and a large number of internally displaced persons (IDPs) are at a particularly high risk due to overcrowded shelters and settlements with inadequate water and sanitation facilities. Distribution by private tankers using unregulated sources and transportation mechanisms has been reported to be a major source of infection of clean drinking water. In addition, a recent study undertaken by the Bank shows that prices charged by private tankers are several times higher than those charged by municipal services, making clean water less affordable to the poor. The highest numbers of cholera cases have been reported in places where WWTPs are non-functional; for example, the Bani Al-Harith District located north of Sana'a city. Currently raw sewage in the district is diverted outside the non-functional WWTP towards the poor neighborhoods and agricultural lands. This in turn leads to contamination of the shallow aquifers and wells used for consumption, including by private water tankers. Sana'a city is just one example of such a situation in Yemen, and there are other similar or more complex cases particularly in urban centers where fighting is ongoing.

[2] Attack Rate (AR) is the bio-statistical measure of frequency of morbidity, or speed of spread, in an at-risk population.
[3] Case Fatality Rate (CFR) is the proportion of deaths within a designated population of "cases" (people with a medical condition), over the course of the disease.

11. The cholera outbreak is further exacerbated by poor access to basic services, high risk of famine and unprecedented rates of malnutrition. Every ten minutes a child dies of preventable causes in Yemen. The health condition of the vulnerable population, particularly malnourished children, is already compromised by the deteriorating situation, increasing their susceptibility to cholera infection and associated complications contributing to a higher case fatality rate. Children suffering from severe acute malnutrition (SAM) are ten times more likely to die than their healthy peers due to their weakened immune systems. Less than 45 percent of all health facilities are fully functional in Yemen, and nearly 15 million people cannot access the medical care they desperately need.

12. To address the current cholera crisis and help prevent future ones, an integrated package of Health and WSS interventions must be in place to contain and control the outbreak and minimize the risk of recurrence. Currently, millions of Yemenis are now at greater risk of death, as they face the "triple threat" of conflict, famine and cholera, particularly in the most-affected districts. The interventions need to not only tackle the immediate impacts of the cholera crisis, but also to address the systemic failures that exist in the health and water sectors, by providing development solutions such as institutional strengthening.

13. Under the ongoing EHNP, the World Bank immediately responded to the cholera outbreak by scaling up the support for selected health and WSS activities. More than US$50 million has been allocated to health and sanitation services in the highly-affected districts under the ongoing operation. The funds have primarily been used to strengthen local institutional capacity in the health and water sectors to control and prevent the disease. Efforts have included the establishment of 46 cholera treatment centers and 250 oral rehydration corners, along with the delivery of more than 500 tons of medicines, 15 water sources cleaned, 3 million Yemenis provided with hygiene kits and jerry cans, and a nation-wide health promotion and awareness program. More than 200,000 cases have been successfully treated which helped to bring down the national average of cholera CFR from 2.5 percent to 0.4 percent.

14. The international community has been active in supporting the response to the cholera outbreak in Yemen. To date, about US$73.7 million has been provided or pledged by various donors for the cholera outbreak response, including China, U.K. Department for International Development, Office of U.S. Foreign Disaster Assistance, Norway, Swedish International Development Cooperation Agency, Yemen Humanitarian Pooled Fund, Kingdom of Saudi Arabia, United Arab Emirates, the United Nations Central Emergency Response Fund, Oman, European Civil Protection and Humanitarian Aid Operations, and Kuwait. The coordination of partners involved in the cholera outbreak response exists at all levels. At the national level, WHO and UNICEF are leading these efforts in the health and water, sanitation and hygiene (WASH) clusters and collaborating with several international and local organizations.

15. A national cholera task force composed of local and national technical health officers, WHO, UNICEF and other health and WSS partners has been put in place to ensure: a joint identification of hotspots at sub-district levels for integrated response; regular exchange of information, including updates of line-lists; outreach and social mobilization program; and, integration of the overall response activities. UNICEF and WHO are the main procurement sources of required supplies and medicines to the country.

16. The proposed AF2 will include a restructuring which will also apply to the previously approved IDA grants (D163-RY, D164-RY, D195-RY and D196-RY). The Project Development Objective (PDO) will be modified to reflect additional WSS activities to be financed by the proposed AF2: "to contribute to the provision of basic health, essential nutrition, water and sanitation services for the benefit of the population of the Republic of Yemen". Component 1 will be scaled up and a subcomponent will be introduced to reflect additional health and WSS activities to be provided under the integrated package. The closing date will be extended by six months to June 30, 2020 to ensure adequate time to complete all the activities. Finally, several new PDO-level and intermediate indicators are being added to account for the

proposed package of interventions, and the target values for several existing indicators are being revised to account for the expanded scope of services. WHO and UNICEF will remain the IDA grant recipients.

17. Under the proposed AF2, a three-pronged, integrated approach will be introduced to control the cholera epidemic, prevent its resurgence, and support the local health and water systems to deal with any future outbreaks in order to save the country's human capital. Based on this approach, a customized package of health and WSS interventions is developed and integrated at different levels (national, governorate, institutional, facility, community, and household) to maximize implementation efficiency and achieve optimal complementarity. The three prongs will entail: i) cholera response and case control measures aimed at containing the disease attack rates, limiting morbidity and decreasing fatalities; ii) prevention measures aimed at decreasing the likelihood of a resurgence of further wide-scale disease outbreaks (notably cholera) for example through social mobilization, mass oral cholera vaccination campaigns to around ten million Yemenis which would be the world's largest oral cholera vaccine (OCV) campaigns ever, and rehabilitating critical health and water supply and sanitation services including WWTPs; and iii) system/ institutional strengthening and resilience-building measures that will boost the readiness and resilience needed in the health, water and sanitation sectors for early detection and will adequately respond to and effectively contain any future disease outbreaks. The three categories of interventions will be implemented in parallel and will ensure results at different stages of implementation. Table 1 illustrates the health and WSS activities that are considered under this approach.

18. This proposed package not only addresses the immediate needs for cholera, health and water interventions but also will help ensure long-term development outcomes. For instance, prevention and institutional strengthening activities will ensure more sustainable solutions since they will rely on the local systems, enhancing ownership and building capacity. Supporting the local health institutions and water utilities will maintain the operational and technical capacity of the staff and therefore minimize future cholera outbreaks.

**Table 1: Examples of Health and WSS Activities Supported by AF2**

<table>
<tr><th></th><th>Cholera Response and Control of Cases</th><th>Prevention of Resurgence</th><th>System strengthening & Resilience</th></tr>
<tr><td rowspan="2">Health</td><td rowspan="2">Patient care, case management and control of cholera outbreak</td><td>Cholera vaccination</td><td rowspan="2">Strengthening disease surveillance systems; building the epidemiological and laboratory capacity; and institutionalize the rapid response teams</td></tr>
<tr><td rowspan="2">Social mobilization activities at household, facility, community and national levels for effective behavioral, hygiene and health change</td></tr>
<tr><td rowspan="2">WSS</td><td rowspan="2">Improve access to safe water and sanitation at households, schools, health facilities, public markets, and other communal gatherings</td><td rowspan="2">Institutional strengthening and capacity building</td></tr>
<tr><td>Protection of urban and rural public water resources</td></tr>
</table>

19. **The proposed AF2 will enable WHO and UNICEF to deliver, through a network of local health and water institutions and partners, the proposed services under each component.** The AF2 will scale up and expand the scope of component 1 to allow for the additional health and WSS activities as follows;

20. **Component 1: Improving Access to Health, Nutrition, Public Health and WSS (US$191.08 million).** This component will scale up and introduce cholera-specific integrated interventions under the existing subcomponents 1.1, 1.2, and 1.3, and will add a new subcomponent 1.4 for the WSS activities. In addition to the existing health and nutrition activities, the following package will be introduced:

a. Subcomponent 1.1 (managed by UNICEF - US$38.35m); i) Response and Control Measures: to strengthen the operational and technical capacity of the district and governorate health institutions to provide cholera case management and patient care. This includes the operation and maintenance costs of the existing cholera treatment centers, points, and emergency operations centers (EOC) along with the setup of the new required ones; ii) Prevention Measures: to provide operational support at the community level for the OCV campaigns; and undertake nationwide, mass, and household social mobilization activities.

b. Subcomponent 1.2 (managed by WHO - US$27.29m); i) Response and Control Measures: these activities will be similar to those managed by UNICEF for Subcomponent 1.1. The activities will be in different affected districts where WHO has field presence.

c. Subcomponent 1.3 (managed by WHO - US$30.00m); i) Prevention Measures: to support nationwide campaigns of OCVs in the affected cholera districts. The OCVs will be given in two doses per person for the targeted population to ensure the maximum drug efficacy of 3-year protection.[4] This will be also accompanied by a nationwide social mobilization campaign under subcomponent 1.1; and ii) System Strengthening and Resilience Measures: to support the epidemiological and diagnostic laboratory capacity of the local institutions and resilience activities particularly the reference labs at the governorate levels, integrating the electronic disease early warning system (eDEWS). In addition, this subcomponent will enhance the preparedness of the public health system to respond to outbreaks through supporting nationwide rapid response teams and EOCs at the district and governorate levels, which will ensure immediate multi-sectoral coordination and response to disease outbreaks, including cholera.

21. The proposed AF2 will finance basic equipment, medical and non-medical supplies, required medicines, vaccines, training, knowledge management, fuel, and other implementation expenses required for the aforementioned subcomponents.

