

How are we going to survive the climate crisis?

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Obongodu Paul Unanam

“There is no specific law in Nigeria to protect whistleblowers that shields public servants from reprisals when they report cases of fraud through official channels.”

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Photo: Fabeha Monir



Cover: Artwork by Fabeha Monir (see p. 4).

The past few months have strikingly shown the extent to which humanity has put itself into a disaster movie. The climate crisis is unfolding across every continent, bringing torrential rain as well as droughts. Even if we cannot pause the film, it is still up to us to decide what role we wish to play from this point onwards. In many countries of the Global South, climate change competes with other crises, such as armed conflicts or poverty, and often exacerbates them. Our focus section shows that the underlying problems are not natural phenomena, but man-made, and that there are solutions to be found and implemented.

Artist of the month

Fabeha Monir is an independent photojournalist based in Dhaka, Bangladesh. She is renowned for her compelling storytelling that intertwines photography, film and investigative reporting. Her work delves into pressing issues such as gender-based violence, labour rights, climate change and forced migration, amplifying the experiences of people in communities across South Asia.

Monir's work has been featured in prominent news outlets, including The New York Times, Bloomberg News, The Wall Street Journal and The Washington Post. In 2024, she co-directed the short documentary *The Taste of Honey*, which garnered the Best Short Film Award at the Terni Film Festival in Italy and was officially selected for the Africa International Human Rights Film Festival. The film explores the lives of honey collectors in South Asia's Sundarbans, highlighting the intersection of environmental degradation and human rights.

fabehamonir.net



Photo: Mohammad Rakibul Hasan



https://www. ↓

Good news

Germany's international broadcaster DW has developed a lightweight app designed to help users circumvent digital censorship and access DW content in countries where parts of the internet are restricted. While governments continue to escalate blocking tactics, the app still offers a comparatively robust way for users to stay informed.

It combines several features, including an integrated virtual private network (VPN), no personal data transmission, article sharing via Bluetooth and a data-saving mode for low-bandwidth or unstable connections. To reduce reliance on app stores (which may be blocked or monitored), DW Access can be shared via messengers or Bluetooth, or downloaded directly from access-unlocked.org.

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violent conflicts were recorded by the Conflict Barometer of the Heidelberg Institute for International Conflict Research for the year 2025. This represents an increase of 12 conflicts compared with the previous year.

Based on a range of qualitative and quantitative indicators, the *Conflict Barometer* regularly documents global conflict trends, distinguishing between non-violent and violent conflicts.

While the total number of conflicts fell slightly in 2025, the number of wars – the highest level of escalation – among violent conflicts increased from 27 to 28. With 13 wars, a large proportion of these continued to be fought in sub-Saharan Africa.



An anti-corruption demonstration in Abuja in 2016. Ten years on, the situation has not improved significantly.

CORRUPTION

Protecting Nigeria's whistleblowers

There is one question that doesn't get asked often enough in discussions about anti-corruption reforms in Africa: where does the information about malpractice come from – and what about those who provide it?

BY OBONGODU PAUL UNANAM

The Economic and Financial Crimes Commission (EFCC) and the Independent Commission Against Corruption (ICPC) are key institutions in Nigeria in the fight against corruption. However, in order for them to carry out arrests and conduct hearings, they need information. Somewhere, someone must have known something and decided to pass on that information. The question is: who makes that decision, under what circumstances, and what happens to that person afterwards under the law?

In Nigeria, the answer to this last part is: nothing good. There is no specific law to protect whistleblowers that shields public servants from reprisals when they report cases of fraud through official channels. To date, there are only provisions in various pieces of legislation that protect individuals who report misconduct, such as the Corrupt Practices and Other Related Offences Act 2000.

A bill that would provide comprehensive protection was approved by the Federal Council in December 2022 and forwarded to the National Assembly. By mid-2026, it had not yet been passed. Over the past two decades, several versions of that draft bill on the protection of whistleblowers have been submitted to the legislature. None of them has yet become law.

“The draft bill on the protection of whistleblowers is neither complex nor costly.”

Instead, there is only an administrative guideline issued by the Ministry of Finance in 2016, which guarantees whistleblowers between 2.5 and five percent of the public funds ultimately recovered. It remains unclear what happens if the institution in question takes retaliatory measures. Neither dismissal nor criminal prosecution is prohibited. Nor is there anything to prevent, for example, a senior civil servant from coordinating with the law enforcement authorities to make life difficult for a whistleblower.

These are not hypothetical concerns. A former deputy director of Nigeria's Joint Admissions and Matriculation Board reported financial irregularities via the official internal channel that his employer had set up for this purpose. He was dismissed. A criminal complaint was filed

against him, and the police visited him at home. Three separate court cases were running at the same time. He had done exactly what anti-corruption reform frameworks are actually intended to encourage. The reaction seemed designed to ensure that no one would be tempted to follow his example.

WHAT THIS MEANS FOR DEVELOPMENT POLICY

International cooperation programmes aimed at reforming governance in Nigeria and across Africa tend to measure progress in the fight against corruption by looking at which institutions exist, what legal powers they have and what the prosecution rates are. While these are reasonable indicators, they overlook one important aspect.

An anti-corruption authority relies on the information it receives. To this end, auditors, for example, examine published annual accounts, and financial investigation units can track transaction patterns. However, what neither of these bodies can access without internal reports is specific knowledge of how the procurement fraud was organised, which officials approved overpriced contracts or where documents were altered to cover it up. This knowledge lies with the people who were present at the time of the events – such as the official in the finance department, the procurement officer who witnessed the contract being awarded to the wrong bidder or the accountant who processed the payment and wondered about the figures.

These individuals currently have a choice between two options. They can remain silent, which is legally unobjectionable and professionally sensible. Or they can report the incident, which is also lawful but – without any legal protection – leaves them exposed to any institutional reprisals available to the authority to which they have just made the report.

Development programmes that treat anti-corruption agencies as units of analysis, without examining the legal environment within the institutions that these agencies are actually supposed to oversee, merely measure the visible structure while overlooking the broader context. The EFCC's conviction record depends in part on the amount of information it receives. This, in turn, depends in part on whether the people who possess this information feel safe enough to pass it on.

A LAW TO PROTECT WHISTLEBLOWERS IN NIGERIA IS CRUCIAL

The draft bill on the protection of whistleblowers, which has been before the National Assembly for almost four years, is neither complex nor costly. It requires neither the

establishment of a new authority nor a constitutional amendment nor significant budgetary resources. What it does need is a decision by the legislature to declare institutional reprisals against civil servants who report cases of fraud to be unlawful – with specified penalties and an independent complaints mechanism.

Nigeria ratified the African Union Convention on Preventing and Combating Corruption in 2006. Article 5 of this Convention obliges signatory states to take measures to protect persons who report corruption in good faith. This obligation has not been fulfilled in the country for 20 years.

The passing of the bill would not transform the fight against corruption overnight. Institutional cultures change only slowly, and legislative changes alone are not enough to bring about such a transformation. Rather, it would remove the clearest indicator that the legal system undermines the very accountability of insiders that it claims to support publicly.

