EVALUATION REPORT

Formative Evaluation of the Inclusion and Mainstreaming of Climate Resilience in UNICEF Cambodia WASH Programme.

Final Evaluation Report: Annexes (Volume II)

UNICEF Cambodia
May 2022

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United Nations Children's Fund

Exchange Square, 5th floor

Bldg. no. 19&20 Street 106, Sangkat Wat Phnom, Khan Daun Penh, Phnom Penh

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For further information, please contact:

Evaluation Office

United Nations Children's Fund

Three United Nations Plaza

New York, New York 10017

evalhelp@unicef.org

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ANNEX A: TERMS OF REFERENCE

TERMS OF REFERENCE FOR INSTITUTIONAL SERVICES

UNICEF CAMBODIA COUNTRY OFFICE

Title of Consultancy/Works: Formative evaluation of the inclusion and mainstreaming of climate resilience in UNICEF Cambodia WASH Programme

Requesting Section: WASH and Evaluation

1. Background

UNICEF Cambodia Country Office (CO) is commissioning a formative evaluation of the inclusion and mainstreaming of climate resilience into its water, sanitation and hygiene (WASH) Programme over the life of the current Country Programme, 2019 to date. The purpose of the evaluation is to identify the appropriateness, effectiveness, potential for impact and sustainability of these interventions in order to provide key lessons learned to UNICEF Cambodia office for the future improvement of climate resilient WASH programming.

Addressing climate change is a global, regional and country priority for UNICEF, and it is recognized that WASH is one of the sectors at risk from climate change, and consequently has an important role to play in supporting climate adaptation and mitigation.

Globally UNICEF (2020) has identified three key elements to WASH climate resilient programming:

- Ensuring that WASH infrastructure and services and behaviours are sustainable, safe and resilient to climate related risks;
- Ensuring that resilient WASH programmes contribute to build community resilience to adapt to the impacts of climate change;
- Working towards a low carbon WASH sector.

While UNICEF has been implementing climate resilient WASH interventions in Cambodia for a number of years, and in more than 45 countries globally, a formal evaluation has not been undertaken at country office level. This evaluation is expected to not only support improvements in the integration and mainstreaming of climate resilience in WASH programming in UNICEF Cambodia, but also to provide lessons and recommendations on how this could be done in the WASH sector more broadly, as well as in other sectors within UNICEF.

These Terms of Reference (ToR) set out the purpose, objectives, methodological options and operational modalities for an institutional contract to undertake this evaluation. **The evaluation is expected to start in July 2021 and to be completed by December 2021 for approximately 20**

working weeks. It will be supervised by an Evaluation Management Team led by an Evaluation Manager (Evaluation Specialist, UNICEF), in collaboration with a UNICEF WASH Specialist. It will be technically supported by UNICEF East Asia and the Pacific Regional Office (EAPRO) Environment and Climate Change, WASH, and Evaluation Sections.

1.1. Country background – climate change

Cambodia has a tropical monsoon climate and is characterized by wet (May to October) and dry (November to April) seasons.

Mean annual temperature has increased by 0.8˚C since 1960 with a rate of around 0.18˚C per decade. In almost every season, the frequency of hot days and hot nights has also increased significantly since 1960. Mean rainfall over Cambodia does not show any consistent increase or decrease since 1960 and the proportion of rainfall that occurs in heavy events has not altered significantly since 1960[1].

Cambodia experiences almost all types of hydro-meteorological hazards, including floods, drought, heavy storms/ typhoons, and most geographical regions of the country – the Riverine Central Plains, coastal ecosystems and the Dangrek mountain range in the north and Cardamom mountains in the southwest - are exposed to one or more of these hazards[2].

Increases in mean annual temperature in Cambodia are predicted to be between 1.4 and 4.3°C by 2100. Mean annual rainfall is also predicted to increase, with the most significant increases experienced in the wet season. As with the other countries in the Greater Mekong Sub-region, flooding and droughts are expected to increase in terms of frequency, severity and duration[3].

1.2.WASH and climate resilience in Cambodia - background

In 2010, the United Nations General Assembly explicitly recognized water and sanitation as human rights that are "essential for the full enjoyment of life and all human rights". Article 24 of the Convention of the Rights of the Child addresses rights to health, water, food, and the environment.[4]

The Royal Government of Cambodia's National Strategic Plan (NSP) for rural WASH has the vision that 'Every person in rural communities has sustained access to safe water supply and sanitation services and lives in a hygienic environment by 2025'. The Ministry of Rural Development's National Action Plan for Rural Water Supply, Sanitation and Hygiene (NAP)

[1] Conseil Santé (2019) Strengthening Resilience to Climate Change in the Health Sector in the Greater Mekong Subregion: National & Provincial Vulnerability and Adaptation Assessments in Cambodia

[2] Ibid

[3] Ibid

[4] Summarised as: "Children have the right to the best health care possible, clean water to drink, healthy food and a clean and safe environment to live in. All adults and children should have information about how to stay safe and healthy."https://www.unicef.org/sop/convention-rights-child-child-friendly-version

2019-2023, has milestones to support the achievement of that vision, which are also articulated in Cambodia's SDGs results framework.

Data on current WASH service levels in Cambodia show gaps in basic WASH services, particularly in rural areas and amongst the poorest – Figure 1 (n.b. further WASH data for Cambodia is available from the UNICEF and WHO Joint Monitoring Programme for WASH: www.washdata.org)

Figure 1: Percentage of population with access to WASH services, disaggregated by service level, and setting – source: UNICEF/WHO JMP 2017.

Cambodia	Drinking water			Sanitation			Hygiene		
	National	Rural	Urban	National	Rural	Urban	National	Rural	Urban
	2017	2017	2017	2017	2017	2017	2017	2017	2017
Safely managed	26	17	57	-	-	-	-	-	-
Basic service	53	56	41	59	48	96	66	60	88
Limited service	0	0	1	6	7	4	13	15	5
Unimproved	10	13	1	3	3	0	-	-	-
No service	11	14	1	32	41	0	21	26	7

While the projected impact of climate change on precipitation have higher levels of uncertainty than projected temperature increases, and the impact of future dam development on hydrological systems is also an area of uncertainty, data exists on the vulnerability of WASH services in Cambodia to seasonal variations: a vulnerability which climate change risks amplifying, presenting further challenges to achieving and sustaining national and global targets of universal access to WASH.

Rural populations experience a 22 percentage point wet to dry season decrease in those using improved water sources, compared to a 2 percentage point decrease in urban areas during the same period[5]. The poorest rural households experience a 20 percentage point drop in those using improved water sources, compared to a 11 percentage point drop amongst the richest rural households[6].

In the areas of sanitation, it is estimated that over 25% of the population is affected by challenging environments, living in areas affected by floods, high ground water, and other barriers to effective sanitation and faecal sludge management[7]. Of that population, the majority (62.5%) live in seasonally affected flood prone areas[8].

[5] UNICEF/WHO JMP 2017 Cambodia country file 2017
[6] Ibid
[7] Small-Scale Wastewater Treatment Technologies for Challenging Environments. Bukauskas et. al., 2017.
[8] Ibid

Seasonal vulnerability is also seen in water supply services in health centers: 52% of health centres report that their available water sources do not provide enough water for the whole year for all purposes (drinking, food preparation, personal hygiene, medical activities, cleaning and laundry)[9]. Research has also indicated that burdens of water-borne diseases – cholera and diarrhea (with diarrhea prevalent in children under-five and an important factor in malnutrition) - may increase if climate change induced water-scarcity is exacerbated and extreme weather events threaten safe water and sanitation services. Furthermore, rising temperatures may increase the risk of diarrheal disease[10].

Cambodia's updated Nationally Determined Contribution (2020) recognises these challenges and identifies "resilient and adaptive rural water supply and sanitation construction" as a priority adaption action (NDC, 2020 – adaptation action 58), however detailed planning in order to implement this action is still required.

1.3. UNICEF global WASH strategy (2016-2030), Cambodia's WASH Programme (2019-2023) and the inclusion of climate resilience - background

UNICEF's global 'Strategy for Water, Sanitation and Hygiene: 2016-2030' identifies climate resilient WASH as one of the 'new directions' for UNICEF's WASH programming to move in to – WASH in urban areas, and working with private sector are also identified as new directions.

The global strategy identifies the risks posed by climate change and the need for "climate change risk assessment, and building the resilience of communities, water and sanitation systems, and institutions, must be at the core of sectoral programme design, planning resource allocation, implementation and monitoring."

The global strategy frames climate adaptation as part of the promotion of resilient development, cites the concept of the integration of climate measures, and recommends the UNICEF/Global Water Partnership 'Strategic Framework for WASH Climate Resilient Development'[11] (2017) as a key guidance document.

More recently (in 2020) UNICEF has further updated global guidance to support country offices in developing climate resilient WASH in their programming through the 'UNICEF GUIDANCE NOTE: How UNICEF Regional and Country Offices can shift to climate resilient WASH programming'. Guidance on climate resilient WASH is also available from other sources, such as the UNEP GEF supported (2011) Technologies for Climate Change Adaptation guidebook – listed in refences below.

[9] Cambodia National Institute of Public Health in collaboration with Department of Hospital Services, UNICEF, WaterAid, World Health Organization (2017) 'Assessment of Water, Sanitation and Hygiene in Public Health Facilities in 5 Provinces in Cambodia'

[10] Conseil Santé (2019) Strengthening Resilience to Climate Change in the Health Sector in the Greater Mekong Subregion: National & Provincial Vulnerability and Adaptation Assessments in Cambodia

[11] https://www.gwp.org/en/WashClimateResilience/

UNICEF Cambodia's country programme 2019-2023[12] includes the WASH outcome level result that: 'by 2023, underserved children equitably use safe water and practise safe sanitation and hygiene, including during humanitarian situations'.

The Cambodia 'WASH programme strategy note' (2018) presents the analysis and design used in the development of the WASH programme, including through a WASH programme theory of change (see Annex C).

The WASH programme strategy note, in response to priority needs, and UNICEF's added value, places UNICEF's Cambodia WASH programme more (although not exclusively) in the rural setting, and more (although not exclusively) focused on supporting SDG basic (as opposed to safely managed) service levels.

While climate resilient WASH was not the only factor in WASH programme design, climate resilience was included in programme analysis and design, and efforts have been made to mainstream climate resilient WASH in programme implementation.

Amongst the seven bottlenecks identified in the WASH theory of change (which range from financing gaps, national to sub-national coordination linkages, data and data usage gaps; regulatory limitations; and gaps in young child WASH programming), the identification of climate change was included in amongst three bottlenecks:

- insufficient climate resilience and quality control in water supply;
- inequitable rural sanitation for poor households and those living in challenging environments, with high levels of open defecation; and
- weak climate resilience and inclusiveness of WASH in schools and health care facilities.

Climate resilience was also included as part of the ToC problem statement: "Cambodian children (girls and boys) are exposed to preventable [primarily referring to WASH preventative public health risks: for example WASH barriers to faecal-oral pathogen transmission], climate related WASH risks at home, school, and in health care facilities". And amongst the ToC pathways to change with "modelling and scale-up of climate resilient WASH" one of the seven pathways identified.

The WASH Programme Strategy Note also identifies climate resilient WASH as a response to potential external risks - "Extreme climate related events (such as drought or flood) or other health related emergencies affect Cambodia and require a response from UNICEF, shifting resources away from planned programme." – to which the strategy note propose as response "Climate resilient WASH and strengthening of national emergency preparedness and response systems included in WASH programme planning."

Amongst the three WASH output level result areas for the country programme (related to the enabling environment; sanitation and hygiene; and water supply), rural sanitation and hygiene is the largest single area in terms of anticipated resource allocation: in part due to the scale of the

[12]The Cambodia Country Programme Document available online https://www.unicef.org/cambodia/media/2361/file/CountryProgramme_OVERVIEW_25x25_2019_Final.pdf%20.pdf

needs in this area, and in part due to UNICEF's track record and comparative added value – reflected also in donor funding to UNICEF for this area.
And in the area of sanitation ending open defecation through the achievement of basic sanitation, and larger area (commune, district, and province) open defecation free achievement through a district wide approach is a dominant theme in the identification of UNICEF's added value, and was a dominant factor, with government counterparts, in selecting priority programme implementation areas during programme design.
As a consequence climate resilience was not explicitly cited in WASH programme output results relating to output 1 (the enabling environment) and 2 (sanitation and hygiene) – although activities under these output areas have included climate resilient aspects.
WASH programme output 3 (connected to water supply – for which a strong climate related vulnerability is also well documented) does explicitly refer to climate resilience:

- "By 2023, state and non-state actors have strengthened capacity to implement programmes to increase equitable access to basic, safe, climate resilient water supply for people at home, in schools, and health care facilities in targeted UNICEF districts."

And the indictors for this output also explicitly include climate resilient parameters:

- Target population with access to basic, safe, climate resilient water supplies;
- Target communes with water safety plans linked to Commune Investment Plan through UNICEF support;
- Number of target schools with basic, safe, climate resilient water services;
- Number of target health care facilities with basic, safe, climate resilient water services.

In UNICEF's WASH annual work plans (developed and signed with government counterparts to provide further details and guide programme implementation) in 2019, 2020, and 2021 climate resilient WASH activities are included under all WASH outputs.
To facilitate understanding of the integration and mainstreaming of climate resilience in the implementation of UNICEF Cambodia WASH programme, climate resilient actions implemented during the current country programme (2019 to date), have been mapped and are presented in Annex A which include details on location, timelines, budget, status, reach, implementing entities, development partners and duty bears for each action.
These actions have been categorised by the three WASH country programme outputs, and, in addition - to provide a clearer view on how these map against global frameworks - by the 4 segments (i. understanding the problem; ii. identifying and appraising options; iii. delivering solutions; and iv. monitoring results) identified in the UNICEF & GWP (2014, updated 2017) 'WASH Climate Resilient Development Strategic Framework' and 9 steps of UNICEF (2020) 'UNICEF GUIDANCE NOTE: How UNICEF Regional and Country Offices can shift to climate resilient WASH programming'.
To summarise:

- Under WASH output 1, connected to the WASH enabling environment, 4 climate resilient related actions have/are being implemented to date with a total estimated budget of $170,000, and a national reach, and sub-national focus on 5 provinces;
- Under WASH output 2, connected to sanitation and hygiene, 2 climate resilient actions have/are being implemented, with a total estimated budget of $145,000, and sub-national focus on 1 province;
- Under WASH output 3, connected to water supply, 3 climate resilient related actions have/are being implemented, with a total estimated budget of $1.1 million, and sub-national focus that has included 7 provinces;
- Under WASH 'cross-cutting' – including UNICEF WASH planning and work on WASH in institutions (schools and health care facilities), 7 actions have/are being implemented, with a total estimated budget of $2.8 million, and national reach and sub-national focus that has included 6 provinces and 5 cities.

Annex B provides further narrative explanation of this summary, and the details presented in the table on Annex A.

2. Purpose and objectives of the consultancy/Contract

A formative evaluation of climate resilience in the WASH Programme was identified as a priority evaluation in the UNICEF Cambodia Costed Evaluation Plan 2019-2023. It was strategically included due to climate resilient WASH being an unevaluated and new approach to WASH programming.

The evaluation is expected to identify the relevance, coherence, effectiveness and sustainability of the interventions, as well as identifying lessons learned and opportunities to strengthen programming in the second half of the country programme, as well as laying the foundation for the next country programme - after 2023.

The evaluation will take stock of 2.5 years of programming, and based on this will assess both programme design and early implementation. Based on this assessment, the formative and forward-looking component of the evaluation will help UNICEF explore ways to enhance its capacity to implement climate resilient WASH programming, improve its ability to connect to other sectors and maximize the value for money of this strand of work. The evaluation will identify lessons, blind-spots and possible missed opportunities as well as good practices and innovations. The evaluation will provide strategic recommendations for further strengthening implementation in order maximize achievement of results and ultimately, impact. The evaluation will also promote accountability to donors as well as rights-holders by reassuring internal and external stakeholders of the level of performance and quality of the programme they have supported.

The primary users of the evaluation include UNICEF Cambodia and government counterparts, UNICEF EAPRO plus EAP region countries, and UNICEF HQ. UNICEF Cambodia will use the evaluation findings and recommendations to strengthen its climate resilient WASH programming in the current country programme cycle as well as to guide its inclusion in the next country programme. UNICEF EAPRO will use the findings as inputs to enhance support to implementation of the climate resilient framework at the CO level. UNICEF HQ will use the findings to contribute to enhanced global programming, especially when it comes to applicability and contextualization by the country offices. Other users include the key stakeholders who are also engaged in climate WASH programming such as the Royal Government of Cambodia, including the Ministry of Rural Development, Ministry of Industry, Science, Technology and Innovation and NGO partners. Donors who are interested in climate resilient programming may also use the evaluation.

The objectives of the evaluation include the following:

1. To develop a "benchmarking" paper that defines and provides guidance for measuring progress and success in terms of mainstreaming and integrating climate resilience in programming, and which provides guidance on how to best measure climate resilient interventions, including through development of indicators;
2. To provide an assessment, in terms of relevance, coherence, effectiveness and sustainability, of the extent to which the UNICEF Cambodia WASH Programme has been able to successfully integrate and mainstream climate resilience in WASH programming;
3. To identify challenges, missed opportunities and blind spots, gaps and bottlenecks in designing, contextualizing, mainstreaming and implementing climate resilient WASH and provide co-created recommendations on how to best overcome these in the remaining period of the current country programme (immediate and medium term) and in the next country programme (medium to long term);
4. To provide and document co-created, actionable recommendations on how UNICEF's climate resilient WASH programming, and contribution to national priorities (including those identified in the Royal Government of Cambodia's climate change Nationally Determined Contribution) can be further enhanced and scaled up as part of continuous learning and improvement.

3. Programme Area and Specific IR Involved:

Programme Area: WASH
IR: Output 1, Key result area 1.8

Included in approved AWP: (yes/no) Yes

4. Work Assignments/TOR

4.1.Evaluation Scope

What and What not- The evaluation will cover the WASH Programme of the UNICEF Cambodia country office and its progress from 2019-to date. As only 2.5 years have passed in this country programme, evaluators will not be expected to measure the effectiveness of long term outcomes, rather the evaluators will be expected to focus on the relevance, coherence, effectiveness and sustainability of action to date, and provide an assessment of the potential for achieving impact, but will not assess impact itself. Efficiency will also not be included given the status of implementation of most of the initiatives.

Where- National with a sub-national focus: Kampong Cham; Kampong Speu, Kratie, Mondulkiri, Ratanakiri, Svay Rieng and Takeo, and (design and preparatory work only) the cities Krong Bavet; Krong Serei Saophoan; Krong Battambang; Krong Kampong Chhnang; and Krong Chbar Morn – see Annex A for further details.

The geographical focus follows areas where climate resilient WASH has been implemented in the current country programme.

When- The evaluation will cover climate resilient WASH programming of the current country programme, starting on January 2019 to date, noting that some WASH resilient climate interventions (particularly related to climate water supply services) finalized in early 2019 were carried over from the previous country programme.

4.2.Evaluation Criteria

The evaluation will assess the **relevance, coherence, effectiveness and sustainability** of UNICEF Cambodia's inclusion and mainstreaming of climate resilience in its WASH programme**.** These criteria are mainly inspired by the Organisation for Economic Co-operation and Development's for the Development Assistance Committee (OECD/DAC) and will be informed by **equity, gender equality and human rights considerations** in line with UNICEF's Evaluation Policy (2018)[13] and the United Nations Evaluation Group (UNEG) Norms and Standards[14] (2016). The criteria chosen will help answer the questions on the programme design itself with relationship to the Cambodia context, its capacity to achieve results and its potential for sustainable changes and sustainable programmatic approaches. The additional criteria ensure that the focus remains on those who are most left behind. Criteria not included are efficiency, due to potential lack of available data, and impact (as described in the evaluation scope).
This evaluation will be non-experimental, mixed methods and utilization focused. It is expected that the evaluation uses a theory-based approach and also draws from approaches used in design

[13] https://www.unicef.org/evaldatabase/files/Revised_Evaluation_Policy_Interactive.pdf
[14] http://www.unevaluation.org/document/detail/1914

evaluations, process evaluations, as well as in consistency and results evaluations. Restructuring of evaluation questions as well as agreeing on the feasible reach and depth will be part of the inception report.

4.3.Evaluation Questions

Key evaluation questions, and possible exploratory sub-questions, under each criteria are described below. Please be aware that the inception phase will be the time to review and confirm these questions, and the firm is able to propose alternative questions that are meaningful and respond to the methodological approach and availability of data finally agreed upon.

Relevance: *The extent to which the integration of climate resilience into the WASH programme is suited to the priorities and policies of the target groups, national government and donors, and how relevance could be further enhanced, including:*

1. How well aligned was the integration of climate resilience into the WASH programme with the available UNICEF global guidance (i.e. WASH Climate Resilient Strategic Framework) or other available guidance as well as with national policies? When answering the question please explore:
    - **a.** Efforts made to align to both global and national policies;
    - **b.** Appropriateness of the support provided by UNICEF EAPRO and HQ for using the guidelines;
    - **c.** Degree of contextualization of global guidance to ensure relevance to the Cambodian context.
2. How well does the climate resilient programming meet the challenges of climate change in Cambodia, and meet the needs of the most vulnerable populations? When answering this question please explore:
    - **a.** Were the climate risks correctly identified?
    - **b.** Did the selection of geographical locations to implement climate resilient actions respond to clear identification of risks and needs? Should there be changes or adaptations in the focus areas for climate resilient programming?
    - **c.** Do the ongoing activities respond to the most pressing risks and needs identified?
3. Is the design the WASH programme and its climate resilient aspects conducive to achieving the outputs and final outcomes defined by UNICEF Cambodia for climate WASH? When answering the question please consider:
    - **a.** Was climate resilience incorporated in all areas where it could have been incorporated in the WASH programme? Are there missed opportunities of areas that could benefit from stronger inclusion of climate resilience in the future?
    - **b.** Are there design and implementation features that could be improved and strengthened?
4. Looking forward, how can climate resilience be best incorporated into the WASH programme following recently released guidance[15], and in particular using the nine-steps

[15] UNICEF (2020) 'UNICEF GUIDANCE NOTE: How UNICEF Regional and Country Offices can shift to climate resilient WASH programming'

framework proposed therein? What specific changes would be needed to be aligned with the new existing frameworks? What gaps/limitations exist in the newly released guidance that would need to be addressed for its fuller use in Cambodia?

Effectiveness: The extent to which the UNICEF Cambodia WASH programme has effectively mainstreamed and incorporated climate resilience into its programme, the effectiveness of the approach in achieving its short-term objectives/intermediate conditions for change and potential for achieving long term outcomes/outcome conditions for change, as defined in the ToC results framework. *Following is suggested key effectiveness questions:*

5. How effective has the WASH programme been in creating an enabling environment conducive to achieving climate resilient WASH services and communities? (national level)
6. How effective has the WASH programme been in reducing climate related vulnerabilities in the areas it has started working in? In case it is too early to measure, is there objective evidence that points to how the activities planned and under implementation will reduce vulnerabilities?
7. Have climate risks to WASH services, infrastructure and community exposure been thoroughly considered and included in assessment and monitoring tools? How well has the programme been able to measure and monitor climate resilient indicators? What would be possible improvements in the way climate resilience is measured, monitored and reported?
8. To what extent has the WASH programme been effective in enhancing climate resilient behavioural change and governance at community and local level?
9. How effective has the WASH programme been in innovating and developing approaches through the use of downscaled climate projection data for the selection of target areas, and water supply design tools; climate water safety planning processes; the selection, design, and application of climate resilient WASH services; and in providing inputs to climate and WASH related national plans, technical guidance, and standards.
10. What actions can be recommended to improve UNICEF's support to climate resilient WASH priority actions identified in the Royal Government of Cambodia's climate change Nationally Determined Contribution (2020) going forward?

