REPORT

End Phase Evaluation: Epidemic Control and Reinforcement of Health Services (ECRHS) Phase II Project in Sierra Leone

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Teddy Amara Morlai (MSc)
(Lead Consultant, IDRC)

List of Abbreviations and Acronyms

ABC Development	Association for the Wellbeing of Rural Communities and Development
ANC	Ante-Natal Care/Clinic
CARE	Cooperative for Assistance and Relief Everywhere
CBS	Community Based Surveillance
CHC	Community Health Centre
CHP	Community Health Post
CHW	Community Health Officer
DMO	District Medical Officer
ECRHS	Epidemic Control and Reinforcement of Health Services
EVD	Ebla Virus Disease
FGD	Focus Group Discussion
FP	Family Planning
GoSL	Government of Sierra Leone
HFAC	Health for All Coalition
HMIS	Health Management Information System
IDRC	Inclusive Development and Research Consultancy
IDSR	Integrated Disease Surveillance and Reporting
IMNCI	Integrated Management of Neonatal and Childhood Diseases
IP	Implementing Partner
IPC	Infection Prevention Control
IR	Intermediate Result
JBSCBU	Joint Borders Security and Confidence Building Unit
KfW	German Development Bank, Krebital ftaltfür Wieberaufbau (KfW)
KII	Key Informant Interview
LARC	Long Acting and Reversible Contraception
MADAM	Mankind Activities for Development Accreditation Movement
MAFFS	Ministry of Agriculture, Forestry and Food Security
MCHP	Maternal and Child Health Post
MDSR	Maternal Death Surveillance and Reporting
MEAL	Monitoring, Evaluation, Accountability and Learning
MoH	Ministry of Health
NGO	Non-Governmental Organisation
PAC	Post-Abortion Care
PHU	Primary/Peripheral Health Unit
PI	Personal Interviews
PMTCT	Prevention of Mother-to-Child Transmission
RODA	Rofuta Development Association
SGBV	Sexual and Gender Based Violence
SRH	Sexual Reproductive Health
TBA	Traditional Birth Attendant
TOR	Terms of Reference
VSLA	Village Savings and Loan Association
WASH	Water Sanitation and Hygiene

Executive Summary

The Epidemic Control and Reinforcement of Health System Services (ECRHS) project is funded under **the German Financial Cooperation (BMZ) with Sierra Leone through KfW**. Two phases have been successfully completed during the project implementation. The first phase of the project was launched in November 2015 and ended in 2018. The first phase was originally designed to respond to the Ebola outbreak. The second phase of the ECRHS project was considered an extended phase of the ECRHS I; and started in January 2019. Whereas the primary focus of ECRHSI was on public health emergency response, the aim of phase II of ECRHS is the sustainable establishment of an epidemiological control system, whilst also strengthening the performance of the health system with a focus on reproductive health / self-determined family planning. The purpose of this report therefore is to present findings of the final evaluation of the ECRHS II programme evaluation which was carried out with the general objective of '*assessing the result and impact of the project goal and outcomes in targeted northern region of Sierra Leone*'.

The evaluation used mixed methods to document the findings- that is both quantitative and qualitative research methods. A total of 3,353 (2,313 female, 1,040 male) respondents were targeted from 137 communities during the evaluation exercise. Also 497 PHU staff, 7 DHMT members, 1 Water Technician, 5 implementing partners and 5 Programme staff were engaged as key informants with specific, but flexible questions. Focus Group Discussions (FGDs) were held with community members in 60 communities targeting women in reproductive age (15-49 years), men of age over 15 years and persons with disabilities. and 30 key informant interviews (KIIs) were done with CARE, implementing partners, state actors and chiefdom authorities. The evaluation also included an assessment of 497 PHUs in the 7 operational districts in northern Sierra Leone. Further case studies/insight stories were documented from the field interviews.

Programme results or achievements

It is noteworthy that during implementation a second component was added to the ECRHS II programme in response to the COVID-19 pandemic. The Programme level results or achievements are there discussed under 2 components as set out below.

Component 1: Epidemic Control and Reinforcement of Health Services (ECRHS II)

Component 1 of the programme was expected to contribute to national efforts to improve on the health status of the Sierra Leone population with specific focus on reproductive health. This component has 1 programme and 2 module objectives from which the key programme results or achievements are discussed.

- Programme Objective: Improved health status of the population of Sierra Leone with a focus on reproductive health

Ideally reduction in maternal mortality was the key indicator identified to ascertain the programme effect on reproductive health. However, due to lack of an updated credible data other proxy indicators were identified including a) reduction in maternal deaths, b) reduction in infant and mortality. Notably targets set for impact indicators in the ECRHS II project documents aligned with targets of existing national strategic documents such as the strategic monitoring plan of the Sierra Leone Reproductive, Maternal, Newborn, Child and Adolescent Health Strategy 2017-2021(RMNCAHS 2017-2021)[1]. In addition change in contraception prevalence rate is an addition indicator under the programme objective. The evaluation findings showed an impressive programme effect on reproductive health outcomes at national level.

- **Reduction in maternal** death: The 2020 maternal death data captured by the Ministry of Health and Sanitation (MOHS) suggest a steady decline in the DHS 2019 maternal mortality ratio. Despite the pressure posed by the COVID-19 pandemic, the 6-monthly 2020 maternal deaths nation-wide. Comparatively there was an overall drop in maternal deaths by approximately 6 percent from 2019 (581) to 2020 (547). Results from analysis of the DHIS2 data further affirmed consistency in progress reported by the Ministry of Health in 2020. The results showed marked drop in maternal deaths by 20 percent from 2017 (base year) to 2022 (endline). The evaluation suggests that surveillance (including maternal death review surveillance) and an effective referrals (ambulance) system during the COVID-19 pandemic played a critical role in reducing maternal mortality in Sierra Leone. The ECRHS II programme was noted to have built on successes made in the first phase thereby further contributing to the strengthening of disease surveillance and supporting the establishment of the general early warning system. The programme also supported the conduct of maternal death review surveillance (MDSR) to identify the cause(s) of maternal death, and take remedial actions that prevent similar occurrence in the future. One of the most important responses to maternal death was the programme's support towards the National Emergency Medical System (NEMS) for effective referrals of obstetric cases.

[1] See RMNCAHS 2017-2021 available at: https://www.globalfinancingfacility.org/sites/gff_new/files/documents/Sierra-Leone-GFF-Investment-Case.pdf

- **Reduction in infant and child mortality:** Under-five mortality rates were captured by the evaluation to serve as proxy measures and -to determine the indirect effect of the ECRHSII programme intervention at end of implementation. Like baseline and targets set for maternal mortality in the initial programme design, the Sierra Leone National Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCAH) Strategy 2017-2021[2] served as a source for baseline and targets considered in the evaluation exercise. Considering the DHS2013 results as baseline, the UN Inter-agency Group for Child Mortality Estimation (UN IGME) report for 2021 revealed a significant drop in neonatal mortality by approximate 21 percentage points. This result reflects on progress made in efforts to reduce under-5 mortality rate. Under-5 mortality dropped by approximately 33 percentage point from 2013 to 2021. Although the ECRHSII intervention had little focus on under-five mortality, it was noted that the programme had ripple effect on reducing early childhood mortality in Sierra Leone. The ECRHSII programme has been very effective in providing support (directly/indirect) to tackle the leading causes of under-5 mortality through the comprehensive surveillance approach adopted (including the community-based surveillance, the integrated disease surveillance, emergency preparedness and response) at community, district and national level. Approximately 85 percent and 73 percent of health personnel interviewed at 497 PHUs during the evaluation respectively claimed that IDSR and case management of common disease outbreaks were very effective.
- **Contraception prevalence rate:** Notably the ECRHSII programme baseline and targets for this indicator reflect the national modern contraception prevalence rate (mCPR) as set out in the RMNCAH 2017-2021 strategic plan. Whilst considering DHS2017 results for modern contraception prevalence rate (23 percent) as baseline, the project was expected to contribute to achieving a target of 33.7 percent by 2022 at both national level and project intervention districts. However, due to lack of credible data at district level (such as DHS, SLIHS, MICS), the personal interview results from the evaluation were used for comparison with the DHS 2019 mCPR (as baseline). Overall, the mCPR geometrically increased in the project intervention districts by approximately 140 percentage points from 16 percent in 2019 (project inception period) to 38 percent in 2022 (after project intervention). At national level, the Sierra Leone FP 2030 indicator measurement report showed a consistent increase in contraception prevalence rate from 2017 to 2022. The 2022 results showed an approximated 13 percent increase in the 2017 baseline situation on modern contraception use in Sierra Leone. Although there were shortfalls, 77 percent of national target (33.7% in 2022) on mCPR was met. Further analysis revealed that the programme's effort to promote the use of long-acting reversible contraception (LARC) seemed to have taken effect by end of implementation in the intervention districts. Approximately 57 percent of modern contraceptive users agreed to have initially used short-term contraception methods. Notably 44 percent reportedly discontinued the use of their initial choice of contraceptives 6 month before the evaluation. Meanwhile, it was observed that about 13 percent of short-term users who discontinued their initial preferred choice of modern contraceptives had switched to LARC methods.

  Importantly, the evaluation suggests that the programme's contributions to sexual reproductive health showed strong impact on the reproductive health (RH) and wellbeing among women of reproductive age in Sierra Leone. The higher-level effects of these results were notably increase in unintended pregnancies, unsafe abortion and maternal deaths averted in Sierra Leone. The overall effect is that the number of unintended pregnancies and unsafe abortions averted as a result of increased contraceptives use increased by 31.3 percent and 31.1 percent from 2017 and 2022 respectively. The number of maternal deaths averted also increased by 30.8 percent during the same period.

- Module Objective (MO1): Epidemic control system sustained in selected health facilities in the project region

The evaluation findings proved that phase 2 of the ECRHS programme continued to improve on gains made on epidemic control system in first phase of implementation. The key indicator identified to ascertain the program effect on sustained epidemic control system is '*the changes observed in proportion of suspected epidemic cases investigated according to the Integrated Disease Surveillance and Response (IDSR) cases definition*'. The programme's action notably had positive effect on case reporting, investigation and response in the intervention districts. According to IDSR case definition suggested in the project documents, reporting, investigating, and response taken for all suspected epidemic cases must be done within 72 hours. The project baseline showed that during 2017 only 79 percent of response to suspected epidemic cases met the standard IDSR case definition. Although structured data was not available for comparability with the baseline data, the programme's effectiveness was tested by pockets of potential outbreaks in 13 percent of 497 PHUs in the intervention districts. The reported disease episodes/ events which align with identified priority diseases Acute Flaccid Paralysis (AFP), Chicken Pox, Cholera, Diarrhoea, measles, suspected anthrax, COVID-19,

[2] See document at: https://portal.mohs.gov.sl/wp-content/uploads/2021/04/final-rmncah-strategy_may-2017-_word-doc.pdfhttps://portal.mohs.gov.sl/wp-content/uploads/2021/04/final-rmncah-strategy_may-2017-_word-doc.pdf

Lassa fever, dysentery and suspicious animal deaths. Unlike situations prior to the project inception, investigations and responses to all the diseases/ events were promptly initiated. Accordingly, 100 percent of responses (including investigation and actions initiated) were done within 72 hours of occurrence. While most of these were communicable diseases, the low threats they posed to the public during their emergence, confirmed the effectiveness of responses initiated in the intervention districts. All disease episodes were contained in good time.

- Module Objective (MO 2): Increased offer and demand of sexual reproductive health services in the project region

The programme has notably registered huge success regarding uptake of modern FP methods in the intervention districts and Sierra Leone at large. Whilst continued users are maintained, the programme ensured incremental uptake of the modern FP methods across the operational districts during the implementation period. Data generated from project monitoring suggest that number of new users of modern FP methods almost tripled (increasing by 189 percentage points from 2019 (66,860 new users) to 2021 (191,596 new users). Also, approximately 69 percent of the total project target was achieved in 2021.

Maintaining number of ongoing users and fostering increased uptake of FP users was particularly noted to have strong link with couple years of protection (CYP) in the project districts. It is noteworthy that CYP is an important output indicator that has been used by many national governments and international organisations to monitor the progress and measure program performance around family planning service delivery. Overall, CYP determines the extent of coverage of FP services. Based on data generated from 497 PHUs assessed by the evaluation, the computed CYP for 2021 was 115,352 CYP for all project districts. Meanwhile, the CYP computations using specific to ECRHSII procured FP commodities revealed that the target set on CYP (250,000 CYP) was achieved and exceeded by 1 percent (252,730 CYP)- indicating an outstanding project performance and contribution to the protection of 252,730 women in reproductive age (WRA) from pregnancy across the operational districts.

Component 2: COVID-19 Prevention and Response Project (CRP) in Sierra Leone

Component 2 of the ECRHS II was launched to leverage the technical strength, position and build access from the ECRHS programme to support five pillars of the COVID-19 response in Sierra Leone with a focus on 10 districts including Kambia, Port Loko, Koinadugu, Falaba, Bombali, Karene, Tonkolili, Bo and Kenema. The programme results are discussed under one programme objective and two module objectives.

- Programme Objective: Improved health status of the population of Sierra Leone with a focus of COVID-19 prevention and response

One of the primary objectives of the CPR project was to contribute to efforts made in strengthening the health system in Sierra Leone to respond to the COVID-19 epidemic. The overall effect of the CPR intervention (component 2 of the ECRHSII programme) was its contribution to the eventual reduction in weekly COVID-19 cases registered in the programme operational districts. However, given that weekly analysis of the cases for 2 years may not be clearly presented, the evaluation collated weekly averages on a monthly basis. The findings showed that the CPR project was launched when the weekly cases for ECRHS II intervention remained higher than the national weekly cases. According to the trend analysis, the average weekly COVID-19 cases in the operational districts dropped sharply from 19 cases in August 2020 to 3 cases in September 2023; and the drop was consistent towards the end of 2020. This rapid drop in weekly trend proved the effectiveness of the strategies adopted by the CPR project, especially in the first quarter of implementation proved the effectiveness of the strategies adopted by the project.

The project was successful after activating community structures (such as Community Health Workers (CHWs), Ward Development Committees (WDCs), and health staff) to carry out house-to-house sensitization and meetings on COVID-19 signs, symptoms and prevention in a bid to break the community chain of transmission. The project ensured the integrated disease surveillance reporting system was strengthened and the emergency preparedness and response system were further enforced. Frontline workers were also supported with training in case management. Also considering the northern province consists of major points of entry, the policy on polymerase chain reaction (PCR) testing was enforced for inbound passengers/cross-border travelers.

- Module Objective (MO1): Strengthen the health system of Sierra Leone to respond to COVID-19 epidemic

The key performance indicators of module objective 1 is 'proportion of suspected COVID-19 cases reported and investigated according to the IDSR case definition'. Data on this indicator was generated from the Emergency Operation Centre (EOC) under the Directorate of Health Security and Emergency (NHSE). Interestingly, all alerts received by the EOC during the COVID-19 response were independently investigated

and verified; and actions were initiated within 72 hours according to IDSR case definition. Between 2020 and 2021, over 3,800 alerts of suspected covid-19 cases were received by EOC from the 7 ECRHSII operational districts in northern Sierra Leone. Accordingly, all alerts received were investigated and approximately 14 percent of the suspected cases were confirmed as covid-19 positive within 72 hours after alert messages (see Figure 19). This result proved a very successful intervention around surveillance- which further confirms the rapid decrease in and containment of community transmission of the virus in northern Sierra Leone.

One of the key factors that led to this achievement was the ECRHS II programme under component 2 intensified efforts to improve the reporting system of the integrated disease surveillance mechanisms. The programme supported the district health structures with training on IDRS and HMIS and built their understanding of the tools. There were several joint supportive supervisions facilitated by the programme (in addition to logistics supports)- which were used as a strategy to strengthen IDSR tools at PHU and community levels across the intervention districts. One of the unexpected outputs of these actions is the alignment of IDSR with the national COVID-19 emergency response system, later integrated into technical pillars or programmes the National Directorate of Health Security and Emergency (NHSE). The established NHSE is observed as an extension of improvements made at community and district levels regarding surveillance, and emergency preparedness and response (EPR) systems. The directorate serves as a repository for all epidemic-prone diseases and other events of public health concerns.

- Module Objective (MO 2): Support community awareness and resilience to COVID-19 resilience to shocks

The expected outcome suggested by the project for the CPR action on community and household resilience to COVID-19 was 'reduced use of negative coping strategies among beneficiary households. However, the evaluation considered the analysis of the CPR project contribution to the overall effects of the cash voucher assistance (CVA) on targeted beneficiary communities across the four CPR project districts including Bo, Kenema, Port Loko, Western Area Rural and Western Area Urban districts. The reduced coping strategy index (rCSI) was used to capture changes in the use of negative coping strategies across the beneficiary communities in the CPR project districts. Sources of information used were secondary data from the evaluation and the WFP Comprehensive Food Security and Vulnerability Analysis (CFSVA) and Emergency Food Security Monitoring System (FSMS) reports.

Results from the analysis showed that the COVID-19 pandemic negatively influenced the patterns of coping strategies in the intervention districts and proved the relevance and timeliness of the CVA intervention. In the first 3 of the pandemics (April-June 2020) average rCSI across the four intervention districts was 14. This shows an increase in the January 2020 figure (9.0) by approximately 56 percent and served as the baseline for the intervention. The CVA program effect was highly evident during the CPR program implementation across the intervention districts. Between June and December 2020, those using negative coping strategies to survive the impact of the COVID-19 crisis markedly dropped by 19 percent. Given that the CVA was a one-off program, it proved to be very effective during the implementation period.

Key recommendations

Overall, the achievements are remarkable and serve as a basis for replication and further strengthening of the health system. Meanwhile, the evaluation noted some flaws that also require attention whilst sustaining gains made.

Recommendation for reproductive health (RH)/ sexual reproductive health (SRH) service delivery

- Strong and visible sectoral leadership by MOHS should be encouraged by aligning the mandate of different Directorates of MOHS to specific components of the ECRHS is recommended in the coming phase of implementation. For instance, DHSE to demonstrate leadership on EPP and RCH to demonstrate leadership on RH/SRH, etc.
- Training and capacity building on fundraising and project cycle management and increased collaboration with donor partners such as the World Bank Group is recommended.
- Build on existing health financing system such as the WHO Health Financing Matrix for Universal Health Coverage (UHC) to forecast and mobilise local resources through national and subnational government budgets.
- The Ministry of Health must ensure licensing for health staff and creation of a budget line for remote allowances and volunteer healthcare worker package for quality service delivery in last mile health catchment communities.
- It is recommended that replenishment policy through the pull supply chain system be promoted particularly for RH/SRH commodity supplies. Stock out of acceptable FP commodity supplies was high at the time of the assessment. Also, critical examination and supply of LARC medical equipment must be done and

maintained for all health facilities.

- Rolling out training and capacity building support on quantification, forecasting and medical commodity data management is strongly recommended.
- It is recommended that the quarterly joint monitoring, supportive supervision and ISSV be maintained. This innovative health systems approach can provide guidance in identifying gaps, health staff capacity weakness and strengthen quality health care service delivery in Sierra Leone.
- MOHS should ensure that budget line for emergency funds is created in national health financing. It was observed that NEMS operation was donor-driven and there were reported instances where delays in funds approval contributed to high mortality after operations were stalled. Emergency funds can be used in such a situation.
- Rolling out water works for uninterrupted running water supply to all BEmONC facilities is highly recommended.
- The need for birth waiting homes in PHUs overwhelmed with patients is recommended.
- Sustaining and rolling out of gains made in health management information system should not be overemphasized for health system strengthening efforts.

Recommendation for surveillance, emergency response and epidemic prevention

Although the major focus of phase two of the ECRHS II implementation was RH/SRH, the programme also placed strong emphasis on surveillance, emergency response and epidemic prevention. The capacity of health staff on IDSR has been strengthened compared to first phase of ECRHS programme implementation. The EPP strategy to include local authorities and the continuous strengthening of CHWs capacity garners local support and ownership for community-based surveillance and emergency response. This has improved the quality and effectiveness of response to priority disease events detected at community level. Replicating this strategy in other parts of Sierra Leone will improve on national future emergency response.

Recommendation for Water, Sanitation and Hygiene (WASH)

- The ECRHS programme made strong focus on improving WASH facilities at PHUs in operational districts. While this seems to be a commendable approach, it is recommended that preventive maintenance by local water technicians be maintained. The PHU WASH improvement activities should be rolled out across all health facilities.
- Community water management committees should be revived and made functional to sustain gains made in access to water and sanitation.

Recommendation for crosscutting issues/ general perspectives

- Socio-cultural barriers to access and utilize modern FP contraception methods remain widely evident across the ECRHS II operational districts. Continued adoption of gender transformation approach and establishing a community-led male advocacy forum on FP are strongly recommended.
- Disability perspectives have not been fully incorporated in the ECRHS interventions. Rehabilitation efforts and small water works have not recognized the need for disabled-friendly health facility infrastructure particularly the water and sanitation infrastructure.

1. BACKGROUND OF THE EVALUATION

1.1 Background/ Context of the Project

The Epidemic Control and Reinforcement of Health System Services (ECRHS) project is funded under **the German Financial Cooperation (BMZ) with Sierra Leone through KfW**. Two phases have been successfully completed in the course of the project implementation. The first phase of the project was launched in November 2015, and was originally designed to respond to the Ebola outbreak. At the first phase, the project was further implemented for an extended period of 17 months, from August 2017 – December 2018. The project aim was to improve the health status of Sierra Leoneans in four northern districts (Bombali, Tonkolili, Kambia, and Koinadugu) in Sierra Leone. The project design for phase 1 had three main objectives:

i. Objective 1: Contain and stop the Ebola epidemic,
ii. Objective 2: Securing primary healthcare services, and
iii. Objective 3: Building resilience of vulnerable households.

According to the ECRHS I evaluation report, the expected impacts outlined in the project planning were largely achieved. Specifically, the project made significant contribution to consolidating the community-based reporting system for infectious diseases, which was further developed into a general early warning system after the Ebola epidemic subsided. Processes and systems put in place to prevent and contain the epidemic also reportedly improved access to hygiene products and clean water. The resilience of the rural target population was promoted through a cash-for-work emergency programme and the provision of farm seeds. Further, health facilities were supported to restore basic services to the population.

Importantly noted was that the initial design of the project takes into account a longer-term view by work towards putting in place preparations for the transition to an extended health system strengthening (HSS) effort. To this end, the German Ministry of International Development and Cooperation (BMZ) suggested the incorporation of measures to promote sexual and reproductive health (SRH) services from ECRHSI to an extended phase, whilst ending the activities carried out to improve resilience of vulnerable households (objective 3).

The second phase of the ECRHS project was considered an extended phase of the ECRHS I; and started in January 2019. Whereas the primary focus of ECRHSI was on public health emergency response, the aim of phase II of ECRHS is the sustainable establishment of an epidemiological control system, whilst also strengthening the performance of the health system with a focus on reproductive health / self-determined family planning. In the core area of epidemic control, promoting the integrated early warning system for epidemic-prone diseases is planned with the involvement of community-based structures. Water, sanitation and hygiene (WASH) is further observed as a critical component of the second phase of the ECRHS project especially in efforts to contain health facility acquired infections (HFAI) across the seven intervention districts. In an effort to strengthen the health system in ECRHS II, health facilities are also supported in ensuring basic care for the population, with a focus on reproductive health/self-determined family planning. Furthermore, the project intended to strengthen the planning and coordination function of the District Health Management Teams (DHMTs) through training activities.

Meanwhile, the program was observed to have included activities not initially planned in the original design for the second phase of implementation in a bid to respond to the COVID-19 pandemic. These changes were made through KfW non-objection approval for additional project titled the "COVID-19 Prevention and Response Project" with a fund volume of 3,000,000 EUR.

The ECRHS II interventions cover the seven northern districts of Bombali, Falaba, Kambia, Karene, Koinadugu, Port Loko and Tonkolili with a total population of approximately 2.5 million, including approximately 630,000 women of childbearing age.

Until the outbreak of the COVID 19 epidemic, the project measures were implemented largely

according to plan, with a slight delay. Since March 2020, the project was observed to be partly focused on stringent measures to contain the COVID 19 epidemic – which affected the implementation of some planned activities initially noted in the ECRHS II program design. Once the spread of the COVID-19 pandemic has been stabilised and stringent measures to contain the disease were relaxed, the project intervention regained its normal operations. The ECRHSII project has two key strategic components and four module objectives as set out below:

Component 1: Sierra Leone: Epidemic Control and Reinforcement of Health Services (ECRHS PHASE II) Duration: January 1st, 2019 - December 31st, 2021 (36 months)
Programme Objective: Improved health status of the population of Sierra Leone with a focus on reproductive health.
Module Objectives: MO1: Epidemic control system sustained in selected health facilities in the project region
Module Objective MO2: Increased offer and demand of Sexual Reproductive Health services in the project region

Component 2: COVID-19 Prevention and Response Project (CPR) in Sierra Leone
Programme Objective: Improved health status of the population of Sierra Leone with a focus on COVID-19 prevention and response.
Module Objective MO1: Strengthen the health system in Sierra Leone to respond to the COVID-19 epidemic.
Module Objective MO2: Support community awareness and resilience to COVID-19.resilience to shocks (adequate food security to defenddiseases);

1.2 Evaluation Purpose and Objectives

The overall purpose of the evaluation is '***to assess result and impact of the Epidemic Control and Reinforcement of Health Services project goal and outcomes in targeted northern region of Sierra Leone'***. The specific objectives of the evaluation are:

- To assess the project result areas in relation to the DAC OECD criteria including effectiveness, relevance, efficiency, sustainability, impact and coherence,
- To assess changes in the general conditions (context) and perspectives, cooperation with other stakeholders and projects in the same field, synergies with specific focus on other projects funded through the German Development Cooperation,
- To assess key project implementation areas such as training quality, capacity of implementing partners, coordination activities, cooperation between community structures (Community Based Surveillance System), local administration and overall health system, including other specific aspects of cross-border activities,
- To assess the project steering, communication, and interaction with key stakeholders at national and district levels.
- To assess need and identify critical gaps for considerations in future project interventions
- To identify the project key challenges during implementation, and lessons learnt/ best practices,
- To draw conclusions and proffer recommendations that enable reflection and assist in decision making for continuity and changes in future interventions
- To proffer recommendations on how to consolidate the achievements, how to promote sustainability, hand over to national structures.

The final evaluation also assessed general aspects that included largely the following according to strategic thematic areas:

Surveillance

- Sustainability of community-based surveillance and motivation to participate in surveillance activities,
- Preparedness of health facilities for future disasters, epidemics,

WASH

- Sustainable risk minimizing behaviour,
- Utilisation of water supply and WASH facilities,
- Maintenance aspects and interventions of other projects contributing to improve WASH facilities in the same districts,
- Level of hygiene practices at facility level,

Sexual (Reproductive Health) (SRH/RH)

- Volume of new FP users in the region and their satisfaction rates,
- Culturally accepted FP commodities in the region,

Community based activities

- Sustainability of VSLA by different beneficiaries,

Coordination and other cross-cutting aspects of the project

- Support by district team (including supervision),
- Participation in coordination activities at central and decentralised levels,
- Synergies with other programs in the same field,
- Financial sustainability of project activities, and
- Preparation of handing over and consolidation of results
- Gender aspect, implications on women
- Assess other expected and unexpected results
- Appreciation of the project's activities by the different beneficiaries
- Participation in coordination activities at central and decentralized levels
- Financial sustainability of project activities
- How to prepare hand-over and consolidate results

The evaluation is expected to present evidence, recommendations and learnings which can be utilized by KfW, MOHS, CARE Sierra Leone and implementing partners in the development of potential future projects. The findings of the evaluation are also important for improving programme quality, identifying collaborative approaches with the civil society, and develop working methods together with women and girls at the community level.

2. METHODLOGY

The methodology section discusses the scope of the evaluation and sampling design, desired data and sources and tools used for the evaluation methods for data gathering, management and analyses.

2.1 Scope of the Evaluation

The evaluation was expected to assess the results of the Epidemic Control and Reinforcement of Health Services Phase II and COVID-19 emergency prevention and response projects against the targets set out in the original project documents and result framework as well as the Ministry of Health and Sanitation (MOHS) strategy. It includes field assessment in project sites of targeted regions of the country(Bombali, Tonkolili, Koinadugu, Port Loko, Karene, Falaba and Kamba districts) and also include assessments at national level (MOHS and other relevant stakeholders).

The evaluation focused on community structures including VSLA groups, Facility Management Committee (FMCs), WASH committee etc to evaluate the effectiveness of modules used during the intervention. It explored other information related to the project information spanning through the implementation period.

2.2 Design of the Evaluation

The design of the evaluation considered both descriptive and exploratory methods. Given that the evaluation type was both impact- and performance-based, descriptive research design techniques using quantitative methods were used to a larger extent to carry out impact analyses and target-actual comparisons. However, as noted from the project brief in the RFP, a mixed data collection methodology was used in the evaluation. This means a highly participatory qualitative approach including focus group discussion sessions, key informant interviews, critical incidence analysis and case study documentations were used to triangulate quantitative findings from the evaluation. In essence, both field data and desk review were done to collect, compare and/or collate or triangulate data. It is noteworthy that findings from the desk reviews were collated from existing credible documents such as the Demographic Health Survey reports/ database, Multi-indicator Cluster Survey Reports, RMNCAH policy and related research documents. The qualitative method was particularly employed to help the evaluation to note probable success factors, likely efficiency characteristics, challenges and gaps in project implementation, lessons learnt and options for future intervention. Taking into account the redesign of project following the COVID-19 pandemic response (as stated in the ToR), flexibility was used in some data collection approaches in a bid to generate meaningful learning and include the voices of girls, communities and other stakeholders while responding to the pandemic.

2.3 Sample design and sampling methodology for quantitative interviews

The sample design for the proposed assignment covers quantitative interviews at both household and health facility level.

2.1.1 Design for quantitative interviews at household/ individual level

The design of the project (as noted from the project documents) allowed for purposive and simple random cluster sampling approach regarding interviewing respondents at household/ individual level. At the design stage, the sampling selection process was done at **three stages**. It is noteworthy that all the seven (7) ECRHS programme intervention districts in northern Sierra Leone were covered; and therefore, required no selection procedure. **The first stage** of selection was done targeting health catchment areas as clusters (using the master facility lists for the seven intervention districts). Given that master health facility lists were provided for the seven intervention districts, the health catchment areas were selected using stratified systematic cluster

sampling approach (where the health catchment areas were stratified using based on their level of functionality in the health system such as CHC, CHP and MCHP catchments). **At stage 2**, at least one community cluster was randomly selected in each of the health catchments during field exercise (taking cognizance of communities with and without health facilities to avoid biasness in findings on access and community perception). However, it is noteworthy that community clusters which were targeted for specific project components/ interventions (such as **VSLA, cash voucher assistance and WASH**) were purposively selected to capture the programme effects and beneficiary perceptions/ appreciation of the programme. Ideally, the evaluation intended to stratify communities by rural and urban/peri-urban, but due to limited project intervention in and around urban settings, this method could not be applied. **At stage 3**, at least one eligible respondent was randomly selected at household and/or individual level during field interviews. For RH/SRH questions, the evaluation design noted that some households have more eligible respondents who have similar views. In such situation, the required number of respondents per household was selected using the Kish or Last Birthday methods; and gender was considered as strata.

- **Desired Data for evaluation of component 1 of the project**

It is noteworthy that component 1 of the ECRHSII empahsises on improved health status of the target population with focus on reproductive health (RH) and increased demand and offer of SRH. Therefore, the formula to obtain the required minimum sample size (n) to generate data on RH, SRH and epidemic control (using cluster sampling) is shown below. This formula is based on a statistical test of the difference of proportions of key indicators set to track progress of the programme's intervention in meeting the target set. Considering that the primary focus of the ECRHS II is health system strengthening on reproductive health and epidemic prevention (COVID-19), the key targets for personal interviews included women aged 15-49 years who are best placed to respond to both specific questions (on SRH) and general questions on COVID-19 and WASH. For the purpose of the evaluation statistical parameters such as 95 percent level of significance (α=1-a =1-0.5) and 90 percent power (ß=1-b = 1-0.1) were used. The statistical power (ß) used was noted to be high enough to detect real (even smallest) changes in targets/ differences by the programme. For instance, the programme is expected to contribute to increase in contraceptive prevalence rate by 10.7% (baseline: 23.0%, target: 33.7%). While this target may not be achieved, increasing the power can help the evaluation detect the smallest change as statistically significant.

$$n = D\left[(Z_\alpha + Z_\beta)^2 * (P_1(1 - P_1) + P_2(1 - P_2)) / (P_2 - P_1)^2\right]$$

n = required minimum sample size of the target respondents (preferably women aged 15-49 years)
D = design effect (assumed to have a default value of 2 for women of reproductive age (15-49 years)
P_1 = the value of the key indicator[3] at baseline expressed as percentage between 0 and 1= 0.23
P_2 = the expected target value of the key indicator at final evaluation= 0.337
Z_α = z-score corresponding to the degree of confidence with which it is desired to be able to conclude that an observed change of size (P_2 - P_1) would not have occurred by chancel (α=0.95) = 1.645
Z_β = z-score corresponding to the degree of confidence with which it is desired to be certain of detecting a change of size (P_2 - P_1) if one actually occurred (statistical power ß=0.90) = 1.282

The computed minimum sample size using the above formula is 233 per intervention district. Meanwhile, as a standard rule, it is expected that 10% may either fail to respond or refuse to respond to some questions (incomplete questions). The minimum sample size was therefore inflated by 10 percent using the formula below. Hence 259 women in reproductive age (15-49 years) were initially targeted per district for personal interviews.

n_a (expected number targeted) x (% that expected to respond) = desired sample size n_a (expected number targeted) x (0.90) = 233 Expected number targeted= 233/0.90 = 259

Meanwhile, in a bid to increase precision, this number was further inflated to 280 women of

[3] Here we take the ECRHS ii Key Performance indicator: Contraceptives prevalence rate increase from baseline value (23.0% in 2017) to 33.7% in 2022.

reproductive age (15-49 years) per district. A modest number of men age 16 years and above were also targeted. That is, targeted men considered were 50% the number of women targeted. Hence, 420 respondents (280 women, 140 men) were initially targeted per district for personal interviews. This means 2,940 (1,960 women, 980 men) were targeted across the 7 programme intervention districts. However, actual sample size of respondents interviewed was 3,353 (2,313 female, 1,040 male) respondents- 14 percent increase further increasing the precision level. It is noteworthy that this sample also included CVA beneficiaries interviewed in other districts (for component 2 of the project) including Bo and Kenema (See Table 1)

Table 1: A table showing selected sample size for all category of respondents

Districts covered	Region	# of chiefdoms	# of communities	Total # of respondents interviewed			# of respondents by category				
				Total	Female	Male	Adolescent girl (15-17 years]	Adult female of reproductive age (18-49 years)	Adult female (50 years and above)	Adolescent boy (16-17 years)	Adult male aged 18 years and above
Bo	South	2	6	104	102	2	0	73	29	0	2
Bombali	North	10	16	453	289	164	143	143	3	77	87
Falaba	North	7	20	426	291	135	136	154	1	57	78
Kambia	North-West	6	17	427	285	142	83	162	40	54	88
Karene	North-West	5	19	441	297	144	117	172	8	61	83
Kenema	East	2	11	114	112	2	0	85	27	0	2
Koinadugu	North	7	12	422	285	137	110	174	1	61	76
Port Loko	North-West	9	20	532	367	165	137	215	15	70	95
Tonkolili	North	5	16	434	285	149	61	122	102	43	106
Total		**53**	**137**	**3353**	**2313**	**1040**	**787**	**1300**	**226**	**423**	**617**

As defined in the cluster sampling design methodology above, at least 30 household/individual (20 female and 10 male) respondents were targeted and interviewed across 98 health catchment areas in the 7 intervention districts. It is noteworthy that women of sexually active/reproductive age group mostly visit health/SRH facilities (15-49 years). Therefore (as inter alia stated) this age group is best placed to adequately respond to questions on health/SRH and WASH services provided, as well as hygiene practices, etc. The eligible age for both household and individual interviews on health/SRH and WASH was therefore be 15-49 years for women and 15 years and above for men. However, given that household members below 18 years are not eligible for household level questions, the evaluation ensured that household members aged 15-17 years were separately targeted to respond to specific SRH questions. This addressed biasness in selecting eligible age groups (15-49 years) for the SRH questions and analyses. Actual female respondents (15-49 years) interviewed was 2,087 which includes 787 adolescent girls (15-17 years) and 1,300 female members of households (aged 18-49 years). Further men were considered as those who accompany their wives and relatives to the health facilities (especially during labour or complications), and therefore a reasonable number were expected to have knowledge about the health and WASH situation in the catchment area. Cognizance of this situation, 1,040 male respondents above 15 years were targeted and interviewed (423 aged 16-17 years and 617 aged 18 years and above).

It was expected that at least 30 respondents (20 women of reproductive age, 10 men above 15 years) would be interviewed per community cluster. This means in each community, the specific targeted respondent would include at least 10 female respondents (15-17 years), 10 female respondents (18-49 years), 5 boys (16-17 years) and 5 male respondents (18 years and above). Meanwhile, there were fluctuations in actual sample size across communities due to differences in population of eligible respondents- which further affected targeting equal number of respondents across the project intervention districts.

However, it is noteworthy that the evaluation considered only adults aged 18 years and above as eligible for household interviews (on RH, WASH and VSLAs), while adolescent girls and boys aged 15-17 years, were targeted for SRH questions only. In a targeted household with more than one eligible respondent in age group 15-17, random sampling using Kish or Last Birthday method was adopted to select a respondent so that all eligible members of the household had equal chance of being selected. A household targeted for eligible female member, was replaced if no eligible female respondent was identified.

Table 2 presents the disaggregated sample size for component 1 which includes eligible respondents for SRH/RH, WASH and VSLA across the targeted project districts. It is noteworthy that all eligible household respondents (aged 18 years and above) responded to all sections of the personal interviews questionnaire (except for CVA and VSLA which only target beneficiaries in specific targeted communities), while adolescent girls and boys aged 15-17 years, were targeted for SRH questions only.

Table 2: Desired sample size selected for component 1 of the ECRHS II project

		# of eligible respondents for SRH			# of respondents for RH			# of respondents for WASH			# of respondents for VSLA		
Districts covered	Region	Total	Female (15-49 yrs)	Male (16 yrs & above)	Total	Female	Male	Total	Female	Male	Total	Female	Male
Bombali	North	450	286	164	227	140	87	233	146	87	167	102	65
Falaba	North	425	290	135	231	153	78	232	154	78	184	130	54
Kambia	North-West	387	245	142	246	164	82	290	202	88	261	180	81
Karene	North-West	433	289	144	251	170	81	263	180	83	138	87	51
Koinadugu	North	421	284	137	248	173	75	249	174	75	154	123	31
Port Loko	North-West	517	352	165	306	213	93	322	229	93	142	114	28
Tonkolili	North	332	183	149	205	116	89	328	221	107	244	173	71
Bo	North-West	0	0	0	0	0	0	0	0	0	93	91	2
Kenema	North	0	0	0	0	0	0	0	0	0	53	53	0
Total		**2965**	**1929**	**1036**	**1714**	**1129**	**585**	**1917**	**1306**	**611**	**1290**	**909**	**381**

- **Desired Data for evaluation of component 2 of the project**

Key beneficiaries the evaluation targeted to ascertain the project's effect under component 2 (Covid-10 Prevention and Response) included cash voucher assistance (CVA) beneficiaries and the Mama-Baby kits beneficiary mothers. It is however noteworthy that responses to knowledge of covid-19 transmission and prevention methods were also solicited from all respondents targeted by the evaluation.

For cash transfers beneficiaries, purposive and systematic random sampling technique was used, considering beneficiary list was provided. Whilst communities covered by the CVA programme were purposively sampled at the first stage, beneficiary households were randomly selected taking congnisance of the proportion of beneficiaries targeted by district. Considering that the total number of CVA beneficiaries targeted was known and no baseline value was generated, the sampling selection procedures for personal interviews with the target respondents used the formula below.

$n=z^2pqN/(z^2pq+Ne^2)$
Where
n=the desired minimum sample size
z= the value of the standard normal deviation corresponding to the level of confidence
p= the estimated population experiencing positive outcome measures (e.g beneficiaries engaged in reduced coping strategies)
q= 1-p= estimated population experiencing negative outcome measures
N= total number of beneficiaries across the intervention areas
e= desired minimum level of precision/accuracy

For the study p was estimated at 50% and e, at 0.05 level of accuracy. Therefore, substituting in the above equation gives the sample size,
$N=1.96^2 \times 0.5 \times 0.5 \times 2{,}000/ (1.96^2 \times 0.5 \times 0.5 + 2000 \times 0.05^2) = 322.22 \approx 322$

Notably, the project targeted 2,000 beneficiary households of the multi-purpose cash transfers in Port Loko, Western Area, Bo and Kenema, Ideally, the desired minimum sample size computed from the total beneficiary household is 322. However, actual number of CVA beneficiaries interviewed was below the minimum sample size computed (315) due to problems with tracking beneficiaries during field interviews- where few beneficiaries were tracked in only 3 of 4 districts covered by the project for multi-purpose cash transfers. This sample size was used to ascertain the impact of the unconditional social safety net intervention for vulnerable households during the covid-19 crisis. Table 3 presents the total number of CVA beneficiaries interviewed.

Table 3: Desired sample size selected for component 2 of the ECRHS II project

Districts covered	Region	# of respondents for CVA			# of respondents for behaviour change on covid-19		
		Total	Female	Male	Total	Female	Male
Bombali	North	0	0	0	453	289	164
Falaba	North	0	0	0	426	291	135
Kambia	North-West	0	0	0	427	285	142
Karene	North-West	0	0	0	441	297	144
Koinadugu	North	0	0	0	422	285	137
Port Loko	North-West	105	89	16	532	367	165
Tonkolili	North	0	0	0	434	285	149
Bo	South	98	96	2	104	102	2
Kenema	East	112	110	2	114	112	2
Total		**315**	**295**	**20**	**3,353**	**2,313**	**1,040**

In addition, while almost all PHUs in the Northern Province were targeted, specific consideration was made to target 5 health catchment communities in each of the districts that have been reached with the Mama-Baby kits since the Covid-19 pandemics. In each of these communities' women with children (aged 24 months old or younger) were randomly interviewed to ascertain the proportion of this category of women who benefited from the opportunities and the ensuing impacts made in terms of increased health seeking behaviour, skilled birth attendants and ANC visits. Women with children 24 months or younger were also identified from the personal interviews and were used as case studies on the impact of Mama-to-Baby kits they received during delivery.