22. ***Subcomponent 1.4 (Improving Access to WSS and Strengthening Local Systems, US$95.44 million) will be introduced to support the WSS activities (managed by both UNICEF and WHO):***

**a) Improving Access to Safe Water and Sanitation at Households, Schools, Health Facilities, Public Markets and Other Communal Gathering Places:**

i. These activities (managed by UNICEF) are geared toward the short to medium term response to the crisis to minimize the attack rate and prevent further spread of the disease. These interventions are expected to be implemented mostly in the first six months after effectiveness and will include: i) bulk chlorination of water sources, piped network and private water trucks; ii) distribution of consumable hygiene kits, chlorine tablets, jerry cans, cleaning, disinfection

[4] The distribution and administration of OCV will follow the international guidelines and protocols set by WHO.

materials and storage; and iii) rehabilitation of water and sanitation systems in health facilities, schools, public markets and other communal gathering places.

ii. WHO will be responsible for hygiene and related WSS activities, such as rehabilitation of water and sanitation systems in the health facilities including the CTCs and ORPs which they manage in a number of the cholera affected districts.

b) **Systems/institutional strengthening toward further prevention and resilience building (managed by UNICEF[5]).**

The following interventions aim at strengthening local institutions to provide sustainable access to water and sanitation services (WSS) to the Yemeni population. These development activities also support the prevention of and preparedness for future outbreaks and are expected to be implemented in parallel to the immediate response activities and will continue until the closing date.

i) *Supporting the operation and maintenance of WSS systems, including WWTPs, to provide access to sustainable services through*: a) Rehabilitation of major and critical infrastructure, including water and sewerage networks and WWTPs and tankers/tanker filling stations in urban areas and related water supply systems in rural areas; b) Provision of necessary parts, supplies, fuel and other implementation expenses for system operations; c) Rehabilitation of public and private laboratories for water and wastewater quality testing (including at WWTPs) and capacity building of relevant staff; and d) Piloting innovative techniques such as those that are energy-saving for remote and mountainous areas where pumping costs are prohibitive to functioning WSS systems.

ii) *Enhancing water security* by protecting water resources in urban and rural areas through the demarcation of well-fields and their catchment areas and the protection and monitoring of critical urban and rural water sources and resources (quantity and quality) to prevent new drilling at or near existing protected well-fields; and, the development of regulatory and other mechanisms to strengthen partnerships with private water providers for sustainable access to safe water and sanitation.[6]

iii) *Improving local capacity at the institutional, community and household level* through water safety planning, including water quality testing and monitoring; and, capacity building and training of water user associations to address public health outbreaks from the WSS perspective.

23. In order to have access to the networks and WWTPs and to improve the development impact of the intervention, UNICEF will work closely with the Urban Water PMU[7] and local water corporations/ utilities (LCs) in urban areas; the General Authority for Rural Water and Sanitation Project (GARWSP) and its branches at governorate level for rural areas, INGOs and NGOs; as well as private water vendors. This collaboration/capacity building is core to strengthening systems and institutions thereby ensuring ownership and sustainability of the Project.

24. **Under component 2 of the EHNP, the proposed AF2 will also support the administration, and monitoring and evaluation (M&E) activities to ensure smooth and satisfactory project implementation (US$8.92 million)**. The component will finance: (a) general management support for both WHO and UNICEF; (b) hiring of a Third Party Monitoring (TPM) agency, with the terms of reference (TOR) satisfactory to the World Bank, that will complement the existing TPM arrangements for both

[5] UNICEF has extensive experience working in the WSS in Yemen, and has worked on WSS interventions to manage cholera outbreaks throughout the world. Implementation arrangements based on existing operations in WSS in Yemen are provided in the Annex.

[6] A recent Bank study on private water tankers in Sana'a and Aden shows that private tankers not only charge very high prices, but are sourcing water in an unregulated fashion, which can prove detrimental not only for possible cholera transmission, but also for the medium and longer-term given the water scarcity situation in Yemen.

[7] Established with funding from an earlier World Bank supported project and other donors, the Urban Unit will be UNICEF's main local partner when working on network and WWTP rehabilitation.

agencies; and (c) direct staffing costs.

25. **Component 3, Contingent Emergency Response Component (CERC):** The zero-dollar CERC will continue to be in place to provide expedited response in case of emergency. There is a probability that during the life of the project an epidemic or outbreak of public health importance or other health emergency may occur, which will cause major adverse economic and/or social impacts. An Emergency Response Operational Manual has been prepared and agreed upon by the Bank to be used if this component is triggered. This component has been triggered twice, since the parent project approval in January 2017, to address the cholera outbreak and risk of famine.

26. Similar to the EHNP, the proposed AF2 will strengthen existing coordination mechanisms with central agencies, donors and other partners involved in the health and water sectors through the partnership with UNICEF and WHO. In addition, the AF2 will seek to create knowledge platform throughout implementation and distill lessons learned for future engagements. Working with WHO and UNICEF will ensure the integration of health and WSS activities and strengthen the collaboration between the two clusters. Social mobilization will be supported by both health and WSS subcomponents and will be customized through several channels of communication to ensure maximum impacts.

27. The proposed AF2 contributes to the achievement of the World Bank Group (WBG) twin goals of ending extreme poverty and boosting shared prosperity in a sustainable manner as it aims for social inclusion and achieving progress in non-monetary dimensions of welfare, including health and water sectors, with a particular emphasis on underserved and vulnerable groups. The proposed AF2 directly supports implementation of the MENA strategy pillars on: (a) renewal of the social contract by preserving inclusive service delivery resilience and improving emergency services to conflict-affected poor; and (b) resilience to internally displaced persons (IDPs)/refugee shocks by strengthening existing public health service delivery mechanisms and improving health and WSS service delivery to IDP-affected areas.

28. It also directly supports the objective of the Yemen Country Engagement Note (CEN) for FY17-18 to provide emergency support to preserve local service delivery capacity to support conflict-affected families and communities. The AF2 is well aligned with the main principles of the CEN to maintain simple project design and rely on existing mechanisms to scale up support to well performing projects. Finally, the AF2 enables the delivery of free critical health and WSS services to vulnerable populations in an extremely fragile context, which directly contributes to the World Bank Health, Nutrition and Population and Water Global Practices' goals of supporting progress towards universal health care and ensuring financial protection and service delivery and universal sustainable access to water and sanitation services.

29. **Table 2 below illustrates the proposed changes in the Results Framework.** Five new indicators (and relevant sub-indicators for corporate results indicators) are introduced, while end target values are modified for three existing indicators. All the indicators will have the end target date of June 30, 2020.

**Table 2: Changes in the Results Framework**

| New | Indicator | Current targets of EHNP and AF1 | Revised targets with AF2 |
|---|---|---|---|
| | People provided with access to improved water sources in cholera affected areas<br>- Rural<br>- Urban | Not applicable | 1.80 million<br><br>0.45 million<br>1.35 million |
| | People vaccinated with oral cholera vaccine | Not applicable | 10 million |
| | People provided with access to improved sanitation in cholera affected areas | Not applicable | 1.40 million |

| | | | |
|---|---|---|---|
| | - Rural<br>- Urban | | 0.15 million<br>1.25 million |
| | People who have received hygiene consumables | Not applicable | 4.5 million |
| | People who have received cholera treatment | Not applicable | 0.30 million |
| **Modified Targets** | People who have received essential health, nutrition and population services<br>- Female<br>- IDP<br>- Children under 5 | 8 million<br><br>60%<br>10%<br>50% | 13 million<br><br>55%<br>10%<br>50% |
| | New electronic disease early warning system (eDEWS) data collection sites | 600 | 1,200 |
| | Health personnel receiving training | 4,500 | 7,500 |
| | Health facilities provided with equipment and medical/non-medical supplies | 300 | 800 |

**Table 3: Project costs**

| **Project costs per implementing partner** | |
|---|---|
| WHO | US$70m |
| UNICEF | US$130m |
| **Project costs per sector** | |
| Health | US$100m |
| Water and sanitation | US$100m |
| **TOTAL** | **US$200m** |

**Policy Exceptions and Proposed Waivers**

30. Under the proposed AF2, the following waivers are being sought from the World Bank Board of Executive Directors: (i) Waiver for criteria on eligible recipients under the IDA CRW in order for UNICEF and WHO to be grant recipients - given that the CRW program in its design is geared towards IDA sovereigns as recipients; (ii) Waiver of application of the Anti-Corruption Guidelines for IDA Grants to UNICEF and WHO - a waiver is sought of paragraph 20 of BP 10.00, which would otherwise require application of the Bank's Anti-Corruption Guidelines, in favor of relying on the fraud and corruption procedures of UNICEF and WHO; and (iii) Waiver of the application of the IDA Commitment Charge to UNICEF for the duration of the Project - given that the current commitment charge is zero percent, the financial impact of this proposed waiver is expected to be negligible.

## III. Proposed Changes

**Summary of Proposed Changes**

The following changes are proposed for the proposed AF2 and level 1 restructuring: (a) modification of the PDO to capture the WSS activities; (b) scale-up of the existing components 1.1, 1.2 and 1.3 to reflect the additional health and nutrition activities in particular case management, control and prevention of cholera, and an introduction of subcomponent 1.4 to support the WSS activities; (c) addition of PDO-level and intermediate results indicators to reflect the WSS activities; (d) addition of intermediate results indicators to account for the additional health-specific activities; (e) increasing the end-targets of select indicators to reflect the scaled-up project activities; and (f) extension of the closing date from January 31, 2020 to June 30, 2020.

| Change | Yes/No |
|---|---|
| Change in Implementing Agency | Yes [ ] No [ X ] |
| Change in Project's Development Objectives | Yes [ X ] No [ ] |
| Change in Results Framework | Yes [ X ] No [ ] |
| Change in Safeguard Policies Triggered | Yes [ ] No [ X ] |
| Change of EA category | Yes [ ] No [ X ] |
| Other Changes to Safeguards | Yes [ X ] No [ ] |
| Change in Legal Covenants | Yes [ ] No [ X ] |
| Change in Loan Closing Date(s) | Yes [ X ] No [ ] |
| Cancellations Proposed | Yes [ ] No [ X ] |
| Change in Disbursement Arrangements | Yes [ ] No [ X ] |
| Reallocation between Disbursement Categories | Yes [ ] No [ X ] |
| Change in Disbursement Estimates | Yes [ X ] No [ ] |
| Change to Components and Cost | Yes [ X ] No [ ] |
| Change in Institutional Arrangements | Yes [ ] No [ X ] |
| Change in Financial Management | Yes [ ] No [ X ] |
| Change in Procurement | Yes [ ] No [ X ] |
| Change in Implementation Schedule | Yes [ X ] No [ ] |
| Other Change(s) | Yes [ ] No [ X ] |

**Development Objective/Results**

**Project's Development Objectives**

Original PDO

To contribute to the provision of basic health and essential nutrition services for the benefit of the population of the Republic of Yemen.

