



The 3FM pneumonia programme 2017 - 2021

Summary meta-evaluation from community-based child health programmes in Ethiopia, Sudan, Zambia, Cote d'Ivoire and Mali



The Netherlands Red Cross



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## List of acronyms

ANC	Ante-natal care
ARI	Acute respiratory infection
BCC	Behaviour change communication
BCG	Bacillus Calmette–Guérin (vaccine for tuberculosis)
CAG	Community Action Group
CBHFA	Community-based health and first aid
CHW	Community health worker
CLTS	Community-led total sanitation
EPI	Expanded Programme on Immunization
FGD	Focus group discussion
FP	Family planning
GAPPD	Global Action Plan for Pneumonia and Diarrhoea
HAD	Health Development Army
HEP	Health Extension Program
HEW	Health Extension Worker
HH	Household
HIS	Health information system
ICCM	Integrated Community Case Management
IFRC	International Federation of Red Cross Red Crescent Societies
IMCI	Integrated Management of Childhood Illnesses
MoH	Ministry of Health
MSC	Most significant change
NLRC	Netherlands Red Cross
NS	National Society
ODF	Open defecation free
PcV3	Pneumococcal conjugate vaccine
PHAST	Participatory hygiene and sanitation transformation
PMER	Planning, monitoring, evaluation and reporting
UNICEF	United Nations Children's Fund
WASH	Water, sanitation and hygiene
WHO	World Health Organization

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# 1 Overview of the 3FM Pneumonia programme

The 3FM Pneumonia programme was a flagship integrated community health programme implemented in 5 countries (Ethiopia, Mali, Sudan, Zambia, and Cote d'Ivoire) with support of the Netherlands Red Cross (NLRC) from January 2017 to December 2020, with some final evaluations and closing activities in 2021. The programme was funded through a public radio campaign called the '3FM Serious Request', organised by the 3FM radio station and NLRC in 2016. Figure 1 presents a broad timeline of the 3FM programme.

The integrated community health programmes aimed to reduce child morbidity and mortality due to pneumonia, a major health problem and cause of death among children under five years of age.

To achieve this goal, the programme focussed on 2 main components:

- 1) **Pneumonia control:** Improving early case detection and recognition of danger signs, home care management, timely health seeking behaviour, effective referral to health care facilities, and improved case management through basic support to health care facilities. This was the central component of the programme and it was included in the 5 countries.
- 2) **Pneumonia prevention:** Strengthening community level prevention measures (both direct and indirect) against childhood illnesses, particularly (community acquired) pneumonia. Core preventive practices present across all countries were: increasing vaccination rates, promoting exclusive breastfeeding, handwashing and air ventilation. Additional practices that are indirectly related to ARI prevention and varied from country to country were: safe feeding practices and hygiene and access to water, sanitation (to reduce diarrhoeal diseases) and hygiene services, improving nutrition status, promoting access to family planning, reducing indoor air pollution, and promoting other prevention measures for pertinent local diseases among children (e.g. malaria). These components varied across the 5 countries, according to differences in context.

By working both at community and health facility level, the 3FM programme aimed to strengthening health and hygiene promotion, and improving health seeking behaviour and health service delivery:

*"Availability of health services (e.g. drugs for children under five) and health promotion activities motivated the community members, including households with children under five, to utilize health facilities, specifically for children. All community members started to visit the health unit for treatment and ask for drugs." (Quote from female during the final evaluation, Hamashkorieb, Sudan)*

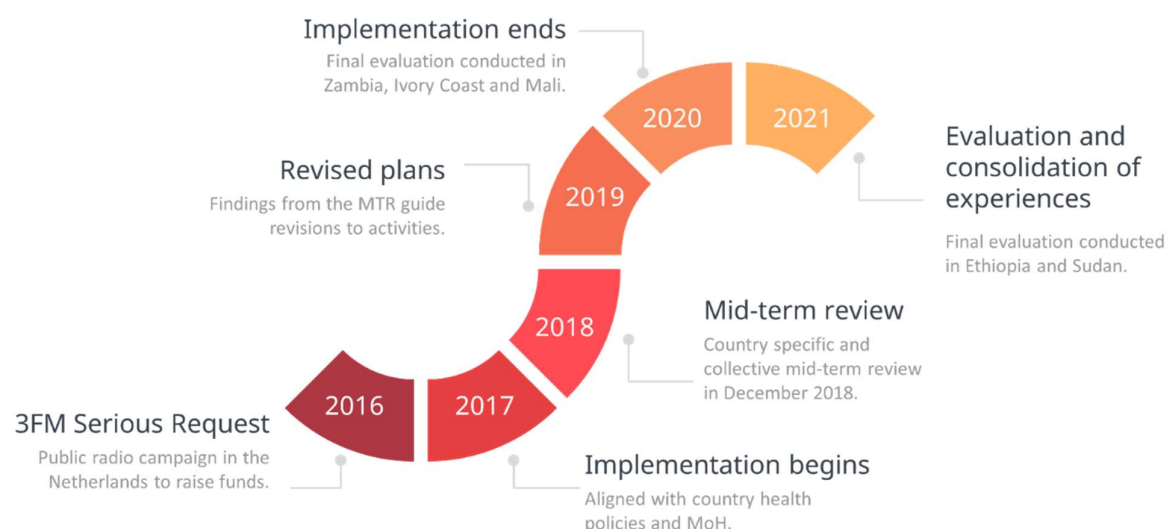


Figure 1: Broad timeline of the 3FM pneumonia programme.

## 2 How was the programme implemented?

This section provides broad information on how the 3FM Pneumonia programme was implemented. Country specific information is presented in chapter 4.

### 2.1 Programme structure

The overall programme structure was according to NLRC standard procedures. Project teams were set-up within each National Society (at both headquarters and branch level), and MoUs signed to formalise partnerships. A steering group including NLRC Health and Hygiene Promotion Advisors provided close technical support to National Society teams throughout the programme.

### 2.2 Overview of specific objective and results

A generic logical framework was developed for the overall programme (Table 1 below). This provides a broad overview of the 3FM programme focus and activity areas. Each National Society (NS) then adapted and revised the specific objectives, results and activities to fit the country context – particularly specific objective 1 (the pneumonia prevention component).

The programme followed a combination of interventions to protect against, prevent, and treat pneumonia in children in line with the WHO and UNICEF integrated Global Action Plan for Pneumonia and Diarrhoea to 2025 (GAPPD)<sup>1</sup>, and national Ministry of Health guidelines.

**Table 1: Generic logical framework for the overall 3FM pneumonia programme.**

Specific objectives	Results
1. By 2020 communities in target areas increase the uptake of practices that help prevent ARI <sup>2</sup> infections and support timely diagnosis and treatment of respiratory infections.	1.1 Increased uptake of ARI preventive practices at community level. 1.2 Improved indoor air quality within households in target communities. 1.3 Improved health care seeking behaviour and adherence to treatment.
2. By 2020 health facilities in target areas have improved their capacity to provide quality curative care services for childhood ARI and other underlying contributing causes (malnutrition).	2.1 Quality EPI <sup>3</sup> , IMCI <sup>4</sup> and Nutrition services are delivered to target communities in health centres.
3. Community-based outreach systems in place in target area.	3.1 Timely and quality ARI surveillance, case finding and referral system are in place in all target communities. 3.2 Outreach vaccination support services are available by end of 2020.
4. Increased both managerial capacity of NS to implement the project and technical capacity in the health emergency sector by the end of 2020.	4.1 By end of 2020 NS staff is versant with project cycle management and PMER <sup>5</sup> duties. 4.2 By end of 2020 NS has strengthened their ability to respond to potential ARI related outbreaks.

<sup>1</sup> [https://apps.who.int/iris/bitstream/handle/10665/79200/9789241505239\\_eng.pdf?sequence=1](https://apps.who.int/iris/bitstream/handle/10665/79200/9789241505239_eng.pdf?sequence=1)

<sup>2</sup> ARI – acute respiratory infections.

<sup>3</sup> EPI – Expanded Programme on Immunization.

<sup>4</sup> IMCI - Integrated Management of Childhood Illness.

<sup>5</sup> Planning, monitoring, evaluation and reporting.

### 3 Evaluation summary of the core programme components

This section presents summaries of key outcomes for each core programme component: i) pneumonia control, and ii) pneumonia prevention.

Behaviour change was a central pillar of the 3FM programme and underpinned both core components. The focus was on training parents and caregivers to identify danger signs for pneumonia in their sick children, influence health seeking behaviour, promote full compliance with treatment and reduce risk factors for pneumonia/ARIs (such as improved handwashing with soap, breastfeeding, vaccination, addressing harmful traditional practices, proper nutrition and access to improved cooking stoves).

Further information on the behaviour change communication (BCC) process, including key learnings of interest are outlined in **Annex 1: Learning notes** – capturing important lessons from the behaviour change communication (BCC) process of the 3FM community health programme.

#### 3.1 Summary of outcomes: pneumonia control

This component is split into two sub-sections: one focussing “at home” on parent/caregiver knowledge and health seeking behaviour, and the other focusing on “getting to and what happens at the health clinic” with health system strengthening, referral systems and case management.

##### 3.1.1 Health seeking behaviour and pneumonia related knowledge

As part of the pneumonia control component, a key focus of the programme in all countries was to improve early recognition of danger signs and timely healthcare seeking behaviour. This was largely addressed through improving caregiver knowledge of pneumonia/ARI symptoms and danger signs, and addressing delays in seeking care.

Traditional medicine co-exists with modern medicine in all 5 countries, with strong use and trust in traditional healers and remedies. However, there are a number of harmful traditional practices relating to, such as burning (Ethiopia) or tattooing (Zambia) the chest of a child with children with respiratory illness. In general, traditional medicine was viewed as complementary and in all countries, traditional healers were engaged and involved at varying levels in project activities such as training for capacity building, and as a referral pathway from the community. As traditional healers were influential and often held in high esteem in communities, they were an important channel for communication and were identified in BCC plans as target audiences for messages. For example, in Ethiopia traditional healers (and religious leaders) took part in community conversation sessions, and supported the Health Extension Workers, health staff and volunteers in social mobilization.

The formative research identified widespread cultural and social norms and beliefs relating to respiratory illness, such as in Cote d’Ivoire pneumonia disease is believed to be caused by the consumption of local fish called ‘djéké’ by pregnant women. In Zambia, pneumonia is a disease of the child’s spirit, connected with the air/wind. Other key barriers to health seeking reported across countries were distance to health facilities, cost (of transportation, for consultation and/or medicines). Decision making power, linked to gender and social norms, was also identified as a barrier for timely health seeking. For example mothers needing permission from their husband or mother-in-law to seek care (Mali), or to spend money on transportation to the clinic (Ethiopia).