It is also noteworthy that CARE-sponsored VSLA members were included in the design for comparison of coping strategies and to verify the group readiness in terms of activities around social mobilization on SRH and epidemic prevention during public health crisis. As presented in Table 2, 1290 respondents interviewed already belong to a VSLA group, which is large enough to draw conclusion on the indicators.

However, it should be noted that only adults aged 18 years and above were considered eligible for household interviews on CVA and VSLA questions, while all 3,353 (2,313 female, 1,040 male) respondents were eligible for knowledge on COVID-19 prevention methods as well as access to WASH facilities.

2.1.2 Design for quantitative interviews at health facility level

Output 1 of the first component of ECRHS II programme requires that functional epidemic control system is in place in the seven northern districts of Sierra Leone. In particular, output 1.2 requires the evaluation to assess the proportion of peripheral health facilities with functional water and sanitation infrastructure. Ideally, this indicator demands that all Peripheral Health Units (PHUs) in the intervention districts be targeted. Notably, there are 502 PHUs (including 256 MCHPs, 159 CHPs & 87 CHCs) as shown in Table 3. It is noteworthy however, that PHUs in the northern province were targeted for both component 1 and 2 of the ECRHSII interventions on WASH, training and supplies of IPC and PPEs, while selected PHUs in Bo and Kenema districts were covered only under component 2 (CRP) of the ECRHSII. Meanwhile, due to specific interest in WASH infrastructure status of PHUs in Bo, the evaluation was expected to assess all PHUs available in the district. To this end, actual sample size of PHUs assessed was 639 including 497 PHUs in all 7 northern districts, 137 PHUs in Bo and 5 PHUs in Kenema. Also, important to note was that the master facility listing provided for sampling selection was not updated. Actual number of PHUs identified there showed some inconsistencies with PHUs registered in the master facility listing.

Table 4: PHUs assessed distributed by districts and region

Districts covered	Region	Chiefdoms covered	Initial # of PHUs available	% of total PHUs assessed	# of PHUs assessed			
					Total	CHC	CHP	MCHP
Bombali	North	12	87	100%	87	17	39	31
Falaba	North	13	40	103%	41	5	14	22
Kambia	North-West	10	70	86%	67	15	16	36
Karene	North-West	10	56	105%	59	17	20	22
Koinadugu	North	10	49	100%	49	7	21	21
Port Loko	North-West	13	97	97%	94	23	36	35
Tonkolili	North	19	104	96%	100	17	19	64

Total		**87**	**502**	**99%**	**497**	**101**	**165**	**231**
Bo	South	18	140	98%	137	37	35	65
Kenema	East	2			5	1	2	2
Western Area	West	3			0	0	0	0
Total		**23**			**142**	**38**	**37**	**67**

Separate assessors were recruited to carry out the following activities::

- ☞ Assess the status of health facility and WASH infrastructure at all targeted PHUs across the 7 intervention districts- with an extended reach to Bo.
- ☞ Verify the number of PHU trained in Standard Operational Procedures for handling waste especially with regard to infectious waste.
- ☞ Assess the proportion of health facilities offering at least three FP methods according to the national programme.
- ☞ Verify availability and adequacy of PPE and IPC provided to meet the needs of PHUs,
- ☞ Verify the number of health workers trained in integrated COVID-19 case management, surveillance and IPC use

2.2 Evaluation approach

The approach for the ECRHS II final evaluation adapted the final evaluation of ECRHS Phase I from which some indicators have been used as baseline indicators for project implementation in phase II. As discussed in earlier sessions, the evaluation adopted a mix of quantitative and qualitative research methods to collect the relevant information/data from beneficiaries (VSLA and WASH), project team and other stakeholders. Our approach relied on three key components:

- Primary data collection (both qualitative and quantitative) from women of reproductive age (WRA), men, people with disabilities, ECRHSII programme steering, MOHS/DHMTs, health workers, Water Directorate, Community Structures for surveillance system, District level stakeholders, WASH Committees, NACOVERC/DICOVERC, and VSLA members, etc.
- Flexible analytic framework to identify program effects using baseline and final evaluation data.
- Innovative use of monitoring data, annual reports and other extant data to complement the primary data.

2.2.1 Primary data collection (both qualitative and quantitative)

The evaluation collected primary data through field survey on project performance indicators (as outlined in the project performance monitoring plan (PMP) or results/logical framework) from women of reproductive age (15-49 years), men (age 16 years and above, people with disabilities (if available), ECRHSII programme steering, MOHS/DHMTs, health workers, Water Directorate, Community Structures for surveillance system, District level stakeholders, WASH Committees, NACOVERC/ DICOVERC and VSLA members, etc. Data will be collected in project intervention communities across the 7 districts. The collection of primary data included both quantitative and qualitative data, which were collected using structured and semi-structured questionnaires respectively. To answer questions on relevance, efficiency, and sustainability of the project interventions, and other general aspects, the evaluation explored key informant interviews, focus group discussions and review of documents.

2.2.2 Flexible analytic framework to identify project effects using baseline and target- actual comparisons

The ECRHSII is notably an extension of the ECRHS I programme but with specific focus on reproductive health and epidemic prevention (activated at the wake of the covid-19). As such baseline values for the ECRHS II were generated from the ECRHSI final evaluation results and other national sources. Baseline and targets values were set and project performance was analysed based of baseline- actual, and target-actual comparisons. In addition to assessing the programme's performance, the team walso ascertained the programme's coherence with other interventions in the programme's locations in line with the programme's strategy. This strategy documented the extent of complementarity, harmonization and coordination during implementation. The strategy was expected to reveal the existence of added values, while avoiding duplication of effort. In

addition to this, qualitative approaches such as case studies scenarios, Most Significant Change, Life History and Critical Incidence Interviews (CIIs) were adopted to understand the extent to which the project influenced specific group of the population in the intervention districts. Annex1 presents the evaluation design matrix.

2.2.3 Innovative use of monitoring data, annual reports and other extant data to complement the primary data

It is noteworthy that the second phase of the ECRHS programme has covered the entire population of the northern providence. To ascertain trustworthiness of the evaluation results, extensive review of existing secondary data and reports will be done. Such data/ reports will be sourced from most recent Demographic Health Surveys (DHS), Multi-Indicator Cluster Surveys (MICS), the Integrated Disease Surveillance Reports and regular monitoring reports, etc. The secondary information was particularly sourced to supplement primary data as much as possible. These data were useful in situations where the evaluation team cannot acquire such data during the field survey that may require significant time to collect. In particular, longitudinal (secondary) data were collected on contraceptives prevalence, epidemic cases investigated within 72 hours, maternal mortality and couple of years protection (CYP), etc.

2.3 Evaluation tools

Separate evaluation tools comprising structured and semi-structure questionnaires were designed and used to collect data from the respective target audiences according to the data collection methods. These tools are described as set out below:

2.3.1 Quantitative Methods

- ***Personal/ Household Interviews Questionnaire*** was developed to solicit quantitative information from household respondents of age 15-49 years for female respondents and above 15 years for male respondents. Target respondents were drawn from the intervention areas. In a special case, purposive sampling of beneficiary communities for cash transfers (CVA) and VSLAs sub-component of the project were targeted. A maximum of 3,353 interviews (2,313 female respondents and 1,040 male respondents) were conducted across 137 communities. This total sample also include respondents of specific sub-components such as 112 CVA beneficiaries (110 females, 2 males), 1,290 VSLA participants (909 females, 381 males). It is noteworthy that respondents in these sub-components also overlaps in some cross-cutting sections of the questionnaires.
- ***Health Facility Assessment tool***: was developed in the form tracking tool to capture data on functionality of WASH infrastructure, availability of RH services, number of FP users (including new users and couple years of protection (CYP), number of PPE and IPC kits available, health workers trained in integrated case management, surveillance and IPC use. A total of 639 health facilities (including 497 in the 7 northern districts, 137 from Bo district, and 5 from Kenema district) were assessed.
- ***WASH Infrastructure tracking tool:*** This tool was designed as part of the health facility assessment tool. It was used to track the status of WASH infrastructure in the targeted 7 northern districts and Bo district. The status of WASH infrastructure was documented from a total of 497 PHUs (101 CHCs, 165 CHPs and 231 MCHPs) in the 7 northern districts and 137 PHUs (37 CHCs, 35 CHPs and 65 MCHPs) in Bo. This assessment was done to inform future intervention on health/WASH infrastructure.
- ***Client exit interview and observation tool***: Ideally, client exit interviews were expected. Meanwhile, due to the large number of indicators in the health facility assessment tool which consumed more time for assessors, newborns/ lactating and under-five mothers were interviewed using specific RH/SRH questions to track their perceptions about the health facilities. A total of 246 newborn/ lactating were interviewed to allow for gap in client exit interviews.

2.3.2 Qualitative Methods

i. ***Focus group discussions (FGDs Guide):*** were administered to project beneficiaries including women of reproductive age (15-19 years), men of age over 15 years, people with disabilities (where available), etc. Whilst general FGDs on Health, WASH and SRH were held with all categories of respondents, separate focused questions were done for specific targeted beneficiaries of the COVID-19 CVA (Cash Voucher Assistance) in Port Loko, Bo and Kenema districts and VSLA participants across all districts targeted. A total of 60 FGDs were done across the 7 project intervention districts in northern provinces where focused discussions were held around the projects sub-components including SRH/FP, cash transfers, VSLA, behavior change on covid-19 prevention, and WASH.

ii. ***Key Informant Interviews (KIIs tools:*** included unstructured (and flexible probing) questions that used for-depth interviews with a range of stakeholders including project/ partner staff, MEAL personnel, MOSH/DHMTs, PHU staff, Local authorities, District Water Directorates/ Water Engineers, Local WASH mechanics, CHWs, and WASH committees among others. These key informants were targeted and interviewed on unstructured questions specifically related to component 1 and component 2 of the ECRHSII interventions:

   - **Stakeholders for component 1 only:** These include MOHS/ DHMTs, PHU staff (including the in-charge, SRH focal points, midwifes/maternity ward nurses)
   - **Stakeholders for component 2 only**: These include MOHS/DHMTs, DiCovERC coordinators, Surveillance Pillars, IDSR focal points, PHU staff, Local authorities (chiefs and religious leaders), SRH focal points, Water Directorates/ Engineers, WASH mechanics/ committees.
   - **Stakeholders for components 1 and 2**: These include Project/ partner staff, MEAL personnel

iii. ***Desk Review***: This was done by sourcing secondary information from project documents including past evaluation reports, policy and strategy documents, project proposal, Logframe, IPTT. Other documents/ data reviewed included DHMT/MOHS reports, WHO reports, DHS reports, MICS reports and annual reports. At the design stage, the review formed the basis of the evaluation process and informed the framework for designing the study. Other reviews done during field interviews were used to provide the relevant secondary information for analysis.

iv. ***Most Significant Change Case Studies***: These were documented as good practices observed from FGDs and personal interviews. A total of 5 case studies were documented during the course of the evaluation.

2.4 Ethical considerations and methods for establishment of security for respondents targeted

Modalities were put in place for data management and ethical considerations for the security of all respondents interviewed. It is noteworthy that the major targets of the proposed exercise also include women, adolescent girls and other vulnerable groups. Conscious efforts were therefore made to protect them from harm, as well as psychological problems that may result from the exercise. The identification of risks and mitigation measures, ethical consideration and data management are explained as follows:

- Risk management.

Table 5: Potential risks and mitigation measures identified for field data collection

Potential Risk	Level of Risk	Mitigation
Exposure of data collectors and respondents/ participants to the risk of contracting COVID-19 and other communicable diseases during community data collection	Low	All field work took place observing WHO and Government of Sierra Leone guidance on social distancing, and participants were asked to observe handwashing and mask wearing protocols. It was also ensured that the selected location for the FGDs was adequately spaced for social distancing and ventilation.

Potential of compromising the safety and wellbeing of FGD participants through exposure of risk to GBV	Low	All researchers received training sessions on critical child safeguarding guidelines including awareness on key sexual exploitation and abuse (SEA) procedures to support and protecting women and adolescent girls from possible abuses. Researchers were instructed to ensure that they are never alone with any one adolescent participant. The targeted communities were well informed about the purpose of the research to minimize any risk of a backlash from the community towards any of the research participants. All activities in relation to the evaluation were conducted during the daytime in a safe location which the participants can access without security risk.
Instances where the respondents' participation and termination may not include prior informed consent,	Low	All participants were explained the purpose of the research and their role. They were assured about their right to withdraw at any time and that they do not need to answer any question they do not wish to answer. They were requested to give their consent during interviews and the researchers ensured that every single research participant has fully understood the content.
Breach/compromise of privacy and confidentiality of respondents	Low	Protocols were put in place to ensure responsible data management. Efficient monitoring of data access will be put in place to protect the security of personal data against or from unauthorized access, damage loss or other risks presented by data processing. In general, the repository will be encouraged to ensure that personal data are de-identified and password protected to minimize any potential risks to privacy.

▪ Ethical considerations

To counter any risk of data collection exposing participants to COVID infection, data collection was undertaken in accordance with the rules of social distancing during group interviews.

To ensure that participation was voluntary, informed consent was obtained from all participants. The purpose of the exercise, the intended use of the findings and the process was explained to participants; and they were also encouraged to ask questions for clarity and understanding.

The questions for the discussion were asked in the local language (or Krio) as the data collectors were familiar with dialects in the districts. Participants were treated with respect and dignity and were not be pressured to engage in any activity in which they do not wish to participate.

▪ Data management and quality control

Mobile data collection method was especially used to collect quantitative information/ data from respondents. The SurveyCTO mobile data collection app was especially used for quick turnaround from personal interviews. This app has features such as query languages, flagging, calculations, GPS, Voice recording and image/photo taking to ascertain trustworthiness of the data. For instance, the query languages are used to allow for skip questions, multiple choice selections and single choice selection; and therefore, field data collectors are prompted by the system to answer mandatory questions/ conditions before moving to the next question. The GPS of location of interviews or during submissions were embedded in the system to visualised by the system after submissions are made. However, due to problems with mobile networks and access to mobile charging sources, real-time online monitoring was not very effective. Meanwhile, it is important to note that once every field data collector's mobile phone detail/name has been included in the system, the lead evaluator (or designated IT specialist) monitors and review individual interview performance after submissions. In a situation where flaws are detected in the submissions the specific questions will be flagged and automatically sent back to the data collector to repeat interviews or do the necessary corrections as the case may be.

Lastly, other stakeholders interviewed were assured about nondisclosure of names or photos for any sensitive quotes that would implicate their personality/positions.

2.5 *Methods for analysis of data/ information*

The RFP and terms of reference required the evaluation design to explored mixed methods to solicit information/data. Hence quantitative analyses was done for personal interview, and health facility and WASH infrastructure data, whilst content analysis was considered for qualitative information gathered from FGD sessions, Key Informant Interviews and most significant change case studies. The results from content analysis was especially used to triangulate (or produce the why and how components of) some specific sections from the quantitative findings.

In particular, both descriptive and inferential statistics were adopted, and therefore means analyses, cross tabulations, generation of figures were done for presentation and discussion of findings. Households/individuals and health facilities were largely used as units of analyses; but achievements were compared by districts in a number of analyses. Measures of associations were done in some instances to test changes in project results (e.g target – actual comparisons). In other cases some comparative analyses were done for impact of specific sub-components such as access Cash Transfer intervention by using respondents not targeted by the interventions as counterfactuals. Meanwhile considering that a high volume of contamination (due to high number of different interventions outside ECRHS II support), documentation on existing interventions would be prioritised to assess the quality of coordination and synergy in the intervention districts. STATA 15 Software was used to some extent to test measures of associations particularly the binary logistic regression analyses.

Analysis for specific components such as the CVA, VSLA and sexual reproductive health and rights (SRHR) required some model modifications. For the purpose of this evaluation, key areas that need model modifications for analysis included 1) Reduced Coping Strategy Index (rCSI) for CVA and VSLA beneficiaries, and 2) Couple Years Protection (CYP), SRHR interventions. Table 6 presents these indicators and measures. Other critical analysis will include demand satisfied for contraceptives use, unmet needs and CPR.

Table 6 : Analyzes matrix for some sub-components of ECRHS II components 1 and 2

Measure	Recommended indicators	Formula needed/descriptions
Indicators for Cash Voucher Assistance (CVA) and VSLA beneficiaries		
Reduced Coping Strategies Index (rCSI) analysis	5 standard coping strategies and their associated severity rating are recommended to analyze comparative (reduced) coping strategy index (rCSI): ▪ Eating less-preferred foods (1.0 severity weight) ▪ Borrowing food/money from friends and relatives (2.0 severity weight ▪ Limiting portions of mealtime (1.0 severity weight) ▪ Limiting adult intake (3.0 severity weight), and ▪ Reducing the number of meals per day (1.0 severity weight)	The reduced coping strategy index is derived iteratively as follows: 1. Weighted score=frequency of occurrence x universal severity weight= fw 2. rCSI=∑fw for each individual household
House Hunger Scale (HHS) analyses	9 Household Food Insecurity Access Scale (HFIAS) items are recommended for a recall period of 4 weeks (30 days) 1. Worry that the household would not have enough food 2. Not able to eat the kinds of food preferred 3. Eat a limited variety of foods 4. Eat some foods that you really did not want to eat 5. Eat smaller meal than you felt you needed 6. Eat fewer meals in a day 7. No food to eat of any kind in your household 8. Go to sleep at night hungry 9. Go a whole day and night without food	Analyzes will be done using direct response scale of [1] yes, [0] No, and frequency scale of [1] Rarely (1-2 times), [2] sometimes (3-10 times) and [3] Often (more than 10 times), using appropriate recoding techniques, two different cut-off values (>1 and >3) will be applied to define the household hunger scale in three score categories: 0-1=Little to no hunger in the household 2-3=Moderate hunger in the household 4-6=Severe hunger in the household
Sexual Reproductive Health and Rights (SRHR)		
GEMS Indicator: Sexual Relationship Domain	8 sexual relationships domain items recommended for analyses include: 1) It is the man who decides what type of sex to have 2) Men are always ready to have sex 3) Men need sex more than women do	Three pre-defined answers of scale 1-3 are assigned to questions of each answer. That is: 1) agree 2) somewhat agree 3) disagree. For each of the response, 3 points represent gender equality, 2 points means moderate gender equality,

<table>
<tr><td></td><td>4) A man needs other women even if things with his wife/partner are fine
5) You don't talk about sex, you just do it
6) It disgusts me when I see a man acting like a woman
7) A woman should not initiate sex
8) A woman who has sex before she marries does not deserve respect</td><td rowspan="2">and 1 point represents lowest gender equality. For instance, if a respondent says "agree" to the statement 'a man can hit his wife if she won't have sex with him", it means the lowest equality and should be given 1 point. On the other, if the response is "disagree", it means highest gender equality and should be given 3 points.

It is noteworthy that a good computation will result to an overall GEM scale score that ranges from 0 to 1- with '0' representing extremely low support of gender equality and '1' representing high support of gender equality. To compute this the following steps are followed:
1. Calculate the total number of points for each respondent. For example, for a 6 item domain like the violence domain, the maximum number of points is 18 (6x3) and the minimum is 6 (6x1)
2. Divide the respondent's number of points by the maximum possible number of points. Considering the example in step 1, if a respondent scores 12 (6x2), divide 12 points by 18. The GEM Scale score will therefore be 0.7
To compute the average/mean score for a domain

n, divide the GEM Scale score by the number of respondents interviewed. Example, if the total number of respondents interviewed is 20, divide the total GEM Scale score by 20.</td></tr>
<tr><td>GEMS Indicator: Reproductive Health and Prevention Domain</td><td>5 reproductive health and disease prevention domain items recommended for analyses include:
1) Women who carry condoms on them are easy
2) Men should be outraged if their wives ask them to use a condom
3) It is a woman's responsibility to avoid getting pregnant
4) Only when a woman has a child is she a real woman
A real man produces a male child</td></tr>
<tr><td>Couple Years of Protection</td><td>For the purpose of this evaluation, CYP is the estimated protection the SRH component of ECRHS programme provide during a one-yea period, based on the volume of all contraceptives sold or distributed free of charge to clients during that one year period. The results of this calculations make assumptions about the FP coverage in the programme intervention districts. The CYP for each FP method is calculated by multiplying the number of units distributed (for sale or for free) to clients over a defined period of 12 years by a conversion factor that quantifies the duration of contraceptive protection provided per unit distributed and per procedure. The FP methods and their corresponding conversion factors endorsed by USAID[4] in January 2022 are as follows
<table>
<tr><th>Method</th><th>CYP Per Unit</th></tr>
<tr><td>Copper-T 380-A IUD</td><td>4.6 CYP per IUD inserted</td></tr>
<tr><td>Hormonal IUD (e.g. LNG-IUS)</td><td>4.8 per IUD inserted</td></tr>
<tr><td>3 year implant (e.g. Implanon, ImplanonNXT, Levoplant)</td><td>2.5 CYP per implant</td></tr>
<tr><td>5 year implant (e.g. Jadelle)</td><td>3.8 CYP per implant</td></tr>
<tr><td>Emergency Contraception</td><td>0.05 CYP per dose (20 doses per CYP)</td></tr>
<tr><td>Fertility Awareness Methods</td><td>1.5 CYP per trained adopter</td></tr>
<tr><td>Standard Days Method</td><td>1.5 CYP per trained adopter</td></tr>
<tr><td>Lactational Amenorrhea Method (LAM)</td><td>.25 CYP per user (4 active users per CYP)</td></tr>
<tr><td>Sterilization*
Global
India, Nepal, Bangladesh</td><td>
10 CYP per procedure
13 CYP per procedure</td></tr>
<tr><td>Combined Oral Contraceptives (COC) (blister packs of 28 pills)</td><td>0.0667 CYP per pack (15 cycles per CYP)</td></tr>
<tr><td>Progestin-only Pills (POP) (blister packs of 35 pills)</td><td>0.0833 CYP per pack (12 cycles per CYP)</td></tr>
<tr><td>Condoms (Male and Female)</td><td>0.00833 CYP per unit (120 units per CYP)</td></tr>
<tr><td>Diaphragm</td><td>1 CYP per diaphragm</td></tr>
</table></td><td>Examples of illustrative computation for number of units for some FP methods are given as follows
<table>
<tr><th>Method</th><th>Quantity</th><th>Conversion factor</th><th>CYP</th></tr>
<tr><td>Condoms</td><td>190,000</td><td>0.00833</td><td>1,583</td></tr>
<tr><td>COC packets</td><td>19,000</td><td>0.0667</td><td>1,267</td></tr>
<tr><td>Copper IUDs</td><td>450</td><td>4.6/IUD</td><td>2,070</td></tr>
</table></td></tr>
</table>

[4] Available in the following link: https://www.usaid.gov/global-health/health-areas/family-planning/couple-years-protection-cyp

Vaginal Foaming Tablets	0.00833 CYP per unit (120 units per CYP)
Depo Provera (DMPA) Injectable	0.25 CYP per dose (4 doses per CYP)
Noristerat (NET-En) Injectable	0.167 CYP per dose (6 doses per CYP)
Cyclofem Monthly Injectable	0.077 CYP per dose (13 doses per CYP)
Monthly Vaginal Ring/Patch	0.067 CYP per cycle (15 units per CYP)

2.6 Performance rating of achievement

Performance rating of achievements was- done at two levels- that is target-actual rating and baseline-endline comparison rating (where no target was provided). In instances where the baseline-end line comparison was done, test of differences in means was used as the ideal form of analysis to ascertain any significance difference between baseline and final evaluation values using EpiTool[5] or Stata software. The z-value and ρ-value were used as determinants to test the differences in mean proportions in responses to key performance indicators. For ρ-value>0.05 at 95 per cent confidence level means the project made less progress on the indicator in question, otherwise ρ-value<0.05 would mean the project made significant difference in the situation. In terms of the target-actual comparison at outcome and output levels, achievement rating would be done as shown in the colour coding below.

Description of Performance	Highly unsatisfactory	Unsatisfactory	Moderate Performance	Satisfactory	Highly satisfactory	Target Achieved/ outstanding
Score Range	(<0%-24%)	(25%-49%)	(50%-74%)	(75%-89%)	90%-99%	(100% or More)
Status Code						

3. Working programme of the evaluation and challenges

This evaluation was commissioned in June 2022 and field data collection was done between August and September 2022. Meanwhile due to some operational and technical challenges the evaluation process was significantly delayed. Firstly, part of the design of the evaluation required that all health facilities across the 7 northern districts and in Bo district be evaluated. In bid to achieve this objective, there were several accessibility issues in most remote/ hard-to-reach health catchments. This situation caused significant delays in field activities, and was further compounded by problems with tracking PHU staff (MCHP staff in particular) and the August'22 demonstration (that affected key informant interviews in the northern districts). Secondly, the evaluation team experienced technical issues where data were missing and the paid platform (SurveyCTO) was closed by then after the mobile data collection and submissions were completed. There was an incidence of laptop damage where almost all research documents (including results analysed and the report) could not be recovered. These issues militated against the milestones agreed and significant changes have been made to the timeline. To this end, finalization of the report was done in February 2023.

4. Staffing assignment and key evaluation team members

The evaluation team comprised of 50 personnel including 1 lead, 1 co-lead, 18 Health/WASH infrastructure Assessors, 8 Field Supervisors and 21 enumerators/ field data collectors, and 1 IT Specialist. The roles and responsibilities of these positions are as follows:

- ***The Lead Consultant:*** The Lead Consultant is the lead proponent of the proposal. He is the main point of contact and principal signatory to all contract agreement. The Lead Consultant spent 100 percent of consultancy period leading recruitment of field researchers, field data collection, data analysis, report writing, presentations. He is responsible for quality data and report.

[5] See EpiTool for z-test available at: http://epitools.ausvet.com.au/content.php?page=z-test-2

- ***Co-lead:*** The co-lead spent 50 percent of the entire consultancy period. He contributed to the analysis and report writing during this period.
- ***IT Specialist:*** The IT specialist was responsible for digitalization of questionnaires and online monitoring and flagging for data quality. He spent extensive time with the team due to delay in data collection. He was also responsible to take stock of field data collection materials provided to for field work.
- ***Health/wash Infrastructure Assessor:*** 18 Health/ WASH Infrastructure (2 per district) with experience in health facility assessment were recruited for real-time assessment of the functionality of all health and WASH infrastructure across the 8 intervention districts (7 in northern province and Bo district).
- ***Field Interviews Protocols and Quality Control Coordinator***: This position was responsible for quality assurance of field interviews. He traveled to the field for monitoring of Field Supervisors and ensured that field interviews are done according to standards set during training. In particular, he examined whether ethical considerations are made and will flag and correct any violations regarding child safe guarding principles The Coordinator spent at least 18 days including field monitoring and writing of transcript.
- ***Field Supervisors:*** Seven (8) field supervisors (1 for each district) were recruited. They were responsible for supervision of field enumerators and assisted the evaluation team in KIIs and FGDs at community levels.
- ***Field Enumerators:*** 21 enumerators (3 for each district) were recruited and they were responsible for conduct of personal interviews across 7 intervention districts. However, this number was increased for additional districts (such as Bo and Kenema) for specific components including CVAs and Mama-Baby kits.

3 EVALUATION FINDINGS AND DISCUSSIONS

This section of the evaluation discusses findings from the assessment. It is divided into eight (8) sub-sections, and follows the DAC/OECD evaluation criteria including impact, effectiveness, efficiency, sustainability and coherence of the programme implementation. The findings discussed were generated from both quantitative and qualitative evaluation methods used to document achievements (according to DAC/OECD criteria), best practices and challenges observed from the implementation of the 'Epidemic Control and Reinforcement of Health Services (ECRHS) Phase II Project.

3.1 Programme impact/ objective level project achievement

Ideally assessing impact focuses on the extent to which the intervention generates significant positive or negative, intended or unintended, higher-level effects. That is, addressing the ultimate significance and potentially transformative effects of the intervention such as potential effects on people wellbeing, gender equality and the environment. Meanwhile the ECRHS II, the impact assessment focused on higher level achievement in relation to the programme and module objectives. Overall, the programme is expected to contribute to national efforts to improve on the health status of the Sierra Leonean population with specific focus on reproductive health. Meanwhile, at midterm of implementation, there was a short-term shift in focus due to the COVID-19 response. Results of the evaluation have therefore been discussed at two levels including achievement for component 1 and component 2 of the programme intervention.

3.1.1 Programme impact/objective level achievement for component 1

The ECRHS II programme has one programme and two module objectives. The higher-level impact indicators were identified from these objectives. These include one indicator from the programme objective and two indicators from the module objectives. Notably target set for these impact indicators aligned with targets of the strategic monitoring plan of the Sierra Leone Reproductive, Maternal, Newborn, Child and Adolescent Health Strategy 2017-2021 (RMNCAHS 2017-2021)[6]. The three indicators allowed for assessing the overall project effect on RH/SRH and disease surveillance and response.

3.1.1.1 Programme Objective 1: Improved health status of the population of Sierra Leone with specific focus on reproductive health

Programme impact on Reproductive Health/ Sexual Reproductive Health

The key performance indicator identified to achieve the programme objective was the 'reduction of maternal mortality ratio from 1,360 per 100,000 live births (in 2013) to 650 per 100,000 live births (by 2021). Meanwhile, trend analysis of maternal mortality ratio (MMR) proved difficult due to lack of updated reliable source of data. Notably, the most recent Demographic Health Survey (DHS) report (as one of the recommended sources of the MMR data) was only published in 2019[7]. Notably the available DHS reports showed consistent progress in efforts to reduce maternal mortality rate from 2014 to 2019. There was a sharp decline by approximately 39 percent from 2013

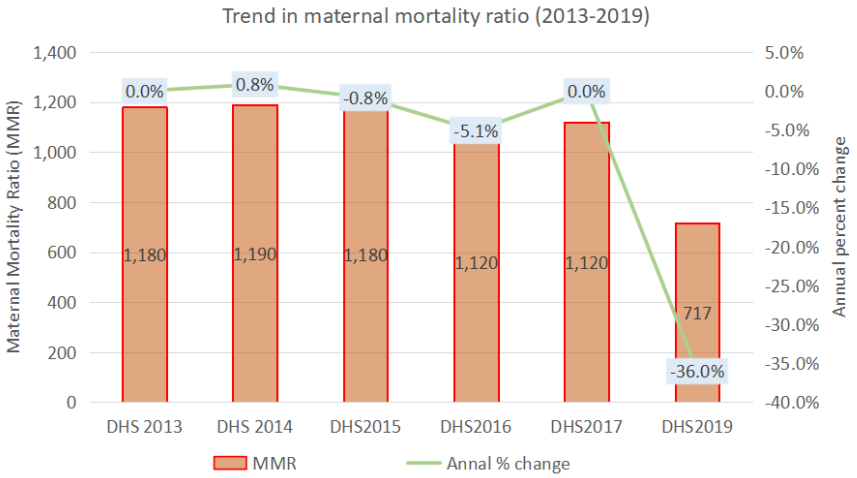


Figure 1: Trend in maternal mortality ratio (2013-2019)

[6] See RMNCAHS 2017-2021 available at: https://www.globalfinancingfacility.org/sites/gff_new/files/documents/Sierra-Leone-GFF-Investment-Case.pdf

[7] See report at https://dhsprogram.com/pubs/pdf/FR365/FR365.pdf

(1,180) to 2019 (717). Despite the presence of some limitations (that questions historical comparisons)[8], this trend shows consistency with the World Bank 2020 gender data that suggest much lower maternal mortality ratio of 443 deaths per 100,000 live births- indicating a drop by 38 percent from 2019 (717/100,000 live births) to 2020 (443/100,000 live births). Meanwhile, the official DHS report falls short of ascertaining actual project contributions- giving that the ECHRS II was launched in 2019 and the project implementation may not be largely attributed to such progress. To this end proxy measures such as maternal deaths, and infant and child mortality rates were documented from trusted sources including the maternal deaths surveillance response (MDSR) report[9] by the Ministry of Health and Sanitation (MOHS), and the United Nations Inter-Agency Group for Child Mortality Estimation (UN IGME)[10].

- Reduction in maternal deaths

The progamme's effect on reproductive health could only be ascertained at mid-term given available data particularly at mid-term of the ECRHS II programme implementation. In the absence of credible data on maternal mortality ratio, it is noteworthy that the 2020 maternal deaths data were captured by the Ministry of Health and Sanitation (MoHS) from the Integrated Disease Surveillance and Response (IDSR) and MDSR systems. Figure 2 presents trend in annual maternal deaths figures over a 6-year period. Notably the 2020 results showed continuation of the decline observed in the DHS 2019 maternal mortality ratio depicted in Figure 1. Despite the overwhelming pressure posed by the COVID-19 pandemic, the 6-monthly 2020 maternal deaths report revealed steady decline in maternal death nation-wide. Overall, there was an approximated 6 percent drop in maternal deaths from 2019 (581) to 2020 (547).

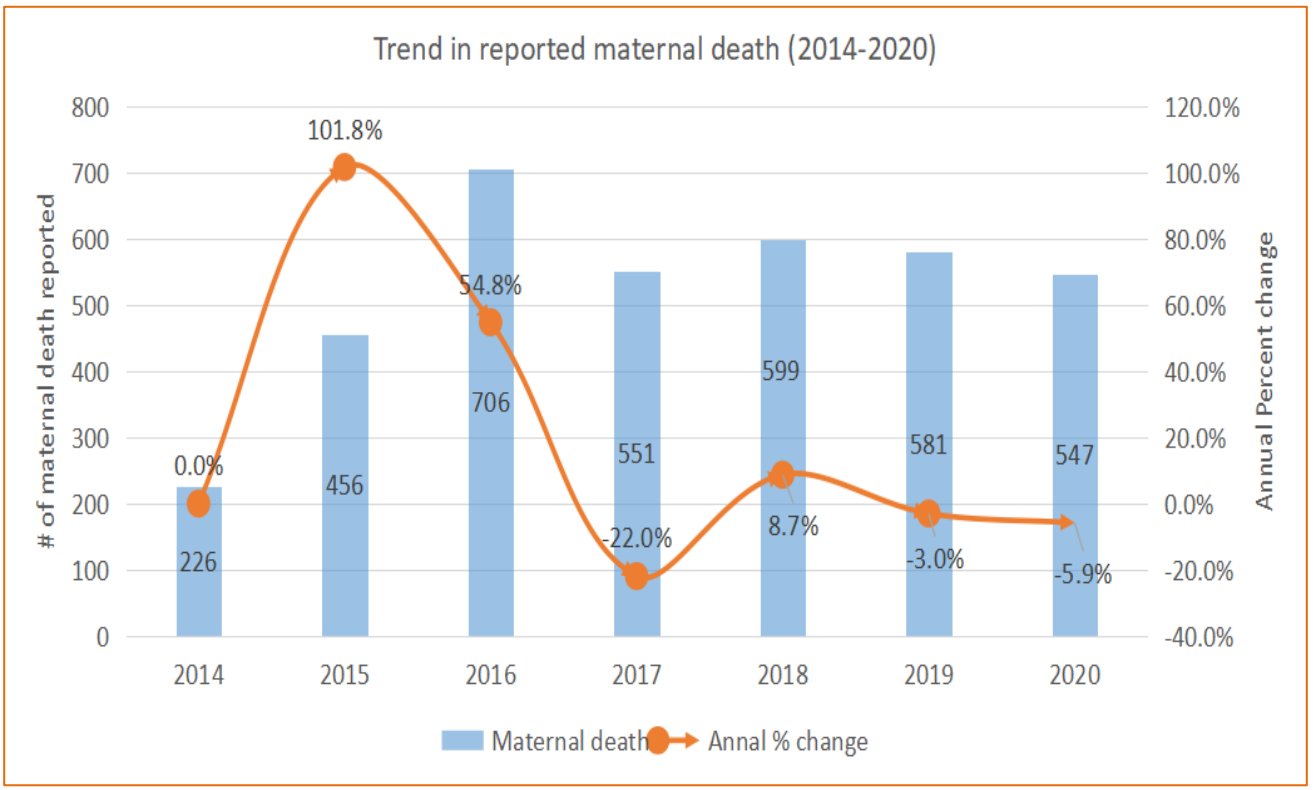


Figure 2: Trend in maternal deaths (20114-2020)
Source: MDSR 2020 report from MoHS

[8] The limitations and exceptions noted by World Bank suggest that the methodology used to estimate MMR differs from other previous methods- which means data should not be compared historically. The data were estimated with a regression model using information on the proportion of maternal deaths among non-AIDS deaths in women ages 15-49, fertility, birth attendants, and GDP measured using purchasing power parities (PPPs).
[9] The MDSR 2020 report is available at: https://mohs.gov.sl/publications/#
[10] The UN IGME was formed in 2004 to share data on child mortality, improve methods for child mortality estimation, report on progress towards child survival goals and enhance country capacity to produce timely and properly assessed estimates of child mortality. The Group is led by UNICEF and includes the World Health Organisation (WHO), World Bank (WB) and the United Nations Department of Economic and Social Affairs (UNESA), Population Division.

Even though some systematic and random errors are reported[11], surveillance has been recognized to have played a critical role in reducing maternal mortality in Sierra Leone. In the informal report generated from analysis of the DHIS2 data, there were indications that the programme made significant impact around efforts to reduce maternal mortality. Comparatively (as shown in Figure 3) whilst the national average shows a 2 percent decrease, there was a marked drop of maternal death by 20 percent from 2017 (base year) to 2022 (endline) in the project operational districts in northern Sierra Leone.[12] The findings however suggest that the intervention has been more impactful in efforts to reduce maternal deaths in Port Loko (51% decrease), Falaba (42% decrease) and Kambia (33% decrease) than the other districts. (See Figure 3)

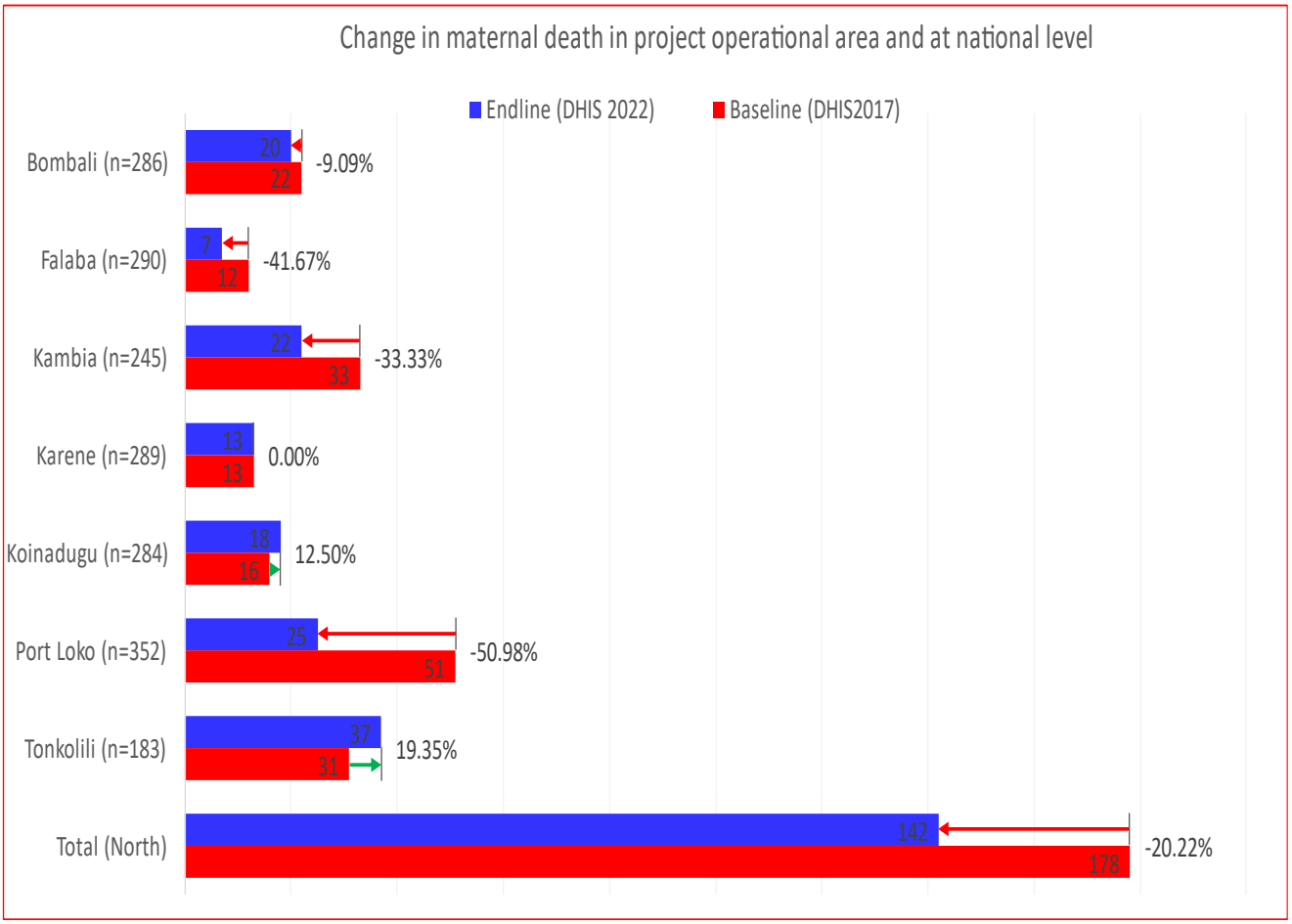


Figure 3: Change in maternal deaths in the ECRHS II programme operational districts and at national level (20117-2022)
Source: DHIS2 data source

The ECRHS programme's contribution to establishing a strong surveillance system in Sierra Leone started in the first phase of implementation. According to the ECRHS phase I final evaluation report, the project made significant contribution to consolidating the community-based reporting system that has been strongly linked to the integrated disease surveillance and response (IDSR) system in which maternal death surveillance and reporting has been integrated. The programme was noted to have built on successes made in the first phase thereby further contributing to the strengthening of disease surveillance and supporting the establishment of the general early warning system. A short description of the MDSR and ECRHS II programme's contribution to improved reproductive health is provided in Box 1.

[11] "Systematic error" occurs when the death cases are either under- or over-reported." Random error" is an error related to recording inaccurate information. These errors can always impact on actual reporting of maternal mortality. See details at: https://borgenproject.org/decreasing-maternal-in-sierra-leone/

[12] Note: DHIS is not recognized as a source that gives more accurate data and have therefore not been used for formal national report without corrections. However, it is being used by NGO partners to ascertain progress in their interventions at larger geographical scope.