Nigeria's 2027 elections are drawing nearer. The country consistently ranks low on corruption indices, such as Transparency International's "Corruption Perception Index". The current government's track record in the fight against corruption will also be judged by whether any lasting changes have been made to the institutional framework. A law to protect whistleblowers would be the clearest answer to this question.

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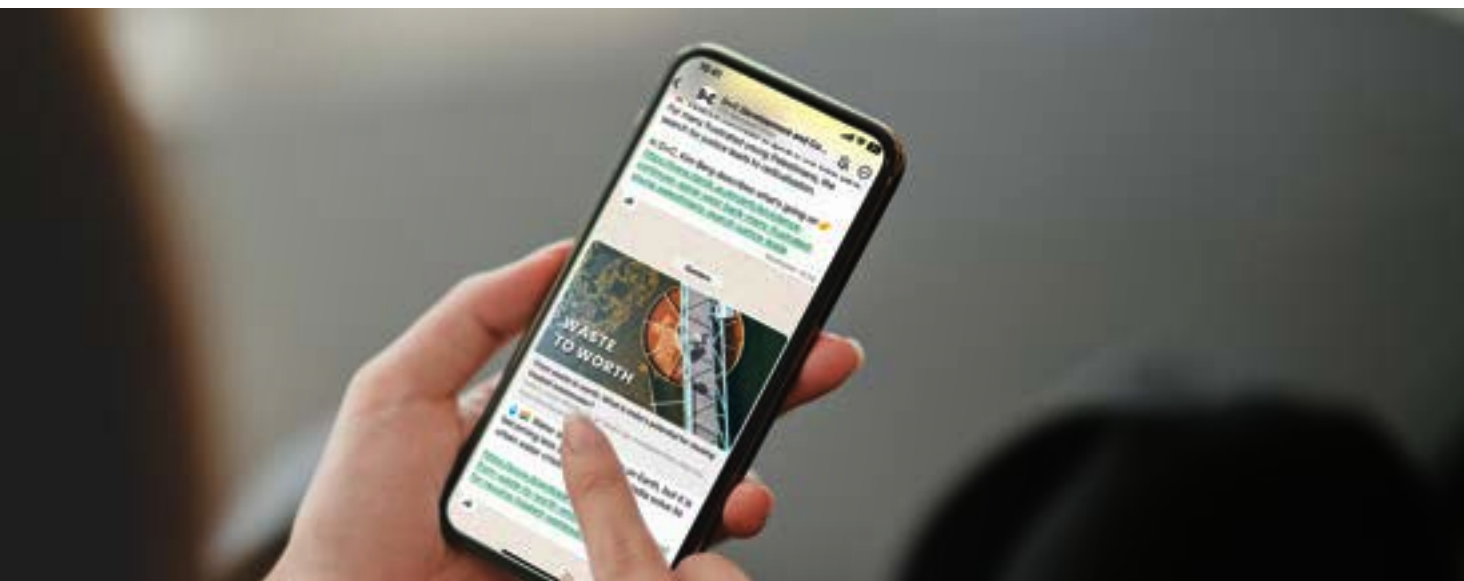




Photo: picture alliance / ASSOCIATED PRESS / Khalil Senosi

Their herds are an integral part of the Maasai identity.

CO₂ COMPENSATION

For VW to receive CO₂ credits, the Maasai's cattle must run their circles faster

It sounds almost satirical, but it is true. The CO₂ offset project supported by Volkswagen in Tanzania, which aims to maximise carbon storage in the soil, is facing opposition from the Maasai community as it conflicts with their traditional grazing practices.

BY LAWRENCE KILIMWIKO

German car manufacturer Volkswagen, which in Tanzania has been known until now primarily for its car models popular with civil servants, is now in the spotlight for a different reason. It is funding a large-scale carbon offset project. The Maasai and their herds play an important role in this, but the Indigenous people largely reject the project as it conflicts with traditional practices that are vital to their livelihoods.

The Longido Monduli Rangelands Carbon Project is developed by the civil-society organisation Soils for the Future Tanzania in collaboration with the Biodiversity Research Institute and supported by Volkswagen's environmental consultancy joint venture, Volkswagen ClimatePartner. The project is designed to promote a vast grassland ecosystem across two districts in northern Tanzania by accelerating the grazing rotation of Maasai herds.

As a result, the nomadic herders will have to move their livestock to new grazing areas more frequently. Instead of grazing on the same pasture every three months, the cattle are now to be moved to a new pasture every two weeks.

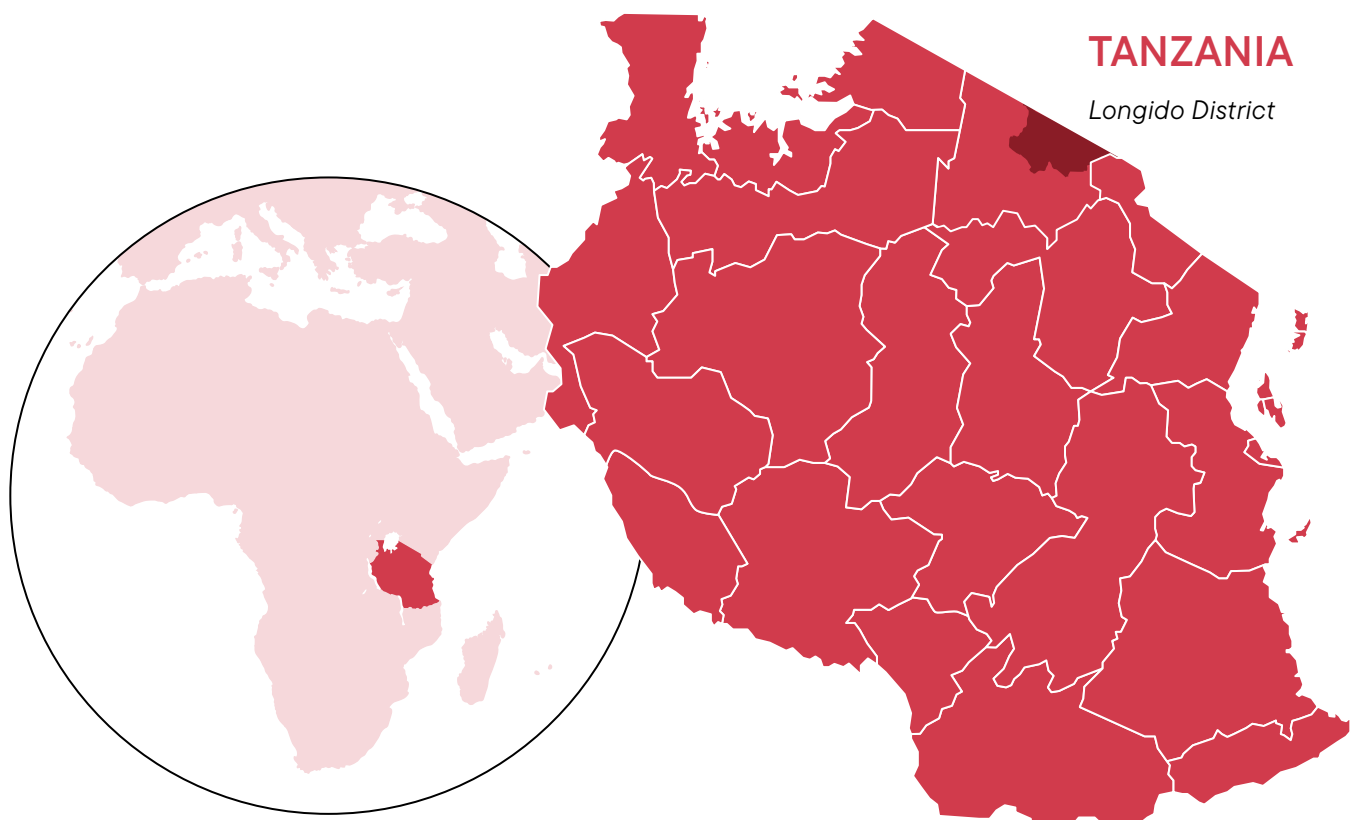
"RAPID ROTATIONAL GRAZING PLAN"

