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HEALTH

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Cover photo: a mother kisses her baby in a hospital in West Darfur.

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ACRONYMS

ANC	Antenatal Care
ART	Anti-Retroviral Therapy
ARI	Acute Respiratory Infection
AUHIP	African Union High-Level Implementation Panel
AWD	Acute Watery Diarrhea
BCG	Bacille Calmette-Guerin (vaccine)
CHW	Community Health Worker
CMAM	Community-based Management of Acute Malnutrition
CPD	Country Programme Document
DHSS	District Health Systems Strengthening
EmONC	Emergency Obstetric and Newborn Care
GAM	Global Acute Malnutrition
HIV	Human Immunodeficiency Virus
HRP	Humanitarian Response Plan
ICCM	Integrated Community Case Management
IMCI	Integrated Management of Childhood Illness
IYCF	Infant and Young Child Feeding
LLIN	Long-Lasting Insecticidal Nets
MAM	Moderate Acute Malnutrition
MCV	Measles Containing Vaccine
MICS	Multiple Indicator Cluster Surveys
MoH	Ministry of Health
MUAC	Mid-Upper Arm Circumference
NGO	Non-Governmental Organisation
OPV	Oral Polio Vaccine
ORS	Oral Rehydration Solution
OTP	Outpatient Therapeutic feeding Programme
PHC	Primary Health Care
RUTF	Ready-to-Use Therapeutic Food
S3M	Standard Spatial Survey
SAM	Severe Acute Malnutrition
SC	Stabilisation Center
SCM	Standard Case Management
SDGs	Sustainable Development Goals
TT	Tetanus Toxoid
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNHCR	United Nations Refugee Agency
UNICEF	United Nations Children's Fund
WASH	Water, Sanitation and Hygiene
WHO	World Health Organisation
WFP	World Food Programme

I. EXECUTIVE SUMMARY

The current context in Sudan is one of ongoing protracted and multi-faceted needs, with more than two million internally displaced people and displacement-affected communities, a total of 1.2 million refugees and vulnerable communities including significant numbers of children requiring assistance, combined with underdevelopment and a need to address the root causes of vulnerability, including conflict and climate change. In this context, multiple activities need to run concurrently across the humanitarian-development-peace equation, sometimes in the same geographical areas, to adequately address needs in ways that can achieve a sustainable impact. This includes response to emergencies and lifesaving needs; investment in preparedness and resilience; seeking durable solutions for displaced people; supporting conflict prevention, social cohesion and peacebuilding; planning for longer term development; and building and working with national capacities.

In 2018, Sudan also faced an intense economic crisis, characterised by extreme inflation and shortages of basic commodities after administrative austerity measures were adopted in January 2018. Rather than alleviate the crisis, these measures had a paralysing effect on the economy throughout the year, causing a severe shortage of fuel and other commodities such as bread and increasing social tensions. Restrictions on bank withdrawals also caused a liquidity shortage, causing a slowdown in humanitarian and development operations by the government, international and national Non-Governmental Organisations (NGOs), and development partners.

The One Health Plan that has components of all key outputs from SDGs two (zero hunger) and three (good health and well-being) was developed as a One Comprehensive Health and Nutrition Sector Plan for the government, United Nations agencies, Non-Governmental Organisations (NGOs), donors and the private sector. UNICEF's work plan on health was integrated with nutrition and Communication for Development activities (C4D). Of four key outputs outlined in the work plan, UNICEF's health interventions were primarily covered by two outputs, focusing mainly on policy-level support and strengthening of health systems to include primary health services, such as maternal and newborn care, immunisation and Integrated Management of Childhood Illnesses (IMCI). In all key thematic areas, UNICEF and partners made tremendous progress toward the targets outlined in the Country Programme Document (CPD).

UNICEF's upstream work also yielded dividends with part of the costs for so called routine vaccines covered by the government, increasing funding from 14 per cent in 2017 to 21 per cent in 2018. For the first time, the government agreed on co-funding the procurement of routine vaccines, notably BCG, Oral Polio Vaccine (OPV), measles and Tetanus Toxoid (TT). This a significant step towards the government's full ownership of routine immunisation in Sudan with decreasing dependence on donors and development partners.

UNICEF technical and financial support significantly contributed towards increasing children and women's access to health care services, specifically to achieving the following outputs and results:

OUTCOME 1**:** By 2021, more children under the age of five years and women of reproductive age utilise high-impact, quality health and nutrition services.
OUTPUT 1.1**:** The government - at national and subnational levels - has strengthened capacity and develops evidence-based and equity, multi-sector focused policies, plans and budgets to improve health and nutrition services.
OUTPUT 1.2**:** Health systems and communities in targeted localities have strengthened capacities and deliver integrated high-impact health and nutrition services.

OUTPUT 1.4: Mothers and other caregivers in targeted localities have improved skills and knowledge on key family practices.