Box 1: Understanding the MDSR and ECRHS II project contribution to Reproductive Health

Maternal death surveillance and response (MDSR) forms an integral part of the IDSR and remains crucial for the reduction of maternal death. The IDSR framework allows for a more usable surveillance and laboratory data that help public health managers and decision-makers improve detection and response to the leading causes of illness, death, and disability. The core function of the IDSR (as noted by the MoHS) is to identify, report, analyse, investigate, prepare, respond, communicate and evaluate outbreaks. The MDSR system was integrated into the national IDSR system in 2015 and involves an investigation of cause of death, which gives an insight of how to avert death of similar nature. The system had its first full report for 2016 in 2017 which has continued thereafter.

CARE has a long history of support towards surveillance and reducing maternal mortality. Prior to the launch of the ECRHS I programme in Sierra Leone, CARE had implemented Community-Based Maternal Death Reviews (MDR) across 7 chiefdoms in Koinadugu district through the LIFT-UP (Leveraging Information from the Field to Transform US Policy). This was noted as a gap-filling initiative to address "systematic errors" made from facility-based MDRs due to difficulties in accessing reports on maternal death and cause of death from communities. The community based MDR initiated by CARE was called **verbal autopsy (VA)** that finds out medical causes of death and ascertains the personal, family or community factors that may have contributed to the death of a woman who died outside a health facility. This initiative served as a model that improves on community based maternal deaths reporting and linking this process with facility based MDR for better accuracy in maternal death reporting at district and national level.

The experience bought from the verbal autopsy was introduced in the surveillance component of the ECRHS I, which succeeded in activating and strengthening the role of community-based surveillance structures in the IDSR system. At the end of ECRHSI project implementation, these structures such as the Community Watch Groups (CWGs) and Community Health Workers (CHWs) were reported to be very active in terms of monitoring, information gathering, referrals and reporting on events related to disease episodes and antenatal surveillance that were reported, investigated and integrated in the e-IDSR alert system. Lessons learnt from these models were eventually transitioned into the ECRHS II programming that focused on reproductive health/ sexual reproductive health.

It is noteworthy that the 2020 National MDSR report suggests that postpartum haemorrhage remains the major cause of maternal death in Sierra Leone (28.3%), followed by hypertension (16.3%), while indirect causes and abortion/ectopic pregnancy respectively contributed to 12.8% and 3.1% of deaths. The MDR report also noted that lack of awareness of danger signs during pregnancy (76.2%) and socio-cultural norms (22.5%) were major reasons for delaying decisions to go to the health facility. Meanwhile, number of ANC visits was noted to have no strong link to cause of maternal death. Instead, the quality of care and management of the referral system were critical delay factors responsible that have also contributed to maternal death across districts in Sierra Leone. Accordingly, health facilities at all levels face challenges to deliver quality emergency obstetric and newborn care (EmONC) services. As depicted in the figure below, poor adherence to EmONC Guidelines (46.2%) and delay in providing care (32.6%) caused the greatest obstacles to averting death from obstetric complications. Amidst failures to handle obstetric complications, 75% of maternal deaths at health facilities are linked to delayed referrals from lower-level facilities, followed by inadequate human resources (12.5%) and lack of equipment and supplies (8.8%). Lack of transport facilities was also responsible for 15.6% of maternal death.

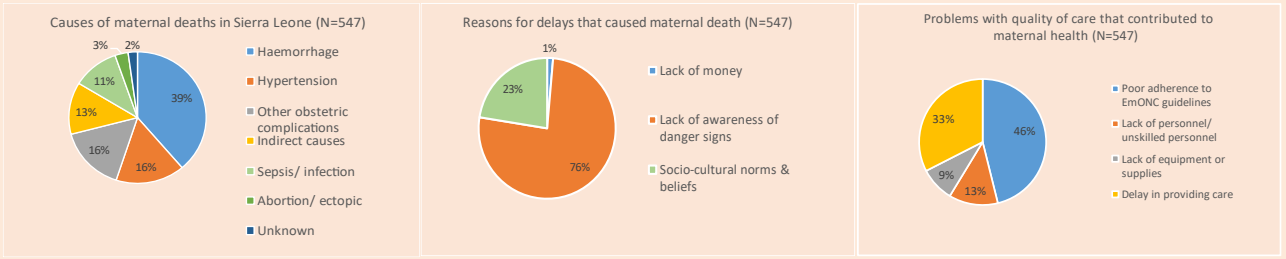


Figure 4: Causes of maternal deaths in Sierra Leone

Source: 2020 Sierra Leone MDR Report

In spite of the foregoing challenges, the ECRHSII programming was observed to have included critical strategic and operational processes, procedures and systems that address the major causes of maternal death. Notably the ECRHSII programming focused on reproductive health, whilst also strengthening gains made around the surveillance system by extending operations from 4 districts to cover all districts in the northern administrative region. In the second phase, the programme continued to strengthen gaps in the surveillance system by incorporating sexual reproductive health in community-based surveillance system, supporting referrals, joint monitoring and supervision, and by contributing to systematization of emergency preparedness and response at district and national level.

At community level, the programme continued to strengthen the role of CHWs around Integrated Community Case Management (iCCM) of childhood illnesses, integrated disease surveillance, and provision of comprehensive primary health for women in the intervention districts during the second phase. To improve the effectiveness and better health outcome from the comprehensive primary healthcare (including sexual, reproductive, maternal and child health) activities of CHWs, the Village Savings and Loans Associations (VSLAs) received an expanded role from economic empowerment of women to promoting reproductive health through awareness raising on the need for ANC and PNC visits, as well as access to Family Planning (including post-partum FP). Over the implementation period, the programme has engaged 1,284 VSLA groups on health communication skills to serve as advocates for promoting SRH and FP services.

"…Our role as an association has been expanded. We used to establish the VSLA to take care of the welfare of group members, and in some instances promote community development. But recently we use our meetings to raise awareness on health seeking behaviour by pregnant women and lactating mothers. The continued sensitization on the need to visit health facilities has reduced complications during delivery at the health center. The outcome is better now than the past when such initiative was not in place."

VSLA participant, Mannah Village, Dembelia Sinkunia chiefdom, Falaba district

At facility and district level, the programme's contribution was highly evident around training, capacity building and coordinated activities to further improve on the effectiveness of the surveillance system and reproductive health (RH)/ sexual reproductive health (SRH) activities. A total of 919 key facility staff received training/ refresher training on IDSR to ensure surveillance through an integrated approach that also included SRH and maternal death surveillance and response (MDSR). The PHU records documented from 497 PHUs assessed during the evaluation showed that only 937 (43%) of 2,179 PHU staff have received training- which means ECHRSII programme contributed to approximately 98 percent of all personnel training related to surveillance across the seven northern districts. The programme also provided training on data entry in the District Health Information System (DHIS) for 124 health facility staff, and on Health Management Information System (HMIS) for 462 personnel. Most importantly, the programme supported joint monitoring, supportive supervision and referrals. Over the course of implementation, a total of 431 monitoring and joint supportive supervisions were carried out. In an effort to contribute to strengthening of the referral system for women and girls in the project region, fuel and airtime supports were provided to the DHMTs and district councils in the intervention districts to facilitate unrestrained referrals of obstetric emergency cases and further support efforts to reduce maternal deaths in Sierra Leone. Between January and March 2022 alone, 2,395 additional litres were provided to DMHTs for surveillance and referrals activities. The project also made tremendous effort to engage communities in many instances and achieved in bridging the gap between district health authorities community people on maternal death reviews. This has created a sustainable space to discuss life threatening issues including positive health seeking behaviour, danger signs of pregnancy, importance of early referrals and dangers of false behaviour, etc.

These actions in combination are noted to have undoubtedly contributed to a more effective disease and maternal death surveillance and response systems. Special attention was particularly made regarding immediate response in case of emergencies and referrals for women. A total of approximately 200,000 EUR (6% of direct programme cost) was especially allocated for direct response to emergencies and immediate referrals of women during complications. These in combination with improved surveillance activities were life-saving opportunities for women during emergency obstetric complications and have largely contributed towards reduced maternal deaths over the course of the ECRHSII programme implementation in the project districts. The August 2021 National Emergency Medical Services (NEMS) report proved the relevance of programme support towards surveillance and referrals. According to the report, over 60 percent of all referrals made were obstetric related (see Figure 5).

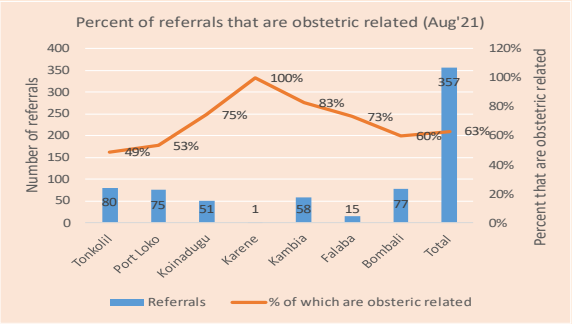


Figure 5: Percent of referrals that are obstetric related

Even though more actions are required, the DHIS2 data provides an indication that the processes and systems put in place by the ECRHSII programme provided better health outcomes on obstetric complications. There was a marked drop in death related to indirect obstetric complications by over 50 percentage points from 2020 (79 deaths) to 2021 (36 deaths). This keeps track of consistency of the general drop in maternal deaths observed in 2020. Interestingly unpublished result from analysis done from the DHIS2 showed greater improvement in reduction of maternal death across the 7 ECRHSII project districts than at national level during the implementation period. As presented in Figure 5, there was a sharp increase in maternal death in the first year of project intervention; but this markedly dropped by approximately 16 percent in 2020. Although there was a slight rise by 2.3 percent from 2020 to 2021, the drop in maternal death from 2019 to 2022 significantly dropped by 28 percent. Using the same source of data (DHIS2), this estimate was 14 times higher than the national average (2% drop)- where clearly suggests the effectiveness of the programme's strategies in the reduction of maternal death in northern Sierra Leone.

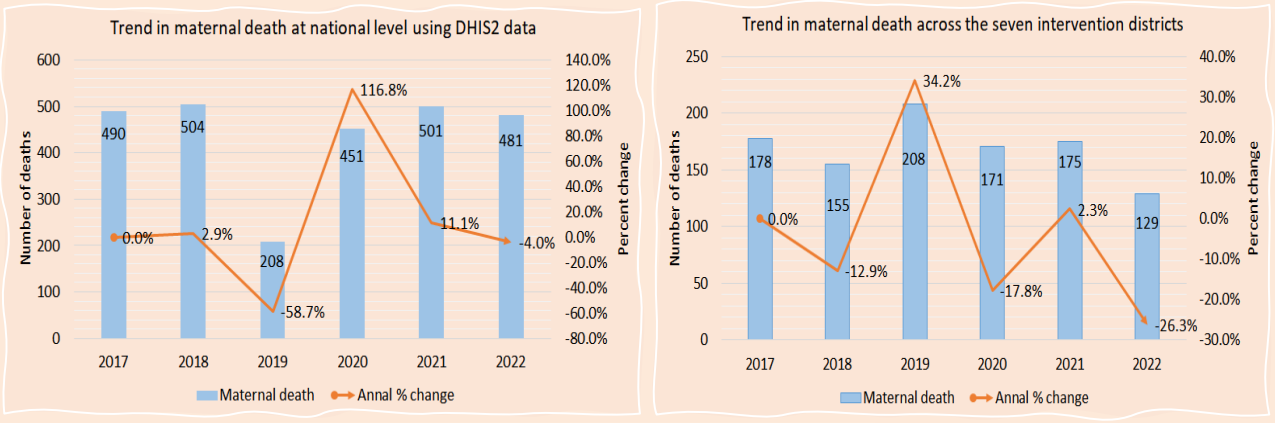


Figure 6: Comparing trend in maternal mortality at nation and project districts
*Source: DHIS2

- Reduction in infant and child mortality rates

It is noteworthy that under-5 mortality rates were not included in the initial project documents as outcome indicators. However, due to lack of maternal mortality data for end of project implementation (2021), under-five mortality rates were captured by the evaluation to serve as proxy measures and -to determine the indirect effect of the ECRHSII programme intervention at end of

implementation. Like baseline and targets set for maternal mortality in the initial programme design, the Sierra Leone National Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCAH) Strategy 2017-2021[13] served as a source for baseline and targets considered in the evaluation exercise. Trend analysis and baseline and target -actual comparison proved marked improvement in efforts to reduce early childhood mortality rates including under-5 mortality rate[14], infant mortality[15] and neonatal mortality rates[16].

Considering the DHS2013 results as baseline, the UN IGME report for 2021 revealed a significant drop in neonatal mortality by approximate 21 percentage points. This result reflects on progress made in efforts to reduce under-5 mortality rate. As depicted in Figure 6, under-5 mortality dropped by approximately 33 percentage point from 2013 to 2021.

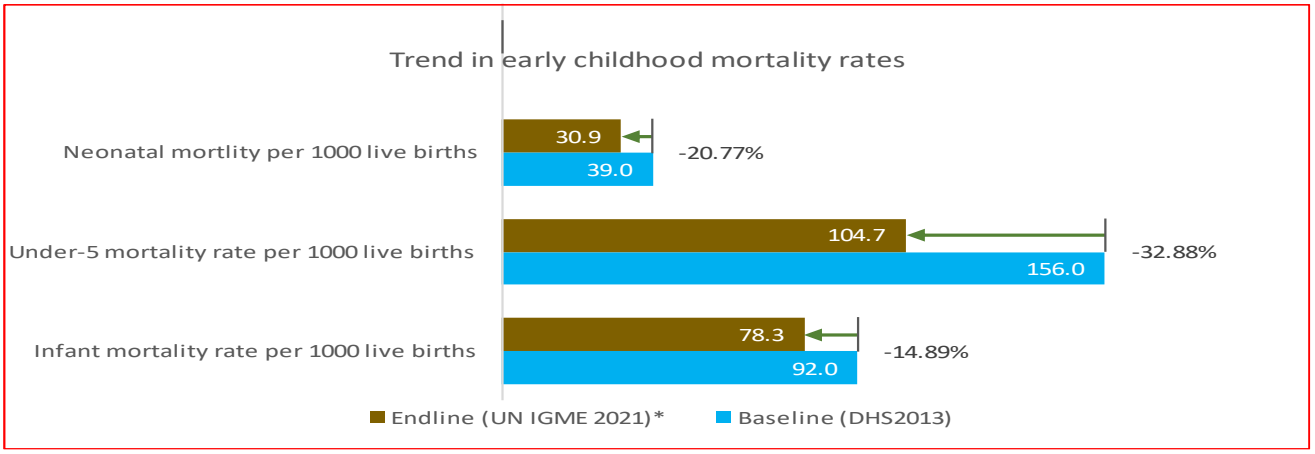


Figure 7: Trend in early childhood mortality rates
Source: Estimates developed by the UN Inter-agency Group for Child Mortality Estimation (UN IGME)[17]

Meanwhile, national targets set on under-5 mortality rates were not achieved, but achieved targets were approximately above 50 percent. Specifically, about 53 percent of target set regarding reduction in under-5 mortality rate was achieved. Improvement in reduction in neonatal mortality was particularly impressive given that substantial portion of children have reportedly died in the brief period just after birth. As presented in Figure 7, significant progress was made in efforts to reduce neonatal mortality- with 66 percent of targets achieved.

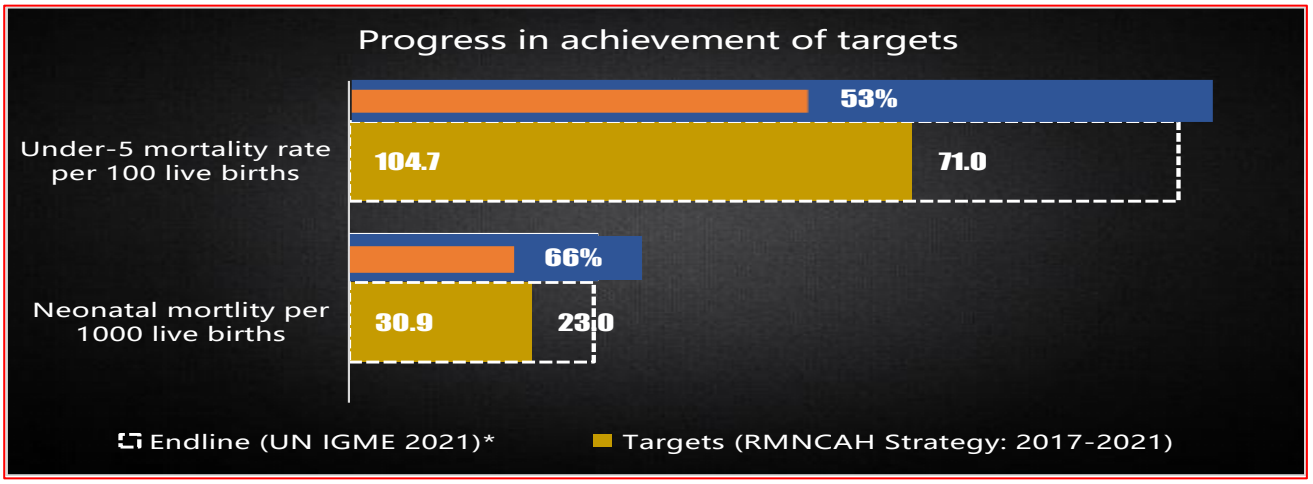


Figure 8:Progress in achievement of national targets on early childhood mortality rates
* Source: Estimates developed by the UN Inter-agency Group for Child Mortality Estimation (UN IGME)[18]

[13] See document at: https://portal.mohs.gov.sl/wp-content/uploads/2021/04/final-rmncah-strategy_may-2017-_word-doc.pdfhttps://portal.mohs.gov.sl/wp-content/uploads/2021/04/final-rmncah-strategy_may-2017-_word-doc.pdf
[14] Under-5 mortality is the probability that a newborn would die before reaching five years expressed per 1,000 live births.
[15] Infant mortality rate is the probability that a newborn would die before reaching 1 year expressed per 100 live births.
[16] Neonatal mortality rate is the probability that a newborn would die begore reaching 28 days expressed per 1,000 live births.
[17] Available at: https://childmortality.org/data/Sierra%20Leone
[18] Ibid

Although the ECRHSII intervention had little focus on under-five mortality, it was noted that the programme had ripple effect on reducing early childhood mortality in Sierra Leone. The contribution of the project is discussed in Box 2.

Box 2: ECRHS II project contribution to reduction in under-5 mortality

According to the UN IGME, the leading causes of preventable deaths of children under 5 years old include premature birth and birth complications (such as asphyxia/ trauma), acute respiratory infections, diarrhoea and malaria. Specific age reference shows that neonatal deaths are associated with causes of death related to antenatal care and the birth process, while the age period beyond the first month but before age 5 is caused by communication diseases. These claims reflect on the leading causes of under-5 deaths cited in the RMNCAH Strategy (2017-2021) which include neonatal (29%), malaria (20%), pneumonia (12%), diarrhoea (10%), injuries (5%) and others (24%). Specifically neonatal deaths are caused by pre-term (30%), asphyxia (27%), sepsis (23%), congenital (7%) and others (7%).[19]

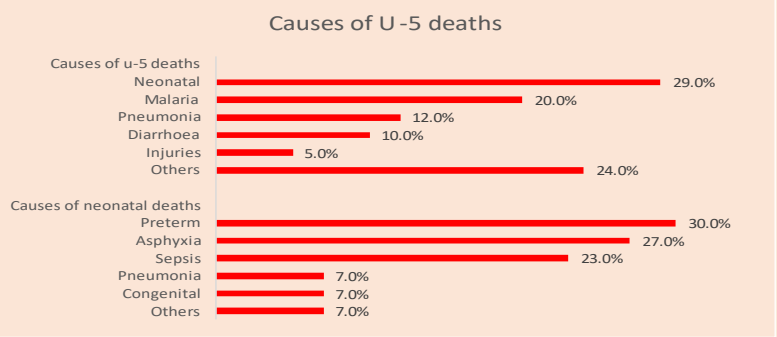


Figure 9: Causes of under-5 deaths

The ECRHSII programme has been very effective in providing support (directly/indirect) to tackle the leading causes of under-5 mortality through the comprehensive surveillance approach adopted (including the community-based surveillance, the integrated disease surveillance, emergency preparedness and response) at community, district and national level. Approximately 85 percent and 73 percent of health personnel interviewed at 497 PHUs during the evaluation respectively claimed that IDSR and case management of common disease outbreaks were very effective. To prevent child death from preventable communicable diseases, the ECRHSII programme partly supported the strengthening of CBS structures through training of CHWs on surveillance, referrals and iCCM of childhood illnesses such as childhood malaria, pneumonia, and diarrhoea, and have included the identification of other IDSR priority diseases and evolving events of public health concerns (such as child illnesses with danger signs, under-5 deaths, obstetric complications) for immediate referrals. The ECRHS II programme also ended leaving CHWs transitioning to the primary healthcare model (iCCM Plus). Accordingly, the CBS structures (CHWs) are being prepared to identify and treat pneumonia, diarrhoea and malaria in children ages 2 to 59 months. While they immediately refer cases with danger signs and diarrhoeal disease episode, the CHWs are reportedly required to identify malaria using rapid diagnostic test kit (RDT) and treat it.

In addition, 69 percent of the same PHU staff interviewed argued that the provision of vehicles/ ambulance and support towards fuel supply for fleet movement made referrals more relevant in the surveillance system, and that this has led to improved health outcomes such as reduced under-5 and maternal death.

"There has been marked improvement in both passive and active surveillance. Weekly reporting on IDSR and regular joint monitoring system by DHMT and their partners (such as CARE, ICAP) prove the surveillance more effective. A strong referral system set up with available ambulance (as observed in some chiefdoms) further makes the surveillance system more relevant for efforts to reduce maternal and child deaths in some areas of the Bombali districts. For instance, when communicable diseases such as measles, chicken pox, cholera, corona virus, etc are triggered, community identification and alert surveillance are done, and once proven positive, patients are referred for treatment under scrutinized surveillance system…. What we observe is that the DHMT surveillance team currently demonstrate prompt response to cases by taking specimen, testing and confirming cases in affected communities. "

Mara CHC, Mara PHU, Mara chiefdom, Bombali district

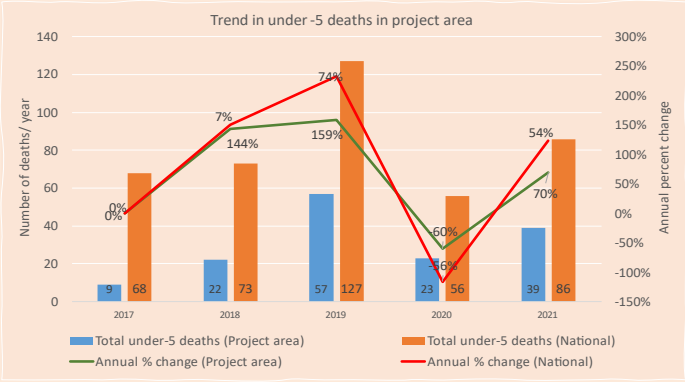
"We handled disease events professionally as we received training from CARE, MOHS and UNICEF, and there has not been any spread in all cases."

Health Worker, Kortimoh MCHP, Samu Chiefdom, Kambia district

In general health workers are reported to have followed the common standard procedure of disease surveillance and reporting after identification of a disease/ event. This standard procedure includes notification of case **to DHMT→ Sensitisation→ Filling of notification Form→ Line Listing→ Investigation → Report in the DHIS2**. Meanwhile during the identification stage, cases of communicable diseases are isolated and immediately referred. For measles, under-5 patients are introduced to Vitamin A, Calamine lotion, anti-biotics, whilst the surveillance team is promptly informed. This process saved the life of an under-5 measle case in the Masuba health catchment community, Bombali district. For diarrhoea, health workers claimed presumptive treatments with ORS and zinc are done, or IV lines are opened on admission if the symptom persists, while counseling is conducted.

Figure 9 presents results of a 5-year trend analysis of under-5 years child deaths and case fatality rate from common childhood diseases including malaria, cholera, diarrhoea and pneumonia. The results showed marked increase in under-5 deaths during the year of ECRHSII project inception (2019). Under-5 deaths in the project operation district increased by 159 percent from 2018 (22 deaths) to 2019 (57 deaths). Impressively, the annual change dropped sharply by 60 percent in 2020- which is 4 percent below the national figure (56%)- proving marked improvement at the end of second year of programme implementation. There was a notable sharp increase in death in the third year of implementation, but this was comparatively better that the 2019 figure thereby maintaining a 32 percent low in terms of under-5 deaths in the project area. Importantly, under-5 case fatality rates generally increased in 2019, but consistently dropped over the implementation periods. These are significant changes that suggest the strategic importance of the ECRHS programme implementation in the intervention districts.

[19]See Sierra Leone National RMNCAH Strategy 2017-2021 (p.24)



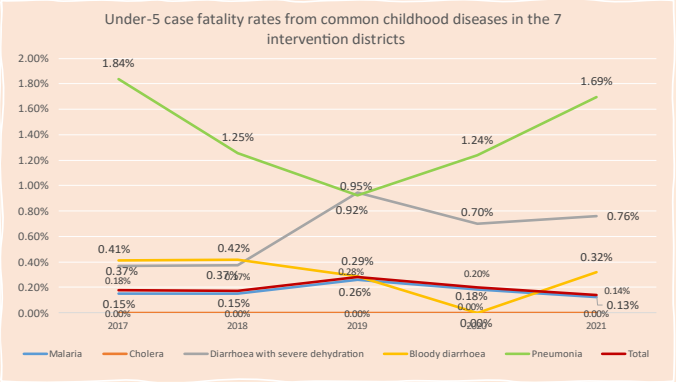


Figure 10: Trend in under-5 deaths and case fatality rates from common

*Source: DHIS2/HIMS

- Changes in contraceptive prevalence rate

Promoting access to modern contraception method forms a critical part of the ECRHSII intervention to achieve its goal of improving the health status of Sierra Leoneans. Notably the ECRHSII programme baseline and targets for this indicator reflect the national modern contraception prevalence rate (mCPR) as set out in the RMNCAH 2017-2021 strategic plan. Whilst considering DHS2017 results for modern contraception prevalence rate (23 percent) as baseline, the project was expected to contribute to achieving a target of 33.7 percent by 2022 at both national level and project intervention districts. Meanwhile, it is noteworthy that the evaluation considered DHS2019 figures as baseline values due to availability of district data to ease calculations and comparison in the project intervention districts. Also, due to lack of credible district data for 2021/2022 (such as DHS, SLIHS, MICS), the evaluation results were considered for current contraception prevalence rates. The evaluation suggests that there has been marked improvement in contraception prevalence rates across the project districts. Overall, the mCPR geometrically increased in the project intervention districts by approximately 140 percentage points from 16 percent in 2019 (project inception period) to 38 percent in 2022 (after project intervention). This result is reflected across all 7 project districts except Bombali and Port Loko districts which showed improvement less that 60 percent above the baseline situation. (See Figure 10)

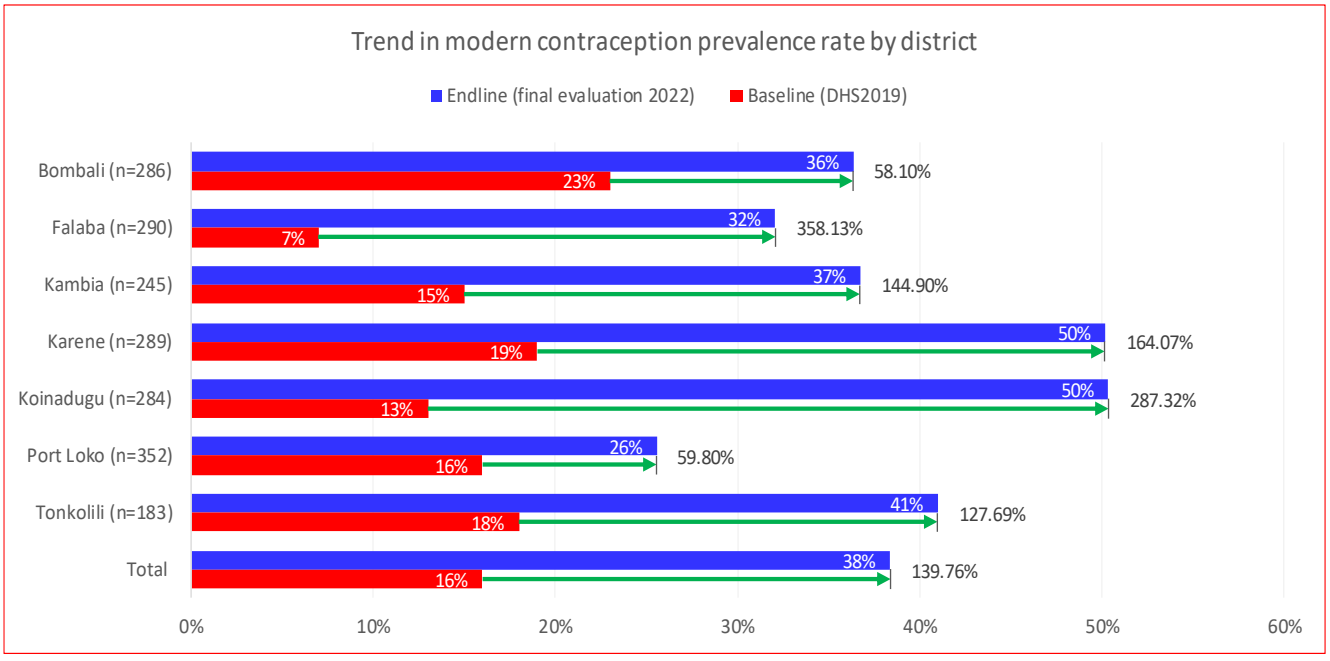


Figure 11: Changes in modern contraception prevalence rate in project district

The evaluation noted a consistent increase in contraception prevalence rate at national level from

2017 to 2022. As depicted in Figure 11, the 2022 results showed an approximated 13 percent increase in the 2017 baseline situation on modern contraceptive use in Sierra Leone. Although there were shortfalls, 77 percent of national target (33.7% in 2022) on mCPR was met.

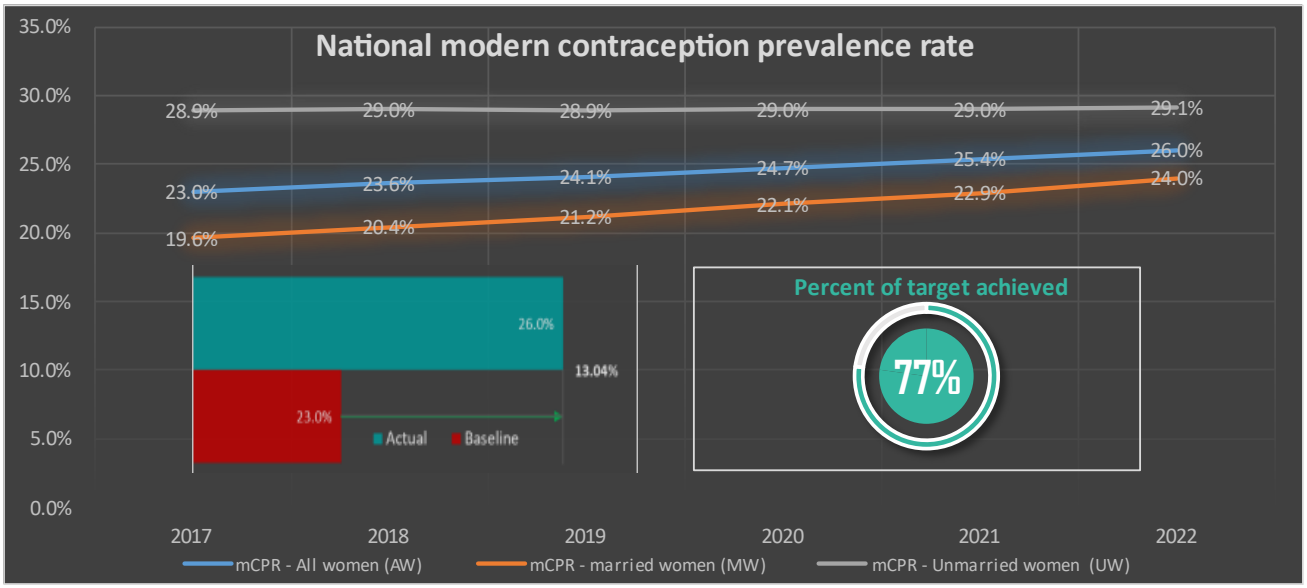


Figure 12: Changes in modern contraception prevalence rate at national level
*Source: Sierra Leone 2030 Indicator Summary Sheet: 2022 Measurement Report[20]

The evaluation also revealed opportunities for spacing and better health outcome among married women in the programme intervention districts. Unlike the results at national level, more married women (46%) than unmarried women (30%) in reproductive age group (14-49 years) are using modern methods of contraceptives in the ECRHS programme intervention districts at the time of the assessment. Meanwhile, district level comparison showed mixed results regarding these differentials- but more married women/women in union in four of the seven intervention districts have access to modern contraceptives than unmarried women. (See Figure 12)

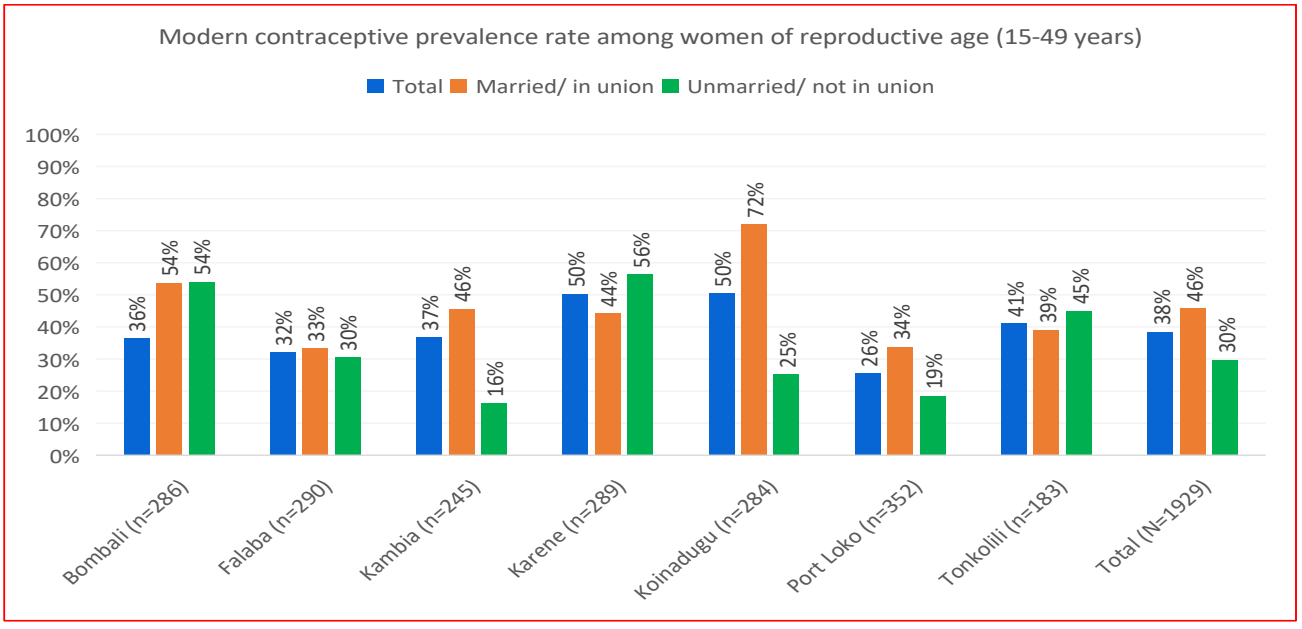


Figure 13: Modern contraceptive prevalent rate among women of reproductive age by marital status
*Source: Evaluation results

[20] See details at: https://www.track20.org/download/pdf/2022%20Country%20Briefs/English/Sierra%20Leone%202022%20Indicator%20Summary%20Sheet.pdf

Notably, the uptake of contraceptives use across the ECRHSII programme intervention districts was high at the time of the assessment in 2022. Over 50 percent of current users of modern contraception methods were identified as new users. Injectable such as Depo Provera (40%) were noted as the most widely used methods in the intervention districts, followed by 3- year implants such as Levoplant/Implanon (15%), condom use (12%) and IUD (11%).

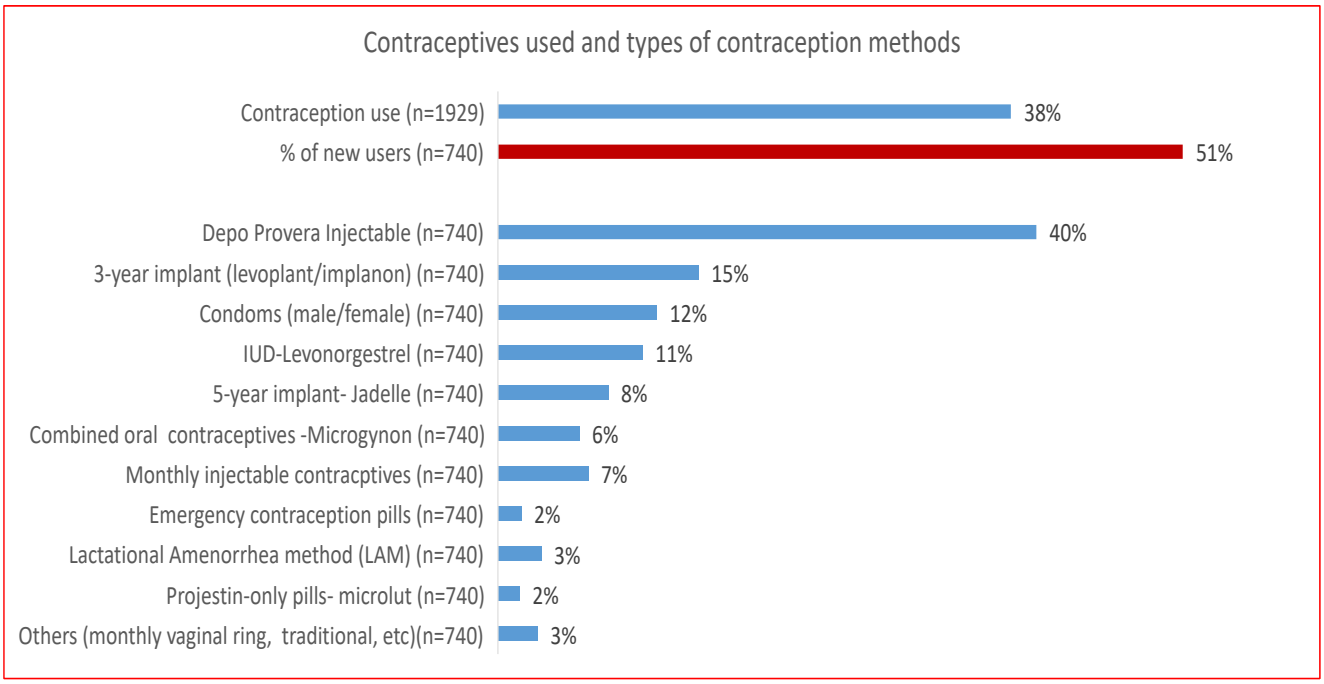


Figure 14: Modern contraceptives reportedly used
*Source: Evaluation results

Further analysis revealed that the programme's effort to promote the use of long acting reversible contraception (LARC) seemed to have taken effect by end of implementation in the intervention districts. Approximately 57 percent of modern contraceptive users agreed to have initially used short-term contraception methods. Notably 44 percent reportedly discontinued the use of their initial choice of contraceptives 6 month before the evaluation. Meanwhile, it was observed that about 13 percent of short-term users who discontinued their initial preferred choice of modern contraceptives had switched to LARC methods as depicted in Figure 14.

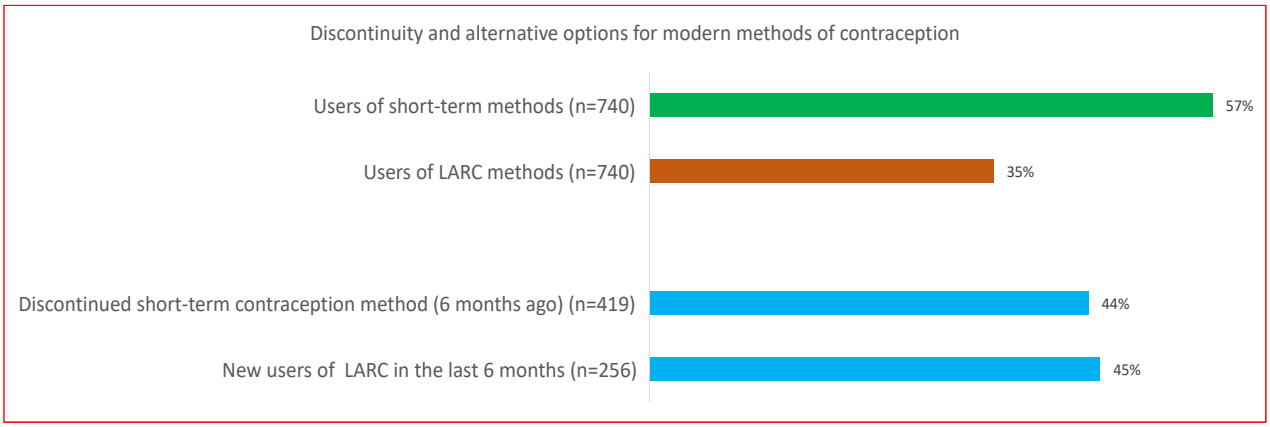


Figure 15: Discontinuity and switching of modern contraceptives
*Source: Evaluation results

According to the evaluation findings, the programme's contributions to sexual reproductive health showed strong impact on the reproductive health (RH) and wellbeing among women of reproductive age in Sierra Leone. Box 3 summarises the programme's contribution to sexual reproductive health and its impact on RH indicators such as percent change in a) unintended pregnancies averted, b)

unsafe abortion averted and c) maternal deaths averted in Sierra Leone.