**Change in Project's Development Objectives**

Explanation:

The change of the PDO captures the water and sanitation services (WSS) activities which are introduced for the second Additional Financing.

Proposed New PDO - Additional Financing (AF)

To contribute to the provision of basic health, essential nutrition, water and sanitation services for the benefit of the population of the Republic of Yemen.

**Change in Results Framework**

Explanation:

The PDO-level and intermediate results indicators will be added to reflect the WSS activities. Intermediate results indicators will be also included to account for the additional health-specific activities. Finally, end-targets of some indicators will be increased to reflect the scaled-up project activities. All indicators will have the end target date of June 30, 2020.

## Compliance

**Other Changes to Safeguards**

Explanation:

New interventions will be added to introduce cholera-specific integrated interventions, notably rehabilitation of some wastewater treatment plants and water and sewerage networks in urban areas; the rehabilitation of water networks in rural areas; and supporting the epidemiological and diagnostic laboratory capacity of the local institutions, particularly at the governorate levels, through providing equipment and supplies. To eliminate or mitigate any potential impact that might result from the implementation of the newly-introduced interventions, an Environmental and Social Management Framework (ESMF) was prepared, and is expected to be disclosed by September 15, 2017.

**Covenants - Additional Financing (Yemen Emergency Health and Nutrition Project Second Additional Financing - P164466)**

| Source of Funds | Finance Agreement Reference | Description of Covenants | Date Due | Recurrent | Frequency | Action |
|---|---|---|---|---|---|---|
| IDA-Crisis Response Window | | | | ☐ | | |

**Conditions**

| Source Of Fund | Name | Type |
|---|---|---|
| IDA-Crisis Response Window | | |

**Description of Condition**

## Risk

| Risk Category | Rating (H, S, M, L) |
|---|---|
| 1. Political and Governance | High |

| | |
|---|---|
| 2. Macroeconomic | High |
| 3. Sector Strategies and Policies | High |
| 4. Technical Design of Project or Program | Substantial |
| 5. Institutional Capacity for Implementation and Sustainability | Substantial |
| 6. Fiduciary | High |
| 7. Environment and Social | High |
| 8. Stakeholders | High |
| 9. Other | High |
| OVERALL | High |

**Finance**

**Loan Closing Date - Additional Financing (Yemen Emergency Health and Nutrition Project Second Additional Financing - P164466)**

| **Source of Funds** | **Proposed Additional Financing Loan Closing Date** |
|---|---|
| IDA Grant from CRW | 30-Jun-2020 |

**Loan Closing Date(s) - Parent ( Emergency Health and Nutrition Project - P161809 )**

Explanation:

The proposed duration of the additional financing is 30 months to complete all the proposed activities, and the current closing date of January 31, 2020 will be shifted to June 30, 2020.

| **Ln/Cr/TF** | **Status** | **Original Closing Date** | **Current Closing Date** | **Proposed Closing Date** | **Previous Closing Date(s)** |
|---|---|---|---|---|---|
| IDA-D1630 | Effective | 31-Jan-2020 | 31-Jan-2020 | 30-Jun-2020 | |
| IDA-D1640 | Effective | 31-Jan-2020 | 31-Jan-2020 | 30-Jun-2020 | 31-Jan-2020 |
| IDA-D1950 | Effective | 31-Jan-2020 | 31-Jan-2020 | 30-Jun-2020 | 31-Jan-2020 |
| IDA-D1960 | Effective | 31-Jan-2020 | 31-Jan-2020 | 30-Jun-2020 | 31-Jan-2020 |
| | | | | | |

**Change in Disbursement Estimates (including all sources of Financing)**

Explanation:

Disbursements will reflect activities under Health and WSS.

**Expected Disbursements (in USD Million) (including all Sources of Financing)**

| Fiscal Year | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
|---|---|---|---|---|---|---|---|---|---|---|
| Annual | 212.00 | 130.00 | 100.00 | 41.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Cumulative | 212.00 | 342.00 | 442.00 | 483.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

**Allocations - Additional Financing (Yemen Emergency Health and Nutrition Project Second Additional Financing - P164466)**

| **Source of Fund** | **Currency** | **Category of Expenditure** | **Allocation** | **Disbursement %(Type Total)** |
|---|---|---|---|---|

| | | | Proposed | Proposed |
|---|---|---|---|---|
| IDAT | USD | | 200.00 | 100.00 |
| | | **Total:** | 200.00 | |

**Financial Management Arrangements:**

The financial management (FM) arrangements under the proposed AF2 will be governed by the Financial Management Framework Agreement (FMFA), consistent with the parent project. The nature and level of risks as identified in the parent project remain valid and relevant for the proposed AF2. The mitigation measures that were identified in the parent project remain valid. The AF2 includes a new sub-component related to water and sanitation services which will be implemented by UNICEF and WHO following their respective implementation modalities and financial management regulations. Refer to Annex 3 for further details.

Withdrawals from the AF2 will be made based on Interim Unaudited Financial Reports (IFRs). UNICEF will prepare and submit IFRs in accordance with the format and periodicity agreed with the World Bank. Disbursements and flow of funds under the parent project for both UNICEF and WHO have been processed efficiently and in a timely manner. UNICEF and WHO will continue to maintain their FM systems and separate ledger accounts to record transactions of the project, and prepare and submit to the Bank six-monthly IFRs showing receipts and expenditures. Overall, the FM and disbursement arrangements have worked well and remain adequate for the proposed AF2. Both UNICEF and WHO will continue with their independent monitoring systems through programmatic visits focusing on implementation issues and utilization of resources by national and local partners, as well as spot checks, and financial audits. A third-party monitoring agency will verify implementation progress and carry out spot checks to assess partners' FM and internal controls in line with the UN Harmonized Approach to Cash Transfers (HACT). The results of these assessments and TPM reports will be shared with the Bank and contribute to the Bank's supervision of the project.

**Procurement Arrangements:**

The procurement arrangements for the proposed AF2 are consistent with those of the parent project. There is no procurement activity that would need external procurement arrangement beyond UNICEF and WHO. Changes are introduced to Component-1 to reflect additional health and WSS activities provided under the integrated package. The procurement arrangement under this project is that the UNICEF and WHO will follow their own procurement procedures. As in the parent project, given that OP 2.30 was triggered for Yemen, the Bank agreed upfront that the procurement rules of the UN implementing agency - as a grant recipient are acceptable and can be used. No additional waivers on procurement matters are required to enact this scenario. In addition, the Bank does not need to carry out a separate assessment of UNICEF and WHO as this is already covered by the other arrangements that the Bank has in place with the UN agencies. Since UNICEF and WHO will follow their own procurement rules and procedures, no contract will be subject to prior or post review. The nature and level of risks as identified under the parent project remain valid and relevant for the AF2. For this AF2, UNICEF will work closely with their local partners such as the local corporations (LCs) and the Urban PMU on rehabilitation and maintenance of WSS systems. The LCs will provide detailed technical support, and the Urban Unit will provide the same especially where LC capacity is weak. Using UNICEF procurement processes, the three entities will together develop TORs, designs, bills of quantities (BOQ's). Therefore, procurement responsibility will remain on the UNICEF side.

**The terms of reference (TOR) for the existing Third Party Monitoring** (TPM) agencies under the parent project will be modified and agreed upon by the World Bank to reflect the additional activities. This will complement the existing TPM arrangements for both UNICEF and WHO as part of the monitoring activities to follow up on the implementation of the program and ensure that the agreed upon procedures are followed and to report on any deviations. The TPM agency reports will be shared with the World Bank, and will include the actions taken to address the implementation issues identified by the TPM agency, if any.

## Components

**Change to Components and Cost**

Explanation:

Component 1 has been modified to account for the integrated health and WSS interventions for cholera. For instance, new activities have been added to subcomponents 1.1, 1.2, and 1.3. In addition, a new subcomponent 1.4 has been added for the WSS activities.

| Current Component Name | Proposed Component Name | Current Cost (US$M) | Proposed Additional Cost (US$M) | Action |
|---|---|---|---|---|
| Improving Access to Health, Nutrition, and Public Health Services | Improving Access to Health, Nutrition, Public Health, and WSS Services | 229.49 | 191.08 | Addition of Subcomponent 1.4 |
| Project Support, Management, Evaluation and Administration | Project Support, Management, Evaluation and Administration | 13.51 | 8.92 | No Change |
| Contingent Emergency Response | Contingent Emergency Response | 40.00 | 0.00 | No Change |
| | **Total:** | 283.00 | 200.00 | |
| | | | | |

## Other Change(s)

| Implementing Agency Name | Type | Action |
|---|---|---|
| United Nations Children's Fund | Implementing Agency | No Change |
| World Health Organization | Implementing Agency | No Change |
| | | |
| | | |

**Change in Implementation Schedule**

Explanation:

The proposed duration of the additional financing is 30 months to complete all the proposed activities. The closing date of parent project, AF, and AF2 will be June 30, 2020.

## IV. Appraisal Summary

**Economic and Financial Analysis**

Explanation:

The benefits from the envisaged cholera response activities will be coming mainly from: i) contributing to the immediate control of cholera cases, reducing morbidity and avoiding mortality; ii) preventing the cholera and other disease outbreaks from spread and further propagation; and iii) strengthening the capacity of the public health system as well as health surveillance and preparedness, as well as strengthening safe water and sanitation services. The economic benefits of these cost-effective public health activities are large, not only for Yemen but for the entire region which is also at risk if the epidemic expands. A healthy population is a strong pillar for any socio-economic developmental efforts. No economic recovery would be possible if the cholera epidemic is not controlled. Therefore, the combined health and WSS services in this AF2 will accrue multiple economic benefits of: i) avoiding mortality that would otherwise remain high if no actions were taken; ii) reducing the severity of morbidity and hence reducing the extra needed direct costs of medium to long-term complications of the disease; and iii) preventing the occurrence of other potentially infectious diseases with their pertinent direct and/or indirect costs.