In general, there were considerable improvements in the knowledge of pneumonia /ARI symptoms and danger signs across all countries. For example, in Cote d’Ivoire there was a 54% increase in parents who could recognise at least 3 symptoms of pneumonia. There were also substantial increase in the parents who reported checking fever in children under five years with the first symptoms of respiratory illness, and giving lemon, honey and herbal tea to children who are coughing.



Changes in health seeking behaviour were reflected in both quantitative and qualitative data. Overall there was a trend for parents/caregivers to first seek care from community health workers/volunteers, with a general decrease in the reported use of traditional healers (when children show danger signs of pneumonia; other diarrhoeal disease or symptoms were not analysed).

In Ethiopia, positive trends around participation in the decision to take a child to the health facility were seen, with reported decisions taken by fathers only decreasing from 15% at baseline to 2% at the endline. However in Mali, mothers in FGDs conducted in the final evaluation confirmed that the decision to go to the health centers is yet not taken by them as they need permission from husband or other relatives. In Zambia, the majority of caretakers in the three districts informed a Red Cross volunteer instead of going directly to a health facility. This difference could be due to the project emphasis on iCCM and the strong presence of first line RCRC volunteers in the community.

### 3.1.2 Health system strengthening, referral systems and case management

As part of the pneumonia control component, a number of different areas related to health system strengthening were addressed in each country (Table 2 below). The extent to which each area was addressed depended largely on the needs and gaps identified during the inception phase, baseline surveys and mid-term evaluation.

Overall, capacity building of health staff was a priority area of intervention identified in all five countries, along with strengthening of referral systems, rehabilitation of health facilities, procurement of equipment and drugs and support to Expanded Program on Immunization (EPI), Integrated Management of Childhood Illnesses (IMCI) and nutrition. Aspects such as joint supervision and monitoring with Ministry of Health (MoH), strengthening of Health Information Systems (HIS), and strengthening collaboration with MoH and other external stakeholders received different degrees of attention.

**Table 2: Summary of health system strengthening activities, by country, as part of the pneumonia control component of the 3FM programme.**

	Cote d'Ivoire	Mali	Zambia	Ethiopia	Sudan
Improved quality of EPI, IMCI, nutrition and other services <sup>6</sup>	EPI IMCI Nutrition ANC	EPI MNCH Nutrition FP ANC	EPI IMCI ICCM Nutrition	EPI IMCI ICCM Nutrition FP	EPI IMCI Nutrition
Health facility rehabilitation, equipment and drugs					
Improved referrals and outreach					
Capacity building of health workers/community health and extension workers					
Supervision and monitoring					
Strengthening reporting/HIS					
Strengthening collaboration with other stakeholders					

<sup>6</sup> Expanded program on Immunization (EPI), Integrated Management of Childhood Illnesses (IMCI), Ante-natal care (ANC), Integrated Community Case Management (ICCM), Family planning (FP).

<b>Key for table</b>		Included comprehensively.
		Included partially/somewhat.
		Not included.

The relevance of this outcome is clear given the weak health systems in the contexts this project was implemented, notably facing lack of trained staff, poorly equipped health facilities and long distances to seek/deliver care. This project responded to government strategies and the needs of both communities and healthcare workers.

Although the project managed to achieve this output successfully it faced some challenges, notably related to long distances, supply of drugs for children under five, management capacities at health facilities. While all countries worked with and involved local health and other relevant government stakeholders (e.g. in trainings, in planning workshops, through regular meetings etc.), several evaluations noted that these partnerships could be strengthened and developed further.

In all five countries the project was evaluated as effective with practically all targets reached in terms of number of health staff trained, overall increase in vaccination rates, and number of health facilities rehabilitated. Results from the endline evaluations reveal that communities in all countries were generally satisfied or very satisfied with the services received.

Despite continuous attempts to improve referral systems, a few countries reported persistent challenges such as long distances between communities and health facilities, lack of transport (or money to pay for transport) to reach health facilities, attitudes of the staff, and perceptions that health facilities did not have sufficient medicine or equipment to properly treat illnesses.

Despite these challenges, overall a positive trend of increased number of referrals from trained CBHFA volunteers or CHW/HEWs to health facilities was observed. However, in some cases this trend could not be supported by data, or there was no information indicating the percentage of referrals that were properly diagnosed with pneumonia.

As an example related to proper diagnosis and quality case management, health staff in Zambia outlined reasons including a lack of equipment, lack or insufficient supervision of CHWs and volunteers, and shortages of drugs:

*“Due to shortages sometimes it was not possible to conduct monthly meetings. Besides, there is no diagnostic equipment at community level, and CHW are not trained or supposed to diagnose. They are given a timer and trained to recognize the respiratory rate: 2 main danger signs. As to stock out of drugs, sometimes CHW are not submitting monthly consumption reports and requests on time, sometimes there is simply a shortage or stock out at district level.”*

Effectiveness when it comes to supervision and monitoring of staff, strengthened reporting systems and collaboration with MOH and other stakeholders varied from country to country, but overall there was room for improvement.

The project clearly contributed to the improved capacity of healthcare workers to use IMCI and ICCM protocols and guidelines, as well as strengthened healthcare facilities to deliver care. In broad terms, relationships with MoH were strengthened and this contributed to higher efficiency in implementation of activities such as EPI and IMCI. More collaboration with external stakeholders could have been sought to maximize efficiency by deploying existing knowledge and resources.

Sustainability, in particular economic and institutional sustainability, is a challenge when it comes to health system strengthening as it relies heavily on the capacity of the government and health authorities to ensure the supply of drugs and equipment, rehabilitation and equipment repairs, payment of salaries and incentives for healthcare workers, supervision, travel costs for supervision



and outreach activities, etc. The main risk to sustainability lies in the relevant line ministries (e.g. MoH) as well as the effectiveness and continued initiative of the community action groups (CAGs).

### 3.2 Summary of outcomes: pneumonia prevention

Behaviours that are **directly** related to pneumonia prevention (vaccination, exclusive breastfeeding, air ventilation and handwashing) were included in all 5 country programmes. A broad summary of the outcomes in these core preventative practices are presented below.

The activities and focus on behaviours that are **indirectly** related to pneumonia prevention (nutrition, hygiene, safe feeding, access and use of water and sanitation facilities, family planning, and prevention of other co-morbidities such as malaria and diarrhoea) varied widely from country to country. Outcomes for these practices are included in the country summaries in chapter 3.

Vaccination	<p>Overall, there were significant improvements in vaccination coverage, as a key protective behaviour for pneumonia and acute respiratory illnesses (ARIs). In each country, the project aligned with the approved Ministry of Health routine vaccination schedule, and therefore the vaccination data captured as part of the project varies between countries. Cote d'Ivoire and Mali reported 41% and 40% increases respectively in children under the age of two who follow the vaccination schedule. Although increases were seen in all 5 countries, vaccination coverage remained below national targets. For example, in Ethiopia where measles vaccination increased 13% to 87% at the endline – below the national target of 95%. The main challenges reported in terms of reaching communities to further increase vaccination coverage were transport to cover distant and pastoralist communities, and storage of vaccines.</p>
Exclusive breastfeeding (from birth to 6 months)	<p>Exclusive breastfeeding and appropriate complementary feeding from 6 months was promoted through a variety of channels, but was not specifically included in the BCC plan for all countries. For example, in some countries the key message was 'continue breastfeeding if the child is sick'. In Cote d'Ivoire and Mali, significant increases in the mothers reporting practicing exclusive breastfeeding were seen over the project period (64% and 42% increase respectively).</p> <p>The baseline level of reported exclusive breastfeeding was relatively high in Sudan (60%), however an increase of 14% was realised. In Ethiopia, breastfeeding is common and although a 14% increase was observed in mothers reporting breastfeeding their youngest child, there was no significant change in the percentage of mothers who reported exclusive breastfeeding.</p> <p>In Zambia, a slight reduction (6%) in mothers who exclusively breastfed was reported, which could be due to hunger experienced in the districts (related to drought) or variations in sampling or data collection.</p>
Handwashing with soap	<p>Changes in handwashing practices varied across the 5 countries, with some significant increases in reported handwashing practices (e.g. after using a toilet or before preparing food), particularly in Zambia (77% reported increase) and Cote d'Ivoire (38% reported increase). Ethiopia and Mali both reported substantial increases in availability of fixed handwashing stations at household level (28% and 65% increase respectively), however there were no or limited details about the functionality, availability of soap and water, or presence of any signs of use. Therefore, results regarding handwashing with soap should be interpreted cautiously.</p>

Indoor air pollution

The focus was on reducing indoor air pollution (smoke) through separating cooking and living/sleeping areas, and using improved cooking stoves at household level. While knowledge of air pollution and separation of cooking areas was included from the beginning of the project, activities on construction and uptake of improved cooking stoves were included following the mid-term review and therefore baseline data on this indicator was not collected.

In Sudan, there was a significant improvement in observed separated cooking and living/sleeping areas in the project areas, increasing by 40% (from 49% at baseline to 89% at endline). At the project end, 2 out of 3 (71%) respondents in Ethiopia reported currently using the MIRT improved cooking stove, with many stating that the stoves reduced the consumption of firewood and smoke.

In Zambia, levels of knowledge on smoke from cooking being a risk factor for pneumonia were high, however there were challenges with uptake of the improved cooking stoves due to cost and availability of clay as the main construction material. In Cote d'Ivoire, the improved stoves were well received and appreciated by communities however there were concerns with durability and sustainability, with many being degraded due to rain.

## 4 Country-specific results, impact, lessons and recommendations

This section presents succinct country-specific summaries of key results and impact (based on final evaluations) as well as lessons and recommendations and key ingredients for success. Summary data tables are provided for each country, including key baseline and endline indicators (Annex 2 – 6).

### 4.1 Ethiopia

#### 4.1.1 Overview of the country programme

<b>Overall objective</b>	To contribute to the reduction of Acute Respiratory Infection (ARI) among children under five in the selected woredas and kebeles and of South Gondar Zone (Amhara Region), Fafan/JigJiga Zone (Somali Region) and Gujji zone (Oromia Region) by 2020.
<b>Project areas<sup>7</sup></b>	Eight woredas and 56 kebeles in Amhara, Somali and Oromia Regions.