The "Rapid Rotational Grazing Plan" aims to maximise carbon storage in the grasses. Whilst the Maasai are used to moving freely with their herds across the vast grazing lands in line with seasonal fluctuations, under the CO₂ offset pro-

ject they would have to adhere to a rigid 14-day rotational grazing cycle. According to the project design, their cattle would be grouped and moved following a fixed timetable, with the pastureland divided into time-defined blocks so that the carbon content in the soil can be measured and monitored.

One assumption underpinning the project is that rapid rotational grazing schemes enable Maasai herders to mimic the natural migratory patterns of their livestock, thereby re-

"The new project requirements make traditional grazing practices impossible, as the Maasai must now comply with carbon sequestration requirements."



ducing overgrazing and improving soil health. Similarly, by introducing sustainable grazing practices, the communities are expected to promote biodiversity and generate income, as the sequestered carbon can be sold to finance conservation measures. The aim is to create a sustainable financing model that supports the restoration of land and local livelihoods.

A second premise is that overgrazing by livestock destroys perennial grasses, compromises the protection of the topsoil and reduces the reliability of the food supply for livestock herds. Degraded soils lose carbon and become more vulnerable to climate risks and natural disasters. Conversely, alternating between grazing and allowing the grasses to rest leads to an increase in soil organic matter, thereby mitigating the effects of climate change and promoting the resilience of local ecosystems.

KNOWLEDGE DATING BACK CENTURIES

Critics of the project argue, however, that the concept of carbon offsetting is flawed in many respects. It seems that the focus here is more on the carbon footprint of a European company than on the survival of the nomadic herders.

Usually, the Maasai's grazing routes are determined by the availability of water, the pattern of the dry season and the movements of their grazing livestock. The Maasai's grazing patterns and mobility not only form a central pillar of their traditional culture but also make a sustainable, positive contribution to the conservation and resilience of arid grazing lands.

The Maasai know the valleys where water collects during the dry season, including the corridors they must follow when it rains, as well as the months in which they should move on or remain in one place. This knowledge is passed down from generation to generation. It is precisely these habits that make the grazing lands of the East African Rift Valley ecologically valuable.

The new project requirements make such traditional grazing practices impossible, as the Maasai must now comply with carbon sequestration requirement. There are serious concerns: the indigenous population could lose control of their traditional grazing lands and no longer be able to continue centuries-old practices. They also fear, in particular, losing access to sacred land for rituals and to medicinal plants that are indispensable to them.

UNLAWFUL PROCEDURES?

"Our lives are inextricably linked to nature. Thanks to our deep-rooted knowledge, we understand better than anyone how to protect everything around us for future gener-

"Critics of the project argue that the concept of carbon offsetting is flawed in many respects."

ations," says Daudi Lembile, a Maasai from the village of Ngasavela near the Kenyan border. He adds that the practice of block-rotation grazing fails to take into account the seasonal fluctuations that are crucial for ensuring that the herds have access to salt-rich valleys and nutrient-rich plants that are available only during certain periods of the year. Olen'yo Loketo, who is also a Maasai from the same village, takes the argument a step further: "If you drive us away from our sacred sites and ritual places, it is as if you were killing us."

The CO₂ offset programme covers almost 970,000 hectares of pastureland, which is to be bound under contracts with terms of up to 40 years. The Maasai lawyer Edward Porokwa believes the block-rotation system is essentially designed to drive them out of areas where they have lived for centuries. Joseph Oleshangay, another Maasai lawyer and human-rights activist, has also repeatedly argued in various forums that projects interfering with people's use of their land without their consent are unlawful.

A 2025 investigation by the non-governmental organisation "Maasai International Solidarity Alliance" (MISA) revealed shortcomings in project management, such as questionable advance payments to villages and a general lack of transparency, for example when concluding contracts. According to the findings of the NGO, in some cases the communities were given contracts in a foreign language, without having received any legal advice and without being able to participate meaningfully in the process. They claim the project was being pushed through hastily to secure signatures of consent, without the local population – who lack basic knowledge of carbon markets, contractual terms and their consequences – having given their informed consent.

According to MISA, all villages are being offered a so-called engagement or dowry payment of two dollars per hectare. Greenpeace says that emissions allowances for the same areas can fetch up to ten times that amount on global mar-

kets. The organisation also points out that Tanzania's 2022 emissions trading regulations were designed for forests, not for rangelands. This means that projects aimed at sequestering carbon in the soil operate in a grey area.

CULTURAL DECAY

However, Soils for the Future Tanzania rejects all allegations and states that the consultation meetings in the villages are held in Swahili and in the Maasai language Maa, and that no contract is signed until the communities have agreed to its terms.

With regard to traditional grazing routes, Soils for Future Tanzania states that the rotation blocks are based on traditional migration patterns and are in line with the grazing season. Furthermore, communities must retain their land rights under the project and continue to manage the land

with their livestock. Moreover, according to the civil-society organisation, the majority of the project staff on the ground are Maasai from the local villages.



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Women are primarily responsible for managing their families' daily lives in the Aboutengue refugee camp.

WOMEN IN CONFLICTS

Women's daily lives in a refugee camp: attacks, shortages and queues

Women and girls from Darfur find protection from the war in Sudan in eastern Chad, but little security. They are the ones who are primarily responsible for their families' survival in the refugee camps. In January, D+C editor Katharina Wilhelm Otieno spoke with refugee women on the Chadian side of the border. Their stories bear witness to unimaginable suffering as well as to unbroken strength.

BY KATHARINA WILHELM OTIENO

Hawayaya Souleyman reports that she, her husband and their six children spent eight days fleeing Sudan in September 2023. Their home village in the Sudanese state of Gharb Darfur is located 30 kilometres from the Chadian border town of Adré. The family fled on foot. Three of their children did not survive that week. They were killed by a bomb.

For three years now, Souleyman has lived with her husband and their surviving children in Aboutengue, one of the largest refugee camps in the Chadian border region of Wadai. As of the end of January, it was home to 43,200 people. The 33-year-old Souleyman says that she feels more or less safe there, though collecting firewood in the surrounding bush is dangerous. Attacks are frequent, she explains, so women only go in groups. She herself once had to flee from men who were approaching her group.

During their escape from Darfur, Souleyman reports, fighters with the RSF militia in Sudan repeatedly abducted women and girls from the group that she and her family were travelling with. Some came back, others did not. Souleyman was spared.