Note: When assessing effectiveness questions, the programme cycle should be kept in mind. When it is too early to assess effectiveness at the outcome level, effectiveness should be assessed at output level and consider both progress made as well as potential for achieving results (outcomes and impacts), even if these have not yet been achieved. The UNICEF Cambodia CPD, WASH PSN and results framework and ToC should be used as guide in terms of expected outputs and outcomes expected to be achieved.

Coherence: *The extent to which there is coherence, compatibility and complementarity between the climate resilient WASH programming and other WASH strategies, plans and services in Cambodia, including:*

11. What role has UNICEF played and what role can UNICEF better play to strengthen and support collaborative working among WASH related ministries and departments to align WASH strategies and plans with national climate change priorities? Have counterparts reached an agreement on the most important climate change risks and how to respond?
12. What role has UNICEF played and what role can UNICEF better play to support and optimize how WASH related ministries (see Annex A) and departments work collaboratively on providing climate resilient WASH services? Are these collaborations clearly stated and formalized in policy documents or strategies?
13. How has UNICEF maximised the opportunities /initiatives in the climate sector to strengthen climate resilient WASH for UNICEF programme and the sector (e.g. NDC, NAP, etc.)
14. Have cross-sectoral opportunities to strengthen climate resilience beyond the WASH sector only (e.g. Health – Nutrition – Education) been identified? Are there clear opportunities in the current CPD to mainstream climate resilient programming in other sectors and strengthen collaboration? How could UNICEF Cambodia best build climate resilience into its whole programme in its next CPD?

Sustainability and scalability *of the initiatives and actions plans within climate resilient WASH programming and possible scalability, including:*

15. To what extent can climate resilient WASH programming activities be scaled-up to other areas in Cambodia and scaled-out to other sectors?
16. What are the gaps and bottlenecks to creating lasting systems and resources that can also support a scale-up of the approach?
17. What financial, social, environmental and institutional capacities are needed to strengthen the sustainability of the results of the climate-resilient WASH programme over time? To what extent do these exists and where are the gaps?

Cross-cutting considerations: *To what extent has WASH programming in Cambodia adequately addressed issues of gender equality, equity and human rights in its design, implementation and outcomes, including:*

18. How well does the climate resilient WASH programming in Cambodia incorporate and encourage equity and gender equality in its interventions, especially for those most disadvantaged (including minorities, people with disabilities, poor) and those identified as most vulnerable to climate change risks? How could these aspects be better incorporated?
19. To what extent are age, gender, disability, ethnicity, climate related vulnerability disaggregated data collected and monitored? How can the current programme performance indicators and monitoring and evaluation framework be strengthened in terms of gender equality, equity and human rights?

Evaluators are encouraged to propose changes to the questions. The proposal should also include a preliminary evaluation matrix with the proposed methods and data sources for answering each evaluation question (and exploring the sub-questions).

5. Deliverables

Evaluation products expected for this exercise are:

1) **An Inception Report** of 40 pages (in English and with executive summary in Khmer), including a summary note in preparation for data collection (report in English and summarised in Khmer).The inception report would also include an initial version of the benchmarking paper, which will be refined throughout the evaluation. The Inception Report will be key in confirming a mutual understanding of what is to be evaluated, including additional insights into executing the evaluation. At this stage, evaluators will refine and confirm evaluation questions, confirm the scope of the evaluation, further improve on the methodology proposed in the ToR and their own evaluation proposal to improve its rigor, as well as develop and validate evaluation instruments.The report will include, among other elements: i) evaluation purpose and scope, confirmation of objectives of the evaluation; ii) evaluation criteria and questions; iii) evaluation methodology (i.e., sampling criteria), along with a description of data collection methods and data sources (incl. a rationale for their selection), draft data collection instruments, for example questionnaires, with a data collection toolkit as an annex, an evaluation matrix that identifies descriptive and normative questions and criteria for evaluating evidence, data analysis methods and a data analysis plan, a discussion on how to enhance the reliability and validity of evaluation conclusions, the field visit approach, a description of the quality review process, a discussion on the limitations of the methodology and ethical considerations; iv) proposed structure of the final report; v) evaluation work plan and timeline, including a revised work and travel plan; vi) annexes (i.e., organizing matrix for evaluation questions, data collection toolkit, data analysis framework); and vii) a summary of the evaluation (evaluation briefing note) to present the evaluation to counterparts and facilitate fieldwork. The Inception Report will be presented at a formal meeting of the Reference Group.
2) **A summary of initial evaluation findings from primary data collection** (in English), of maximum 30 pages in length. This report will present the initial evaluation findings from primary data collection, comprising the desk-based document review and analysis of the technical support project. The report will also include a description of the data collection process, limitations and challenges encountered during data collection, the final sample size and distribution of respondents, etc.
3) **A benchmarking paper** that that defines and provides guidance for measuring progress and success in terms of mainstreaming and integrating climate resilience in programming, and which provides guidance on how to best measure climate resilient interventions, including through development of appropriate indicators;

4) **A draft and final report** of maximum 50 pages plus annexes (in English and Khmer) that will be revised until approved (incl. a complete first draft to be reviewed by the Evaluation Management Team and UNICEF; a second draft to be reviewed by the Reference Group and Regional Evaluation Adviser within UNICEF EAPRO, and a penultimate draft, unless further revisions are needed). The final evaluation report should frequently use visual aids such as infographics, maps, tables, figures and photos to convey key information. The report should be written in a way that emphasises lessons learned, recommendation for programme improvement and utilization approach linked to the formative nature of the evaluation. Linked to utilization approach, it is expected that recommendations are co-created with key stakeholders, and those in final report are the outcome of co-creation efforts.
5) **A PowerPoint presentation** (in both English and Khmer) to be used to share findings with the Reference Group in a validation workshop and updated after finalization of the report for use in subsequent dissemination events; and
6) **A four-page Evaluation Brief** (in both English and Khmer) that is distinct from the executive summary in the evaluation report and it is intended for a broader, non-technical and non-UNICEF audience, and should resemble an e-book or infographic as much as possible.

Other interim products are:

- Minutes of key meetings with the Evaluation Management Team and the Reference Group;
- Copy of the raw qualitative and quantitative data collected during the evaluation; and
- Presentation materials for the meetings with the Evaluation Management Team and the Reference Group as well as for the national level dissemination workshop. These may include PowerPoint summaries of work progress and conclusions to that point.

6. Reporting Requirements

Outlines and descriptions of each evaluation products are meant to be indicatives, and include:
Reports will be prepared according to the UNICEF Style Guide, UNICEF Brand Toolkit and UNICEF Publication Toolkit (to be shared with the winning bidder) and UNICEF-Adapted UNEG Evaluation Reports Standards as per GEROS guidelines (referenced before). All deliverables must be in professional level standard English and they must be language-edited/proof-read by a native speaker.
Khmer translation will be required for: PPT of the inception report and evaluation summary note included in the IR, as well as PPT of final report for the reference group and for dissemination, as well as the final report and its annexes, as well as the summary infographic.
The first draft of the inception and final evaluation report will be received by the Evaluation Management Team and UNICEF who will work with the team leader on necessary revisions. The second draft will be sent to the Reference Group for comments. The Evaluation Manager will

consolidate all comments on a response matrix and request the Evaluation Team to indicate actions taken against each comment in the production of the penultimate draft.

Bidders are invited to reflect on each outline and effect the necessary modification to enhance their coverage and clarity. Having said so, products are expected to conform to the stipulated number of pages where that applies.

7. Location and Duration

An estimated budget has been allocated for this evaluation. As reflected in Table 1, the evaluation has a timeline of six months from July to December 2021. Adequate effort should be allocated to the evaluation to ensure timely submission of all deliverables, approximately 20 weeks (100 days) on the part of the Evaluation Team. The proposal should consider alternatives for meeting the deadlines in the current Covid-19 scenario, including alternative ways of data collection, etc. Even if the work happens remotely, it is expected that meetings and communication will happen on Cambodian time.

Table 1: Proposed evaluation timeline[16]

ACTIVITY	DELIVERABLE	TIME ESTIMATE	RESPONSIBLE PARTY
1. INCEPTION, DOCUMENT REVIEW AND ANALYSIS		**9 weeks (6 weeks effort by evaluators)**	
1. Inception meeting by Skype with the Evaluation Specialist; WASH Manager; and WASH Specialist	Meeting minutes	2 hours Week 1	Evaluation Team, Evaluation Management Team
2. Inception phase visit (incl. initial data collection and desk review; development of evaluation matrix, methodology and work plan, data collection material, drafting of the Inception Report). The development of a draft benchmarking paper will be part of this phase.	Draft Inception Report	Weeks 1-4	Evaluation Team

[16] Please note that the timing of the data collection may change depending on the possibility of carrying out KIIs and FGDs and other contextual factors.

3. Draft inception report+ benchmarking paper and present to evaluation management team	PowerPoint presentation	End Week 4	Evaluation Team, Evaluation Management Team
4. Review inception report by evaluation management team	Evaluation commenting matrix	Week 5	Evaluation Management Team
5. Present revised inception report to reference group	Evaluation commenting matrix with responses	Week 6	Evaluation Manager, Reference Group Evaluation team
6. Reference group comments	Evaluation commenting matrix	Week 7-8	Evaluation Management Team
7. Send revised inception report integrating feedbacks from the reference groups, confirm planning for field visit	Final Inception Report + commenting matrix	Weeks 9	Evaluation Team, Evaluation Management Team, Reference Group
2. DATA COLLECTION AND INITIAL ANALYSIS		**7 weeks**	
1. Pilot data collection tools and conduct field-based data collection	-	Weeks 10-15	Evaluation Team
2. Prepare initial evaluation findings report and	Initial evaluation findings report (incl. desk review), PowerPoint presentation, meeting minutes	Week 16	Evaluation Team, Evaluation Manager, Reference Group
3. ANALYSIS, REPORTING AND COMMUNICATION OF RESULTS		**8 weeks, consecutive (5 weeks effort from evaluation team)**	
1. Prepare and submit first draft of evaluation report	Draft report	Weeks 17-18	Evaluation Team

2.	Comments to first draft evaluation report from Evaluation Management Team	Evaluation commenting matrix	Week 19	Evaluation Manager
3.	Prepare and submit second draft of evaluation report + PPT	Draft report + presentation	Week 20	Evaluation Team
4.	Reference group comments	Meeting minutes	Week 21-22	Evaluation manager and Reference Group
5.	Prepare and submit penultimate draft of evaluation report	Draft report	Weeks 23	Evaluation Team
6.	Submit and present final report to Reference Group and prepare power point presentation that can be used for dissemination purposes and other materials	Final report, executive summary, PowerPoint presentation, meeting minutes	Week 24	Evaluation Team, Evaluation Manager, Reference Group

8. Qualifications or Specialized Knowledge/Experience Required

The evaluation will be conducted by engaging an institution. The proposed team consists of one (1) senior evaluation expert with specific expertise in WASH programming, ideally climate resilient WASH (Team Leader) to conduct the evaluation that will be supported by at least one (1) expert on climate resilient WASH programming. The team should also include two national consultants, with combined expertise ideally in climate resilient WASH programming, but at least in WASH, as well as in proven experience in data collection.

The Team Leader should bring the following competences:

- Having extensive experience (at least 15 years) with an excellent understanding of evaluation principles and methodologies, including capacity in an array of qualitative and quantitative evaluation methods, and experience in leading UN evaluations, familiarity with UNICEF and UNEG Norms and Standards.
- Having extensive experience in WASH programming, ideally in climate resilient WASH programming – planning, implementing, managing or monitoring and evaluation.
- Holding an advanced university degree (Master or higher) in international development, public policy, public administration, development economics or similar, including sound knowledge of WASH and climate resilient WASH programming and familiarity with the rights of children.

- Bringing a strong commitment to delivering timely and high-quality results, i.e., credible evaluations that are used for improving strategic decisions.
- Having in-depth knowledge of the UN's human rights, gender equality and equity agendas.
- Having a dedicated team leadership and management track record, as well as excellent interpersonal, communication and report writing skills to help ensure that the evaluation meets quality standards, is understood and used.
- Specific evaluation experience of climate resilient WASH programming is strongly desired but is secondary to a strong mixed-method evaluation background in the WASH sector, so long as the climate resilient WASH programming expertise of the other team member (see below) is harnessed to ensure the team's collective understanding of issues relating to climate resilient WASH programming.
- Previous experience of working in an East Asian context is desirable, together with understanding of Cambodian context and cultural dynamics.
- The Team Leader must be committed and willing to work independently, with limited regular supervision; s/he must demonstrate adaptability and flexibility, client orientation, proven ethical practice, initiative, concern for accuracy and quality.
- S/he must have the ability to concisely and clearly express ideas and concepts in written and oral form as well as the ability to communicate with various stakeholders in English.

The Team Leader will be responsible for undertaking the evaluation from start to finish, for managing the evaluation, for the bulk of data collection, analysis and consultations, as well as for report drafting in English and communication of the evaluation results.

One (1) Team/technical Expert:

- Holding advanced university degrees (Master level) in Environment, Climate Change, WASH Engineering, Natural Resource Management and/or Environmental Management or related;
- At least 8-10 years of field experience in developing country settings on climate resilient WASH programming;
- Good knowledge of UNICEF programming strategies, field work, procedures and organisational culture;
- Knowledge of additional sectors involved in climate resilient programming (Health and Nutrition, Education. Etc..);
- Be committed and willing to work in a complex environment and able to produce quality work under limited guidance and supervision.
- Having effective communication, advocacy and people skills and the ability to communicate with various stakeholders and to express concisely and clearly ideas and concepts in written and oral form.
- Excellent English communication and report writing skills.

In case the below key qualifications are not visible in the team leader and technical expert, an additional expert (and maximum 2) can be included in the team. These additional team members must be Cambodian nationals in case the team leader and technical expert mentioned above are not from Cambodia.

- Holding advanced university degrees (Master level) in international development, public policy, development economics or similar, or holding a master degree in Climate Change, WASH Engineering, Natural Resource Management and/or Environmental Management or related;
- Hands-on experience in collecting and analysing quantitative and qualitative data, ideally in the areas of health and nutrition.
- Strong expertise in equity, gender equality and human rights-based approaches to evaluation and expertise in data presentation and visualisation.
- Be committed and willing to work in a complex environment and able to produce quality work under limited guidance and supervision.
- Having effective communication, advocacy and people skills and the ability to communicate with various stakeholders and to express concisely and clearly ideas and concepts in written and oral form.
- In depth knowledge and understanding of national policies related to WASH and climate resilient WASH
- Excellent Khmer and English communication and report writing skills.

The Team Member(s) will play a key role in data collection, analysis and presentation, and preparation of the debriefings and will make significant contributions to the writing of the main evaluation report.

The Evaluation Team is expected to be gender and geographically balanced. Back-office support assisting the team with logistics and other administrative matters is also expected. **It is vital that the same individuals that develop the methodology for the RFPS will be involved in conducting the evaluation. In the review of the RFPS, while adequate consideration will be given to the technical methodology, significant weighting will be given to the quality, experience (CV's and written samples of previous evaluations) and relevance of individuals who will be involved in the evaluation.**

9. Evaluation process and methods

Based on the objectives of the evaluation, this section indicates a possible approach, methods, and processes for the evaluation.[17] **Methodological rigor will be given significant consideration in the assessment of proposals. Hence bidders are invited to interrogate the approach and methodology proffered in the ToR and improve on it or propose an approach they deem**

[17] The proposed methodology is just indicative and based on internal experience in conducting similar evaluations. The will be a need to develop a detailed design, analytical methods and tools during the inception phase based on additional literature review and in consultation with UNICEF.

more appropriate. In their proposal, bidder should clearly refer to triangulation, sampling plan, ethical consideration and methodological limitations and mitigation measures. Bidders are encouraged to also demonstrate methodological expertise in evaluating initiatives related to climate resilient WASH programming.

It is expected that the evaluation will be a non-experimental evaluation. It will employ a theory-based, participatory and a mixed-methods approach drawing on key background documents, the existing ToC and the results framework for guidance, as well as include field data collection in the areas where the programme operates and potentially, depending on the methodology proposed, in areas where the programme does not operate (however, large-scale household surveys are not encouraged due to budget limitations). It is expected that the evaluation also draws from approaches used in design evaluations, process evaluations, as well as in consistency and results evaluations.

The evaluation methodology should take consideration of the COVID-19 context, ensuring that high quality is achieved while ensuring safety of enumerators and respondents, as well as flexibility of the methodology to react and adapt to potential travel restrictions within Cambodia.

The evaluation is not expected to include systematic data collection at the household level, but it is encouraged that truly participatory methods are used to capture the voices of mothers, fathers and caregivers, community leaders as well as government officials and service providers. Bidders are encouraged to use, to as much as possible, existing sources of secondary data.

The evaluation is expected to be utilization-focused and use this approach throughout the whole life of the evaluation. In particular, opportunities to co-create the recommendations with the reference to ensure their applicability, relevance and feasibility will need to be ensured.

The following materials and documents exist and will be provided to the winning firm:

Global frameworks and guidance:

- UNICEF & GWP (2014, updated 2017) 'WASH Climate Resilient Development Strategic Framework' https://www.gwp.org/en/WashClimateResilience/
- UNICEF (2020) 'UNICEF GUIDANCE NOTE: How UNICEF Regional and Country Offices can shift to climate resilient WASH programming'
- UNICEF Strategy for Water, Sanitation and Hygiene 2016-2030
- Downscaled climate data resources/site specific reports https://climateinformation.org/
- UNICEF HQ (2020) 'CR SMQ 2020 Guidance - Guidance on the Climate related WASH SMQs'
- De Lopez, T. T. (Ed.), Elliott, M., Armstrong, A., Lobuglio, J., & Bartram, J. (2011). Technologies for Climate Change Adaptation - The Water Sector. Danmarks Tekniske Universitet, Risø Nationallaboratoriet for Bæredygtig Energi. TNA Guidebook Series

National guidance documents, strategic documents:

- Rural WASH National Action Plan 2019-2023
- National Strategy for Rural WASH 2011-2025
- Cambodia Climate Change Strategic Plan 2014-2023
- Cambodia's Updated Nationally Determined Contribution (NDC) 2020-
- Cambodia National Adaptation Plan
- MRD (2015) National Rural Water Supply Technical Design Manual
- MRD (2019) National Emergency Response Contingency Plan on Rural WASH
- MRD (2020) Guiding principles for sanitation in challenging environments
- WBG (2011) 'Vulnerability, Risk Reduction, and Adaptation to Climate Change – Cambodia'
- iDE (2021) 'RESEARCH BRIEF -Linking Climate Vulnerability, Latrine Functionality, and Fecal Sludge Management (FSM) in Rural Cambodia'.

Programme documents with specific mention of the topic of the evaluation

- WASH CPSN 2019-2023
- RWPs
- PCA PDs
- Technical/methodological notes including on design tools using climate data
- Donor proposal – including to J-SDG-Fund

Past studies, research and evaluation including the topic of the evaluation

- EAPRO consultant (2019) 'ASSESSING CLIMATE RESILIENCE IN WASH IN EAST ASIA & PACIFIC REGION: IDENTIFYING OPTIONS FOR FUTURE PROGRAMMING & FINANCING - COUNTRY ASSESSMENT SUMMARY – CAMBODIA'
- Country case study report – Cambodia – of the global evaluation of UNICEF's drinking water supply programme in rural areas and small towns 2006-2016

Monitoring data:

- PCA PD progress/final reports

Data that monitors indicators related to the object of evaluation:

- Target population with access to basic, safe, climate resilient water supplies
- Target communes with water safety plans linked to Commune Investment Plan through UNICEF support
- Number of target schools with basic, safe, climate resilient water services
- Number of target health care facilities with basic, safe, climate resilient water services

Note: Some of the documents are only available in Khmer. It is expected that the firm engages national capacity so that all documents, including those available only in Khmer,are taken into consideration.

At minimum, the evaluation will draw on the following methods:

- Literature review of climate resilient WASH programming, with a focus on the East Asia region.
- Desk review of background documents and other relevant data, including the documents mentioned above;
- Key Informant Interviews (KIIs) with UNICEF Cambodia, UNICEF EAPRO, Royal Government of Cambodia, and other DPs at the national and sub-national level as well as with service providers;
- Focus Group Discussions (FGDs) with relevant stakeholders particularly implementing partners, service providers at sub-national level, with representation of programme areas;
- FGDs with community members from different groups and backgrounds, including mothers, fathers and caregivers, as well as people with disabilities and vulnerable mothers (minorities, poor, adolescent, etc) with representation of programme areas;
- Direct observation of climate resilient WASH services/infrastructure ;
- Small scale surveys (to be proposed as needed by the methodological design).

Data collection and analysis should be human rights based and gender sensitive. The data collected should be disaggregated by age, gender, state/region, disability, etc., where possible. Data triangulation will be of crucial importance.

Key stakeholders for the evaluation at the national and sub-national level include:
Outside of UNICEF

- MRD; PDRDs
- MISTI; PDISTI
- MoEYS
- MoH
- NGO partners (see Annex A)
- Development partners (see Annex A)
- Private water operators
- Latrine businesses

In UNICEF

- UNICEF Cambodia, UNICEF EAPRO and HQ – specifically WASH & Climate Change & Environment staff
- Others engaged with climate resilient WASH programming at EAPRO and HQ level (including staff responsible for cross cutting areas mentioned in this ToR, and other sections whose implementation converges with climate resilient WASH programming)

A sampling strategy should be included in the Technical Proposal, setting out how geographic areas and populations, and different stakeholder groups will be sampled. This will be important to have for both quantitative and qualitative data collection.

Gender equality, equity and human rights considerations must also be used as a lens when responding to all evaluation questions and not be limited to the last two questions posed

above. Reference and use of rights-based framework, and/or CRC, and/or CCC, and/or CEDAW and/or other rights related benchmarks are expected in the design of the evaluation and analysis and presentation of findings.

Likewise, conventional ethical guidelines are to be followed during the evaluation. Specific reference is made to the **UNEG Norms and Standards and Ethical Guidelines, as well as to the UNICEF's Evaluation Policy, the UNEG Guidance on Integrating Human Rights and Gender Equality in Evaluation, the UN SWAP Evaluation Performance Indicator[18], and the UNICEF Procedure for Ethical Standards in Research, Evaluation and Data Collection and Analysis and UNICEF's Evaluation Reporting Standards**.[19] Note that the standards cover the possibility of needing an ethical review of the inception report and evaluation tools, especially when vulnerable populations are included into the data collection. Ethical review from an IRB should be considered in the proposal and in the timeline and are the responsibility of the consultant. Good practices not covered therein are also to be followed. Any sensitive issues or concerns should be raised with the Evaluation Manager as soon as they are identified.