- UNICEF supported the capacity development of 53 localities in eight states to monitor bottlenecks and to strengthen service delivery to improve health and nutrition outcomes.
- 956,925 children suffering from diarrhea, malaria, and acute respiratory tract infections in 742 hard-to-reach communities - including refugee camps, Internally Displaced Persons (IDP) camps, vulnerable host communities, and newly accessed communities - were treated.
- Among refugees, IDPs, and children from vulnerable host communities, 462,919 children under one year (51% girls) were reached with the first dose of measles immunisation.
- As part of efforts to sustain polio-free Sudan, two rounds of subnational polio vaccination were conducted, reaching 3,016,657 children under five (98% of the planned target) in round one and 4,477,692 children under five (100% of planned target) in round two.
- The polio campaign was delivered integrated with Vitamin A reaching 2.4 million children (estimated 50% girls) in round one and 3.7 million children in round two.
- 423,955 pregnant women received iron and folic acid supplementation during the first antenatal care visit to prevent anaemia with UNICEF support, which represents over 100 per cent of the 2018 target.
- 378 out of 400 (95%) reproductive health service providers were trained so that their capacity is improved to provide quality services. UNICEF also delivered essential reproductive health supplies.
- UNICEF delivered sufficient ORS and zinc throughout the year for the treatment of children reached at Primary Health Care levels and through Community Health Workers (CHW) delivering Integrated Community Care Management (ICCM) services.
- UNICEF also delivered 3,456,800 Long-Lasting Insecticidal Nets (LLIN) nationwide including in seven states with humanitarian needs.
- UNICEF supported the establishment of two centers for excellence at the national level to improve newborn care in Sudan and revised and updated the pre-service training curriculum for medical doctors and assistants to incorporate maternal and newborn care.

Fuel shortages and shortage of cash in banks delayed implementation of the polio vaccination and Vitamin A supplementation campaigns in July of 2018 and this is still impacting the measles and Tetanus Toxoid (TT) campaign in 2019. The economic crisis also increased the cost of services and reduced individuals' purchasing power, limiting their access to critical lifesaving health services. Multiple outbreaks of communicable diseases, including acute watery diarrhea in Central Darfur, chikungunya and dengue outbreaks in Kassala and Red Sea states and over 7,000 suspected measles cases nationwide overstretched the health systems. In the Red Sea State, they are still battled out in 2019.

As per the Country Programme Action Plan (CPAP) 2018-2021, UNICEF's child survival programme will continue to focus – amongst others– on the following areas:

- ↗ Health system strengthening with a focus on quality and preparedness.
- ↗ Improve quality of Maternal and Newborn Healthcare (MNH) services.
- ↗ Strengthening the immunisation supply chain and routine vaccination with a focus on the first and second dose of measles.
- ↗ Increasing coverage with the community-based health interventions (ICCM, CMWs) to access remote and hard-to-reach population.
- ↗ Advocacy for domestic resources mobilisation for vaccines.
- ↗ Support preparedness and rapid response teams for emergencies
- ↗ Continue procurement of essential supplies (LLNS, vaccines, RUTF etc.)


© UNICEF Sudan/Omer. Landscape around the Sortoni IDP-camp in North Darfur

II. STRATEGIC CONTEXT

On the political level, the situation in Sudan is characterised by the existence of unresolved internal conflicts and unfulfilled political reform. While the security situation relatively improved, it remained volatile. The comprehensive implementation of the African Union High-level Implementation Panel (AUHIP) roadmap to end the armed conflicts in Darfur, Blue Nile, and South Kordofan, and on the National Dialogue remains the basis for efforts to attain sustainable peace required to end long-standing armed conflicts in the country.

The economic situation reached a point of 'instability and dysfunction' (according to the World Bank).[1] In September, the Sudanese Government adopted a series of austerity measures, including a major cabinet reshuffle, additional exchange rate devaluation and further restrictions on bank withdrawals. However, these measures were unable to stabilise the situation, and long queues continued at cash machines, fuel stations, and bakeries across Sudan. In December, following public demonstrations and protests, a state of emergency and school closures were imposed in several cities and towns, causing major disruption in children's access to basic services, especially in education and health care. Economic insecurity was also an important driver in government restructuring and reorganisation of presidential, executive, and national state governance bodies in terms of objectives, ranking, and mandates.

In terms of health, the situation in Sudan is as follows:
In Sudan, an estimated two million children under-five are still affected by diarrhea each year. The case management of diarrhea has improved due to the expansion of the Integrated Management of Childhood Illnesses (IMCI) programme at the facility and community levels. The proportion of children receiving appropriate treatment for diarrhea increased from 15 per cent in 2010 to 59.3 per cent in 2014, while an estimated 90 per cent of children were given ORS or another recommended homemade fluid. Wealthier households were more likely to seek treatment.[2]

Despite efforts to reduce malaria in Sudan, its prevalence remained stagnant at 5.9 per cent in 2016, with 4.1 per cent in urban areas and 6.1 per cent in rural areas[3]. Children under 15 years of age are the most affected as well as those in the poorest quintile (9.9%) as compared to richest quintiles (1.3%). Conflict-affected states have malaria prevalence far above the national average (up to 21.8% in one of the Darfur states). Only 62.6 per cent of malaria cases received any treatment, and only 34.1 per cent were treated with anti-malarias. Monotherapy remains a common practice. The prevention of malaria using insecticide treated nets remains low. Only 37 per cent of people sleep under Long-Lasting Insecticide-Treated Mosquito Nets (LLINs) despite 66 per cent of houses having access to these nets.

An estimated 1.2 million children remain under the threat of acute respiratory infections every year[4]. Treatment at a health facility for acute respiratory infection cases among children under five was sought in only 48 per cent of the cases, 59 per cent of which were treated with antibiotics. Children from urban and wealthier households were more likely to obtain treatment.

[1] Sudan Country Office Annual Report 2018
[2] MICS 2014
[3] MISC 2016
[4] MICS 2014

Vaccination programmes have been unable to reach all children in Sudan. The proportion of children 12-23 months who are fully immunised decreased from 49 per cent in 2010 to 43 per cent in 2014. The decline in measles vaccination coverage from 63 per cent in 2010 to 61 per cent in 2014 partly explains the overall reduction in the proportion of fully immunised children. Sudan experienced a measles outbreak in all states between 2011 and 2015, which affected over 12,000 children. Population movements, conflict, inaccessibility of some areas, and inadequate funding coupled with ineffective vaccines management all contributed to the increase in unvaccinated children. There has been one promising upward trend however. Children vaccinated with pentavalent increased from 58 per cent in 2010 to 64 per cent in 2014.