A simple cost-benefit analysis for project activities has been conducted. All economic costs and benefits were envisaged for a period of 30 months (implementation period). Benefits for averted mortalities have assumed that the project activities will be able to avert nearly 70 percent of the mortalities and 70 percent of the medical complications that would otherwise occur if the project activities were not implemented. The discount rate was assumed at 15 percent. The analysis adopted a very conservative assumption of US$100,000 for the extrapolated value of statistical life for the Yemeni context, compared to US$126,000 for a life year in Uganda which has a comparable level of per capita income at an elasticity of 1 (Hammitt et al, 2011). Schaeti et al (2014) has also estimated that the direct costs of complications for a single episode of cholera would stand at US$123 in a low-income country setting.

The analysis shows that averted deaths alone would yield a benefit of US$560 million annually with annual discount rate of 15 percent. As for the morbidity, the benefits of reaching out to 350,000 per year and avoiding only 50 percent of the complications would yield and annual savings of US$21.52 million. Not accounting for other project benefits of averting productivity loss and protecting against other disease outbreaks, the calculated Benefit Cost Ratio (BCR) will be around 5.

**Technical Analysis**

Explanation:

**Design:** Cholera is rapidly engulfing Yemen. The whole population is currently at risk of being infected, especially the highly vulnerable women and children, facing the triple risk of conflict, famine and cholera. The AF2 was designed with a vision for supporting a horizontally and vertically integrated spectrum of health, water and sanitation services to the whole country. The horizontal integration is demonstrated through the incremental response to the epidemic with parallel and sequential control and prevention approach. In the short run, up to six months after effectiveness, activities are geared to contain the epidemic, halt spread and cater for case control. In the medium to long run, efforts will be geared to prevent further infections and halt the spread of the disease as well as boost the system's preparedness and resilience in dealing with any future disease outbreaks. On the vertical integration, activities were grouped to target the national, facility-based and community and household levels, respectively.

In terms of the WSS aspects, the AF2 will provide the development support critically required in the sector through close cooperation with the Urban Unit and local utilities (LCs) in urban areas and GAWRSP and user associations in rural areas, both to have appropriate access to networks and treatment plants that need rehabilitation maintenance, and to strengthen the functionality of existing institutions, increase ownership, and provide capacity support. The design is consistent with the Yemen WASH Poverty Diagnostic published by the World Bank Water and Poverty Global Practices (June 2017). The design builds on the important

lessons learned from EHNP and other Bank-financed projects in Yemen and from Bank engagements in emergency health and nutrition and WSS operations in other fragility, conflict and violence (FCV) countries. This accumulated experience imparts to: a) using a design that allows room for flexibility in response to the changing socio-political and sectoral challenges; b) working with UN partners in times of conflict to achieve optimal penetration of services to the citizens; and c) using and strengthening the local technical and implementation capacity to preserve the future developmental prospect of Yemen.

This AF2, like the parent project, will be implemented in partnership with UN agencies in an FCV context. This approach uses the strong stewardship and implementation oversight offered through the implementing UN partners, while making best use of the available capacities at the local and decentralized levels, which in turn helps to preserve and maintain the capacities for developmental objectives. Both agencies will strive to: i) train, equip and retain the existing, and new, human capacities working at the local levels; ii) preserve the functionality of the existing and new facilities providing direct services to the population; and iii) combat urgent challenges that may threaten the overall long developmental perspective of the country.

**Targeting:**

The AF2 will cover all governorates in Yemen but through a flexible and needs-based targeting mechanism that will follow a transparent, evidence-based and internationally recognized set of criteria for each type of activity. The findings of the WHO cholera-specific "Daily Epidemiological Update" (prepared with rigorous inputs from UNICEF and other partners) will be the basis of prioritizing the target areas for the proposed activities. This report prioritizes governorates and districts based on the following criteria: i) the actual numbers of AWD and confirmed cholera cases; ii) number of reported deaths attributed to the epidemic; iii) CFR; and iv) Attack Rate. WSS will follow the same targeting methodology in addition to those urban areas where there are non-functional WWTPs.

In addition and as in the parent project, governorate/district prioritization will be revisited periodically to appropriately respond to the changing: i) epidemiological trends; ii) security; and iii) other confounding situations in the field.

Activities that target the prevention and system strengthening may address other areas with low prevalence and/or low transmission season of high prevalence areas to create a fire wall and induce healthy behavior in, boost immunity of, and build a rapid response towards people living in those communities.

**Social Analysis**

Explanation:

The health activities under the subcomponents 1.1, 1.2 and 1.3 of the proposed AF2 will include the cholera-specific integrated interventions such as the expenses of the CTCs, ORPs, and the provision of OCVs. In addition, WSS activities under subcomponent 1.4 will include the improvement of access to safe water and sanitation at households, schools and health facilities. It will include the rehabilitation and maintenance of existing water and sewerage facilities both in urban and rural areas. It will also include chlorination of water pipe network and the private water tankers. Based on the proposed activities mentioned above, OP 4.12 will not be triggered since no land acquisition, loss of livelihood income or restriction to access parks and cultural sites is expected.

Both implementing agencies will carry out individual interviews during implementation with target beneficiaries. In addition, during interviews, both agencies shall provide contact information (name and phone number) of the persons in charge of handling complaints to ensure services are provided to all target areas.

| **Environmental Analysis** |
| --- |
| Explanation: |
| According to the OP 4.01 on Environmental Assessment, this proposed AF2 is classified as Environmental Category "B". Activities to be supported will scale up the ongoing interventions under the Emergency Health and Nutrition Project. In addition, new interventions will be added to introduce cholera-specific integrated interventions –as described in section II- notably rehabilitation of some wastewater treatment plants and water and sewerage networks in urban areas; the rehabilitation of water networks in rural areas; and supporting the epidemiological and diagnostic laboratory capacity of the local institutions, particularly at the governorate levels, through providing equipment and supplies. Potential environmental impacts of such activities are expected to be site-specific, limited and mitigatable.<br><br>To ensure proper management of potential environmental impacts, the existing Medical Waste Management Plan (MWMP) - which was prepared for the parent project - will continue to be implemented under the proposed AF2. This MWMP will be reviewed and updated, if needed. In addition, and to eliminate or mitigate any potential impact that might result from the implementation of the newly-introduced interventions mentioned above, an Environmental and Social Management Framework (ESMF) was prepared, and is expected to be disclosed by September 1, 2017 in country and on the Bank's website. Furthermore, subprojects will be screened against criteria that will be included in the ESMF, and subsequent site-specific environmental assessment instruments will be prepared - if needed - during the implementation phase and before the commencement of any physical activities. As this additional financing (AF) is prepared under emergency procedures as defined by OP 10.00 para 12, the preparation of the ESMF is deferred, and a Safeguards Action Plan (SAP) was prepared (Annex 4). |
| **Risks** |
| Explanation: |
| The nature and level of risks as identified in the parent project remain valid and relevant for the proposed AF2. The overall risk rating is High. This rating stems from the exceptional context of ongoing conflict and the deteriorating health, nutrition and WSS in the Republic of Yemen. The key risks that may affect the effective implementation of the project include: i) political and governance risks; ii) macroeconomic risks; iii) technical design and institutional capacity risks; iv) fiduciary; v) stakeholder, and other risks. The mitigation measures that were identified in the parent project remain valid. As for the new WSS related activities, minimal environmental risks are envisaged and therefore an ESMF is being prepared to account for these additional risks. Overall the direct benefits and positive externalities of rehabilitating failing WSS networks and treatment plants are very large compared to the minimal risks envisaged and mitigated against.<br><br>For the technical design and institutional risks, the project builds on the recently achieved successes of the IDA-financed operations in partnership with UN organization in Yemen and aims to expand currently offered services nationwide, which can pose significant risks with regard to the capacity of local service providers in the health and WSS sectors. Risks will be mitigated by the diversity of interventions and implementation modalities currently adopted by UNICEF and WHO through their network of service delivery providers; strong focus on the communities as well as services that have proven effective will provide reasonable mitigation measures. The security challenge and frequent mobility of the population fleeing heavily conflict-affected areas may compromise the ability of UNICEF and WHO and their implementing partners to adequately identify eligible potential beneficiaries. This will be mitigated by the strong field presence and knowledge of the agencies and their implementation partners. In addition, the project will cover all governorates in Yemen on a needs basis that will follow a transparent, evidence based and pre-agreed upon set of criteria outlined in the technical analysis section. |

## V. World Bank Grievance Redress

31. Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit http://www.worldbank.org/GRS. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

## Annex 1. Results Framework

| Project Name: | Yemen Emergency Health and Nutrition Project Second Additional Financing (P164466) | | | Project Stage: | Additional Financing | Status: | DRAFT |
|---|---|---|---|---|---|---|---|
| Team Leader(s): | Moustafa Mohamed ElSayed Mohamed Abdalla | Requesting Unit: | MNC03 | Created by: | Mariam William Guirguis on 29-Jun-2017 | | |
| Product Line: | IBRD/IDA | Responsible Unit: | GHN05 | Modified by: | Miyuki T. Parris on 05-Aug-2017 | | |
| Country: | Yemen, Republic | Approval FY: | 2018 | | | | |
| Region: | MIDDLE EAST AND NORTH AFRICA | Financing Instrument: | Investment Project Financing | | | | |
| Parent Project ID: | P161809 | Parent Project Name: | Emergency Health and Nutrition Project (P161809) | | | | |

**Project Development Objectives**

Original Project Development Objective - Parent:

To contribute to the provision of basic health and essential nutrition services for the benefit of the population of the Republic of Yemen.

Proposed Project Development Objective - Additional Financing (AF):

To contribute to the provision of basic health, essential nutrition, water and sanitation services for the benefit of the population of the Republic of Yemen.