Some limitations can already be foreseen and should be taken into consideration in the proposal and in the design of the methodology and approach to be followed. The main limitation is related to Covid-19. Even though data collection is not expected to take place until August-September 2021, it is unknown what the level of restrictions or mobility might look like at that point. At this stage, travel to Cambodia is allowed (though not under tourist visas), and requires 14 day quarantine in government dictated hotels. It will be important for firms to access the most recent travel requirements at the time of bidding. Alternative scenarios and possibilities to ensure that the evaluation retains its high quality in the face of continued restrictions, as well as its participatory approach need to be considered and included in the proposal. In particular, scenarios where the team leaders and international experts cannot come to Cambodia need to be explored, as well as scenarios that include internal travel restrictions between provinces. Tied to this are budget considerations as resources are being prioritized for the covid-19 response. Bidders are expected to offer the best possible services while being cost-conscious and looking for alternatives and innovations that can keep costs down while meeting the evaluation objectives. Evaluation questions can be adjusted to reflect the data availability and data collection possibilities available.

Each proposal will be assessed first on its technical merits and subsequently on its price. In making the final decision, UNICEF considers both **Technical and Financial Proposals**. The Evaluation Team first reviews the Technical Proposals followed by review of the Financial Proposals of the technically compliant firms. The proposal obtaining the highest overall score after adding the scores for the Technical and Financial Proposals together, that offers the best value for money, will be recommended for award of the contract.

The Technical Proposal should include but not be limited to the following:

[18] Please refer to: http://www.unicef.org/evaluation
[19] See: https://www.unicef.org/supply/files/ATTACHMENT_IV-UNICEF_Procedure_for_Ethical_Standards.PDF

a) **Request for Proposals for Services Form** (provided above).
b) **Presentation of the Bidding Institution** or institutions if a consortium (maximum two institutions will be accepted as part of the consortium), including:
    - Name of the institution;
    - Date and country of registration/incorporation;
    - Summary of corporate structure and business areas;
    - Corporate directions and experience;
    - Location of offices or agents relevant to this proposal;
    - Number and type of employees;
    - In case of a consortium of institutions, the above listed elements shall be provided for each consortium members in addition to the signed consortium agreement; and
    - In case of a consortium, one only must be identified as the organization lead in dealing with UNICEF.
c) **Narrative Description of the Bidding Institution's Experience and Capacity** in the following areas:
    - Evaluations on WASH ideally on climate resilient programming
    - Previous assignments in developing countries in general, and related to climate resilient programmes, preferably in East Asia; and
    - Previous and current assignments using UNEG Norms and Standards for evaluation.
d) **Relevant References** of the proposer (past and on-going assignments) in the past five years. UNICEF may contact references persons for feedback on services provided by the proposers.
e) **Samples or Links to Samples of Previous Relevant Work** listed as reference of the proposer (at least three), on which the proposed key personnel directly and actively contributed or authored.
f) **Methodology**. It should minimize repeating what is stated in the ToR. There is no minimum or maximum length. If in doubt, ensure sufficient detail.
g) **Work Plan**, which will include as a minimum requirement the following:
    - General work plan based on the one proposed in the ToR, with comments and proposed adjustments, if any; and
    - Detailed timetable by activity (it must be consistent with the general work plan and the financial proposal).
h) Evaluation Team:
    - Summary presentation of proposed experts;
    - Description of support staff (number and profile of research and administrative assistants etc.);
    - Level of effort of proposed experts by activity (it must be consistent with the financial proposal); and
    - CV of each expert proposed to carry out the evaluation.

The Technical Proposal will be submitted in hard copy and electronic (PDF) format.
Please note that the duration of the assignment will be from July 2021 to December 2021, and it is foreseen that the Team Leader and the Team Expert/Team Members will devote roughly half of their time to the evaluation. The presence of a conflict of interest of any kind will automatically disqualify prospective candidates from consideration.

The Financial Proposal should include but not be limited to the following:

a) **Resource Costs:** Daily rate multiplied by number of days of the experts involved in the evaluation.
b) **Conference or Workshop Costs (if any):** Indicate nature and breakdown if possible.
c) **Travel Costs:** All travel costs should be included as a lump sum fixed cost. For all travel costs, UNICEF will pay as per the lump sum fixed costs provided in the proposal. A breakdown of the lump sum travel costs should be provided in the financial proposal.
d) **Any Other Costs (if any):** Indicate nature and breakdown.
e) **Recent Financial Audit Report:** Report should have been carried out in the past two years and be certified by a reputable audit organization.

Bidders are required to estimate travel costs in the Financial Proposal. Please note that: i) travel costs shall be calculated based on economy class fare regardless of the length of travel; and ii) costs for accommodation, meals and incidentals.
The financial proposal must be fully separated from the technical proposal. The financial proposal will be submitted in hard copy. Costs will be formulated in US$ and free of all taxes.

The proposals will be evaluated against the two elements: technical and financial. The ratio between the technical and financial criteria depends on the relative importance of one component to the other. Cumulative Analysis will be used to evaluate and award proposals. The evaluation criteria associated with this ToR is split between technical and financial as follows:

- Weightage for Technical Proposal = 80%
- Weightage for Financial Proposal = 20%
- Total Score = 100%

TECHNICAL EVALUATION CRITERIA

Criteria	Points	Unit of Analysis
Experience of Company/Institution and Key Personnel		
1. Range and depth of experience with similar projects (reference to similar contracts)	5	Information on similar activities having been undertaken by the company, institution or team of individuals going to be involved in this evaluation (max 3 points) Recent and current contracts with similar agencies (UN, NGOs) using UNEG Norms and Standards (max 2 points)

2. Team Leader (relevant experience, qualifications, certifications)	10	Number of years of relevant professional experience in delivering high-level, evidence driven evaluations of WASH evaluations or similar, ideally including climate resilient WASH (max 2 points) Experience in WASH sector and in climate resilient programming (max 2 points) Experience as team leader or project manager (max 1 point) Quality of written sample (max 4 points) Qualifications/certificates (max 1 point)
3. Team Member (relevant experience, qualifications, certifications)	10	Numbers and respective years of relevant professional experience in climate resilient WASH programming (max 2 points) Relevant technical expertise in collecting and analysing quantitative and qualitative data (max 2 points) Qualifications/certificates (max 1 point)
Proposed Methodology and Approach		
4. Description of implementation, operational methodology	40	Description of the proposed process for conducting the quantitative and qualitative data collection and analysis including the tools that will be used, as well as guiding ideas on how to develop the benchmarking paper (max 25 points) Match between the proposed approach and requested scope of the evaluation (max 5 points) Other creative, innovative referenced ideas for methodology/tools and presentation of findings (max 10 points)
5. Timeframe	5	Adherence of the proposed timeframe and work plan to the ToR (max 3 point) Adherence to all the milestones outlined in the ToR (max 2 point)
6. Potential constraints considered	10	At least two considerations outlined (max 4 points) Description of the process and procedures to deal/mitigate these constraints (max 4 points) Reference to additional resources which can be made available for the evaluation (max 2 point)
Sub-Total		**Maximum 80**

		Firms that score less then 65 points will not qualify

PRICE EVALUATION

Criteria		Total costs (in USD$)
Sub-Total		**The maximum score assigned to the price proposal (i.e., 20 points) will allocated to the lowest priced proposal. All other price proposals receive scores in inverse order.**
TOTAL		**Maximum 100**

10. Administrative Issues

The consultant is expected to submit their financial proposals inclusive of cross country and in-country travel and DSA cost. Consultant will be responsible for travel arrangements cross-country and in country (if required). No additional cost outside of the scope of this TOR will be covered by UNICEF.

Travel cost shall be calculated based on economy class travel, regardless of the length of travel and costs for accommodation, meals and incidentals shall not exceed applicable daily subsistence allowance (DSA) rates, as promulgated by the International Civil Service Commission (ICSC).

The consultants will have to possess own laptop and other technical equipment to complete the assignment. No office space at UNICEF Cambodia will be provided.

The documents produced during the period of this consultancy will be treated strictly confidential and the rights of distribution and/or publication shall solely reside with UNICEF. Some of the documents (see where indicated in the deliverables above) should be developed in both English and Khmer. The translation costs are to be covered by the consultants and clearly budgeted in the financial proposal as well.

11. Project Management/Contract Supervisor and other stakeholders

11.1. Evaluation management

The evaluation will be conducted by an external Evaluation Team to be recruited by UNICEF Cambodia. The Evaluation Team will operate under the supervision of an Evaluation Specialist at UNICEF Cambodia that will act as Evaluation Manager and therefore be responsible for the day-to-day oversight and management of the evaluation and for the management of the evaluation budget. The Evaluation Manager will assure the quality and independence of the evaluation and guarantee its alignment with UNEG Norms and Standards and Ethical Guidelines and other relevant procedures, provide quality assurance checking that the evaluation findings and conclusions are relevant; and recommendations are implementable, and contribute to the dissemination of the evaluation findings and follow-up on the management response. She will work in collaboration with the WASH Manager and closely with the WASH Specialist. Together

with the Evaluation Specialist, they will form an Evaluation Management Team. Additional quality assurance will be provided by the Regional Evaluation Advisers (WASH, Climate and Environment and Evaluation) and by the members of the Reference Group. The final report will also be approved by the Country Representative at UNICEF Cambodia.

A Reference Group will be established, bringing together a representative of each section involved in climate resilient WASH programming within the Government, development partners, EAPRO, and HQ. The Reference Group will have the following roles: contribute to the preparation and design of the evaluation, including providing feedback and comments on the Inception Report and on the technical quality of the work of the consultants; provide comments and substantive feedback to ensure the quality – from a technical point of view – of the draft and final evaluation reports; assist in identifying internal and external stakeholders to be consulted during the evaluation process; participate in review meetings organized by the Evaluation Management Team and with the Evaluation Team as required; play a key role in learning and knowledge sharing from the evaluation results, contributing to disseminating the findings of the evaluation and follow-up on the implementation of the management response.

11.2. Quality assurance

Quality assurance plays a vital role in the evaluation and involves a wide range of people. Quality assurance must start from the evaluation team itself, and clear quality assurance considerations must be presented in the proposal and ensured throughout the evaluation. As a minimum, the UNICEF evaluation manager, together with the evaluation management team will also be the first layer of quality assurance. The reference group together with the Regional Office will add a second layer of technical and strategic feedback. Each deliverable will undergo a thorough process of quality assurance. The inception report and final report will go through various rounds of quality assurance, starting with a first review by the evaluation management team internal to the Cambodia country office (1 week). After this review the evaluation firm will have one week turnaround time after which the report must be returned together with the comments matrix. This will then be shared with the regional office and reference group, who have two weeks to review the report and revert with comments. Power point presentations to the management team and reference group (in English and Khmer when involving partners) will also be given to provide interactive ways to get feedback.

12. Payment Schedule (Please link to deliverables to the extent possible):

Unless the proposers propose an alternative payment schedule, payments will be as follows:

- Approved Inception Report and draft benchmarking paper (Deliverable 1): 25% of the contractual amount;
- Approved initial evaluation findings report (Deliverable 2): 25% of the contractual amount;
- Approved final benchmarking paper (Deliverable 3) 30%

- Approved final report and final presentation for dissemination, summary report and other materials (Deliverables 4, 5 and 6): 20%.

ANNEX B: EVALUATION MATRIX

Evaluation Questions	Sub Questions/Focus Areas	Data Sources		Data Collection Methods
		Secondary Data	Primary Data	
Relevance: The extent to which the integration of climate resilience into the WASH programme is suited to the priorities and policies of the target groups, national government, and donors, and how relevance could be further enhanced.				
R1 How well aligned was the integration of climate resilience into the WASH programme with the available UNICEF global guidance or other available guidance as well as with national policies, and how well does it meet the challenges of climate change in Cambodia, and meet the needs of the most vulnerable populations?	• What efforts have been made to align to both global and national policies? • How appropriate has the support provided by UNICEF EAPRO and HQ been for using climate resilience guidelines? • To what extent are guidelines able to be contextualised to the Cambodian context? • Have climate risks have been correctly identified? • Do ongoing activities respond to the most pressing risks and needs identified? • Did the selection of geographical locations to implement climate resilient actions respond to clear identification of risks and needs?	Global frameworks and guidance (including UNICEF WASH Climate Resilient Strategic Framework); national guidance documents and strategic documents; Programme documents.; past studies, research, and evaluations.	UNICEF Cambodia staff, UNICEF EAPRO staff, representatives from Government, development partners	Document review FGDs and KIIs
R2 Is the design of the WASH programme, and its climate resilient aspects, conducive to achieving the outputs and final outcomes defined by UNICEF Cambodia for climate resilient WASH programming?	• Has climate resilience been incorporated into all areas of the WASH programme? • Are there missed opportunities or areas that could benefit from stronger inclusion of climate resilience in the future? • Which, if any, programme design and implementation features could be improved and strengthened? • Has any learning been generated by UNICEF and its partners to confirm interventions are appropriate?	Global frameworks and guidance national guidance documents and strategic documents; Programme documents	UNICEF Cambodia staff, UNICEF EAPRO staff, representatives from Government,	Document review, KIIs,
R3 Looking forward, how can climate resilience be best incorporated into the WASH programme?	• Which, if any, programme design and implementation features could be improved and strengthened? • What specific changes would be needed to ensure alignment with the new existing frameworks? • What gaps/limitations exist in the newly released guidance that would need to be addressed for its fuller use in Cambodia?			
Effectiveness: The extent to which the UNICEF Cambodia WASH programme has effectively mainstreamed and incorporated climate resilience into its programme, the effectiveness of the approach in achieving its short-term objectives/intermediate conditions for change and potential for achieving long term outcomes/outcome conditions for change, as defined in the ToC results framework.				

E1 To what extent has the UNICEF Cambodia WASH programme achieved, or is expected to achieve, its short-term objectives/intermediate conditions for change?	• How effective has the WASH programme been in reducing climate related vulnerabilities in the areas it has started working in? • Is there objective evidence that points to how the activities planned and under implementation will reduce vulnerabilities in cases where it is too early to measure? • Has the Theory of Change been being applied in practice? • Have interventions been implemented to a high standard? • What measures have been taken to ensure high quality implementation when working through partners and local contractors? • What monitoring and supervision is being undertaken to ensure high quality interventions? • Have climate risks to WASH services, infrastructure and community exposure been thoroughly considered and included in assessment and monitoring tools? • What would be possible improvements in the way climate resilience is measured, monitored, and reported? • How effective has the WASH programme been in innovating and developing approaches using downscaled climate projection data for the selection of target areas, and water supply design tools; climate water safety planning processes; the selection, design, and application of climate resilient WASH services; and in providing inputs to climate and WASH related national plans, technical guidance, and standards. • How well has the programme been able to measure and monitor climate resilient indicators?	Programme documents; past studies, research, and evaluations; monitoring data and reports	UNICEF Cambodia, representatives from Government, service providers, community members , service providers, development partners	Document review, KIIs, FGDs, observation
E2 What is the potential for achieving long term outcomes/outcome conditions for change, as defined in the ToC results framework?	• How effective has the WASH programme been in creating an enabling environment conducive to achieving climate resilient WASH services and communities? • To what extent has the WASH programme been effective in enhancing climate resilient behavioural change and governance at community and local level?	Programme documents; past studies, research, and evaluations; monitoring data and reports	UNICEF Cambodia, representatives from Government, service providers, development partners	Document review, KIIs, FGDs, observation
E3 What actions can be recommended to improve UNICEF's support to climate resilient WASH priority actions identified in the Royal Government of Cambodia's climate change Nationally		Programme documents; past studies, research, and evaluations; monitoring data and reports	UNICEF Cambodia, representatives from Government, service providers, development partners	Document review, KIIs, FGDs, observation

Determined Contribution (2020) going forward?				
Coherence: The extent to which there is coherence, compatibility and complementarity between the climate resilient WASH programming and other WASH strategies, plans and services in Cambodia				
C1 What role has UNICEF played, and what role can UNICEF better play, to strengthen and support collaborative working among WASH related ministries and departments to align WASH strategies and plans with national climate change priorities and work collaboratively on service provision?	• What role has UNICEF played to support and strengthen collaborative working in the sector? • What role could UNICEF better play? • Have counterparts reached an agreement on the most important climate change risks and how to respond? • Are these collaborations clearly stated and formalized in policy documents or strategies? • Has systems strengthening by UNICEF led to better planning and collaboration between government and local communities? • To what extent has decentralization been supported? • Are there inter-linkages between the different components of the WASH system?	Programme documents; past studies, research, and evaluations; monitoring data and reports	UNICEF Cambodia, representatives from Government, service providers, development partners	Document review, KIIs
C2 How have UNICEF maximised the opportunities /initiatives in the climate sector to strengthen climate resilient WASH for the UNICEF programme and the wider sector?	• What opportunities and initiatives has UNICEF had and taken for strengthening climate resilient WASH programming? • How has UNICEF engaged with National Adaptation Plans (NAPs) and Nationally Determined Contributions (NDCs)? • How could UNICEF Cambodia best build climate resilience into its whole programme in its next CPD? • Is UNICEF building up a body of evidence regarding what works in different contexts? • What internal lessons learnt has been documented across UNICEF and its WASH partners?	Programme documents; past studies, research, and evaluations; monitoring data and reports	UNICEF Cambodia, UNICF EAPRO, representatives from Government, development partners	Document review, KIIs
C3 Have cross-sectoral opportunities to strengthen climate resilience beyond the WASH sector only (e.g., Health – Nutrition – Education) been identified?	• Have cross-sectoral opportunities to strengthen climate resilience beyond the WASH sector been identified, for example in health, education, nutrition? • Are there clear opportunities in the current CPD to mainstream climate resilient programming in other sectors and strengthen collaboration? • How could UNICEF Cambodia best build climate resilience into its whole programme in its next CPD?			
Sustainability and scalability the extent to which the initiatives and actions plans within climate resilient WASH programming are permanent and lasting, and what is required to up-scale impact.				

S1 To what extent are initiatives and actions plans within climate resilient WASH programming sustainable i.e., permanent, and lasting?	• Is the performance of existing WASH infrastructure likely to lead to sustainable outcomes? • What financial, social, environmental, and institutional capacities are needed to strengthen the sustainability of the results of the climate-resilient WASH programme over time? • To what extent do these exist and where are the gaps? • Does the manner of implementation by UNICEF and its partners result in sustained outcomes? • Can actors, other than UNICEF and its partners, fulfil their role in supporting sustainability after the withdrawal of UNICEF and NGOs? • Is systems strengthening work addressing some of the major obstacles that hinder sustainable outcomes.	Programme documents; past studies, research, and evaluations; monitoring data and reports	UNICEF Cambodia, UNICF EAPRO, service providers, development partners, community members	Document review, KIIs, FGDs, observation
CC2 To what extent is equity and gender equality data disaggregated, collected, and monitored and how can this be strengthened?	• Is collected data disaggregated by age, gender, disability, ethnicity, climate related vulnerability? • How can the current programme performance indicators and monitoring and evaluation framework be strengthened in terms of gender equality, equity, and human rights?	Programme documents; past studies, research, and evaluations; monitoring data and reports	UNICEF Cambodia, UNICF EAPRO, service providers, development partners, community members	Document review, KIIs, FGDs, observation
Cross-cutting considerations the extent that WASH programming in Cambodia has adequately addressed issues of gender equality, equity and human rights in its design, implementation, and outcomes				
CC1 How well does the climate resilient WASH programming in Cambodia incorporate and encourage equity and gender equality in its interventions, especially for those most disadvantaged and those identified as most vulnerable to climate change risks?	• To what extent is consideration given to the most vulnerable i.e., minorities, people with disabilities and the poor? • Are interventions aligned to the principle of "leave no one behind?" • How could these aspects be better incorporated into the design? • Is there evidence that programme interventions are reaching the most vulnerable people? • Will other actors, other than UNICEF, fulfil their roles in sustaining GESI interventions?	Programme documents; past studies, research, and evaluations; monitoring data and reports	UNICEF Cambodia, UNICF EAPRO, service providers, development partners, community members	Document review, KIIs, FGDs, observation
CC2 To what extent is equity and gender equality data disaggregated, collected, and monitored and how can this be strengthened?	• Is collected data disaggregated by age, gender, disability, ethnicity, climate related vulnerability? • How can the current programme performance indicators and monitoring and evaluation framework be strengthened in terms of gender equality, equity, and human rights?	Programme documents; past studies, research, and evaluations; monitoring data and reports	UNICEF Cambodia, UNICF EAPRO, service providers development partners, community members	Document review, KIIs, FGDs, observation

ANNEX C: DOCUMENTS REVIEWED

Global Frameworks and Guidance

De Lopez, T. T. (Ed.), Elliott, M., Armstrong, A., Lobuglio, J., & Bartram, J. (2011) Technologies for Climate Change Adaptation - The Water Sector. Danmarks Tekniske Universitet, Risø Nationallaboratoriet for Bæredygtig Energi. TNA Guidebook Series

Global Water Partnership (GWP) and UNICEF. (2014) WASH Climate Resilient Development. Strategic Framework.

Global Water Partnership (GWP) and UNICEF. (2014) WASH Climate Resilient Development: Risk Assessments for WASH.

Global Water Partnership (GWP) and UNICEF. (2014) WASH Climate Resilient Development: Linking risk with response: options for climate resilient WASH.

Global Water Partnership (GWP) and UNICEF. (2014) WASH Climate Resilient Development: Monitoring and Evaluation for Climate Resilient WASH.

Global Water Partnership (GWP) and UNICEF. (2014) WASH Climate Resilient Development: Local participatory water supply and climate change risk assessment: modified water safety plans.

Global Water Partnership (GWP) and UNICEF. (2014) WASH Climate Resilient Development: appraising and prioritising options for climate resilient water supply.

Global Water Partnership (GWP) and UNICEF. (2014) WASH Climate Resilient Development: integrating climate resilience into national strategies and plans.

Neha Rai, Nick Brooks, Tin Ponlok, Neth Baroda and Erin Nash (2015). Developing a national M&E framework for climate change: Tracking Adaptation and Measuring Development (TAMD) in Cambodia. Research Report, IIED, London

UNICEF (2020) Climate Resilience SMQ 2020 Guidance.

UNICEF (2016) UNICEF Strategy for Water, Sanitation and Hygiene 2016-2030

UNICEF (2020) UNICEF Guidance Note: How UNICEF Regional and Country Offices can shift to Climate Resilient WASH Programming

UNICEF (2021) UNICEF Strategic Plan, 2022-2025.

UNICEF (no date) WASH Climate Resilience: A Compendium of Case Studies. Available from: https://www.unicef.org/media/91351/file/Compendium-of-WASH-Climate-Resilience-Programming-Field-Experiences.pdf

National Frameworks and Guidance (Cambodia)

General Secretariat of the National Council for Sustainable Development/Ministry of Environment, the Kingdom of Cambodia (2017) Cambodia National Adaptation Plan

General Secretariat of the National Council for Sustainable Development/Ministry of Environment, the Kingdom of Cambodia (2020) Cambodia's Updated Nationally Determined Contribution

IDE Global (2021) Research Brief: Linking Climate Vulnerability, Latrine Functionality, and Faecal Sludge Management (FSM) in Rural Cambodia

Ministry of Industry, Science, Technology, and Innovation & Investing in Infrastructure Program (2020) Provincial Investment Plan in Piped Water Supply in Cambodia.

Ministry of Rural Development (2016) Guidance for Rural Water Safety Planning in Cambodia.