Sudan has a high rate of maternal mortality, related to a lack of access to skilled birth attendants and antenatal care. Maternal mortality was estimated at 311 per 100,000 live births in 2015[5] (the nationally accepted estimate is 216 per 100,000 live births from 2010[6]) with most deaths due to delivery by unskilled birth attendants at home and the lack of comprehensive emergency obstetric care from skilled providers at medical facilities. Skilled attendance at delivery is lowest in Central Darfur (38%), South Darfur (48%) and West Darfur (58%). Less than half of women in rural areas regularly visit antenatal care services. In conflict affected states, only a low proportion of women attend four antenatal care clinics: South Kordofan (22%), North Darfur (37%) and South Darfur (41%).

The estimated HIV-prevalence rate in Sudan is 0.2 per cent among adults aged 15-49, with an estimated 4,400 new infections annually.[7] Limited knowledge about the epidemic remains a concern, with only 8.5 per cent of young women aged 15–24 years able to identify correct ways to prevent HIV and reject major misconceptions about the virus.[8] Prevention of mother-to-child transmission of HIV is hampered by women's limited antenatal care attendance and the high level of stigma associated with the virus. There are frequent stock outs of HIV-testing kits and health care providers are reluctant to actively refer pregnant women to Anti-Retroviral Therapy (ART) centres. In 2016, only 83,605 pregnant women were tested for HIV, of which 88 were diagnosed HIV-positive. Only 56 of these women were enrolled in ART-centres for care and treatment.

The trend in continuum of care between 2006 and 2014 indicates gaps between interventions. 'Silo programming' continues to lead to huge lost opportunities for integration of lifesaving child and maternal health programmes, in a context of limited funding for the health sector. And 2018 was no exception. While an important step was taken with a consensus on collective outcomes for the SDGs and the formulation of a specific outcome on scaling-up of basic social services, including health, nutrition, WASH (water, sanitation and hygiene), education and protection.

UNICEF's leading role in the development of the One-Health Plan[9] was a game-changer in 2018. The momentum from this strategic engagement gave the required final push for the government to agree on the conduct of the national Standard Spatial Survey (S3M) to update evidence on the situation of women and children in Sudan, results of which will be available by mid-2019. All these efforts are pivoted towards the 2030 agenda for health.

[5] Inter-agency Maternal Mortality Estimation, 2015

[6] SHHS 2010

[7] SHHS 2010

[8] 'MICS 2014 Key Findings', April 2015.

[9] The One Health Plan is a consolidated national annual health sector plan for all stakeholders in Sudan. It incorporates health plans by NGOs, UN agencies, the private sector, academia and other CSO into the government national health sector plan.

© UNICEF Sudan/Noorani. A group of mothers listen to a health worker at a health centre in Kadugli, South Kordofan.

III. RESULTS

UNICEF supported the Ministry of Health's (MoH) efforts towards having a stronger health system by investing in capacity development, supporting evidence-generation, supporting strategies and polices, leveraging domestic resources, supporting national budgeting and scaling-up services to reach more people in need.

Through these strategic technical, policy and financial investments, UNICEF advanced the rights of children and women of Sudan with quality, integrated, high-impact health and nutrition programmes, including in humanitarian situations through improved capacity of Primary Health Care (PHC) at facility and community levels. 956,925 children suffering from diarrhea, malaria, and acute respiratory tract infections in 742 hard-to-reach communities - including refugee camps, Internally Displaced Persons (IDP) camps, vulnerable host communities, and newly accessed communities - in the five states in Darfur, South and West Kordofan, White Nile and Blue Nile states were treated. The number of communities reached exceeded the 2018 target and the number treated exceeded the 2018 Humanitarian Response Plan (HRP) target.

Additionally, UNICEF supported the Ministry of Health to respond to different epidemics through the provision of technical assistance to update the national acute watery diarrhea (AWD) preparedness and response plan, the chikungunya virus outbreak response plan, training of health care providers on AWD Standard Case Management (SCM), operation of Oral Rehydration Therapy (ORT) corners, and availing of essential supplies needed for SCM. Through UNICEF's Communication for Development programme, more than 3,000 cadres (65 percent of whom were female) from government counterparts, international NGOs and community volunteers were trained on the outbreak response. For the first time, mobile text messages were used to increase outreach and personalise messages to the at-risk group.

This section provides an assessment of the results attained, constraints and challenges against the planned results.

OUTCOME 1 **By 2021, more children under the age of five years and women of reproductive age utilise high-impact, quality health and nutrition services.**
OUTPUT 1.1 Government at national and subnational levels have strengthened capacities and develop evidence-based and equity, multi-sector focused policies, plans and budgets to improve health and nutrition services.
OUTPUT 1.2 Health systems and communities in targeted localities have strengthened capacities and deliver integrated high-impact health and nutrition services.
OUTPUT 1.4 Mothers and other caregivers in targeted localities have improved skills and knowledge on key family practices.

These are the activities and results achieved per output and indicator:

OUTCOME 1

By 2021, more children under the age of five years and women of reproductive age utilise high-impact, quality health and nutrition services.

UNICEF and partners made considerable progress towards the elimination of measles. A total of 1,241,577 children under the age of one received the first dose of measles vaccine, 50.9% of whom were girls. Equal importance was given to vaccinate IDPs and South Sudanese refugees against measles. This coverage represents 77.6 per cent of the annual target, falling slightly short of the Country Programme Document target of 90 per cent due to operational challenges, particularly the fuel shortage which impacted on transportation of vaccines, transportation of mobile and outreach teams and supervision activities.