**Estimated number of children under five (indirect beneficiaries):** 192,312 children

**Total number of direct beneficiaries:** 51, 290 people

The specific outcomes of the project were:

- By 2020 communities in the selected Kebeles and Woredas of South Gondar, Fafan Zones and Guji zone have increased the uptake of practices that help protect against and prevent ARI infections and support timely diagnosis and treatment of respiratory infections.
- By 2020 health facilities in the selected Kebeles and Woredas of South Gondar, Jigjiga Zones and Guji zone, have improved their capacity to provide quality case-management services for childhood ARI using the IMNCI / ICCM approach.
- Referral and outreach systems in place and functional in the selected Kebeles and Woredas of South Gondar, Jigjiga Zone and Guji zone, by 2020.

<sup>7</sup> Project targets were revised based on the mid-term review outcomes, and two additional woredas (Liben and Wadera) in Gujji Zone were added in January 2019.

- Increased managerial and technical capacity of NS to implement the project and to anticipate and respond to disease outbreaks by 2020.

The programme followed different approaches for the delivery of activities:

- i. the Ethiopia Ministry of Health Integrated management of newborn, child and infant (IMNCI / iMIC) approach,
- ii. Integrated Community Case Management (iCCM) and WHO guidelines,
- iii. the IFRC CBHFA approach to facilitate access to health care, motivate behaviour change among care givers, and improve key pneumonia (acute respiratory illnesses)ARI prevention practices at household and community levels.

The 3FM programme was closely aligned with the existing Ethiopian Health Development Army (HDA) and Health Extension Worker (HEW) structures, training them with community-based volunteers to improve knowledge and strengthen the referral pathway from community to health facilities.

#### 4.1.2 Key results and impact

Health seeking behaviour and pneumonia/ARI knowledge	<p>The project considerably improved the awareness of the community on ARI danger signs and prevention, and changes in health seeking behaviour were reflected in both quantitative and qualitative data, as well through most significant change (MSC) evaluation techniques.</p> <p>Community members in all target areas reported that through the support of the programme they are in a better position to identify the signs and symptoms of pneumonia and seek timely medical support.</p> <p>Significant increases in recognition of pneumonia danger signs and methods for prevention were seen. For example, the percentage increases from baseline to endline in recognition of dangers signs was 48% for cough, 45% for fever, 41% for fast breathing, 30% for chest drawing in, 35% for inability to drink/breastfeed, and a 19% increase in recognition of lethargy as a danger sign. Knowledge of methods to prevent pneumonia increased 31% for immunization, 31% for hygiene and sanitation, 28% for reducing indoor pollution and 35% for adequate nutrition.</p> <p>The percentage of mothers who reported taking their sick child to health facilities increased by 14% (from 41% at baseline to 54% at endline). Approximately half (53%) reported seeking help at a health post, with one third (35%) seeking care at a government health centre.</p> <p>Positive trends around participation in the decision to take a child to the health facility were seen, with reported decisions taken by fathers only decreasing from 15% at baseline to 2% at the endline.</p> <p>The level of satisfaction of the service provided at health facilities was generally high, with 97% of respondents reporting they were satisfied.</p> <p>Cost and distance were repeatedly mentioned as key factors which affected utilisation of health services. The community health insurance system (CHIS) promoted by the project in south Gondar was functioning well, with high community acceptance and willingness to pay.</p>
Health systems strengthening, including referral	Overall, health facilities in the selected Kebeles and Woredas of South Gondar, Jigjiga Zones and Guji Zone improved their capacity to provide quality

and case management	<p>case management services for childhood ARIs, and referral and outreach systems were in place and functional.</p> <p>The capacity building component of the programme was found to be effective in strengthening the local health facilities (e.g. through provision of medical equipment, antibiotics, refrigerators, generators, water tanks etc.), and that it contributed to improved performance of existing health system programs such as the Health Extension Program (HEP) through training using the IMCI/ICCM approach. Qualitative evaluation data highlighted that these activities had a direct contribution to improved provision of health services and particularly quality case management services for childhood ARIs, and a direct role in the observed reduction of health problems in under five's.</p>
Vaccination	Overall vaccination coverage improved in targeted areas, although some differences were observed across regions due to long distances, the context of pastoralist communities and security concerns. BCG vaccination coverage improved from 80% to 91% and measles vaccination from 61% to 74%.
Nutrition	Positive trends were reported in terms of behaviour change related to nutrition. A 14% increase in mothers reporting breastfeeding their youngest child was observed across all target areas (63% at baseline and 77% at endline).
Hygiene and sanitation	The availability of fixed handwashing facilities at household level increased significantly from 12% to 40%. Positive trends in main sources of drinking water were observed, with a 13% increase in respondents reporting using dug wells (38% at baseline; 51% at endline) and a 23% decrease in spring water as the major source (33% at baseline; 10% at endline).
Indoor air pollution	At the time of evaluation, a significant majority (85%) of respondents reported using a separate kitchen while preparing food, and 2 out of 3 (71%) respondents reported currently using the MIRT stove. Out of those currently using the stoves, a significant majority (86%) reporting that the stoves reduce the consumption of firewood and 64% reporting that the MIRT stoves reduce smoke.

**Personal story: Hafisa** [*full name omitted*]  
I am 30 years old, married, and have 6 children. We used to take our children to the local traditional healers for childhood illnesses, where they would burn the child's body using a metal wire. This was very serious and so painful, I felt a lot of regret and the child's body was left scarred. We got education from the Red Cross volunteers about signs of pneumonia such as cough, fast breathing, and chest drawing in, and to bring children to the health facility for treatment.

My 7 month old son, [*name omitted*], recently fell sick with a common cold and then developed a cough and difficulty breathing. He also stopped breastfeeding and was getting weak. Initially, I took my son to the nearest health post, where he was referred to the Gore health center. After an hour of walking, we reached the health center and they checked my son so quickly and told me that he had a serious illness. He was admitted and treated for about 2 days. Finally, he got better and started breastfeeding. I thank Allah and the health care providers for saving my son's life. You see I wouldn't have saved my son if I didn't accept the health education by the Red Cross volunteers.

Annex 2 provides a summary of key quantitative indicators, at baseline and endline, for the 3FM programme in Ethiopia.

#### 4.1.3 Context specific lessons and recommendations

Lesson	Recommendation
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<p>Some gaps were observed during formative research and in the first half of implementation, in terms of male/father involvement in child care, health seeking behavior and decision making, and harmful traditional practices. Cultural and religious practices were also identified to be barriers or challenges. Gender and diversity mainstreaming and training was subsequently included in the project after the mid-term review.</p>	<p>Gender and diversity mainstreaming should be integrated into all community-based health programming right the beginning (e.g. formative research) so that decision making power and how this influences health seeking behaviour and harmful traditional practices can be well addressed in project activities.</p>
<p>The Mirt stoves were highly valued by the community, however there were some challenges with ongoing uptake. For example, the Office of Water and Energy could be linked to the Mirt stove producers together with local microfinance institutions, to provide the financial and technical support to engage in other business opportunities, marketing and access to finance to purchase the stoves.</p>	<p>Ongoing technical support should be provided to local government offices to improve the sustainability of some of the project activities, as well as improving collaboration with local private sector and microfinance institutions. These activities would not require a large financial commitment. The presence of the ERCS Regional office is an opportunity for providing such regular support to the local governmental sector offices.</p>
<p>The project trained local branches, and community based volunteers, in emergency preparedness and response related to ARIs at the beginning of the Covid-19 pandemic. The response to Covid-19 has been built on this capacity, with volunteers able to support on-going project activities e.g. routine immunization as well as Covid-19 prevention activities, to have a major impact on the health of the target group.</p>	<p>Existing capacity at national, local and community level should be built on and used to respond to disease outbreaks or pandemics through scaling up of preventive activities.</p>

#### 4.1.4 Key ingredients for success

Key factors that were identified as contributing to the success of the programme in Ethiopia were:

- Working in partnership with Zonal and Woreda Health Offices was instrumental in improving the quality of project implementation as well as in promoting transparency and shared responsibility. Implementation focused on building upon and strengthening existing health systems and structures, such as the Health Development Army, and Health Extension Workers. These aspects also contributed to sustainability of the outcomes beyond the project, as they facilitated ownership and local capacity development, building on existing structures and systems in place. and
- The capacity building interventions particularly the introduction of trained CBHFA Volunteers, together with existing Health Extension Workers, had a positive contribution for the achievement of the project.
- The final evaluation recognised that the targeted behavioural change communication based counselling and community messaging through existing government strategies, such as community conversation events, had greatly contributed to positive changes. Key messages and materials for behaviour change were designed to fit to the cultural context of each region, and are appropriate to the context e.g. use of local language and role plays (depicted by the communities themselves).
- The ‘community conversation’ (CC) approach was found to contribute to beneficiary engagement and accountability, and trust as the CC platform gives opportunity for the beneficiaries to give feedback regarding the project, through the trained CBHFA volunteers and CC facilitators.

- The local ERCS branches were given flexibility to adapt their activities to local needs while staying consistent with the objectives of the project and the national priorities and guidelines e.g. focusing on malnutrition in South Gondar, and CLTSH in Gujji zone.

## 4.2 Sudan

### 4.2.1 Overview of the country programme

<b>Overall objective</b>	To reduce mortality and morbidity rates of Acute Respiratory Infections (ARI) among children under five years of age by 2020 in the targeted communities.
<b>Project areas</b>	Four localities (Hamoshkorieb, North Delta, Rural Aroma and Telkook) within Kassala State.
<b>Direct beneficiaries:</b> 95,000 men, women and children (in 15,323 households).	
<b>Indirect beneficiaries:</b> 25,000 men, women and children.	

The specific outcomes of the project were:

1. Communities in target areas are better able to protect themselves against and prevent ARI infections and support timely diagnosis and treatment by community health workers and health facilities due to increased uptake of ARI protection and prevention practices, improved home care and enhanced health seeking behaviour (including adherence to antibiotic treatment of severe ARI) by 2020.
2. Health facilities (and outreach systems) in the target areas have improved capacity to provide quality case-management services for childhood ARI and the deliverance of nutrition services to children under five years of age in health centers.
3. Increased both managerial capacity of NS to implement the project and technical capacity in the health sector by the end of 2020.

### 4.2.2 Key results and impact

Despite facing a number of challenges (including political and financial instability), the 3FM programme in Sudan was successful in implementing activities which were relevant and effective in building trust with the key stakeholders and gaining the confidence and satisfaction of communities.

The programme contributed to achieving a number of results and impact in different areas, including improvements in household knowledge on pneumonia, improved health seeking behaviours, nutrition, WASH, vaccination coverage and indoor air pollution. Qualitative data reported by communities in the project areas indicated improvement on awareness and understanding on importance of child vaccination, defecation practices and overall sanitation, hygiene and cleanliness (through increasing hygiene awareness, and reducing open defecation mostly due to PHAST and CLTS interventions).