To avoid having to expose themselves to such dangers again, it would be better if women no longer had to go out and collect firewood at all, but were instead provided with it by the aid organisations in the camp, says Souleyman. But their aid supplies are usually inadequate and often come too late, she adds. There is a serious shortage of basic necessities on the ground: water, medication, food and cash.

As a result, Souleyman spends her days looking for things. The first half of her day is usually spent queuing for water at wells. It is often 1 pm by the time she gets home, sometimes without water, if there wasn't enough for everyone. In the afternoon, she frequently goes into the forest to look for firewood, or she walks through the camp to places where she's heard that aid organisations are distributing soap, food or cash.

“Five or six cases of rape are reported every week on average in the IRC women’s clinic.”

Souleyman's three remaining children sometimes attend the camp school, but nowhere near regularly. Her husband doesn't have a job, but he doesn't help out at home, either. Like almost everyone in the camp, Souleyman is a Zaghawa. The Zaghawa are an ethnic group that primarily earns its living through livestock farming and maintains a patriarchal structure. It is above all the Zaghawa and Masalit who are being targeted by the RSF militia in the Darfur region. Amnesty International and other human rights organisations are using the term ethnic cleansing; the UN is warning of genocide.

Souleyman hopes either to return to her home in Sudan one day or at least find work in Chad, like a field she can cultivate.



Hawayaya Souleyman.

THE DANGERS OF GATHERING FIREWOOD

Manail Youssouf lives a few tents away. The 25-year-old comes from the same village as Souleyman and fled a few months before her. Youssouf's husband does not live in the Aboutengue camp. Some time ago he went to northern Chad with other men to work in gold mines in the hope of supporting his family. The Youssouf family's children are five and two years old. The youngest, who was born in the camp, is malnourished and receives outpatient care in one of the camp's clinics.

The care of the family members remaining in the camp now falls to her. Manail Youssouf's brother and mother also live in Aboutengue. Both were partially paralysed by a bomb attack on their house in Sudan and have, in Youssouf's words, "lost their memory". They are receiving psychological treatment in the camp.

Youssouf herself was shot in the leg whilst fleeing; the scar will remain visible. She reports that her arrival at the camp was in no way the start of a safe life. For example, she was once chased by two men while collecting firewood, though she was able to get away.

Youssouf sells the wood she collects; it is her only source of income. Life in the camp is expensive, she says. She reports that strangers keep turning up at the tents and theft is rampant. The money that families receive at the end of the month is nowhere near enough, she continues. At the time of the conversation in January, it amounted to around \$ 85 per household. Depending on the funding situation, families may only receive this money every two months.

Youssouf's greatest wish is to resume her studies one day. Before the war broke out, she had begun studying law. Until then, she's hoping to find work in Chad in order to support her family.

SEXUAL VIOLENCE REMAINS THE GREATEST RISK

Ndjepa Dinga Toloun works as a midwife in Aboutengue. Pregnancy rates in the camp are high, even though aid organisations like the International Rescue Committee (IRC), which she works for, provide family planning counselling. "Nevertheless, only one in two men accompanies his wife here, which is a problem," Toloun says.

It is stiflingly hot under the tarps of the makeshift women's clinic in Aboutengue. The beds are planted in sand and flies buzz around. Raick Bell, who works as the lead physician for the IRC in Aboutengue, considers the lack of medical infrastructure one of the largest problems for women and girls in eastern Chad. Especially since Western donor countries made massive cuts to their develop-



Manail Youssouf.

“Youssouf’s greatest wish is to resume her studies one day.”

ment budgets, there has been a shortage of medication, beds, midwives and delivery wards.

Bell and Toloun agree, however, that sexual violence is the greatest risk to women and girls in the refugee camps. According to Toloun, five or six cases of rape are reported every week on average in the IRC women's clinic. She also reports that women often find themselves in dangerous situations especially when they are collecting firewood.

is still unable to properly care for her remaining three. The pregnancy was her husband's decision. Nevertheless, he has agreed to use permanent contraception after this baby.

“The survivors see it as their duty, to some extent, to make up for the losses by having more children.”

But men also rape refugee women within the camp. Zara Fadoul Moussa brought her 16-year-old sister to the clinic. The perpetrator was a tent neighbour, 18 or 19 years old. The 31-year-old and her younger sister knew him. The younger sister is now pregnant. In such cases, IRC also offers psychological care. Zara Fadoul Moussa says it was simply fate.

REVENGE THROUGH SONS

Just yesterday, Denise Remadji Madjimbaye reports, she helped deliver a child whose mother was raped by a soldier in Sudan. Madjimbaye directs the IRC's women's and maternity units in Aboutengue and in the small town of Farchana, another refugee camp location.

However, the high birth rates in the camps in Chad cannot be attributed solely to rape, she says. “We lack staff to provide education about sensible family planning.” What's more, she continues, many families have lost a lot of their members. The survivors see it as their duty, to some extent, to make up for the losses by having more children in order to have more support and wage earners in the household over the long term.

Camp staff also report that many are hoping for newborn sons – so that they can one day take revenge for the injustices done to the Zaghawa.

Hawayaya Souleyman is once again two months pregnant. She says she actually didn't want another child while she



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Photo: picture alliance / Xinhua News Agency / Nicholas Kajoba

Nigeria is not the only country affected by sickle-cell disease: awareness campaign in Uganda in 2022.

HEALTH

The high cost of sickle-cell disease

Nigeria is the country most affected by sickle-cell anaemia in the world. Unreliable tests and a lack of awareness surrounding the disease continue to put lives at risk.

BY MUNYAL MANUNYI

Sickle-cell disease (SCD) is an inherited blood disorder, which can cause red blood cells to adopt an abnormal sickle-like shape, reducing their mobility. People with sickle-cell disease inherited two haemoglobin gene variants, one from each parent. Haemoglobin is the protein in red blood cells that carries oxygen. Symptoms appear from the age of six months and may include painful seizures, anaemia, stroke, kidney failure and cognitive impairment. It is precisely these symptoms that can make the disease fatal.

Sickle-cell disease is one of the most common genetic disorders worldwide. It is possible to be a carrier of sickle-cell disease without developing symptoms. Genotype tests identify whether a person has inherited a certain trait: AA is considered unaffected, AS means a person carries the sickle-cell trait but does not usually develop symptoms, and SS or SC are forms of sickle-cell disease.

This distinction is important for family planning and medical care. In many countries, particularly in the Global North, screening is already carried out on newborns. However, in sub-Saharan Africa, where the disease is most prevalent, screening gaps remain. According to medical experts, more than half of all children born with SCD in Africa die before their fifth birthday, although accurate data is lacking in many places. In high-income countries, life expectancy is higher. Studies show that, in the US, for example, people born with SCD have an average life expectancy of up to 52.6 years.

“For people living with the disease, the pain is compounded by high costs.”

There is no treatment that can address the cause of sickle-cell disease, namely the defect in the haemoglobin gene. Treatment for sickle-cell disease mainly consists of basic care aimed at preventing the various health problems that may be associated with the condition, as well as treating them.