Ministry of Rural Development (2019) Emergency Response Contingency Plan on Water, Sanitation and Hygiene

Ministry of Rural Development (2019) National Guiding Principles on Sanitation in Challenging Environments.

Ministry of Rural Development (2019) National Action Plan: Rural Water Supply, Sanitation and Hygiene (2019-2023).

Royal Government of Cambodia. (2012) National Strategy for Rural WASH 2011-2025

Royal Government of Cambodia. (2013) Cambodia Climate Change Strategic Plan (2014-2023).

SNV (2015) Rural Water Supply Technical Design Guidelines and Construction Supervision Manual

UNICEF Cambodia (2020) Explanatory note: Draft design tool for climate resilient pond/reservoir for domestic water use

Water and Sanitation Program (2011) Assessment – Affordable Sanitation in Challenging Areas in Cambodia and Lao PDR, Phase 1. Aruna Technology Ltd: Cambodia

World Bank Group (2011) Vulnerability, Risk Reduction, and Adaptation to Climate Change – Cambodia

UNICEF Cambodia Programme Documents

UNICEF (2018) WASH Programme Strategy Note - Cambodia 2019-2023

UNICEF (2018) UNICEF Cambodia Country Programme Document 2019-2023

UNICEF Cambodia (2019) 2019 Strategic Moment of Reflection: Summary report

UNICEF and MIH (2019) Cambodia – UNICEF Programme of Cooperation 2019-2023. 2019-2020 Rolling Work Plan.

UNICEF and MRD (2019) Cambodia – UNICEF Programme of Cooperation 2019-2023. 2019-2020 Rolling Work Plan

UNICEF and MRD (2020) Cambodia – UNICEF Programme of Cooperation 2019-2023. 2020-2021 Rolling Work Plan.

UNICEF and MRD (2019) Cambodia – UNICEF Programme of Cooperation 2019-2023. 2021-2022 Rolling Work Plan

UNICEF (2021) Programmatic Review UNICEF Country Programme for Cambodia (2019-2023) 28 July 2021 (PowerPoint presentation)

UNICEF Cambodia Monitoring Documents and Data

AAN (2019) UNICEF-DFID Accelerated Sanitation and Water for All (ASWA) II Programme: Cambodia

UNICEF (2019) RAM report (WASH Outputs)

UNICEF (2019) RAM Summary Narrative

UNICEF (2020) RAM report (WASH Outputs)

UNICEF (2020) RAM Summary Narrative

Additional (UNICEF PROVIDED)

Hydroconseil-Aguaconsult-CGSW (2018) Global Evaluation of UNICEF's Drinking Water SupplyProgramming in Rural Areas and Small Towns2006–2016: Country case study report – Cambodia

Paudyal, B.N (2019) Assessing Climate Resilience in WASH In East Asia & Pacific Region: Identifying Options for Future Programming & Financing Country assessment Summary – Cambodia.

PIN Cambodia and UNICEF (2018) WASH system resilience to climate change in rural Cambodia: Water supply and sanitation situation analysis

UNICEF (2018) Updated Situation Analysis of Children and Women in Cambodia

Cambodia Information, Statistics and Reports

EPTISA and KCC (2016) Greater Mekong Sub-Region Flood and Drought Risk Management and Mitigation Project: Preliminary Flood and Drought Risk Assessment Report

National Institute of Statistics, Ministry of Planning (2020) Report of Cambodia Socio-Economic Survey 2019/20.

National Institute of Statistics, Ministry of Planning (2020) General Population Census of the Kingdom of Cambodia 2019.

Ministry of Economy and Finance (2019) Climate Public Expenditure Review 2017

MRD MIS (2021) Cambodia National Rural Water & Sanitation Report 2020

NDC Partnership (2021) Quarterly Report NDC Partnership In-country Facilitator – Kingdom of Cambodia for the implementation of the NDC and the preparation of the Long-Term Strategy for Carbon Neutrality in Cambodia

UNICEF/WHO JMP 2017 Cambodia country file 2017

JMP (2020) JMP Tables. Available from: https://washdata.org/data/household#!/table?geo0=country&geo1=KHM.

USAID (2019). Climate Risk Profile: Cambodia. Fact sheet. Available from: https://www.climatelinks.org/sites/default/files/asset/document/2019_USAID_Cambodia%20CRP.pdf

Vathana, L (2018). Current Impacts of Climate Change on Water Resources in Cambodia: Challenges from Floods and Drought. Research Paper. Available from: https://pic.org.kh/images/2018Research/20180611_Current%20Impacts%20of%20Climate%20Change%20on%20Water%20Resources%20in%20Cambodia.pdf

World Bank Group (2021) Climate Change Knowledge Portal: Cambodia Climate Projections > Mean Projections. Available from: https://climateknowledgeportal.worldbank.org/country/cambodia/climate-data-projections

The World Bank Group and Asian Development Bank (2021) Climate Risk Profile: Cambodia. Available from: https://climateknowledgeportal.worldbank.org/sites/default/files/2021-08/15849-WB_Cambodia%20Country%20Profile-WEB.pdf

Other

Oates, N., Ross, I., Calow, R., Carter, R. and Doczi, J. (2014) Adaptation to Climate Change in Water, Sanitation and Hygiene: Assessing Risks and Appraising Options in Africa. Overseas Development Institute, London.

IPCC (2022) Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press. In Press.

IPCC (2022) Summary for Policymakers [H.-O. Pörtner, D.C. Roberts, E.S. Poloczanska, K. Mintenbeck, M. Tignor, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem (eds.)]. In: Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press. In Press.

McSweeney, C., New, M., & Lizcano, G. (2012) UNDP climate change country profiles: Cambodia. UNDP. Available from: https://www.geog.ox.ac.uk/research/climate/projects/undp-cp/UNDP_reports/Cambodia/Cambodia.hires.report.pdf

Murungi, Caroline & Blokland, Maarten. (2016). Benchmarking for the provision of water supply and sanitation services to the urban poor: An assessment framework. International Journal of Water. 10. 155. Available: https://www.researchgate.net/publication/299502072_Benchmarking_for_the_provision_of_water_supply_and_sanitation_services_to_the_urban_poor_An_assessment_framework

ANNEX D: WASH BENCHMARK PAPER: STRENGTHENING CLIMATE RESILIENCE IN CAMBODIA

Introduction

This paper sets out several "benchmark principles" for improving climate resilient WASH (water, sanitation, and hygiene) programming in Cambodia. It aims to provide a tool that can be used to support greater clarity on what climate resilient WASH looks like, and how climate resilient WASH work can be planned, implemented, and evaluated.
It is intended for three groups of people:

- The first is national and local government personnel who are responsible for setting policy, strategy and coordinating WASH sector activities.
- The second group is international and national development partners, such as NGOs and UN organisations supporting the implementation of WASH programmes in rural areas and small towns.
- The third group is private operators and suppliers of goods and services who may be operating and managing, or supporting, water and sanitation services in towns and cities.

The draft benchmark paper has been developed for UNICEF as part of an ongoing evaluation and it is aligned to the strategic results framework for climate resilient WASH programming[20] with proposed principles[21] structured around five core pillars:

1. Strengthening the enabling environment
2. Improved water resources management
3. Strengthening WASH infrastructure, services, and behaviours
4. Building community resilience
5. Towards a low carbon WASH sector

The principles described in the following sections have been developed following stimulating discussions with UNICEF's national, regional and HQ offices, and a consultation workshop held on 2nd December 2021. The workshop was attended online by over twenty-five professionals and interested persons representing key organisations and governmental departments working in Cambodia's WASH sector. This benchmark paper and accompanying draft monitoring indicators will be updated at the end of the evaluation process. It will then need to be 'adopted' and supported by organisations in Cambodia so it can gradually be applied in practice. This is important because it means organisations can tailor the benchmark paper and monitoring indicators to their own programmes.

Background

Climate change disasters will always be local in their impact, in the sense that households, communities and local authorities will need to collaborate and work together to alleviate risk. The concept of risk provides a useful focal point to design and implement appropriate responses. Disaster risk can be defined as three inter-linked components[22]: the hazard that may occur (such as a flood or drought), the exposure to such hazards (the specific communities and children exposed) and the vulnerability to that hazard, in terms of susceptibility to shocks and the capacity to cope with, resist, and recover from a hazard occurrence. This must be viewed from both community and institutional perspectives.

[20] UNICEF (2020) UNICEF guidance note: How UNICEF regional and county offices can shift to climate resilient WASH programming
[21] The principles described relate to WASH interventions in Cambodia and long-term development contexts, rather than humanitarian settings. Humanitarian professional standards and principles are addressed in Sphere standards and relevant UN guidance.
[22] REACH (2021) A risk-based framework. [online].

It is important that a risk-based approach is considered when planning climate resilient WASH interventions because a lack of access to WASH and exposure to climate shocks leads to worse WASH outcomes[23]. Many organisations in Cambodia, both international and national, are working to deliver water supply and sanitation services to households and communities whilst also bringing about improvements in hygiene behaviour. Their work is increasingly having to consider climate change risks, which are fundamental to sustainability. Climate change undermines water security and threatens to disrupt the local water balance by altering the timing, intensity, and duration of rainfall events. In Cambodia, there are five main climate related risk factors associated with vulnerability to climate hazards:

- The risk of increased flood events, resulting in damaged infrastructure, flooded latrine pits and contaminated water resources.
- The risk of increased drought, leading to reduced access and availability of water for both drinking and sanitary/hygiene purposes.
- The risk of protracted dry seasons also leading to reduced access and water availability.
- The risk of deteriorating water quality, which has corresponding impacts on health and well-being.
- The risk of sea level rise and saline intrusion, which may also be exacerbated by pumped groundwater abstraction leading to land subsidence.

These risks will be complicated further by population growth and demographic shifts, changes in land use and continued environmental change and degradation. These factors combined also make the prediction of changes in runoff and recharge uncertain and location specific. This means it can be difficult to determine what the resulting impacts of climate change will be on local water resources (i.e., the water resources that rural communities or towns depend on), which is the scale at which most water and sanitation planning and intervention takes place.

Benchmark principles

1. Strengthening the Enabling Environment for Climate Resilient WASH Programming

1.1. It is essential to understand, respect and work in a collaborative manner with government policy and strategy.

Many WASH organisations are now engaged in systems strengthening work. This refers to the networks of people, institutions, sector finance, policy, strategy, and infrastructure required to keep services working. Much of this work focuses on strengthening the environment in which WASH services and positive behaviours are introduced to ensure they remain permanent and lasting. It is also important that organisations work in a collaborative manner with government. The Sanitation and Water for All 'Building Blocks' provides a useful framework for this[24] and encourages detailed stakeholder analysis, knowledge of national climate and WASH policies and detailed assessment and mapping of climate risks. This is fundamental and encourages all partners to collaborate and work with, and not outside of, government systems. Working independently of national and local government will be detrimental because it undermines the mandate of government, while also failing to help strengthen government systems.

1.2. Upstream work related to strengthening the enabling environment must try to ensure inter-linkages between different component parts of the WASH system.

Many organisations are now engaged in WASH systems strengthening work. This is often referred to by UNICEF as "upstream work" as opposed to the more traditional "downstream work" of WASH service

[23] UNICEF (2021) The Climate Crisis is a Child Rights Crisis: Introducing the Children's Climate Risk Index.
[24] Sanitation and Water for All (2019) Adapting to climate change and fostering a low carbon water and sanitation sector. Briefing Paper 3.

delivery. The WASH system is often defined as a number of component parts or building blocks[25]. For this work to be truly effective the inter-linkages between these building blocks need to be realized. For example, better policy and strategy should lead to increased resources and funding; similarly monitoring data must be processed and analyzed so it leads to learning and corrective follow up action. Consideration should be given as to how national institutions are leading this process (national autonomy) and how the interlinkages between the component parts of the "WASH system" work together in practice.

1.3. Programmes should have a strong focus on inter-sectoral coordination.

Climate change, including the increase in intensity and frequency of floods and drought, will adversely impact on food security, ecosystems, and water resources. Water is so fundamental to poverty, people's health, household life, food security and ecosystems that it cuts across multiple sectors. WASH programme initiatives should consider multi-purpose water supply systems and should consider a multitude of arrangements to better engage with environmental, food security and water resource sectors. Compliance and coordination of multiple actors is therefore essential. This includes complying with national policies (such as Nationally Determined Contributions) and government systems. In pursuing such an approach support should be provided to national institutions to improve coordination and, at a local level, sectors should be working to a single climate change resilience plan.

1.4. Systems Strengthening work must engage with the Private Sector.

Work on systems strengthening must include engagement with Private Sector Organisations who invest time in providing first time services, supplying goods and services, and keeping services working. An important first step in systems strengthening work is to consider the roles and responsibilities of the Private Sector and understand the barriers they face and the possible solutions that are present. National policies need to encourage engagement with the Private Sector and sector financing plans need to help them cover operating costs where tariffs from users are insufficient.

1.5. Programmes should be built on a targeted risk assessment of hazard, exposure, and vulnerability.

Climate resilient WASH programmes need to be tailored to specific contexts to be effective. This requires a sound assessment of the hazards that people face, their level of exposure to these hazards and their vulnerability defined by the capacity of local networks of people and institutions to respond to, or cope with, shocks and threats. This will require a sound assessment of all contributing factors (such as environmental, socio-economic, political, infrastructure and institutions) that underpin water security and sanitation/hygiene services. This is not a one-off assessment and local level water security threats will need to be assessed on an ongoing basis.

1.6. Programme interventions should try to strengthen and inform national budget allocations.

National funding for WASH climate resilience should increase accordingly and become more predictable. This includes both capital and recurrent expenditure. For this to happen, programme interventions should clearly record the genuine cost of climate resilience interventions. They should be explicit about the full Capital Expenditure (CAPEX), Operational Expenditure (OPEX) and Capital Maintenance Expenditure (CAPMANEX) costs required to implement and sustain WASH infrastructure. The justification for this is that governments will need such information to support financial planning and scale-up of services. For real progress to be made, this information needs to be shared with the Ministry of Economy and Finance, and relevant WASH Ministries and local departments as part of a coordinated approach to increase WASH expenditure.

[25] Building Blocks as defined by SWA are Sector Policy/Strategy; Institutional Arrangements; Sector Financing; Planning, Monitoring and Review; Capacity Development.

2. Improved Water Resource Management

2.1. Specific measures need to be taken to strengthen the links between water resources and WASH.

Water is predicted to be the main channel through which climate change impacts will be felt by people, ecosystems, and economies[26]. Freshwater sources are particularly vulnerable to climate change and have the potential to be impacted. However, predicting the resultant impacts on local surface water and groundwater resources is extremely difficult. Changes can be both sudden or gradual, but they have the potential to impact on water quality, availability, and access. This means the "water" component in WASH needs to be strengthened. There are three main aspects to consider:

- Better attention to assessing water availability on a near continuous basis. As a minimum, this requires commitment to monitor rainfall, groundwater[27], and surface water, along with water quality at specific locations.
- Improved management of water resources, which includes sharing water in an equitable and fair manner with clarity over water laws and institutional roles.
- Building better linkages between stewardship of water resources and infrastructure design to withstand flooding, drought, and seasonal variability.

2.2. WASH organisations should contribute to the collection of local hydrometric data.

As part of their WASH programming, organisations can support communities to monitor local level water resources. This is often termed 'citizen science.' Local hydrometric monitoring must be coordinated to national monitoring networks and should be designed to reflect national standards and rigor, but also local capacities and literacy levels. Community members can serve as volunteer observers to record rainfall and groundwater levels, but they will need to be supported to process and interpret data. This work can be undertaken by mandated government agencies, and it helps to reduce recurrent operating costs. However, mandated institutions will often need support to process hydrometric data specifically in data collection, validation, analysis, and publication of results. Data should also be fed into a national water resources repository (database) to improve planning and decision-making, and it should also lead to appropriate follow up action at commune and village levels. Ideally all water resources data will be publicly available and the relevant authorities in Cambodia will need to decide whether they disseminate raw, cleaned, or analysed data, and what information is of most use to decision-makers and communities. Mandated institutions will also need to reach agreement where hydrometric should be stored and managed.

2.3. Modified Water Safety Plans provide a useful vehicle for establishing better water resources planning between communities, local and national authorities.

The approach involves risk assessment, control and monitoring of risks to both water quality and quantity[28]. This can be applied at either geographical scale or at water supply system scale. Activities can be viewed in terms of the following:

- Engagement with the community and local authorities to assemble a water safety planning team.
- Description of water supply (and sanitation) services to be determined through discussions with the host communities – so their priorities are known and understood.
- Risk assessment of WASH services.
- Identification of control measures and corresponding adaptation.

[26] Bates, B.C., Kundzewicz, Z.W., Wu, S. and Palutikof, J.P. (eds) (2008) 'Climate Change and Water'. Technical Paper of the Intergovernmental Panel on Climate Change. Geneva: IPCC Secretariat.
[27] The absence of groundwater monitoring in Cambodia was highlighted as a major gap during the consultation workshop.
[28] UNICEF and GWP (2017) WASH Climate Resilient Development. Technical Brief. Local participatory water supply and climate change risk assessment: Modified Water Safety Plans.

- Monitoring activities with corrective follow up action.

2.4. Monitoring data should directly feed into national early warning systems and models.

Monitoring data and technology can improve the performance of early warning systems. Therefore, monitoring technology should be selected in partnership with government institutions and such instrumentation should complement national early warning systems. A balance should also be struck between installing technology and providing institutional support so government can process data and ensure corrective follow up action. Efforts should also be made to support water resources modelling. This is required so past trends of water resources can be represented with reasonable accuracy, and likely future scenarios can be explored. This will enable decision-makers to ask *what if?* Questions and consider the implications if rainfall decreases and/or increases.

2.5. Measures should be taken to provide communities with better access to, and understanding of, climate information.

Increased climatic variability, deteriorating water resources and poorly maintained WASH infrastructure will impact on people's livelihoods, health, and welfare. Rural communities especially will need greater access to climate information and external support if they are to strengthen their own resilience. Efforts should be made to understand and provide people and groups (such as farmers) with the types of climate information they want, and when they need it.

3. Strengthening WASH Infrastructure, Services, and Behaviors

3.1. Interventions should be appropriate for the context and implemented to high professional standards.

This means that climate resilient water and sanitation infrastructure and hygiene services should be a good fit for the local context – *doing the right thing*. This requires organisations to critically evaluate whether their interventions are appropriate in response to robust risk assessments. It also means that water and sanitation infrastructure need to be implemented professionally – *doing the right thing well* – especially when many local authorities lack adequate resources to provide effective external support. If infrastructure is poorly sited, designed or constructed there will be little prospect of climate resilient WASH services being realized or sustained beyond the immediate term.

3.2. Sustainable outcomes should be planned for from the outset.

Climate resilient water and sanitation services need to be permanent and lasting. Once there is an improvement in service or behaviour, or the capacity of an institution has been strengthened, every effort should be made to avoid slippage or regression. This means external support systems need to be established so repairs and breakdowns can be fixed rapidly to minimise downtimes. It also means all aspects of the sanitation chain should be considered alongside the provision of elevated latrines. Consequently arrangements, processes and finances need to be put in place, which is also a focus of wider systems strengthening work.

3.3. Implementing agencies should maintain simple and functional monitoring systems.

UNICEF and its WASH partners should be recording the outcomes of their climate resilience WASH work. Monitoring systems will need to record the work and progress made by individual organisations, but information should also be feeding into national systems and databases. This is particularly important as the impacts of climate change will be felt in future decades. Monitoring should also lead to appropriate follow up interventions, therefore collected data needs to be appropriate and useable.

3.4. The cost of climate resilience WASH interventions should be recorded and managed to ensure cost effectiveness and inform scale up of the approach.

The costs associated with implementing climate resilient WASH interventions, such as modifying sanitation infrastructure designs or augmenting water supply infrastructure, should be documented, and recorded. These interventions should lead to better quality WASH services, but the continuous asset management and maintenance improvements/costs also need to be recorded to ensure efficient use of resources. This information is also important if interventions are to be replicated and scaled up by government institutions and other sectors.

3.5. It is essential that organisations implementing climate resilient WASH programmes strive to improve their behaviour by generating new learning.

There are many areas where the learning on climate change adaptation and mitigation can be strengthened. One example is to understand how water resources respond to rainfall and the interactions between rainfall, surface runoff and infiltration. This is important as climate change places the spotlight on water resources and there needs to be a strong focus on the sciences of hydrology and hydrogeology and the local water balance. Important questions to answer include:

- How quickly do groundwater and surface water resources respond to rainfall and surface runoff?
- What is the seasonal range of water level variation? What types of water sources are seasonal?
- How fast do water levels recede after the rainy season?
- How do national and local river basins respond to rainfall?

If these fundamentals are known with certainty, then relevant models can be generated and future 'what if?' questions can be asked. For example, 'what if rainfall increases or decreases?'; 'What if the dry season is more protracted?' 'What if land uses changes are implemented?'

Also, the generation of data is of limited use unless there is also institutional capacity to process hydrometric information so it can be fed into relevant databases and used to improve decision-making by mandated institutions. Learning experiences regarding what works in building effective institutional capability need to be documented and drawn upon.

4. Building Community Resilience

4.1. It is essential to understand the capacity of households and local communities to respond to climate shocks.

Communities living in remote areas often have great strengths and resilience, evidenced by their ability to survive in difficult environments. Nevertheless, their coping capacities will be threatened by internal and external factors (such as climate change) that are beyond their control. This means it is necessary to assess people's resilience capacity and coping mechanisms as well as identifying those vulnerable groups (such as children, people with disabilities, chronically ill) who are most susceptible to hazards. It is also important to ensure the most remote communities have established links with local authorities, so they are part of formal planning processes. This is an important consideration when establishing Water Safety Planning Teams, rather than starting from a pre-conceived position as to what problems need to be addressed and how.

Water Safety Planning teams can also provide the basis for conducting risk assessments locally. These may be carried out at commune level or across specific water supply systems and sanitation services. They provide an approach for collecting, ordering, and using information, as part of an overall planning process. They can be used as a coordination mechanism to communicate risk information and help to establish a planning culture between communities and local authorities.

4.2. Good programmes are relevant to people's needs and based on a sound assessment of climate risks.

Sound assessments of climate risks should be conducted to understand the specific threats people face and their local development needs. Interventions should be a good fit for the local context to be effective. It is also important to acknowledge that water resources face multiple threats or drivers of change. Climate change is one major pressure, but it should also be considered alongside other critical factors, such as population growth, growing demands for water, changes in land use, pollution threats and existing climatic variability. Other persistent obstacles to sustainable WASH service delivery should also be addressed.

4.3. Good climate resilience programmes will need to establish strong planning partnerships to ensure national and local institutions work collaboratively.

Community-level resilience will only be achieved if successful partnerships are established between mandated institutions at national and local levels. Different levels of government will need to work together more effectively if people are to be able to plan for, respond to, adapt to, and learn from the effects of climate change. An essential outcome of climate resilient WASH interventions should be a shared planning culture between government, service providers and community-based institutions. This refers to a change in mind set as to how institutions collaborate and work together. For example, the first stage of the Water Safety Planning approach is to establish a planning team or steering committee. However, to be effective, wider institutional support will be required to ensure the planning team can perform essential functions routinely. Developing local institutional capability requires in-depth knowledge of professional attitudes, capacities, skills, resources, and finances. Good programmes should assess receptive capacity and work directly with local institutions to build capability in a step-by-step manner. This work needs to be coordinated with relevant national institutions and line Ministries.