Health seeking behaviour and pneumonia/ARI knowledge	Overall, the self-reported rate of ARI signs (coughing and wheezing) by mothers / caretakers of children under five decreased from 55% at baseline to 42% at endline. The most significant change was the 43% decrease in the use of traditional treatment from baseline to endline. Although traditional treatments can be considered as alternative or complementary, instances of harm are often reported.
Health systems strengthening, including referral and case management	Training of both staff and volunteers, and use of IMIC and ICCM protocols, together with the rehabilitation of health facilities and provision of simple equipment, improved the capacity of the health staff and enabled them provide the required health services according to protocols and guidelines. This was confirmed by increased satisfaction reported by the community regarding the health services provided (qualitative data).



However, many challenges persisted such as reliance on payment of incentives, turnover of health staff and availability of supplies and nutrition materials considered to crucial for short and medium term impact. As reported by SMOH, there were some weaknesses in supervision by SRCS such as poor reporting systems, reports received directly from the health centres without involving the SMOH, regular field monitoring visits without and M&E system in place. The free medicines for children under five did not reach the health facilities regularly due lack of fuel and other logistic problems. IMCI and ICCM training was provided without provision of supportive equipment such as thermometers, blood pressure measure instruments, stethoscopes, and non-medical materials to those who trained in order to maximize the benefit from training. Enhancing of coordination between the stakeholders at local and state level will play a vital role in effectiveness of implementation, supervision, monitoring, evaluation and sustainability of the project results.

All the training efforts to support the referral system were challenged by the persistent lack of referral services. During both male and female FGDs it was reported that there were no ambulance or cars used for referral, and the distance between the nearest HF and the villages is very long:

*“As a mother the referral service is very important for under five’s, due to severity of the disease when the child become sick it is better to refer of HF as soon as possible because it will save the life and reduce the suffering, but unfortunately this services is not available and sometimes I walk or use donkey cart.” Woman in FGD as part of final evaluation, Sudan.*

Vaccination	A 13% increase in vaccination coverage for measles vaccination was seen with 87% at endline (although this remains below the national target of 95%).
Nutrition	Exclusive breastfeeding for 6 months (in the mother’s last child) was reported to have increased from 60% at baseline to 74% at endline (14% increase).
Hygiene and sanitation	There was a slight increase in reported handwashing with soap after using a latrine, however a decrease in reported handwashing practice before preparing food was seen.  Improvements in sanitation coverage were significant, with 79% of respondents reporting using a latrine for defecation at endline (compared with 41% at baseline). However, the majority reported using a traditional latrine with a modest increase (6%) in those using an improved or enhanced pit latrine.
Indoor air pollution	There was a significant improvement in observed separated cooking and living/sleeping areas in the project areas, increasing from 49% at baseline to 89% at endline.

Annex 3 provides a summary of key quantitative indicators, at baseline and endline, for the 3FM programme in Sudan.

#### 4.2.3 Context specific lessons and recommendations

Lesson	Recommendation
SRCS volunteers considered to be vital human resource, community action groups established from volunteers (women & men) are considered to be an effective mechanism for community engagement and	In future projects, SRCS should endeavour to mobilize these groups in alternative ways (including increasing willingness to participate voluntarily) to continue their role in health promotion and community awareness after the

accountability, project sustainability and gender inclusion.	end of the project. In addition, participation in community actions groups should be based on criteria that respect the representation of each ethnic group in the project areas.
As part of the project, health facility staff and volunteers were trained using the IMCI and ICCM protocols however no equipment was provided. This made it challenging for staff and volunteers to put the protocols and their new knowledge into practice.	When SRCS apply IMCI and ICCM training protocols in the future, provision of equipment and material to those who trained should be ensured in order to maximize the benefit from training, and allow the health staff and volunteers response to community health need in a better way.
The use of improved cooking stoves is considered to be an innovative idea for reducing indoor pollution, but there are many challenging factors facing the adoption of the idea such as availability of water, type of soil etc. In some communities the training was conducted but households were not able to produce the stoves due to lack of resources.	For implementing future activities with cooking stoves, it is recommended that SRCS analyse the enabling environment and provide support to ensure availability of the inputs/resources needed.
There were challenges with the CLTS approach. Most households were not able to cover the cost of the technologies needed to construct household latrines, and there were issues with soil instability. For example, communities in Umraka reported that the soil is very fragile and all the constructed latrines collapsed and they are not able to construct them again.	A standalone CLTS approach is not enough to end the phenomena of open defecation. In future programs, if CLTS is to be used, support with solutions to solve the problems related to soil fragility should be provided (and ideally for the capital cost also e.g. revolving finance, micro-loans etc.).
Community engagement and participation was considered an important factor in the project, and included establishment of community action groups in each village. However this step alone is not enough to ensure sustainability and future ownership.	In future projects, to strengthen effective community participation, it is recommended that SRCS consider the community as true partners and mobilize its resources (especially for CLTS, maintenance of water stations and provision of essential medicines for under five's) and embark on securing substantial financial support to be used for revolving funding.  Further improvement is needed to strengthening the role of water committees on issues related to maintenance of water sources operating with solar power, management and functioning, as well as improvement of the links with WASH sector at both local and state level.

#### 4.2.4 Key ingredients for success

In the context of Sudan, key factors that were identified as contributing to the success of the programme include:

- Linking project activities with community structures directly after they receive training on the specific thematic areas supports ownership and sustainability of the project outcomes.
- Establishment of a project steering committee as a mechanism for coordination.
- Implementation of the PHAST approach was considered very effective and was appreciated by the sanitation department Ministry of Health in Kassala.
- Use of improved cooking stoves for the first time in the project area was considered to be a positive innovation for reducing indoor pollution.

- The water committee in Hamashkoraeb innovated a smart idea for water station maintenance, a water committee 'store'. When neighbouring committees are in need, they borrow spare parts and after the problem is fixed, the spare part is returned back to the water committee store. This practice allowed cooperation between community groups and enabled maintenance of facilities as soon as possible.

### 4.3 Cote d'Ivoire

#### 4.3.1 Overview of the country programme

<b>Overall objective</b>	To contribute to the reduction of mortality and morbidity in girls and boys under five years of age due to ARI / pneumonia in four health areas in the departmental health district of Dimbokro.
<b>Project areas</b>	28 villages in the departmental health district of Dimbokro, N'Zi region.
<b>Estimated number of children under five:</b> 1798 children (842 girls, 956 boys)	
<b>Total number of direct beneficiaries:</b> 14 187people (in 2,539 households)	

The specific outcomes of the project were:

1. Increasing the capacities of women, men, girls, and boys in the 3 health areas of the project area to deal with the risk factors of Pneumonia and other childhood illnesses.
2. Strengthening the operational and technical capacities of the health district of the project area in its strategy to deal with childhood illnesses.
3. Strengthening the capacities of the Red Cross Côte d'Ivoire to ensure the sustainability of the project's achievements.

#### 4.3.2 Key results and impact

The 3FM programme in Cote d'Ivoire was aligned with the Ivorian government's National Development Plan and the community component of health programs, and was also well integrated in the CRCI strategic development plan and policies. Overall, the programme contributed to improvements in knowledge of pneumonia/diarrhoea/malaria, improved health seeking behaviour and increased uptake of preventative practices.

Health seeking behaviour and pneumonia/ARI knowledge

There was an increase in parents who could recognise at least 3 symptoms of pneumonia (increasing from 23% at baseline to 77% at endline). Qualitative data suggested a change in perceptions about the root causes of the pneumonia. Participants in the FGDs conducted for the final evaluation debated about the causes of the illness, and no longer attributing the disease to the consumption of the fish "djèké" but citing as cause among others: failure to vaccinate the child, lack of hygiene, and long exposure of the child to kitchen smoke.

Parents also have now the ability to react to primary signs of respiratory infection, e.g. there is an increase of parents who report that they give lemon, honey and herbal tea to children under five years with coughing (from 31% at baseline to 78% in endline). There was also an increasing percentage of parents who report checking fever in their children under five years when showing the first symptoms of respiratory illness (from 19% at baseline to 86% in endline).

Health seeking behaviour (as reported by parents) at the beginning of the project was high (86 %) and this increase further to 98% at endline (an increase of 12%).

Health systems strengthening, including referral and case management	<p>Referrals to health centers and increased attendance of ANC visits were reported to have increased (quantitative data unavailable). Qualitative statements of women in FGDs during the final evaluation confirmed going to the health center or hospital in case of illness. However, it is important to take this result with caution as it is unknown how changes have affected to the combined use that parents make of traditional and formal medicine.</p>
	<p><b>Quote from a traditional healer Kalabo district.</b>  <i>“Since this programme started I can say very few people come to seek for help from us (traditional healers). Most people are aware of pneumonia as a result they go straight to a clinic. The ones who still come to us are those with little no awareness of pneumonia and what to do. But we also refer them to the clinic.”</i></p>
	<p>Health staff interviewed during the final evaluation confirmed that health center attendance has increased, however they noted that they rarely receive severe cases of childhood illness which allowed them to provide effective care. Satisfaction with the services provided for management of childhood illnesses remained high throughout the project (from 90% to 100%).</p> <p>Despite high use of health facilities, it appears that during needs assessment health centers were found to be poorly equipped and with staff that hardly could manage ARI illnesses. This was seen as a critical barrier for changing health seeking behaviour. Changes in the health facilities were observed due to the investment in equipment in 4 health centers and provided training for health staff.</p> <p>According to the final evaluation, all 4 health structures were rehabilitated and reinforced to treat ARI cases. This support was evaluated as relevant in the sense that it met the needs of health workers. There is no reference as to access (connection) to drinking water at health facility and schools, although originally two health facilities were targeted. Furthermore, training of 20 health staff on IMCI allowed them to provide adequate health care to children under five as well as nutrition, with all 20 effectively practicing IMCI protocols (the original target was only 2). The health staff of the 3 health districts of the project area considered the training effective since they were now able to deal with IMCI as well as the health center rehabilitation.</p>
Vaccination	<p>From baseline to endline a 41% increase in children who had received the PEV vaccines (Pneumo13, BCG, Pentavalent, VPO, Hib, Measles, Yellow Fever, VPI, Rotavirus) was reported.</p>
Nutrition	<p>The number of women who report breastfeeding their children exclusively until 6 months increased from 13% at baseline to 76%, at endline, which shows a significant increase in the uptake (64%). Qualitative data show strong trends in the adherence to exclusive breastfeeding by mothers.</p> <p>There was a significant increase (42%) in caregivers who reported their children had received supplementary feeding (from 54% at baseline to 95% at endline). The percentage of parents able to interpret a growth chart increased from 0% at baseline to 40% at endline.</p>
Hygiene and sanitation	<p>The programme focused on water awareness, hygiene and sanitation with a component devoted to rehabilitation and construction of water and sanitation infrastructure in Dimbokro.</p>

	<p>In regard to sanitation practices, at the endline 72% of parents interviewed reported having and using a family latrine at home (compared to 20% at the beginning of the project). Observations during the final evaluation have shown a significant reduction in open defecation. Qualitative data show a strong pattern around latrine use: of those without a latrine at home, most stated (in FGDs) that they use their neighbour's latrine.</p> <p>Despite the progress on sanitation, only 60% of target communities were declared Open Defecation Free (ODF) by the authorities (8 out of 12 villages). It is important to note that the project managed to motivate 1834 household to build their own latrine with no external subsidies.</p> <p>For handwashing, 91% of parents self-report practicing handwashing at home, compared to 53% at the beginning. The increase in the reporting has to be taken cautiously as there is not triangulation done through observation and it is not reported at what time the handwashing is done.</p>
Indoor air pollution	Communities appreciated the improved MiRT stoves, and 1556 were built in total. However there are concerns with durability and sustainability, and recommendations were provided to protect the improved stoves from the rain with tarpaulins, plastics or aluminum sheets.