Box 3: ECRHS II programme effect on modern contraception prevalence and impact on RH

The use of modern contraception methods was noted to have had significant impact on reproductive health and wellbeing of women of reproductive age in Sierra Leone. Notably the ECHRSII programme intervention has undoubtedly have far-reaching effect on reproductive health in Sierra Leone. One of the programme's effects was the increased use of modern contraceptives among women in reproductive age in the intervention districts. As note in foregoing discussions, contraception prevalence rate more than doubled from 2017 (19%) to 2022 (38%) across the 7 project intervention districts. At national level, modern contraception prevalence rate increased by 4 percentage points from 2017 (19.6%) to 2022 (24%). This implies a high contribution of the project and other partners towards national efforts on sexual reproductive health. The higher-level effects of these results were notably increase in unintended pregnancies, unsafe abortion and maternal deaths averted in Sierra Leone. The overall effect is that the number of unintended pregnancies and unsafe abortions averted as a result of increased contraceptives use increased by 31.3 percent and 31.1 percent from 2017 and 2022 respectively. The number of maternal deaths averted also increased by 30.8 percent during the same period. (See Figure 15)

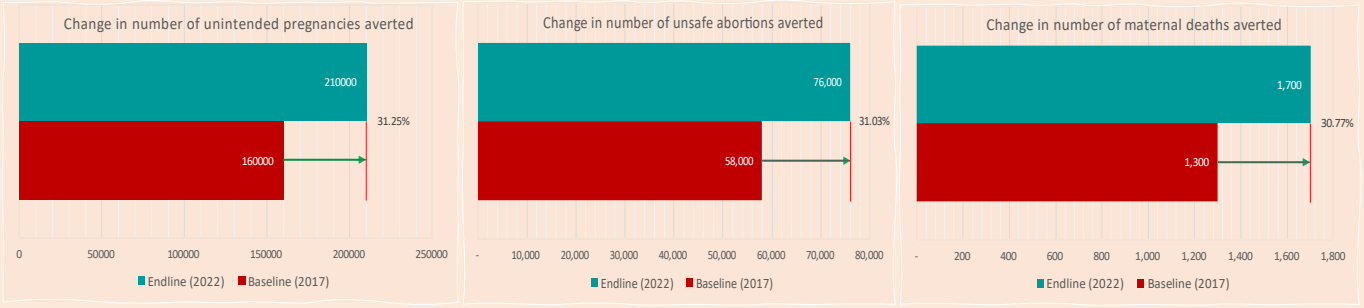


Figure 16: Impact of increased modern contraceptive use on women in reproductive age in Sierra Leone

*Source: Sierra Leone FP2030 Indicator Summary Sheet: 2022 Measurement Report

The ECRHS II programme's contribution to FP service delivery has been markedly pronounced at both district and national levels. The programme largely carried out both strategic and operational interventions on SRH in all northern districts- that is, approximately 44 percent coverage of all 16 administrative districts in Sierra Leone. The ECRHSII programme was observed to have contributed a significant amount of funds towards FP service delivery in Sierra Leone. According to the 'Sierra Leone Costed Implementation Plan (2018-2022)[21], the government of Sierra Leone committed US$18.1 million towards family planning (FP). The ECRHSII share of this budget during the same period was 17 percent (as presented in Table 7).

Table 7 : Contribution of ECRHSII contribution to FP service delivery in Sierra Leone

	GoSL total FP budget	ECRHS contribution	
Description	Year 2019-2022 (US$)	Cost (US$)*	% contributed
Cost for FP service delivery	12,098,894	1,514,752	13%
FP commodity & consumables	6,012,444	1,510,447	25%
Demand creation/ awareness raising	4,680,739	946,988	20%
Total	**18,111,338**	**3,025,198**	17%

*Exchange rate (1 Jan'19): Eur1.00=US$1.14438

Specifically, the ECRHSII programme cost for FP service delivery was notably 13 percent of the total government commitment towards FP service delivery. Further, the highest contribution of the programmes support towards FP was observed around FP commodity and consumable supplies. The programme's share of FP commodity and consumable supplies forms approximately 25 percent of total national FP budget on the budget on the FP commodity and consumable line. Also, the ECRHSII programme contributed about 20 percent of total national FP budget on demand creation/ awareness raising on FP use. These supports proved especially effective in the intervention districts. Accordingly, the programme contributed to significant increase in new of FP users due to complementary FP commodity supplies and robust awareness raising tailored for culturally transformative behaviours towards FP commodity use.

"Over the past three years, the negative perception about family planning (FP) is gradually changing. Men (both literate and illiterate) have experienced the importance of FP. At present, a greater proportion of men are even accompanying their partners to health facilities for FP. Moreover, with the rapid increase in STIs, the use of condoms as a contraceptive is becoming increasingly important among men."

Male participant, FGD, Lunsar, Port Loko district

The project monitoring reports noted that the number of new FP users almost tripled with a surge of 187 percent from 66,860 new users (in 2019) to 191,596 news users (in 2021) in the 7 intervention districts.

3.1.1.2 Module Objective 1 (MO1): Epidemic control system sustained in selected health facilities in the project region

[21] See details at: https://portal.mohs.gov.sl/wp-content/uploads/2021/04/sl-family-planning-costed-implementation-plan-2018-2022.pdf

Programme effect on surveillance

Findings from the evaluation proved that phase 2 of the ECRHS programme continued to improve on gains made in first phase of implementation. Notably, the first phase of programme implementation rolled out the surveillance system to community-based structures such as CHWs and established a foundation for transitioning and long-term programming of the health system strengthening (HSS) in Sierra Leone. Whilst phase 2 of the programme implementation particularly focused on improving the health status of Sierra Leonean through response to sexual (reproductively health), a larger part of its activities implementation has been strengthening the health system to effectively continue to respond to epidemics in the operational districts and eventually the country at large. Over the course of implementation, the evaluation noted 43 percent (937) of 2,179 PHU staff captured across 497 PHUs assessed received training on surveillance (including IDSR and MDSR). According to ECRHSII monitoring data, the programme's support to all surveillance training provided across the 7 programme districts was approximately 98 percent. The programme also provided training support to PHU staff on data entry in the District Health Information System (DHIS) and on Health Management Information System (HMIS).

- **Changes in proportion of suspected epidemic cases investigated according to IDSR case definition**

The programme's action notably had positive effect on case reporting, investigation and response in the intervention districts. According to IDSR case definition suggested in the project documents, reporting, investigating, and response taken for all suspected epidemic cases must be done within 72 hours. The project baseline showed that during 2017 only 79 percent of response to suspected epidemic cases met the standard IDSR case definition. Whilst there were anecdotal records on responses to reported epidemic cases that met the standard IDSR case definition, the evaluation documented reported epidemics/outbreaks from across 497 PHUs assessed, and the perceived quality of responses initiated during the ECRHS II programme implementation period. As noted in Table 8, ten types of disease episodes/ events which align with identified priority diseases were observed in 13 percent of 497 health catchments across the seven intervention districts. These include Acute Flaccid Paralysis (AFP), Chicken Pox, Cholera, Diarrhoea, measles, suspected anthrax, COVID-19, lassa fever, dysentery and suspicious animal deaths. Unlike situations prior to the project inception, investigations and responses to all the diseases/ events were promptly initiated. Accordingly, 100 percent of responses (including investigation and actions initiated) were done within 72 hours of occurrence. While most of these were communicable diseases, the low threats they posed to the public during their emergence, confirmed the effectiveness of responses initiated in the intervention districts. All disease episodes were contained in good time.

Table 8 : Suspected outbreak/ disease events reported from PHUs assessed during the evaluation

Districts covered	% of health catchment areas that experienced outbreak in past 2 years	Outbreaks/ disease event reported	Strategies to contain disease events
Bombali (n=87)	15%	▪ Acute Flaccid Paralysis (AFP) ▪ Chicken pox ▪ Cholera ▪ Diarrhoea ▪ Measles ▪ Suspected Anthrax ▪ COVID-19 ▪ Suspected ailment leading to death of a goat	▪ Cases promptly reported to the DHMT surveillance team who had promptly responded by taking specimen, testing and confirming cases in the affected communities. Where tested positive (e.g for AFP), every under-five children below 14 weeks are vaccinated with IPV vaccines. ▪ When communicable diseases such as measles chicken pox, cholera, Corona virus, etc are triggered, community identification and alert surveillance are done; and once proven positive patients are referred for treatment under scrutinised surveillance system. At the initial stage, these cases are isolated and immediately referred. For measles under-five patients are initial introduced to Vitamin A, Calamine lotion, antibiotics, whilst the surveillance team are promptly informed. For the measles case in the Masuba health catchment community, Bombali district, the child was isolated, and after three days there was much improvement. For diarrhoea, presumptive treatments with ORS and Zinc and counselling are done, and if the symptoms persists, patients are referred or IV lines are opened on admission, whilst community sensitisation is done.
Falaba (n=41)	12%	▪ Measles	
Kambia (n=67)	9%	▪ Chicken pox ▪ Cholera ▪ Measles	
Karene (n=59)	10%	▪ Acute Flaccid Paralysis (AFP) ▪ Cholera ▪ Diarrhoea ▪ Measles ▪ Anthrax	
Koinadugu (n=49)	8%	▪ Cholera ▪ Diarrhoea	

Port Loko (n=94)	4%	▪ Cholera ▪ Measles ▪ COVID-19	▪ 'We handled disease events professionally as we received training from CARE, MOHS and UNICEF, and there has not been any spread in all cases..'Health Worker, Kortimoh MCHP, Samu Chiefdom, Kambia district ▪ Health workers reported to have followed the following disease surveillance and reporting after identification of a disease/ event: Notification of case to DHMT→ Sensitisation→ Filling of notification Form→ Line Listing→ Investigation → Report in the DHIS2
Tonkolili (n=100)	29%	▪ Lassa Fever ▪ Cholera ▪ Dysentery ▪ COVID-19	
Total (North=497))	**13%**		

Results from interviews with 497 PHU staff from all 497 PHUs covered by the evaluation confirmed that the programme's activities largely influenced the effective handling of epidemics in the intervention districts.

"We handled disease events professionally due to the training received from CARE, MOHS and UNICEF… As a result, we have not experienced any spread of all infectious disease cases in our chiefdom."
Health Worker, Kortimoh MCHP, Samu Chiefdom, Kambia District

Health workers reported to have followed a standard disease surveillance and reporting procedures after identification of a disease or an event- which have always been done within 72 hours. These procedures are reportedly outlined as follows:

Notification of case to DHMT→ Sensitisation→ Filling of notification Form→ Line Listing→ Investigation → Report in the DHIS2

Accordingly, the surveillance system has been notably well coordinated as over 70 percent of 497 health workers claimed that integrated disease surveillance and reporting, case management of common disease outbreak, MDSR and communication/ information sharing have been very effective in the past two years preceding interviews. (See Table 9)

Table 9 : Percent of PHU staff who agreed that the surveillance system has been effective in the past two years preceding evaluation

Surveillance system	PHUs agreeing surveillance system is effective	Lessons learned/ best practices
Maternal Death Surveillance and Response (MDSR)	71%	▪ CHWs have been very prompt in reporting events as soon as they occur in their communities ▪ There has been an improvement in both active and passive surveillance due to capacity building on covid-19 case management ▪ Weekly reporting on IDSR and regular joint monitoring by DHMT and their partners prove the surveillance systems more effective ▪ A strong referral system set up with available ambulance in the chiefdoms has strongly contributed to reduction in maternal death in some areas in the project districts
Integrated Disease Surveillance and Response (IDSR)	85%	
Case Management of common disease outbreak	73%	
Referral system	69%	
Communications/information sharing	71%	

3.1.1.3 Module Objective 2 (MO2): Increased offer and demand of Sexual Reproductive Health services in the project region

Programme effect on Family Planning uptake in the project districts

The programme has notably registered huge success regarding uptake of modern FP methods in the intervention districts and Sierra Leone at large. Whilst continued users are maintained, the programme ensured incremental uptake of the modern FP methods across the operational districts during the implementation period. New users of FP methods increased during implementation in the intervention districts. Data generated from project monitoring suggest that number of new users of modern FP methods almost tripled (increasing by 189 percentage points from 2019 (66,860 new users) to 2021 (191,596 new users). Also, approximately 69 percent of the total project target was achieved in 2021.

- Number of couple years of protection in the project districts

Maintaining number of ongoing users and fostering increased uptake of FP users was particularly noted to have strong link with couple years of protection (CYP) in the project districts. It is noteworthy that CYP is an important output indicator that has been used by many national governments and international organisations to monitor the progress and measure program performance around family planning service delivery. Overall, CYP determines the extent of coverage of FP services.

> **Couple Years of Protection (CYP)** is the estimated protection provided by family planning (FP) methods during a one-year period, based upon the volume of all contraceptives sold or distributed free of charge to clients during that period...
> (USAID, 2022)

Based on data generated from 497 PHUs assessed by the evaluation, the computed CYP for 2021 was 115,352 CYP for all project districts. This means the ECRHSII programme contributed to the protection of 115,352 women in reproductive age (WRA) from pregnancy- which is 17 percent of the total number of WRA reported across 497 health catchments in the intervention districts. While the programme targeted 250,000 CYP, this result showed that only 46 percent of target was achieved (See Figure 16).

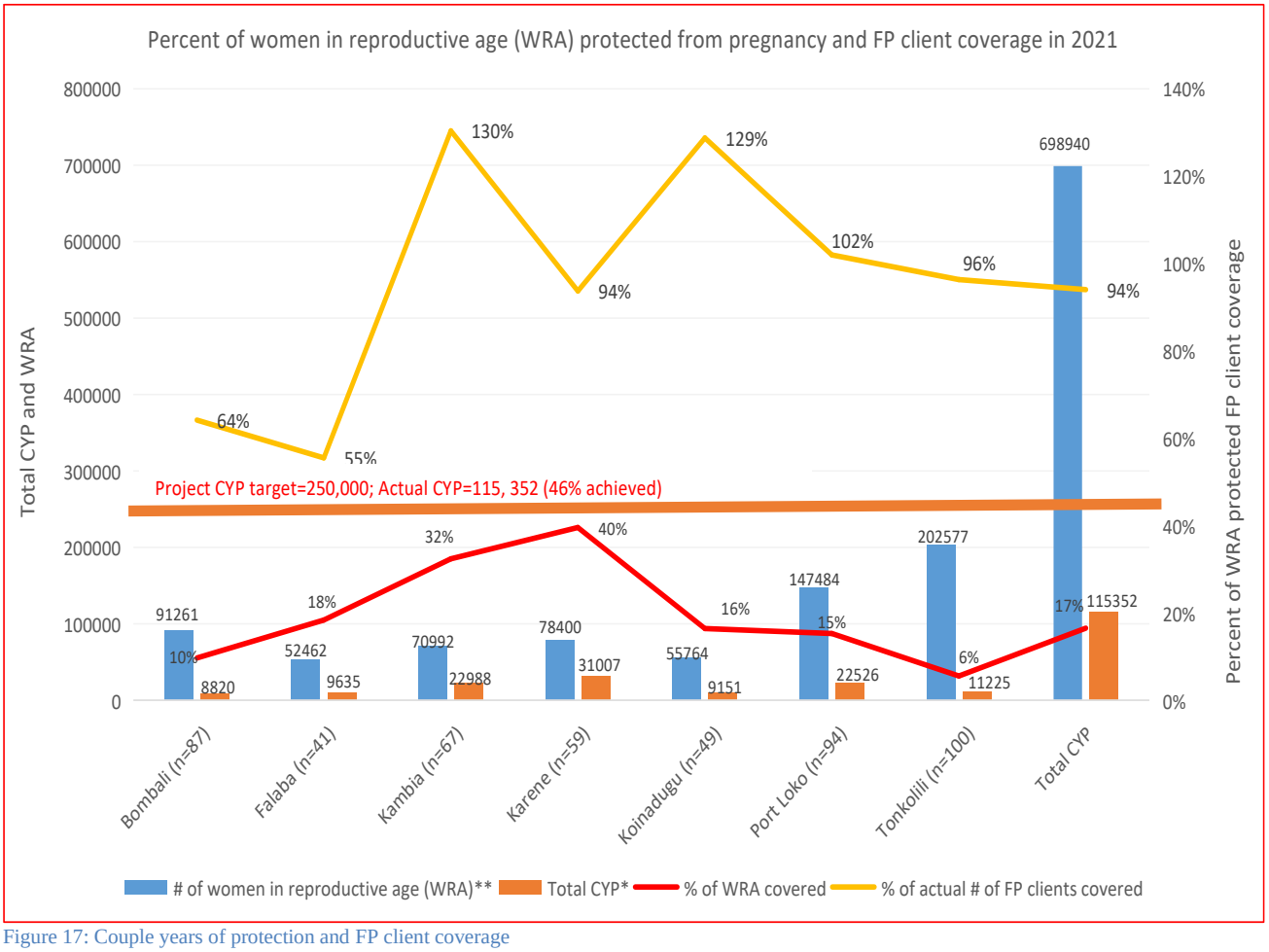


Figure 17: Couple years of protection and FP client coverage

Meanwhile, additional computation specific to FP commodities procured by the ECRHS II revealed that the programme achieved and exceeded the set target (250,000 CYP) by 1 percentage point- which indicates an outstanding performance.

Further analysis of CYP by types of FP commodities supplied showed that long-acting reversible contraceptives (LARC) have mostly contributed to CYP across the intervention districts. Jadelle has been the largest contributor to CYP followed by Depo Provera (injectable) and IUDs. This result is unsurprising considering the high demand of LARC among FP clients and the relative increase in discontinuity from short-term methods and switching to long-term methods during the programme implementation period.

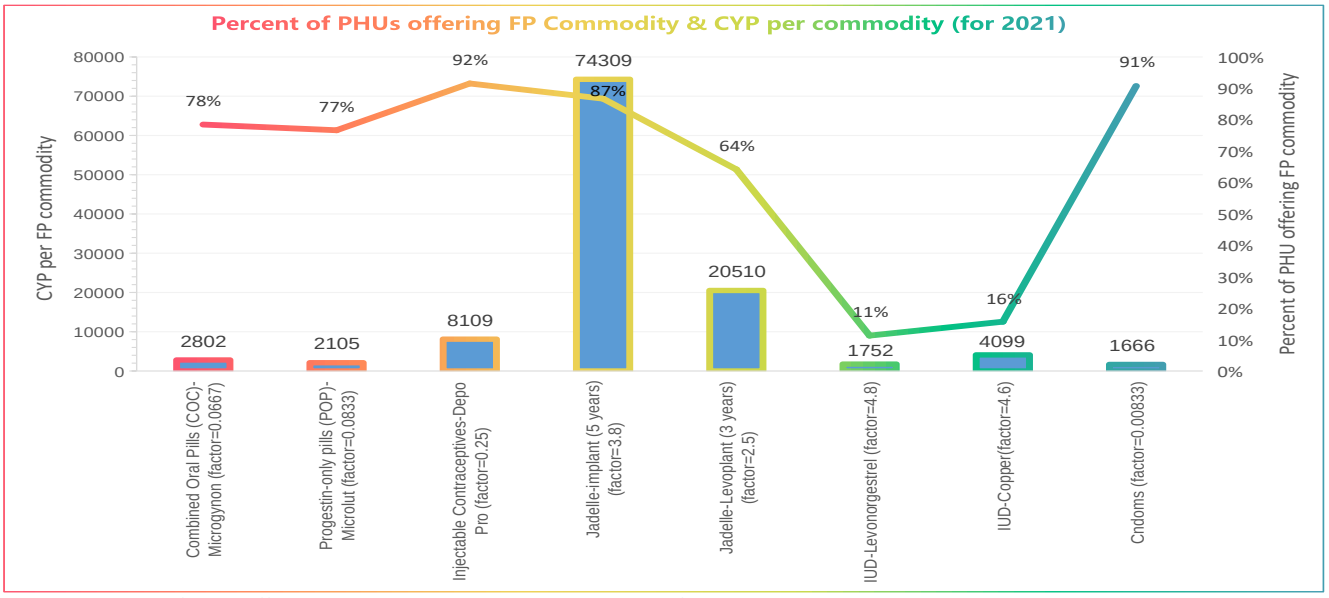


Figure 18: Percent of PHUs offering FP commodity and CYP per commodity (for 2021)

At district level, CYP is higher in Karene, Kambia and Port Loko districts than the other intervention districts. Conversely Bombali district comparatively presented the lowest form of protection against pregnancy. (See Table 10)

Table 10 : CYPs by FP methods and district

Districts covered	Combined Oral Pills (COC)-Microgynon (factor=0.0667)	Progestin-only pills (POP)-Microlut (factor=0.0833)	Injectable Contraceptives-Depo Pro (factor=0.25)	Jadelle-implant (5 years) (factor=3.8)	Jadelle-Levoplant (3 years) (factor=2.5)	IUD-Levonorgestrel (factor=4.8)	IUD-Copper(factor=4.6)	Condoms (factor=0.00833)	**Total CYP**
Bombali (n=87)	244	67	565	6240	1613	0	0	92	**8,820**
Falaba (n=41)	412	549	511	4704	158	984	2231	86	**9,635**
Kambia (n=67)	322	527	1407	13786	6555	144	133	113	**22,988**
Karene (n=59)	508	487	1884	19464	6913	0	1435	316	**31,007**
Koinadugu (n=49)	193	66	720	5221	2525	0	133	294	**9,151**
Port Loko (n=94)	929	260	2412	16507	1630	24	23	740	**22,526**
Tonkolili (n=100)	194	150	610	8387	1118	600	143	25	**11,225**
Total CYP	**2802**	**2105**	**8109**	**74309**	**20510**	**1752**	**4099**	**1666**	**115,352**

The results were notably due to the appropriateness of the programme's strategy to promote a sustained increase in FP utilization particularly the long-acting methods. To ensure that no stock-out of priority FP commodities are reported, regular monitoring and reporting of FP stock-out level were done in all intervention districts. The programme's M&E Officers ensured they provide continued support to health workers/ DHMTs for timely delivery of FP commodity every month. Uptake was also facilitated by VSLAs that served as a social space to advocate and promote the utilization of FP/SRH services at community level. Despite the low contribution to CYP, combined oral pills (COC) such as Microgynon was observed as the most widely distributed FP commodity supplied across the 7 programme intervention districts. Injectables such as depo provera and implants such as Jadelle also showed high availability across the intervention districts. (See Table 11)

Table 11 : Stock of selected FP commodities available at PHUs covered during the time of assessment

Districts covered	Combined Oral Pills (COC)-Microgynon	Progestin-only pills (POP)- Microlut	Injectable Contraceptives-Depo Pro	Jadelle-implant (5 years)	Jadelle-Levoplant (3 years)	Injectable-Sayana Press	IUD-Levonorgestrel
Bombali (n=87)	3657	803	2261	1642	645	84	0
Falaba (n=41)	6173	6589	2044	1238	63	85	205
Kambia (n=67)	4828	6325	5628	3628	2622	926	30
Karene (n=59)	7623	5844	7536	5122	2765	86	0
Koinadugu (n=49)	2888	789	2880	1374	1010	9	0
Port Loko (n=94)	13923	3125	9649	4344	652	148	5
Tonkolili (n=100)	2910	1796	2439	2207	447	657	125

Total (North=497))	42002	25271	32437	19555	8204	1995	365

3.1.2 Objective level achievement for component 2

3.1.2.1 Programme Objective 1: Improved health status of the population of Sierra Leone with specific focus on COVID-19 prevention and response

The COVID-19 Prevention and Response (CPR) project was launched at a time when the virus had already spread to every district in Sierra Leone. The pandemic threatened to overwhelm the healthcare resources in a country where public health infrastructure was weak and under-resourced – further destroying the moral and confidence of health care workers. Also, the secondary effects of the epidemic included drop in essential health-seeking behaviours and disruption of agricultural activities which further provoked acute food insecurity among vulnerable families. The project was especially design to leverage the technical strength, position and build access from the ECRHS programme to support 5 pillars[22] of the COVID-19 response in Sierra Leone with particular focus on 10 districts including Kambia, Port Loko, Koinadugu, Falaba, Bombali, Karene, Tonkolili, Bo and Kenema.

Programme effect on COVID-19 prevention and response

- COVID-19 incidence in the project districts (number of new cases per week)

One of the primary objectives of the CPR project was to contribute to efforts made in strengthening the health system in Sierra Leone to respond to the COVID-19 epidemic. The overall effect of the CPR intervention (component 2 of the ECRHSII programme) was its contribution to the eventual reduction in weekly COVID-19 cases registered in the programme operational districts. Considering that epi-week data was cumbersome and may not present a clear presentation of COVID-19 cases compressed over a period of two years, the evaluation collated weekly averages on a monthly basis. As presented in Figure 18, the CPR project was launched when the weekly cases for the ECRHSII intervention districts were still higher than the national weekly cases.

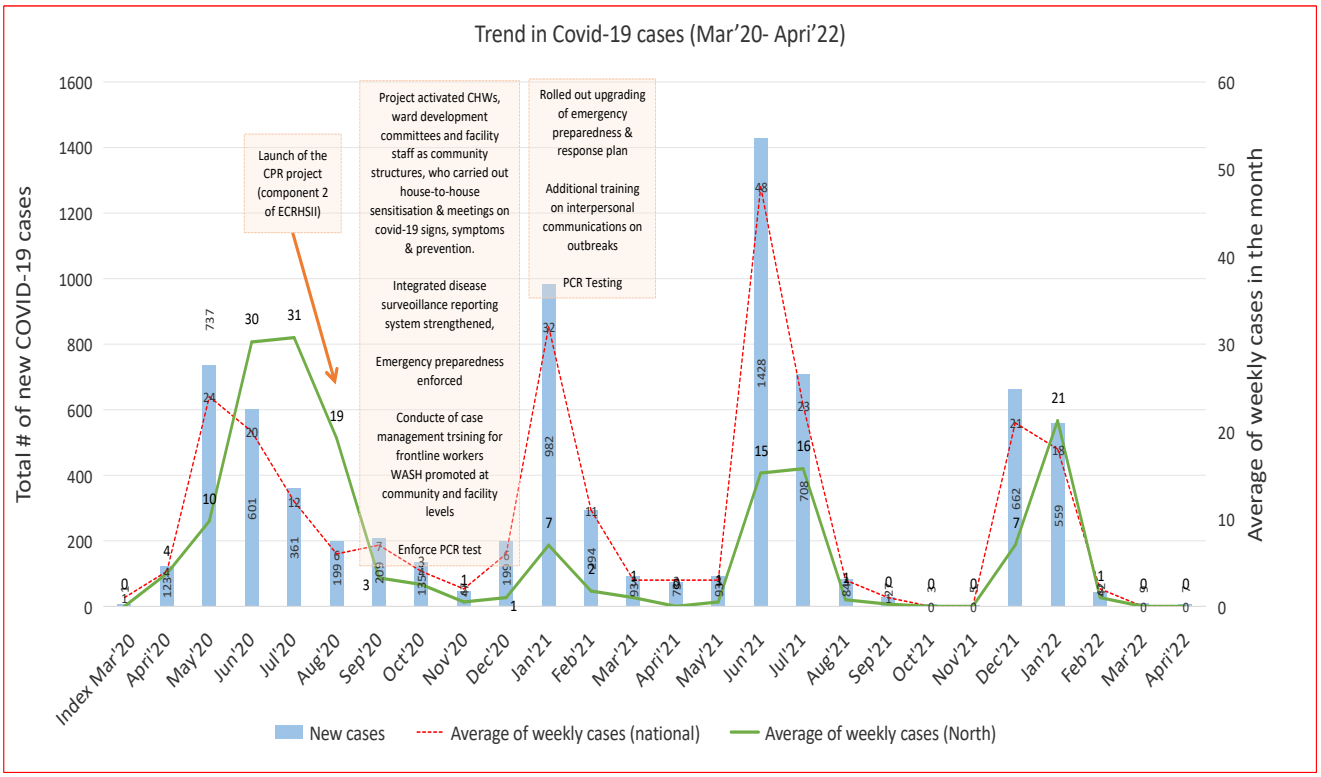


Figure 19: Average of weekly COVID-19 cases in the programme intervention districts

*Source: NaCOVERC/EOC

[22] The 5 pillars of the COVID-19 targeted by the project included: 1) coordination, 2) logistics, 3) surveillance, 4) social mobilisaton and risk communication, and 5) community and household resilience.

The evaluation noted that the average weekly COVID-19 cases in the operational districts dropped sharply from 19 cases in August 2020 to 3 cases in September 2020; and the drop was consistent towards the end of 2020. This rapid drop in weekly trend proved the effectiveness of the strategies adopted by the CPR project especially in the first quarter of implementation proved the effectiveness of the strategies adopted by the project. At this stage, the project was successful after activating community structures such as community health workers (CHWs), ward development committees (WDCs) and health staff to carry out house-to-house sensitization and meetings on covid-19 signs, symptoms and prevention in a bid to break the community chain of transmission. The project ensured the integrated disease surveillance reporting system was strengthened and the emergency preparedness and response system were further enforced. Frontline workers were also supported with training in case management. Also considering the northern province consist major points of entry, the policy on polymerase chain reaction (PCR) testing was enforced for inbound passengers/cross-border travelers.

3.1.2.2 Module Objective 1 (MO1): Strengthen the health system in Sierra Leone to respond to the COVID-19 epidemic

Programme effect on COVID-19 surveillance

Surveillance is notably a critical sub-component of the ECRHSII programme implementation. While the strategies for case investigation and reporting remain the same, the response system has been constantly subjected to changes as new epidemics emerge. As one of the 5 pillars of the COVID-19 response, surveillance was critical in the CPR project such that district health structures were supported to monitor for, identify, trace and refer cases of COVID-19.

- Proportion of suspected COVID-19 epidemic cases reported and investigated according to IDSR case definition

During the COVID-19 pandemic, the ECRHSII programme under component 2 intensified efforts to improve the reporting system of the integrated disease surveillance mechanisms. The programme supported the district health structures with training on IDRS and HMIS and built their understanding of the tools. There were several joint supportive supervisions facilitated by the programme (in addition to logistics supports)- which were used as a strategy to strengthen IDSR tools at PHU and community levels across the intervention districts. One of the unexpected outputs of these actions is the alignment of IDSR with national COVID-19 emergency response system, later integrated into technical pillars or programmes the National Directorate of Health Security and Emergency (NHSE). It is noteworthy that the NHSE serves as the operational branch of the MoHS with the responsibility to prevent and control epidemic prone diseases and other events of public health significance. The established NHSE is observed as an extension of improvements made at community and district levels regarding surveillance, and emergency preparedness and response (EPR) systems. The directorate serves as a repository for all epidemic-prone diseases and other events of public health concerns. Interestingly all alerts received by the Emergency Operation Centre (EOC) under the DHSE during the COVID-19 response were independently investigated and verified; and actions were initiated within 72 hours according to IDSR case definition.

> "The response to alerts has been highly effective… We receive alerts randomly from communities, health facilities and IDSR focal points from the DHMT. The alerts are also received by other actors for independent confirmation/ verification. Interestingly, the process of information flow from the community through health facilities to DHMTs and then EOC has been faster than expected.
> Verification and lab test and confirmation of the suspected case have been done within 72 hours…"
> **Data Officer, DHSE, Freetown**

Between 2020 and 2021, over 3,800 alerts of suspected covid-19 cases were received by EOC from the 7 ECRHSII operational districts in northern Sierra Leone. Accordingly, all alerts received were investigated and approximately 14 percent of the suspected cases were confirmed as covid-19 positive within 72 hours after alert messages (see Figure 19). This result proved a very successful intervention around surveillance- which further confirms the rapid decrease in and containment of community transmission of the virus in northern Sierra Leone.

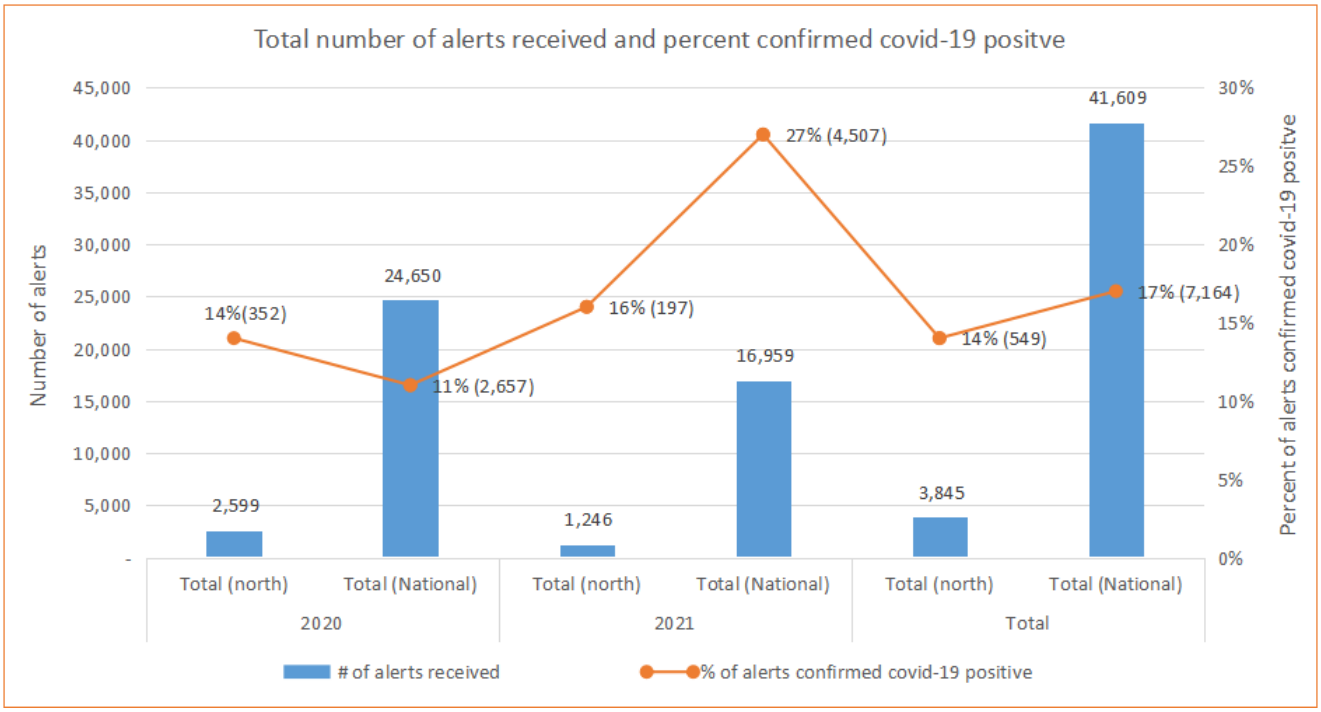


Figure 20: Number of alerts investigated and verified as covid-19 positive in the programme intervention districts

*Source: NaCOVERC/EOC

3.1.2.3 Module Objective 2 (MO2): Support community awareness and resilience to COVID-19

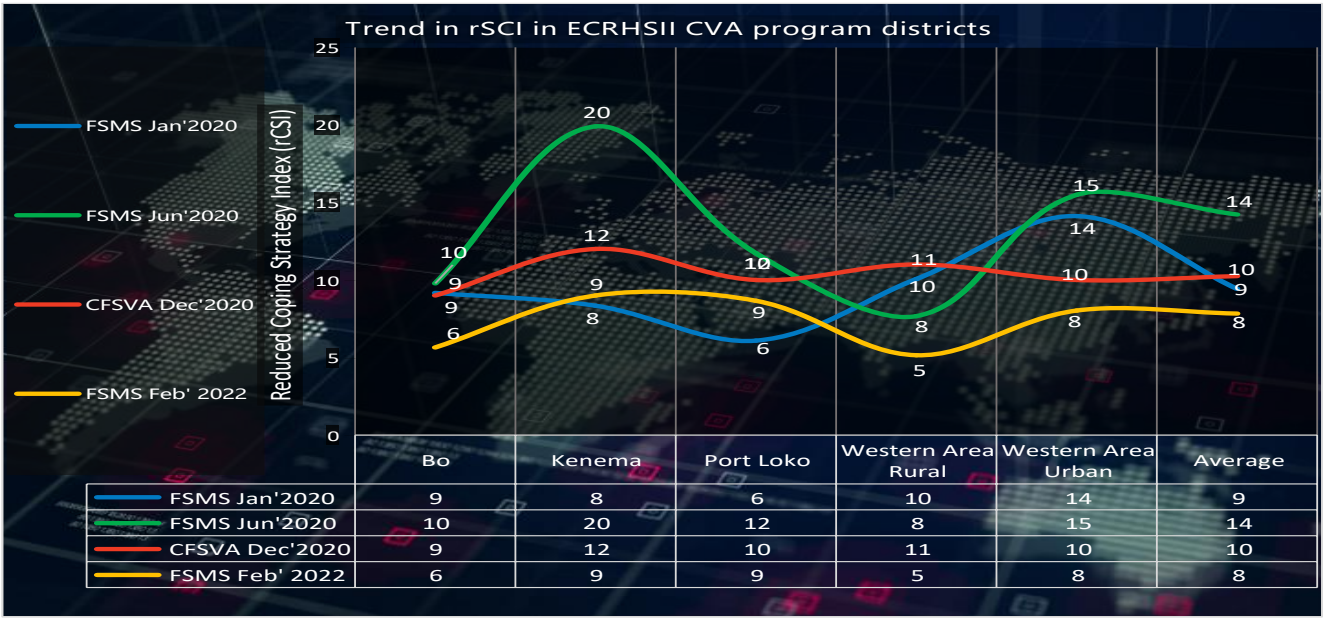
Programme effect on community and household resilience to COVID-19 in the project districts

Multi-purpose cash assistance (MPC) for community and household resilience was one of the key actions taken during the implementation of the CPR project. This component of the CPR project was adopted to mitigate and prevent the most harmful coping strategies of economically vulnerable households in response to COVID-19. The MPC was a one-time unconditional cash assistance provided to 2,000 most vulnerable households to enable them to survive during the periods of quarantining following exposure to the virus or as a result of stringent measures such as the lockdown introduced to contain the spread of the virus. In addition to direct provision of food commodities according to MoH guidelines during the response, the project also transferred $120 to vulnerable households who were not reached by the National Commission for Social Action (NaCSA) cash transfer social assistance or COVID-19 relief program.

- **Percent reduction of beneficiary households reporting decrease in use of coping strategies**

The expected outcome suggested by the project for the CPR action on community and household resilience to COVID-19 was 'reduced use of negative coping strategies among beneficiary households'. However, the evaluation considered the analysis of the CPR project contribution to the overall effects of the cash voucher assistance (CVA) on targeted beneficiary communities across the four CPR project districts including Bo, Kenema, Port Loko, Western Area Rural and Western Area Urban districts. The reduced coping strategy index (rCSI) was used to capture changes in the use of negative coping strategies across the beneficiary communities in the CPR project districts. Sources of information used were secondary data from the evaluation and the WFP Comprehensive Food Security and Vulnerability Analysis (CFSVA) and Emergency Food Security Monitoring System (FSMS) reports.

Results from the analysis showed that the COVID-19 pandemic negatively influenced the patterns of coping strategies in the intervention districts and proved the relevance and timeliness of the CVA intervention. In the first 3 of the pandemic (April-June 2020) average rCSI across the four intervention districts was 14. This shows an increase in the January 2020 figure (9.0) by approximately 56 percent and served as the baseline for the intervention.



	Bo	Kenema	Port Loko	Western Area Rural	Western Area Urban	Average
FSMS Jan'2020	9	8	6	10	14	9
FSMS Jun'2020	10	20	12	8	15	14
CFSVA Dec'2020	9	12	10	11	10	10
FSMS Feb' 2022	6	9	9	5	8	8

Figure 21: Trend in reduced coping strategies index in the ECRHS II CVA program districts

Source: WFP rSCI. reports[23]

The CVA program effect was highly evident during the CPR program implementation across the intervention districts. Between June and December 2020, those using negative coping strategies to survive the impact of the COVID-19 crisis markedly dropped by 19 percent. Given that the CVA was a one-off program, it proved to be very effective during the implementation period.

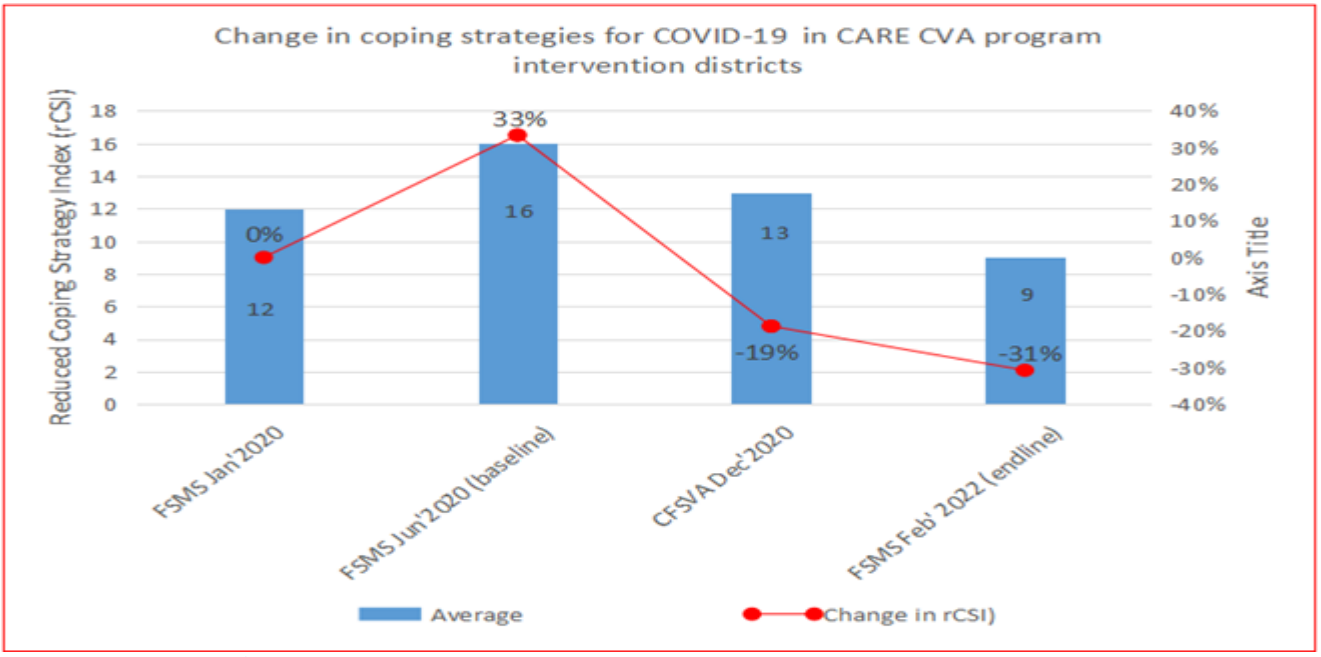


Figure 22: Changes in use of coping strategies in the ECRHS II CVA program districts

Source: WFP rSCI. reports[24]

Notably there were indications of consistent drop in use of negative coping strategies even after the cash CVA program. For instance, the June 2020 rCSI figure was observed to have further dropped markedly by 43% in February 2022- falling below situation in January 2020 (prior to the COVID-19 pandemic). As indicated in the CPR project proposal and reports, the CVA contributed to this wider effect by aligning with the NaCSA "COVID-19 Social Safety Net Cash Transfers (COVID-19 SSN)/" Ep

[23] Available at: https://www.wfp.org/publications?f%5B0%5D=country%3A2077&f%5B1%5D=topics%3A2123
[24] ibid

Fet Po[25]" program which targeted 35,000 extremely poor households identified using 3-tier targeting (geographic, community and PMT) during the COVID-19 pandemic. The CPR CVA program reportedly targeted 2,000 vulnerable households through the NaCSA SSN program. This revealed the CPR CVA program contributed to approximately 11 percent of national efforts to prevent vulnerable people from further falling into poverty during the pandemic, as well as the overall drop observed in rSCI across the intervention districts. The contribution maybe even higher for specific districts targeted by the CPR CVA program.