Progress has been made in the field of newborn care. Last year, 77.5 per cent of births was attended by a skilled health worker. In 2018, UNICEF supported the establishment of two centers for excellence at the national level to improve newborn care in Sudan and revised and updated the pre-service training curriculum for medical doctors and assistants to incorporate maternal and newborn care. Last year, 61 per cent of newborns received care within two days of birth. This is an increase with 33 per cent since 2014 (baseline) and 26 per cent more than targeted in 2018.

OUTPUT 1.1

The government - at national and subnational levels - has strengthened capacity and develops evidence-based and equity, multi-sector focused policies, plans and budgets to improve health and nutrition services.

After three years of continued advocacy since 2016, UNICEF finally made a breakthrough with the Government and launched the Standard Spatial Survey (S3M), an innovative sub-locality level multisector survey to generate evidence nationally on all sectors of Nutrition, Health, Water, Sanitation and Hygiene (WASH), education, and protection. This will be used for multisector policies and plans to holistically address critical health and nutrition needs of women and children. Data collection was completed in 17 of 18 states and results were expected by the first quarter of 2019.

In addition, UNICEF supported a comprehensive Emergency Obstetric and Newborn Care (EmONC) assessment, a qualitative study on barriers to immunisation in low-performing localities. The Community-based Management of Acute Malnutrition (CMAM) evaluation and supply chain analysis were also underway to document what worked well and where UNICEF and partners should improve. The S3M and the CMAM evaluation and Ready-to-Use Therapeutic Food (RUTF) supply chain evaluation will further inform the scale-up of nutrition programmes and improve the quality of programming. There is a recognised and keen interest by the government in nutrition programmes and UNICEF's role in the scale-up is well acknowledged.

- Number of states in which barriers and bottlenecks related to child survival are monitored.

UNICEF supported the capacity development of 53 localities in eight states (seven in Blue Nile, two in Kassala, nine in North Darfur, eight in West Darfur, two in Central Darfur, nine in East Darfur, Nine in White Nile, Seven in Sennar) to monitor bottlenecks and to strengthen service delivery to improve health and nutrition outcomes. In West Darfur, bottleneck analysis was conducted in all eight localities and micro-plans developed to improve uptake of services. Health system strengthening will be launched in other states in 2019.

- Share of budget requirements for non-GAVI vaccines (measles, polio, tetanus toxoid, BCG) and related devices covered by the government.

UNICEF supported the development of the 2018 national budget and successfully advocated for inclusion of child-centered actions. As a result, the government provided USD 1.07 million for the procurement of 21 per cent of bundled vaccines and committed to spend additional USD 3 million in 2019 for traditional vaccine procurement (TT, BCG, OPV and measles) and USD 4.8 million for new and underutilised vaccines. These investments are expected to increase coverage of immunisation, especially among low-coverage, high-risk localities.

UNICEF procured 7.2 million doses of measles vaccines and 9.8 million doses of oral polio vaccines and provided operational and technical support to the government to implement vaccination campaigns.

Besides vaccinating 462,919 children under five against measles, two rounds of subnational polio vaccination were conducted, reaching 3,016,657 under five (98% of the planned target) in round one and 4,477,692 (100% of planned target) in round two. The polio campaign was delivered integrated with Vitamin A supplementation, reaching 2.4 million children (estimated 50% girls) in round one and 3.7 million in round two. The integrated polio campaigns were conducted with full UNICEF support and ensured prioritisation of localities hosting IDPs and refugees as well as newly accessible localities in conflict-affected states to ensure that no child was left behind.

OUTPUT 1.2

Health systems and communities in targeted localities have strengthened capacities and deliver integrated high-impact health and nutrition services.

- Number of hard to reach communities in targeted localities with trained community workers to deliver community-based treatment of child illnesses.

Community workers in 6,170 localities and communities have improved capacity to provide treatment to sick and malnourished children (exceeding the 2018 target of 4,800).

In addition, the capacity of 378 out of 400 (95%) reproductive health service providers was improved to provide quality services. UNICEF supported procuring and distributing essential reproductive health supplies in the five Darfur states, Blue Nile, Gedarif, Kassala and Kordofan states.

- Percentage of health facilities in targeted localities reporting zero stock-out of ORS during the last three months.

UNICEF delivered sufficient ORS and zinc throughout the year for treatment of children reached at Primary Health Care (PHC) levels and through Community Health Workers (CHW) delivering Integrated Community Care Management (ICCM) services. As a result, 81 per cent of localities reported zero stock-out of ORS during the last three months.

- Number of UNICEF-targeted children under one year in humanitarian situations who are vaccinated against measles.

Among refugees, IDPs, and children from vulnerable host communities, 462,919 children under one year (51% girls) were reached with the first dose of measles immunisation in the five Darfur States, West and South Kordofan, White Nile and Blue Nile states.

- Number of pregnant women who receive iron and folic acid supplementation for at least 90 days with UNICEF support in the reporting year.

423,955 pregnant women received iron and folic acid supplementation during the first antenatal care visit to prevent anaemia with UNICEF support, which represents over 100 per cent of the 2018 target.

OUTPUT 1.4

Mothers and other caregivers in targeted localities have improved skills and knowledge on key family practices.

UNICEF printed and distributed leaflets with key messages during outbreaks of communicable diseases, including Acute Watery Diarrhea (AWD), chikungunya, and dengue. One of the lessons learned was the importance of UNICEF's leadership in Communication for Development (C4D) to mobilise communities and build their capacity for behavior change during the outbreaks of communicable diseases (such as AWD in Central Darfur and chikungunya and dengue outbreaks in Kassala and Red Sea states). Key constraints in the uptake of family practices were social barriers, beliefs and behaviors limiting utilisation of health, WASH and nutrition interventions. UNICEF supported a qualitative study on barriers to immunisation in low-performing localities to inform evidence-based planning for behavior change communication.