Annex 4 provides a summary of key quantitative indicators, at baseline and endline, for the 3FM programme in Cote d'Ivoire.

#### 4.3.3 Context specific lessons and recommendations

Lesson	Recommendation
The project implemented the CLTS approach in communities and a number of latrines were built with local materials. However, by the endline evaluation, most of these latrines were already in a state of degradation and disrepair. Community members report not being able to afford concrete construction.	Although difficult to run, community action to end open defecation is necessary and vital to reduce diarrheal disease. However, for future projects, it is recommended to opt for the sanitation marketing approach to make it possible to offer communities a variety of hardware option (e.g. tiles, superstructure) and for all budgets, and to provide technical advice for sound construction. Further, it is important to implement the process over a longer time frame, with other interventions implemented simultaneously.
There was substantial community volunteer turnover, especially in Djangokro, throughout the project. Many volunteers complained of the excessive workload they were expected to do and the non-remuneration of their activities. Time spent training new recruits was a source of inefficiency and slowed implementation of activities e.g. awareness raising.	Future projects should ensure that an adequate strategy for the management of volunteers (recruitment, recognition, retaining and training) is developed, including potential provision of simple items (e.g. t-shirt, badge, and other branded items) and capacity building events that may help to improve volunteer's motivation.
The awareness caravans and fairground consultations held were very successful due to the use of sound equipment and the high suitability of the type of communication for the target communities. In particular, the skits, song competition and simulation for first aid were very well received.	Where possible, future projects should incorporate caravans, fairground consultations, song and community competitions as relevant and effective awareness raising methods in the Cote d'Ivoire context.

Community contests were also held (e.g. cleanest village, best mothers club) which promoted the work and efforts of community structures in supporting their communities. These contests were found to be a very good means of motivating and mobilizing communities to perpetuate community actions.	
The use of traditional medicine practitioners in communities is high. Most community members use traditional medicine in first in the case of illness. This project aimed at strengthening a framework for collaboration between the modern health system and traditional medicine as recommended by the Ministry of Health and Public Hygiene, including building the capacities of healers and matrons.	Continue to incorporate traditional medicine into future projects and strengthen the collaboration with the modern health system, including the involvement of traditional healers and matrons in the referral of patients to health clinics, capacity building and addressing harmful traditional practices.
Many households were appreciative of the improved cooking stoves, however there were challenges durability. Stoves are usually built outside the kitchens because of the strong heat generated. However they are deteriorated quickly and destroyed by the rain.	To overcome this sustainability challenge, it is recommended that households are supported (e.g. with material or financial contribution) and/or instructed to protect the improved stoves from the rain with tarpaulins, plastics or aluminum sheets.

#### 4.3.4 Key ingredients for success

In the context of Cote d'Ivoire, key factors that were identified as contributing to the success of the programme include:

- The flexibility of the project's strategies and innovation gave the project a good dynamic. Volunteers were confronted with the unavailability of communities during the day, which led to initiation of activities at night as well as the awareness caravans. These initiatives were very successful and strongly contributed to the positive change in behaviour.
- The immersion of Red Cross teams in the community built trust and helped to deepen the understanding of the root causes of the barriers, with a view to actively seeking a solution.
- The use of volunteers, Mothers' Clubs and Husbands' Schools from the communities is seen as an important factor in the sustainability of the results, as they will be able to maintain contact with households more easily and continue raising awareness.
- The project approach encouraged association with partners such as administrative authorities, community leaders, other groups active in the community and certain government departments such as the Ministry of Health. Information sharing and technical support from partners ensured that health promotion actions were aligned with and strengthened national policies and guidelines as well as facilitating the sustainability of the project.
- Social cohesion and the establishment of social norms in communities are factors for the success of overall activities such as the community income generation activities.

## 4.4 Zambia

### 4.4.1 Overview of the country programme

<b>Overall objective</b>	To contribute to reduction of morbidity and mortality rates in Under-5 children due to pneumonia in the targeted communities.
<b>Project areas</b>	Limulunga, Kalabo and Luampa districts of Western province.

**Estimated number of children under five:** 9335 children under five (5124 girls and 4211 boys)



**Total number of direct beneficiaries:** 3121 households

4.4.2 Key results and impact

The 3FM programme was found to have had significant impact and contributed to both the reduction of pneumonia in the province and towards reduction of water and sanitation related diseases such as diarrhoea and malnutrition. As well as pneumonia, these are also national priorities targeted under the iCCM and are areas which the project indirectly addressed as preventive measures of pneumonia.

Evaluation of the programme showed that knowledge levels increased on danger signs of ARI/pneumonia, the need to seek medical attention, how to manage child illnesses at home and indoor pollutants.

Data also showed that some practices were improved, increased hygiene practice, use of child health cards for growth monitoring, health seeking behaviour at community level when a child showed dangers signs of pneumonia and took children for key vaccinations. However, there was low practice of exclusive breastfeeding, good nutrition and use of cook stoves.

Health seeking behaviour and pneumonia/ARI knowledge	<p>Mothers and caretakers showed a high level of behaviour change in regard to prevention measures, and knowledge of dangers signs. There was a 44% increase in caretakers that knew that fast breathing was a danger sign of pneumonia (increasing from 36% at baseline to 80% at endline). Caretakers that knew difficulty breathing was a danger sign increased by from 14% at baseline to 83% at endline (69% increase). Almost all caretakers reported knowing that a child with fast/difficulty breathing should continue breastfeeding or taking fluid.</p> <p>75% of caretakers at endline (compared to 4% at baseline) knew that pneumonia could be prevented by avoiding indoor pollution/smoke. This knowledge was put in practice, with 93% of households with children under five reporting having smokeless cook-stoves at endline (compared with only 7% at the beginning of the project).</p> <p>The percentage of caretakers that sought treatment for a child with fast/difficulty breathing at a health facility reduced drastically from 67% at baseline to 1% at endline but the number of caretakers seeking health assistant from community health worker/volunteers increased from 8% at baseline to 77% at endline.</p> <p>The majority of caretakers in the three districts informed a Red Cross volunteer instead of going directly to a health facility. This difference could be due to the project emphasis on iCCM (integrated community case management) and the strong presence of first line RCRC volunteers in the community.</p> <p>55% of respondents at baseline vs 48% at endline knew that they should seek treatment at a facility the same day while 27% at baseline vs 40% endline said they knew they should seek treatment the next day.</p>
Health systems strengthening, including referral and case management	<p>Out of the total referred cases, 74% actually went to the health facility. Main reasons for not following referral advice were distance, lack of transport, and attitudes of the staff. There was an increase in referrals from traditional healers, despite loss of income or business for them (as an incentive they received a certificate of recognition). It is often easier for caretakers to approach them because of proximity.</p>

	<p>Qualitative data from the district health office showed that CHWs were not accurately weighing children and that the statistics obtained over the years were not accurate. Secondly, the CHW did not always have medicines to attend to pneumonia and other child health issues. Approximately 20% of caretakers said the CHW/volunteer had medicines whenever they needed help. Data showed that medicine restocking was only done if the CHW/volunteers submitted reports to health facilities, but data from volunteers and interviews revealed that the reporting system was perceived as not being very clear, hence compliance from CHW was low leading sometimes to ineffective or delayed supply of drugs. Moreover, the challenge of availability of drugs was also common in health facilities.</p>
	<p><b>Quote from a Red Cross volunteer of the iCCM</b>  “There was an increase in identified pneumonia cases as a result of awareness but then there was a shortage in the supply of drugs.”</p>
	<p>Furthermore, it was reported that most referral cases to health facilities from community structures were often negative (not accurate). This suggests diagnosis skills at community level were still low but on the positive side that the CHW and volunteers were very alert to danger signs of pneumonia. Nonetheless, this had time and financial implications to caretakers that had to travel to health facilities for treatment, and in the long term inaccurate diagnosis can result in low referral compliance.</p>
	<p><b>Quote from Red Cross volunteer in Lui</b>  “Yes, it has greatly helped for example there was a young lady whose child was malnourished. We helped in taking the baby to the hospital and also sensitised her on the kind of food to feed the baby on. Right now, there is a lot of improvement as regards to the baby’s health.”</p>
	<p>29% of caretakers complained about health services offered to them by volunteers or CHW, with the main reasons being misdiagnosis, unnecessary referral and stock out of drugs.</p>
Vaccination	<p>Overall, vaccination coverage has improved from baseline in 2017 to endline in 2020. Vaccination coverage for PCV3 increased from 77% at baseline to 93% at endline (16% increase). For measles, vaccination coverage increased by 17% (from 74% at baseline to 91% at endline). Results from qualitative data also showed that vaccination coverage had increased although there were still challenge especially regarding with storage of vaccines and transport to cover distant communities.</p>
Nutrition	<p>The percentage of caretakers who exclusively breastfed their children under 6 months of age reduced by 6% from 86% at baseline to 80% at endline contrary to midline findings. This could be due to hunger experienced in the districts. There is need to scale-up nutrition activities and in the long term complement them with livelihood projects such as the cattle empowerment in Kate community which helps with milk for malnourished children.</p>
Hygiene and sanitation	<p>There were significant improvements in reported handwashing practices, with a 77% increase in caretakers reporting that they washed hands after using the toilet (from 17% at baseline to 93% at endline).</p>
Indoor air pollution	<p>A 43% increase of caretakers who reported knowing sources of indoor pollution was seen, from baseline (46%) to endline (89%). Because the activities on improved cooking stoves were included after the project mid-term, baseline data was not collected on this indicator. At endline, 7% of households surveyed reporting using an improved cooking stove.</p>

**Personal story, Nyambe** [full name and village omitted]

Through door to door sensitizations, volunteers identified a 1.5 year old child who was malnourished. The child had a red MUAC reading and low weight, and so was referred to the local health facility. The health provider who was also a trained IYCF provider, counselled the mother of the child on better nutrition practices, and noted that the child suffered from repeated episodes of diarrhoea, likely due to poor hygiene practices. The health care provider assigned volunteers from the nutrition support group to monitor and continue counselling the mother for 1 month and conduct MUAC assessments every week. Volunteers monitored his feeding and conducted assessment using MUAC until Nyambe graduated from a Red to Green MUAC reading. To date Nyambe is like any other child and is living a healthy life.