Recall: The 5 standard coping strategies and their associated severity rating are recommended to analyze comparative (reduced) coping strategy index (rCSI) include the following:

- Eating less-preferred foods (1.0 severity weight)
- Borrowing food/money from friends and relatives (2.0 severity weight
- Limiting portions of mealtime (1.0 severity weight)
- Limiting adult intake (3.0 severity weight), and
- Reducing the number of meals per day (1.0 severity weight)

The evaluation findings from interviews with 346 direct CVA program beneficiaries confirmed that the program succeeded in normalizing beneficiary response to shocks for a considerable period. Perceived changes in income and the five recommended damaging coping strategies to analyse rCSI were captured by the evaluation. The analysis revealed that approximately 74 percent of CVA beneficiaries claimed to have experienced increased household income after the COVID-19 pandemic. This figure was higher than non-beneficiaries, and the difference was statistically significant at 95 percent confidence level (CI: 0.1628-0.2772). Specific findings (as indicated in Table 12) showed that there was no significant difference between proportion of beneficiaries and non-beneficiaries using coping strategies such as i) relying on less preferred and less expensive foods, and ii) reducing portion of meal for the day.

Table 12 : Comparative analysis of rCSI indicators and perceived change in income reported by beneficiary and non-beneficiary households

Indicator	Total (N=2134)	CVA beneficiary HHs (n=346)	Non-CVA beneficiary HH (n=1788)	z-value	p-value	Results
% of respondents who claim household income has increase after covid-19	56%	74%	52%	7.2	<0.0001	CI (0.1628-0.2772) Statistically significant difference
% of HHs who experience food or income shortage in the past 7 days preceding interviews	36%	38%	36%	0.7	0.4789	CI (-0.0354 -0.0754) Not statistically significant difference
% of HHs who had at least a day relying on less preferred or less expensive foods in the past 7 days preceding interviews	25%	29%	24%	0.7	0.4789	CI (-0,0196 -0.0876) Not statistically significant difference
% of HHs who reported taking loan or borrowing foods in the past 7 days preceding interviews	17%	25%	15%	4.6	<0.0001	CI (0.0571-0.1429) Statistically significant difference
% of HHs who reported reducing portion of meal for the day in the past 7 days preceding interviews	33%	36%	32%	1.5	0.1464	CI (-0.014-0.094) Not statistically significant difference
% of HHs who reported adults went hungry in order for children to eat food in the past 7 days preceding interviews	17%	26%	15%	5	<0.0001	CI (0.067-0153) Statistically significant difference
% of HHs who reported reducing number of meals in a day in the past 7 days preceding interviews	27%	35%	26%	3.4	0.0006	CI (0.0386-0.1414) Statistically significant difference
Total rSCI	**4.37**	**6.05**	**4.37**			

Conversely, fewer non-beneficiaries than CVA beneficiaries reportedly practiced less of the other three coping strategies (including borrowing food/ money, limiting adult intake and reducing number of meals), and the difference was noted to be statistically significant. Meanwhile, the proportion who reported practicing these coping strategies at the time of the evaluation was generally very low among the two groups. (See Table 12)

These positive program effects on beneficiaries strongly reflect on the emergency strategy put in place by beneficiary during and after the cash benefits they received from the CVA program. Whilst the expected purpose[26] of the cash benefits was followed during the COVID-19 pandemic, most CVA

[25] Ep Fet Po in Krio (English-based Creole language of Sierra Leone) means "Help to Fight Poverty."

[26] The most vulnerable households were targeted by the CVA program so they can meet their basic needs (food consumption and other household essential items) and this was expected to prevent them from most detrimental consumption-based coping strategies.

beneficiaries also claimed to have invested into business (91%) and farming (95%) as an emergency plan to independently respond to future shocks and stressors (see Figure 22). This strategy seemed to have worked well given the perceived increase in household income and decrease in overall rCSI noted at the time of the evaluation.

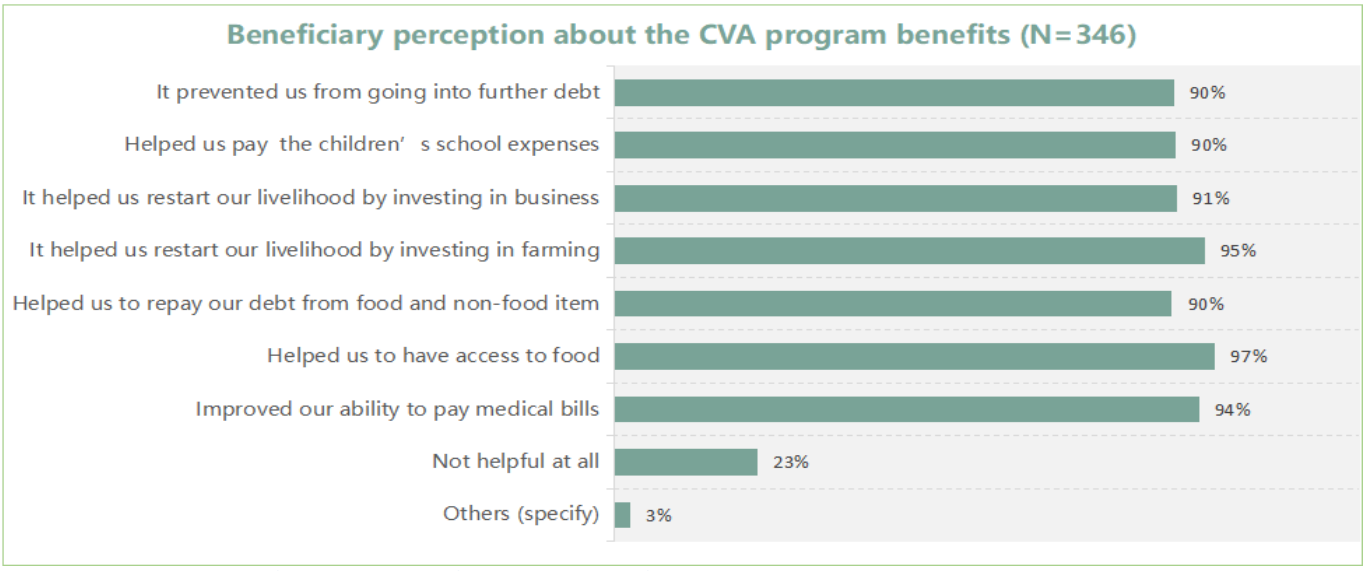


Figure 23: Perception and use of CVA program benefits expressed by beneficiary households

Source: Evaluation findings

One of the unexpected results of the CPR program that contributed to improvement in reduced coping strategies was the use of the Village Savings and Loan Association (VSLA) for emergency savings and loan acquisition.

"Each beneficiary household received the sum of Le1,265,000 from the emergency cash transfers. Although the cash was not enough to address all our needs, we appreciate it so much. Meanwhile as part of our fallback plans, most of us who benefited from the emergency cash transfers used part of our benefit to join and save in the VSLA group in our community…"
VSLA participant, Pelewahun community, Bagbwe chiefdom, Bo district

According to responses documented from VSLA participants in the intervention districts, the VSLA has served as a great opportunity that supports participants and their relatives with immediate economic and social needs including loans and interests for foods, medicals, school fees and business ventures.

3.2 Programme effectiveness

Ideally the effectiveness section discusses the achievement of programme targets at objective and intermediate results levels. Whilst the evaluation assessed documented and observed changes of the ECRHS II programme objectives and intermediate results/ outcomes which have been exhaustively discussed under the impact sections, this section mainly focuses on achieved results at output level.

3.2.1 Intermediate results/ Output level achievement for component 1

Component 1 of the ECRHS II programme presents 2 key outputs and 6 sub-indicators that were critically analysed based of the terms of reference. These are discussed as set out below. Considering the impressive effects of the programme at impact level, it is clear that output targets set were achieved to a large extent.

3.2.1.1 Output 1: Functional epidemic control system is in place in the seven northern districts of Sierra Leone

- Output indicator 1.1: Proportion of weekly surveillance reports submitted timely and validated at district levels

Figure 23 depicts trend in timely submission of weekly surveillance report at both national level and ECRHS II programme intervention districts in the north. It is noteworthy that in 2016 only 18.1

percent of weekly submission of surveillance reports from PHUs were done within a defined timeline. The target set for the ECRHS II programme implementation was that timely submissions of weekly surveillance reports would be at 80 percent in 2019 and 85 percent in subsequent years. Trend analysis showed that by the end of phase I the ECRHS programme made marked improvement (90.3%) in timeliness of weekly surveillance, but this moderately dropped by 2.3 percent during the programme's transitioning to second phase of implementation (2018). Meanwhile by the end of the first year of ECRHS II programme implementation in 2019, timeliness of weekly surveillance reports hit 89.2 percent which exceeded the programmes target by 9.2 percent. The 2019 results consistently increased to more than 90 percent in subsequent years during implementation period. In 2022, the project target was exceeded by more than 14 percent. Impressively, there were clear differences in timeliness of reporting between the intervention districts and national level. These findings particularly verified that output indicator 1.1 of component 1 and its associated activities largely contributed to timely containment of emerging epidemics (including COVID-19) during implementation period.

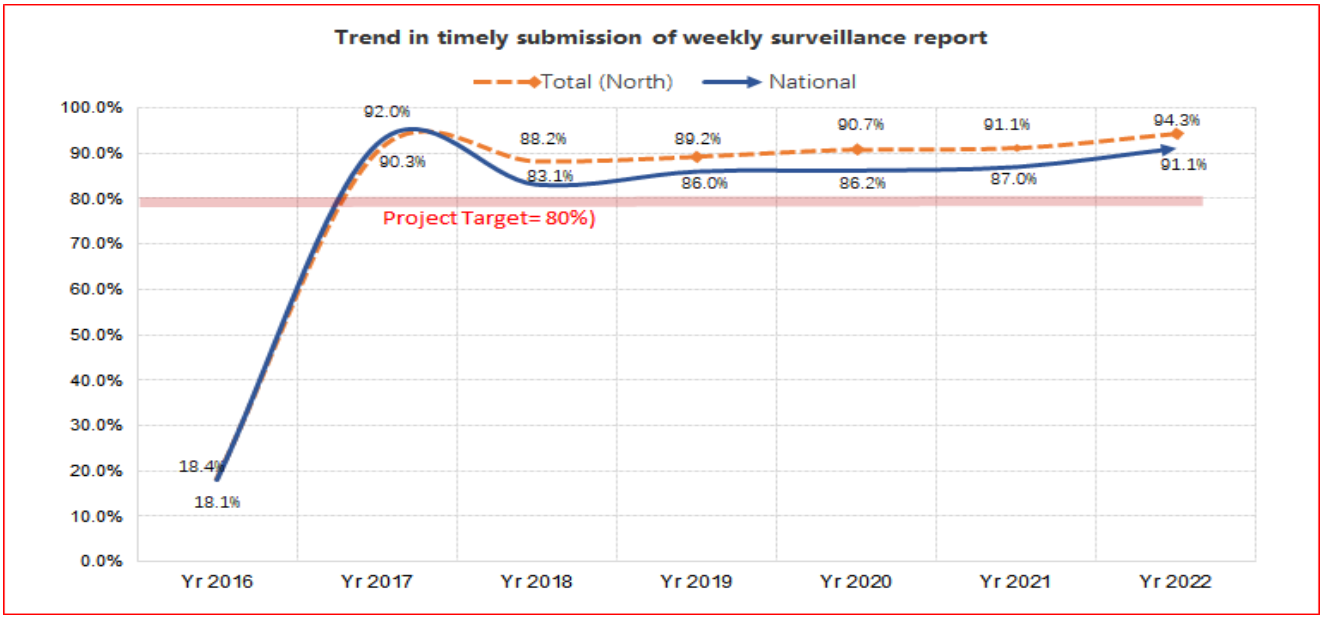


Figure 24: Trend in timely submission of weekly surveillance report and achievement of target sets for output 1.1

Source: DHIS2 reports

District level analysis shows that the proportion of weekly surveillance reports submitted and validated in each of the programme intervention districts exceeded the programme's target for all years covered during the implementation period. The effectiveness of timely submission was evident across all districts targeted by the project- with Falaba and Koinadugu district exhibiting outstanding performance in timely submission of weekly surveillance reporting.

Table 13 : Tren analysis of timely submission of weekly surveillance report by intervention districts

Districts covered	2016	2017	2018	2019	2020	2021	2022
Bombali	19.4%	77.3%	66.2%	85.8%	88.4%	91.9%	93.1%
Falaba	16.4%	88.0%	93.8%	89.0%	93.5%	96.7%	100.0%
Kambia	18.9%	99.5%	96.9%	94.7%	98.9%	92.4%	97.1%
Karene	19.1%	87.2%	81.4%	89.5%	94.9%	96.2%	93.8%
Koinadugu	16.4%	89.8%	96.0%	89.3%	87.3%	97.1%	101.0%
Port Loko	18.7%	89.8%	91.6%	86.3%	83.6%	81.1%	93.0%
Tonkolili	18.2%	98.2%	96.5%	90.7%	92.1%	92.9%	90.0%
Total	**18.4%**	**90.3%**	**88.2%**	**89.2%**	**90.7%**	**91.1%**	**94.3%**
National	**18.1%**	**92.0%**	**83.1%**	**86.0%**	**86.2%**	**87.0%**	**91.1%**

Source: DHIS2 reports

- Output indicator 1.2: Proportion of peripheral health facilities with functional water and sanitation infrastructure

The availability of water and sanitation infrastructure was noted to be a critical issue during the first

phase of ECRHS programme implementation. In 2016, only 33 percent of all 503 PHUs in northern Sierra Leone had functional water and sanitation infrastructure. Whilst this served as baseline, the programme was expected to increase the proportion of PHUs with water and sanitation infrastructure to 38 percent. The evaluation attempted to assess status of water and sanitation, and other physical infrastructure in all PHUs in the 7 intervention districts in north. All PHUs in the Bo district were also covered to gather baseline values on water and sanitation situation of the PHUs. In northern Sierra Leone, a total of 497 PHUs which were open for service delivery during the assessment were covered. The results showed that the 2016 baseline situation has improved significantly after the first phase of the ECHRS programme implementation across the 7 programme intervention districts. As noted in Figure 24, approximately 64 percent of all PHUs assessed had functional water and sanitation infrastructure- which almost 2 times the project target and doubled the baseline situation in 2016. This figure reflects across all project districts, except in Tonkolili districts (where 60 percent of health facilities still lack both functional water and sanitation infrastructure that are functional). Overall, the progress made in ECRHSII programme intervention areas regarding functional water and sanitation infrastructure is 9 percent higher than in Bo district.

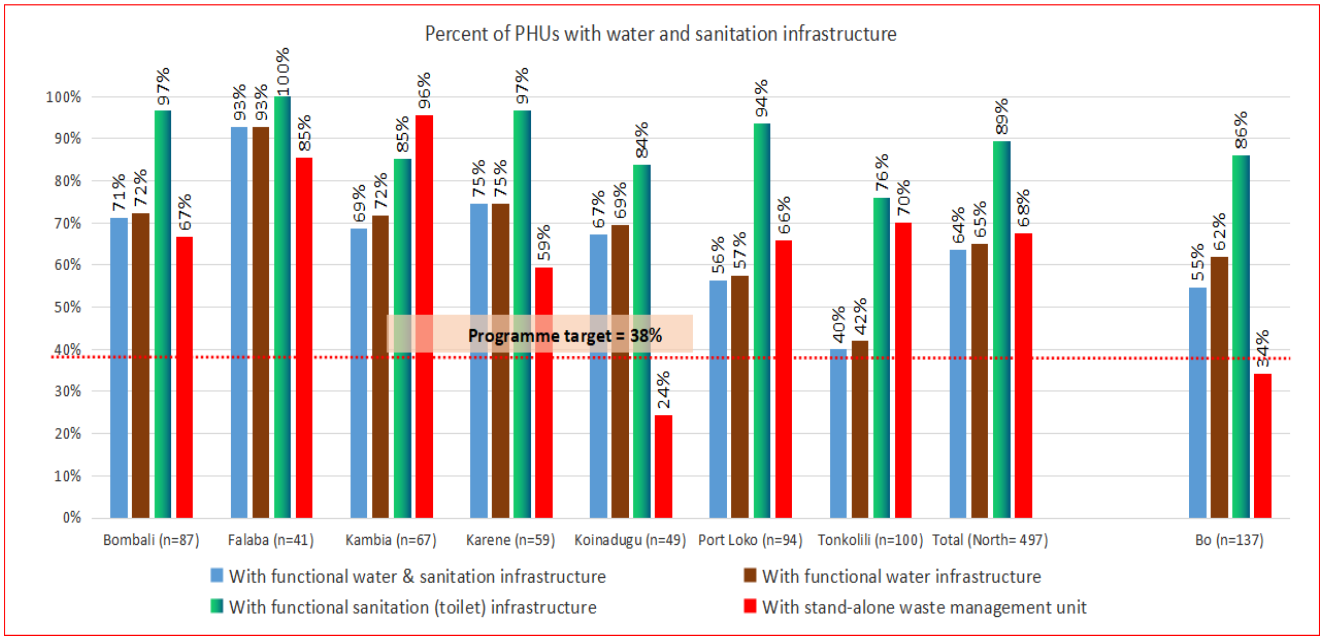


Figure 25: Extent of achievement of output indicator 1.2: percent of PHUs with water and sanitation infrastructure

Specifically, there seems to be greater improvement on interventions around sanitation (toilet) than water infrastructure. Disaggregation by PHU type further revealed that MCHPs are more deprived of water facilities than the other levels of the primary health units in the programme intervention districts. Meanwhile, shortage of functional water infrastructure is more pronounced for CHCs in Karene district than any of the other intervention districts. (See Table 14)

Table 14 : Percent of PHUs with water facilities disaggregated by district and types of PHUs

	% of PHUs with water facilities				% of PHUs with functional water facilities			
Districts covered	Total (N=497)	CHC (n=101)	CHP (n=165)	MCHP (n=231)	Total (N=497)	CHC (n=101)	CHP (n=165)	MCHP (n=231)
Bombali	86%	94%	90%	77%	72%	71%	77%	68%
Falaba	100%	100%	100%	100%	93%	100%	100%	86%
Kambia	82%	100%	94%	69%	72%	100%	81%	64%
Karene	85%	100%	80%	77%	75%	41%	70%	68%
Koinadugu	80%	100%	81%	71%	69%	100%	62%	67%
Port Loko	88%	96%	86%	86%	57%	65%	58%	51%
Tonkolili	50%	82%	53%	41%	42%	71%	47%	33%
Total	**79%**	**95%**	**84%**	**69%**	**65%**	**77%**	**69%**	**57%**
	Total (N=137)	CHC (n=37)	CHP (n=35)	MCHP (n=65)	Total (N=137)	CHC (n=37)	CHP (n=35)	MCHP (n=65)
Bo	67%	73%	74%	60%	62%	68%	71%	54%

Whilst more sanitation (toilet) facilities are still in use, the evaluation noted that 72 percent of these facilities the ECRHS II programme intervention districts require repairs and 10 percent are severely damaged (posing physical risks to users/ clients). The situation of sanitation (toilet) infrastructure is even critical in Bo district. Approximately 32 percent of toilets facilities in use at PHUs in Bo are severely damaged and 58 percent needs repair. In addition, 66 percent of PHUs in Bo district lack stand-alone waste management units and 43 percent lack bathroom or showers for patients. This results suggest that the risk of contracting health facility acquired infections (HFAI) is high at PHUs in Bo district considering the poor hygiene situation observed.

Table 15 : Status of WASH in the programme intevention districts

Districts covered	With functional water & sanitation infrastructure (N=497)	With functional water infrastructure (N=497)	With functional sanitation (toilet) infrastructure (N=497)	Functional toilet in good condition (N=444)	Functional toilet needs minor repairs (N=497)	Functional toilet badly damaged (N=497)	With stand-alone waste management unit (N=497)	PHUs with bathroom/showers for patients (N=497)
Bombali	71%	72%	97%	73%	62%	12%	67%	57%
Falaba	93%	93%	100%	90%	85%	5%	85%	10%
Kambia	69%	72%	85%	39%	100%	16%	96%	84%
Karene	75%	75%	97%	84%	67%	16%	59%	1%
Koinadugu	67%	69%	84%	85%	56%	10%	24%	55%
Port Loko	56%	57%	94%	90%	99%	8%	66%	88%
Tonkolili	40%	42%	76%	84%	34%	8%	70%	34%
Total	**64%**	**65%**	**89%**	**78%**	**72%**	**10%**	**68%**	**57%**
	Total (N=137)	Total (N=137)	Total (N=137)	Total (N=118)	Total (N=118)	Total (N=118)	Total (N=137)	Total (N=137)
Bo	55%	62%	86%	41%	58%	32%	34%	43%

The evaluation also observed low potentials for running water system that promotes good hygiene practices particular in delivery rooms across all PHUs assessed. Figure 25 presents a comparative analysis of PHUs with infrastructure that enhance running water system. Whilst high proportion (64%) have water storage tanks, approximately 63 percent of PHUs in the north (ECRHS II intervention region) lack water reticulation system – although the figure is comparatively 10% higher in Bo (72%). In addition, 45 percent of PHUs (with either borehole or protected water well) in the programme intervention region lack either solar power or submersible pumps.

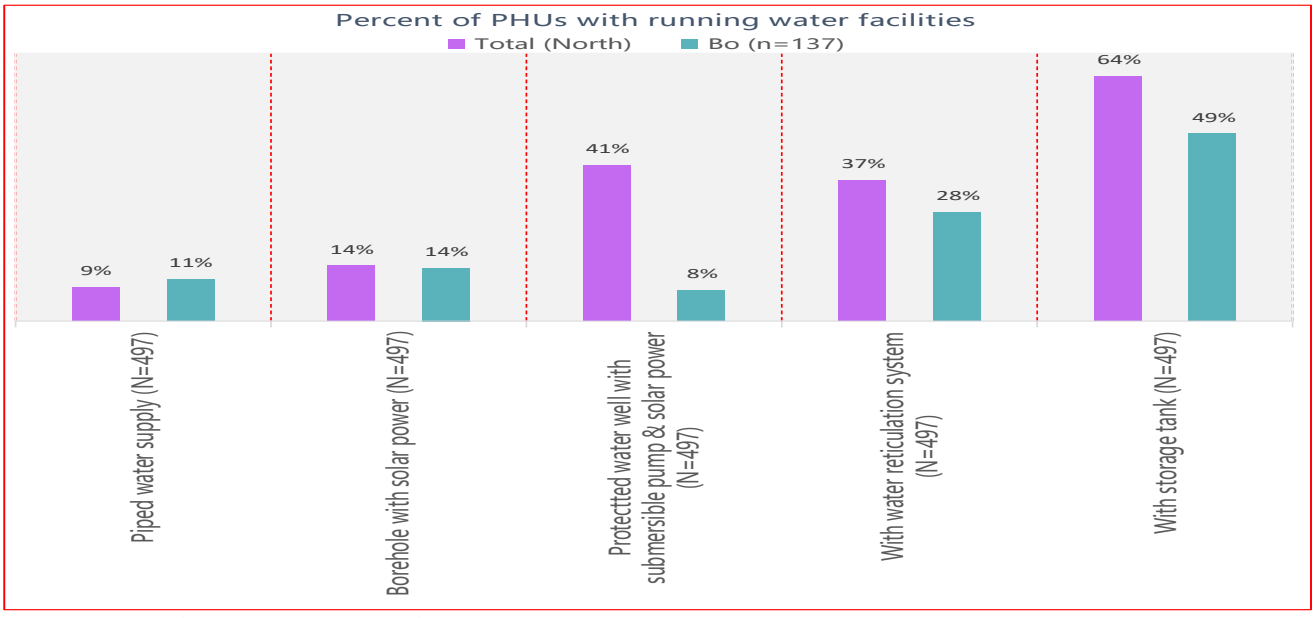


Figure 26: Percent of PHUs with running water facilities

In spite of the widespread lack of water reticulation system, only 9 percent of all PHUs evaluated have piped water supply (as shown in Table 16)- with Bombali (17%) and Karene (17%) presenting the highest share, whilst Falaba district presents the share (2%). Meanwhile the proportion of PHUs with piped water supply (11%) is comparatively 2 percent higher than that in the north, yet this figure is extremely lower considering the number of PHUs available in the district.

Table 16 : Types of functional water facilities in the programme intevention districts

Districts covered	Piped water supply (N=497)	Protected well with hand pump (N=497)	Protected water well without hand pump (N=497)	Protected water well with submersible pump & solar power (N=497)	Borehole with solar power (N=497)	Other types (N=497)
Bombali	17%	66%	6%	40%	30%	2%
Falaba	2%	88%	7%	2%	5%	10%
Kambia	6%	81%	12%	70%	19%	3%
Karene	17%	75%	3%	42%	3%	0%
Koinadugu	2%	20%	16%	51%	4%	0%
Port Loko	7%	15%	2%	63%	12%	1%
Tonkolili	6%	42%	2%	10%	2%	0%
Total	**9%**	**52%**	**6%**	**41%**	**14%**	**2%**
	Total (N=137)	Total (N=137)	Total (N=137)	Total (N=118)	Total (N=118)	Total (N=118)
Bo	11%	41%	5%	8%	14%	1%

As noted in foregoing discussions (see Figure 24 and Table 14), 35 percent of all 497 PHUs evaluated lacked functional water facilities across the 7 intervention districts in the northern and north-western region of Sierra Leone. Fortunately, most of these PHUs (74%) have nearby water facilities within 500 meters radius, whilst 26 percent are somehow located beyond 500 meters radius (see Figure 26).

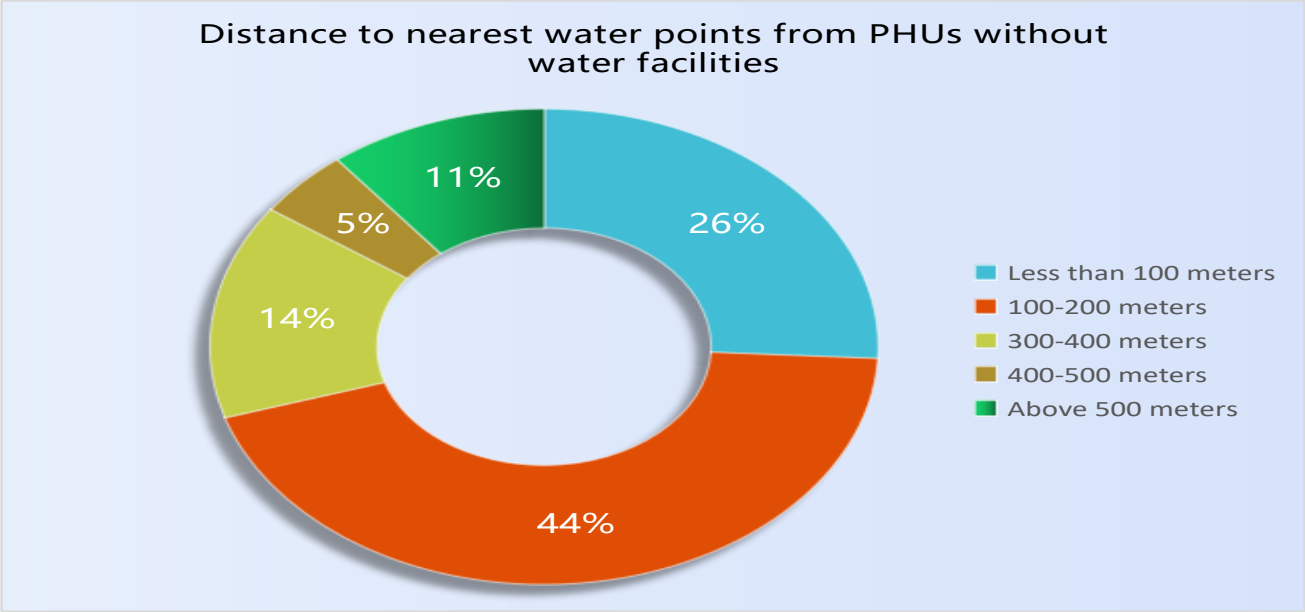


Figure 27: Distance of PHU without water points to the nearest water sources

Interestingly, results from contribution analysis revealed clear visibility of ECRHS intervention districts across 7 intervention districts. On average, the ECRHS contributions towards WASH provisions (either in the form of construction or rehabilitation) was noted to be 37 percent- and this turned out to be the highest contribution amongst 9 key institutions providing WASH support in the seven districts. Although all targets set for ECRHS II WASH component (construction or rehabilitation of 63 health facilities), the programme achieved approximately 68 percent of its targets by the end of implementation in 2021- that is 43 of 63 targeted PHUs covered by the programme. (See Table 17)

Table 17 : Contribution analysis of WASH interventions across the 7 ECRHS programme intevention districts

Districts covered	CARE ECRHS	Action Aid	AfDB support to GoSL (SALWACO)	Japan support (Inter-Aid)	Private individuals/ community-owned	Concern	Oxfam	SLRC	ChildFund	Others
Bombali (n=232)	54%	1%	1%	6%	7%	0%	0%	0%	9%	0%
Falaba (n=223)	3%	0%	27%	0%	25%	0%	22%	0%	0%	8%
Kambia (n=290)	53%	28%	10%	0%	0%	0%	0%	0%	0%	4%
Karene (n=258)	3%	0%	0%	74%	4%	0%	0%	0%	0%	11%
Koinadugu (n=204)	30%	0%	20%	0%	0%	0%	0%	20%	0%	13%
Port Loko (n=253)	40%	0%	0%	0%	17%	0%	7%	4%	0%	14%
Tonkolili (n=297)	66%	0%	0%	0%	6%	10%	6%	0%	0%	7%
Total (North=1917)	**37%**	**5%**	**8%**	**12%**	**8%**	**2%**	**4%**	**3%**	**1%**	**8%**

- Output indicator 1.3: Number of health staff trained in Standard Operational Procedure for handling waste, especially with regards to infectious waste

The ECRHS II programme was noted to have exceeded achieved and exceeded its target on staff training on Standard Operational Procedures (SOP) for handling waste, especially infectious waste. By the end of 2021, the programme intended to reach out and train 200 PHU staff in addition to 358 staff already trained in SOP for handling of infectious waste. Notably the programme demonstrated an outstanding performance on the indicated exceeding target by 5 percent (210). This increased the baseline total of 358 to 568. Whilst a total of 910 PHU were noted to have received SOP for infectious waste handling training, it could be affirmed that the ECRHS II programme contributed 68 percent of the total PHU staff (910) reportedly trained on SOP for handling infectious waste. (See Figure 27)

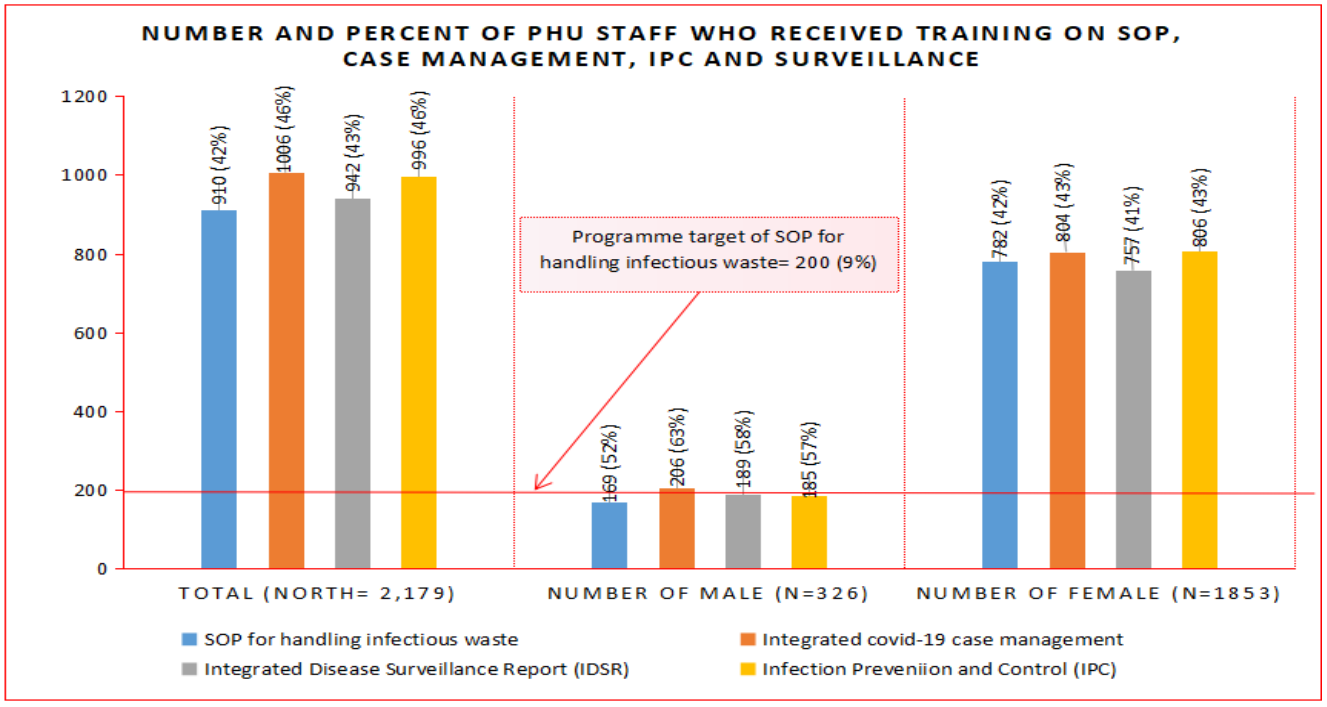


Figure 28: Number and percent of PHU staff who received training on SOP for infectious waste in the programme intervention districts

- Output indicator 1.4: Number of districts with updated emergency plans (not older than 1 year)

The Emergency Preparedness and Response Plan (EPRP) was integrated in the ECRHS II programme to facilitate national effort to respond to events of public health concerns by putting in place adequate arrangements to prepare for crisis. EPRP is a form of tool like National Threat and Hazard Identification and Risk Assessment (THIRA) that is used to prioritize and prepare for all form of public health threats. Accordingly, the National THIRA is used to identify threats and hazards to the nation, the potential impacts of those threats and hazards to life and property, and the capabilities needed to address those impacts. Like the THIRA, the ECRHS II activated the District Emergency Prepared and Response Plans which are review and validated for each of the intervention districts. As a best practice district EPRPs are updated every year following analysis of potential hazards most of which are triggered. As noted in the programme logframe, 4 of 5 districts in the north in 2018 (before the new districts became functional) already had EPRP. This was used as a baseline during the launch of the phase II of implementation in 2019.

The evaluation therefore required to ascertain the effectiveness of EPRP implementation across the intervention, by documenting the number of districts that have been active in updating and implementing their plans. It was noted that 5 of the 7 ECRHS II programme intervention districts had updated plans not older than 1 year. This means the 2019 target (5 districts with updated plans) was achieved and 74 percent of target for subsequent years (7 districts) was achieved after phase 2 of implementation). The districts noted to have undated EPRP during the evaluation include Kambia, Port Loko, Bombali, Karene and Tonkolili. Their EPRP activities and results are noted in the matrix

below.

Table 18 : Districts with updated emergency plans

District	Last update	Early warning/ triggers following risk/ hazards analysis	Justification for the early warning/ triggers	Activities	Results
Kambia	2021/2022	High likelihood of Cholera, Haemorrhagic fever, rabies & measles	Historic occurrence of cholera, rabies & measles, EVD outbreak likely to lead to acute viral haemorrhagic fever (VHF), AHF also triggered with lab confirmation of +ve IgM anti-body, cholera also triggered by lab confirmation of Vibio cholera O1 or O139	▪ Formation of EPRP working group ▪ Conduct of simulation exercise ▪ Awareness raising on AHF, Covid-19 & measles ▪ Prepositioning of WASH supplies, Aqua tabs, fuel for emergencies, medical supplies and equipment, IPCs supplies ▪ Fuel for emergency	Very effective. No widespread major outbreak observed. Spread of covid-19 contained
Port Loko	2021/2022	Likelihood of Cholera, COVID-19 & fire disaster	Prevailing occurrence of Covid-19 on the global stage, historic occurrence of cholera, threshold trigger of cholera due to one lab confirmed case, covid-19 triggered due to confirmed lab case, wildfires triggered due to sever prolonged draught with all vegetation dried and slash and burning observed	▪ Formation of EPRP working group ▪ Conduct of simulation exercise ▪ Awareness raising on hazards identified ▪ Prepositioning of WASH supplies, Aqua tabs, fuel for emergencies, medical supplies and equipment, IPCs supplies ▪ Fuel for emergency (at least 2,000 litres)	Very effective. No widespread outbreak/ disaster observed. Spread of covid-19 contained
Bombali	2021/2022	High likelihood of EVD/ Lassa fever and COVID-19	Prevailing occurrence of Covid-19 on the global stage and cases in neighbouring countries, recurrence of EVD expected due to past pandemic, EVD/ Lassa fever triggered due to 1 lab confirmed case with IgM antibody, covid-19 triggered due to confirmed lab case, wildfires triggered due to sever prolonged draught with all vegetation dried and slash and burning observed	▪ Formation of EPRP working group ▪ Conduct of simulation exercise ▪ Popularization of the EPRP via radio discussions and chiefdom-level community meetings ▪ Information sharing and social mobilization on prevention of flooding, acute viral haemorrhagic fevers and covid-19 ▪ Prepositioning of WASH supplies, Aqua tabs, fuel for emergencies, medical supplies and equipment, IPCs supplies Fuel for emergency	Very effective. No widespread major outbreak observed. Spread of covid-19 contained
Karene	2021/2022	Likelihood of Cholera, COVID-19 & fire disaster	Prevailing occurrence of Covid-19 on the global stage and the widespread cases in the country, recurrence of EVD expected due to past pandemic, covid-19 triggered due to confirmed lab case, wildfires triggered due to sever prolonged draught with all vegetation dried and splash and burning observed	▪ Formation of EPRP working group ▪ Conduct of supportive supervision for all PHUs in Karene ▪ Conduct of simulation exercise ▪ Awareness raising on prevention of Covid-19, flooding and wildfire, cats) ▪ Prepositioning of WASH supplies, Aqua tabs, fuel for emergencies, medical supplies and equipment, IPCs supplies Fuel for emergency (at least 2,000 litres)	Very effective. No widespread outbreak/ disaster observed. Spread of covid-19 contained
Tonkolili	2021/2022	High likelihood of EVD and COVID-19	Prevailing occurrence of Covid-19 on the global stage and cases in neighbouring countries, recurrence of EVD expected due to past pandemic, EVD triggered due to 1 lab confirmed case with IgM antibody, covid-19 triggered due to confirmed lab case, wildfires triggered due to sever prolonged draught with all vegetation dried and slash and burning observed	▪ Formation of EPRP working group ▪ Popularisation of the EPRP via radio discussions and chiefdom-level community meetings ▪ Conduct of IP mentorship in all PHUs in the district ▪ Information sharing and social mobilization on prevention of flooding, acute viral haemorrhagic fevers and covid-19 ▪ Prepositioning of WASH supplies, Aqua tabs, fuel for emergencies, medical supplies and equipment, IPCs supplies, infrared thermometers Fuel for emergency	Very effective. No widespread major outbreak observed. Spread of covid-19 contained
Koinadugu/ Falaba	2018/2019 (not updated)	High likelihood of measles, Lassa fever, cholera, VHF, floods/ landslides, political unrest, conflict between cattle herders & farmers	Diseases/ hazards identified have been prevalence in the district for over 10 years killing many inhabitants, negative risk behavior still high around Lassa fever and measles, high risks of extreme climatic events, possibility of unrest during elections.	▪ Prepositioning of non-food items (NFIs), WASH supplies, IPC supplies ▪ Ring vaccination of children at measle affected areas, immediate supply of food and safe drinking water and seeds to affect population ▪ Provision of logistics and equipment ▪ Awareness raising	Not effective. No updated emergency plans. There were outbreaks such as COVID-19, but were contained due to the active IDSR activities.

3.2.1.2 Output 2: Access to sexual reproductive health services in the seven northern districts of Sierra Leone is improved

- Output indicator 2.1: Increased proportion of health services offering at least three FP-methods according to the national programme

No baseline and target were assigned to output indicator 2.1 under component 1 of the ECRHS II programme. It proved very difficult to ascertain progress. The evaluation therefore considered the ECRHS I endline values as baseline. Figure 28 presents the change in proportion of PHUs offering at least 3 modern methods of contraception. The analysis showed 93 percent of PHUs offered at least 3 modern methods of contraception according to national requirement. This revealed an increase in the 2019 baseline value (87%) by approximately 7 percent. Although this change is not statistically significant at 95 percent confidence level, it indicates the effectiveness of the complementary role played by the programme in the supply chain of modern contracepts. There are signs of increase in last mile distribution of contraceptives given the significant increase in the proportion of MCHPs/clinics offering at least 3 modern FP methods from 2019 (70%) to the period under review (2021).