- Percentage of children under five sleeping under LLINs in targeted states.

UNICEF delivered 3,456,800 Long-Lasting Insecticidal Nets (LLIN) nationwide including in seven states with humanitarian needs.

CHALLENGES

Fuel shortages and shortage of cash in banks delayed implementation of the polio vaccination and Vitamin A supplementation campaigns in July of 2018 and this is still impacting the measles and Tetanus Toxoid (TT) campaign in 2019. The economic crisis also increased the cost of services and reduced individuals' purchasing power, limiting their access to critical lifesaving health services. Multiple outbreaks of communicable diseases, including acute watery diarrhea in Central Darfur, chikungunya

and dengue outbreaks in Kassala and Red Sea states and over 7,000 suspected measles cases nationwide overstretched the health systems. In the Red Sea State, they are still battled out in 2019.

Sustaining achieved results is the main focus for 2019, specifically in light of the prevailing economic situation in Sudan which is blotting the political climate with uncertainties. The Central Government declared State of Emergency in February 2019 and the co-funding of strategic interventions is already being impacted negatively. Funding for traditional vaccines remained a major challenge. UNICEF has been advocating with the Ministry of Health to increase the government allocation for traditional vaccines and continues advocating with international community and donors to support this critical and lifesaving element of the health programme. While 2018 marked a success story, it remains a herculean task to maintain this progress.

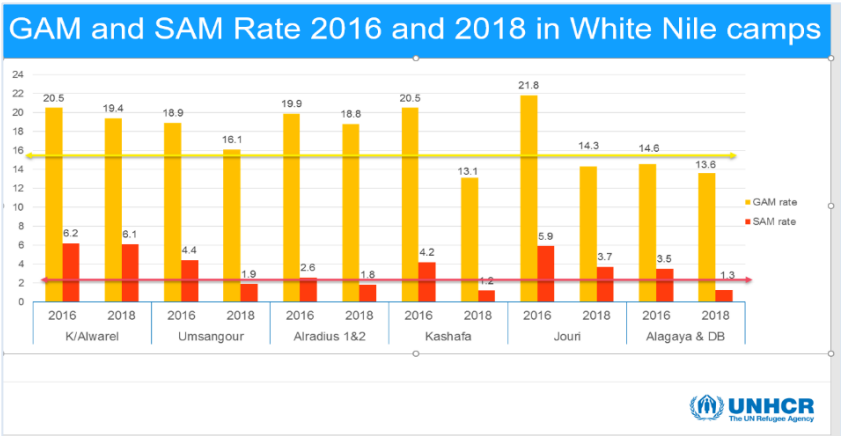
CASE STUDY: FIND AND TREAT CAMPAIGN

UNICEF adopts a systems approach to deliver health and nutrition services at both facility and community levels. This allows refugees to access services at existing facilities, especially those living in host communities. UNICEF conducts monthly or bimonthly screening of children under five years for early detection and treatment of Severe Acute Malnutrition (SAM) integrated with immunisation, IMCI, Integrated Community Case Management (ICCM), health promotion, Infant and Young Child Feeding (IYCF), reproductive health and newborn care services. To address to acute and wider needs in a rapid manner, UNICEF has successfully implemented the *'Find and Treat Campaign'*, rallying partnerships to rapidly deliver lifesaving integrated health and nutrition services to affected children within a short term.

The states of White Nile, South and West Kordofan benefited from this approach in 2018, saving lives of thousands of children who could have suffered preventable deaths. This was in response to low immunisation coverages, high levels of SAM and Moderate Acute Malnutrition (MAM), high incidence of diarrheal diseases and low coverage of IMCI. A total of 24,282 children under five benefited from the campaign, including children screened for SAM and MAM. 482 children were found with SAM and received lifesaving treatment; 1,192 children were treated for MAM, 4,822 children were treated for diarrhea, ARI or malaria (IMCI diseases) and 14,201 children were vaccinated against measles. Additionally, 1,724 pregnant mothers received Antenatal Care (ANC) services and 15,201 children received Vitamin A supplementation.

BACKGROUND

Many interagency assessments have been conducted on the wellbeing of refugees, all pointing to high needs for health, nutrition, WASH, protection and education. The most recent, the Standardized Expanded Nutrition Survey (SENS) conducted by UNHCR and partners, including UNICEF, brought to light the specific health and nutrition needs among the refugees and coverage of existing interventions in key states, including White Nile, South and West Kordofan. The survey was done in West Kordofan (October – November 2017), White Nile (March-April 2018) and South Kordofan (May 2018).



Among the findings, Global Acute Malnutrition (GAM) prevalence of 17.6 per cent (with 4.2% Severe Acute Malnutrition) was reported in Alliri, South Kordofan; GAM prevalence of 19.6 per cent (with 4% SAM) in Elmeiram, West Kordofan; GAM prevalence of 16.8 per cent (with 2.2% SAM) in Kharasana, West Kordofan.

Diarrhea prevalence reported in Alliri was 27.3 per cent, and 32.6 per cent and 24.3 per cent in Kharasana and Elmeiram respectively. Coverage of immunisation, Antenatal Care and Vitamin A supplementation were also low across all three states.