**Personal story, Rabecca** [full name and village omitted]

Rabecca is a mother of 2 and a wife. When she had her first child, she faced a lot of problems as a young mother. Their source of water has always been scoop holes, and when her child turned six months she started giving her water and other foods as per custom. It didn't take long before her child started to have repeated diarrhoea which led to weight loss. Rabecca was advised at the clinic to give her child clean safe water, but they had no way of doing this and struggled for months until she was given the water filter. Since her family has been using the water filter, no cases of diarrhoea have been experienced even among her and her husband. She is very proud today that her newly born second child will not have the health challenges like her first born. Rabecca requests the Red Cross to continue supporting vulnerable communities because many times they are taught on the best ways of avoiding diseases but sometimes it is difficult to have access to some of the remedies.

Annex 5 provides a summary of key quantitative indicators, at baseline and endline, for the 3FM programme in Zambia.

4.4.3 Context specific lessons and recommendations

Lesson	Recommendation
As a consequence of raised awareness, the number of caretakers seeking help from traditional healers reduced significantly and the few that were still seeking medical help from them were being referred to a health facility. This increased awareness had negative implications on the traditional healer's income flow. Recognition of traditional healers as "champions of childhood pneumonia" was found to positively influence their referrals to health facilities.	For future community-based health projects, scale-up cooperation with traditional healers to ensure referrals from them to health facilities are sustained.
The project originally assumed that sensitising communities on the need to constructed ventilated kitchens away from the dwelling of children would increase the construction of ventilated kitchens. The BCC strategy did not cover actions related to construction of ventilated kitchens and cook stoves as preventative measures of pneumonia.  However, qualitative data collected during the evaluation revealed that most households had not constructed ventilated kitchens, mainly due to an inability to mobilise the resources and materials needed. Ventilated kitchens remains one of the	Scale-up the roll-out of the cook stove intervention coupled with behaviour change on the need to cook away from the dwelling of children.  Uptake of the construction of cook stove can be scale up if the roll-out is couple with conditional support such as supply of garden seed to households with cook stove a strategy that has been shown to work already in the project areas. However, given that this is not sustainable, more sustainable and easily replicable alternatives are needed.

<p>highest concerns among mothers that they are unable to address at household level.</p> <p>There was a low uptake of improved (smokeless) cooking stoves (7% at endline). Demand is high, but households have very limited ability to construct them due to the cost (for transportation) and scarcity of the clay soil needed for construction.</p>	<p>BCC strategies should also contain messages that not only increase knowledge health seeking behaviour but call for action to put in place prevention measures such as construction of ventilated kitchens. Give certificates of recognition to households constructing ventilated kitchens and perhaps cook stoves could increase their construction in communities.</p>
<p>Approximately 20% of caretakers said the CHW/volunteer had medicines whenever they needed help. However, health seeking at a health facility was low unless if referred. Data showed that medicine restocking was only done if the CHW/volunteers submitted reports to health facilities. Nevertheless, interview data from health facility in charge showed that there was low report compliance among CHW which translated to stock-out at community level. The implication was caretakers had to travel to health facilities or seek traditional healers help.</p>	<p>There is need to strengthen health systems linkages between community health workers and facilities to ensure there is no stock-out of essential medicines which facilities and communities report to be unavailable. Stock-resupply is dependent on CHW/volunteers reporting to health facility but distance to facility is a bottleneck for timely reporting. There is need to introduce mobile phone text messaging report and allow for quarterly paper and pencil reports to follow afterwards.</p>
<p>The practice of exclusive breastfeeding reduced by 6% despite increased knowledge on the importance of exclusive breastfeeding. This was due to the drought situation and subsequent hunger that hit most of Western province, leading to some lactating mothers not having enough food to produce sufficient milk.</p>	<p>Health behaviour change interventions work best when combined with poverty reduction and livelihood interventions. There is need to scale-up nutrition activities and in the long term complement them with livelihood projects such as cattle empowerment (which helped with milk for malnourished children in Kate community) and kitchen gardening or agriculture interventions.</p>
<p>Qualitative data from the field showed that there was relatively low involvement in sensitization activities at community level. Reports of moonlighting with other NGOs working in the communities where volunteers are domiciled were common. Motivating volunteers to remain active is key to sustaining the projects impact.</p>	<p>Strengthen volunteer motivation by providing them with periodical incentives such as branded T shirts, calendars, note books and pens. When resources allow, empowering volunteers with bicycles will be important not only for their work and but motivation level too.</p>

#### 4.4.4 Key ingredients for success

In the context of Zambia, key factors that were identified as contributing to the success of the programme include:

- Zambia Red Cross Society had been present and worked for many years in the project area, and had built up a trusted relationship with communities and had in-depth knowledge of many important socio-cultural factors.
- Strong engagement with key stakeholders in the planning and execution of project activities through consultations with line government ministries such as the Ministry of Health, Ministry of Community Development and Social Services built strong bonds, enhanced complementarity and maximized results. The project also received overwhelming support from senior government political leaders such as respective District Commissioners.
- At community level, an important factor for success was that local leadership - including traditional healers – were part of the collaboration and decision making from the start.

- The emphasis and effort put into the behaviour change communication (BCC) process strengthened community engagement and improved the relevance and impact of the project activities. For the formative research and assessment, an iterative process with several validation and feedback sessions with the communities and local authorities was used which provided an opportunity for community members to raise questions, suggestions and concerns about the findings and agree on how those would be translated into behaviour change objectives.

## 4.5 Mali

### 4.5.1 Overview of the country programme

<b>Overall objective</b>	To contribute to the reduction of morbidity and mortality rates related to ARI among children (boys and girls) aged less than 5 years in the district of Koussané and Logo in the Kayes region before 2020.
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<b>Project areas</b>	Koussané and Logo districts, in the Kayes region.
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**Estimated number of children under five:** 4166 children (2041 boys and 2125 girls)

**Total number of beneficiaries (direct and indirect):** 23,503 people in 25 communities (11,516 male and 11,987 female)

The specific outcomes of the project were:

1. Improve practices used for the prevention and treatment of ARI/pneumonia among children aged less than 5 years, conducted by women, men, boys, and girls in the communities of Koussané and Logo by the year 2020.
2. Reinforce the technical and operational capacities of the healthcare staff / local community agents (M/W) in the diagnosis, treatment and referencing of ARI/pneumonia cases in the project's intervention area.
3. Reinforce capacities of the Malian Red Cross in sustaining the project's key interventions.

### 4.5.2 Key results and impact

In addition to pneumonia, the programme included activities around malaria and diarrhoea as those three diseases are the major killers of children under five in the target area (although not explicitly mentioned in the project title and goals). Additionally, the Mali project had a quite a significant family planning (FP), and Mother, Newborn and Child Health (MNCH) including Antenatal Care (ANC) component, which served as the basis for the follow-up NPL project on Safe Motherhood.

In the final evaluation report it is noted that despite the relevance of objectives and expected results underlying the overall goal, some incoherence persisted between expected results and the strategic actions planned, due to initial planning of actions which were not coherent with the socioeconomic characteristics. For example, the considerable illiteracy rate of the target population and the absence of a shared spoken language between the project team and target groups (in Koussané).

Health seeking behaviour and pneumonia/ARI knowledge

The percentage of mothers and caregivers who could recognize at least two signs of danger for pneumonia increased from 37% at baseline to 83% at endline, showing a positive progress. The percentage of mothers and caregivers who can recognize as well at least two factors of exposure to pneumonia increased from 6% to 75% and that can react at least with one home care action (checking fever, etc.) increased from 49% to 63%. There was a difference between the two project locations, with 83% of mothers and caretakers in Logo knowing at least two danger signs, and 65% in Koussané.

Results in terms of knowledge showed considerable improvement across of number of indicators, from both quantitative and qualitative data. A group of women stated during the final evaluation:

“We did not know this illness, it is only with the arrival of the Red Cross that we got to know what pneumonia is.”

Participants were able to cite symptoms; adult women said “pneumonia manifests through fever, pain in the bones and in the entire body, coughs, vomiting and hard breathing.”

The percentage of mothers and caregivers who are aware of the transmission route for malaria increased from 83% at baseline to 96% at endline, with positive results as well on the knowledge on how to prevent it (from 85% to 97%). The percentage of mothers and caregivers who also know how to prevent diarrhoea increased from 65% at baseline to 84% at endline.

The attitudes and practices in case of a respiratory illness were also show to have improved over the programme period. In the baseline, 49% of the mothers and caretakers said they would go to the health center or to the pharmacist which increased to 63% in the endline. In Logo, there was a 7% decrease from baseline to endline, in mothers and caretakers with children suffering from respiratory illness that say they would go to a healthcare center or to the pharmacist. This drop may be explained by the way data were collected and also by the fact that mothers and caretakers do not take decisions about what to do with their children.

Among mothers or caregivers who showed high levels ok knowledge about pneumonia, 53% reported going to the health centers or pharmacy in case of pneumonia symptoms in their children at the time of baseline with an increase to 66% at the endline point. Despite this increase, mothers in FGDs conducted in the final evaluation confirmed that the decision to go to the health centers is yet not taken by them as they need permission from husband or other relatives. No information was available in the final project or evaluation report indicating whether the BCC strategy and messages were targeted toward husbands as well as mothers, however the communication approaches used did reach men (e.g. through the community caravans, and door-to-door outreach).

Health systems strengthening, including referral and case management	The follow up of children by qualified medical staff is not a common practice in the project area and a slight improvement was noticed since the beginning of the programme. The proportion of mothers or caretakers stating that their children are followed by medical staff increased from 4% to 19%. As for the vaccination of children, practices slightly improved with 69% holding vaccination booklets versus 61% initially while 63% are up-to-date in terms of vaccination versus 21% at baseline.
Vaccination	A significant improvement in protective behaviour of vaccination was shown, with the percentage of children under the age of two who follow the vaccination schedule increasing by over 40% (from 21% at baseline to 63% at endline).
Nutrition	The percentage of mothers who practice exclusive breastfeeding increased from 21% to 63%.