4.4. An important outcome of climate-related WASH interventions should be more resilient services enjoyed by all.

People already affected by poverty and inequity will have an unequal chance to cope with climate change. JMP (Joint Monitoring Programme) data (2019) for Cambodia shows that the poorest wealth quintiles in rural areas risk being left behind. This includes women, girls, elderly, and people with disabilities and means that WASH programmes must place high emphasis on 'leaving no-one behind'. Special measures will be required to ensure people in remote rural hinterlands are not forgotten when planning takes place in response to drought, floods, and seasonal variations in access to water services.

4.5. Climate change adaptation is complex work, full of uncertainties, therefore iterative and adaptive approaches are required.

Predicting the impacts of climate change on WASH programmes is difficult work, full of complexity. This means the most viable way is to proceed iteratively, making small changes and adjustments based on new data, learning and evidence of 'what works'. This adaptive approach should form the basis of longer-term planning approaches. Where well-established good practices are identified and proven they should be pursued, accompanied by clear messaging and advice to government. Many water supply services already suffer from high inter-annual variability, which means there is an intensive 'wet' season followed by a protracted 'dry' season. Understanding and adapting to existing climate variability, coupled with continuous monitoring of rainfall, surface water, groundwater and water quality provides a fruitful approach for future adaptation planning. If WASH programmes struggle to cope with existing climatic variability there will be little prospect of success as rainfall and temperature variability increases.

5. Towards a Low Carbon WASH Sector

5.1. Good programmes strive to improve their efficiency and reduce the need for reworking and corrective action.

If water and sanitation services breakdown soon after construction or service levels decline, they will require rapid response and corrective follow up action. Errors in design, construction and supervision increase the risk of poor infrastructure and high failure rates. Measuring service levels, improving the quality of implementation work and being less wasteful are fundamental steps for better quality interventions and addressing climate change.

5.2. Organisations working in the WASH sector should be committed to engaging in wider Nature Based Solutions

The WASH sector is primarily focussed on delivering sustainable water and sanitation services and bringing about lasting improvements in hygiene behaviour. But WASH solutions must also have a sound understanding of local environmental conditions that may affect services. Not all programmes may extend to consider wider environmental management issues, but where possible there should be some consideration for water sources and local catchment areas. To reflect and consider the inter-linkages between water, land, and forestry and how deforestation and land degradation can affect the local water balance. Nature Based Solutions are actions that can help to safeguard the environment in the face of growing populations and societal change.

5.3. Piped water supply programmes should measure Non-Revenue Water to improve service performance levels

It is vital that water supply service providers understand and reduce levels of Non-Revenue Water. Otherwise, raw water is stored, treated, processed, and pumped before being ‘lost’ to the environment. It will reduce the operators service performance levels, reduce revenue, and increase their carbon footprint.

5.4. Renewable pumping systems should be considered if the necessary enabling conditions are present

Renewable energy systems, such as solar and wind, are becoming increasingly relevant and desirable in the WASH sector because of the sharp decline in cost of such technologies and interest in reducing greenhouse gas emissions in line with SDG (Sustainable Development Goals) 13. However, all factors that contribute to sustainable renewable energy approaches need to be considered. This includes quality of installation, the availability of maintenance skills to carry out necessary repairs, associated costs and economies of scale. Thus, it makes sense for implementing agencies to coordinate their renewable energy programmes.

5.5. Organisational overheads and logistics should be managed to acceptable levels

A balance should be struck between costs required to keep organisations functioning efficiently (offices, vehicles, equipment, and travel) and maximising available funds for high quality interventions. Efforts should be made to minimise overhead and expense costs and ensure no unnecessary extravagance. This principle is more relevant to large development organisations (such as UN agencies and INGOs) rather than the private sector, which is more likely to innovate and evolve its approaches to be commercially viable and competitive. However, commercial service providers will also need to ensure their operating models are viable to they do not go out of business, thus increasing the vulnerability of the communities they serve.

Proposed 'Benchmark' Indicators

Pillar 1: Strengthening the enabling environment for climate resilient WASH programming				
#	**Principle**	**Indicator**	**Description**	**MoV**
1.1	It is essential to understand, respect and work in a collaborative manner with government policy and strategy.	Alignment with government policy and strategy	Number of programmes aligned to key policies and strategies.	Programme documents
1.2	Upstream work related to strengthening the enabling environment must try to ensure inter-linkages between different component parts of the WASH system.	Quality of systems strengthening work	Evidence of inter-linkages between building blocks	Formal evaluation
1.3	Programmes should have a strong focus on inter-sectoral coordination.	Quality of coordination	Number of inter-sector coordination meetings at national and local levels	Meeting minutes
1.4	Systems Strengthening work must engage with the Private Sector.	Engagement of private sector	Number of appropriate enabling conditions in place to support engagement with Private Sector	Review of the enabling environment
1.5	Programmes should be built on a targeted risk assessment of hazard, exposure, and vulnerability.	Targeted risk assessments	Number of programmes, which outline the key climate risks facing WASH services and adopt technologies to mitigate and adapt to these.	Programme documents
1.6	Programme interventions should try to strengthen and inform national budget allocations.	Financial performance	Year on year increased and targeted climate financing	Review of national and local government budgets

Pillar 2: Improving water resources management				
#	**Principle**	**Indicator**	**Description**	**MoV**
2.1	Specific measures need to be taken to strengthen the links between water resources and WASH.	Water resource practices	Number of WASH programmes engaged in measuring and managing local water resources	Survey
2.2	WASH organisations should contribute to the collection of local hydrometric data.	Hydrometric monitoring practices	Number of organisations monitoring water resource parameters	Survey
2.3	Modified Water Safety Plans provide a useful vehicle for establishing better water resources planning between communities, local and national authorities.	Water Safety Planning	Percentage of water safety plans that have led to regular collaborative planning with local authorities	Survey

2.4	Monitoring data should directly feed into national early warning systems and models.	Monitoring processes	Number of monitoring locations where data is processed and stored in national repositories	Desk study
2.5	Measures should be taken to provide communities with better access to, and understanding of, climate information.	Quality and timeliness of information	Measures (a) relevance of information, (b) timing, (c) number of satisfied communities	Survey

Pillar 3: Strengthening WASH infrastructure, services, and behaviours				
#	**Principle**	**Indicator**	**Description**	**MoV**
3.1	Interventions should be appropriate for the context and implemented to high professional standards.	Service performance	Ratio of water and sanitation services that meet performance criteria year-round and at all times	Survey
3.2	Sustainable outcomes should be planned for from the outset.	Quality of services	Number of WASH services where repairs are carried out rapidly, either by community-based maintenance structures or with external support	Survey
3.3	Implementing agencies should maintain simple and functional monitoring systems.	Effectiveness of monitoring systems	Number of monitoring systems that leads to corrective action	Study
3.4	The cost of climate resilience WASH interventions should be recorded and managed to ensure cost effectiveness and inform scale up of the approach.	Cost effectiveness	Ratio of programmes that strive for optimum value for money over the long term.	Measured against a 'code of practice'.
3.5	It is essential that organisations implementing climate resilient WASH programmes strive to improve their behaviour by generating new learning.	Learning process indicators	Field level experiences being documented and feeding into national policy and strategy	Study

Pillar 4: Building community resilience				
#	**Principle**	**Indicator**	**Description**	**MoV**
4.1	It is essential to understand the capacity of households and local communities to respond to climate shocks.	Coping mechanisms	Measures community coping mechanisms and levels of external support provided	Survey
4.2	Good programmes are relevant to people's needs and based on a sound assessment of climate risks.	Service user satisfaction	Measures user satisfaction with local climate action plans	Survey
4.3	Good climate resilience programmes will need to establish strong planning partnerships to ensure national and local institutions work collaboratively.	Quality of partnerships	Number of effective working partnerships	Survey

4.4	An important outcome of climate-related WASH interventions should be more resilient services enjoyed by all.	Sustainability and resilience of services	Percentage of households who feel their resilience has been strengthened through WASH	Survey
4.5	Climate change adaptation is complex work, full of uncertainties, therefore iterative and adaptive approaches are required.	Adaptive Management practices	Percentage of programmes that are using agreed AM practices	Survey

Pillar 5: Towards a low carbon WASH sector				
#	**Principle**	**Indicator**	**Description**	**MoV**
5.1	Good programmes strive to improve their efficiency and reduce the need for reworking and corrective action	Quality of service	Number of programmes that are implemented cost-effectively	Study
5.2	Organisations working in the WASH sector should engage in wider Nature Based Solutions.	Nature Based Solutions	Number of programmes that are inter-linking WASH and wider environmental pressures	Survey
5.3	Piped water supply programmes should measure Non-Revenue Water to improve service performance levels	Non-revenue water	Ratio of non-revenue water meeting minimum requirement	Operator reports and surveys
5.4	Renewable pumping systems should be considered if the necessary enabling conditions are present	Renewable energy	Ratio of WASH programmes with sustainable renewable energy systems	Survey
5.5	Organisational overheads and logistics should be managed to acceptable levels	Financial performance	Ratio of organisational overhead costs to programme implementation costs	Survey

How can the Benchmark Paper be Implemented?

We suggest that the following five actions need to be undertaken for the benchmark paper to be applied in practice.

First, the benchmark principles will need to be included in the current evaluation to see how well the UNICEF Climate Resilient WASH programme complies with the overarching principles proposed. This will be done using a simple 'traffic light' score, with red implying the principle is omitted, amber at risk and green meaning performance is good. This will be subjective, but it will provide initial analysis of the gaps that exist.

Second, UNICEF should explicitly give priority to implementing the benchmark paper within its own Climate Resilience WASH programmes. The Cambodia Country Office should identify where the benchmark paper can be applied within its current programme through to 2023. The country office also needs to adapt the monitoring indicators, so they are realistic and appropriate for its current programme. This is required so UNICEF are clear about the steps required, so this experience and advice can be used to inform other WASH organisations.

Third, UNICEF need to engage with government counterparts at both national and local levels because they are the de-facto authorities for coordinating Climate Resilience WASH interventions. The purpose of this approach is to raise awareness to the aims of the benchmark paper, to increase national autonomy and to help government apply the benchmark paper at multiple levels.

Fourth, as the benchmark paper gains interest and is applied by other WASH organisations there needs to be greater understanding of cost benefit analysis. This implies better understanding of how much it costs organisations to implement the benchmark paper and whether there are perceived benefits by adopting the principles. Programmes should be explicit about the planning costs and costs/savings associated with each principle.

Fifth, all those organisations involved in planning and adopting the benchmark paper should be continuously learning and documenting their experiences of applying these principles. The benchmark paper will only be successful if individuals and organisations working in the WASH sector are willing to collaborate and make this approach a success

ANNEX E: BENCHMARK SCORING

Date of Scoring: February 2022

	Pillar 1: Strengthening the enabling environment for climate resilient WASH programming				
#	Principle	Traffic Light Score			Brief comments
1.1	It is essential to understand, respect and work in a collaborative manner with government policy and strategy.				UNICEF clearly take active measures to support RGC.
1.2	Upstream work related to strengthening the enabling environment must try to ensure inter-linkages between different component parts of the WASH system.				UNICEF works at multiple levels, but less clear how their systems strengthening work is impacting at district and commune levels.
1.3	Programmes should have a strong focus on inter-sectoral coordination.				Some interlinkages with health, education and social protection sectors but wider links with water resources, agriculture and energy sectors missing.
1.4	Systems Strengthening work must engage with the Private Sector.				Evident for water and sanitation work.
1.5	Programmes should be built on a targeted risk assessment of hazard, exposure, and vulnerability.				High priority for UNICEF and its partners.
1.6	Programme interventions should try to strengthen and inform national budget allocations.				Less evidence of cost benefit analysis studies being undertaken or what targets for increased WASH recurrent finance have been set.

	Pillar 2: Improving water resources management

		Traffic Light Score			Brief comments
2.1	Specific measures need to be taken to strengthen the links between water resources and WASH.				CR WASH programmes have increased focus on CR boreholes and pumping tests.
2.2	WASH organisations should contribute to the collection of local hydrometric data.				No evidence of routine hydrometric monitoring.
2.3	Modified Water Safety Plans provide a useful vehicle for establishing better water resources planning between communities, local and national authorities.				The 'true' effectiveness of WSPs needs to be determined post establishment.
2.4	Monitoring data should directly feed into national early warning systems and models.				No evidence of hydrometric monitoring feeding into early warning systems or models.
2.5	Measures should be taken to provide communities with better access to, and understanding of, climate information.				Strong focus on initial risk analysis but gaps in how information is being shared continuously with communities.

	Pillar 3: Strengthening WASH infrastructure, services, and behaviours				
#	Principle	Traffic Light Score			Brief comments
3.1	Interventions should be appropriate for the context and implemented to high professional standards.				This is considered and is highly relevant o UNICEF's work given post construction support is limited.
3.2	Sustainable outcomes should be planned for from the outset.				Need to consider systematic issues (such as finance and ongoing external support) that are weak.
3.3	Implementing agencies should maintain simple and functional monitoring systems.				Necessary to shift to measuring service levels rather than coverage data.

3.4	The cost of climate resilience WASH interventions should be recorded and managed to ensure cost effectiveness and inform scale up of the approach.				Very necessary to start recording CBA data.
3.5	It is essential that organisations implementing climate resilient WASH programmes strive to improve their behaviour by generating new learning.				Relevant given climate change will require iterative and adaptive approaches. This is work-in-progress.

	Pillar 4: Building Community Resilience				
#	Principle	Traffic Light Score			Brief comments
4.1	It is essential to understand the capacity of households and local communities to respond to climate shocks.				Unclear how UNICEF is determining whether a community is resilient to climate change – what metrics are being used?
4.2	Good programmes are relevant to people's needs and based on a sound assessment of climate risks.				Strong focus on initial risk, hazard and vulnerability assessments.
4.3	Good climate resilience programmes will need to establish strong planning partnerships to ensure national and local institutions work collaboratively.				Necessary to ensure adequate resources are being decentralised.
4.4	An important outcome of climate-related WASH interventions should be more resilient services enjoyed by all.				Baseline and end-line assessments are required to determine impact.
4.5	Climate change adaptation is complex work, full of uncertainties, therefore iterative and adaptive approaches are required.				Some adaptation measured undertaken, but necessary to document iterative and adaptive approaches based on learning being generated.

	Pillar 5: Towards a low carbon WASH sector

#	Principle	Traffic Light Score	Brief comments
5.1	Good programmes strive to improve their efficiency and reduce the need for reworking and corrective action		Necessary to demonstrate efficiency in service delivery.
5.2	Organisations working in the WASH sector should engage in wider Nature Based Solutions.		Limited evidence of nature-based solutions being prioritised.
5.3	Piped water supply programmes should measure Non-Revenue Water to improve service performance levels		This is a grey area as we have been assured Private Operators do not require stronger regulation to improve service levels. But to the best of our knowledge NRW is not currently monitored or reported on by Private Water Operators.
5.4	Renewable pumping systems should be considered if the necessary enabling conditions are present		Being pursued by UNICEF, but impacts should be quantified as well.
5.5	Organisational overheads and logistics should be managed to acceptable levels		Necessary to demonstrate efforts to reduce organisational GHG emissions.

ANNEX F: SAMPLING

A purposive approach to sampling was utilized for the field work, recognizing the need to cover all four output areas of UNICEF Cambodia's WASH programme in various locations and covering different technologies (see Table 6). Ideally we want to evaluate a mix of areas considered 'high' and 'low' performing by UNICEF to reflect field realities. Our sampling strategy includes three main considerations.

- areas selected emphasize the inter-connectedness of UNICEF's work, thus recognising the limitations of single intervention approaches. It will also allow us to maximize the days available for data collection.

- to include development interventions that focus on: Community Water Supply and Private Operator Water Supply, with both groundwater and surface water sources; Water Safety Plans with both geographical and system approaches; climate resilient sanitation; WASH in Schools and Health Care Facilities.
- It provides a broad enough coverage to determine whether efforts to strengthen the enabling environment are having impact at a local level.

Table 1: Climate Resilient WASH Technologies for Field Sampling

Technologies/Approaches	Sample Size	Out of Total Number	Comments
Water Supply			
Groundwater systems – climate resilient boreholes	2	15	Community Water Supply Schemes
Groundwater system – with back-up generator or solar	1	3	Private Operator Schemes
Surface Water systems - ponds, reservoirs, and canals	2	3	Private Operator Schemes
Augmented water supply systems (Rainwater Harvesting, Upgrading storage tanks, new groundwater sources)	13 6	187 schools 15 Health Care facilities	Schools and Health Care Facilities
Water Safety Plans at commune scale	2	32	Often implemented alongside community water supply systems.
Water Safety Plans at system level	3	4	Often implemented alongside Private Operator water supply systems.
Sanitation			
Elevated Latrine	80[29]	500	Implemented at household level
Twin Pit Latrine	16[30]	51	

We propose to visit 5 provinces, 9 districts and 21 communes[31]. Field data collection will focus on areas where climate resilient interventions have taken place, and this will be used to validate recent progress. These are set out below in Table 7.

Our selection of the target areas started with an understanding of the main climate risks in Cambodia and the corresponding resilient WASH technology that has been implemented. These covered services provided in villages, small towns, urban settlements, as well as schools and health centres. We will also engage with WSP teams for geographical areas and water supply systems. Our sampling criteria includes the following:

- Communes that suffer flood, drought, water seasonality and water quality risks
- A mix of groundwater and surface water systems
- A mix of rural and urban localities
- Water supply systems that require community-based maintenance
- Water Supply systems that are privately operated

[29] Ten FGDs comprising eight people in each
[30] Two FGDs comprising eight people in each
[31] We believe this will be manageable given resource constraints.

- A range of schools and health centres
- WSPs that include both geographical and system focus
- Communes where it will be possible to see all climate resilient latrine options
- Communes where social engagement from service users will be high
- Those areas where we can interview marginalized groups, such as elderly, people with disabilities and female headed households
- Access to site and key personnel is possible during the COVID-19 pandemic

In recognition of the human right to water we will also maintain a record of all the “right holders” and “duty bearers” we engage with. This will ensure the views of a wide range of rights holders are captured and details of the duty bearers are recorded. The primary duty bearer is government but also includes other service providers (such as UN agencies and INGOs) who work in support of state actors. We will maintain records from all the interviews with key informants and FGDs and well as details of participants from the reference group meetings and validation workshops. This will be included in the final evaluation report, and we will begin populating data of rights holders (such as location, age, disability as we obtain information from UNICEFs WASH partners.

We are also mindful that JMP data highlights people, particularly those in the lower wealth quintiles, who remain excluded from access to sustainable WASH services. We understand there is also high disparity between rural and urban areas, with the former having reduced access to services in the dry season months. In order to address this situation, vulnerable groups need better access to services, but they also need a voice so that national policies and entrenched attitudes can change too.

People are excluded, or marginalized, for multiple reasons. This may be on the basis of gender, age, and disability. They may also be vulnerable because of their social and economic status or because of their geographical location. We describe vulnerable groups as those that:

- Live remotely and are hard to reach for the provision of services
- Households and groups that are particularly poor
- Women and girls whose status in society may be considered inferior
- Ethnic minorities who lack influence in society and may be discriminated against
- People with physical and mental disabilities and those with chronic health conditions
- Children, youths, and older members of society

Prior to undertaking fieldwork, we will engage with UNICEF’s partners to identify where these groups are and what efforts have been made to serve them and ensure they have a voice. It is realistic to expect some baseline mapping has been conducted in all communes and this will be used for the final selection of our engagement with vulnerable groups.

Table 2: Proposed Provinces, Districts, and Communes

Province	District	Commune	WASH Climate Resilience Technology	Comments
Kampong Cham	Batheay	Tang Krang	Private Operator Water Supply System (1)	Groundwater System
			Water Safety Plan (1)	System Approach
Kampong Speu	Borsedth	Kak	Community Water Supply System (1)	Groundwater system
			Water Safety Plan (1)	Geographical approach
	Samrong Tong	Khutum Kraing	Water Safety Plan (1)	Geographical approach
			Community Water Supply System (1)	Groundwater system
			Private Operator Water Supply System (1)	Surface water (reservoir)

		Trapeang Kong	Water Safety Plan (1)	System approach
		Tropaing Korg	School WASH (3)	
		Taing Krouch	School WASH (1)	
			Health Care Facility (1)	
	Kong Pisei	Srang	Private Operator Water Supply System (1)	
			Water Safety Plan (1)	Geographical approach
			School WASH (1)	
	Odongk	Veal Pong	School WASH (2)	
			Health Care Facility (1)	
		Phnom Touch	Health Care Facility (1)	
Kratié	Preak Prasab	Preak Prasab	Elevated Latrine	Household level
		Chambak	Twin Pit Latrine	Household level
Svay Rieng	Romeas Haek	Sambour	School WASH (1)	
		Tras	School WASH (1)	
		Chik Dei	Health Care Facility (1)	
		Tropang Sdout	Health Care Facility (1)	
Takeo	Bati	Lumpong	Private Operator Water Supply System (1)	Surface Water (Pond)
			Water Safety Plan (1)	System approach
	Tramkak	Nhaeng Nhang	School WASH (2)	
		Ta Phem	Health Care Facility (1)	
		Ghaning Gnorng	Health Care Facility (1)	
		Trapeang Thum Khang Cheung	School WASH (2)	

Key Informant Interviews shall be conducted in Phnom Penh, during step 2, as per Table 8. In addition, visits will be made to a selection of water supply schemes, communities, schools, and health facilities that represent each of the main WASH technologies promoted by UNICEF. This includes water systems implemented by UNICEF, which fall under the control of both MRD and MISTI. The groups we intend to meet and facilitate FGDs with are shown in Table 9.

Table 3: Key Informants to interview

Key Informant Category	Approximate Number to be Interviewed	Description
UNICEF staff	4	WASH managers from UNICEF in Phenom Penh as well as WASH field level staff in Kratie
National government representatives	7	Representatives from MRD, MISTI, MEYS, MoH, MWRM, MoE and NCDDS

Table 4: Focus Groups to interview

Focus Group Category	Approximate Number of People to be Interviewed[32]	Description

[32] For FGDs we have assumed a maximum of 8 participants per meeting

Water Safety Planning Teams	48	Required at area and system level. To include WASH commune focal points and Commune Chief
Community Water User Groups	16	People tasked with operating and maintaining water supply services.
Private Water Supply Operators	16 -24	Including both management and operating staff
Female households and disadvantaged groups	40	Vulnerable people and households identified by UNICEF and its WASH partners.
Local government, UNICEF, and Development Partner representatives	10 - 20	Including local technical and managerial staff from mandated agencies and institutions that support WASH service delivery
Latrine suppliers	2-4	Suppliers of modified latrine goods and services
School support committee	13-26	Staff concerned with managing WASH services in schools.
Health centre representatives	6-12	Staff concerned with managing WASH services in health centres.