PROGRAMME

The *Find and Treat Campaign* was adopted as an accelerated strategy to reach a maximum number of children in need of treatment for Severe Acute Malnutrition (SAM), Moderate Acute Malnutrition (MAM) and diarrheal diseases as well as to identify and refer pregnant women for antenatal care. It was necessary to rapidly mobilise wider partnerships, leverage capacities from the Ministry of Health, NGOs, the World Health Organisation (WHO), the World Food Programme (WFP) to accelerate provision of lifesaving health and nutrition services to population in desperate need (i.e. the South Sudanese refugees), stabilise the deplorable humanitarian crisis and to strengthen systems to maintain provision of these services in a systematic and routine manner. The *Find and Treat Campaign* was implemented on assumption that it would be successfully implemented, based on an experience in 2017 in newly accessible areas in Darfur's Jebel Marra region. it was planned under the assumption that the refugee population will remain at their residential locations in the camps and out of camps. It was executed in an integrated and multisectoral manner under the assumption that all agencies and partners would be ready, and avail required logistics, supplies, financial and human resources.

The response was planned to benefit the entire refugee population; directly all children under five and pregnant and lactating mothers, and indirectly the entire refugee community in White Nile camps, South and West Kordofan out of camps. A total of 273,192 people was expected to benefit directly or indirectly. UNICEF planned the integrated response for efficiency and in consideration of multidimensional needs of the refugee child.

STRATEGY AND IMPLEMENTATION

The *Find and Treat Campaign* approach focused on intensive and active case-finding, strict supervision and instant admission of children in need of health and nutrition services. Three-person teams - consisting of a Mid-Upper Arm Circumference (MUAC) measurer, a trained community health worker and a vaccinator - were formed. The teams were trained after which they were deployed to visit all individual refugee households to measure children's mid-upper arm circumference and detect oedema among children age 6-59 months, deliver measles vaccination for children 9-59 months, deliver Vitamin A to children 6-59 months, provide antenatal care services for pregnant women, check for diarrhea and other childhood illnesses (e.g. Acute Respiratory Infection) and to provide malaria prevention and treatment.

All other sick children were referred to the health center for further diagnosis and treatment. Children with acute malnutrition were brought to the Outpatient Therapeutic feeding Programme (OTP) within the camp by a designated admission facilitator, usually a respected and well-known South Sudanese refugee leader within the community. As a measure to prevent non-compliance, no SAM child or sick child was referred unaccompanied. To ensure quality, each team covered not more than 100 households a day.

During the campaign, OTPs and health centres remained opened until the last child was screened. Children suffering from SAM with medical complications were transported for admission in the Stabilisation Centre (SC). When there was no NGO supporting the SC, UNICEF paid the full cost of transportation as well as the caretaker ration. More importantly, UNICEF staff in the field ensured that severe acute malnourished children were transported to the SC within one day of referral and followed-up to ensure that they received care and treatment free of charge, including medication and laboratory services.

A joint supervision team comprising of UNICEF, UNHCR, WHO, WFP and MOH ensured quality supportive daily supervisory support to the teams and held daily meetings to review the progress of implementation and take stock of challenges and lessons learned.

RESOURCES

Provision of therapeutic supplies, MUAC tapes, IMCI kits, Vaccines, RH kits	UNICEF, WFP
Financial support	UNICEF
Transportation of supplies & logistics	CONCERN, Almanar, SCI, CIS
Field implementation of the response	SMOH, CONCERN, Almanar, SCI, CIS
Monitoring and supervision	UNICEF, WHO, WFP, UNHCR, SMOH, Concern, SCI, CIS, Almanar, Goal
Provision of supplementary feeding supplies	WFP
Orientation workshop and trainings	UNICEF, SMOH
Support transportation of complicated cases	CONCERN, SCI, Almanar, CIS
Coordination with COR, HAC and other state authorities	UNHCR
arrange after the campaign progress review meetings	UNICEF, UNHCR, SMOH

RESULTS

A total of 24,282 children under five benefited from the campaign, including children screened for SAM and MAM. 482 children were found with SAM and received lifesaving treatment; 1,192 children were treated for MAM, 4,822 children were treated for diarrhea, Acute Respiratory Infections (ARI) or malaria (IMCI diseases) and 14,201 children were vaccinated against measles. Additionally, 1,724 pregnant mothers received antenatal care services and 15,201 children received vitamin A supplementation. The participation of various NGOs and UN-agencies plus commitment of the State Government ensured that resources were contributed and not coming from one agency; this greatly contribute to the success of the intervention.

CHALLENGES AND LESSONS LEARNED

One of the key challenges faced was shortage of MAM supplies in West and South Kordofan states. this handicapped the provision of MAM treatment, creating a huge gap in the response.

The key lessons learned included the efficiency of the multisector approach and the leveraging of resources and platforms from other agencies. For example, even though UNICEF did not form a financial partnership agreement with some NGOs, the health centres being run by those partners conformed to the need of the campaign and adapted their strategies and approaches to meet the immediate needs. They opened their clinics throughout the week to ensure children had uninterrupted access, although normally the clinics are opened only once a week.

The community participation was a commendable lesson. The community health workers and volunteers were themselves South Sudanese refugees who understood the cultural and social dynamics of the refugees. As a result, rejection of services was at record low. Overall the *Find and Treat Campaign* has successfully proven an emerging best practice and the results have been consistently impressive.

MOVING FORWARD

While UNICEF's strategic focus will remain on system strengthening, the *Find and Treat Campaign* approach remains an important lifeline for many of Sudan's population caught-up in conflict. UNICEF hopes to replicate the *Find and Treat Campaign* in two other areas once access is provided. In areas with regular access, UNICEF will scale-up services and improve on quality, including improved monitoring.