NIGERIA: THE HIGHEST GLOBAL BURDEN

Nigeria has the highest rate of sickle-cell anaemia in the world. According to the Sickle Cell Foundation Nigeria (SCFN), about a quarter of the population carries the sickle-cell gene (AS). WellaHealth, Nigeria's largest

healthcare pharmacy network, estimates that 4 to 6 million people in the country live with SCD (SS or SC), while the SCFN reports that approximately 100,000 to 150,000 babies are born with the disease each year.

However, it is precisely in Nigeria that patients and advocates report that many laboratories continue to produce conflicting results – and that there is insufficient awareness of the need for testing. Experts warn that inadequate regulation, poor quality control and the use of unqualified staff are exacerbating a health crisis that could, in fact, be avoided.

DIFFERENT CLINICS, DIFFERENT RESULTS

Benita Zacks (name changed) never imagined that a simple laboratory error would determine her family's fate. The 44-year-old still finds it hard to believe that her three-year-old daughter has sickle-cell disease. Zacks had herself tested before her wedding, and her result was AA, whilst her fiancé's was AS. Convinced that everything was fine, they got married and started to plan their family. After all, this combination of genes could not have resulted in the genotype required for the disease.

Ten years later, their daughter began waking up at night crying in pain; her joints were swollen. Tests revealed that her genotype is SS. The couple had additional genotype tests carried out at various centres and discovered that Zacks is indeed AS and therefore a carrier of the sickle-cell trait.

Zacks also had further tests carried out on her daughter. A test this year showed the girl had the AA genotype; two months later, at a different hospital, the result was again SS. Contradictory results – for which Zacks' daughter pays the price. When asked about the matter, the owner of one of the clinics denied any responsibility for the error.

Zacks blames the clinics but says she would also have expected her church to highlight the importance of genotype testing. She says: “I had the test done, but the church never recommended it to me. They were only interested in the pregnancy. But the disease is the real problem.”

A SYSTEM THAT WORKS IN THEORY BUT FAILS IN PRACTICE

Her situation is not an isolated case in Nigeria. In a study by the University of Ibadan, more than half of the respondents reported having received incorrect genotyping results. About three out of four of these errors are attributable to private facilities.

Nevertheless, Abdulsalam Yakubu, National Secretary of the Association of Medical Laboratory Science in Nigeria

(AMLSN), emphasises that laboratory practice in Nigeria is strictly regulated and licensed by the Medical Laboratory Science Council of Nigeria (MLSCN). He explains that laboratories are expected to adhere to strict quality management systems and procedures. “Should it transpire that they are in breach of these requirements, the Council has the right to impose sanctions on their practice or on them personally.”

Yakubu admits, however, that these standards are frequently disregarded, particularly in private facilities. “You often see doctors looking to make a quick profit. Instead of calling in a scientist trained to carry out the tests, they might opt to hire a technician who is not trained or certified,” he says.

MISINFORMATION AND POOR STANDARDS

Staff shortages are a particular problem in state hospitals and health centres, says Yakubu. “This has led to a situation where, at some clinics, there are staff members who are not authorised by the Council to carry out their duties.” He explains that the Council regularly closes non-compliant laboratories, but enforcement remains difficult in a large country with limited human resources.

“Many are marginalised at school, in the workplace and even within their own families.”

The Sick Cell Advocacy and Management Initiative (SAMI), a Lagos-based charity, states that errors in private laboratories are widespread due to poor technical standards, and that the most commonly performed test, haemoglobin electrophoresis, is particularly prone to error. Alayo Sopekan, Director of Non-Communicable Diseases at the Federal Ministry of Health, however, partly blames patients for relying on unqualified private laboratories and failing to verify their results. “The first question I always ask is: Where did you have the test done? Public hospitals have qualified staff and certification systems. There, such errors are kept to an absolute minimum.” He adds that some people also deliberately falsify genotype results to “match them to their partner’s. When they start having children, the truth comes to light.”

“Instead of getting medical help, Shamsiya was forced to undergo spiritual rituals.”

There are also myths circulating in Nigeria that genotypes can change. Ibrahim Musa, a consultant haematologist at Aminu Kano Teaching Hospital, refutes this: “You don’t have AA and then, without any medical intervention, it changes to AS. If you see two different results, one of them must be an error. High-quality tests such as HPLC or isoelectric focusing are more accurate,” he says, adding that genotypes can only be altered medically through bone marrow transplants or gene therapy.

For the vast majority of people in Nigeria, neither of these treatments is even remotely affordable: a bone marrow transplant costs about \$ 50,000 in Nigeria. Gene therapy, which was recently approved in the US, costs around \$ 3 million.

CRUSHING COSTS

For people living with the disease, the pain is compounded by high costs. At 59, Shehu Olaito Mohammed, an accountant from Abuja, knows exactly how much it costs to survive. “There are standard medicines – folic acid, Paludrin, vitamin C and B complex and hydroxyurea. These alone cost up to \$ 22 a month. But when a crisis strikes, the costs multiply,” he says. The average monthly income in Nigeria is around \$ 100 to \$ 220. The National Health Insurance Authority (NHIA) provides routine medication to prevent diseases that weaken the immune system, such as malaria. Folic acid and antimalarial drugs also help to increase haemoglobin levels in the blood. However, strong painkillers, gloves, disposable items and other consumables must be paid for out of pocket.

In Maraba Loko, in Nasarawa State, tyre repairer John Ishaya and his wife Monica live with their son Destiny, who suffers from sickle-cell anaemia. Ishaya says he knew nothing about genotype testing before their wedding. Starting when Destiny was two years old, his persistent illness meant months-long hospital stays and blood transfusions. “We spent around \$ 1000. I had to sell my plot of land,” John Ishaya says. With a monthly income of around \$ 14, the family relies on donations. “If we could

turn back time,” says Ishaya, “this marriage would not have taken place. The suffering is too great.”

“THEY SEE US AS HALF HUMANS”

Across Nigeria, social discrimination is a further burden. Because they are stigmatised for a condition that is beyond their control, many are marginalised at school, in the workplace and even within their own families.

For 27-year-old Shamsiya, a civil servant and mother of one who lives in Abuja, the suffering began at an early age. As a child, her frequent illnesses led relatives to label her a “jinn” – an evil spirit – and she was treated accordingly. “People advised my mother to take me to the river-bank,” she says. “They said that if I were really possessed, I would get up, walk into the river and never return.”

Instead of getting medical help, she was forced to undergo spiritual rituals: smoke was blown into her nose, substances were rubbed onto her body, and she sought out spiritual teachers and herbalists. Even as her condition worsened, she was twice misdiagnosed as having the AA genotype.

It was only after her family had moved to Abuja that she received an accurate diagnosis of her SC genotype. Yet the diagnosis did not put an end to the stigma. In her neighbourhood and at her workplace, Shamsiya’s condition became a reason for her to be marginalised. “It weighed so heavily on me that sometimes I couldn’t bring myself to go to work or be around other people, because they see us as half-people. As if we didn’t function like other people,” she says.

At work, colleagues tacitly undermine Shamsiya’s abilities, and sometimes stigmatisation even comes from other patients, she says. Those with the SS genotype occasionally dismiss SC patients as “not real sicklers”.

