The five main sectors:
- Health
- Nutrition
- Water, sanitation, & hygiene (WASH)
- Child protection
- Education

Sector profiles (health)
Health in Sudan

The health of a child in Sudan is undermined by conflict, culture and chronic under-development. Statistics from UNICEF-supported surveys reflect this depressing reality: for every 100,000 live births, 216 mothers die (in Darfur it’s 335 mothers); for every 1,000 births 52 babies die, 33 of them within the first 28 days of life; only half of children here are fully immunized.

But there are signs of promise, too. In the past five years the percentage of babies fed with only breastmilk for the first six months increased by 14 percent. Vitamin A coverage increased from 60 percent to more than 95 percent. And the proportion of children dying before their fifth birthday decreased by 18 percent; it’s now at 68 per 1,000 live births. That last trend, infant mortality, is encouraging.

But in Sudan it’s necessary to dig below the national figures to understand the true situation. In Northern State, for example, it’s much better: 30 children under the age of five die for every 1,000 live births. But in East Darfur that same figure is 112—meaning that more than 1 in 10 children die before they reach five years.

Sudan is committed to reaching the half of her children that are not fully immunized. Each year in Sudan an estimated 1.4 million children under the age of one year are targeted for routine immunizations. Measles coverage for the first dose now stands at 86 percent, a marked improvement, but still below the 95 percent target to eliminate the disease.

Routine coverage for measles and other vaccine preventable diseases remains a major weakness in Sudan. In addition to inadequate systems there are additional challenges here: population movement and conflict. Ten percent of the population is nomadic, and ongoing violence has made some areas inaccessible; some children in conflict zones have not received routine immunization since 2011. Because of this, sustained and repeated outbreaks of childhood diseases continue to threaten the lives of children in Sudan.

Health and Traditions

In rural Sudan, health facilities, trained medical personnel and correct information are very limited. Mothers give birth on their knees while clinging to a rope suspended from the ceiling of their round tukul hut. If a girl has her genitalia cut she may have a lifetime of...
complications every month during her menstrual cycle or every time she goes to the toilet, and childbirth is more dangerous for her and her baby. If a girl is married and becomes pregnant, her body—still growing—competes against the fetus—growing in her womb—for essential nutrients. Nearly 1/3 of babies born in Sudan are under-weight.

"I’m extremely happy to be involved in this campaign," said Muna Idris, one of the trained measles vaccinators. "I want to be able to serve the children in my community."

For babies that survive, mothers may not know the importance of exclusive breastfeeding or how to care for a sick child. Rather than relying solely on breastmilk, she may give her baby water, dates or honey. Even if a mother is breastfeeding, there is a belief in Sudan that her milk becomes bad with pregnancy and so she stops breastfeeding her young children. For reducing fever, a rural remedy involves placing a child in a tub of hot water mixed with leaves from neem trees. In South Darfur there is a tradition where Koranic verses are written on a board using special ink. The verses are then washed off with water, and that water is given to sick children.

What UNICEF Sudan is doing
UNICEF is a major player in health in Sudan. We support 80 percent of all things vaccines here: procurement, training, social mobilization, cold chain and monitoring. This also means we are the sole provider of routine vaccinations against measles,
tuberculosis, tetanus and polio. All other vaccines coming into Sudan, funded by GAVI or other donors, are procured through UNICEF.

In response to Sudan’s very high number of mothers dying in childbirth, UNICEF supported the Village Midwives Initiative, targeting one trained midwife (12 months training) to serve every 2,000 families. Building on the success of this initiative a new program, with funding by the EU, involves 18 months of training of community midwives and a certificate upon completion.

A trained midwife is one of the best ways to keep mother and baby alive. In a partnership with Japan, nearly 2,000 village midwives received in-service training in 12 states here. This translates into potential support of 20,000 pregnant women and newborns every day. UNICEF and partners have trained 13,000 midwives, and the Government has folded the trained midwives into the civil service. UNICEF-Sudan also provides direct support to the Government and its Integrated Management of Childhood Illness, including training, monitoring and supervision in both community and health facilities. Community health workers, at seven-day trainings in very remote locations, are learning how to manage the major causes of death for children in their area (pneumonia, diarrhea, malaria, referral of malnourished children).

We are also active in collecting information to add to the evidence base for children here: data on immunizations, IMCI, health system strengthening, and increasingly using mobile phones to better understand the situation at community and household levels.

**Measles Response**
Since 2011, Sudan has been hit by a series of measles outbreaks. In response to the current one—the worst in recent memory at five times the annual average—UNICEF organized for 9.6 million doses for children between the ages of six months and 15 years.

The immunization campaign was a complex operation, however, as ongoing conflict restricted coverage in parts of the Kordofan states, Blue Nile and Darfur. Using our trusted voice and authority, UNICEF has called on all fighting factions to facilitate humanitarian access so that children in conflict areas can be reached.

While UNICEF is a leader in the effort to halt measles outbreaks, we are also committed to working with Government to strengthen routine immunization systems. Campaigns, while urgent and lifesaving, are costly and not sustainable.

A strong immunisation system improves community immunity, and collects and manages data on coverage, illness and death. This informs decision-making, resulting in cost-effective and nimble hotspot detection and response.
El Geneina, West Darfur
As a syringe is jabbed neatly into his right arm, 13 year-old Ali Ismail barely flinches. After being patched up with cotton wool and given a small rectangular registration card with his name on it, he skips away from his vaccinators like a Sudanese gazelle.