Hygiene and sanitation	<p>The percentage of mothers or caregivers knowing key times for hand washing increased from 63% at baseline to 89% at endline, with 65% of households having a functioning handwashing station (compared to 0% at the baseline).</p> <p>In terms of latrine usage, the percentage of households with family members using latrines increased from 64% to 85% which are positive behavioural changes in terms of breaking down the transmission routes for diarrhoea. The percentage of households that report all members sleeping under a mosquito net has increased from 67% to 90%.</p>
Indoor air pollution	<p>The percentage of households with family members using improved cooking stoves increased from 26% to 64%.</p>
Family planning and maternal health	<p>In addition to the focus on childhood diseases, the project also tackled behavioural issues around family planning and maternal health. Childbirth practices have improved significantly, for example at the end of the project 52% of mothers gave birth in a health centre compared to 45% before the project. In case of risk delivery, 54% of mothers were assisted by qualified medical personnel during childbirth. The number of pregnant women who have had at least 1 pre-natal visit at the health center increased from 65% to 77% and those having a post-natal visit increased from 45% to 80% as self-reported during the endline survey interviews.</p> <p>With regard to contraceptive methods, 71% of mothers identified during the interview at least one modern contraceptive method against 0% in the baseline study. As for the use, 25% of mothers reported its use against 16% at the baseline. The use of contraceptives is said to be forbidden by the Coran and represents a key barrier in the adoption of birth control practices. Those adhering to those practices have discussed the topic with their husbands and seek their permission.</p>

Annex 6 provides a summary of key quantitative indicators, at baseline and endline, for the 3FM programme in Mali.

#### 4.5.3 Context specific lessons and recommendations

Lesson	Recommendation
<p>Language constraints, given the target community did not speak the same language as the project team, were identified as significant constraints to the project, which also increased the project's implementation costs (e.g. hiring translators).</p>	<p>If future projects are to be implemented in similar areas where project staff do not speak the local language, make sure that ways to overcome these challenges are planned and budgeted for (e.g. language training, hiring translators, hiring of local project staff or supervisors etc.).</p>
<p>The very high illiteracy rate within the project's target communities in Koussané was a constraint which impeded implementation of activities, and reach and understanding of key messages.</p>	<p>Always include a strong analysis of target audiences, and trusted and used communication channels in the development of any BCC plan. Use innovative and locally appropriate communication methods to reach illiterate communities (e.g. community caravans, storytelling, use of pictures or models etc.).</p>
<p>Among the many activities planned for the project, men were more involved in the construction of improved cooking stoves and latrines and this was highly appreciated by women who were using those facilities with</p>	<p>Continue to specifically engage men as husbands, fathers and community members in future community based programmes, including an analysis of decision-making at household</p>

self-esteem. These has improved hygiene and sanitation practices at individual, family and community level.	level, gender roles etc. to strengthen effectiveness and impact.
The 'edutainment approach' with caravan get success at all level where messages were disseminated through songs, dances, games and competition. It was a special event in all villages. By the end, key messages were memorised and were sang by children and other young people.	Utilise the 'community caravan' approach as part of future community-based health programmes in Mali.

#### 4.5.4 Key ingredients for success

In the context of Mali, key factors that were identified as contributing to the success of the programme include:

- The high motivation, commitment and adaptability of the project team was a determining factor in achieving the objectives, or even exceeding the expected results in some areas.
- The participation of administrative authorities in the Prefect of Kayes (the governor, deputy governors and mayors) in both districts gave confidence to the communities, as the authorities were leading selected supervision activities and getting feedback from the community. The involvement of the local authorities, the administration, civil society and the State's technical specialized departments (e.g. Regional healthcare department of Kayes, DRS) contributed to the implementation of the project.
- The level of commitment and participation of target populations in carrying out the activities was remarkable, and showed a real commitment of the community in continuing the results and progress even after the departure of the project team.
- The project had high relevance, with activities matching the needs expressed by the target population. The community having a clear understanding of the project's objectives was an important factor to ensure their engagement and participation in the execution of planned activities.

## 5 Lessons and recommendations to guide other community health programmes

The following recommendations have been drawn from the experiences of Zambia, Sudan, Cote d'Ivoire, Ethiopia and Mali in implementing the 3FM Pneumonia programme. In addition to the country specific points outlined above, these broad recommendations are relevant for other Red Cross Red Crescent National Societies who are planning to or currently implementing a community health programme.

	Challenges and/or examples faced	What did we learn: recommendations
<b>General</b>	<p>The multi-sectoral and complementary interventions included in the 3FM programme were identified as a strength across the 5 countries.</p> <p>Although guided by WHO and national MoH guidelines and policies, there was tendency however in some countries to include a very broad range of activities (and messages) comprehensively covering both direct and indirect factors for pneumonia prevention and control. For example, in Cote d'Ivoire and Mali a wider community child health approach was taken, emphasizing both direct and indirect pneumonia prevention factors (e.g. vaccination, nutrition, hygiene, family planning, indoor air pollution, water and sanitation) as well as antenatal care and family planning.</p> <p>While adaption to the country context is regarded as positive, qualitative data and anecdotal evidence suggests that there is a risk of "diluting" the quality of programming (e.g. resources, activities and messages 'spread too thinly') and therefore not achieving the desired impact.</p>	<p>While it is important to take a broad perspective, recognise that health is impacted by a wide variety of factors and linked to different sectors such as livelihoods, food security and water and sanitation, development programmes have finite resources and timeframes.</p> <p>It is recommended that future disease-specific community health programmes focus on direct risk factors based on available evidence (e.g. for pneumonia prevention – vaccination, exclusive breastfeeding, handwashing and avoiding indoor air pollution) and if resources and capacity allow, to expand the focus to include indirect risk factors.</p> <p>Include an analysis (together with the MoH and other key stakeholders) to better understand which 'problem behaviours' and 'potential solutions' are likely to have greatest impact in terms of reducing disease morbidity and mortality.</p>
	<p>The Community-Based health and First Aid (CBHFA) approach was incorporated into all country activities, with the CBHFA training package used to build capacity of community volunteers and equip them to conduct activities in communities in all countries.</p>	<p>The CBHFA approach is a valuable tool for community based programming and training volunteers on basic disease prevention and control, as well as 'soft skills' which are important for</p>

<p>In Ethiopia and Zambia in particular, CBHFA volunteers had a larger role and were highly integrated into the existing MoH health system. Volunteers were mainly involved in conducting household visits, providing advice to parents/caregivers, and providing basic identification/diagnostic and referral services.</p> <p>This approach of having CBHFA volunteers from local communities strengthen the community based activities of the existing health system is identified as unique and successful in improving the connection between the community and health system.</p>	<p>effective community engagement such as behaviour change, listening and communication.</p> <p>Trained CBHFA volunteers can be an asset that remain with communities after the project ends, potentially continuing awareness and mobilisation activities as well as providing a link to other community and local government structures (e.g. community committees, health workers etc.).</p>
<p>A lack of access to water was identified as a critical barrier to health and hygiene behaviour change in Mali and Cote d'Ivoire. Due to budget limitations in Mali, the project could not cover the rehabilitation or construction of water facilities and funds were unable to be mobilised from other donors in the area. Despite the poor coverage of water facilities, the behaviour change strategy invested in the promotion of water collection from safe sources and emphasized the use of household water treatment.</p> <p>In Cote d'Ivoire, investment in water was not planned in the initial budget, but it was understood that having low access to clean and safe water was a barrier to uptake of improved hygiene and nutrition practices. Part-way through the project, top-up funding was secured to rehabilitate 13 boreholes and reactive community water committees, however this was conducted over a very short timeframe.</p>	<p>Improved handwashing practices are reliant on access to water and soap (or ash). Community health programmes which aim to improve handwashing practices, or increase access to safe drinking water cannot be successful without including financial and technical resources for WASH hardware (e.g. water, handwashing facilities), as well as adequate analysis and consideration of appropriate operation and maintenance strategies, and sustainability aspects such as cost-recovery (e.g. willingness and ability of community members to pay).</p>
<p>Handwashing with soap was a preventative behaviour included in all 5 country programmes. There were some significant increases in reported handwashing practices (e.g. data collected by asking people when and how they wash their hands), particularly in Zambia (77% increase) and Cote d'Ivoire (38% increase). Ethiopia and Mali reported improvements in the availability of fixed handwashing stations at household level (e.g. data collected by observation), however there were no or limited details about the functionality, availability of soap and water, or</p>	<p>Include proxy indicators for measuring handwashing practices as the standard in community health programming.</p> <p>In addition to change in knowledge of key handwashing times and reported handwashing practices, standardise and ensure that observation</p>

	<p>presence of any signs of use. Handwashing is generally known to be a ‘desired’ practice and highly susceptible to response bias. Results regarding handwashing with soap should be interpreted cautiously.</p> <p>Observation of soap (or ash) availability at the handwashing site and ‘signs of use’ are generally considered the ‘gold standard’ for handwashing practice, however these proxy indicators were not consistently measured across the countries.</p>	<p>data is collected (both as part of routine monitoring and evaluations).</p>
<p><b>Sustainability</b></p>	<p>The FIETS model<sup>8</sup> (Financial, Institutional, Environmental, Technological and Social) was used as a framework by all countries in developing sustainability plans, however trends or key actions were not well documented or elaborated using this framework in final project documentation. In general, sustainability plans focussed on actions to be taken during the project for greater sustainability of project results, without detailing responsibilities of different stakeholders.</p> <p>In all 5 countries, the central pillars for sustainability mentioned throughout were:</p> <ul style="list-style-type: none"> <li>i) Collaboration with local government authorities and health structures, including ‘embedding’/integrating the project within existing health structures, and</li> <li>ii) Building capacity of local volunteers and community committees, who would remain with their communities after the project ends to continue awareness raising, supporting referrals etc.</li> </ul> <p>However, there remain considerable risks and challenges in terms of sustainability. As part of the final evaluation in Ethiopia, local government sector office representatives indicated that they do not have adequate capacity, or particularly operational budget, to fully own and continue the project interventions. For example, the project had been covering the transportation cost for the HEW to conduct community-based activities.</p>	<p>As part of future community health programmes, ensure that sustainability plans which are developed together with stakeholders, and detail responsibilities of different partners both during and after the project, are a requirement.</p> <p>Make sure that indicators for sustainability are developed and included in the monitoring framework.</p> <p>In annual, mid-term and final evaluation reporting, ensure that the FIETS model is specifically elaborated (e.g. include a template or detailed format to be filled in).</p> <p>If possible, identify and collaborate with sector strengthening initiatives (at national or sub-national level), that aim to address the underlying barriers to sustainability including at policy and strategy level, such as funding and resourcing of local government offices and health structures.</p>