**Results**

Core sector indicators are considered: Yes

Results reporting level: Project Level

**Project Development Objective Indicators**

| Status | Indicator Name | Corporate | Unit of Measure | | Baseline | Actual(Current) | End Target |
|---|---|---|---|---|---|---|---|
| Revised | People who have received essential health, nutrition and population services | ☐ | Number | Value | 0.00 | 5,250,000.00 | 13,000,000.00 |
| | | | | Date | 13-Jan-2017 | 30-May-2017 | 30-Jun-2020 |
| | | | | Comment | | | Revised end |

| | | | | | | | target value and date |
|---|---|---|---|---|---|---|---|
| Revised | People who have received essential health, nutrition and population services (% female) | ☐ | Percentage<br>Sub Type<br>Supplemental | Value | 0.00 | 55.00 | 55.00 |
| Revised | People who have received essential health, nutrition and population services (% IDPs) | ☐ | Percentage<br>Sub Type<br>Supplemental | Value | 0.00 | 3.00 | 10.00 |
| Revised | People who have received essential health, nutrition and population services (% children under 5) | ☐ | Percentage<br>Sub Type<br>Supplemental | Value | 0.00 | 95.00 | 50.00 |
| New | People provided with access to improved water sources in cholera affected areas | ☐ | Number | Value | 0.00 | | 1,800,000.00 |
| | | | | Date | 15-Aug-2017 | | 30-Jun-2020 |
| | | | | Comment | | | |
| New | People provided with access to improved water sources in cholera affected areas - rural | ☐ | Number<br>Sub Type<br>Breakdown | Value | 0.00 | | 450,000.00 |
| | | | | Date | 15-Aug-2017 | | 30-Jun-2020 |
| | | | | Comment | | | |
| New | People provided with access to improved water sources in cholera affected areas - urban | ☐ | Number<br>Sub Type<br>Breakdown | Value | 0.00 | | 1,350,000.00 |
| | | | | Date | 15-Aug-2017 | | 30-Jun-2020 |
| | | | | Comment | | | |

**Intermediate Results Indicators**

| Status | Indicator Name | Corporate | Unit of Measure | | Baseline | Actual(Current) | End Target |
|---|---|---|---|---|---|---|---|
| Revised | Number of outreach rounds conducted | ☐ | Number | Value | 0.00 | 250.00 | 3,000.00 |
| | | | | Date | 13-Jan-2017 | 31-May-2017 | 30-Jun-2020 |
| | | | | Comment | | | Revised end |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | | target date |
| New | People who have received hygiene consumables | ☐ | Number | Value | 0.00 | | 4,500,000.00 |
| | | | | Date | 15-Aug-2017 | | 30-Jun-2020 |
| | | | | Comment | | | |
| New | People vaccinated with oral cholera vaccine | ☐ | Number | Value | 0.00 | | 10,000,000.00 |
| | | | | Date | 15-Aug-2017 | | 30-Jun-2020 |
| | | | | Comment | | | |
| New | People who have received cholera treatment | ☐ | Number | Value | 0.00 | | 300,000.00 |
| | | | | Date | 15-Aug-2017 | | 30-Jun-2020 |
| | | | | Comment | | | |
| New | People provided with access to improved sanitation services in cholera affected areas | ☐ | Number | Value | 0.00 | | 1,400,000.00 |
| | | | | Date | 15-Aug-2017 | | 30-Jun-2020 |
| | | | | Comment | | | |
| New | People provided with access to improved sanitation services in cholera affected areas - rural | ☐ | Number | Value | 0.00 | | 150,000.00 |
| | | | Sub Type | Date | 15-Aug-2017 | | 30-Jun-2020 |
| | | | Breakdown | Comment | | | |
| New | People provided with access to improved sanitation services in cholera affected areas - urban | ☐ | Number | Value | 0.00 | | 1,250,000.00 |
| | | | Sub Type | Date | 15-Aug-2017 | | 30-Jun-2020 |
| | | | Breakdown | Comment | | | |
| Revised | Number of mobile team rounds | ☐ | Number | Value | 0.00 | 220.00 | 1,500.00 |
| | | | | Date | 13-Jan-2017 | 31-May-2017 | 30-Jun-2020 |
| | | | | Comment | | | Revised end target date |
| Revised | Health facilities provided with equipment and medical/non- | ☐ | Number | Value | 0.00 | 600.00 | 800.00 |
| | | | | Date | 13-Jan-2017 | 31-May-2017 | 30-Jun-2020 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | medical supplies (number) | | | Comment | | | Revised end target value and date |
| Revised | Women who have received basic nutrition services (number) | ☐ | Number | Value | 0.00 | 130,000.00 | 660,000.00 |
| | | | | Date | 13-Jan-2017 | 31-May-2017 | 30-Jun-2020 |
| | | | | Comment | | | Revised end target date |
| Revised | Children U5 who have received basic nutrition services (number) | ☐ | Number | Value | 0.00 | 350,000.00 | 1,050,000.00 |
| | | | | Date | 13-Jan-2017 | 31-May-2017 | 30-Jun-2020 |
| | | | | Comment | | | Revised end target date |
| Revised | Children immunized (number) | ☐ | Number | Value | 0.00 | 5,000,000.00 | 5,500,000.00 |
| | | | | Date | 13-Jan-2017 | 31-May-2017 | 30-Jun-2020 |
| | | | | Comment | | | Revised end target date |
| Revised | Pregnant women receiving antenatal care during a visit to a health provider (number) | ☐ | Number | Value | 0.00 | 20,000.00 | 200,000.00 |
| | | | | Date | 13-Jan-2017 | 31-May-2017 | 30-Jun-2020 |
| | | | | Comment | | | Revised end target date |
| Revised | Births (deliveries) attended by skilled health personnel (number) | ☐ | Number | Value | 0.00 | 5,000.00 | 40,000.00 |
| | | | | Date | 13-Jan-2017 | 31-May-2017 | 30-Jun-2020 |
| | | | | Comment | | | Revised end target date |
| Revised | New electronic disease early warning system (eDEWS) data collection sites (number) | ☐ | Number | Value | 0.00 | 450.00 | 1,200.00 |
| | | | | Date | 13-Jan-2017 | 31-May-2017 | 30-Jun-2020 |
| | | | | Comment | | | Revised end target value and date |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Revised | Health personnel receiving training (number) | ☐ | Number | Value | 0.00 | 1,200.00 | 7,500.00 |
| | | | | Date | 13-Jan-2017 | 31-May-2017 | 30-Jun-2020 |
| | | | | Comment | | | Revised end target value and date |
| Revised | Local NGOs involved in service provision (number) | ☐ | Number | Value | 0.00 | 4.00 | 15.00 |
| | | | | Date | 13-Jan-2017 | 31-May-2017 | 30-Jun-2020 |
| | | | | Comment | | | Revised end target date |
| Revised | Beneficiaries satisfied with services provided | ☐ | Percentage | Value | 0.00 | | 30.00 |
| | | | | Date | 13-Jan-2017 | | 30-Jun-2020 |
| | | | | Comment | | | Revised end target date |
| Revised | Number of community nutrition sites covered by a new Integrated Nutrition Surveillance System | ☐ | Number | Value | 0.00 | | 1,100.00 |
| | | | | Date | 01-Jun-2017 | | 30-Jun-2020 |
| | | | | Comment | | | Revised end target date |

## Annex 2. Revised Costing Table

| Revised component's costs (US$ million) | | | | |
|---|---|---|---|---|
| The proposed AF2 will add subcomponent 1.4 to the parent project. However, the additional resources will also be used to revise the original components' costs as per the following: | | | | |
| **Component Name** | **Costs under parent project** | **Costs under AF1** | **Proposed additional costs under AF2** | **Revised total costs (Parent + AFs)** |
| **Component 1: Improving Access to Health, Nutrition, and WSS services** | **191.00 (US$40 million were later reallocated to Component 3)** | **78.49** | **191.08** | **420.57** |
| Subcomponent 1.1: Strengthening the Integration of Primary Health Care Model (UNICEF) | 118.54 (US$30 million were later reallocated to Component 3) | 59.09 | 38.35 | 185.98 |
| Subcomponent 1.2. Supporting Health and Nutrition Services at the First Level Referral Centers (WHO) | 52.46 (US$8 million were later reallocated to Component 3) | 13.90 | 27.29 | 85.65 |
| Subcomponent 1.3. Sustaining the National Health System Preparedness and Public Health Programs (WHO) | 20.00 (US$2 million were later reallocated to Component 3) | 5.50 | 30.00 | 53.50 |
| Subcomponent 1.4. Improving Access to WSS to Control and Prevent Cholera and Strengthen Local Systems. (UNICEF US$ 85.76 million + WHO US$ 9.68 million) | 0.00 | 0.00 | 95.44 | 95.44 |
| **Component 2: Project Support, Management, Evaluation and Administration** | **9.00** | **4.51** | **8.92** | **22.43** |
| UNICEF Indirect Cost | 3.60 | 1.81 | 3.79 | 9.20 |
| WHO Indirect Cost | 2.22 | 1.00 | 1.95 | 5.17 |
| TPM and Evaluation | 1.50 | 0.35 | 0.68 | 2.53 |
| Direct Costs | 1.68 | 1.35 | 2.50 | 5.53 |
| **Component 3: Contingent Emergency Response (UNICEF + WHO)[8]** | **0.00 (US$40 million were later reallocated to Component 3 from Subcomponents 1.1 & 1.3)** | **0.00** | **0.00** | **40.00** |
| **Total Financing** | **200.00** | **83.00** | **200.00** | **483.00** |

[8] This component has been triggered by UNICEF (US$30 million) in light of the unprecedented rates of malnutrition and imminent risk of famine and by WHO (US$10 million) for the cholera outbreak.

## Annex 3. Detailed Description of Additional Activities and Targeting Mechanism

### A) Description and implementation arrangements for the health interventions for cholera

1. The Cholera Response and Case control measures will target funding the establishment of new, and operational support for the existing and new Oral Rehydration Points (ORPs) and Cholera Treatment Centers (CTCs). These centers are respectively the first and second lines of case sorting, control and management, hence markedly lowering the morbidity and mortality impact of the disease. The AF2 will establish additional ORPs and CTCs/DTCs b, in addition to the operational support of a the existing and new ORPs and CTC/DTC in terms of supplies, kits, medicines, basic supplies (water, electricity, fuel) and implementation expenses.

2. **Oral Rehydration Points (ORPs)** will be established in locations that are easily accessible by the population to ensure rapid access to oral rehydration of AWD cases. ORPs can be in a health center or health unit, in someone's house, a public location or a standalone structure in the community. The ORP must have access to clean water (able to do chlorination on site) and accessible latrines in appropriate distance (minimum of 30 meters) from water sources. Depending on population density and distance to the next CTC/DTC the ratio of ORPs per CTC/DTC can be estimated to be between 8 – 10/ ORPs per CTC/DTC. ORPs will be open at least 12 hours per day with a referral mechanism in place to ensure patient referral in severe cases. Each ORP will be staffed with 3 nurses/community health volunteers (CHV) with the capacity of screening patients for signs and symptoms of cholera, promote health, prepare and administer oral rehydration solution (ORS) and refer to CTC/DTC. Additional staff such as cleaners and guards will also be required in the ORPs.