NIGERIA’S EFFORTS TO TACKLE SICKLE-CELL DISEASE

Alayo Sopekan of the NCD Control Division explains that Nigeria’s efforts to combat SCD are coordinated through the NCD Department, which was established in 1989. After a national survey in 1990 revealed that around 25 % of Nigerians were carriers of the sickle-cell gene, the government set up a dedicated SCD unit and launched awareness campaigns to counteract stigma and misinformation.

A major breakthrough was achieved in 2010 with the introduction of the National Guidelines for the Prevention, Control and Management of Sickle Cell Disease, Nigeria’s first comprehensive framework. Six centres of excellence were established across the country to enable early diag-

nosis in newborns and prompt care, including routine vaccinations such as those against polio, prophylactic medication and screening for stroke risks. In addition, training manuals were developed to support primary healthcare workers in carrying out newborn screening, particularly in rural areas.

“Sickle-cell anaemia remains a major burden in Nigeria because many young people are unaware of their genotype.”

SCD was later incorporated into the broader national strategy for combating non-communicable diseases (NCDs), which encompasses prevention, treatment, staff training and long-term care. However, according to Sopekan, the government has resisted legislation making genotyping compulsory, citing concerns about potential discrimination.

Meanwhile, it was reported last August that a bill introduced to establish a national sickle-cell centre had passed its second reading. In October, Nigerian media reported on the Senate’s plans to set up nationwide research and treatment centres for SCD, at a cost of around \$ 3.5 million. Alongside these legislative initiatives, there are research efforts involving the University of Abuja and international partners.

AWARENESS REMAINS TOO LOW

Ayoola Olufemi, Director of Health and Social Care at the National Orientation Agency, the body tasked with communicating government policy, explains that sickle-cell anaemia remains a major burden in Nigeria because many young people are unaware of their genotype. “As 40 to 50 % of our population consists of young people, they need to be aware of the burden of sickle-cell anaemia so that they can make informed decisions when they wish to marry,” he says.

He points out that the government uses radio and television adverts, information and educational materials, social media and community awareness-raising initiatives to promote awareness of genotypes, adding that many participants help to spread the message within their communities.

Nowadays, it is especially social media that provides important platforms. Before her death in June 2025, Edhughoro Ejiroghene Onome, known as Ejiro, used her suffering as a catalyst for her activism. As a journalist and campaigner in the fight against sickle-cell anaemia, she posted unedited videos showing her pain.

Her death, along with that of Joy Mari Wujat, a lawyer and mother who died in the same week at the age of 27, reignited public outrage over the inadequate care provided to people with sickle-cell disease in Nigeria. Joy, too, had shared her struggles online.

Unless Nigeria tightens its health regulations, invests in quality assurance for laboratories and makes premarital genotyping tests compulsory, such preventable tragedies will keep happening.



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MEDIA

Independent journalism in the age of Big Tech and AI

Users worldwide are increasingly getting most of their news via platforms operated by a small number of major tech companies. How can journalism become less dependent on Big Tech infrastructure?

BY LUCIA DEON

Around the world, news consumption continues to move away from traditional journalistic outlets. As reported in the Reuters Digital News Report 2026, social media and video platforms are, on average and for the first time, more popular news sources than the websites and apps of news organisations themselves. Moreover, an increasing number of users are experimenting with AI chatbots. At the same time, support for journalistic principles such as impartiality persists.

In discussions about independent journalism, “Big Tech” plays a central role – the handful of technology companies that operate the social media platforms and search engines from which information today is gleaned. They possess not only cloud storage and computing power but also data analysis capabilities and high-reach distribution channels – and thus the essential prerequisites for the creation and publication of digital news content.

Journalists worldwide are grappling with the question of how they can reduce their dependence on Big Tech. The Journalism Cloud Alliance (JCA) aims to provide an answer to this. Its objective is a shared technical infrastructure for different newsrooms. This is intended to improve cybersecurity for journalists and make it more affordable, whilst also enabling greater bargaining power vis-à-vis Big Tech. The JCA was launched in 2024, convened by the Global Forum

for Media Development (GFMD) and the Organised Crime and Corruption Reporting Project.

At national level, there are already examples of several smaller newsrooms joining forces, such as those under the umbrella of the Danish Press Publications Collective Management Organisation (DPCMO) in Denmark and Country Press Australia (CPA) in Australia. This strategy has strengthened the position of smaller media organisations in negotiations with Google and Facebook regarding fair remuneration for news content on their platforms and search engines.

DIFFERENT CONTEXTS FOR JOURNALISM

Two of the key challenges facing the JCA’s alternative cloud infrastructure were raised during a panel discussion on journalism and Big Tech at the Global Media Forum (GMF) in Bonn in June. The GMF is an international media conference organised annually by Germany’s international broadcaster Deutsche Welle.

Firstly, it is likely to prove difficult to create a uniform system that meets the various legal requirements to which newsrooms worldwide are subject. Data protection legislation and press law differ considerably from country to country; there are even differences within the European Union. Journalistic workflows in democracies differ from those in autocracies.



Iranian journalist
Hannah Kaviani
participated in the
Global Media Forum
2026 in Bonn.

The second problem concerns monetisation. Initially, the JCA was funded through philanthropic donations. In order to be able to offer services and technologies in the long term, the JCA could explore different revenue models such as membership fees, usage-based service charges or public funding. However, many small newsrooms, especially in countries where the press is underfunded, are already struggling with financial constraints. They may not be in a position to contribute to a model that requires additional costs from them. Additionally, it may prove difficult to encourage the public to get on board, now that people have become accustomed to receiving their news with little or no direct charge.

CHALLENGES FACING JOURNALISM

This year's Global Media Forum in Bonn was held under the motto "Journalism out loud". The slogan refers to the call for independent journalism to speak out more forcefully in the face of a global political landscape characterised by rising nationalism, efforts to increase state control over the digital sphere and deepening polarisation within society, including in Western democracies.

In Bonn, representatives from the media, academia, business and politics discussed topics such as the misuse of information, manipulation and the role of artificial intelligence (AI). The latter is being viewed as a chance for journalism due to its fact-checking capabilities, but also as a threat, for example, because it can easily be used to spread disinforma-

tion. In light of the shifting balance of power in the media landscape, a particular emphasis was placed on the continued significance of traditional media and journalism, despite changes in how people access information. For many media organisations, however, the key challenge remains that of establishing a sustainable business model in response to changing user behaviour among their target audiences.

The future of journalism will not be determined by the nature of its content or distribution mechanisms alone, but by the choices made by those who control the infrastructure upon which it depends. Structural change is needed to ensure a diverse media landscape based on pluralism and equity. Journalists have a vested interest in halting the trend towards growing dependence on Big Tech. The extent to which they succeed in this will help determine the quality of the media landscape – in democracies and autocracies alike.

SOURCES

Reuters Institute Digital News Report 2026
Journalism Cloud Alliance
Global Media Forum 2026



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A child undergoing a blood test in the context of the major HIV outbreak in Ratodero, Pakistan, in 2019.



Photo: picture alliance/AP Photo / Fareed Khan

CHILDREN'S HEALTH

In Pakistan, some hospitals have become places of infection

Unsafe injections and weak infection control are driving new HIV infections in Pakistan. Children are among the hardest hit, as preventable failures undermine trust in the healthcare system.