ANNEX G: FIELDWORK SCHEDULE

Province	District	Commune	WASH Climate Resilience Technology	Comments	Dates visit
Kampong Speu	Odongk	Veal Pong	School WASH (2)	KII/FGD/DO	14.Dec.21
			Health Care Facility (1)	KII/FGD/DO	
		Phnom Touch	Health Care Facility (1)	KII/FGD/DO	
	Samrong Tong	Trapaing Korng	Private Operator Water Supply System (1)	Surface water (reservoir), DO	15.Dec.12
			Water Safety Plan (1)	System approach	
			School WASH (3)	KII/FGD/DO	
		Khutum Kraing	Water Safety Plan (1)	Geographical approach	16.Dec.21
			Community Water Supply System (1)	Groundwater system, DO	
		Taing Krouch	School WASH (1)	KII/FGD/DO	17.Dec.21
			Health Care Facility (1)	KII/FGD/DO	
	Kong Pisei	Srang	Private Operator Water Supply System (1)	KII/FGD/DO	20.Dec.12
			Water Safety Plan (1)	Geographical approach	
			School WASH (1)	KII/FGD/DO	
	Borsedth	Kak	Community Water Supply System (1)	Groundwater system, DO	21.Dec.21
			Water Safety Plan (1)	Geographical approach	
Takeo	Bati	Lumpong	Private Operator Water Supply System (1)	Surface Water (Pond) ,DO	22.Dec.21
			Water Safety Plan (1)	System approach	
	Tramkak	Ta Phem	Health Care Facility (1)		23.Dec.21
		Trapeang Thum Khang Cheung	School WASH (2)		
		Nhaeng Nhang	School WASH (2)		24.Dec.21
			Health Care Facility (1)		
Svay Rieng	Romeas Haek	Tropang Sdout	Health Care Facility (1)	KII/FGD/DO	03.Jan.22
		Sambour	School WASH (1)	KII/FGD/DO	
		Tras	School WASH (1)	KII/FGD/DO	04.Jan.22
		Chik Dei	Health Care Facility (1)	KII/FGD/DO	
Kampong Cham	Batheay	Tang Krang	Private Operator Water Supply System (1)	Groundwater System	05.Jan.22
			Water Safety Plan (1)	System Approach	
Kratié	Preak Prasab	Preak Prasab	Elevated Latrine	Household level, OD,KII, FGD	06-07.Jan.22
		Chambak	Twin Pit Latrine	Household level	

ANNEX H: PEOPLE INTERVIEWED/PARTICIPANTS

Consultative Workshop on the Benchmark Paper: Participant List

	Name	Organization	Designation/Position	M/F
1	Sonia Pérez	IOD PARC	Evaluation team member	F
2	Singe Day	IOD PARC	Evaluation team leader	M
3	Soriya Thun	UNICEF Cambodia	WASH Specialist	M
4	Sam Treglown	UNICEF Cambodia	WASH Officer	M
5	Sovath Ngin	UNICEF Cambodia	WASH Manager	F
6	C hhorn Choeur	MRDPM	Chief of Office	M
7	Sokunthea By	EU Delegation	Progamme Officer-Food Security, Water & Sanitation	M
8	Mr. Bilal Akbar	DFAT	Assistant Director; Water Security Section	M
9	H.E. Chreay Pom	MRD	Director General of Technical Affairs	M
10	Koeut Puthvorun			M
11	Dr Lim Khannkrika	MoH		M
12	Niina Kylliainen	UNDP	Climate Change Policy Specialist	F
13	Phan Phorn	MRD/DRWS		M
14	Mr Phyrum Kov	World Bank Group	'Water and Sanitation Specialist (water supply and sanitation)	M
15	Pich Sambattrattanak	DTPM/MISTI		M
16	Rous Bora	MRD/DRWS		M
17	Sim Socheata	MRD/DRWS		F
18	Siti Hasanah	ADB	Project Officer	F
19	Ms. Sokhadeva Chanthet	MRD/DRHC	Deputy director, DRHC/MRD	F
20	Mrs. Stephanie Seng	Teuk Saat 1001	Partnerships and development manager	F
21	Thida Tieng	UNDP	CCCA Climate Change Specialist	F
22	Mr. Tyler Kozole	iDE	WASH Program Manager	M
23	Mr. Vira Riel	Cambodian Water Supply Association (CWA)	Program Manager	M
24	Mr. Chan Virak	World Bank Group	'Water and Sanitation Specialist (water resources)	M

Key Informants Interviewed

	Name	Organization	Designation/Position	Type of KII	M/F
1	Mr. Srin Pouthy	MRD/DRWS	Director of Rural Water Supply	Government	M
2	Soem Sopheara	MRD/DRWS	Chief, clean water office	Government	M
3	Somountha Mith	MRD/DRWS	Deputy Director	Government	F
4	Kunthea Sok	MRD/DRWS		Government	F
5	Bora Rous	MRD/DRWS		Government	M

6	Sim Socheata	MRD/DRWS		Government	F
7	Soham Prathna	MRD/DRWS		Government	M
8	Sopheap Ory	MRD/DRWS		Government	F
9	Sovanreach Ros	MRD/DRWS		Government	M
10	Ms. Sokhadeva Chanthet	MRD/DRHC	Deputy director, DRHC/MRD	Government	F
11	Dr. Lon Sayteng	MRD/DRHC	Director of Rural Health Care	Government	M
12	HE Chreay Pom	MRD	Director General of Technical Affairs	Government	M
13	Mr.Teang Chhayheang	MRD/ Climate Change TWG	Deputy Director, Department of Planning and Public Relations; and MRD member of Climate Change TWG	Government	M
14	Sok Srun	MoH	Director of Department of Hospital Services	Government	M
15	H.E. Bunrith	MoWRAM	Technical Director of Department of Water Resource,	Government	M
16	Mr. Sem Samnang	MoWRAM	Director of the Department of Water Supply and Sanitation	Government	M
17	Mr Thach Sovanna	MoWRAM	Director of Water Resources Management and Conservation, member of Climate Change TWG	Government	M
18	Ms. Vichet Ratha	MoE/DCC	Deputy Director and NDC Partnership in-Country Facilitator	Government	F
19	Ms. Sopanha	MoE/DCC		Government	F
20	Mr. Sim Touch	MoE/DCC	Chief of office	Government	M
21	Mr. Nong Davith	World Vision International Cambodia (WVI-C)	Senior Specialist - WASH Sector	Implementing Partner	M
22	Thearavuth Kao	World Vision International Cambodia (WVI-C)	Senior Manager for PNS & GIK	Implementing Partner	M
23	Makara Nuth	BORDA	Technical coordinator	Implementing Partner	M
24	Mr. Opasith Mang	BORDA	Country Director	Implementing Partner	M
25	Mr. Lim Minh	Cambodian Water Supply Association (CWA)	Executive Director	Implementing Partner	M
26	Mr. Tyler Kozole	iDE	WASH Program Manager	Implementing Partner	M
27	Sam Treglown	UNICEF Cambodia	WASH Manager	UNICEF	M
28	Soriya Thun	UNICEF Cambodia	WASH specialist	UNICEF	M
29	Sovath Ngin	**UNICEF Cambodia**	WASH officer	UNCEF	F

Field Work: People Interviewed

Note that identifiable information i.e., names and telephone numbers have been removed from the tables below to respect anonymity of participants,

Fieldwork on 14 December 2021

List of People Interview (1)

FGD- Group: School WASH of Prey Chrap

Place: Veal Pong Commune, Odonk District, Kampong Speu Province

N.	Family Name & Name	Gender	Job/Position	Organization

1	Hong Horn	M	Director	Prey Chrap School
2	Sim More	M	Teacher	Prey Chrap School
3	Khin Ratana	F	Teacher	Prey Chrap School
4	Yin Sitha	F	Teacher	Prey Chrap School
5	Tho Reaksmey	F	Teacher	Prey Chrap School
6	Leng Chem	M	Community Repres.	Prey Chrap School
7	Sieng Soka	M	Evaluation Team	
8	Saing Hay	M	Evaluation Team	

List of People Interview (2)
FGD- Group: School WASH of Sahak Satrey Khmer
Place: Veal Pong Commune, Odonk District, Kampong Speu Province

N.	Family Name & Name	Gender	Job/Position	Organization
1	Soeun Sophea	M	Director	Sahak Satrey Khmer
2	Ouer Chetra	M	Teacher	Sahak Satrey Khmer
3	Sambo Savakdy	F	Teacher	Sahak Satrey Khmer
4	Sim Dalin	F	Teacher	Sahak Satrey Khmer
5	Hing Lyna	F	Teacher	Sahak Satrey Khmer
6	Theng Naheng	M	Teacher	Sahak Satrey Khmer
7	Sin Socheata	F	Teacher	Sahak Satrey Khmer
8	Vanna Sreymon	F	Teacher	Sahak Satrey Khmer
9	Chorn Theary	M	Deputy Chief	Samkipheap Village
10	Sieng Soka	M	Evaluation Team	
11	Saing Hay	M	Evaluation Team	

List of People Interview (3)
FGD- Group: Health Care Facility WASH of Damnak Smach
Place: Veal Pong Commune, Odonk District, Kampong Speu Province

N.	Family Name & Name	Gender	Job/Position	Organization
1	Hum Naren	M	Staff	Damnak Smach HC
2	Yim Rem	F	Staff	Damnak Smach HC
3	Ly Dana	F	Staff	Damnak Smach HC
4	Hou Narin	M	Chief	Damnak Smach HC
5	Samang Srey Leak	F	Worker	Patient visiting HC
6	Sieng Soka	M	Evaluation Team	
7	Saing Hay	M	Evaluation Team	

List of People Interview (4)
FGD- Group: Health Care Facility WASH of Phnom Toch Paing Lvea
Place: Phnom Toch Commune, Odonk District, Kampong Speu Province

N.	Family Name & Name	Gender	Job/Position	Organization
1	Sreykhon Lagn	F	Deputy chief	Phnom Toch Paing Lvea HC
2	Khun Sokhoeun	F	Chief	Phnom Toch Paing Lvea HC
3	Nem Kan	M	Staff	Phnom Toch Paing Lvea HC

4	Sam Sinorn	F	Staff	Phnom Toch Paing Lvea HC
5	Chhoy Sovannary	F	Staff	Phnom Toch Paing Lvea HC
6	Vy Pisey	F	Staff	Phnom Toch Paing Lvea HC
7	Sieng Soka	M	Evaluation Team	
8	Saing Hay	M	Evaluation Team	

Fieldwork on 15 December 2021

List of People Interview (5)
FGD- Group: Private Water Supply (PWS) of Trapaing Kyong
Place: Trapang Korng Commune, Samrong Tong District, Kampong Speu Province

N.	Family Name & Name	Gender	Job/Position	Organization
1	Meng Hak	M	Owner	Trapaing Kyong PWS
2	Chel Sotha	M	Manager	Trapaing Kyong PWS
3	Pich Sophal	M	Deputy Chief village	Pdao Village
4	Bou Vannary	F	Farmer	Pdao Village
5	Pak Puch	M	Farmer	Pdao Village
6	Kong Sam On	M	Farmer	Pdao Village
7	Ven Vichet	M	Worker	Trapaing Kyong PWS
8	Ven Keo	M	Worker	Trapaing Kyong PWS
9	Lay Hun	F	Farmer	
10	Sieng Soka	M	Evaluation Team	
11	Saing Hay	M	Evaluation Team	

List of People Interview (6)
FGD- Group: School WASH of Prey Pdao
Place: Trapang Korng Commune, Samrong Tong District, Kampong Speu Province

N.	Family Name & Name	Gender	Job/Position	Organization
1	Khom Nara	M	Teacher	Prey Pdao School
2	Hem Ravy	F		Prey Pdao School
3	Ngem Channa	F		Prey Pdao School
4	Soeng Ratanak	M		Prey Pdao School
5	Sung Sokneang	F		Prey Pdao School
6	Chhou Rith	M		Prey Pdao School
7	Mey Thoeun	M	Director	Prey Pdao School
8	Mey Chanthorn	M	1st deputy chief	Trapaing Korng commune
9	Morm Sarin	M	Chief	Prey Pdao Village
10	Yim Sarin	M	Deputy Director	Prey Pdao School
11	Sieng Soka	M	Evaluation Team	
12	Saing Hay	M	Evaluation Team	

List of People Interview (7)
FGD- Group: School WASH of Toul Svay Raot
Place: Trapang Korng Commune, Samrong Tong District, Kampong Speu Province

N.	Family Name & Name	Gender	Job/Position	Organization
1	Horm Chanthou	F	Teacher	Toul Svay Raot School
2	Yim Sory	F	Teacher	Toul Svay Raot School
3	Sim Thum	M	Teacher	Toul Svay Raot School
4	Hun Chan	M	Director	Toul Svay Raot School
5	Long Londy	M	Teacher	Toul Svay Raot School
6	Heum Him	M	Chief of Community	Toul Svay Raot School
7	Sou Phin	M	Chief	Krok Pnao Vilage
8	Sieng Soka	M	Evaluation Team	
9	Saing Hay	M	Evaluation Team	

List of People Interview (8)
FGD- Group: School WASH of Dypok Kdey Lvea
Place: Trapang Korng Commune, Samrong Tong District, Kampong Speu Province

N.	Family Name & Name	Gender	Job/Position	Organization
1	Sou Vimul	M	Director	Dypok Kdey Lvea School
2	Oum Sothoeun	M	Deputy Director	Dypok Kdey Lvea School
3	Pok Sophea	F	Teacher	Dypok Kdey Lvea School
4	Try Ly	M	Teacher	Dypok Kdey Lvea School
5	Touch Chamroeun	M	Community	
6	Yong Chanthol	M	Chief of village	
7	Khem Sorya	F	Teacher	Dypok Kdey Lvea School
8	Sieng Soka	M	Evaluation Team	
9	Saing Hay	M	Evaluation Team	

Fieldwork on 16 December 2021

List of People Interview (9)
FGD- Group: Communal Water Supply (CWS) of Kvan Community
Place: Khnum Kraing Commune, Samrong Tong District, Kampong Speu Province

N.	Family Name & Name	Gender	Job/Position	Organization
1	Chhem Sarum	M	Deputy chief	Kvan CWS
2	Ek Mao	M	Chief of village	Kvan CWS
3	Som Sy	F	Finance	Kvan CWS
4	Nen Savuth	M	Member	Kvan CWS
5	Phoeun sreyroat	F	Farmer	Water user of Kvan CWS
6	Oem Sreyloeng	F	Farmer	Water user of Kvan CWS
7	Chap Chandy	M	Member	Kvan CWS
8	Chip Sareth	M	Farmer	Water user of Kvan CWS
9	Sieng Soka	M	Evaluation Team	
10	Saing Hay	M	Evaluation Team	

List of People Interview (10)
FGD- Group: Water Safety Planning Team (WSPT) of Khnum Kraing Commune

Place: Khnum Kraing Commune, Samrong Tong District, Kampong Speu Province

N.	Family Name & Name	Gender	Job/Position	Organization
1	Pheng Sear	M	Chief	Khnum Kraing Commune
2	Vorn Vet	M	1st Deputy Chief	Khnum Kraing Commune
3	Chhum Men	F	2nd deputy chief	Khnum Kraing Commune
4	Im Chhoeung	M	Member	Khnum Kraing Commune
5	Moeun Thoeun	M	Member	Khnum Kraing Commune
6	Koy Nai	M	Member	Khnum Kraing WSPT
7	Sorn Kimsang	M	Member	Khnum Kraing WSPT
8	Chhoeng Mon	M	Chief village	Khnum Kraing WSPT
9	Lun Sreyleak	F	Member	Khnum Kraing WSPT
10	Soth Van	M	Chief village	Khnum Kraing WSPT
11	Doek Saroeun	F	Member	Khnum Kraing WSPT
12	Py Sok	M	Member	Khnum Kraing WSPT
13	Sarun Vanak	M	Chief village	Khnum Kraing WSPT
14	Sieng Soka	M	Evaluation Team	
15	Saing Hay	M	Evaluation Team	

Fieldwork on 17 December 2021

List of People Interview (11)
FGD- Group: School WASH of Kirisessor
Place: Taing Krouch Commune, Samrong Tong District, Kampong Speu Province

N.	Family Name & Name	Gender	Job/Position	Organization
1	Chhun Racha	M	Director	Kirisessor School
2	Yim Saron	M	Teacher	Kirisessor School
3	Nou SreyKhe	F	Teacher	Kirisessor School
4	Choueng Chim	M	Community Representative	Or Neang Hing Village
5	Chan Phearum	F	Chief of Community	Or Neang Hing Village
6	Sieng Soka	M	Evaluation Team	
7	Saing Hay	M	Evaluation Team	

List of People Interview (12)
FGD- Group: Health Care Facility WASH of Krouch Meas
Place: Taing Krouch Commune, Samrong Tong District, Kampong Speu Province

N.	Family Name & Name	Gender	Job/Position	Organization
1	Chhoeun Dalin	F	Chief	Krouch Meas HC
2	Yun Solar	F	Staff	Krouch Meas HC
3	Sum Charya	F	Staff	Krouch Meas HC
4	Ly Pheareak	M	Staff	Krouch Meas HC
5	Huy Pichpisey	F	Staff	Krouch Meas HC
6	Ly Sophany	F	Staff	Krouch Meas HC
7	Sek Non	M	Staff	Krouch Meas HC
8	Sieng Soka	M	Evaluation Team	

9	Saing Hay	M	Evaluation Team	

Fieldwork on 20 December 2021

List of People Interview (13)
FGD- Group: Private Water Supply—Eang Mab Facility
Place: Srang Commune, Kong Pisey District, Kampong Speu Province

N.	Family Name & Name	Gender	Job/Position	Organization
1	Eang Mab	M	Owner	Ean Mab Water Supply
2	Leang Chem	F	Spouse	Ean Mab Water Supply
3	Tob Sarim	F	Worker	Ean Mab Water Supply
4	Norn Mao	M	Worker	Ean Mab Water Supply
5	Ouk Sokhorn	M	Worker	Ean Mab Water Supply
6	Long Heak	M	Worker	Ean Mab Water Supply
7	Svay Roat	M	Worker	Ean Mab Water Supply
8	Sin Sophal	M		
9	Sieng Soka	M	Evaluation Team	
10	Saing Hay	M	Evaluation Team	

List of People Interview (14)
FGD- Group: **Water Safety Planning Team of Srang Commune**
Place: Srang Commune, Kong Pisey District, Kampong Speu Province

N.	Family Name & Name	Gender	Job/Position	Organization
1	Chhorn Sreang	M	Chief	Sla Village
2	Nget Nouen	M	Deputy chief	Svay Village
3	Muy Vy	M	Chief	Traobek Roung Village
4	Pi Mean	F	Deputy	Tlok Daunsor Village
5	Touch Voern	M	Chief	Ortavam Village
6	Khim Sokha	F	Focal Person	Srang Village
7	Pech Voeu	M	Village assistance	Svay Chrum village
8	Soung Khon	M	Chief	Daun Tey village
9	Leng Sokhim	M	Assistance	Sre Moan village
10	Mom Channith	F	Assistance	Srang Commune
11	Sok Norn	F	2nd Deputy Chief	Srang Commune
11	Aun Meng	M	Chief	Srang Commune
12	Chhuim Thuch	M	Commune clerk	Srang Commune
13	Sieng Soka	M	Evaluation Team	
14	Saing Hay	M	Evaluation Team	

List of People Interview (15)
FGD- Group: **School WASH of Ang Ta Phem**
Place: Srang Commune, Kong Pisey District, Kampong Speu Province

N.	Family Name & Name	Gender	Job/Position	Organization
1	Hun Vor	M	Director	School Ang Ta Phem

2	Choeun Sopha	F	Teacher	School Ang Ta Phem
3	BO Sona	F	Teacher	School Ang Ta Phem
4	Bo Sreyleap	F	Teacher	School Ang Ta Phem
5	Phon Sam Ath	M	Teacher	School Ang Ta Phem
6	San Navy	F	Teacher	School Ang Ta Phem
7	Hun Leankhena	F	Teacher	School Ang Ta Phem
8	Soung Saroeun	F	Teacher	School Ang Ta Phem
9	Hun Pheany	F	Teacher	School Ang Ta Phem
10	Sieng Soka	M	Evaluation Team	
11	Saing Hay	M	Evaluation Team	

Fieldwork on 21 December 2021

List of People Interview (16)
FGD- Group: Communal Water Supply (CWS) of Ang Ta Phal Commune
Place: Kok Commune, Kong Pisey District, Kampong Speu Province

N.	Family Name & Name	Gender	Job/Position	Organization
1	Sok Sarin	M	Chief of Committee	Ang Ta Phal CWS
2	Nget Vannak	M	Member	Ang Ta Phal CWS
3	Sum Sorn	M	Member	Ang Ta Phal CWS
4	Leu Mao	F	Member	Ang Ta Phal CWS
5	Chhiay Hoeun	M	Member	Ang Ta Phal
6	Long Thoy	F	Farmer	Water User
7	Noa Yoat	F	Farmer	Water User
8	Seb Dy	F	Farmer	Water User
9	Seb Rany	F	Farmer	Water User
10	Mel Sin	M	Member	Ang Ta Phal CWS
11	Sieng Soka	M	Evaluation Team	
12	Saing Hay	M	Evaluation Team	

List of People Interview (17)
FGD- Group: Water Safety Planning Team of Kak Commune
Place: Kok Commune, Kong Pisey District, Kampong Speu Province

N.	Family Name & Name	Gender	Job/Position	Organization
1	Keo Pisey	F	Chie of commune	Kok Commune
2	Soun Horn	M	Commune Councilor	Kok Commune
3	Kong Neng	M	Commune Councilor	Kok Commune
4	Sok Sarin	M	Member WSP	Ang Ta Phal
5	Chhiay Hoeun	M	Member WSP	Ang Ta Phal
6	Mel Sin	M	Member WSP	Ang Ta Phal
7	Khim Sorn	F	Member WSP	Choeung Phnom
8	Khat Sov	F	Member WSP	Russey Vors
9	Mel Thy	F	Member WSP	Russey Vors

10	Sieng Soka	M	Evaluation Team	
11	Saing Hay	M	Evaluation Team	

Fieldwork on 22 December 2021

List of People Interview (18)
FGD- Group: Private Water Supply
Place: Lumpong Commune, Bati District, Takeo Province

N.	Family Name & Name	Gender	Job/Position	Organization
1	Lor Veasna	M	Owner	Water Supply Facility
2	Ngim San	M	Farmer	
3	Tes Poev	M	Worker	Water Supply Facility
4	KongThoun	M	Farmer	
5	Bou Kon	M	Farmer	
6	Bou Kan	M	Farmer	
7	Sieng Soka	M	Evaluation Team	
8	Saing Hay	M	Evaluation Team	

List of People Interview (19)
FGD- Group: Water User Group
Place: Lumpong Commune, Bati District, Takeo Province

N.	Family Name & Name	Gender	Job/Position	Organization
1	Sot Yat	F	Farmer	
2	Veach Kan	F	Farmer	
3	Khat Poev	F	Farmer	
4	Phon Ly	F	Farmer	
5	Nut Rotnea	F	Farmer	
6	Sieng Soka	M	Evaluation Team	
7	Saing Hay	M	Evaluation Team	

Fieldwork on 23 December 2021

List of People Interview (20)
FGD- Group: Ang Ro Kar Primary School
Place: Trapaign Thom Khang Chhoeung Commune, Tramkok District, Takeo Province

N.	Family Name & Name	Gender	Job/Position	Organization
1	Ek Chhem	M	Director	Ang Ro Kar School
2	Seth Sophal	M	Teacher	Ang Ro Kar School
3	Hech Ngun	M	Librarian	Ang Ro Kar School
4	Phem Long	M	Teacher	Ang Ro Kar School
5	Khem Ren	F	Teacher	Ang Ro Kar School
6	Mouk Sophanna	M	Teacher	Ang Ro Kar School
7	Mom Sophea	F	Teacher	Ang Ro Kar School
8	Khuy Sakhorn	F	Teacher	Ang Ro Kar School