3. The main duties of the ORP will be: i) screening and initiation of hydration; ii) referral for treatment when required Preparation of safe water; iii) safe water storage and preparation of ORS; iv) Patient and family education; and v) distribution of water purification and rehydration products for household level use. The ORP teams will be supervised by a staff member of the CTC it is affiliated with. Each shift at the ORP will have a shift leader. Reports will be submitted to the supervisor in the CTC at the end of each day. The outreach teams who conduct active case finding will be supervised by the ORP staff shift team leader and report to them. Reports/information must be made available to the governorate disease surveillance officer and WHO on a daily basis.

4. **Cholera or Diarrhoea Treatment Centers (CTCs/DTCs)** will provide rapid and efficient treatment for patients who meet the admission criteria for stationary treatment of cholera. During small incidences of acute watery diarrhea, most patients can be treated in existing health facilities. However, during outbreaks, particularly cholera, health personnel may decide to set up a temporary CTC/DTC, either in part of the existing facility or as a separate site. Establishing a CTC/DTC requires identification of suitable sites, organization of patient flow, infection control and pre-position of supplies, stocks of drugs and other material. The specific objective of operating a CTC/DTC is to bring emergency health care services as close as possible to patients who otherwise would be at risk of death during cholera epidemics. If there is no suitable building, the CTC/DTC could be set up in a tent in an open space. Local Health authorities and communities will be involved in the selection of sites and their preparation. CTCs/DTCs can be opened and shut down very quickly, based on epidemiological findings.

5. A typical CTC/DTC will include the following sections: i) Admission and screening area where all the new arrivals have to go through for triage and registration; ii) Observation area where patients with moderate dehydration receive oral rehydration therapy; iii) Hospitalization area where patients with severe dehydration or vomiting are treated with IV and oral rehydration; iv) Neutral area for the kitchen, stocks, changing room, and restroom for the personnel; and v) Recovery area where hospitalized patients proceed from the hospitalization area for continued oral rehydration after being upgraded from severe dehydration to mild or moderate dehydration. Every CTC will be initially stocked with a central cholera kit containing the necessary equipment and supplies for the initial response to a cholera outbreak. One complete central cholera kit provides treatment for 100 patients (80 severe cases, requiring IV rehydration, and 20 mild/moderate cases who should be given oral dehydration solutions only). This kit will be enough until the CTC is further replenished with the requisite supplies. In addition to the central kit, there will be a community kit containing the necessary equipment and supplies for the initial response to a cholera outbreak at the community level. The community kit is designed to support a small treatment facility for an average of 40 patients' maximum per day. The community kit is designed for the oral dehydration of 100 mild/moderate cases. Given the high burden of SAM in the country the CTCs/DTCs will work closely with Outpatient Therapeutic Programmes (OTPs) and Therapeutic Feeding Centers (TFCs)/ Stabilization Centers (SCs)

in providing nutrition supplies and care for the children with both cholera and SAM.

6. **Oral Cholera Vaccines (OCV)**, technical health capacities in Yemen have accepted recommendations to introduce cholera vaccines as a supplementary measure to control and prevent cholera in select communities. There are two WHO-prequalified OCVs. Both vaccines have a 2-dose regimen, are orally administered, and require a cold chain and give an immunity of at least 3 years. The AF2 will target to vaccinate 2 successive doses (2-3 weeks apart) of OCV to around 10 million people in Yemen[9]. This would be the largest mass OCV vaccination campaign in the world, given the scale of the problem in Yemen. The target areas will be based on prioritizing highly infected areas where the vaccination campaigns will take place during the low seasons of transmission to prevent the resurgence of infection rates in the following seasons.

7. Given the unfolding of the rapidly moving epidemiologic situation, the vaccination campaigns may also target the areas with low transmission rates to protect the geographic spread of the disease into new communities. Campaigns will, to the extent possible, target larger numbers of population to provide a herd-immunity protection effect. Cholera vaccinations during outbreaks should not disrupt the provision of other high-priority health interventions to control or prevent cholera. Vaccines provide immediate, short-term protection that can be implemented while the interventions to improve access to safe water and sanitation are also put into place.

8. **Social Mobilization**. A targeted social mobilization effort will be launched to: i) further broaden the knowledge about the disease and its risk factors; ii) incite healthy and protective behaviors in the community; and iii) give information about optimal responses in cases of doubt. Working with epidemiologists, key messages will be developed, adapted and adjusted. Three key behaviours will be promoted for immediate response, namely: i) water disinfection at household and WSS facility level, handwashing with soap at critical times and appropriate food handling; ii) awareness raising on effective household response practices such as disinfection, early detection uses of ORS for rehydration, care seeking behavior, reporting and referral of cholera patients; and iii) develop a communication plan around the OCV campaigns; and awareness on exclusive breastfeeding and its protective measures for infants, infant and young child feeding, early detection and referral of children with moderate acute malnutrition and SAM to appropriate treatment centres. The messages will be delivered through different channels including: i) interpersonal communication for patients and their relatives at points of contact in health facilities, ORPs and CTCs; ii) media outlets such leaflets, posters, newspaper and TV adds; and iii) door-to-door outreach through the outreach and mobile teams. At least 1000 health personnel, mostly Community Health Volunteers, will be trained to deliver those messages.

9. Support to the system strengthening and resilience activities under this AF will further promote and expand the surveillance activities that have started under the original YEHNP. Three main activities will be supported: i) further expansion, roll-out and development of the electronic Disease Early Warning System (eDEWS); ii) training, operational support and deployment of Rapid Response Teams (RRT) at the Governorate and District levels; and iii) promoting the diagnostic laboratory capacities in strategically located reference labs that would enable better diagnosis and enhanced response times in reaction to disease outbreaks in general.

10. **Electronic Disease Early Warning System (eDEWS)**. The main objective of the eDEWS is to detect and respond rapidly to alerts that could indicate outbreaks and clusters of epidemic-prone diseases, especially for a set of 13 highly infectious diseases. The main objective is the reinforcement of the national surveillance system under the AF2 to develop the current eDEWS to provide data on the line lists (detailed patient data) of cholera cases, and to provide the needed inputs (providing per diems, logistics, operating expenses, etc.) to enable real-time collection, analysis and dissemination of vital data on epidemic-prone diseases and the affected population. This activity complements the original support started under YEHNP that focused on expanding eDEWs to 600 new sites nationwide, purchasing equipment for Focal Points (FPs) and District Coordinators in the governorates (mobile phones, laptops, etc.), the purchase of equipment for the central level and support to the operational costs.

[9] A risk/needs assessment by WHO, UNICEF and technical partners will be undertaken to determine whether the OCV campaign will be undertaken in one go or on a successive rolling basis as well as to identify the exact scale of the campaign according to the availability of vaccines at global stock and coordination with the Global Task Force for Cholera Control (GTFCC).

11. **Emergency Operations Centers and Rapid Response Teams:**[10] The EOC concept is internationally recognized as a mechanism that enables faster and more efficient communication and action. It will be established in Yemen jointly by WHO, UNICEF, WFP to provide support to the authorities in the key areas of management, administration and planning team, technical function, information management function, operational support and logistics function and liaison desk (call centre) function. The mechanism will include the central and governorate EOCs, field managers in every district and Rapid Response Teams at central, governorate and district level. Therefore, the new AF will also support the functionality of EOCs and RRTs across all the Governorates and Districts in Yemen. This will entail the i) Support for timely outbreak investigation and response across all governorate and districts; (supporting the deployment including transport and per diem allowance); ii) Enhance logistics capacity to support rapid response teams; iii) Conduct refresher training to build capacity of health workers on outbreak investigation, disease surveillance, and active case finding; and ) Disseminate all necessary guidelines and reporting tools including standard case definition, case management and infection control guidelines;

12. A typical RRT composition would be: i) District Health Office Director/Representative; ii) Surveillance Officer; iii) Epidemiologist iv) Health Education Officer; and v) WSS Officer. The team would be the first epidemiological respondent in case of a disease outbreak in its catchment area and strive for the early containment and response to the outbreak, preventing it from further spread. It will also act as an early warning liaison with the higher health authorities.

13. **Reference Public Health Laboratories.** Given the need to strengthen diagnostic capacity (with an emphasis on Cholera and communicable diseases, the operation will support and strengthen diagnostic capacity of 5 existing public health laboratories and introducing 7 new reference laboratories inside health facilities across the country. The support will involve: i) Provision of laboratory equipment, consumables and diagnostic reagents; ii) Training of laboratory staff, and pertinent transportation and per diems; and iii) Contracting the needed laboratory technicians.

**B) Description and implementation arrangements for Water Services and Sanitation.**

14. UNICEF and WHO have a strong presence across Yemen and has a diversified pool of partners which enables for an immediate and timely implementation of the planned project activities. For the planned water and sanitation services (WSS) interventions through this AF2 under EHNP project, both organizations will work in close partnership and coordination with national and international NGO's and autonomous local authorities for the implementation of the activities.

The following implementation modalities will be adopted for the key WSS interventions:

**1. Rehabilitation of Water Supply and Sanitation Systems**

15. UNICEF is already implementing rehabilitation of WSS systems with the support of different donors across Yemen through existing local authorities, private contractors and NGO's with a focus on providing basic services, preserving the local structures and strengthening the national capacities.

16. WSS services in urban areas are provided through legal mandate by utilities known as Local Water and Sanitation Corporations (LCs), autonomous corporations that collect their own revenue and in theory are financially self-sufficient. The LCs are often supported by the Urban Unit, a technical institution registered legally in 2002 through an agreement established between the Government and the Bank and other donors using IDA funding.

17. UNICEF provides support to the Urban Unit for providing consultancy support by ensuring programme quality along with capacity strengthening of the respective LC's. UNICEF support to the Urban Unit is to preserve the existing structures for continuing the technical assistance in Yemen in addition to extending support to respective LC's. UNICEF will need to strengthen this support – possibly with a UNICEF local staff located at the

[10] The Rapid Response teams are different from the mobile and outreach teams who support other basic health and nutrition services.