<sup>8</sup> <https://wash-alliance.org/our-approach/sustainability/>

<p>For health systems strengthening, economic and institutional sustainability are particular issues as it relies heavily on the capacity of the government to ensure the supply of drugs and equipment, rehabilitation and equipment repairs, payment of salaries and incentives for healthcare workers, supervision, travel costs for supervision and outreach activities, etc.</p> <p>Payment of incentives may influence turnover of health staff, availability of medical supplies and nutrition materials considered as crucial for short and medium term impact, however their sustainability beyond the project period is often problematic and needs to be clearly communicated with community and health authorities.</p>	<p>Emphasising the involvement of government and community structures right from the beginning of the project is critical.</p> <p>A look-back study is recommended to be conducted 3 – 5 years after the programmes has finished, to understand and measure any continued change or impact in communities and to capture key lessons for sustainability and impact.</p>
<p>For the construction of water supply infrastructure, community committees were set up and tasked with managing a cost recovery system (usually through fee collection from the community), in order to pay for repairs and maintenance.</p> <p>There was limited or no data regarding the set-up, training, support and ongoing functioning of water committees in final project or evaluation reports.</p> <p>The mobilization and management of water funds remains a major challenge to sustainability of water infrastructure. For example, the final evaluation in Cote d'Ivoire noted that the water committee's internal organization is relatively weak and their financial management capacities are unknown.</p>	<p>In community health projects which include water supply components, detailed consideration of maintenance and operation aspects is needed as well as an analysis of willingness and ability of community members to pay. Community water committees require extensive training, and ongoing support and monitoring.</p> <p>The potential for public-private partnerships to provide water services should be explored.</p> <p>Integrate a water specific sustainability framework into the project planning and monitoring, such as UNICEFs Sustainability Checks<sup>9</sup> or other WASH sustainability assessment tools<sup>10</sup>.</p>

<sup>9</sup> <https://www.unicef.org/media/91406/file/WASH-Guidance-for-Sustainability-Checks.pdf>

<sup>10</sup> <https://www.ircwash.org/news/25-wash-sustainability-tools>

	<p>CLTS was the primary approach used for improving access to and use of latrines, with some countries also training volunteers on PHAST. However significant challenges were faced, mainly relating to poor construction, rapid degradation of latrines, reported lack of money from communities to purchase materials. This led to high levels of ‘slippage’ and the sustainability of sanitation outcomes is likely to be weak.</p> <p>For example, in Sudan there were reported issues with soil instability leading to latrine collapse, and most households were not able to cover the cost needed to construct household latrines. In Cote d’Ivoire, most latrines constructed during the project with local materials were already in a state of degradation and disrepair at the endline evaluation. Community members reported not being able to afford concrete for construction.</p>	<p>If implemented, the CLTS approach should be combined with other complementary approaches such as sanitation marketing, and innovative approaches such as revolving finance or micro-loans considered to cover the capital cost.</p> <p>In additional, support with solutions to solve the problems related to soil fragility must be provided.</p>
Behaviour change	<p>In all countries, the behaviour change communication (BCC) strategy was identified as an ingredient for success. The behaviour change strategy was informed by comprehensive formative research, and included a systematic description of the audience groups, barriers and motivators for behaviour change, and selection of message briefs and communication channels and approaches.</p> <p>Decision making power, linked to gender and social norms, was identified as a common barrier for timely health seeking.</p> <p>For example mothers needing permission from their husband or mother-in-law to seek care (Mali), or to spend money on transportation to the clinic (Ethiopia).</p>	<p>Use a logical, systematic approach to design activities, messages and communication channels based on formative research findings. Successful programmes develop their messages, activities and communication channels with clear links to the barriers, motivators and socio-cultural considerations identified as part of formative research (or assessment).</p> <p>Men and husbands must be involved in activities on disease prevention, home case management and referral because they often decide on how household money is spent, and decide on the involvement of traditional healers. The assessment of community and household decision making is vital to be able to identify and plan activities which effectively address barriers to participation, and to accessing health services (including access to WASH).</p>



Barriers	<p>Along with cultural and social norms and beliefs, and reliance on traditional medicine, key barriers to timely health seeking reported across all countries were distance to health facilities, and cost (of transportation, for consultation and/or medicines). Qualitative data indicated that for many communities, these barriers remained unchanged at the end of the project.</p> <p>In Ethiopia, there is a Government-led health care financing policy at local level called the community health insurance scheme, or CHIS. However, there was a low uptake due to lack of promotion of the policy and a lack of organisation of community groups to access it. The annual premium is 250 ETB per household and covers all the services at the health centre level. The mid-term review found communities willing to participate in the HIS, and subsequent support was provided to mothers groups to save and join the HIS. This was very well received by communities and helped to improve use of health services.</p>	<p>In countries where long distances to health facilities, lack of transportation, or large areas covered by community health workers are barriers to outreach activities and access to care, identify and include innovation solutions (potentially with external development partners) to overcome these barriers.</p> <p>Explore forms of insurance or support for Red Cross Red Crescent volunteers, as incentive and to encourage continued involvement in the project and with the community.</p> <p>Continue providing incentives such as t-shirts, caps, umbrellas, boots, pens, notebook etc. as a way to motivate community volunteers.</p>
Assessment, monitoring and data	<p>Most of the countries used a mix of existing general messages by MoH and new messages developed specifically for the specific audiences and behavioural problems. The development of new messages required an exhaustive process of testing with the community and validation by the MoH, which resulted in extended delays but was considered an important process.</p> <p>In Zambia, the validation and feedback process was iterative with several sessions held with the communities and local authorities. This created a space for engagement fostering transparency and participation of community members in the design of the BCC strategy, helping to tailor the strategy to what people need and desire, and helping to address sensitive barriers to health seeking such as gender relations and co-existence of traditional and modern medicine.</p>	<p>Ensure that community based health programmes plan and budget for sufficient time and resources for quality formative research, which can be a long, slow process. Validating formative research findings with communities improves transparency, trust, and quality of behaviour change activities. When messages are accepted by communities, and they address the right barriers and build on the right motivators for the community context, they are more likely to lead to larger impact (versus undifferentiated messages). Ensure that communication channels, messages and activities are tested and validated with both the community and the Ministry of Health.</p>

<p>All countries had monitoring systems in place, and routinely collected data on process/output indicators (e.g. number of people reached or no of activities conducted). Mid-term and endline evaluations measured as outcome indicators (e.g. level of change in practice).</p> <p>However, throughout the project implementation there were no indicators defined that measured progress in the implementation of the BCC plan. While reporting activities completed and outputs is important, without a sense of progress of the BCC plan it is difficult to know whether the strategy is working (i.e. whether there is any change in practices or outcomes). If progress is only measured at the end of the project, this is too late for messages, communication channels and activities to be adjusted and revised to ensure impact and results are achieved.</p>	<p>Define key indicators that will measure progress of implementation of the BCC plan, and ensure these are integrated into the programme monitoring system. For example, simple observation checklists which capture proxy indicators can give a good indication of progress for handwashing (presence/absence of facility, presence of soap, signs of use) or latrine use.</p> <p>Ensure that monitoring data reported over time is used for planning purposes and re-adjustment of future communication activities.</p>
<p>Barriers for the selected behavioural problems were documented extensively as part of the formative research in all 5 countries, with different levels of depth. Motivators for change (universal motivators such as nurturing individual feelings)<sup>11</sup> were less explored in formative research across all 5 countries. However social/peer pressure was extensively reviewed, with the role of older women- grandmothers influencing behaviour, as well as the role of men in decision making on expenses to be made e.g. for referral of a sick child.</p>	<p>In addition to analysing behavioural barriers, it is important to explore and understand motivators for change (e.g. nurture, pride) and include these in behaviour change communication (BCC) strategies. Using positive motivators is often considered to improve overall uptake of practices and increase effectiveness of BCC activities.</p> <p>Involve men/husbands in prevention, home case management and referral because they often decide on how HH money is spent; involve traditional healers.</p>

<sup>11</sup> Behaviour Centered Design (BCD) by the LSHTM.

	<p>The formative research, baseline and endline survey tools in all countries included specific gender and diversity-oriented questions (e.g. age, ethnicity, socio-demographic profile). However, this disaggregation and detail was often ‘lost’ during analysis and data displayed in graphs and frequency tables or reported was not disaggregated by age or sex.</p>	<p>Strengthening the capacity and skills in data analysis is key for ensuring that all data collected is utilised to effectively guide the programme and incorporate gender and diversity.</p>
	<p>There were difficulties in compiling global results for the programme, due to a lack of clear and consistent strategy across the countries to count beneficiaries targeted by communication activities (especially when these are conducted in open spaces and large crowds) and a lack of consistent definition for key terms used in BCC plans. For example, there were inconsistencies on the use of ‘approaches’, ‘channels’, ‘media’ and ‘communication tools/activities’ and it is necessary to harmonize these definitions for reporting purposes. The caretaker of a child could be a mother, or grandmother, or father - but that’s not understood by the word alone.</p>	<p>Standardise descriptions of common terms so that everyone has a clear understanding of them, to facilitate accurate reporting, and to allow comparison within and between countries. Provide clear and consistent guidance on counting community members who are reached by communication activities. Agree on key indicators that will be monitored across the different countries to compile global results.</p>
	<p>The joint inception and mid-term review workshops, which brought together counterparts from each National Society and the NLRC, were very well received and both qualitative data and anecdotal evidence suggest they were valuable for sharing ideas and best practices, as well as relationships.</p>	<p>Information and resource sharing can add great value. In multi-country programmes, in addition to joint inception, BCC and mid-term review workshops, create a central space for all countries to store and share information (e.g. BCC materials, program documents).</p>
	<p>National Societies used a mix of external consultants and in-house PMER expertise to manage collection, analysis and reporting of baseline/endline survey and formative research data. Overall there were gaps in capturing important trends and patterns from qualitative data, data disaggregation and reporting.</p>	<p>Plan and budget for ongoing capacity building in data collection and analysis as part of any community-based programme. When using external consultants, ensure a detailed and clear Terms of Reference is developed, which outlines the specific type of analysis and reporting (narrative and graphs) expected (e.g. gender and age disaggregated), and that all data and analyses (e.g. spreadsheets) are to be ‘owned’ and retained by the National Society.</p>