IV. FINANCIAL ANALYSIS

TABLE 1: PLANNED BUDGET BY OUTCOME AREA HEALTH AND NUTRITION (IN USD)

Intermediate Results	Funding Type	Planned Budget
Output 1.1 Evidence-Based Planning for Health and Nutrition	RR	1,080,399
	OR	812,449
	Total	1,892,848
Output 1.2 Integrated High-Impact Health and Nutrition Services.	RR	650,000
	OR	9,565,748
	Total	10,215,748
Output 1.3 Severe Acute Malnutrition	RR	1,000,000
	ORR	2,589,818
	Total	3,589,818
Output 1.4 Knowledge on Key Family Practices	RR	403,351
	ORR	1,550,216
	Total	1,953,567
Grand Total Health and Nutrition Outcome Area		**17,651,980**

TABLE 2: COUNTRY-LEVEL THEMATIC CONTRIBUTIONS RECEIVED IN 2018 (IN USD)

Donors	Grant Number	Contribution Amount	Programmable Amount
SIDA Sweden	SC1899010032	595,632	553,938
SIDA Sweden	SC1899030020	595,632	553,938
Total Thematic contributions		**1,191,264**	**1,107,876**

TABLE 3: EXPENDITURES BY KEY-RESULTS AREAS (IN USD)

Organizational Targets	Expenditure Amount			
	Other Resources-Emergency	Other Resources-Regular	Regular Resources	All Programme Amounts
21-01 Maternal and newborn health	4,307,651	4,472,892	1,418,004	10,198,547
21-02 Immunization	2,304,478	3,019,143	904,422	6,228,043
21-03 Child Health	708,811	2,131,106	782,567	3,622,484
21-04 Prevention of stunting and other forms of malnutrition	130,984	661,292	178,497	970,773
21-05 Treatment of severe acute malnutrition	15,550,707	858,340	3,070,272	19,479,319
21-08 Early childhood development	89,381	16,394	5	105,780
Grand Total	**23,092,012**	**11,159,167**	**6,353,767**	**40,604,946**

TABLE 4: THEMATIC EXPENSES BY PROGRAMME AREA (IN USD)

	Grants	Expenses amount
Other Resources - Emergency	TOTAL	975,459
21-01 Maternal and newborn health	SM149910	496,091
	SM189910	4,211
21-02 Immunization	SM18991	365,700
21-03 Child Health	SM149910	41,230
	SM189910	41,496
21-05 Treatment of severe acute malnutrition	SM149910	10,849
	SM189910	13,414
21-08 Early childhood development	SM189910	2,468
Other Resources - Regular	TOTAL	516,877
21-01 Maternal and newborn health	SC149901	2,995
21-03 Child Health	SC149901	1,773
21-04 Prevention of stunting and other forms of malnutrition	SC149904	30,323
	SC189903	70,833
21-05 Treatment of severe acute malnutrition	SC149904	67,621
	SC189903	343,332
Grand Total		**1,492,336**

TABLE 5: EXPENSES BY SPECIFIC INTERVENTION CODES (IN USD)

Intervention Codes	Expenses
21-01-01 Community and home based maternal and newborn care	5,465
21-01-02 Facility based maternal and newborn care (including emergency obstetric and newborn care, quality improvement)	1,105,117
21-01-05 Maternal and newborn care policy advocacy, evidence generation, national / subnational capacity development	3,424,026
21-01-99 Technical assistance - Maternal and newborn health	4,553,368
21-02-01 Demand for immunization (C4D)	29,410
21-02-02 Immunization supply chain, including cold chain	1,435,734
21-02-03 Evidence generation and policy advocacy for immunization	59,521
21-02-04 Purchase of vaccines and devices	1,150,953
21-02-05 Immunization operations	2,651,999
21-02-12 Continuous social mobilization and communication	79,245
21-03-02 IMNCI facilities	6,208
21-03-03 Child health policy advocacy, evidence generation, national/ subnational capacity development	303
21-03-09 HSS - Community Health System	177
21-03-10 HSS - Health systems procurement and supplies management	1,014,073
21-03-11 HSS - Health sector policy, planning and governance at national or sub-national levels	321,079
21-03-16 HSS - Management Information Systems	16,305
21-03-17 HSS - Health real time monitoring	57,112
21-03-18 Public health emergencies, including disease outbreaks	780,621
21-03-98 Technical assistance - HSS	8,111
21-03-99 Technical assistance - Child health	204,070
21-04-01 Breastfeeding protection, promotion and support (including work on Code)	418,020
21-04-02 Diet diversity in early childhood (children under 5), includes complementary feeding and MNPs	3,968
21-04-03 Vitamin A supplementation in early childhood (children under 5)	10,943
21-04-07 National multisectoral strategies and plans to prevent stunting (excludes intervention-specific strategies)	89,068
21-04-08 Data, research, evaluation, evidence generation, synthesis, and use for prevention of stunting and other forms of malnutrition	314,651
21-04-99 Technical assistance - Prevention of stunting and other forms of malnutrition	39,930
21-05-01 Care for children with severe acute malnutrition	16,942,660
21-05-02 Capacity building for nutrition preparedness and response	2,582
21-05-03 Nutrition humanitarian cluster/humanitarian sector coordination	3,470
21-05-99 Technical assistance - Treatment of severe acute malnutrition	253
21-08-09 Social and behavioural change communication for ECD	66,592
26-01-01 Country programme process (including UNDAF planning and CCA)	55,243
26-01-02 Programme reviews (Annual, UNDAF, MTR, etc.)	16,665