9	Sieng Soka	M	Evaluation Team	
10	Saing Hay	M	Evaluation Team	

List of People Interview (21)
FGD- Group: Prey Sbat Health Center
Place: Ta Phem Commune, Tramkok District, Takeo Province

N.	Family Name & Name	Gender	Job/Position	Organization
1	Seang Sophon	M	Director	Prey Sbat HC
2	Mom Touch	F	Staff	Prey Sbat HC
3	Sim Sam Oun	F	Staff	Prey Sbat HC
4	Yan Doeun	M	Staff	Prey Sbat HC
5	Khem Chhuny	F	Staff	Prey Sbat HC
6	Heak Chhorvy	F	Staff	Prey Sbat HC
7	Ros Bona	F	Staff	Prey Sbat HC
8	Pok Samphors	F	Staff	Prey Sbat HC
9	Sieng Soka	M	Evaluation Team	
10	Saing Hay	M	Evaluation Team	

List of People Interview (22)
FGD- Group: Ang Sa At Primary School
Place: Ta Phem Commune, Tramkok District, Takeo Province

N.	Family Name & Name	Gender	Job/Position	Organization
1	Hou Sarom	M	Deputy Director	Ang Sa At School
2	Hoeun Socheat	F	Teacher	Ang Sa At School
3	Mey Pak	M	Teacher	Ang Sa At School
4	Sieng Sophy	F	Teacher	Ang Sa At School
5	Sao Savorn	F	Teacher	Ang Sa At School
6	Met Sodany	F	Teacher	Ang Sa At School
7	Sieng Soka	M	Evaluation Team	
8	Saing Hay	M	Evaluation Team	

Fieldwork on 24 December 2021

List of People Interview (23)
FGD- Group: Samnab Primary School
Place: Nhaeng Nhang Commune, Tramkok District, Takeo Province

N.	Family Name & Name	Gender	Job/Position	Organization
1	Seam Set	M	Director	Samnab School
2	Keo Sokha	M	Teacher	Samnab School
3	Touch Keng	M	Teacher	Samnab School
4	Sun Sreynou	F	Teacher	Samnab School
5	Sieng Soka	M	Evaluation Team	
6	Saing Hay	M	Evaluation Team	

List of People Interview (24)
FGD- Group: Nhaeng Nhang Health Centre
Place: Nhaeng Nhang Commune, Tramkok District, Takeo Province

N.	Family Name & Name	Gender	Job/Position	Organization
1	Dos Vichea	M	Director	Nhaeng Nhang HC
2	Yoeung Vanak	F	Staff	Nhaeng Nhang HC
3	Khoun Sreytouch	F	Staff	Nhaeng Nhang HC
4	Seng Sreysath	F	Staff	Nhaeng Nhang HC
5	Koy Chetra	F	Staff	Nhaeng Nhang HC
6	Nil Chandareay	M	Staff	Nhaeng Nhang HC
7	Sieng Soka	M	Evaluation Team	
8	Saing Hay	M	Evaluation Team	

List of People Interview (25)
FGD- Group: Thoma Mangul Primary School
Place: Nhaeng Nhang Commune, Tramkok District, Takeo Province

N.	Family Name & Name	Gender	Job/Position	Organization
1	Me Nary	F	Director	Thoma Mangul School
2	Chin Sarim	M	Teacher	Thoma Mangul School
3	Choun Samey	M	Teacher	Thoma Mangul School
4	Sao Samnang	F	Teacher	Thoma Mangul School
5	Orn Samedy	F	Teacher	Thoma Mangul School
6	Me Dano	F	Teacher	Thoma Mangul School
7	Sieng Soka	M	Evaluation Team	
8	Saing Hay	M	Evaluation Team	

Fieldwork on 03 January 2022

List of People Interview (26)
FGD-Group: **Private Water Supply of Phnom Del**
Place: Taing Kraing Commune, Batheay District, Kampong Cham Province

N.	Family Name & Name	Gender	Job/Position	Organization
1	Moy Muyheng	M	Owner	Private Water Facility
2	Lim Chanmala	F	Deputy manager	Private Water Facility
3	Tou Nhean	M	Worker	Private Water Facility
4	Ly Laiheng	F	Accountant	Private Water Facility
5	Chan Buntheng	M	Worker	Private Water Facility
6	Tou Bory	M	Worker	Private Water Facility
7	Sieng Soka	M	Evaluation Team	
8	Saing Hay	M	Evaluation Team	

List of People Interview (27)
FGD- Group: **Vulnerable Household of Phnom Del**
Place: Taing Kraing Commune, Batheay District, Kampong Cham Province

N.	Family Name & Name	Gender	Job/Position	Organization
1	Uy Pechchenda	F	Villager	Phnom Del village
2	To Youen	M	Villager	Phnom Del village
3	Ou Yun	F	Villager	Phnom Del village
4	Ung Youeng	F	Villager	Phnom Del village
5	Han Sreyneang	F	Villager	Phnom Del village
6	Nun Bunnorn	M	Villager	Phnom Del village
7	Sieng Soka	M	Evaluation Team	
8	Saing Hay	M	Evaluation Team	

Fieldwork on 04 January 2022

List of Household Visit/Interview (28)
for Assessment of sanitation Infrastructure
Place: Chambak 1 Village, Preak Prang village, Preak Prosab District, Kratie Province

N.	Family Name & Name	Gender	Job/Position	Organization
1	Va Sarot	M	Villager	Chambak 1
2	Peab Than	F	Villager	Chambak 1
3	Vong Chnatha	F	Villager	Chambak 1
4	Lonh Linda	F	Villager	Chambak 2
5	Chek Sreyneang	F	Villager	Chambak 2
6	Lanh Sokly	F	Villager	Chambak 1
7	Ben Sokvorn	F	Villager	Chambak 1
8	Chhang Sokheng	F	Villager	Chambak 1
9	Doer Vanthun	M	Villager	Chambak 1
10	Lay Eang	F	Villager	Chambak 1
11	Ngam Neng	F	1st deputy of commune	Chambak 1
12	Neng Sarong	M	Villager	Preak Prang
13	Touch Seyha	M	Chief of village	Preak Prang
14	Meas Pov	M	Villager	Preak Prang
15	Pov Votey	F	Villager	Preak Prang
16	Sam Neang	F	Villager	Preak Prang
17	Voeng	M	Villager	Preak Prang
18	San Rung	M	Villager	Preak Prang

Fieldwork on 05 January 2022

List of People Interview (29)
FGD- Group: WASH Ta Sous Primary School
Place: Trass Commune, Romeas Heak District, Svay Rieng Province

N.	Family Name & Name	Gender	Job/Position	Organization
1	You Boran	M	Director	Ta Sous School
2	Hem Sary	M	Teacher	Ta Sous School
3	Soeun Samut	F	Teacher	Ta Sous School

4	Sieng Soka	M	Evaluation Team	
5	Saing Hay	M	Evaluation Team	

List of People Interview (30)
FGD- Group: WASH Chhik Dei Health Centre
Place: Chhik Dei Commune, Romeas Heak District, Svay Rieng Province

N.	Family Name & Name	Gender	Job/Position	Organization
1	Hok Ratanak	M	Director	Chhik Dei HC
2	Sao Votey	F	Deputy Director	Chhik Dei HC
3	Khiev Chakrya	F	Staff	Chhik Dei HC
4	Pov Savoeun	M	Staff	Chhik Dei HC
5	Sokha Socheat	F	Staff	Chhik Dei HC
6	Sorn Theary	F	Staff	Chhik Dei HC
7	Pov Thon	F	Staff	Chhik Dei HC
8	Sieng Soka	M	Evaluation Team	
9	Saing Hay	M	Evaluation Team	

List of People Interview (31)
FGD- Group: WASH Sam Bour Primary School
Place: Sambour Commune, Romeas Heak District, Svay Rieng Province

N.	Family Name & Name	Gender	Job/Position	Organization
1	Yoeun Sinat	M	Director	Sam Bour school
2	Mom Sotevea	F	Teacher	Sam Bour school
3	Long Votha	M	Teacher	Sam Bour school
4	E Mom	F	Teacher	Sam Bour school
5	Som Bony	M	Teacher	Sam Bour school
6	Sieng Soka	M	Evaluation Team	
7	Saing Hay	M	Evaluation Team	

Fieldwork on 06 January 2022

List of People Interview (32)
FGD- Group: WASH Trapaign Sdao Health Centre
Place: Trapaign Sdao Commune, Romeas Heak District, Svay Rieng Province

N.	Family Name & Name	Gender	Job/Position	Organization
1	Sek Sreymom	F	Staff	Trapaign Sdao HC
2	Mon Sothavy	F	Staff	Trapaign Sdao HC
3	Kim Sophy	F	Staff	Trapaign Sdao HC
4	Vong Peth	M	Director	Trapaign Sdao HC
5	Sieng Soka	M	Evaluation Team	
6	Saing Hay	M	Evaluation Team	

ANNEX I: ETHICAL CONSIDERATIONS

Our Approach	Obligation to Participants as per UNEG Guideline
Adherence to international guidelines and standards: It was NOT envisaged that during primary data collection, the consultants would come into contact with UNICEF beneficiaries since the ToRs and our proposed methodology are centered around primary data collection with implementing partners and service providers rather than direct rights-holders. Nevertheless, consultants ensured that the research would adhere to international standards and guidelines on working with children and vulnerable groups. In addition, if sensitive issues such as violence or abuse arose in the research processes, the Evaluation Team intended to ensure that the evaluation adapted and applies the WHO guidelines on the safety and ethics in studies of violence.[33]	• Compliance with codes for vulnerable groups • Avoidance of harm
Privacy and confidentiality: Any UNICEF staff, stakeholders or others who are included in the research process were assured that their confidentiality would be protected, and research information kept private to the fullest extent allowable by law. When participants took part in group consultative activities, they were supported to understand the importance of their role in respecting the privacy of other participants.	• Confidentiality • Avoidance of harm • Fair representation
Anonymity: The names and other identifiable features of any person involved with the research/methodology were not used during reporting and dissemination activities, and participants were made aware of this. The names and telephone numbers of participants of the field work data collection have been removed.	• Confidentiality • Avoidance of harm
Consent: Prior verbal consent was sought from all participants in this evaluation regarding their participation or involvement.	• Respect for dignity and diversity • Fair representation
Compensation: Participants were not provided with financial compensation for participation but were made aware of the uses of the evaluation and given acknowledgement (by stakeholder group) in the final report as well as having access to the final report. We will ensure our information is produced in formats that are accessible, e.g., large print, suitable language, audio if needed. We also ensured that the timing and length of focus groups meets people's needs, for example, if there was a requirement to include careers or family members in focus groups or interviews, we tried to accommodate this.	• Redress
Referral process and post-interview support: If the nature of any discussion or engagement is sensitive and had the possibility of raising difficult issues among participants (e.g., related to violence, abuse, or trauma), the consultant team ensured that a referral process was is in place. The Evaluation Team sought further guidance from UNICEF on whether this would be likely and what would be appropriate or feasible to employ beforehand.	• Avoidance of harm • Confidentiality
Team composition and roles: All the consultants undertaking this assignment are experienced in collecting data around sensitive issues and working with vulnerable groups. They were thus in a good position to ensure data collection tools were designed in such a way that they are culturally appropriate and do not cause distress for participants.	• Compliance with codes for vulnerable groups • Respect for dignity and diversity • Avoidance of harm

[33] WHO (2021) Putting women first: Ethical and safety recommendations for research on domestic violence against women

Annex J: PREPARATORY MATERIAL; INFORMATION FORM AND INFORMED CONSENT

On behalf of the evaluation team from IOD PARC and M-CRIL we would like to thank you for accepting the invitation to participate in this conversation, which will be of great importance for the evaluation we are conducting. The interview with you will take about one hour to complete. This document provides some background information and a list of the questions we may ask and issues to explore in the conversion in case you wish to prepare in advance.

About the Evaluation

The UNICEF Cambodia Country Office is in the process of undertaking an Evaluation of its inclusion and mainstreaming of climate resilience in its current WASH Programme. The objective of this Evaluation is threefold: to provide an assessment in terms of relevance, coherence, effectiveness and sustainability of the extent to which the UNICEF Cambodia WASH Programme has been able to successfully integrate and mainstream climate resilience in WASH programming; identify challenges, missed opportunities and gaps within their work and suggestions for how to overcome these; and provide actionable recommendations on how UNICEF's climate resilient WASH programming, and contribution to national priorities can be further enhanced and scaled up as part of continuous learning and improvement. We are also developing a benchmarking paper to define and provide guidance for measuring progress and success in terms of mainstreaming and integrating climate resilience in programming in Cambodia.

UNICEF's "downstream" climate resilience work will need to be supported and scaled up by governments through a strong national WASH system. To achieve this "scaling up" each component part of the WASH system needs to be strengthened and inter-linkages need to be established. It is also important that "upstream" work supports local level interventions and that field experiences and learning feeds back into policy making and decision-making.

Consent

UNICEF staff you may have worked with or collaborated with have identified you as one the key stakeholders whose views can greatly benefit the evaluation.

Any information that you provide us in this discussion will not be shared outside of the independent evaluation team, not even with UNICEF, without written permission from you. Your involvement is entirely voluntary, and you may withdraw at any time for any reason.

All interviews are confidential. The information will be used only in an aggregate form in our report and cannot be attributed to the people interviewed. No interviewee will be identified, except as part of a relationship or list of people interviewed, which will be included at the end of the evaluation document.

If you are clear on everything that we have conveyed to you and consent to participate, please verbally confirm this.

Participant has consented to participate in the interview/discussion (YES/NO): _____

Questions

Question	Issues to explore
On the issue of relevance	
Do you agree with the climate risks and challenges identified by experts and practitioners (including UNICEF)?	Are there any other challenges from your perspective – even if they are not climate related? From your perspective what climate information do you think decision-makers and local communities need?
On the issue of coherence	
How is climate resilience incorporated into your government's development planning and programming? In other words what are your roles and responsibilities, the responsibilities of other Ministries/departments, and how do you coordinate?	How does climate resilience fit into your structures and processes? What level of priority does climate resilient WASH have within your government? i.e. How many dedicated staff work on climate resilience WASH issues within your government? What specialist training have they received? How far is climate resilient WASH integrated into your policies, strategies and programming?
Present UNICEF's WASH programme ToC. What are their observations on the actions being implemented and how "higher" level outcomes will be achieved?	Can you describe the obstacles or bottlenecks you face to provide climate resilient water, sanitation and hygiene services? Why do these issues persist, in your opinion? What would cause your government to allocate more resources, or finances to resolve these issues?
What policy, strategy and legislation does your government have in place to reduce climate-related risks and promote adaptive actions?	How are these policies, laws and practices being implemented and what outcomes have been achieved? What climate resilience guidance has been issued to the WASH sector?
What knowledge do you have of UNICEF's climate resilience WASH programme?	What aspects do you think are working well and why? And, what aspects should be strengthened and why? What data do you collect and process, or receive, to determine how successful WASH partner programmes are?

	Do you have any other comments related to the relevance, coherence, effectiveness, and sustainability of WASH partner programmes supported by UNICEF?
How do you coordinate with other government agencies on climate change matters?	What specific issues do you collaborate on? How are roles and responsibilities defined? What are your experiences of these collaborative arrangements?
On the issues of sustainability and scalability	
Can you describe the external support role that government plays?	Do you have any thoughts on how your supporting role for local government could be strengthened? How do you engage with Water Safety Planning Teams? What role do you play in sustaining WASH services in schools and health centres? Can you think of any interventions that have been used as a model for other programmes to scale up?
On cross cutting issues	
How do you try to serve the most vulnerable and “hard to reach” households and communities?	What policy targets are in place? What monitoring indicators are applied?
On the issue of reducing carbon emissions	
How is the government helping the WASH sector to transition to lower carbon emissions?	What policies and strategies are in place? Monitoring being undertaken? Details of green finance provided? Immediate priorities and progress so far.

ANNEX K: IOD PARC ETHICAL CODE OF CONDUCT

1. Ethical Standards in Evaluation and Research

This document contains IOD PARC's ethical framework for all its work including field visits. IOD PARC adheres to the following within all contexts:

- UNEG Ethical Guidelines for Evaluation, UNEG, March 2008
- UNEG Code of Conduct for Evaluation in the UN System 2007
- DFID Ethics Principles for Research and Evaluation 2011
- ESRC Framework for Research Ethics principles 2012

IOD PARC additionally adheres to the following for research and evaluation contexts where women, men and children are affected by violence and where children are included as participants in processes:

- Putting women first: Ethical and safety recommendations for research on domestic violence against women, WHO, 2001
- Minimum Standards for Consulting with Children, Inter-Agency Working Group on Children's Participation (IAWGCP): ECPAT International, Knowing Children, Plan International, Save the Children Alliance, UNICEF EAPRO and World Vision, 2007 and other standards as recommended by UNICEF here http://www.unicef.org/adolescence/cypguide/resourceguide_ethics.html
- Ethical Approaches to Gathering Information from Children and Adolescents in International Settings: Guidelines and Resources, Schenk, Katie and Jan Williamson, Population Council, 2005

2. Ethical Codes of Conduct

This 'Ethical Code of Conduct' for field work is based on international good practice and draws on a guide published by UNICEF which was developed through a participatory process. At IOD PARC, we consider 'field work' to be any activity which takes place outside the office environment and/or involves contact with any stakeholders.
The Team Leader or Principal Investigator of a project/assignment can, and should, add to the code, to ensure that specific issues are included that are relevant to local contexts.
Evaluation and Research Teams on IOD PARC projects agree to abide by these guidelines. The Code of Conduct is comprised of 3 parts:

- Part A: Evaluation and Research Ethics (standard good research practices which apply to any research, at any time, and in any location)
- Part B: Community Ethics (standards which are specific to communities and cultural contexts at a particular moment in time)
- Part C: Child and Adult Protection Ethics (standards which regulate the behaviour and communications of all those involved in the research in relation to working with children and adults in communities)

Risk Management

Team Leaders and/or Field Supervisors will provide (or work with the team members to collectively complete) a context-appropriate 'Field Work Risk Assessment Form' which will be signed by each team member before going into the field.
Context specific risk, behaviour and protection issues will be identified in the risk assessment which will include the specific political, cultural, geographical information that team members should be aware of. If briefing notes or security briefing meetings are provided prior to field visits, it is essential that these are read by the entire team, and any issues clarified in advance.

Part A: Evaluation and Research Ethics

1. Do no harm (physical, emotional, and/or sexual) to anyone with whom you come into contact with as a result of this research: This includes national research team members, respondents, community members, partner staff, client staff and transport providers and others
2. Respect the rights of others: This includes but is not limited to the National research team; respondents/participants; the community as a whole.
3. Attitude: Always be honest and do not be afraid to admit if you do not know something; listen actively; be polite and considerate; concentrate on the respondents; be punctual; recognize the strengths of colleagues, respondents, and community members; do your best to put respondents and community members at ease
4. Teamwork: Cooperate and be responsible to each other as a team; be flexible and help each other out. Conflicts of interest should be dealt with by referring them to the designated Field Supervisor who should raise the issue in a team discussion where appropriate to try and come to a consensus; maintain good communication within the team
5. Professional standards: Maintain professional boundaries – you are here to research, not to develop relationships with your co-researchers, respondents, or community members; do not make promises you cannot keep; be aware of what you can and can't do; collect accurate data and check your data before handing in completed tools to the Field Supervisor – you are responsible for the information you collect and will be held accountable for errors
6. Informed consent: Researchers must read out the informed consent instructions for each of the research tools (e.g., adult and child household questionnaires, group activities and key informant interviews) and sign the relevant informed consent sheets. If appropriate, consent may be gained verbally in areas of high levels of illiteracy but equally the information provided to participants should still be prepared in advance so it can be read out and discussed
7. Confidentiality: see Confidentiality Agreement which forms part of this Code of Conduct for details
8. Impartiality: Do not show favoritism with colleagues, respondents, and community members; do not discriminate against anyone with whom you come into contact because of the research based on sex, religion, language, ethnicity, sexuality, or any other grounds
9. Transparency: Decision-making and disciplinary processes must be transparent (i.e., everyone should know how things are done); the same process must be applied to everyone, regardless of who they are; however, whilst processes are transparent, the information that passes through these processes may be confidential

10. Health and safety: The Field Supervisor is responsible for the health and safety of the Field Research Teams; Field Research Teams shall not be put at unnecessary risk; the Field Supervisors and team members are expected to assess risks and to put in place steps to manage risk; there is one first aid kit provided per team; there is one lifejacket provided per person where boat travel is involved; researchers should work in pairs; researchers should always know where other team members are in case of emergency; do not move away from the team without telling others where you are going and what time you will be back
11. Share findings: Appropriately design information sheets (for example summary of findings or explanation of what happens next in the process) will be shared with the key contact from each research location at the end of the process

Part B: Community Ethics

1. Greetings: Learn the appropriate greeting and interpersonal customs in general and for specific groups of society e.g., handshakes are frequently acceptable but wai/namaste/anjali mudra may be preferable or essential (e.g., Buddhist monks do not make physical contact with women)
2. Dress code:
3. No inflammatory or intimidating clothing: this can include camouflage/military print or style clothes, or t-shirts with slogans or symbols of political support or which are culturally insensitive.
4. Men – trousers or shorts below the knee (check this for specific locations)
5. Women – trousers (check this for specific locations), dress or skirt below the knee or to the ankle depending on local expectations (no shorts)
6. Hygiene: Maintain good standards of personal hygiene
7. Homebrew/alcohol/kava: Drinking is not allowed during the period of the research unless expressly permitted by the Field Supervisor in special circumstances where it would be rude to not drink something which the community has offered. However, even in these exceptional circumstances, moderation must be employed. Breaches of this guideline will be taken very seriously
8. Smoking:
9. No smoking or displaying of cigarette packets in front of children (even whilst 'off-duty')
10. No smoking during data collection (household questionnaires, interviews, group activities, or discussions with community leaders)
11. Dispose of cigarette ends, packets, and packaging properly – no littering
12. Drugs: No non-prescription drugs to be taken during the research
13. Local customs such as chewing tobacco or betel nut: No chewing during data collection (household questionnaires, interviews, group activities, or discussions with community leaders)
14. Language: No swearing; use simple, polite language; no derogatory (bad or negative) words to be used about people of another religion, ethnic group, province, sex, age etc.; avoid words which have different meanings in different languages. This applies to the whole period of the research both 'on' and 'off-duty'
15. Body language: No inappropriate or rude gestures; show respect and attentiveness in your body language. This applies to the whole period of the research both 'on' and 'off-duty'. Learn what parts of the body are not acceptable to display (e.g.,

soles of feet) or what behaviors are not acceptable (e.g., non-familial women and men making eye contact)

16. Physical environment: Respect sacred or ‘taboo’ sites; consider the venue of the data collection to make sure it is safe, culturally appropriate, and as private as possible; care for the community environment and property – no littering or vandalism
17. Cultural context: Show respect for cultural practices, religious and community activities - although if you witness something which is causing harm to a community, adult or child then report this to the Field Supervisor; all team members must observe culturally appropriate protocols during preparation, entry into the community, during the research and exiting from the community
18. Avoidance of burden and inconvenience: Respect the confidentiality, privacy and comfort of individuals and families; avoid overcrowding individuals or community members with large numbers of team members and leave a space or discussion when asked to by the Team Leader or Field Supervisor. Listen carefully to colleagues’ discussions, so you don't need to ask the same questions to someone
19. Gender dynamics: Respect male-only and/or female-only meetings or discussions
20. Interpreters: Respect interpreters as fellow professionals, rather than ‘your personal assistant’. Speak in ways that aid with interpretation i.e., short sentences with purpose, and avoid colloquialisms and metaphors. Do not expect the interpreter to translate every word that a participant speaks as summarizing a longwinded response is acceptable practice
21. Vehicles: Do not obstruct roads or other access points; park where it is safe for pedestrians and other vehicles. Park at a short distance particularly when the arrival of large or several vehicles could be intimidating or antisocial
22. Be ready to move: Be responsive to Team Leaders, Field Supervisors or Interpreters If asked to step away or move by a team member conducting interviews do so without argument and find out later the reason. Local or official protocol might be at stake, or a sensitive issue may have arisen that requires privacy
23. Driving after dark: Keep good time so as not to prejudice the ability of the team to safely return to base or the next venue by not leaving enough time for daylight driving. Most organisations have strict rules about driving after dark because of the dangers of road accidents and for other security reasons

Part C: Child and Adult Protection Ethics

This Child and Adult Protection Section of the Ethical Code of Conduct includes guidance for when children are included as research or evaluation participants. However, **the Code of Conduct** always applies, and in the context of both children and adults.
The Code of Conduct should be interpreted in a spirit of transparency and common sense, with the best interests of the child as the primary consideration:

- Research team members must attempt to understand the local norms around physical contact between children and adults
- These guidelines apply to the interaction of any research team member with anyone under the age of 18 when defining children, but also applies to adults of any age if they are vulnerable

Where possible, this Code of Conduct should be shared with, and explained to, community leaders upon arrival in a community. Permission should be sought from the relevant community leaders with regards to taking photographs for either official research or personal reasons.