BY AQSA YOUNAS

In a small graveyard in Taunsa, a city in the Pakistani province of Punjab, 10-year-old Asma kneels beside the fresh grave of her younger brother, Mohammed Hamza. He was nine years old when he died.

In the final weeks of his life, the fevers became unbearable. His mother says he begged to be allowed to sleep outside in the rain because his body felt as though it was “burning from the inside.” At times, the pain twisted his limbs so violently that she believed he would break apart in her arms.

Doctors later informed the family that Mohammed Hamza was HIV-positive. A few months after his death, Asma tested positive too. Yet neither child was born with the virus. Their family believes both contracted HIV during routine treatment at a government hospital in Taunsa, where growing numbers of children have recently tested positive amid fears of widespread medical negligence.

According to UNAIDS, an estimated 350,000 people in Pakistan are living with HIV, yet nearly 80% remain undiagnosed. Health experts now warn that unsafe medical practices are increasingly exposing families to the virus that have not been infected before. Contaminated syringes, unsafe blood transfusions, unregulated clinics, poor infection-control systems and the repeated reuse of medical equipment are among the main causes identified by public-health officials.

Pakistan has already witnessed one of South Asia’s largest HIV outbreaks among children. In 2019, more than 1300 people, most of them children, tested positive for HIV in Ratodero in the province of Sindh. Investigations linked the outbreak to unsafe injection practices and poor medical regulation. Years later, health experts say many of the same conditions still exist.

control systems fail, children suffer first,” she explains. “Many families do not even realise that reused syringes, unsafe drips or unscreened blood can expose children to lifelong diseases like HIV.”

In poorer communities, patients often rely on overcrowded public hospitals or low-cost private clinics where oversight remains weak. Families rarely question whether syringes are new or whether blood has been properly screened. Many simply trust the system designed to protect them.



CHILDREN ARE PARTICULARLY AFFECTED

Hamna Aslam, a public-health specialist working on infectious diseases in Punjab, says children are particularly vulnerable because they depend entirely on adults and healthcare systems for protection. “When infection-

According to the WHO, Pakistan has one of the highest rates of medical injections in the world, with millions administered daily, many of them unnecessarily. Local health workers continue to report the reuse of syringes despite repeated government crackdowns.

HIV LEADS TO MARGINALISATION

Parents often hide HIV diagnoses from neighbours out of fear. Children are bullied at school. Women are abandoned after testing positive despite having no understanding of how the infection spread. Asma's mother says she no longer allows her daughter to play outside because people in the neighbourhood whisper about the illness. "She is just a child," she says quietly. "What mistake did she make?"

Slowly but surely, people in rural and low-income areas are also beginning to realise that hospitals are places where potentially dangerous germs can spread. For

Asma's family, however, those warnings come too late. One child has already been buried. Another must now grow up with a virus her family believes she contracted in a place where they expected her to be treated.



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Photo: Fabeha Monir

How are we going
to survive the
climate crisis?

We are living in a disaster movie

Fires are raging on every continent. Our planet is both drowning in water and withering away due to drought. Surely it must be clear to us all by now that humankind is heading for disaster.

It's a day in early March in Nairobi. A storm is brewing. Within half an hour, the sky has turned dark as night and I can't see even as far as the building next door. Lightning flashes incessantly, the accompanying claps of thunder seem unable to keep up.

And then the rain begins. Water cascades down from the sky. Within 10 minutes, it is seeping in under the front door, dripping from the ceiling and forcing its way through the window panes. An hour later, it's all over. The building has survived pretty well; only one window needs replacing. The puddles of water can be mopped up.

A friend shows me pictures taken in a neighbourhood close to the Nairobi River. While I was sitting out the storm at home, the small stream was being transformed into a raging torrent, sweeping away shacks close to the banks and trapping people in their cars. At least 108 people lost their lives that night and in the days of flooding that followed. Two years earlier, when Kenya was hit by similar storms that lasted nearly three weeks, the death toll was estimated at 294.

If you feel as if you're constantly reading reports of disastrous flooding across the world, you're not mistaken: in 2022, an estimated 1.8 billion people around the world already faced a significant flood risk.

AN AREA THE SIZE OF SOUTH AFRICA IS RAVAGED BY FIRE

It's a day in mid-August. I'm back in my German home region of the Palatinate Forest. In the afternoon, the air starts getting hazier and there's a pervasive smell of burning. A little while later, a fire engine appears through a wall of smoke, instructing local residents through a loudhailer to keep their doors and windows closed. Soon afterwards, the local mayor gives the all-clear on Instagram and asks people to stop alerting the fire brigade – explaining that it's not

our forest that's burning; the smoke is coming from the wildfires in Belgium and the neighbouring federal states of North Rhine-Westphalia and Saarland.

Between the beginning of this year and the first of August, 112.3 million hectares of land – an area roughly the size of South Africa – had been ravaged by fire globally. Europe's summer holidays were dominated by images of Spanish and French holiday regions in which exhausted firefighters could be seen battling against walls of fire in forests.

WE CAN STILL REWRITE THE SCREENPLAY

This summer, 12,500 people have died from heat-related causes in Germany alone. Water levels on the rivers Rhine and Danube were so low that companies scaled back their production due to increased shipping costs. Increasingly, people across the world are now calling for crisis summits. But who is calling for an admission that things need not have come to this if climate action had been taken in a timely and consistent manner?

Humanity has turned our planet into the backdrop for a disaster movie. It's too late to stop this film from playing, but we can still rewrite the screenplay. Contributors to this edition report on people on the coasts of Bangladesh, in the wetlands of Zimbabwe and in the dunes of the Sahara who have already found ways of continuing to live safely in an increasingly hot world. They should be on the guest list – along with the many others who have been living on the front line of the climate crisis for years – when the crisis summits are convened.



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INDIGENOUS PEOPLES

Learning climate resilience from the Tuareg

For centuries, the Tuareg have managed scarce water and grazing resources through mobility, cooperation and customary law. Governments and international donors should recognise them and other Indigenous groups as partners in climate adaptation.

BY RACHID BOUJILA

Tuareg on their camels in Niger.

Photo: picture alliance / robertharding / Michael Runkel



The air on the Tassili n'Ajjer Plateau in southern Algeria doesn't just shimmer; it burns. For the Tuareg, a nomadic Indigenous people of the Sahara, survival has never been a given. Rather, it has always been a carefully negotiated pact with one of the harshest environments on Earth. For centuries, this pact has been written in the language of the winds, the constellations of the stars and the subtle changes in the sparse greenery of the desert.

Yet today, the terms of this pact are being radically rewritten by a global climate crisis that is unfolding far too quickly. For the Tuareg, the rains are becoming "ghosts" – they fall elsewhere or vanish before reaching the parched earth. The wells of their ancestors are running dry.

As a result, the Tuareg find themselves on the front line of a global security crisis. This challenge is not merely about a changing landscape; it is a fundamental threat to a way of life that has shaped the Sahara for millennia. To secure the future of the people of North Africa and the Sahel, the international community must first understand how and why those who know the desert best are fighting to remain there.

PILLARS OF RESILIENCE

The Tuareg are by no means passive victims of environmental destruction, but rather active masters of adaptation. In the face of the worsening climate crisis, traditional strategies are being reimagined to maintain peace, preserve livestock and protect human dignity across borders. Three specific approaches illustrate this resilience of the Indigenous people.