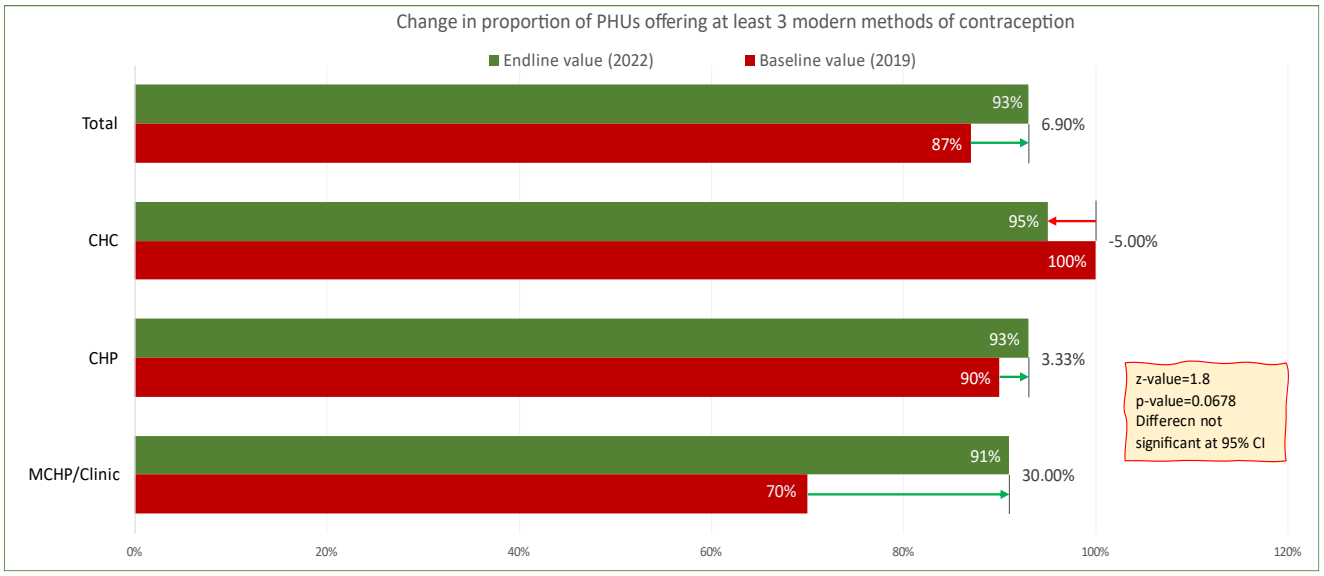


Figure 29: Percent of PHUs offering at least 3 modern methods of contraception by type and facility

Further analyses of the proportion of PHUs offering FP methods by type and district revealed that almost more improvement was made for PHUs in Kambia (100%), Koinadugu (100%), Port Loko (99%), Karene (98%) and Tonkolili (86%) reportedly offered at least 3 modern contraception methods. Interestingly Long-Acting Reversible Contraception (LARC) methods such as implants (90%) and injectable contraceptives (93%) were in high supply. Condom was also available in high quantity (See Table 18)

Table 19 : Proportion of PHUs offering modern contraception methods by type and district

Districts covered	At least 3 modern contraception method offered	Pills	Injectable contraceptives	Implants	IUDs-cupper	IUD-Levonorgestrel	Male condoms	Female sterilisation	Male sterilisation	Others (female condoms, LAM, etc)
Bombali (n=87)	77%	75%	80%	80%	2%	2%	86%	1%	0%	66%
Falaba (n=41)	73%	98%	88%	46%	66%	12%	32%	0%	0%	32%
Kambia (n=67)	100%	100%	100%	99%	12%	61%	100%	0%	0%	93%
Karene (n=59)	98%	85%	93%	100%	24%	3%	98%	2%	2%	76%
Koinadugu (n=49)	100%	100%	100%	100%	20%	4%	96%	0%	0%	88%
Port Loko (n=94)	99%	99%	98%	99%	14%	2%	99%	0%	0%	78%
Tonkolili (n=100)	96%	85%	94%	95%	4%	2%	99%	8%	7%	82%
Total (North=497))	**93%**	**90%**	**93%**	**90%**	**16%**	**11%**	**91%**	**2%**	**2%**	**75%**

Table 20 : Availability of major ECRHS II FP commodities supplied to PHUs across the 7 intervention districts

Districts covered	Combined Oral Pills (COC)-Microgynon	Progestin-only pills (POP)-Microlut	Injectable Contraceptives-Depo Pro	Jadelle-implant (5 years)	Jadelle-Levoplant (3 years)	Injectable-Sayana Press	IUD-Levonorgesterol	IUD-Copper	Condoms
Bombali (n=87)	46%	60%	74%	69%	57%	18%	2%	2%	86%
Falaba (n=41)	95%	78%	88%	37%	4%	22%	12%	66%	32%
Kambia (n=67)	100%	99%	100%	96%	57%	97%	61%	12%	100%
Karene (n=59)	80%	44%	92%	97%	88%	5%	3%	24%	98%
Koinadugu (n=49)	96%	98%	100%	98%	90%	14%	4%	20%	96%
Port Loko (n=94)	93%	98%	98%	99%	99%	7%	2%	14%	99%
Tonkolili (n=100)	63%	65%	93%	94%	39%	2%	2%	4%	99%
Total (North=497))	**78%**	**77%**	**92%**	**87%**	**64%**	**11%**	**11%**	**16%**	**91%**

Meanwhile, there are indications that some PHUs in Bombali and Falaba had limitations in FP commodity supplies. About 23 percent of all PHUs in these districts reported no modern FP service delivery in 2021. A cross section of those PHUs who did not offer modern FP methods are shown in Table 20.

Table 21 : PHUs who did not offer modern FP methods in 2021

Districts covered	PHUs who did not offer modern FP methods in previous year (2021)
Bombali	City Garden Clinic, SLRCS CHP, Hamanda Clinic, Loreto Clinic
Falaba	Serekolia MCHP
Karene	Mabureh Mende MCHP
Port Loko	Rokassa Clinic
Tonkolili	Mayogbor MCHP, Foindu MCHP, Macrogba CHP, Makelleh CHP, Mananie MCHP, Kumrabai Yoni MCHP, Mathoir CHC, Bath Bana MCHP, Bonkababay MCHP, Rochen Kamandao CHC, Masengbeh CHP

Notably adolescent uptake of modern FP methods is high among all FP users documented by age categories. Figure 25 presents the proportion of total FP users in 2021 reported by health facilities during the evaluation exercise. Approximately 31 percent of 122,690 FP clients captured for 2021 were adolescents. Whilst no baseline value was noted by the ECRHS II programme, the 2021 results captured by the evaluation suggests approximately 10 percent increase in the 2019 DHS national average (21.3%) of adolescent (15-19 years) uptake of FP methods. This suggests that the project made significant contributions to national efforts in reducing unwanted teenage pregnancy and aversion of death through abortion. At district level FP uptake among adolescents is relatively high and above the average total (35%) in Falaba (51%), Karene (41%) and Tonkolili (41%) districts.

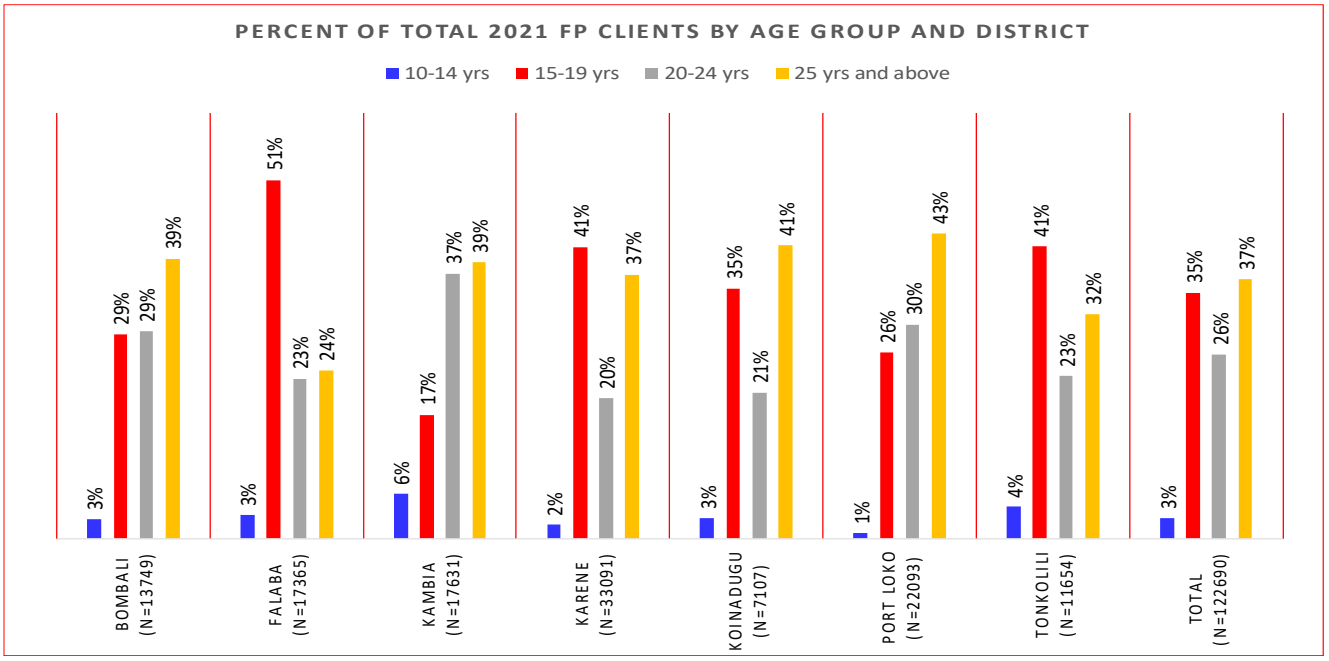


Figure 30: Percent of total FP clients by age in the ECRHS II programme districts

The PHUs in the project districts demonstrated strong capacity to handle LARC methods. Close to 100 percent of the 497 PHUs assessed agreed to have the expertise and equipment to carry out critical FP methods, and this showed consistency across all levels of PHUs. As presented in Figure 30 approximately 99 percent and 97 percent respectively have staff with the expertise to insert and remove implants- which shows that the project made significant efforts to build the capacity of targeted PHUs, while focusing on increased supplies of LARC.

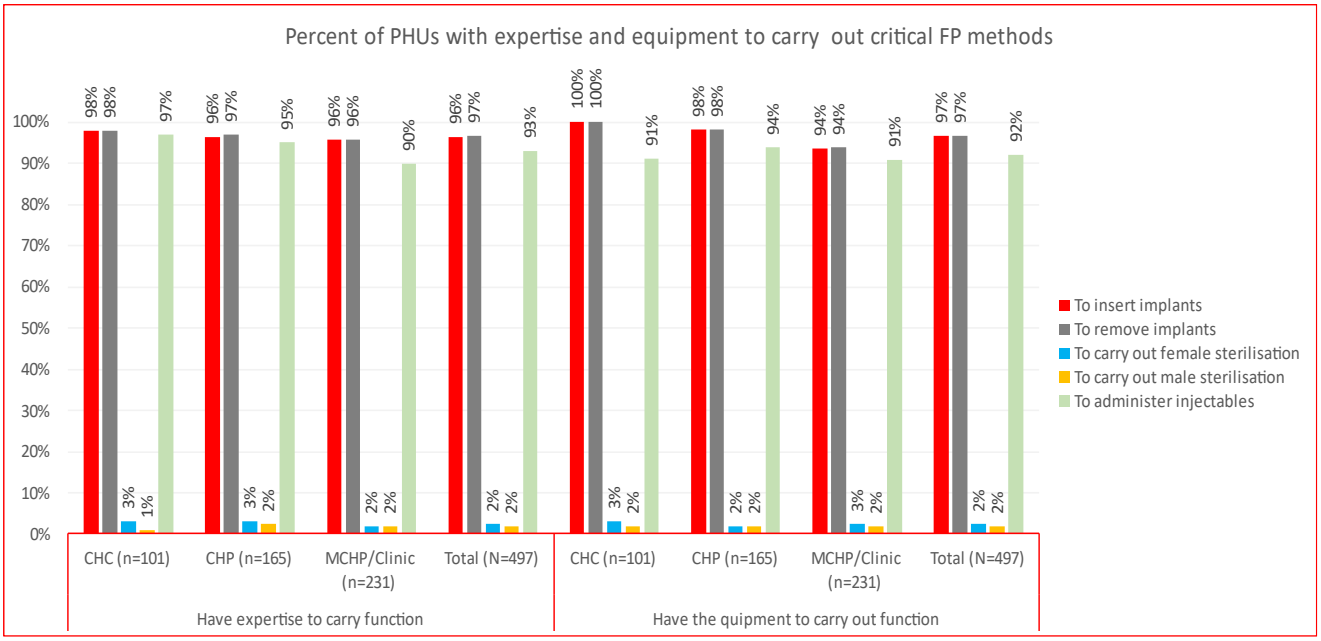


Figure 31: Percentage of PHUs with expertise and equipment to carry out critical FP methods

The evaluation noted a relatively high proportion of PHUs with stocks of key LARC instruments and supplies particularly for implants including Jadelle, Sino-plant/Levoplant and Implanon. Generally, approximately 63 percent and 54 percent of PHUs assessed were respectively noted to have reusable straight curved and sponge-holding forceps. Also, 56 percent of PHUs reportedly have reusable needle holder. Meanwhile, these stocks were mostly available at CHCs than either CHPs or MCPHs. In spite of this relatively high supplies, it could be noted from physical assessment that reasonable proportions of these equipment were not functional, whilst stock out was also high for some types of LARC methods. In particular, stockout of key LARC medical instruments was relatively high for IUD implants. Approximately 83 percent and 79 percent of PHUs reported stockout of UID removal forceps and string removal respectively. In addition, there was stockout of uterine tenaculum forceps for IUD insertion in approximately 85 percent of 497 PHUs assessed. Medical (especially disposable) supplies were noted to be in limited quantity across PHUs in the ECRHS II intervention districts. (See Table 22)

Table 22 : Proportion of PHUs reporting functional LARC medical instruments

LARC medical instruments	Have the LARC medical instruments and supples in good order			
	CHC (n=101)	CHP (n=165)	MCHP/Clinic (n=231)	**Total (N=497)**
For all methods				
[1] Cup/bowl/galipot (reusable)	81%	72%	61%	**68%**
For implants (Jadelle, Sino-plant/ Levoplant, Implanon,)				
[1] Straight sponge-holding forceps (reusable)	73%	53%	47%	**54%**
[2] Curved forceps (reusable)	80%	67%	53%	**63%**
[3] Graduated handle scalpel (reusable)	36%	26%	23%	**26%**
[4] Trocar (dispensable)	43%	24%	35%	**33%**
[5] Sims uterine Sound (reusable)	16%	6%	4%	**7%**
[6] Curved Mayo operating Scissors (reusable)	35%	25%	23%	**26%**
[7] Needle holder (reusable)	60%	44%	54%	**56%**
[8] Small or Army-Navy retractor (reusable)	14%	5%	7%	**8%**
[9] curved Tonsil scissors (reusable)	22%	21%	14%	**6%**
[10] NSV ringed clam forceps (reusable)	16%	13%	3%	**9%**
[11] NSV dissecting forceps (reusable)	22%	17%	10%	**15%**
For Implants (IUDs)				

[1] Alligator Jaw IUD removal forceps	25%	16%	14%	**17%**
[2] IUD string removal	30%	18%	19%	**21%**
[3] Shroeder-Braum uterine tenaculum forceps (for IUD insertion	22%	11%	14%	**15%**
[4] Medium sized Graves vaginal speculum (reusable)	36%	18%	13%	**19%**
[5] Straight uterine dressing forceps (reusable)	33%	22%	23%	**25%**
For female sterilisation				
[1] Standard dressing forceps (for female sterilisation)	27%	13%	9%	**14%**
[2] Delicate pattern tissue forceps (for female sterilisation)	13%	8%	7%	**9%**
[3] Straight artery forceps (for female sterilisation)	28%	13%	16%	**17%**
[4] Delicate intestinal forceps (for female sterilisation)	13%	3%	2%	**3%**
LARC medical supplies (ex				
[1] Soap and water or antiseptic agents (for hand washing or surgical scrub)	83%	73%	71%	**74%**
[2] Sterile gloves	59%	55%	42%	**50%**
[3] iodine (as an antiseptic)	56%	37%	32%	**39%**
[4] Sterile drape	44%	17%	27%	**27%**
[5] exam gloves	57%	47%	49%	**50%**
[6] Sterile gauze sponges	52%	42%	36%	**41%**
[7] Drapes (to cover client's thigh)	28%	5%	12%	**13%**
[8] Bleach to prepare decontamination solution)	43%	32%	28%	**32%**
[9] Drape (for packing instruments)	36%	35%	23%	**29%**
[10] Scalpel blade	39%	27%	22%	**27%**
[11] Small sterile towel (for hand drying after surgical scrub)	35%	16%	18%	**21%**
[12] Sterile surgeon gown	25%	7%	6%	**10%**
[13] cap and face mask	52%	40%	33%	**39%**
[14] client's gown	27%	5%	6%	**10%**
[15] 5 ml syringe with 1.5 inch needle	55%	46%	54%	**52%**
[16] Safety Box	88%	88%	80%	**84%**
[17] Adhesive tape (for positioning the penis)	19%	12%	18%	**16%**
[18] Chromic Catgut or cotton suture (for ligation)	24%	13%	17%	**17%**
[19] Pain management supplies and drugs	61%	48%	47%	**50%**

Contribution analysis (as claimed by PHUs) revealed that, the ECRHS II programme directly covered 23 percent of all PHUs across the seven intervention districts with supplies of FP commodities mostly Jadelle, Sino-plant/Levoplant, Depo Provera, Savana Press, Microgynon, Microlut, I-pills. Oral pills and condoms. This means over the course of implementation, FP coverage by the project was over I44 health catchment areas in 6 of the 7 intervention districts (Bombali, Kambia, Falaba, Karene, Koinadugu and Tonkolili). Other institutions that largely complemented MOH efforts in FP commodity supplies across the 7 northern districts include Marie Stopes (28%) and UNFPA (14%). (See Table 23)

Table 23 : Contribution analysis on FP commodity supplies

Institutions contributing to supplies of FP commodities	% contribution	FP commodities mostly supplied	Districts covered
CARE	23%	Jadelle, Microgynon, Microlut, Levoplant, condoms, Depo Provera, I-pills/ oral pills, Savana Press	Bombali, Kambia, Falaba, Karene, Koinadugu, Tonkolili
Marie Stopes	28%	Jadelle, IUD, Microgynon (COC), Microlut (POP), Levoplant, condoms, Depo Provera, I-pills/ oral pills, Savana Press	Bombali, Kambia, Falaba, Karene, Koinadugu, Tonkolili , Port Loko
Ministry of Health	92%	Implants, IUD, COCs, Microlut POPs, condoms, injectable contraceptives, emergency pills	Bombali, Kambia, Falaba, Karene, Koinadugu, Tonkolili , Port Loko
UNFPA	14%	Implants, IUD, COCs, Microlut POPs, condoms, injectable contraceptives, emergency pills	All 7 project districts but mostly Falaba, Karene, Koinadugu and Kambia
Others (GOAL, ICAP, SLRC, UNICEF, Hellen Keller)	1%	Microlut, Depo Provera, Condoms, Pills	Kambia, Bombali

- Output indicator 2.2: Proportion of men (>15)/ women (15-49) knowing at least 3 modern FP-methods

The evaluation noted that the project failed to popularize different options of modern FP methods in the awareness raising efforts on FP uptake. Although more than one-half (54%) of 2,965 respondents demonstrated knowledge of at least 3 FP methods, it questions the level of understanding of the availability and use of different modern FP methods in the ECRHSII intervention districts. About 46 percent of the population in the ECRHSII intervention districts lacked knowledge of the different modern FP methods. However, gender analysis proved that knowledge of different modern FP methods is more pronounced among women (60%) than men (43%) in the intervention districts. Meanwhile, no baseline values and targets were available to ascertain any progress in efforts to increase knowledge on the various modern FP methods in the intervention districts.

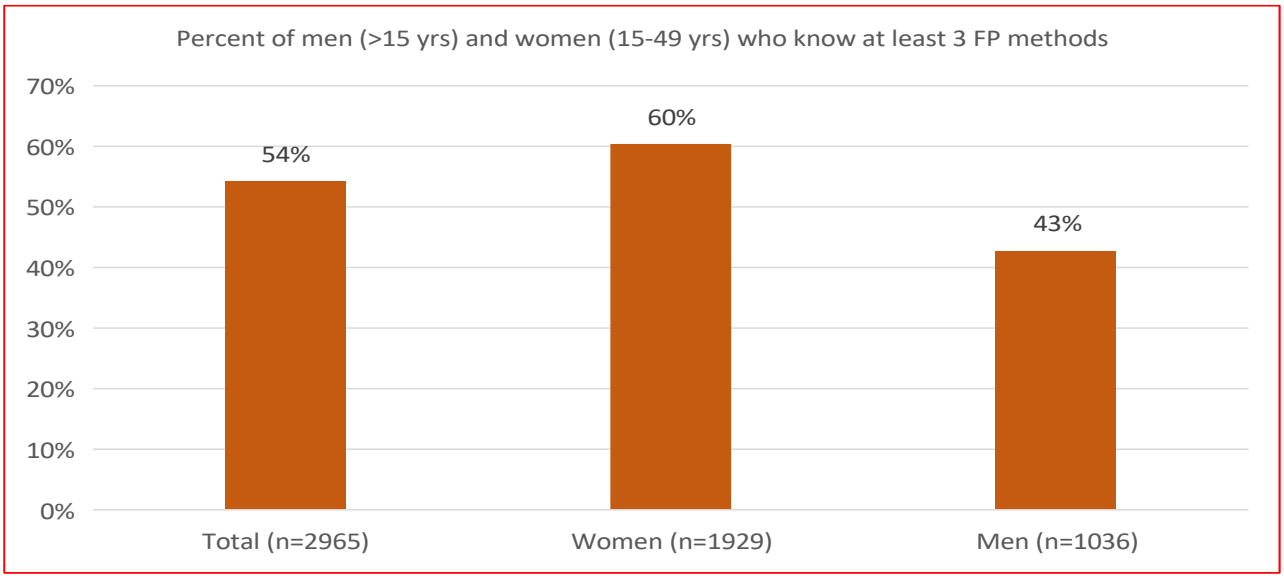


Figure 32: Proportion of men (>15) / women (15-49) knowing at least 3 modern FP methods

- Output indicator 3.3: Percentage increase in number of women aged 15-49 who make their own informed decisions regarding contraceptives use

The percentage of women in reproductive age (15-49 years) who make their own informed decision regarding contraceptives use improved significantly during the implementation period in the intervention districts. As shown in Figure 32 target set for this indicator was achieved and exceeded by 65 percent. Besides the outstanding achievement of the project's target, the evaluation suggests that the situation regarding proportion of women who make informed decisions over contraceptives use before project inception almost doubled at the end implementation. District level analysis showed mixed results regarding informed decision making around contraceptives use. Whilst the results are significantly high in Koinadugu (84%), Karene (80%), and Falaba (74%), the proportion of those women in reproductive age who make informed decision-making regarding contraceptives use was extremely low in Kambia district (34%).

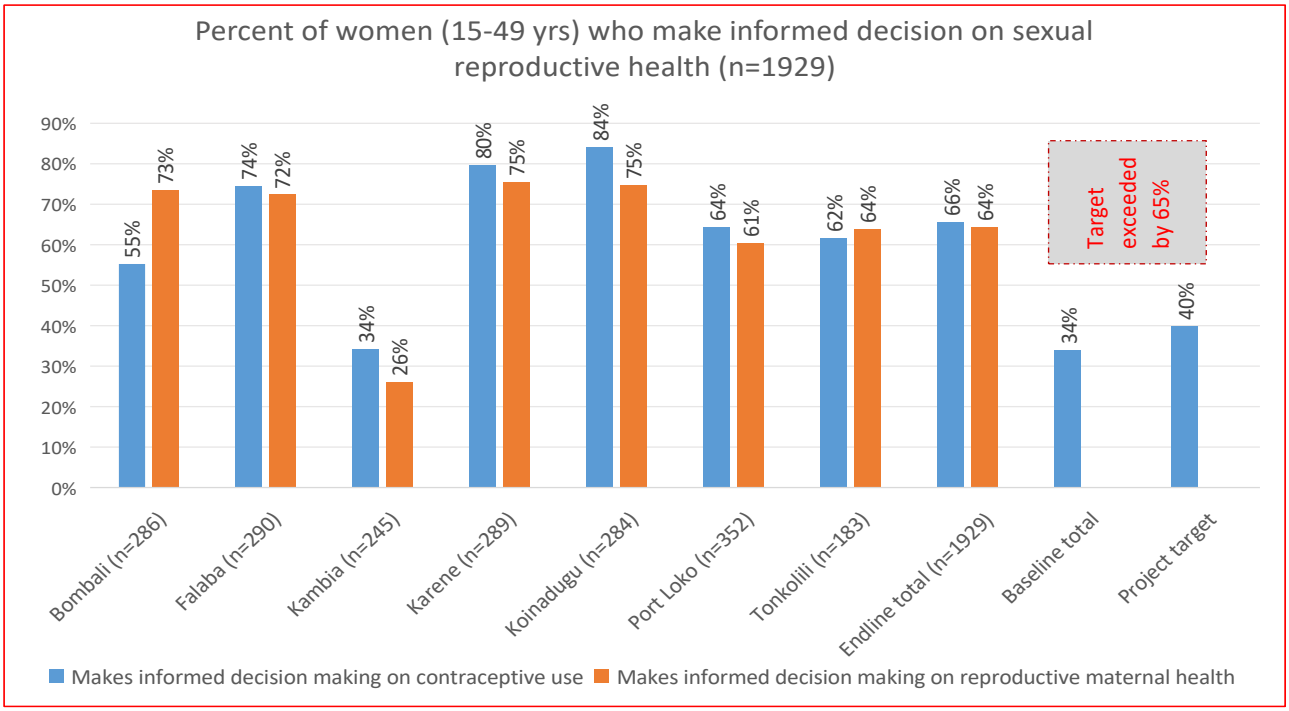


Figure 33: **Percentage of women aged 15-49 who make their own informed decisions regarding use of contraceptives**

Choices of information on modern contraception methods was also analysed by the evaluation. These include proportion of women in reproductive age who received information on a) where to get modern contraceptives, b) how to use modern contraceptives and c) side effects of and alternatives to various methods. There were indications that efforts to spread information on contraceptives use had a wider reach across the 7 intervention districts. Accordingly, 75 percent of women in reproductive age have been reached with information on where to get contraceptives. However, the proportion of those who were reportedly informed about use of modern contraceptives and their side effects was relatively lower. On average approximately 63 percent of women received all three choices of information on contraceptives use.

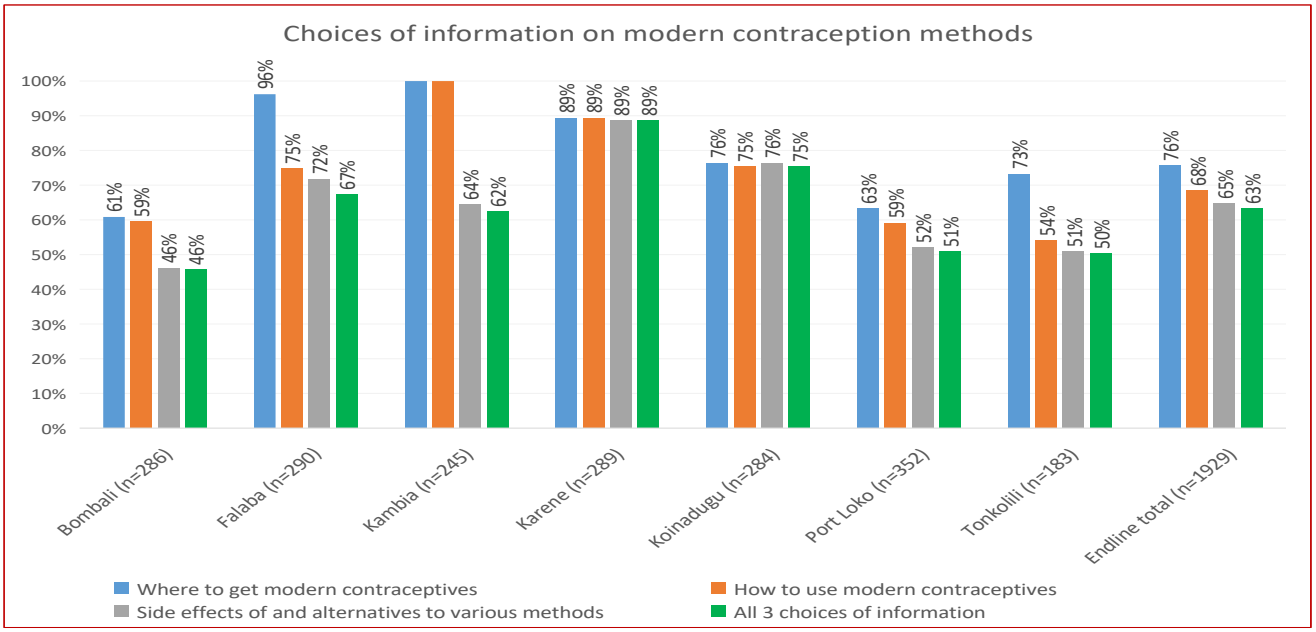


Figure 34: Choice of information on modern contraception methods

Access to acceptable contraception methods was analysed as a proxy indicator to proportion of women with demand satisfied for contraceptives use. Whilst the evaluation results showed that fewer women in reproductive age (45 percent) visit the FP units at health facilities, it was noted from respondent's perception that the units are largely providing contraception methods they prefer. As shown in Figure 34, 78 percent of women who reportedly visit FP units at health facilities claimed the facilities to have provided contraception methods of their choice. Similar result was observed across all intervention districts, except Port Loko district where about 54 percent of women interviewed claimed the FP units do not provide contraception methods of their choice.

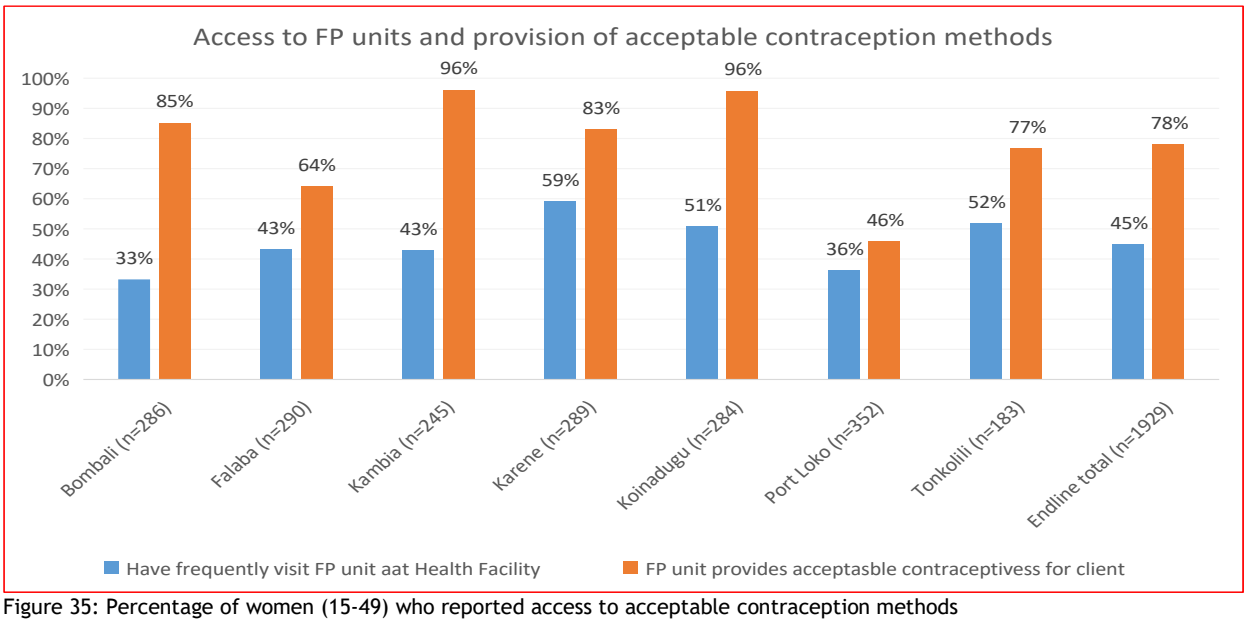


Figure 35: Percentage of women (15-49) who reported access to acceptable contraception methods

3.2.2 Intermediate results/ Output level achievement for component 2

Achievement of intermediate results/outputs for component 2 of the ECRHS II project are discussed under five sub-headings. Mostly the results were generated from the project's MEAL data.

3.2.2.1 Output 1: Government capacity for coordination and the COVID-19 response reinforced

- Output indicator 1.1: Number of joint visits conducted

Joint visits were carried out either as joint monitoring visits or supportive supervision visits. Notably these visits were done either quarterly or bi-annually during the COVID-19 response. Accordingly, the major outputs of the joint supportive supervision and the Integrated Supportive Supervision Visits (ISSV) included a) training, mentorship and coaching to health facility staff to improve service delivery on WASH/IPC, detection of COVID-19 and staff protection, and rapid verification of reported data and FP services, and b) Assessing managerial, technical capacity and performance of health facilities including PHUs and hospitals. Specifically, the ISSV was done to identify gaps, and also provide proper support to improve performance in the implementation of health service delivery. Joint monitoring visits and surveillance exercise (by District Council, DHMT and Ministry of Social Welfare) were further done especially to border communities (in Karene, Kambia and Port Loko districts) during the COVID-19 response. These joint monitoring visits were reportedly done to educate community members on the existence of the COVID-19, agitate on compliance with IPC measures, discourage disbeliefs and myths around the virus, as well as evaluate the health concern on the fight against the pandemic Knowledge, handwashing facilities in public places, use of face mask, Information Education and Communication of COVID-19, presence of surveillance officer in the area etc) for onward action.

According to the project design, 826 visits were initial expected over the course of implementation. The MEAL report showed that a total of 761 visits were done- that is over 92 percent of the target was achieved and could therefore be regarded as an outstanding project performance. (See Figure 35)

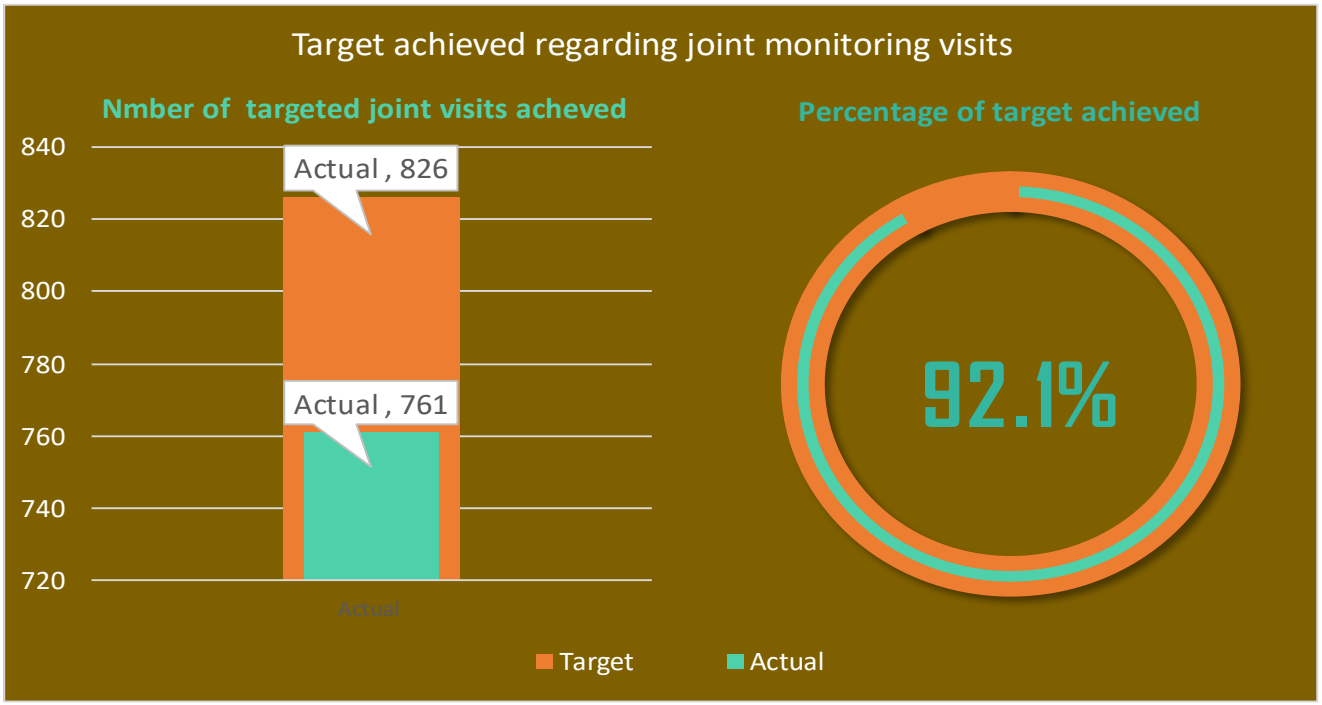


Figure 36: Achieved target regarding number of joint visits

The extent to which the target on joint visits was achieved was part of the effective ways the programme was strategically placed to respond to the COVID-19 pandemic, whilst ensuring quality service delivery on SRH/RH, and compliance with IPC and other SOP guidelines was maintained during the response.

Table 24 : Description of joint visits condcted during COVID-19 response

Joint monitoring/ supportive supervision activities done	Description of coverage	Results
Training, mentorship and coaching to health facility staff to improve service delivery on WASH/IPC, detection of COVID-19 and staff protection, rapid verification of reported data and FP services.	In quarter 6 (April – June 2020),158 PHUs and hospitals routinely visited (20 in Bombali, 12 in Karene, 50 in Koinadugu and 43 in Falaba districts) In quarter 7 (July– September 2020), a total of 32 PHUs and hospitals routinely visited (17 in Koinadugu and 15 in Falaba districts)	Improved quality of service delivered including FP services, compliance with IPC protocols and other SOPs guidelines on COVID-19 and reporting of cases and rapid verification of data reported.
Assessing managerial, technical capacity and performance of health facilities including PHUs and hospitals. Also done to identify gaps, and also provide proper support to improve performance in the implementation of health service delivery.	In quarter 6 (April – June 2020), 102 PHUs and hospitals in Kambia covered by DHMT staff and the Directorate of Drugs and Medical Supplies (DDMS) during an Integrated Supportive Supervision Visit (ISSV) conducted for 7 days. In quarter 7 (July– September 2020), 64 PHUs and hospitals in Kambia covered by DHMT staff and Central Medical Stores (CMS) during an Integrated Supportive Supervision Visit (ISSV) conducted for 7 days in Kambia district.	Improved staff performance and health service delivery
Joint monitoring visits (by District Council, DHMT and Ministry of Social Welfare) to 29 border communities and surveillance exercises	Between July-September 2020, a total of 29 communities (7 in Karene, 11 in Kambia and 11 in Port Loko districts) were covered during the joint monitoring visits. These communities were covered to to educate community members on the existence of the COVID-19, agitate on compliance with IPC measures, discourage disbeliefs and myths around the virus, as well as evaluate the health concern on the fight against the pandemic.	

3.2.2.2 Output 2: Increasing supply of essential PPE and IPC supplies and enhancing the capacity of health workers to respond safely to COVID-19

- Output indicator 2.1: Number of IPC and PPE kits provided to meet needs of health facilities

One of the expected results of the joint supportive supervision is increased compliance with IPC protocols and other SOP guidelines on COVID-19. The monitoring and coaching on PPE handling had followed increased supplies of IPC/PPEs during the response. Accordingly, the project intended to provide supply of PPE and IPC kits for 500 health facilities with an expected reach to at least 2,500 health workers (750 men, 1,750 women) during the first 3 months of the COVID-19 response. Meanwhile, these targets were not captured in the project's monitoring and evaluation framework. In terms of supplies, the PHUs agree that demands were met during the initial stages of the response. Key items provided by the project include alcohol-based hand sanitizers (200 cartoons), liquid soap (300 cartoons), powder soap (300 cartoons), disposable gloves (600 boxes), PPE (750 sets), and disposable face mask (300 boxes). However, the evaluation noted that sustainability of these supplies was questionable. As at the time of the assessment, 88 percent of 497 PHUs assessed in the seven operational districts in the north complained about the inadequacy of IPC/PPE supplies. Only 8 percent and 4 percent respectively agreed that supplies have remained the same or have increased. In other districts covered by the CPR project such as Bo, 76 percent of 137 PHUs also argued that less supplies of IPC/PPE have been made available compared to the initial stage of the pandemic. (

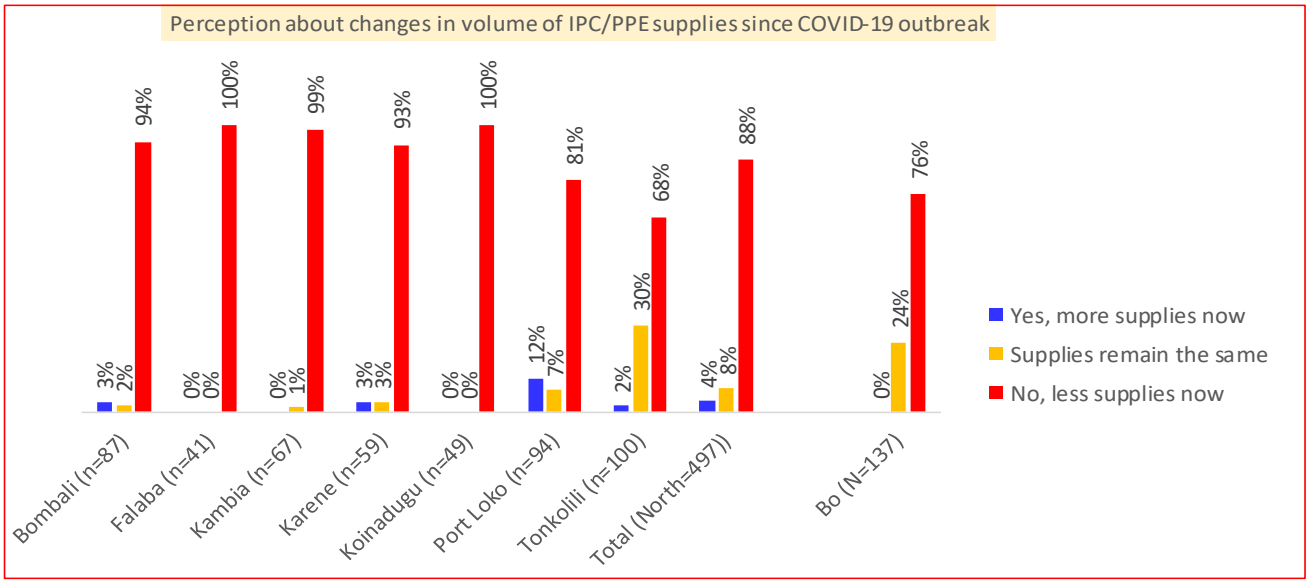


Figure 37: Perception about changes in volume of IPC/PPE

Tabe 25 presents the proportion of PHUs reporting availability of stock of key IPC/ PPE supplies in the 8 CPR project districts. Overall, more than half the number of PHUs assessed (56%) reported availability stockout of an IPC or PPE supply. At district level, availability of stock of IPC/PPE supply was markedly higher in Kambia (81%), and Port Loko (79%) districts than in all other districts.