2.1 Behaviour Guidelines

Minimizing Risk Situations

1. Try to: avoid placing yourself in a compromising or vulnerable position; be accompanied by a second adult whenever possible; meet with a child in a central, public location whenever possible; immediately note, in a designated organisational Child Protection Logbook or incident report sheet, the circumstances of any situation which occurs which may be subject to misinterpretation; keep in mind that actions, no matter how well intended, are always subject to misinterpretation by a third party
2. Try not to be alone with a single child, including in the following situations: in a car (no matter how short the journey); overnight (no matter where the accommodation); in your home or the home of a child. Do not show favoritism or spend excessive amounts of time with one child

Sexual Behaviour

1. Do not: engage in or allow sexually provocative games with children to take place; kiss, hug, fondle, rub, or touch a child in an inappropriate or culturally insensitive way; use language that sexualises a child; encourage any crushes by a child; create, view or distribute images in any format (print or electronic) of a child who is not appropriately clothed and/or who is depicted in any poses that could be interpreted as sexually inappropriate. In relation to children with whom you have a professional relationship, do not sleep in the same bed, or do things of a personal nature that a child could do for him/herself, including dressing, bathing, and grooming

Physical Behaviour

1. Do: wait for appropriate physical contact, such as holding hands, to be initiated by the child, except in situations where it is expected for adults to greet children by offering them their hand
2. Do not: Hit or threaten to hit a child either with a hand or other implement; otherwise physically hurt or physically abuse a child or threaten to do so

Psychosocial Behaviour

1. Do: Be aware of the power balance between an adult and child, and avoid taking any advantage this may provide; be aware that as a member of the research team, your presence with children will often be temporary and you should therefore avoid creating bonds with children which encourage emotional or psychological dependency: make it clear to children from the outset, in age-appropriate terms, that you will not be with them long-term; listen to and respect children's views; encourage children's positive behaviour
2. Do not: use language that will mentally or emotionally harm any child; suggest inappropriate behaviour or relations or any kind; act in any way that intends to embarrass, shame, humiliate, or degrade a child; encourage any inappropriate attention-seeking behaviour, such as tantrums, by a child; show discrimination of

race, culture, age, gender, disability, religion, sexuality, or political persuasion; pressure a child to participate in any activity

Peer Abuse

1. Do: be aware of the potential for peer abuse; be aware of the power balances between children (based on age, sex, ethnicity etc.) and avoid creating situations where children can exploit these differences to abuse each other; develop special measures/supervision to protect younger and especially vulnerable children; avoid placing children in high-risk peer situations (e.g., unsupervised mixing of older and younger children); encourage children to develop mutually agreed peer codes of conduct or 'ground rules' including not hitting, bullying or intimidating each other
2. Do not: allow children to engage in sexually provocative games with each other

Physical Environment

1. Do: develop clear rules to address specific physical safety issues relative to the local physical environment of a project (e.g., for projects based near water or heavy road traffic); provide for gender-sensitive facilities such as separate toilets and showers for girls and boys

Behaviour with other Family Members and Colleagues

1. Do: Treat all family members and colleagues, regardless of age or sex, with respect and courtesy
2. Do not: Harm or threaten to harm any family member or colleague, regardless of age or sex, either physically, sexually, or emotionally. This includes – do not: hit (either with a hand or other implement), intimidate, bully, or sexually coerce or harass any family member or colleague

Confidentiality

1. Do: Inform respondents that their identity will remain anonymous, as stated in the research tools; share concerns – but only with the Field Supervisor
2. Do not: Reveal any personal information about respondents to anyone except the Field Supervisor; pry for information from a respondent if they have not volunteered such information themselves

2.2 Photograph Guidelines

All photographs taken as part of research, whether official or personal, shall comply with the 'communication guidelines' set out in Part C3 of this Code of Conduct.
No photographs, whether official or personal, shall be disseminated via the internet without express permission of the Field Supervisor or Team Leader. This includes via social networking pages such as Twitter, Facebook, Instagram etc.

Photographs for Research

1. Do not take photographs without the informed consent of participants. Informed consent means that the participants understand exactly what the photographs will be used for, where they will be published and how they can contact you to remove them if they change their mind at a later date

2. Do not take photographs of children without their informed consent and that of their parent/caregiver. It is safest to avoid taking photographs of children completely
3. When photography has been pre-agreed with communities or other participants, a photographer or designated field research team member with a digital camera will be given specific responsibility by the Field Supervisor to document certain activities in each location. For example:
    - Drawings, flipcharts, and other outputs produced by the group activities
    - General pictures which give an overview of the community – types of photographs to be decided in conjunction with the Field Supervisor
4. The photographs shall be digitally stored under clearly identifiable file names and digital copies shall be provided to the Field Supervisor at the end of the field research

Personal Photographs

1. The Field Research Team is permitted to take personal photographs during the field research under the following conditions:
    - That such photographs comply with the communication guidelines in Part C3 of this Code of Conduct regarding informed consent, appropriateness of clothing and dignity of the child and community, amongst other things
    - That the taking of such photographs does not interfere with the conduct of the field research: no photographs are to be taken whilst the Field Research Team is in the process of using any of the research tools (household questionnaires, group activities or key informant interviews). The exception to this is official research photographs taken by the designated team member (see above)
2. If a Field Research Team member is in doubt about the appropriateness of a particular photograph, they should submit the photograph to the Team, including the Team Leader, for discussion

Communication Guidelines

1. Access to printed and electronic personal information about children and adults should be restricted to the minimum number of people who need to know within the Research Team. Personal and physical information that could be used to identify the location of a child within a country and cause them to be put at risk should not be used on any website or in any other form of communication for general or public purposes
2. Every child and adult have a right to be accurately represented through both words and images. The Research's portrayal of each participant must not be manipulated or sensationalized in any way. Children and adults must be presented as human beings with their own identity and dignity preserved. Text and images included in any print, broadcast, or electronic materials such as brochures, publications, reports, videos, or websites should depict an accurate and balanced depiction of children and their circumstances. Sufficient information should be provided where possible as to their social, cultural, and economic environment. Where children and adults are indeed 'victims', the preservation of their dignity must nevertheless be preserved at all times. In these circumstances, 'before' and 'after' pictures are useful to depict a balance between victimization and empowerment

3. As far as possible, people [including children] should be able to give their own accounts rather than have people speak on their behalf, and people's [including children's] ability to take responsibility and action for themselves should be highlighted.
4. Avoid:
    - Language and images that could possibly degrade, victimize, or shame children
    - Making generalizations which no not accurately reflect the nature of the situation
    - Discrimination of any kind
    - Taking pictures out of context (e.g., pictures should be accompanied by an explanatory caption where possible)
5. In images, children and adults should be appropriately clothed and not depicted in any poses that could be interpreted as sexually inappropriate
6. Always obtain informed consent from the child and their care giver/adult themselves before taking photographs or moving images except under exceptional circumstances, based on the child/ children's best interests, where this might not be possible or desirable. It is safest to avoid taking photographs of children completely
7. To the greatest extent possible, the Research should acquire informed consent/the permission of the child, child's guardian and/or NGO or partner responsible for the child to use the image for publicity, fundraising, awareness-raising or other purpose (which should be made clear to the consent-giver)
8. Individuals or organisations requesting the use of the Research's resources such as photographs should be required to sign an agreement with the Research Team as to the proper use of such materials. The agreement could include a statement that any use of such materials for purposes other than what is agreed upon could subject the borrowing individual or organisation to legal action. Furthermore, failure to adhere to the agreed use of the material will result in the immediate termination of the organisation's permission to use the subject materials and/or require immediate return of all materials (including any copies made) provided by the research

3. Confidentiality Standards

The standard on confidentiality applies to all personnel involved in data analysis.

Team members or associates who are involved in data analysis only, and not field research, are required to sign the 'Confidentiality Agreement' at the end of this document. For those staff and associates who conduct field work, the confidentiality standards are included here as part of the overall Code of Conduct.

1. Team members will ensure that all data to which they have access in relation to the Research, regardless of medium (print or electronic, text, oral or visual) will remain confidential to protect the anonymity and therefore safety of respondents, researchers and others who have taken part in the research
2. Any findings from the research will not be disclosed to anyone outside the immediate research team
3. Enquiries from anyone outside the immediate research team regarding the research findings or any other information which may be considered confidential will be directed to the Team Leader or Field Supervisor who will confer with the

relevant Portfolio Team Lead if in doubt as to how to handle the enquiry. This includes enquiries coming from Government or NGO partners, a Steering Committee and client/ donor staff, associates, and any other source of the enquiry

4. Copies will not be made (paper, electronic, audio, or visual) of any documents or information associated with the Research without the express permission of a member of the immediate research team
5. Any information from the Research (regardless of medium) which is entrusted to team members, even on a temporary basis, will be always stored securely (i.e., accessible only to the immediate research team)
6. The level of confidentiality outlined in this agreement will be maintained throughout and beyond the completion of the research
7. Following the public release / distribution / publication of any associated report for this research, team members are free to discuss any, and all findings contained within the report. However, this will be without reference to any further information to which they have had access during the research, which is not contained in the public report, unless written permission is given by the Team Leader

4. IOD PARC Ethical Code of Conduct References

8. United Nations Evaluation Group, *Ethical Guidelines for Evaluation*. 2008, UNEG.
9. *Code of Conduct for Evaluation in the UN system*. UNEG.
10. DFID, *DFID Ethics Principles for Research and Evaluation*. 2011.
11. ESRC, *ESRC Framework for Research Ethics (FRE) 2010, updated September 2012*. 2012, Economic and Social Research Council.
12. *Putting women first: Ethical and safety recommendations for research on domestic violence against women*. 2001, WHO.
13. Inter-Agency Working Group on Children's Participation (IAWGCP), *Minimum Standards for Consulting with Children*. 2007.
14. Schenk, K. and J. Williamson, *Ethical Approaches to Gathering Information from Children and Adolescents in International Settings: Guidelines and Resources*. 2005, Population Council.
15. UNICEF, *Ethical framework for Field Research Teams: Solomon Islands*. 2008.
16. Groves, L., *Beneficiary Feedback in Evaluation*. 2015, DFID: London.

ANNEX L: EVALUATION PHASES

The evaluation was conducted over three phases as follows:

Phase 1: Inception

Table 1: Summary of Phase 1 Activities, Deliverables, and other Outputs

Activities	Deliverables and Outputs
• Inception meeting. • Desk review. • Initial data collection. • Development of evaluation matrix, methodology, data collection tools • Drafting of benchmark paper and inception report. • Participatory workshop. • Revise and finalise benchmark paper and inception report based on feedback. • Confirm logistics for Phase 2.	• Deliverable 1: 40-page inception report (in English with an executive summary in Khmer). • Draft benchmarking paper.

Phase 2: Data Collection and Initial Analysis

Table 2: Summary of Phase 2 Activities and Deliverables

Activities	Deliverables and Outputs
• Pilot data collection tools. • Field based data collection. • Data analysis. • Draft initial findings report. • Present initial findings report through a PowerPoint presentation.	• Deliverable 2: A 30-page summary of initial evaluation findings (in English). • Deliverable 3: Final Benchmarking paper (in English).

Phase 3: Analysis, Reporting, and Communication of Results

Table 3: Summary of Phase 3 Activities and Deliverables

Activities	Deliverables
• Internal team 'analysis days' • Prepare first draft of evaluation report • Revise and submit second draft of report based on initial comments received from UNICEF • Present to Reference group and Key stakeholder**s** at Validation workshop • Submit final report. • Prepare side deck of PowerPoint presentation and voice over, alongside other dissemination materials.	• Deliverable 4a: Draft report (in English) • Deliverable 4b: A fit-to-print approximately 50 pages evaluation report – with annexes including co-created recommendations (in English and Khmer) • Deliverable 5: annotated updated PowerPoint 'slide-desk' with voice over to be used for dissemination events (in English and Khmer). • Deliverable 6: 4-page Infographic Evaluation Brief (in both English and Khmer) of the evaluation findings for a non-technical audience

ANNEX M: WORKPLAN

Stage	Activity	Schedule (Week Commencing)																																							
		19/07/2021	26/07/2021	02/08/2021	09/08/2021	16/08/2021	23/08/2021	30/08/2021	06/09/2021	13/09/2021	20/09/2021	27/09/2021	04/10/2021	11/10/2021	18/10/2021	25/10/2021	01/11/2021	08/11/2021	15/11/2021	22/11/2021	29/11/2021	06/12/2021	13/12/2021	20/12/2021	27/12/2021	03/01/2022	10/01/2022	17/01/2022	24/01/2022	31/01/2022	07/02/2022	14/02/2022	21/02/2022	28/02/2022	07/03/2022	14/03/2022	21/03/2022	28/03/2022	04/04/2022
1. Inception, Document Review and Analysis	Inception Meeting																																							
	Desk review																																							
	Initial data collection (visit)																																							
	Development of evaluation matrix, methodology, data collection tools																																							
	Draft benchmarking paper																																							
	Draft inception report (Deliverable 1a)																																							
	Participative workshop - share draft benchmark paper, discuss climate risks and impact on programming (date tbc)																																							
	Review of inception report - evaluation management team																																							
	Revisions to, and present revised inception report																																							
	Reference group comments																																							
	Revise inception report (Deliverable 1b), confirm planning for field visit																																							
2. Data collection and initial analysis	Pilot data collection tools																																							
	KIIs (virtual)																																							
	Field based data collection																																							
	Data analysis																																							
	Present initial findings report (Deliverable 2), PPt presentation																																							
	Submit final benchmarking paper (Deliverable 3)																																							
3. Analysis, Reporting and Communication of Results	Prepare first draft of evaluation report																																							
	Initial comments received from UNICEF																																							
	Prepare and submit second draft +PPt																																							
	Workshop for co creation of recommendations																																							
	Prepare penultimate draft of evaluation report																																							
	Reference group commentary																																							
	Submit final report (Deliverable 4)																																							
	Prepare PPt presentation (Deliverable 5) and other dissemination materials (Deliverale 6)																																							
	Contract end																																							

Legend
- Activity
- Milestone deliverable
- Review/commenting

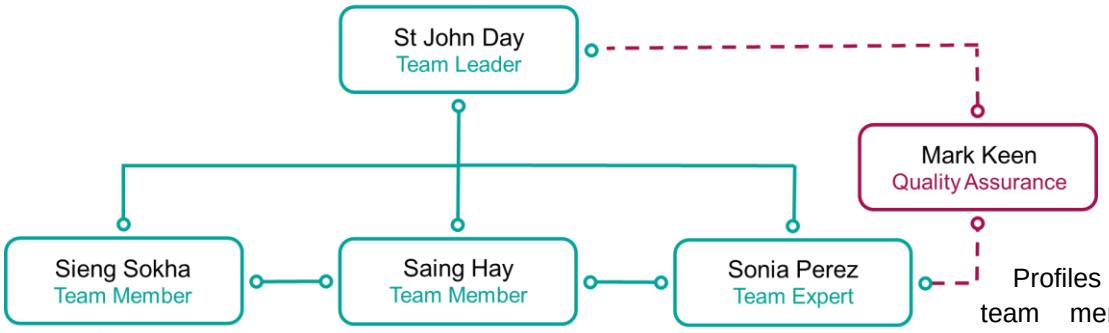
ANNEX N: EVALUATION TEAM

Our international team consists of associate consultant **St John Day** (team leader) and permanent IOD PARC staff member **Sonia Pérez** (team expert). St John will hold overall responsibility for managing and conducting the evaluation from start to finish and lead the data collection and overall data analysis and drafting of deliverables. He will be the main point of contact for UNICEF Cambodia throughout and lead in communicating and disseminating findings. Sonia will offer technical expertise and project management support to St John, and also engaging extensively in the secondary data collection/document review, data analysis and drafting of deliverables.

The other two core team members are **Sieng Sokha** and **Saing Hay** from M-CRIL both based in Cambodia. Their main roles and responsibilities will be centered around primary data collected in the field, including piloting data collection tools beforehand and participation in the DRD training. They will also contribute to data analysis and drafting of deliverables.

Quality assurance will be provided by IOD PARC Director **Mark Keen** who will focus on both the evaluation process and outputs.

Figure 3. Team Overview and Positions



Profiles of the team members can be found below.

St John Day – Team Leader. St John is a Chartered Water Engineer and Environmental Manager with more than 20 years professional experience and 15 years overseas experience working in Africa, Central, East and South Asia, as well as Fragile and Conflict Affected States. St John has worked extensively in vulnerable contexts with low and seasonal rainfall patterns and changing climates. He has conducted research on climate models and has extensive knowledge of practical water resources assessment and management. Together with colleagues his research and work led to the re-introduction of water resources management in both Sudan and Sierra Leone. He has evaluated climate resilient WASH programmes and planned the re-establishment of hydrometric monitoring networks, written national water security guidelines and helped to establish national regulating agencies for water resources. He has extensive knowledge of the engineering and management of urban and rural water supply and sanitation services, water resources management and river engineering. He worked at a senior level for a number of years, which includes team leader roles and providing technical advice and guidance to Ministers and senior Government officials. He has overseen key studies and evaluations related to water resources monitoring and management, water supply, small towns water supply management options and establishing emergency water supplies. St John managed institutional development and capacity building projects and has acted as an advisor to governments, water utilities, municipalities, international donors, UN agencies and NGOs. He has extensive experience of negotiation and managing relationships between different stakeholders. He has worked in both emergency and development contexts alongside a range of cultures. His overseas experience includes

Bangladesh, Burkina Faso, Ethiopia, Ghana, India, Kenya, Myanmar, Niger, Senegal, Sierra Leone, Sri Lanka, Sudan (Darfur), South Sudan, Tajikistan, Uganda, United Kingdom and Vietnam.

Sonia Pérez – Team Expert. Sonia is an experienced evaluator and researcher with over 8 years' experience in the sector. She is familiar with the latest development paradigms including Agenda 2030, especially within her thematic interests which include WASH, health, and gender. She has recent experience conducting in depth and complex evaluations with various multilateral organizations and UN bodies including for WHO in 2020, UNICEF regional and country offices in 2019, and health related organizations such as the Health Systems Advocacy Partnership in 2018 and the International HIV/AIDS Alliance in 2016.

She has extensive experience working with UNICEF at regional, country, and zonal office levels; her most recent engagements have been with the East Asia and Pacific Regional Office conducting cross country evaluation, review, and synthesis exercises across twelve Country Offices including the Cambodia Country Office. Specifically, this included developing a methodology for capacity assessment of UNICEF's WASH emergency preparedness and response, a Formative Evaluation of the UNICEF WASH Regional and Country Programming Strategies in the East Asia and Pacific Region, and a Review of UNICEF Field Presence in East Asia and the Pacific.

Sonia has solid experience in research and evaluation methods using predominantly qualitative approaches such as focus group discussions and semi-structured interviews but also quantitative approaches through surveys and online questionnaires using software such as MAX QDA and SPSS. She demonstrates ability to conduct document and literature reviews drawing on a wide range of source documents and using this to inform and triangulate findings from other sources.

Sieng Sokha Team member. Sieng has over 5 years' experience working in WASH related School Programmes and a further 10 years in teaching, academic research, and program evaluation. He has a PhD in Public Health. Sieng has previously worked with a range of different development actors such as UNDP, WFP and the FIDR (Foundation for International Development Relief) whilst working in Korea. He has expertise in health promotion and education, epidemiology, and WASH education, while also having significant experience in quantitative and qualitative research projects, content development of WASH and Nutrition Education. Sieng has numerous publications focussed on Health and is able to fluent in Khmer (Mother Tongue) and English.

Saing Hay – Team member. Saing is an experienced M&E consultant researcher with expertise in social, health, social protection, gender, social work, and other social related projects. Saing Hay holds a Master of applied population studies (population and human resource development) from flinders university of south Australia, which focused on quantitative research, advance statistics, health interventions, development studies, and policy development. He also holds an MA in sociology-anthropology from royal university of Phnom Penh focused on qualitative research, poverty issues, cultural aspects, social problems, and intervention. Saing has over half a dozen publications centered around key themes such as Gender, Health and waste management and is also fluent in Khmer (Mother tongue) and English.

Mark Keen – Quality Assurance Process and Outputs. Mark is a highly experienced senior Change Management and Evaluation professional. He has over 25 years team leader experience and facilitated and managed large-scale change processes, complex evaluations, and strategic reviews in over 40 countries in a wide range of sectors and institutional contexts. His recent work has focused on assessing Climate Change and Resilience programming.

He has been working in WASH for over 10 years and has led evaluations in the sector for amongst others UNICEF, WSSCC, WaterAid, Oxfam, the Bill and Melinda Gates Foundation, the Howard Buffet Foundation and UNWater. He has also led extensive work for the World Bank, water.org and WaterAid in designing multi-year global monitoring and performance management frameworks. He has extensive experience of work in Southeast Asia, including working in Cambodia on World Bank and UNICEF projects. He was team

leader for the recent Formative Evaluation of the UNICEF WASH Regional and Country Programming Strategies in the East Asia and Pacific Region.
Mark is co-owner and Chair of IOD PARC and was Managing Director from 2002-2019. Mark is a member of the Institute of Directors and a Chartered Management Consultant

For further information, please contact:
Evaluation Office
United Nations Children's Fund
Three United Nations Plaza
New York, New York 10017
evalhelp@unicef.org
www.unicef.org/evaluation