How does it feel to get vaccinated against measles, he is asked? “It’s good.”
And wasn’t he afraid of the needle? “There was no pain,” he replies. Young Ali Ismail is clearly a boy of few words. And he seems unaware that he just became the first child in West Darfur to be immunized during the recent UNICEF-supported measles vaccination campaign.

Delivering Vaccines in a Vast Country
It is a colossal operation, one that becomes easier to appreciate when viewed from the vast expanses of the conflict-hit Darfur region.

A total of 9.6 million vaccines have been ordered for nationwide distribution. Just over 642,000 of those have been made available for West Darfur, one of five administrative areas in Darfur. After being flown into El Geneina, they are then distributed to a target child population of more than half a million—first to the main towns in each state locality, and then from there to outlying villages and vaccination points.

Land Cruiser pick-up trucks are used to deliver the tiny vials of vaccine. But there are precious few roads in this corner of Africa. As soon as the drivers reach the outskirts of El Geneina, they are in open country. Under a scorching 45-degree sun, they plough through mile after mile of sandy tracks, dipping in and out of dried wadis, dodging trees and skirting ditches.

And that is only if they use the main trails. Delivering the vaccine to children who live beyond the larger rural towns requires them to venture even further into the sandy Darfur wilderness. Without continued donor support, a major UNICEF-supported vaccination campaign of this nature would be difficult enough. But it would be completely impossible without the thousands of volunteers and Ministry of Health staff who drive the campaign on the ground.

“I’m extremely happy to be involved in this campaign,” said Muna Idris, one of the vaccinators who received training from the government to help implement the immunization programme. “I want to be able to serve the children in my community.”

Sitting on a mat in a village of traditional round tukul houses, and surrounded by dozens of children, Muna described her training as a vaccinator for a rural immunization point in Krinik locality, east of El Geneina.

“They gave us general information about measles and its symptoms. They also taught us about giving messages to the villagers about hygiene, cleaning their houses and washing their hands.”

“They instructed us how to inject,” she continued, “and that we need to hold the needle at a 45 degree angle and insert it into the right arm. After that, we mark the small finger on their left hand.”

There are hundreds of vaccinators like Muna across the rest of Sudan, along with the many volunteers and health officials who are helping to implement the UNICEF-supported campaign.

Measles, Millions of Vaccines and a Nationwide Campaign
In some parts of rural Sudan, the grandmothers have a saying. “Giving birth is death”, they warn, in a bittersweet testament to the country’s history of high maternal and neonatal mortality.

At a UNICEF-supported midwifery centre in Omdurman, just west of Khartoum, three trainee midwives from Darfur know all about the pain that lies behind this old wives’ saying. Hasania Mohamed Ahmed, age 30, suffered a premature rupturing of the membranes in her womb during pregnancy in 2010. Her grandmother told her it was ‘normal’ and nothing to worry about. Her child died soon afterwards as a result of the complication.

Hafsa Abbakar lost her sister when she died of excessive bleeding during childbirth. “Nobody took care of her because nobody knew what to do,” said the 27-year-old.

And fellow student, Khadeeja Abdel-Kareem, also lost a sister, Mariam. The 26-year-old was eight months pregnant when her body became very swollen. There were no midwives in the village and nobody had a clue what was happening. “When she got to nine months, she died,” said Khadeeja, 28.

Three midwives, three tales of personal tragedy. But there is hope in their determination to receive lifesaving training in a country desperate to fight deaths in childbirth.
In some parts of rural Sudan, the grandmothers have a saying. “Giving birth is death”, they warn, in a bittersweet testament to the country’s history of high maternal and neonatal mortality.

At the Omdurman Midwifery School in Khartoum, UNICEF Sudan is supporting the trio through a scheme that aims to train hundreds of midwives from South and East Darfur, two states with the highest maternal and neonatal mortality rates anywhere in the country.

Out of 100,000 live births, 335 lead to the death of the mother according to recent statistics. Nationally, the average is 216 deaths. In addition, only half of births are attended by skilled healthcare workers, and a mere 20 percent are ‘institutional’ deliveries.

Last year UNICEF Sudan helped establish the Darfur Basic Services Project, a midwifery initiative launched with a donation from the EU. Working in conjunction with Sudan’s federal and state ministries of health, the scheme is aimed at improving basic and emergency obstetric care across Darfur.

“People have started to recognise the importance of midwives over unqualified relatives or others in the community,” said Moshtaha Mohamed al-Nour, a midwife and nurse who supervises the course at the school.

“Because of this, people in the community are agreeing to send their students to our program.”

Located at the Omdurman Midwifery School—the first in Sudan, established in 1921—the project is on course to train several hundred midwives with the current funding.

Hafsa Abbakar, one of the students at the Omdurman Midwifery School, gave an example of the simple training that could solve what otherwise might become a serious problem in her home village of Rajaj in South Darfur.

“I assisted one delivery during my training where the woman had her baby but the placenta got stuck inside her womb,” she said.

“So I started to practise what I had been taught. I massaged her uterus, but nothing happened. After that I gave the baby to the mother’s breast. When the child started to suck the mother’s nipple, the placenta gradually came down.”

Such training may be standard in many developed countries. But in rural areas of Darfur it can be the difference between life and death.
Sudan by the numbers: health

Percentage of children affected by diarrhea, by state

Looking at the national average for any health metric does not even begin to tell the whole story of where the gaps in health care services persist.

UNICEF is active in collecting information to add to the evidence base for children here: data on immunizations, IMCI, health system strengthening, and increasingly using mobile phones to better understand the situation at all levels, down to the community and household levels.

The surprise in this data set was that Khartoum had the worst diarrhea prevalence numbers for the whole country.