26-02-02 MICS - General	31,756
26-02-04 Stimulating demand for and capacity to use data	58,704
26-02-05 Administrative data, registers and non-MICS household surveys and censuses	1,055
26-02-06 Analysis of data	2,386
26-02-07 Data dissemination	8,603
26-02-08 Programme monitoring	54,687
26-02-09 Field monitoring	19,178
26-03-07 Strengthening C4D in Government systems including preparedness for humanitarian action	13,758
26-03-99 Technical assistance - Cross - sectoral communication for development	101,585
26-05-06 Building global / regional / national stakeholder evaluation capacity	757
26-05-11 Building global / regional / national stakeholder research capacity	1,819
26-06-04 Leading advocate	232,075
26-06-05 Leading voice	14,114
26-06-06 Supporter engagement	1,574,235
26-06-07 Leading brand	10,818
26-07-01 Operations support to programme delivery	3,572,689
27-01-06 HQ and RO technical support to multiple Goal Areas	40,875
27-01-15 CO programme coordination	262,336
27-01-16 CO advocacy and communication	35,746
28-07-04 Management and Operations support at CO	-299,170
Unknown	51
Grand Total	**40,604,995**

TABLE 6: PLANNED BUDGET FOR 2019 (IN USD)

Output	Funding Type	Planned Budget	Funded Budget	Shortfall
Output 1.1: Evidence Based Planning for Health-Nutrition	RR	1,080,399	7,247	-1,073,152
	ORR	812,449	1,634,635	822,187
	Total	1,892,848	1,641,882	-250,965
Output 1.2. Integrated High-Impact Health and Nutrition Services	RR	650,000	472,359	-177,641
	ORR	9,565,748	14,501,967	4,936,220
	Total	10,215,748	14,974,326	4,758,579
Output 1.3: Severe Acute Malnutrition	RR	1,000,000	522,396	-477,604
	OR	2,589,818	4,119,446	1,529,629
	Total	3,589,818	4,641,842	1,052,024
Output 1.4 Knowledge on Key Family Practices	RR	403,351	8,000	-395,351
	OR	1,550,216	258,663	-1,291,553
	Total	1,953,567	266,663	-1,686,904
Grand Total	RR	3,133,750	1,010,002	-2,123,748
	OR	14,518,230	20,514,712	5,996,482
	Total	**17,651,980**	**21,524,714**	**3,872,734**

V. FUTURE WORK PLAN

Based on the progress of 2018 and discussion with the Government of Sudan, UNICEF Sudan identified the following as key priorities for 2019:

- Health system strengthening with a focus on quality and preparedness, Support District Health System Strengthening (DHSS).
- Improving the maternal and child referral system.
- Improve quality of Maternal and Newborn Healthcare (MNH) services:
    - Expand newborn corners in health facilities.
    - Establish newborn care units at primary and secondary hospitals.
    - Initiate clinical mentorship for newborn care and maternity.
    - Equipping health facilities with basic maternal and newborn equipment's.
    - Improving maternal and newborn care at the community level.
    - Supporting Emergency Obstetric and Newborn Care (EmONC) services.
- Partnerships with academia (pre-service and in-service training), and the research agenda.
- Strengthen immunisation supply chain management.
- Strengthening routine vaccination with a focus on the first and second dose of measles.
- Strengthening communication and social mobilisation for generating demand for immunisation and nutrition.
- Increasing coverage with the community-based health interventions (ICCM, CMWs) to access remote and hard-to-reach population.
- Improve quality of child health care in health facilities (Integrated Management of Childhood Illness).
- advocacy for domestic resources mobilisation for vaccines.
- Strengthen monitoring system at all levels.
- Support preparedness and rapid response teams for emergencies
- Continue procurement of essential supplies (LLNS, vaccines, RUTF etc.)

VI. EXPRESSION OF THANKS

In 2018, UNICEF continued to implement lifesaving interventions in Sudan, which would not have been possible without the generous funding from our donors, especially the Government and people of Sweden. Thanks to the support, UNICEF can continue its mission to meeting the needs and fulfilling the rights of the most vulnerable populations, especially children.

Flexible funding for UNICEF's health interventions is crucial as it provides us with greater flexibility to respond to the needs of children, particularly in emergencies. UNICEF Sudan highly appreciates this type of funding in order to have a bigger and more effective impact on the lives of vulnerable children in a highly volatile, complex and dynamically evolving context like Sudan.

ANNEX 1: HUMAN INTEREST STORY

SALEEMA' S STORY

Meet Saleema, a community outreach volunteer from Otash camp for Internally Displaced Persons:

'*When I get up in the morning, I do my prayer, feed my children and leave our hut heading to where new arrivals concentrate, go to water points and wander around the camp looking for children and mothers who need help*'.

Saleema

That is how Saleema starts her day. As a rapid response community outreach volunteer, Saleema and her colleagues go scouring the Otash camp every day, looking for sick children and mothers, and take them to the clinic within the camp.

Although I met her towards the end of the day, she didn't seem tired or about to give-up. '*People in this camp know about our work. Sometimes when I walk with my measuring tape (for measuring children's mid-upper arm circumference) and blue UNICEF notebook, mothers call me and ask me to screen their children for malnutrition. I never say no."*

Saleema tells us that the people who just arrived from the mountain suffer the most. She finds many cases of malnutrition and illness among the new arrivals. She points at two women: '*The mother with the twins and the pregnant lady have just arrived from Jebel Marra two days ago, I met them and brought them to the clinic*'.

Saleema is happy helping the most vulnerable children in the camp '*I feel satisfied when I can help a malnourished or sick child to access the health center*'. Although she was once a good high school student, poverty had fiercely knocked down Saleema's dream to study, nevertheless, you can never miss the great smile of pride clearly drawn on her face.

ANNEX 2: FEEDBACK FORM

UNICEF is working to improve the quality of our reports and would highly appreciate your feedback. The form is available on line at this link: English version or French version.

Thank you!

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