Table 25 : Percentage of PHUs reporting stockout of IPC asnd PPE supplies

Stock of IPC and PPE supplies available	Bombali (n=87)	Falaba (n=41)	Kambia (n=67)	Karene (n=59)	Koinadugu (n=49)	Port Loko (n=94)	Tonkolili (n=100)	Total (North=497)	Bo (N=137)
[1] Protective boots	44%	100%	24%	63%	18%	68%	30%	47%	34%
[2] Surgical masks	41%	100%	90%	75%	20%	78%	12%	56%	58%
[3] Utility gloves and/or sterile gloves/ gloves for latex examination	38%	44%	21%	56%	27%	96%	20%	48%	69%
[4] Face shields	34%	98%	97%	78%	41%	60%	23%	56%	61%
[5] Alcohol-based disinfectant	54%	51%	96%	59%	51%	77%	20%	57%	60%
[6] Water for hand washing with soap or ash or sand	95%	49%	96%	75%	43%	95%	51%	75%	94%
[7] Decontamination/puncture proof sharp containers	95%	66%	96%	71%	27%	97%	40%	72%	83%
[8] Metal rubbish bins with cover	91%	63%	94%	54%	59%	98%	10%	67%	86%
[9] Bleach/antiseptics/chlorine	59%	63%	94%	54%	14%	62%	3%	48%	48%
[10] Running water in delivery/labour room with soap	38%	17%	84%	25%	33%	43%	15%	37%	52%
[11] Provision of linen for patient	33%	17%	84%	41%	10%	84%	20%	44%	64%
[12] Incinerator/burial pits	71%	46%	96%	73%	16%	94%	60%	69%	67%
Average	**58%**	**60%**	**81%**	**60%**	**30%**	**79%**	**25%**	**56%**	**65%**

Additional findings from the evaluation, however, proved that availability of PPE/IPC remains a bottleneck across the districts covered by the CPR project. For instance, even PHUs that registered high availability also reported inadequacy as per their staff capacity. As shown in Table 26, an approximated 74 percent of PHUs in Port Loko district and 63 percent in Kambia district argued that IPC/PPE kits are not adequate to meet their staff capacity.

Table 26 : Percentage of PHUs reporting adequacy of PPE and IPC kits supplied

District covered	% of PHUs who reported adequacy of PPE & IPC kits supplied		IPC & PPE showing regular stock out
	Adequate per staff capacity	Not adequate per staff capacity	
Bombali (n=87)	9%	91%	Utility gloves, facemasks, disinfectants, apron
Falaba (n=41)	12%	88%	Utility gloves, protective boots, facemasks, disinfectants
Kambia (n=67)	37%	63%	Utility gloves, protective boots, facemasks
Karene (n=59)	22%	78%	Utility gloves, Apron, bio-hazard plastics, facemasks, and sanitizer, liquid soap
Koinadugu (n=49)	20%	80%	Gloves, plastic aprons, facemasks, sanitisers,
Port Loko (n=94)	26%	74%	Gloves, apron/ gown, liquid soap, sanitisers
Tonkolili (n=100)	12%	88%	Utility gloves, antiseptics/ disinfectants
Total (North=497))	20%	80%	
Bo (N=137)	9%	91%	Utility gloves, aprons, protective boots, liquid soap, sanitisers

Average stockout of IPC/PPE kits was also relatively high considering that all health facilities require uninterrupted IPC/PPE supplies. As presented in Figure 37 approximately 44 percent of 497 PHUs assessed reported stockout of critical IPC/PPE supplies. Districts show high proportion of PHUs reporting stockout of IPC/PPE supplies in the 7 northern districts include Tonkolili (75%) and Koinadugu (70%). In Bo district, 35 percent of the 137 PHUs assessed reported stockout of IPC/PPE supplies. Critical IPC/ PPE supplies reportedly showing stockout across all PHUs include utility gloves, protective boots, disinfectants, apron, face masks, sanitizers and liquid soap.

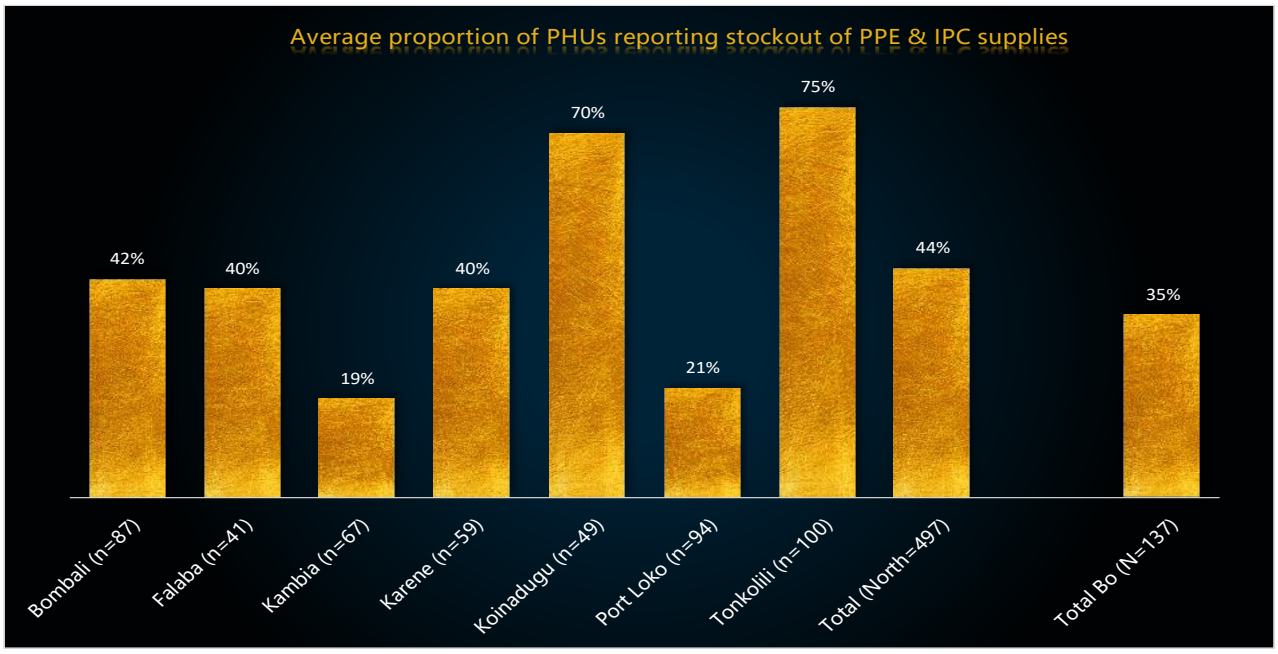


Figure 38: Proportion of PHUs reporting stockout of the PPE and IPC supplies

Availability of running water facilities which serve as an essential component of IPC measures was also captured by the evaluation. Notably, although no baseline value was suggested, the evaluation noted a relatively low proportion of PHUs in the ECRHS project districts. Only 37 percent of 497 PHUs have water reticulation system, 41 percent have protected water well with submersible pumps and solar power and 14 percent have borehole with solar power. Meanwhile, the proportion of PHUs with storage tanks was relatively high- with 64 percent (318) of 497 PHUs have storage tanks with an average capacity of approximately 5,968 litres. However, the assessment results revealed that most facilities were not functional are not functional considering that only 9 percent have piped water supply. In Bo district, availability of running water facilities was even lower. Only 28 percent (67) of 137 PHUs assessed have water reticulation system, 8 percent (11) have protected water well with submersible pumps and solar power and 14 percent (19) have borehole with solar power and 12 percent (15) have piped water supplies. In addition, 49 percent (67) of the 137 PHUs assessed in Bo district have water storage tanks with and average capacity of 5,857 litres. (See Figure 38)

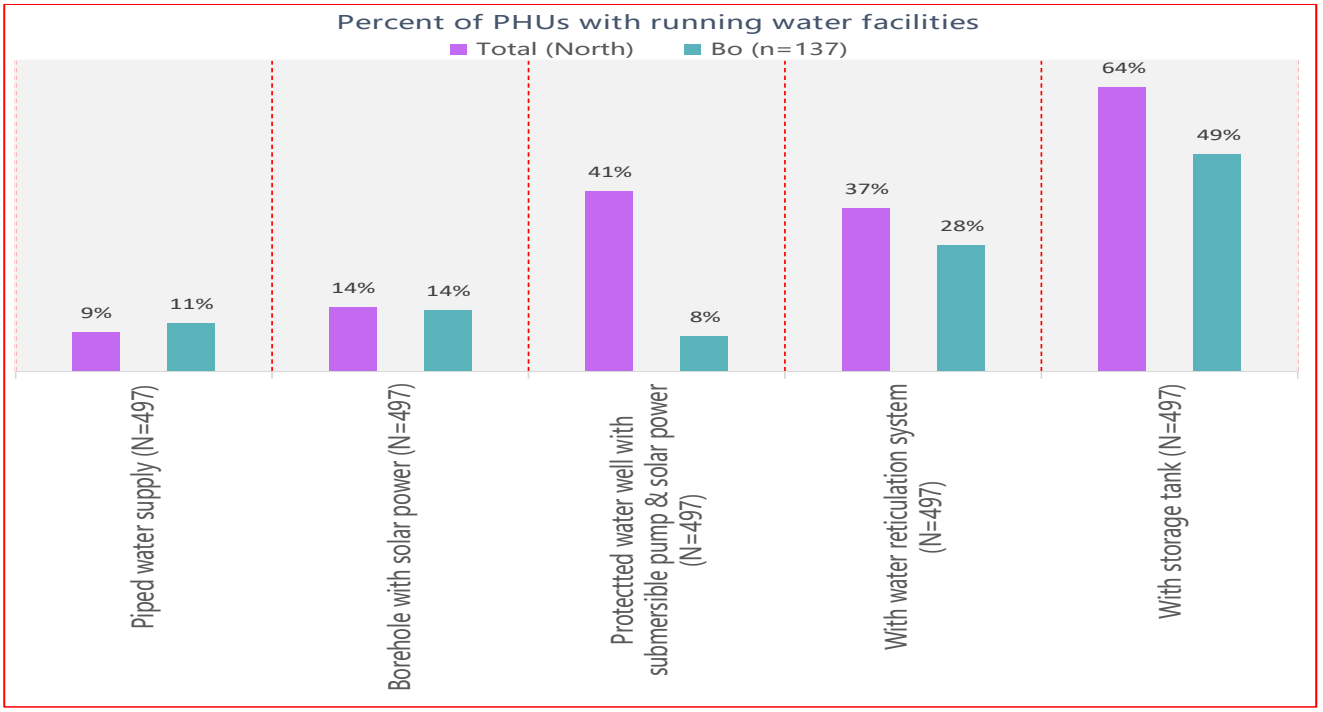


Figure 39: Proportion of PHUs with running water facilities

3.2.2.3 Output 3: Support district health structures to monitor for, identify, trace and refer cases of COVID-19

- Output indicator 3.1: Number of health workers trained in integrated COVID-19 case management, surveillance and IPC

As noted in foregoing discussions, key among the objectives of the joint supportive supervisions were training and coaching to health facility staff to improve on service delivery on early detection of COVID-19 and staff protection and WASH/IPC. The project was expected by the end of the training exercises a total of 500 PHU staff would have acquired adequate knowledge on IPC protocols, COVID-19 case definition, case detection and early reporting. The total number of 2,179 PHU staff recorded from 497 PHUs across the seven (7) ECRHS II intervention districts. According to PHU records, at least 910 (42%) of 2,179 PHU staff in 497 PHUs have been reportedly trained in a) SOP for handling of infectious waste (910), b) integrated COVID-19 case management (1,006), c) integrated disease surveillance and reporting (942) and d) infection prevention and control (996). This data suggests that the CPR project (component 2) contributed to at least 55 percent (500) to staff training around COVID-19 case management, surveillance and IPC across the 7 intervention districts in northern Sierra Leone. (See Figure 39)

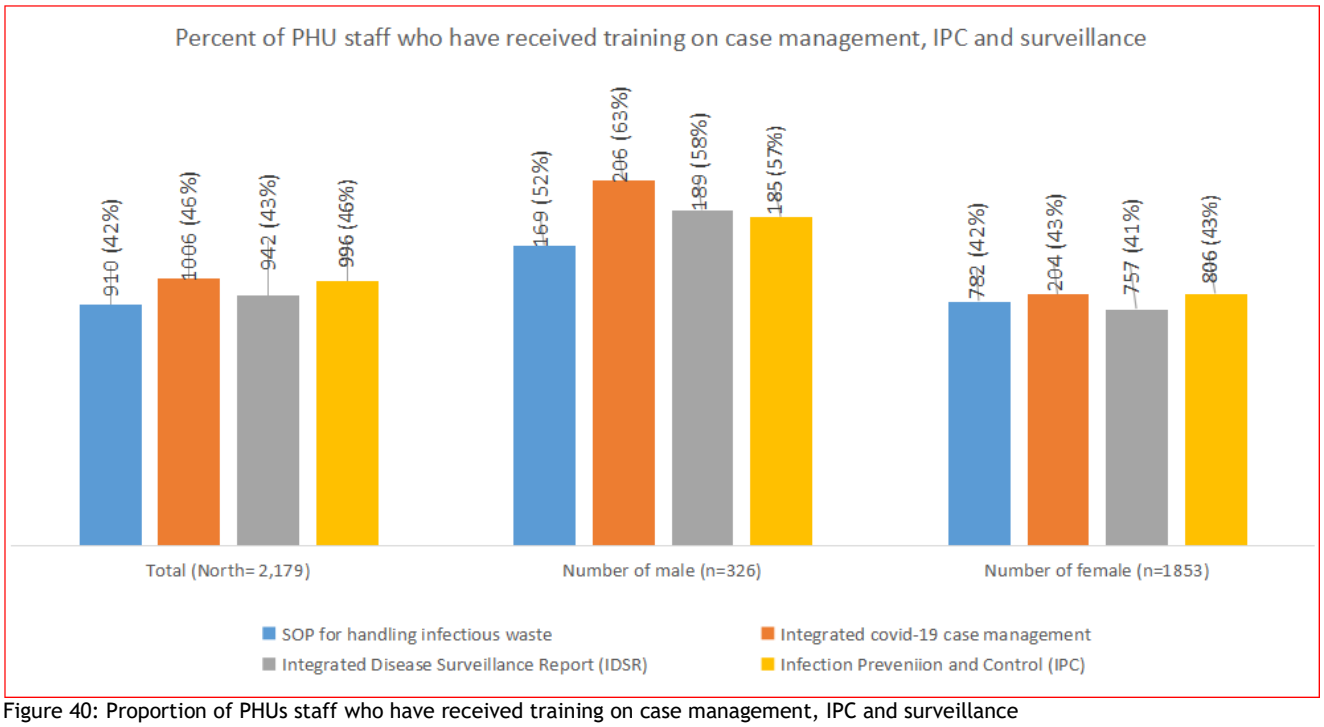


Figure 40: Proportion of PHUs staff who have received training on case management, IPC and surveillance

3.2.2.4 Output 4: Mitigate and prevent the most harmful coping strategies of economically vulnerable households in response to COVID-19

- Output indicator 4.1: Number of households reached with multi-purpose cash assistance)

Multi-purpose cash assistance (MPC) for community and household resilience has been exhaustively discussed at impact level of component 2 of the ECRHS II programme. The project has been highly effective regarding efforts to reduce the use of negative coping strategies among beneficiary households in selected districts including Port Loko, Bo, Kenema and Western Area districts. The project was expected to cover a target of 2,000 households (500 households in each of the 4 selected districts). The actual results showed that 100 percent of the targeted households were reached- and further suggests that 10,000 individuals (including 2,450 men, 2,550 women, 2,440 boys and 2,560 girls) were indirectly reached with the multi-purpose cash transfer.

- Output indicator 4.2: Number of women who received mama-baby kits upon delivery at health facilities

The CPR project was expected to target a total of 1,730 women with Mama-Baby kits. The evaluation however noted that only 63 percent (1,090) of this target (as shown in Figure 40) was achieved at the end of implementation in 2021.

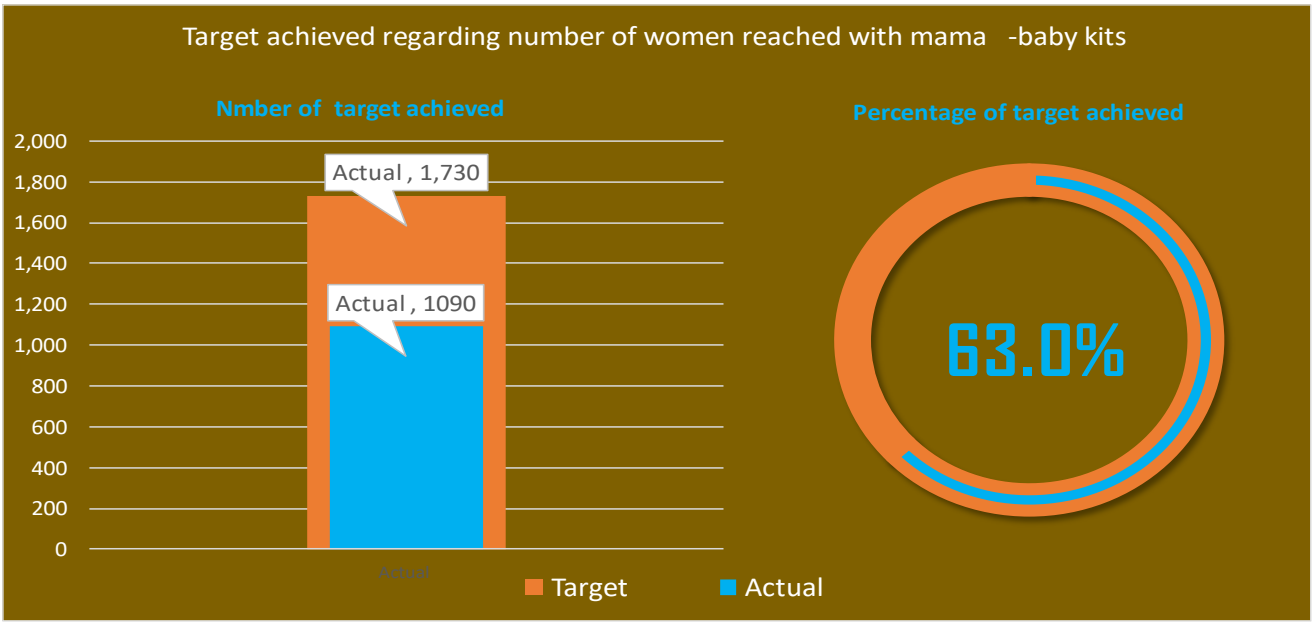


Figure 41: Percentage of target achieved regarding number of women reached with mama-bay kits

Whilst the achievement observed appeared to be moderate using the colour code in the methodology section, the project proved to be very effective and impactful regarding activities around the Mama-Bay kits initiative across the intervention areas. Notably the Mama-Baby Kits initiative was scaled-up during the COVID-19 response to encourage health seeking behaviours, prevent further drop in facility deliveries and enhance community trust in health facilities. The kits were specially provided to women who deliver at the health facility.

About the contents of Mama-Baby Kits

The contents of the mama-baby kits distributed under the CPR project aligns with the contents of similar kits distributed by UNFPA during the same period in Freetown municipality. Each kit provided by the project was costed at 500,000 old Leones. The contents of each kit include the following:

- Washing detergent
- 2 yards of fabric for mother
- Bathing/ hand soap and towel
- Baby soap, baby wash, cloth, and baby towel to keep baby clean.
- Face mask for mother's protection
- Baby hat, baby outfit, baby blanket, and baby wrapper to keep baby warm and comfortable.
- Baby wipes and diapers

3.2.2.5 Output 5: Equitable access to and ability to engage with life-saving and critical information communities need to protect themselves and others from COVID-19

- Output indicator 5.1: Percent of community members reached by social mobilisers correctly identifying methods of COVID-19 transmission

Percentage of members interviewed from communities targeted by the project during the COVID-19 response who demonstrated risk minimizing behaviour was considered as an overall composite indicator that includes knowledge of methods of transmission and prevention of COVID-19. The five risk minimizing behaviours captured in the analysis include a) covering mouth or nose when coughing/ sneezing, b) alerting emergency centers after observing any signs and symptoms of COVID-19, c) Trusted in the COVID-19 protection measures by the government, d) Trusted in COVID-19 and vaccine messages and d) demonstrating positive behaviours towards at least 3 measures to prevent

the spread of COVID-19. Notably, the target set for percent of community members who demonstrated at least 4 of these 5 risk-minimizing behaviours was 70 percent (see Figure 41). The evaluation findings suggest that this target was achieved and exceeded by 19 percent. Specifically, almost all community members (99%) interviewed who demonstrated positive behaviours towards at least 3 measures to prevent the spread of COVID-19. These findings proved the effectiveness of community engagement activities on COVID-19 transmission and prevention in the project intervention areas.

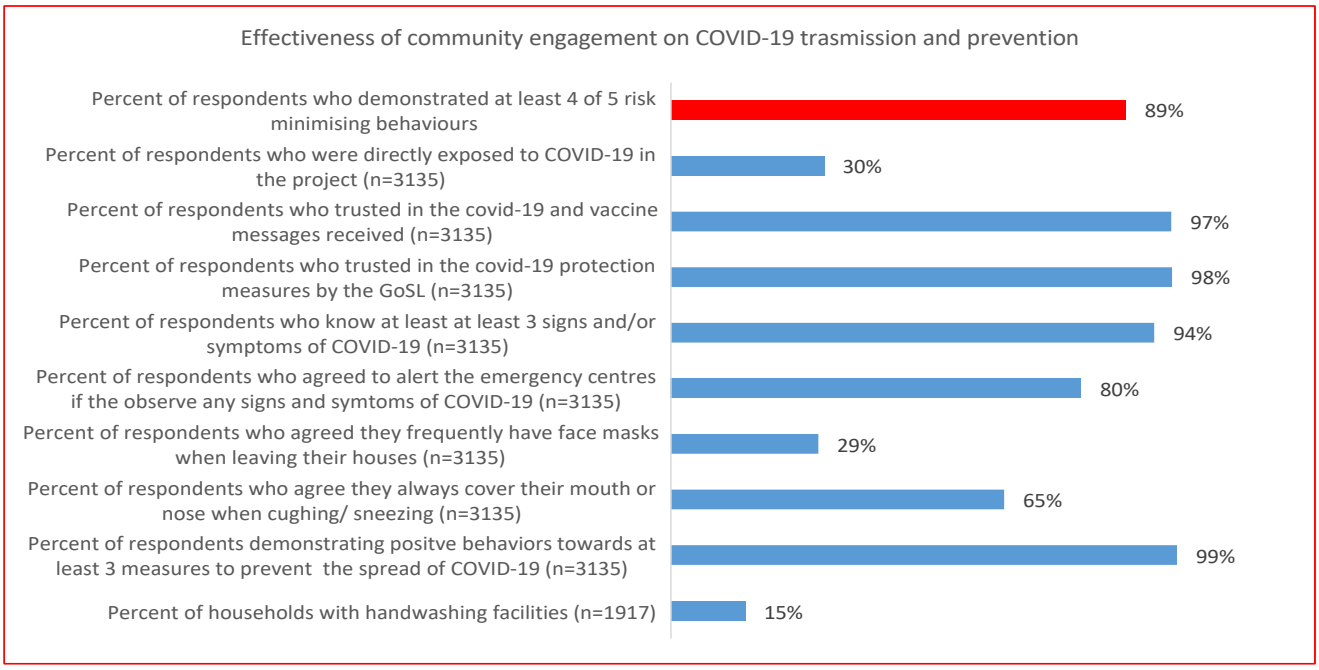


Figure 42: Effectiveness of community engagement on COVID-19 transmission and prevention

Achievement made regarding efforts to promote WASH across the project intervention districts was observed to be encouraging. As presented in Figure 42, approximately 92 percent of 1,917 households interviewed reportedly have access to improved drinking water source and toilet facilities.

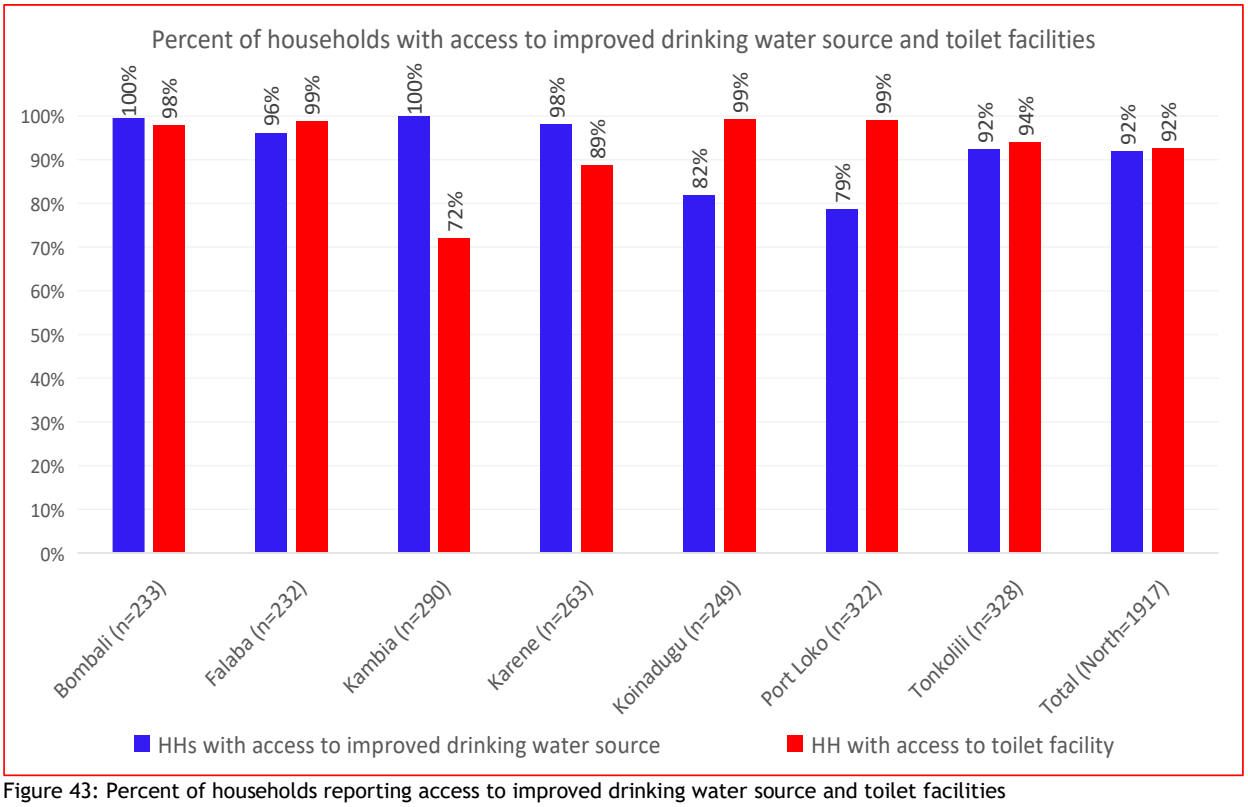


Figure 43: Percent of households reporting access to improved drinking water source and toilet facilities

- Output indicator 5.2: Percent of engaged communities enacting changes to respond to COVID-19 at community level

Whilst the project sets a target of achieving 70 percent on total number of intervention communities enacting changes to respond to COVID-19, the project monitoring report failed to capture progress regarding this indicator. According to the project report, one of the major reasons for lack of data for this indicator was that community bye-laws (such as reporting of strangers and sick people) were not strengthened as evident during the Ebola crisis. However, there was clear evidence of community meetings held across the intervention districts to prevent and control diseases of public health importance (malaria, Lassa fever, COVID-19, etc). Notably a total of 369 (98.4%) of the targeted 375 meetings were held. The Community Health Workers (CHWs) also played critical roles in engaging communities on SRH/RH and COVID-19 during the pandemic. A total of 338 (92.3%) of a target of 366 house-to-house health campaigns were conducted by CHWs across the programme intervention communities. Also, more community engagement (618) than expected (528) were done on hygiene promotion across the intervention communities. According to key informants interviewed, most of the communities engaged activated internal byelaws that were enforced during the Ebola crisis. However, the number of communities who instituted these byelaws were not documented.

3.3 Relevance of the project

The evaluation documented the relevance of the ECRHSII programme following the guidelines in the Terms of Reference. Ideally the relevance of the programme was assessed in terms of whether the project design addressed the priorities and challenges for communities, especially women and children in Sierra Leone context. The findings documented from the evaluation proved the project intervention largely addressed the needs and expectations of different beneficiaries and appreciation of the project activities. Box 5 presents quotes/ documentaries from community members during FGD sessions, key informant interviews and personal interviews.

Box 4: Meeting the needs and expectations of targeted community members and appreciation of the project activities

1. Effects of the Mama-Baby Kits Initiative on the Wellbeing and Health of Pregnant Women: Implications on Health Seeking Behaviour

Beneficiary understanding of the Mama-Baby Kits initiative was that the program was designed to help people in the community who are less privileged but regularly visit the health facility especially for ANC. Documentaries/ case studies from beneficiaries revealed that this component had far-reaching effect on health seeking by vulnerable women in the intervention health catchment communities. This further confirmed the effectiveness of the project strategies around targeting PHUs that saw a drop in deliveries during the second quarter of 2020 and/or who serve extremely economically vulnerable catchment communities. Testimonies, quotes and/or case studies of the effects of Mama-Baby kits on the health and wellbeing of vulnerable pregnant women are as set out.

"My name is Yeama Rogers RogersAnn Marie Koroma aged 22. I frequently visited the Kagbiama MCHP during pregnancy. I am one of the beneficiaries of the Mama-Baby kits after delivery at the Kagbiama MCHP. The kit I received included powder, wrapper, comb, baby oil, baby cap, foam soft, towel, feeding-bottle, diaper and bowl. The supply of baby mama kit was very helpful to me and my household. As an expectant mother I was completely

worried about my unborn child. Things were very tough for me at my matrimonial house that I decided to come and stay with my mother. My husband had abandoned me when the pregnancy was just around 3 months due to hardship. My mother had always worried about money to buy clothes for the child whenever I had to give birth. One faithful morning, my baby was kicking and i decided to go to the health facility where I met a group of strangers who introduced themselves to me as workers from CARE INTERNATIONAL. They handed this supply of baby mama kit to me. I burst into tears because I was never expecting this type of goodness. Even when I called my mother she too cried not because she was unhappy, but because this organisation has just saved us from a very embarrassing situation. That very day, in the evening hours, I gave birth to a bouncing baby boy."

Ann Marie Koroma, Mama-Baby Kit Beneficiary, Kagbiama MCHP,

"My name is Yeama Rogers aged 20 years. I have been a client at Feiba CHP since pregnancy. I was fortunate to benefit from the Mama-Baby Kit because I made regular visit to the health facility since pregnancy. The kit supplied included wrapper, powder, baby oil, baby cap, foam soft, towel, feeding-bottle, bowl (baby rubber) and diaper. The supply was indeed very helpful. During the period of my pregnancy things were tough for me and my husband. Every day I was praying for my husband to have money as the pregnancy was growing. And finally, God answered my prayers in a different way. My husband didn't have money, but a humanitarian organisation saved us from our worries. I'm still grateful that the doctor and his nurses played their level best to save his life.."

Yeama Rogers, Mama-Baby Kit Beneficiary, Feiba CHP,

"My name is Hawa Zucker aged 35 years. I benefited from the Mamba-Baby kit supplied at the Fanima MCHP. The supply was very much helpful. When I was pregnant, me and my husband had to borrow money from someone else to buy clothes for the unborn child. As God would have it, I delivered before the stipulated date for the shopping and luckily, I was selected for this supply. It was a blessing in disguise in the sense, CARE INTERNATIONAL saved us from a debt that would have taken us some time to repay (money was returned to the lender). Since I received this kit, I have influenced several pregnant women and lactating mother to keep visiting the health facility. I have persuaded at least ten people. At any time, I want to go for EPI (immunisation), I usually go round the community informing my friends and relatives about that and they usually agree to follow me at once because they have seen me the benefit from my frequent visit to the health facility."

Hawa Zucker, Mama-Baby Kit Beneficiary, Fanima MCHP,

2. Reproductive Health (RH)/ Sexual Reproductive Health (SRH)

According to community members targeted by the ECRHS II programme, major chnages were noted regarding RH/SRH due to the the effective strategies adopted over the implementation period. Below are views, perceptions and appreciation expressed by community members engaged during the evaluation:

"The introduction and rapid uptake of FP has changed the way community members view contraceptives use. What we currently observe is that family planning has created an avenue for economic growth. Most families in our district (like other parts of Sierra Leone) are polygamous. Controlling our births means we can take care of ourselves with the little resources we have, rather than spending it to take care of children. Another change we see is that we are healthier with the adoption of FP considering that the more children one bears, the higher the risk of dying at an early age. For instance, having more children than one can afford to take care of creates the tendency to go into prostitution in order to take care of the family…by this way many have been infected with terminal illnesses that may take their life..."

Female participant, FGD, Lunsar, Port Loko district

"We appreciate it so much that Family Planning is now available and accessible to any user of FP commodities. Women of family planning age are properly counseled on which particular FP method suits their comfort based on observation from previously used FP commodity. Interestingly we receive regular counseling from health workers on the essence of family planning usage during health talks and community outreach. Family Planning usage has brought about some positive outcomes among women and children within reproductive age. Years back before the introduction of FP usage, there used to be rampant reports of unwanted and early pregnancies and forceful marriages. Also, it was hard to see properly spaced children among families due to ignorance and lack of contraceptives. In the past also, teenage girls risk their lives in the process of inappropriate abortion due to unwanted pregnancies. But thanks to the advent of contraception methods in which one has to prevent until she is ready for bearing a child. Also, in the past, early and unwanted pregnancies was single handedly responsible for most of the dropout observed among children of school age.''

Female participant, FGD, Bumbandain community, Bombali district

3.4 Efficiency of the programme

To measure the efficiency of the programme, the evaluation focused the implementation of the project from the perspective of cost-efficiency and beneficiary reach (such as results of training activities/ changes of practice, choice of methods, choice of sites, involved implementation partners, synergies/ overlap with other programmes, etc). These perspectives were documented under four sub-sections including a) programme management, b) funds management, c) collaboration with other actors and d) monitoring and evaluation.

3.4.1 Programme management

As was observed during the final evaluation of the ECRHS I programme, the second phase of the ECRHS programme has been well managed with strong management structures assignment with clear roles and responsibilities. Partnership was scaled up due to the addition of new districts in the in the second phase of the due to additional districts in the second phase of implementation. Although the ECRHS II programme largely targeted districts and communities in northern Sierra Leone, its design is such that the management has been cascaded at national, district and community levels. Whilst CARE International has the direct responsibility for coordination of district and community level activities, their involvement in national health programming has been highly visible in the second phase of implementation. At the district and community level, CARE works through its partners including the District Health Management Team (led by the Chief Medical Officer who

represents the Ministry of Health and Sanitation (MOHS) in each district), MADAM (in Bombali and Karene), RODA (in Tonkolili district), ADP (in Koinadugu and Falaba district), ABC (in Kambia district), and CFID (in Port Loko district. It was interesting to note that these partners were selecting following due diligence which was appropriately done. To this end, the combination of partner experience in implementing related programmes, and qualification of staff directly assigned to programme implementation largely contributed to the impressive effect of the programme. Although there were extended activities and new roles, CARE International and their partners played similar roles in the programme management structure observed during the ECRHS I implementation.

CARE International was particularly active in providing technical support to the partners. Considering its critical role as a lead agency, the organization ensured quality implementation by monitoring programmatic implementation of the partners and providing oversight of grant management, accountability and compliance. At regional and district level, CARE International was observed to have provided the human resources capacity for implementation, monitoring and coordination. From the practical point of observation, the programme considered staffing for the various components of the second phase of the ECRHS programme implementation for quality and timely delivery. Unlike the first phase of implementation, staffing was significantly increased. The full-time in-country staff for the programme included 1 Regional Programme Manager, 10 District Team Leads (2 each in Kambia, Port Loko, Karene, Koinadugu and Kambia), 1 Program Officer, 3 Health Officers, 3 M& E Clinical Data Officers, 2 WASH Project Officers 1 SRHR Coordinator and drivers. Others who have been involved with at least 50 percent of the time include the MEAL Coordinator, Finance Manager/ Finance Director, Advocacy/ Gender Coordinator and Communication Advisor. Each of these positions provided technical oversight to the specific sectors of the Programme such as RH/SRH, WASH, CVA/VSLA, and surveillance. For instance, the WASH Officers ensured sustainable implementation of WASH activities including water point maintenance at the health facilities targeted by the project.

Partner organisations were responsible for coordination of field implementation of the Programme components. Each of the partner organisations reportedly have Programme and Filed Officers who were assigned to specific activities including a) strengthening the referral system for women in all targeted districts, b) informing the target population concerning modern FP methods and their offer, c) raising awareness and sensitizing women/ girls and men on SRH and FP through the media, d) promoting utilisation of SRH services according to the needs of the target groups including utilisation of LARC, e) promoting safe hygiene and sanitation practices at community level, f) strengthening community awareness for communicable diseases, and f) reinforcing surveillance coordination at district and community level (including hard-to-reach communities). The implementing partners also had strong link with the DHMTs and were therefore strongly involved in training activities conducted by DHMTs at both district and community (PHU) level in the respective intervention districts.

The evaluation also noted that training and capacity building formed a critical part of key components of the ECRHS II programme. Training and capacity building inputs especially reflected on output 1.3 of component 1 of the programme-that is number of staff trained in Standard Operational Procedure for handling waste, especially with regards to infectious waste. Other training activities reportedly done include a) training (including refresher training) on IDSR to ensure surveillance through integrated approach, b) training of data entry clerks/ DHMT staff on DHIS, and c) training of key staff on HMIS. Like in the first phase of implementation, the ECRHS II programme was observed to have further responded to the needs and resource gaps of DHMTs including provision of vehicles and motorbikes and communication facilities. Additionally, logistical support was also provided to NEMS to strengthen the referrals systems particularly in hard-to-reach communities. These supports include providing vehicles and fuel to facilitate referrals.

Training and capacity building support to PHUs and health personnel was also central in the ECRHS I1 Programme implementation. The Programme provided continued support PHUs with basic ANC and newborn child equipment, Infection Prevention and Control (IPC) supplies and Sexual Reproductive Health (SRH)/ FP-commodity supplies.

The ECRHSII programme also facilitated establishment of new VSLA groups and provide training

support for both new and old VSLA groups on health communication skills to serve as advocates for promoting SRH and FP practices. A total 1,284 VSLA groups were engaged to provide them with the skills to communicate the need to seek SRH and FP services in their health catchment areas. This strategy forms part of the factors the influenced the increase uptake of modern method of contraception.

"Advising women to visit reproductive health/ sexual reproductive health at the health facility was one of the reasons for forming the VSLA group. While we seek to promote unity and welfare for members of the group, our role is also to advise women in general, pregnant women and lactating mothers to seek healthcare at the appropriate time. For pregnant women, we urge them to make all ANC visits at the facility. Due to this continuous sensitization, our communities have observed marked reduction in pregnancy-related complications and complications during childbirth…"

FGD participant, Mannah community, Falaba district

3.4.2 Funds management

The evaluation observed sound budget management system that covered numerous activities with positive results. The lead agency (CARE International) has notably maintained the strict financial management and procurement rules followed during the first phase of implementation.

A critical review of the ECRHS II budget revealed highly efficient management of the programme budget. As at the time of the evaluation only few budget lines showed over expenditure of over 15 percent. However, the overall budget 83 percent burn rate- which had meant an efficient use of budget considering the level of impact created by the programme.

It is noteworthy that ECRHS II was designed to contribute to national health programming around RH/SRH and epidemic control system. The national contribution from MOHS to the programme's activities was highly remarkable and served as a leveraging opportunity to maximise the ECRHS II programme's effects. For instance, between January to June 2020, the government of Sierra Leone (GoSL) committed a total of 848,100,000 SLL (80,000 EUR) towards the ECRHS II programme activities around community-based (early warning system), and training of health staff. Notably this contribution is 73.1 percent of ECRHS II programme budget (109,400 EUR) towards emergency preparedness and networking with possible partners. This national contribution saved the total budget on emergency preparedness by 49.4 percent (EUR 54,054 EUR) which could be used to increase the level of achievement of the programme's effect on surveillance system.

The processing and disbursement of the ECRHS II funds go through a rigorous process through online and offline payment system. For instance, the offline payment is mostly applicable to the programme staff and partners and does not go through the purchase request (PR) and purchase order (PO). However, this type of payment system must be supported with sufficient justification which include emails with appropriate charging details attached. This type of payment sometimes delays approvals for further activities due to lack of prior submission of reports and liquidation for previous activities. Conversely, the online payment particularly goes through a rigorous cycle and uses cloud system where approval of request is made remotely online by the budget holders/ authorized bank account signatories. The online payment is highly applicable to agreements between CARE and external vendors hired to carry out specific tasks (e.g contractors for rehabilitations, external trainers, etc.).

3.4.3 Collaboration between programme team with other actors, coordination and synergy with existing programmes

There has been a well-coordinated interactions between the programme steering, CARE international, the government of Sierra Leone and its decentralized structures. Start-up of project was built momentum for collaboration and coordination of activities which allowed for alignment of programme activities with decentralized activities in the intervention districts and address issues around duplication of activities and waste of resources.

For instance, the ECRHS II programme create budget line for coordinated activities with the DHMT (the decentralized structures of the Ministry of Health and Sanitation (MOHS)) including activities around a) strengthening of Health Management Information System (HMIS) and the District Health Information System (DHIS) at district and facility level, b) training of health providers on SRH, c) training of other DHMT members and promoting planning and monitoring on supportive supervision

of health staff. In addition, there were coordinated activities around emergency preparedness which were led by the MOHS through the DHMTs. In particular, the government of Sierra Leone largely committed funds towards facilitating early warning system. This formed strong collaboration with the ECRHS II programming, created synergy and largely contributed to related programme outputs such as a) reinforcement of the surveillance coordination at district and community levels, b) improved reporting system of the integrated disease surveillance mechanism, c) promoting emergency preparedness, d) immediate response to COVID-19, e) strengthened HMIS/DHIS, district referral systems and community awareness for communicating disease prevention and control, and f) coordinated cross-border activities. It was further evident that the ECRHS II programme has strong capacity building component that provided administrative and logistical support to facilitate DHMT's activities including donation of 6 motorbikes (for Port Loko, Karene and Falaba DHMTs), 10 desktop computers and accessories for data management at DHMT and 3 fleet of vehicles (for Port Loko, Karene and Falaba DHMTs).