Urban Unit, for both technical but also procurement and financial management capacity.

18. For urban rehabilitation and maintenance, in relation to financial flows, when supplies or services are procured by the Urban Unit, UNICEF provides either direct payments on a results basis, or through cash transfers up-front for an agreed set of activities with detailed budget and timeline in (3-4) tranches within UNICEF standard liquidation procedures.

19. For rural rehabilitation and maintenance projects under AF2, UNICEF will implement sub-projects under NGO's through partnership cooperation agreements (PCAs). These NGOs are selected through UNICEF's rigorous vetting process, with contract amounts determined jointly based on the planned scope of work. To strengthen local institutional capacity and ensure sustainability, local authorities of GARWSP and water management committees (WMC)/Water User Association will be closely involved during the implementation of project, participating in design and development of BOQs to ensure sub-projects are fit-for-purpose.

20. In terms of financial flows to the NGOs for work in rural areas, UNICEF will adopt the HACT guidelines[i] for facilitating the timely implementation. In some cases, payments for services/outputs are made directly to the NGO by UNICEF after delivery of results (in this case known as "reimbursements"). UNICEF will ensure its technical support at national and sub-national levels in all stages of project implementation for quality assurance and risk mitigation.

21. Throughout the course of implementation, regular field monitoring visits will be conducted by UNICEF staff and third-party monitors (TPM) to inspect, supervise and verify the delivered services and implemented work in addition to providing a platform for soliciting feedback from beneficiaries (measure/gauge satisfaction about quality of provided services) and monitoring impacts. UNICEF has an existing system of TPM, which will be enhanced for WSS and Environmental and Social Safeguards per this AF2.

### 2. Household Level Interventions

22. Household level interventions are intended to contain the ongoing outbreak by establishing a "firewall" at the household level to ensure that all externalities (i.e. risks) are mitigated/addressed at HH level. These interventions are implemented by NGO partners, who are identified based on UNICEF's detailed partnership guidelines. The activities focus on communicating hygiene messages supported with essential supplies as well as breastfeeding messages in households with breastfeeding children.. For delivering the services of behavioral change, NGO's are partnered through (PCA's) with financial assistance on a direct cash transfer (DCT) basis monitored as per HACT guidelines.

23. For supplies, UNICEF provides the items to the NGO partners. All procurement of the supplies is done as per standard UNICEF guidelines by UNICEF, and the payments are made upon the delivery of the items to the consignees as per distribution plan per partner. For ensuring its distribution and delivery to the beneficiaries, end-user monitoring will be conducted by UNICEF through TPM. In addition, each partner will document the overall process of beneficiaries' selection, distribution lists and post distribution monitoring reports.

### 3. Water Disinfection and Quality Measures

24. This intervention is a combination of services and supplies, which UNICEF undertakes through the support of NGO's, the Urban Unit and LCs (urban) and the Emergency Unit in GARWSP (rural). This component will include social mobilization, training of volunteers, distribution of supplies at the household level, and the actual disinfection of the water storage tanks at the household level. Supplies will be procured by UNICEF. Payment of services to NGOs (urban and rural) and the Urban Unit (rural) are mainly through DCT as described above. For this project, GARWSP will not be providing services, although will continue to work with UNICEF in this space through other donor-funded activities given the importance of maintaining the continuity of their expertise and ownership.

| Partnership Modality | Mode of Payment | Type of Interventions |
|---|---|---|
| NGO’s | Mainly DCT<br><br>Direct Payments/ reimbursements | o Rehabilitation of Rural Water Supply Systems.<br>o Water Disinfection and capacity building<br>o Hygiene awareness<br>o Distribution of WSS supplies at HH level<br>o Rehabilitation of the WSS services in Health and Schools |
| Urban Unit | Mainly Direct Payments<br><br>Direct Cash Transfers (DCT’s) | o Capacity building of the Local Water and Sanitation Corporations<br>o Technical Assistance/Consultancy<br>o Rehabilitation of the Water Supply System and Wastes Water Treatment |
| Private Sector | Direct Payment (DP) “Result based” Long-Term-Arrangements (LTA’s) | o Water Supply and Sanitation services<br>o Emergency Water trucking<br>o Fuel services/supplies<br>o Technical studies<br>o WSS services in Health Facilities and Schools<br>o Alternative energy option. |

**4. WSS services to healthcare facilities**

25. Managed through WHO, the AF2 will also ensure safe and sufficient water, sanitation, and medical waste management in hospitals with CTCs and ORPs to reduce exacerbation of cholera outbreak. The AF2 will invest in rehabilitation in EHNP-supported facilities that will improve water, sanitation, medical waste management in hospitals, prioritizing the 13 EHNP hospitals supporting CTCs and/or ORPs.

**C) Project Targeting Mechanism**

26. Table- 1[11] illustrates the number of cases and attack rates by governorate level, as well as, the number of existing and planned CTC’s and ORP’s to be supported by WHO and UNICEF respectively. Ares with the highest number of cases, attack rates, and CFR will be prioritized along with those areas with non-functional WWTPs.

[11] The figures of table one as of July 25, 2017. The table provides an example of the way prioritization will take place.

| Table 1: Cases of Cholera, Attack rate, existing and planned Cholera CTC's/ORP's by Organization and Governorate. | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Governorate** | **Number of Cases (July 25, 2017)** | **Attack rate (%)** | **Number of 1st priority districts (Existing)** | | **Number of 1st priority districts (Planned)** | | **Number of 2nd priority districts (Existing)** | | **Number of 2nd priority districts (Planned)** | | **Total** |
| | | | **WHO** | **UNICEF** | **WHO** | **UNICEF** | **WHO** | **UNICEF** | **WHO** | **UNICEF** | |
| **Abyan** | 12,746 | 20.9 | 1 | 2 | 3 | 1 | 0 | 8 | 0 | 4 | 19 |
| **Aden** | 12,343 | 12.9 | 0 | 2 | 1 | 1 | 0 | 5 | 2 | 3 | 14 |
| **Al Bayda** | 12,165 | 15.8 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 3 |
| **Al Hudaydah** | 50,160 | 15.0 | 1 | 3 | 3 | 2 | 0 | 6 | 2 | 2 | 19 |
| **Al Jawf** | 3,703 | 5.7 | 0 | 0 | 0 | 1 | 0 | 8 | 0 | 3 | 12 |
| **Al Mahwit** | 23,417 | 30.8 | 3 | 3 | 3 | 2 | 0 | 4 | 3 | 2 | 20 |
| **Amanat Al Asimah** | 50,331 | 15.2 | 8 | 7 | 0 | 3 | 0 | 1 | 2 | 1 | 22 |
| **Amran** | 41,038 | 26.8 | 2 | 6 | 10 | 3 | 0 | 10 | 1 | 5 | 37 |
| **Dhamar** | 30,039 | 14.2 | 1 | 5 | 2 | 3 | 0 | 7 | 3 | 3 | 24 |
| **Hajjah** | 42,363 | 19.1 | 3 | 3 | 8 | 2 | 0 | 10 | 7 | 4 | 37 |
| **Ibb** | 30,389 | 9.9 | 0 | 3 | 1 | 2 | 0 | 6 | 3 | 2 | 17 |
| **Lahj** | 4,591 | 4.4 | 0 | 0 | 0 | 1 | 0 | 12 | 0 | 5 | 18 |
| **Marib** | 1,521 | 6.2 | 0 | 0 | 0 | 1 | 0 | 7 | 0 | 2 | 10 |
| **Raymah** | 7,340 | 11.6 | 0 | 0 | 1 | 1 | 0 | 3 | 2 | 0 | 7 |
| **Sa'ada** | 983 | 1.1 | 0 | 2 | 0 | 1 | 0 | 4 | 0 | 2 | 9 |
| **Sana'a** | 26,798 | 21.4 | 3 | 5 | 2 | 3 | 0 | 7 | 2 | 3 | 25 |
| **Taizz** | 28,261 | 9.3 | 1 | 2 | 1 | 1 | 1 | 7 | 4 | 3 | 20 |
| | Total | | 24 | 43 | 36 | 28 | 1 | 105 | 32 | 44 | |

## Annex 4: Safeguards Action Plan

### I. Objectives

1. **The Safeguards Action Plan (SAP)** provides a time-bound plan for the environmental and social safeguards instruments, the production of which has been deferred until implementation under paragraph 12 of OP10.00, allowing for condensed procedures and deferral of the safeguards instruments in situations of urgent need for assistance. This SAP provides general policies and procedures to be integrated into the implementation of the World Bank-supported Emergency Health and Nutrition Project Second Additional Financing.

2. The objective of the SAP is to ensure that the Environmental and Social (E&S) assessment and management instruments and processes for planned WSS activities are in compliance with the World Bank's operational safeguards policies, and are duly and diligently implemented in a logical sequence with the environmentally and socially relevant project activities. E&S assessments and instruments should be completed, disclosed and consulted on before (i) project-funded activities with relevant E&S footprints may commence; and (ii) in case of more complex / large scale activities, before designs are finalized and contracts awarded.

3. This SAP prepared by the Task Team complies with World Bank safeguards policies, specifically OP10.00, paragraph 12, and OP4.01 (paragraph 12).

### II. Compliance with World Bank Safeguards Policies

4. Considering the nature and magnitude of potential environmental impacts from relatively limited scale and magnitude of rehabilitation and improvement works, ***the proposed operations is classified as category 'B'***. Activities supported by the proposed operation are expected to have certain site-specific adverse environmental and social impacts. This SAP has been developed specifically for these proposed activities to ensure due diligence, and to ensure consistent treatment of environmental and social issues by the implementing agency i.e. UNICEF. The purpose of this plan is to also assist the UNICEF in providing a time-bound plan for the environmental and social safeguards instruments for all subprojects for their likely environmental and social impacts, identifying E&S management requirements and prioritizing the investments. The World Bank's policies on Environmental Assessment (OP/BP 4.01) are triggered for this Project. ***No sub-components or subprojects of category "A" will be eligible for funding.***

5. As an emergency operation, the requirement to carry out an Environmental and Social Management Framework (ESMF) to guide the preparation of further safeguards documents -such as site-specific ESMPs- will be undertaken during project implementation. At the same time, prior to sub-project appraisal, the implementing agency will apply the following minimum standards during implementation: inclusion of standard environmental codes of practice (ECOP) in the rehabilitation, improvement and construction bid documents of all components and subcomponents; review and oversight of any major reconstruction works by specialists; implementation of environmentally and socially sound options for disposal of debris; and provisions for adequate budget and satisfactory institutional arrangements for monitoring effective implementation. .

6. For all project activities, which may include civil works, a social and environmental safeguards screening tool, as part of the ESMF, will be developed and applied, along with the specific sub-project level instruments that will be necessary to cover both environmental and aspects, including sub-projects Environmental and Social Impact Assessment (ESIA) if determined necessary, site specific Environmental and Social Management Plan (ESMPs). Additional measures will support the implementation, monitoring, and compliance to the ESMF, including; (a) annual fiduciary audits/post-review of a subset of sub-projects with respect to design and implementation of site specific ESMPs and (b) project supervision missions by the Bank will include environmental and social implementation expertise to support client during the entire project cycle.

7. **OP 4.01 Environmental Assessment.** The proposed project will mainly focus on the rehabilitation and maintenance of water networks, wastewater networks, wastewater treatments (WWTP) plant that are in deteriorated condition, and support water and sanitation laboratories at each local water utility and WWTP. The work in these areas will be done under OP 4.01 and it is not anticipated that OP 4.04, OP 4.10, OP 4.11, OP4.37 and OP 7.50 would be triggered. To ensure proper management of potential environmental impacts that might result from the implementation of activities that generate medical waste, the existing Medical Waste Management Plan, which has been prepared for the parent project, will continue to be implemented under the proposed AF. This Medical Waste Management Plan (MWMP) will be reviewed and updated, if needed.

8. **OP 4.11 Physical Cultural Resources.** Since the proposed operations will not entail new construction and focus only on rehabilitation and improvement of existing water and wastewater networks and wastewater treatment plants, it is not expected that any damage of physical cultural resources to take place.

9. **OP 4.37 Safety of Dams.** The proposed project does not include construction or rehabilitation of any dams or carry out activities that may be affected by the operation of an existing and therefore this OP would not be triggered.

10. **OP 7.50 Projects on International Waterways**. The proposed project does not include any subprojects that would trigger this OP.

11. The task team has not identified any meaningful alternatives to proposed project design, as the project contents, geographic scope and activities are predefined by pre-existing infrastructure. There is some scope for variation in identifying subprojects; the identification of the actual areas to be included into the project will be based on extensive guidance by pre-established criteria.

## III. Sequencing and Tentative Implementation Schedule for Safeguards Processing

12. The implementing agency (UNICEF) will apply the following minimum standards during implementation: (1) inclusion of standard Environmental Codes of Practice (ECOP) in the bid documents for rehabilitation, improvement and reconstruction activities for all subprojects; (2) review and oversight of any major reconstruction works by specialists; (3) implementation of environmentally and socially sound options for disposal of any hazardous waste (e.g. debris or drain spoils, oil-contaminated soils or rubble); and (4) provisions for adequate and satisfactory budget and institutional arrangements for monitoring effective implementation.

13. Time-bound deployment of the following safeguards instruments is anticipated to manage and mitigate the potential adverse impacts:

a. ***During project preparation:*** a conceptual approach and a TOR for an ESMF have been prepared and shared with the implementing agency. Preparation of the ESMF is already underway and is expected to be completed, approved and disclosed by September 1, 2017.

b. ***Immediately after project effectiveness, during the first quarter of implementation****:* The ESMF will be prepared and disclosed outlining the overarching safeguards governing approach, processes and specific instruments for sub-projects. The ESMF will cover the following topics: (i) scope of project activities; (ii) typologies of expected impacts, as well as magnitudes and durations; (iii) types of E&S assessment/management instruments including the range of mitigation measures tailored to the identified sub-project/impact typologies; (iv) methodology for sub-project E&S screening, classification and allocation of specific E&S instruments; (v) review of relevant institutions, key players, roles and responsibilities and administrative processes; (vi) capacity analysis and training requirements; (vii) update of cost estimates for E&S management measures (viii) Grievance redress mechanism; (ix) Consultation; and (x) Arrangements for monitoring and evaluation. The ESMF will also contain a positive and negative list of eligible/non-eligible subprojects.

c. ***During implementation phase, from the second quarter onwards:*** Development of site-specific E&S management instruments for the expected typologies (e.g. repair/reconstruction of water networks, wastewater networks, wastewater treatment plants, as well as the support of support water and sanitation laboratories at each local water utility and WWTP). For the expected scope of subprojects freestanding, comprehensive ESIAs will mostly not be required, as all structures and installations will have existed before, and the project would only finance their repair, reconstruction or reinstatement. The expected typologies of repair/reconstruction would mostly require simple, checklist-type ESMPs (E&S management plans) that would become part of the works contracts, set the E&S standards and compliance mechanisms, and serve as a contractual basis for supervision and enforcement of good E&S practice during the works. For subproject with more potential negative impacts such as the rehabilitation of WWTP, site-specific ESMPs might be prepared including specific measures for the protection of soil, ground water and public health in project's sites or areas adjacent to them. It is mentionable that no project activities can be conducted that present environmental and/or social risks and impacts prior to preparation of sub-project instruments (e.g. site-specific ESMPs) for that activity.

14. **Preparation time for safeguards instruments** including Bank review, revisions, clearance, and approval steps. The preparation of the ESMF is expected to be completed, reviewed, cleared and disclosed in country and the Bank's external web site by September 1, 2017. The preparation of limited ESMPs, if needed, will range from 1 to 3 months including the World Bank review and approval, disclosure, consultations and finalization.

15. **Consultations and Disclosure**. The ESMF will be disclosed in-country and at the Infoshop after Bank review as final draft versions for a period no less than 30 days during which the Client will conduct consultations with the affected stakeholders. The consultation mechanism for the sub-project specific ESMPs, if needed, will be designed with appropriate depth and breadth depending on the specific situation's complexity and dimensions. For smaller works, such as the rehabilitation of water networks, consultations will be for portfolios of multiple projects, based on large scale planning documents and generic E&S sample instruments.

16. **Implementation of safeguards instruments**, if applicable, development of secondary instruments (e.g., subproject ESMPs to be developed, by whom and by when). After finalization of the ESMPs, no further safeguards instruments will be required. No tender package will be issued without an attached ESMP and no contract signed without respective clauses obliging the Contractor to the ESMPs use and implementation.

17. **Implementation Monitoring:** The monitoring of safeguards compliance will be carried out during project implementation. UNICEF will dedicate environmental and social field officer(s) to ensure compliance with the E&S safeguards requirements. In addition, safeguards monitoring will be included into the TOR for a third party monitoring consultant, who will also be responsible for technical quality, measurements, procurement and fiduciary compliance. The TOR will specify that the Consultant will have strong field presence via local agents, and will cover all key areas and construction activities. The TOR will further specify detailed methodology and approach for safeguards monitoring, recording and reporting, as well as measures for rectification in case of non-compliance.

## IV. Consultation and Disclosure

18. This SAP is subject to public disclosure as part of the Project Paper. The SAP will be shared with the relevant implementing agency and concerned governmental and nongovernmental organizations in Yemen. In addition, the SAP has been disclosed both in-country (in the appropriate communication channels and UNICEF webpage) as well as the World Bank website during project preparation.

19. The proposed operations will support a number of feasibility and detailed design studies for future infrastructure investments for which World Bank safeguard policies relating to consultation and disclosure will apply. During the first year of project implementation, the ESMF will be prepared and consulted. Prior to the commencement of any civil works, site specific ESMPs will be prepared and consulted upon with the project-affected groups and local nongovernmental organizations on the project's environmental and social aspects, and will take their views into account. The implementing agency (UNICEF) will initiate these consultations as early

as possible, and for meaningful consultations, will provide relevant material in a timely manner prior to consultation, in a form and language that are understandable and accessible to the groups being consulted with.

## V. Roles & Responsibilities, incl. Supervision Arrangement for Safeguards Preparation, Implementation & Monitoring

20. The responsibility for the implementation of the above described safeguards instruments and processes will be with UNICEF that will be responsible for compliance with national environmental regulations, as well as the Banks E&S safeguards policies. UNICEF will be staffed with qualified environmental and social specialists that will follow-up with the preparation and implementation of the safeguards instruments.

21. The Bank Task Team will be responsible for ensuring the timely commencement of the preparation of ESMF and site specific ESMPs, as needed. The task team will ensure that no contracts for works that have a physical impact are signed or reconstruction, or rehabilitation of proposed activities start without the required safeguards instruments in place.

22. The Task Team will also review ToRs as well as the ESMF and site specific safeguards instruments e.g. ESMPs to ensure that their scope and quality are satisfactory to the Bank. In addition, the task team will review tender documents and reconstruction contracts regarding due consideration of the safeguards instruments, and the inclusion of effective and enforceable contractual clauses. Finally, the task team will also monitor the implementation of the different prepared instruments through regular supervision missions (which will include an environmental and/or social specialist) during which document reviews, and site visits and spot-checks by TPM will be conducted as needed.

## VI. Estimated Costs for Safeguards Preparation and Implementation Process

23. The cost of preparing the required safeguards instruments is estimated to be about US$7,000 for the ESMF, and about US$12,500 for the subsequent safeguards instruments (assuming ca. 5 ESMPs, at US$2,500 per document).

24. The implementation of ESMPs is expected to cost only a small fraction of design and construction cost, as most mitigation measures will be very generic, off-the-shelf, and implementable without specialized skills, experience or equipment. Assuming a proportion of about 0.5 %, for every US$1 million spent on rehabilitation and reconstruction, therefore US$100,000 would be spent for environmental mitigation and management measures.

## VII. Safeguard Screening and Mitigation

25. The selection, design, contracting, monitoring and evaluation of the project interventions will be consistent with the following guidelines, codes of practice and requirements. The safeguard screening and mitigation process:

- A list of negative characteristics rendering a proposed intervention ineligible for support
- A proposed checklist of likely environment and social impacts to be filled out for each intervention or group of interventions.

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