The programme also appeared to show strong visibility in national health policy dialogues, action plans and strategic collaboration especially during the COVID-19 response. As part of the ECRHS II programme implementation, CARE collaborated with MoHS and other actors (including US Centre for Disease Control, Ministry of Agriculture and Forestry (MAF), Red Cross, World Vision, ONS, EPA, WHO, NACOVERC) and conducted multi-sectoral simulation exercise in an effort to strengthen multi-sector, and national institutions and platforms for One Health during the implementation of the World Bank-funded Sierra Leone COVID-19 Emergency Preparedness and Response Project.

Decision making by the Programmes Steering notably improved significantly in the second phase of the ECRHS implementation. The Programme Steering Committee reportedly met every quarter during the second phase of implementation. Importantly GIZ involvement in the Steering Committee meetings was instrumental in creating synergy with other KfW funded projects in the intervention districts. For instance, through regular conversions with GIZ, the programme steering committee identified availability of functional WASH facilities as a critical gap at the Kukuna BEmONC targeted by GIZ in Kambia district. In the 5th quarter of ECRHS II (April-June 2020), ECRHS II programme therefore supported and sustained WASH activities at this BEmONC. The activities reportedly included maintenance of the flush toilet at the maternity room, handwash basin, female toilets, water taps head (at the laundry), water tank pipes and replacement of underground pipes to enable water to run.

CARE represented ECRHS II in several national coordination activities during the COVID-19 response. CARE International and other partners and donors (WHO, CDC, UNICEF, UNFPA, WB, DfID, GIZ, USAID, etc) participated in daily coordination meetings led by the Directorate of Health Security and Emergency (DHSE) through the Emergency Operation Centre (EOC). The Directorate also has a steering committee that presents an opportunity for the ECRHS II steering committee to access emergency response under the One Health Platform. Accordingly, the coordinated emergency response under the One Health Platform is partly done through the Health Development Partners (HDP) forum (which is responsible for coordinating donor support. CARE International also coordinated the ECRHS II emergency response at national level in collaboration with the Public Health National Emergency Operation Center (PHNEOC) and other INGOs (including IRC, GOAL, Breakthrough Action, MSF, Concern Worldwide, CRS, etc).

3.4.4 Monitoring and evaluation

The monitoring system set up by the programme was highly participatory. This was done through joint monitoring visits and/ or joint supportive supervision. These activities brought capacity building and training to the doorsteps of the health facilities- thereby reducing waste of financial resources through large number of training participants at the district health quarters. The ECRHS II facilitated the joint supportive supervision across the intervention districts to help improve the quality of services the health facility staff deliver at the facility and to provide mentorship on IPC and other SOPs on routine service compliance and guidelines on COVID-19. The supportive supervision also served as an opportunity to addresses critical issues faced by health facility staff particularly in hard-to-reach communities. During each visit, orientations were also provided where necessary, especially

on WASH/IPC, detection of COVID-19 cases, family planning services offered to clients and the use of tools and rapid data verification of reported data from PHUs, etc. The joint monitoring visits on the other hand, targeted critical areas and activities that require urgent attention. At some points in the implementation, joint monitoring visits were conducted by the District Council, DHMT and Ministry of Social Welfare to visit points of entries (POEs) and border communities- which further served as an extension of community surveillance activities.

3.5 Sustainability of programme components

The evaluation critically examined the various components of the ECRHS II programming and identified activities and/or results that present the potentials for sustainability.

3.5.1 Surveillance and emergency response system

The training and capacity building support provided to the DHMT on Health Management Information System (HMIS) and Demographic Health Information System (DHIS) are crucial in sustaining and effectively managing the surveillance and emergency response system already established. These are notable factors that contributed to the improved flow of information, timeliness, quality and completeness of epidemic reports during the COVID-19 response. Selected number of data entry clerks have been trained on HMIS and DHIS. They therefore have improved knowledge of using reporting tools and interpretation of different data elements and indicators and can effectively and efficiently carry out adequate record keeping, analysis and reporting from various PHUs in the intervention districts. A total of 10 such data entry clerks are reportedly present in each of the 7 intervention districts. Also, a total of 138 health facility staff (31 males, 107 females) who have acquired skills on IDSR are deployed across the 7 programme intervention districts. As part of the requirement for Sierra Leone to meet the WHO African Regional Strategy of IDSR, under the framework of disease control and prevention, the programme contributed to strengthening the skills of the health staff in effective surveillance, case detection and reporting. This has strengthened efficiency in managing cases at facility level unto the referral hospital using the electronic platform (eIDSR).

Already the emergency response plan and the community-based surveillance structures (CHWs, Ward Development Committees, Health Facility staff) are well established and functional. In particular, CHWs have acquired adequate knowledge on IPC messages, epidemic community case definition, early case detection and reporting of suspected case. They also have wider experience of contact tracing and line listing of contacts. At national level, the Emergency Operation Centre (EOC) is well established and responsible for coordination of health partners meetings under the directives of the Directorate of Health Security and Emergency (DHSE), which is a department of the Ministry of Health and Sanitation (MOHS). Similar to the ECRHS programme, this directorate has a steering committee that responds to emergencies under the one health platform that is led by the Deputy Minister of Health as appointed by the Ministry of Health and Sanitation.

3.5.2 Health and WASH infrastructure management

Rehabilitation efforts of WASH and health infrastructure were made to a large extent during the second phase of ECRHS implementation, and systems and structures were put in place for sustained maintenance of these systems. Some PHUs already have Facility Improvement Action Plans (FIAPs) that guide in the documentation and communication of progress or gap in infrastructure management and health care service delivery.

It is evident that the structures established will continue to maintain the initiative of community dialogues on social accountability to create community engagement and open dialogue sessions between service users, service providers and decision makers in PHUs catchment areas. One of the key assets of this initiative is that action plans generated from the social accountability conversations in some catchments will be monitored on issues around: stock out, facility perimeter fence, availability of drugs, minor repairs at facilities, lack of power supply, nurse attitudes, non-functional FMCs, etc. These issues can be addressed as they are identified by varied established groups across the intervention areas.

3.5.3 Behaviour change towards RH/ SRH

The uptake of Long Acting and Reversible Contraception (LARC) has increased dramatically. The programme has contributed to training and capacity building of PHU staff on FP services. Although more capacity building and training support are required, there is an increased number of PHU staff who currently have knowledge of handling of work FP equipment, storage of RH commodities, recording and documentation, insertion of implants and counselling skills, as well as IPC.

CARE International has facilitated several conversations with UNFPA, Central Medical Store (CMS), Marie Stopes and the reproductive health department who are key partners of the FP supply chain. These collaborations were meant to revisit the FP quantification at national level, and the outcome is expected to transition into a sustained supply chain of FP commodities particularly in the northern part of Sierra Leone. However, logistic needs to facilitate the distribution o commodities from district pharmacies to the last mile still remains to be a bottleneck in the supply chain.

The programme has established community structures such as the VSLAs who have received training support in communication skills. These structures are currently serving as community-based advocates for SRH and FP service usage. Further the programme has activated the Family Management Committee in selected intervention communities to encourage the population to access health services. They also identify minor issues that require attention.

3.5.4 Partnership with the government and community-based organisation

The design and implementation of the ECRHS II was to establish high profile strategic and operational collaboration with the government and other development partners at both national and district level. The support provided by the ECRHS II programme closely aligns with the government plans and priority areas to enable the achievement of the health outcomes. The programme had engaged with the relevant government departments at all stages of the programme including SRH, WASH, EOC/DHSE, and DPPI which present the potential to sustain the activities after phase-out.

Notably, the programme steering comprised of 4 representatives from MOHS- which promoted programme ownership by the Government of Sierra Leone through the MOHS. Other members of the steering included 1 represented from GIZ and 2 representatives from CARE International. The steering coordinates joint health programming led by MOHS which indicates national buy-in and uptake of the joint health programme activities by MOHS. The programme steering coordinated, reviewed and actioned the different programme (from MOHS, CARE and GIZ) during meetings to create synergy and align activities with MOHS national interventions. For instance, whilst CARE provides update of the ECRHSII programme implemented in 7 districts, GIZ discusses progress in the implementation of the project called 'Health System Strengthening and Epidemic Prevention (HSS-EP II) in Sierra Leone' with the aim 'to better promote the healthcare system in Selected districts towards the health needs of the population'.

The ECRHS II programme has also improved the capacity of five implementing partners[27] that can enable them to independently promote health programming (especially RH/SRH) after phase-out.

3.5.5 Referral system

The evaluation observed the National Emergency Management System (NEMS) as a critical system in efforts to strengthen referral system for women/ girls in Sierra Leone. NEMS supports ambulances during emergencies and can therefore largely contribute to the health system strengthening in Sierra Leone particularly in the area of surveillance, referrals and RH/SRH. During the fifth quarter of the ECRHS II (April-June 20202) for instance, the support provided towards NEMS from the ECRHS II programme facilitated the referrals of 107 pregnant women/ young girls with obstetric complications. The programme worked through partners to support the DHMT (mostly the District Medical Officer and District Health Sister 1) with credit card (airtime) and fuel to transport referred women with complications to districts or regional hospitals. This support is expected to be incorporated into the MOHS financing after phase-out of the programme.

[27] The implementing partners include Rofutha Development Association (RODA), Mankind's Activities for Development Accreditation Movement (MADAM), Association for the WellBeing of Rural Communities Development (ABC-Dev), Sierra Leone, Action for Development Programme Sierra Leone (ADP-SL), Collective Initiative For Development- Sierra Leone (CIFD-SL),

3.5.6 Financial sustainability of project activities

Sierra Leone already has an existing health financing reforms document for universal health coverage (UHC), which lays a strong foundation for transitioning of the ECRHS programme into a larger health programming in Sierra Leone. The Health Financing Progress Matrix was developed by WHO for countries to assess how far they have come in preparing their health financing systems to achieve UHC. The Sierra Leone health financing system comprise of nine financing schemes through which the different components of the ECRHS II can be streamlined. Possible schemes of the system in which ECRHS components can be incorporated include reproductive and child health (family planning, EPI/GAVI, quality of care), government health budget, free health care, and nutrition.

The EOC can also serve as a resource mobilization platform which has the potential for uptake of the ECRHS II programme (particularly epidemic control systems). The EOC is being funded by the World Bank through the Sierra Leone COVID-19 Emergency Preparedness and Response Project under the COVID-19 Strategic Preparedness and Response Program (SPRP) using the Multiphase Programmatic Approach (MPA). The World Bank support covers 4 key components through which ECRHS programme can be aligned. These include 1) supporting national and sub-national public health institutions for prevention and preparedness, 2) strengthening multi-sector national institutions and platforms for policy development and coordination of prevention and preparedness using One Health (OH) approach, 3) Emergency COVID-19 response, and 4) implementation management and monitoring and implementation.

3.6 Changes in general perspectives/aspects of the ECRHSII programme

3.6.1 Gender implications of the programme

The evaluation noted the ECRHSII programme implementation as highly gender focused. The recruitment, training, monitoring and reporting activities notably took into account the gender perspectives of the programme design. While the programme specific focus on SRH/RH, it recognized the challenges faced by women to openly talk about their sexuality to their husbands, make decisions at national, district and community level, and about decision making on use of FP contraceptives, etc. The programme therefore used various strategies to constructively engage men and boys to address these socio-cultural challenges. One of the key strategies used in community engagement is the Social Analysis and Action (SAA) model of gender transformation.

The SAA is a community-led social change process through which individuals and communities explore and challenge social norms, beliefs and practices around gender and sexuality that shape their lives. Three (03) main SAA participatory tools used to help communities challenge and explore social norms and assumptions for gender transformation. Conversations using this CARE Social Analysis and Action (SAA) tool challenged men, and young males on social norms, beliefs and practices that hinder women / girls' access to and use of SRH service. In particular staff used the '**gender box**' to identify and critically analyse typical roles, behaviour, and norms that are attributed to or expected of men and women in the community, which can be maintained, and how some can be changed. The outcome for most of these conversations revealed that men are now more informed on women's needs and how SRH benefits the entire family.

> "Over the years, the negative perception about family planning is gradually changing. Men (both literate and illiterate) have experienced the importance of FP. Now, a greater proportion of men in our community are even accompanying their partners to health facilities for FP. Moreover, with the rapid increase in STIs, the use of condoms as a contraceptive is becoming increasingly important among men."
> **FGD participant, Lunsar, Port Loko district**

3.6.2 Preparedness of health facilities for future emergencies and epidemics

The evaluation observed that capacity building efforts marked increase for the DHMTs and health staff even in last mile communities using the COVID-19 response. In addition to various training package on epidemic control and prevention (IDSR, case detection and definition, data gathering and entry, handling of infectious wastes, IPC protocols and SOP guidelines, HMIS/DHIS etc), other capacity strengthening efforts were provided to DHMTS (such as fuel for surveillance and referrals,

desktop computers for data entry and reporting). These supports serve as a strong foundation for future response to emergencies and epidemics. However, there are flaws in the supply chain (such as the 'PUSH' method and poor road network) that will undermine gains made in future response. Figure 43 presents the proportion of health facilities who claimed they are prepared to handle future outbreaks. Based on the analysis, almost 50 percent of all PHUs across the intervention districts are not well equipped and prepared to handle future outbreaks as at the time of the assessment.

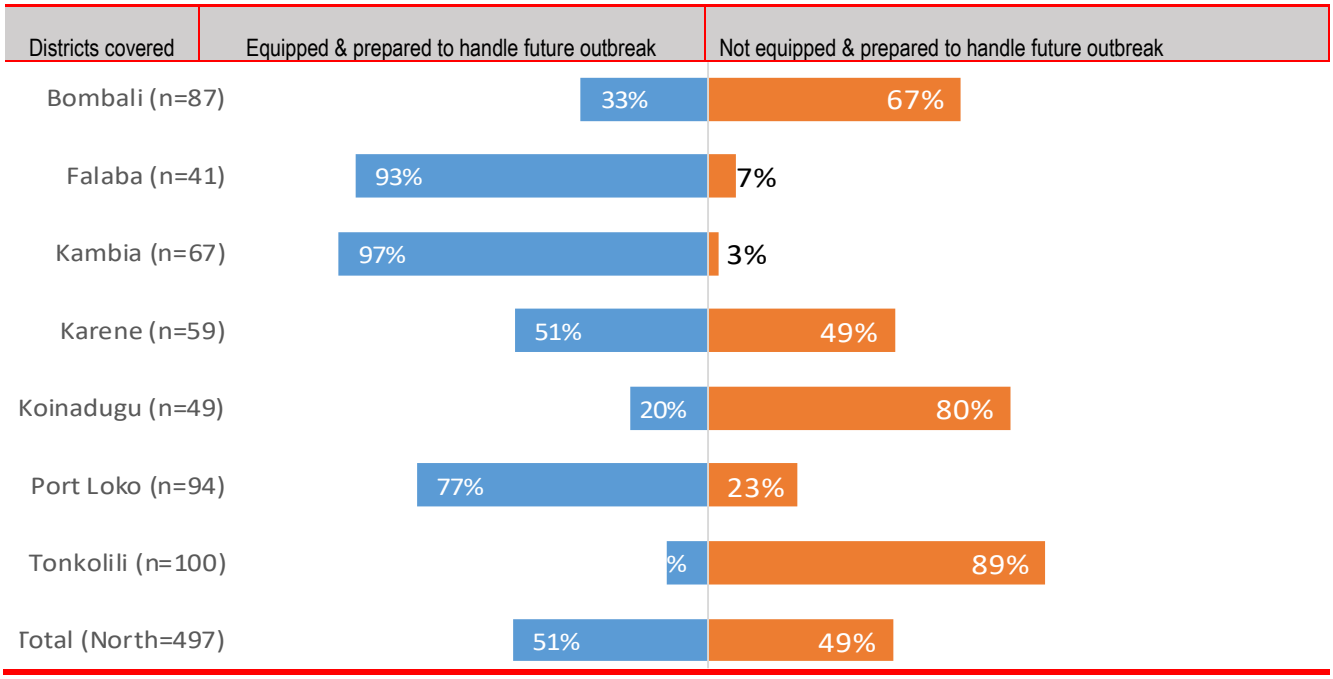


Figure 44: Percent of PHUs agreeing they are prepared to handle future outbreaks

3.7 Analysis of achieved results

The results matrix below summarized the achieved results that include the values of achievement of indicators.

3.7.1 Programme level achievement

Despite the lack of consistent data from credible sources on maternal mortality rate, the results from analysis of targets for other proxy indicators revealed that the programme satisfactorily contributed to high level programme effects at both national and district level. Table 27 presents a description of achieved results.

Table 27 : Level of achievement of targets at programme level

Results	Indicator definition	Baseline value	Project target	Endline value	Level of achievement of targets	Description of progress
Impact of the project: Programme level achievement						
Component 1: Sierra Leone: Epidemic Control and Reinforcement of Health Services (ECRHS PHASE II) Duration: January 1st, 2019 - December 31st, 2021 (36 months)						
Programme Objective: Improved health status of the population of Sierra Leone with a focus on reproductive health.	Impact Indicator 1.1: Reduction in Maternal Mortality rate	1,260/ 100,000	650/ 100,000			No endline value was available at the time of the assessment. However, the World Bank 2020 MMR report (443/100,000 livebirths) shows that target may have already been exceeded by 31.8% at midterm of implementation. In addition, maternal death from DHIS2 shows marked drop in maternal deaths by 20% from 2017 (base year) to 2022 (endline). Results for other proxy indicators used show that national target for under-5 mortality rate was not achieved but baseline situation significantly improved by 32.9 percentage drop by 2021. Similarly targets for reduction in neonatal mortality was not achieved (66% achievement), but 2013 baseline situation dropped by 14.9%. These results in combination indicates satisfactory performance by the programme.
	Impact Indicator 1.1.1: Reduction in under-5 mortality rate	156/ 100	71/ 100	104.7/ 100	52.5%	
	Impact Indicator 1.1.1: Reduction in neonatal mortality rate	39/ 1000	23/ 1000	30.9/ 1000	66.0%	
	Impact Indicator 1.2: Contraceptive prevalence rate increase (Baseline: 23.0% in 2017	23.0%	33.7%	26.0%	77.2%	77.2% of target was achieved at national level. Meanwhile, there is a significant increase in mCPR by 13%.

	(SL FP2020 commitment) Target :33.7% by 2022)					
Component 2: COVID-19 Prevention and Response Project (CPR) in Sierra Leone						
Programme Objective: Improved health status of the population of Sierra Leone with a focus on COVID-19 prevention and response.	Impact Indcator 2.1: COVID-19 incidence in project districts (# new cases per week)	17	0	0	100.0%	As per the data available, COVID-19 cases were 0 as at April 2022 across the project operational districts. This means, the project performance was outstanding for this indicator.

3.7.2 Level of achievement of module objective/ outcome targets

The analysis revealed that 100 percent of targets set for outcome level indicators was achieved. This indicates an overwhelming performance by the project and confirms the higher level programme effect observed in foregoing discussions. Table 28 summarises findings on targets achieved.

Table 28 : Level of achievement of module objective/ outcome targets

Results	Indicator definition	Baseline value	Project target	Endline value	Level of achievement of targets	Description of progress
Effectiveness of the programme: Level of achievement of module objective/outcome targets						
Component 1: Sierra Leone: Epidemic Control and Reinforcement of Health Services (ECRHS PHASE II) Duration: January 1st, 2019 - December 31st, 2021 (36 months)						
Module Objectives: MO1: Epidemic control system sustained in selected health facilities in the project region	Outcome 1.1: Proportion of suspected epidemic cases reported, investigated and response initiated within 72 hours of reporting/all cases meeting definition of integrated surveillance system?	79.0%	85.0%	100.0%	117.6%	Project performance was outstanding for this outcome 1.1. Target was achieved and exceeded by 17%. . Findings from the health facility assessment, suggest that 65 (13%) of 497 health facilities experienced an outbreak in the past 2 years across the 7 intervention districts. Accordingly, all outbreaks reported were investigated and actions initiated within 72 hours.
Module Objective MO2: Increased offer and demand of Sexual Reproductive Health services in the project region	Outcome 1.2: Numbers of couple years of protection in the project districts?	77,864	250,000 CYP	252,730 CYP	101.1%	The programme's performance on CYP specific to the ECRHS II procured FP commodities was outstanding. The target set was achieved and exceeded by 1%. General analysis of CYP for all available FP-methods reported by 497 PHUs revealed there was an overwhelming effect of the programme intervention on CYP across the operational districts.
Component 2: COVID-19 Prevention and Response Project (CPR) in Sierra Leone						
Module Objective MO1: Strengthen the health system in Sierra Leone to respond to the COVID-19 epidemic.	Outcome 2.1: Proportion of suspected epidemic cases reported, investigated and response initiated within 72 hours of reporting/all cases meeting definition of integrated surveillance system?	79.0%	85.0%	100.0%	117.6%	Project performance was outstanding for this outcome 121. Target was achieved and exceeded by 17%. . According to the National Emergency Operation Centre, all cases reported were investigated and actions initiated within 72 hours.
Module Objective MO2: Support community awareness and resilience to COVID-19.	Outcome 2.2: % reduction of beneficiary households in target communities reporting decrease in use of coping strategies (using WFP reduced coping strategies index -rCSI)	n.a	10.0%	42.9%	429.0%	The project performance was outstanding for this indicator. The target was achieved and exceeded by over 300%.

3.7.3 Level of achievement of output targets

Table 29 presents the results from analysis of targets achieved. A total of 14 output indicators were analysed. The project performance was also noted to be highly satisfactory at output level. The project performance was either highly satisfactory or outstanding for over 71 percent of targets set at the output level.

Table 29 : Level of achievement of output targets

Results	Indicator definition	Baseline value	Project target	Endline value	Level of achievement of targets	Description of progress
Effectiveness of the programme: Level of achievement of output targets						
Component 1: Sierra Leone: Epidemic Control and Reinforcement of Health Services (ECRHS PHASE II) Duration: January 1st, 2019 - December 31st, 2021 (36 months)						
To extent has the programme achieved its output targets for component 1 at the end of implementation?	Output indicator 1.1: Proportion of weekly surveillance reports submitted timely and validated at district levels with aggregated community	18.1%	85.0%	87.0%	102.4%	The project performance was outstanding for this indicator. The target set on response to weekly surveillance report was achieved and exceeded by 2.4%. by the end of 2021 The 2019 baseline value was further exceeded by 14% .

	and health facility levels / all expected reports during 1 year (7 northern districts)					
	Output indicator 1.2: Proportion of peripheral health facilities with functional water and sanitation infrastructure / all peripheral health facilities in target region Baseline 2016 33 % (4 districts of Phase I	33.0%	38.0%	64.0%	168.4%	The project performance on provision of functional water and sanitation facilities was outstanding. The target was exceeded by over 68%. Notably 79% of 497 PHUs assessed had water facilities, but only 65% of these PHUs had water facilities that are functional. Also 89% had functional toilets, but 10% only 78% of the functional toilets are in good condition. Further observed is that 63% of PHUs lack water reticulation system for running water supply.
	Output indicator 1.3: Number of health staff trained in Standard Operational Procedure for handling waste, especially with regard to infectious waste	394	594	915	154.0%	The project performance for this indicator was outstanding. Target was achieved and exceeded by 54%.
	Output indicator 1.4: Number of districts with updated emergency plans (not older than 1 year), incl. emergency activities in case of epidemics, provision of protection and prevention material	4	5	7	140.0%	The project performance for this indicator was outstanding. Target was achieved and exceeded by 40%.
	Output Indicator 1.5: Increased proportion of health services offering at least three FP-methods according to the national programme	87.0%	n.a	93.0%		No target was set for this indicator. However, project performance was ascertained from improvement in baseline value. The analysis showed that baseline value improved by 7% and indicates high project performance especially as 93% of all PHUs offered at least 3 FP methods.
	Output Indicator 1.6 Proportion of men (> 15) / women (15-49) knowing at least 3 modern FP methods	n.a	n.a	54% (women-60%, men-43%)		Project performance on social mobilisation on awareness of FP methods was moderately low. However, awareness among women was 17% higher than men.
	Output Indicator 1.7: Percentage increase in number women aged 15-49 who make their own informed decisions regarding contraceptive use (Proportion of women aged 15-49 yrs who make their own informed decisions regarding use of contraceptives)	34.0%	40.0%	66.0%	165.0%	The programme demonstrated outstanding performance in promoting increase in informed decisions regarding contraceptive use among women in reproductive age.
Component 2: COVID-19 Prevention and Response Project (CPR) in Sierra Leone						
To extent has the programme achieved its output targets for component 2 at the end of implementation?	Output Indicator 2.1: # of joint monitoring visits conducted	66	826	761	92.1%	The project performance for the output was highly satisfactory. Over 92% of target set was achieved. Improvement of the baseline situation by over 11 times further confirms this achievement.
	Output Indicator 2.2: # of PPE and IPC kits provided to meet needs of health facilities.	n.a	500 PHUs with 3 months PPE & IPC supplies for 2,500 health workers (750 men, 1,750 women)	279	56%	Oly 56% of target was met at the time of the assessment. This is a moderate project performance. However, all health facilities reported PPE/IPC supplies were highly effect during the first 3 months of the COVID-19, but availability and adequacy of these supplies reduced as the pandemic continues to subside.
	Output Indicator 2.3: # of health workers trained in integrated COVID-19 case management, surveillance, and IPC. Target: 500 health workers	n.a	500 health workers	568	113.6%	The programme demonstrated outstanding performance for this indicator- meeting and exceeding target by approximately 14%. The overall contribution to training on SOP/integrated COVID-19 case management across all PHUs in the 7 operational districts was 68%.
	Output Indicator 2.4: # of households reached with multipurpose cash assistance.	0	2,000 HHs, 10,000 individuals 2,450 men, 2.550 women, 2,440 boys, 2,560 girls	2000	100.0%	The project performance for this output was outstanding. It met the target of 2,000 households identified to receive multipurpose cash assistance in the targeted districts.
	Output Indicator 2.5: # of women who receive mama-baby kit upon delivery at health facility	449	1,730	1,090	63.0%	The programme demonstrated moderate performance regarding this indicator.
	Output Indicator 2.5: % of community members reached by social	n.a	70.0%	99.0%	141.4%	The programme demonstrated outstanding performance on social mobilisation. The target was achieved and exceeded by over 41%.

	mobilizers correctly identifying methods of COVID-19 transmission.					
	Output Indicator 2.6: % of engaged communities enacting changes to respond to COVID-19 at community level.	n.a	70.0%	n.a		No results were found for this indicator in the MEAL framework

3.8 Key challenges, innovations and lessons learned

One of the key lessons learned from the ECRHS II emergency response and surveillance activities is that during public health emergencies, consumption of medical supplies (including IPC and PPE) increases over time in an effort to protect frontline health care workers (particularly those working in isolation and treatment centers). During this period logistic for medical supplies becomes a critical challenge as the health system becomes overwhelmed with the need to increase supplies. This situation serves as one of the critical factors that undermine effective service delivery during the initial stages of epidemics. Also rumor management and risk communication were identified as critical gaps due to lack of robust community engagement efforts at the initial stage of health emergency response.

The evaluation observed the National Emergency Management System (NEMS) as a critical system in efforts to strengthen referral system for women/ girls in Sierra Leone. NEMS supports ambulances during emergencies and can therefore largely contribute to the health system strengthening in Sierra Leone particularly in the area of surveillance, referrals and RH/SRH. During the fifth quarter of the ECRHS II (April-June 20202) for instance, the support provided towards NEMS from the ECRHS II programme facilitated the referrals of 107 pregnant women/ young girls with obstetric complications.

While joint supportive supervision visits aimed at training and mentoring of DHMT/Health facility staff, the visits further proved to be an innovative way of conducting physical spot-checking and simulation exercises for all health facilities in any targeted health catchment areas. These visits present an opportunity for both supervisors and other health care workers to engage in constructive feedback, joint problem solving and two-way communication that further help improve quality and effective service delivery in the health sector. Any outcome from the joint supportive supervision can be further strengthened during the integrated supportive supervision visits (ISSV) which are done by bringing together health facility representatives, DHMT, Directorate of Drugs and Medical Supplies (DDMS), and NGOs to comprehensively assess the managerial, technical as well as capacity and performance of facilities. The ISSV further creates a platform where health staff and other partners identify gaps in service delivery and provides the necessary support for improved performance of staff and health service delivery.

Community ownership of the community-based surveillance system and emergency response and preparedness (ERP) was noted to have been fostered by the EPP coordination activities supported by the ECRHS II project.

Reaching out to community members on reproductive health messages and modern FP methods improved significantly during the second phase of ECRHS implementation. However, some social and cultural factors that undermine gains made on SRH still remain unresolved especially in predominantly Muslim settings where FP use seems to be a taboo. The choice of messaging on SRH does not seem to have been carefully designed, or otherwise have had limitation in terms of coverage.

The livelihoods component of the ECRHS programme continues to be a critical part in health seeking and epidemic prevention control, especially during public health emergencies. This has been proven from emergency responses to the two major outbreaks that have occurred during implementation of the two phases (that is Ebola and Corona outbreaks). During the COVID-19 responses, livelihood packages that serve as critical factors that minimise risk behaviours and fostered health seeking include multi-purpose unconditional cash assistance (CVA) and mama-baby kits that were delivered

to vulnerable households/ families.

VSLA groups have been widely recognized for the multi-purpose capabilities in the implementation of health and humanitarian programmes. The VSLAs have proven to be very instrumental in supporting vulnerable groups from practicing negative survival strategies during public health emergencies. While they serve as advocates for access and use of RH/SRH and FP services, their traditional role as savings and loan groups have largely contributed to strengthened community resilience to financial shocks and emergencies.

One of the key expectations of the ECRHS II programme was to promote safe hygiene and sanitation practices at community level. During the second phase, the programme only focused on small water work at facility level but limited its WASH activities only to hygiene promotion at community level. The evaluation, however, noted some best practices on water point management that have largely contributed to the high number of community members with access to safe water sources. An excellent lesson was documented from Lunsar, Port Loko district. Here, community members have adopted a sustainable way of water point management. Monthly contributions of Le2,000 per household are made towards the water point, and these contributions are saved to carry out yearly preventive maintenance of water point. The minimum amount expected by each committee for the preventive maintenance is Le150,000 per year. This was affirmed by the water technician covering the entire chiefdom. Notably the water technician is very effective and plays a crucial role in ensuring sustainability of the water points. Accordingly, there are 68 water points and each of these water points has a water facility management committee comprising of a chairperson, secretary, caretaker, treasurer and an adviser (who is normally the head man or religious leader of the community). In the past year, the water technician and his team carried out preventive maintenance on 75 percent of all water points within the chiefdom. The remaining 25 percent of water points were left out due to improper flow of communication on the contribution made for preventive maintenance. During the year under review improvements in communications has increased maintenance of 90 percent of the water points. Part of the preventive maintenance by the water technician include maintenance of hand pumps, treatment of water with chlorination, and sensitization on the use of hand pumps and mobilization of community members for cleaning of water points.

4 CONCLUSION

The role played by the ECRHS programme is responding to epidemics, maternal and child death strongly reflects on the purpose for which it was commissioned. The flexibility of the programme to make adaptations in response to emerging public health emergencies makes it particularly unique among existing health interventions across the country. For instance, while the major focus of the phase 2 of implementation was RH/SRH, the programme was quickly adapted to respond to COVID-19 pandemic, thereby extending its coverage from 7 to 10 districts in Sierra Leone. The programme's effectiveness was also tested by pockets of potential outbreaks (such as measles, cholera, yellow fever, Marburg), which were quickly contained without posing considerable risks to the population. The ECRHS II programme contribution to national health outcomes was highly remarkable, which makes it a worthwhile investment in Sierra Leone.

Key reproductive maternal and child health outcome that showed improvement during the programme implementation include i) a drop in maternal death by 6 percent, ii) a significant drop in neonatal mortality by 21 percent and iii) reduction of under-five mortality by 33 percent. Uptake of modern contraception methods also increased significantly towards the end of program implementation. For instance, the baseline situation in modern contraceptives use improved geometrically by 140 percent. In addition, 77 percent of the national target on use of modern method of contraception prevalence was achieved by the end of implementation. Surveillance response was also robust, effective and efficient. The programme had a positive effect on case reporting, investigation and response in the intervention districts. Approximately 13 percent of 497 PHUs assessed by the evaluation recorded 10 types of priority disease events in the course of programme implementation including COVID-19, Lassa fever, dysentery, suspicious animal deaths, AFP, chicken pox, cholera, diarrhoea, measles and anthrax. Unlike situations prior to the project inception, investigations and responses to all the diseases/ events were promptly initiated. Accordingly, 100 percent of responses (including investigation and actions initiated) were done within 72 hours of occurrence.

5. SUMMARY OF RECOMMENDATIONS BASED ON THE FINDINGS

Overall, the achievements are remarkable and serve as a basis for replication and further strengthening of the health system. Meanwhile, the evaluation noted some flaws that require attention whilst sustaining gains made.

4.1 Recommendation for reproductive health/ sexual reproductive health

Considering that the ECRHS is gradually transitioning to a long-term health system strengthening in Sierra Leone. The key findings and recommendations on RH/SRH were aligned with the health system building blocks and bottles identified in the Sierra Leone Reproductive Maternal, Newborn Child and Adolescent Health Strategy 2017-2021

Health system building blocks	Key bottlenecks stated in SL RMNCAH Strategy (2017-2021)	Key ECRHS II evaluation findings	Recommendations
Leadership and governance	▪ Lack of outdated, poorly disseminated and low utilization of guidelines, protocols, SOPs and job aids. ▪ Low levels of implementation of existing protocols and guidelines ▪ Weak management coordination structures, including a multisectoral response for RMNCAH at national and district levels; with high levels of centralization. ▪ Strong political good will at national level not translated to district, chiefdomsand community. ▪ Lack of a champion for RMNCAH at national and district level	▪ The ECRHS f facilitated a number of multi-sectoral coordination meetings that have established political will and leadership drive by MOHS around RH/SRH. For instance, the Programme Steering which meets every quarter includes the Director of Health Security and Emergency (DHSE), Director for the Directorate of Policy, Planning and Information (DPPI), Director of Primary Health Care, and Director of Reproductive and Child Health (RCH)..	▪ Strong and visible sectoral leadership by MOHS should be encouraged by aligning the mandate of different Directorates of MOHS to specific components of the ECRHS is recommended in the coming phase of implementation. For instance, DHSE to demonstrate leadership on EPP and RCH to demonstrate leadership on RH/SRH, etc. ▪

Healthcare financing	▪ Low government allocation to RMNCAH interventions ▪ No health care financing strategy for the country ▪ Inadequate demand side financing strategies to address financial barriers toaccessing RMNCAH services. ▪ Out of pocket payments despite existence of the FHCI ▪ FHCI does not cover adolescent health services except in cases of pregnancy. ▪ Weak development partner coordination into one prioritized strategy leadingto inefficiencies ▪ Low coverage and implementation challenges with Performance BasedFinancing (PBF	▪ Government commitment towards health care financing has increased in recent years. The government is aware of the transitioning of donor-driven programmes such as the ECRHS. MOHS is already committed to the WHO health Financing Progress Matrix for Universal Health Coverage. ▪	▪ . Training and capacity building on fundraising and project cycle management and increased collaboration with donor partners such as the World Bank Group is recommended. ▪ Build on existing health financing system such as the WHO Health Financing Matrix for Universal Health Coverage (UHC) to forecast and mobilise local resources through national and subnational government budgets.
Health workforce	▪ Shortage of and mal-distribution of critical cadre especially midwives andhigher cadre nurses ▪ Inadequate skills among health workers for provision HII for women, newborns, children and adolescents ▪ Low motivation due to poor remuneration, career progression, lack of remotedistrict allowance and lack of staff housing ▪ High numbers of unsalaried health workers, nearly half of health workforce notsalaried ▪ Weak professional regulation of health workers- over 30 % of health workersnot licensed. ▪ Weak infrastructure for health worker training ▪ Weak human resources information management systems	▪ ECRHS II programme design did not support the fin acing of the health workforce. The bottlenecks highlighted in the SL RMNCAH remain unresolved. The evaluation noted that close to 50 percent of PHU staff are not on payroll and therefore not salaried. This undermines the free healthcare initiated (FHCI) and quality of care. ▪	▪ The Ministry of Health must ensure licensing for health staff and creation of a budget line for remote allowances and volunteer healthcare worker package for quality service delivery in last mile health catchment communities.
Essential medical products and technologies	▪ Stock outs of lifesaving and essential RMNCAH commodities reported at healthfacilities. ▪ Underlying problems for stock outs: Inaccurate data for forecasting, lack of skills in quantification and forecasting among health facility staff, challenges with last mile distribution, lack of budget from the councils to ensure last miledistribution, stock out at national level. ▪ Mal-distribution reported, over-stocking in some facilities, understocking inothers, commodities at wrong levels of service delivery. ▪ Adolescents not covered through the FHCI drugs. ▪ LMIS is a challenge, paperwork at facility, ordered electronically at district level. ▪ Challenges with blood availability and ensuring its safety. ▪ Storage challenges for some commodities for example Oxytocin due to lack ofrefrigeration ▪ Inadequate and unregulated medical equipment, poor maintenance	▪ Stock out of lifesaving and essential RMNCAH /SRH continues to pose critical challenge in healthcare service delivery due to the 'PUSH' supply change system. ▪ Capacity building and training for health was, however, a strong component in the ECRHSII programme implementation including data collection, entry and reporting, HMIS, etc.. ▪ Blood donation efforts from community members have not been successful in the programme intervention districts	▪ It is recommended that that replenishment policy through the pull supply chain system be introduced particularly for RH/SRH commodity supplies. Stock out of acceptable FP commodity supplies was high at the time of the assessment. Also, critical examination and supply of LARC medical equipment must be done and maintained for all health facilities. ▪ Rolling out training and capacity building support on quantification, forecasting and medical commodity data management is strongly recommended.
Service delivery	▪ Inadequate pre-service preparation of health workers ▪ Poor quality of services due to absence of standards, guidelines and job aids ▪ Poor quality if service due to poor	▪ Support towards health service delivery was highly evident during the evaluation exercise. The ECRHS II programme supported DHMT	▪ It is recommended that the quarterly joint monitoring, supportive supervision and ISSV be maintained. This innovative health systems

	dissemination of standards, guidelines andjob aids ▪ Absence of/or weak supervision, mentorship and monitoring systems in healthfacilities ▪ Absence of quality improvement mechanisms including audits and regular reviews of performance in health facilities ▪ MDSR, weak on response and the "P" component missing. ▪ Weak referral systems and linkages between different levels ▪ Inadequate infrastructure/space water/electricity for provision of RMNCAH services especially EmONC	to provide training and mentorship on SOPs, modern FP contraception methods (including implants), IPC guidelines and infectious waste management. The DHMT has already established the culture of routine joint monitoring and supportive supervision for additional training and mentorship. ▪ Amid some flaws, the program committed funds towards NEMS role for improved referrals of obstetric emergencies in the operational districts. ▪ The ECRHS II programme recognized the need for running water at health facilities. Small water works and installations of water tanks and reticulation networks were made for selected PHUs in the 7 operational districts. ▪ MDSR was strongly visible in the ECRHS RH/SRH implementation strategy. The outcomes of MDSR are well recognized by MOHS, and have been used to plan remedial actions on reduction of maternal mortality in Sierra Leone.	approach can provide guidance in identifying gaps, health staff capacity weakness and strengthen quality health care service delivery in Sierra Leone. ▪ MOHS should ensure that budget line for emergency funds is created in national health financing. It was observed that NEMS operation was donor-driven and there were reported instances where delays in funds approval contributed to high mortality after operations were stalled. Emergency funds can be used in such a situation. ▪ Rolling out water works for uninterrupted running water supply to all BEmONC facilities is highly recommended. ▪ The need for birth waiting homes in PHUs overwhelmed with patients is recommended.
Health information system	▪ Data use for decision making is weak at all levels-national, district and facilitylevel ▪ Challenges with data quality, timeliness and completeness ▪ Data generally not valued by health workers. ▪ Poor disaggregation of data especially on adolescent health; analysis andreporting for adolescent age bracket is not a norm	▪ Health data management and use have markedly improved at both national and district levels. In the ECRHS II operational districts, robust training activities and capacity support on HMIS and DHIS (including data entry and reporting were done for both PHUs and DHMT staff. Data quality, timeliness and completeness has markedly improved by the end of implementation.	▪ Sustaining and rolling out of gains made in health management information system should not be overemphasized for health system strengthening efforts.

4.2 Recommendation for surveillance, emergency response and epidemic prevention

Although the major focus of phase two of the ECRHS II implementation was RH/SRH, the programme also placed strong emphasis on surveillance, emergency response and epidemic prevention. The capacity of health staff on IDSR has been strengthened compared to first phase of ECRHS programme implementation. The EPP strategy to include local authorities and the continuous strengthening of CHWs capacity garners local support and ownership for community-based surveillance and emergency response. This has improved the quality and effectiveness of response to priority disease events detected at community level. Replicating this strategy in other parts of Sierra Leone will improve on national future emergency response.

4.3 Recommendation for WASH

- The ECRHS programme made strong focus on improving WASH facilities at PHUs in operational districts. While this seems to be a commendable approach, it is recommended that preventive maintenance by local water technicians be maintained. The PHU WASH improvement activities should be rolled out across all health facilities.

- Community water management committees should be revived and made functional to sustain gains made in access to water and sanitation.

4.4 Recommendation for cross-cutting issues/ general perspectives

- Socio-cultural barriers to access and utilize modern FP contraception methods remain widely evident across the ECRHS II operational districts. Continued adoption of gender transformation approach and establishing a community-led male advocacy forum on FP are strongly recommended.

- Disability perspectives have not been fully incorporated in the ECRHS interventions. Rehabilitation efforts and small water works have not recognized the need for disabled-friendly health facility infrastructure particularly the water and sanitation infrastructure.

ANNEXES

Annex I: Terms of Reference

Terms of Reference.docx

Annex II: Household/Personal Interviews Questionnaires

Final Tool #1 - Personal Interviews ar

Annex III: Health Facility Assessment Tool

Final Tool #2 - Health Facility Assessment ar

Annex IV: Focus Group Discussion (FGD) Guide

ECRHS FGD.docx

Annex V: Key Informant Interviews (KIIs) Guide

Key informant interviews- partner re