1. The human internet: Oral networks go digital

Long before the age of satellite imagery, the Tuareg relied on a complex system of oral communication to track the desert's elusive resources. To this day, nomadic herders who cross borders act as real-time environmental sensors, gathering data on which grazing lands are drying up and where rare rainfall has occurred. When travellers meet in the desert, they traditionally exchange "aman" (important news about water and safety).

Today, this traditional network is being enhanced by modern technology. It is not only younger Tuareg who use mobile phones, solar-powered chargers and messaging apps. This digital leap enables them to warn their community about local conflicts, flash floods or dried-up groundwater sources – weeks before the official state weather services are able to publish such reports.

2. Traditional laws of wells: Avoiding conflicts over resources

In an extremely arid environment like the Sahara, water is the foundation of an unwritten legal and social framework.

The Tuareg's traditional customary law prescribes strict, sacred rules for the shared use of wells (birs). During severe droughts, these strictly protected laws govern the rotation of livestock and ensure that no single family or group monopolises a water source.

It is also crucial that these laws provide for established negotiation mechanisms when nomadic herders need to enter the territories of settled farming communities. Representatives meet at the boundaries of the territories to negotiate access rights before the herds arrive. By prioritising collective survival and cooperative access over exclusive property rights, this Indigenous legal system acts as a buffer against the resource-related violence that often afflicts regions threatened by climate change. It demonstrates that scarcity does not automatically lead to conflict, provided that equitable governance is upheld.

"Genuine climate security in North Africa and the Sahel cannot be fully achieved from an office in Brussels or Berlin."

3. Shared livelihoods: Diversification of the nomads' portfolio

Climate change is forcing a pragmatic rethink of traditional strategies for securing a livelihood. Complete dependence on traditional livestock farming becomes too great a risk when grazing land turns to dust. In response, many Tuareg families practise what experts refer to as "shared livelihoods".

Whilst some members of the family continue to lead a nomadic lifestyle – often switching from cattle to drought-resistant animals such as camels and goats – other family members settle temporarily near urban centres or agricultural projects. This flexibility enables them to channel income from trade, crafts or seasonal work back into the pastoralist community. Such economic diversification creates an important financial safety net that helps the entire group to weather prolonged periods of drought without completely abandoning their cultural identity.

REDEFINING SECURITY

For decades, climate change has been viewed in international security policy in the Sahel primarily as a threat

“A modern well dug in the wrong place can inadvertently trigger conflicts by altering long-established migration routes or ignoring traditional agreements.”

multiplier – a force that exacerbates poverty, triggers conflicts over increasingly scarce land and fuels regional instability. The international community’s usual political response has often been heavily security-focused, concentrating primarily on military presence, border controls and top-down infrastructure projects.

However, if one considers the region solely from the perspective of vulnerability, a crucial resource is overlooked: the in-depth, local expertise of the people who actually live there. Top-down solutions often fail because they neglect local conditions. When international development organisations bypass traditional structures in order to build permanent, fixed dams or static agricultural zones, they often disrupt the very mobility that enables pastoralists to survive. A modern well dug in the wrong place can inadvertently trigger conflicts by altering long-established migration routes or ignoring traditional agreements on water sharing.

Genuine climate security in North Africa and the Sahel cannot be fully achieved from an office in Brussels or Berlin, and perhaps not even from Bamako or Niamey. It requires a fundamental shift towards cooperation with Indigenous systems of governance. By introducing a framework of legal pluralism – in which formal state policy actively integrates the customary law of the Tuareg and other Indigenous Peoples into regional strategies, for example on water – international decision-makers can create a far more resilient framework for issues such as transboundary water management. Security in a warming world is not about forcing nomadic societies to a standstill; it is about supporting their legal and physical freedom to adapt – and perhaps even learning from them.

The sands of the Sahara are shifting faster than ever, yet the resilience of the Tuareg proves that adaptation is possible when it is based on cooperation, flexibility and community. Whilst the international community grapples with the link between climate and security in the Sahel, the lesson from the desert is clear: security cannot be imposed

from above. It must be built from the ground up, whilst respecting the ancient wisdom and traditional frameworks of those who have survived here for millennia. To secure the future of the Sahel, we must no longer view Indigenous groups merely as vulnerable populations, but must recognise them as indispensable partners in global climate diplomacy.

RACHID BOUJILA

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In 2025, Germany's Federal Minister for Economic Cooperation and Development, Reem Alabali Radovan, visited the municipal groundwater source in Amman together with Jihad Al-Mahamid, Secretary-General of Jordan's Ministry of Water and Irrigation.

INTERNATIONAL COOPERATION

An investment in water is an investment in security

Clean water is becoming increasingly scarce worldwide, which heightens the risk of supply crises and conflicts over its distribution. How German development cooperation is helping to improve water security in countries such as Iraq and Jordan.

BY REEM ALABALI RADOVAN

“**W**ater as a weapon” – that was a headline when Iran carried out targeted attacks on desalination plants in the Persian Gulf in early March this year. What was publicly declared to be retaliation for attacks by the US and Israel on Iranian water and energy facilities had a clear geostrategic objective: to cut off the civilian population and the economies of Bahrain, Kuwait and the United Arab Emirates from the essential resource of water.

The Middle East is one of the driest regions in the world. Millions of people in that region depend on desalination plants for their drinking water. In Kuwait, 90% of drinking water comes from desalination plants; in the United Arab Emirates, the figure is more than 42%. An attack on these facilities could trigger a humanitarian crisis within a very short space of time. Entire towns would have to be evacuated. The economic consequences would also be dramatic: agriculture, industry and energy production are at risk of coming to a standstill without sufficient water.

“Where water is in short supply or distributed very unevenly, there is a risk of conflict over water distribution, or even food and supply crises. Water scarcity is thus becoming a risk to social stability and to peace within and between countries.”

WATER – THE STRATEGIC RESOURCE OF THE 21ST CENTURY

In March, the worst outcomes were prevented. But this incident is a prime example of just how vulnerable our societies have become in the face of increasing water scarcity. Water is becoming the most strategically important resource of the 21st century – comparable to the importance of energy in the last century. Cutting off access to water not only jeopardises people’s water supply, but also stability and peace.

Water is much more than just a natural resource. Clean drinking water and safe sanitation are essential for health-care systems to function, for children to attend school and for people to be able to earn a living. They are a safeguard against disease, poverty and hunger. They support agriculture, industry and a reliable energy supply. That is why access to water and sanitation is a human right.

Yet water is becoming scarcer and scarcer everywhere in the world. As a result, the availability of water is increasingly becoming a security issue as well. Where water is in short supply or distributed very unevenly, there is a risk of conflict over water distribution, or even food and supply crises. Water scarcity is thus becoming a risk to social stability and to peace within and between countries.

Climate change and the over-use of water resources are making the problem far worse: they disrupt the water cycle, cause water sources to dry up and make extreme weather events such as droughts or floods – with all their consequences – more likely and more severe.

And water crises are by no means unique to war zones. There are still over 2 billion people worldwide who have no safe access to clean water. Only about half of all freshwater sources have good water quality. Every year, more than 1.4 million people, many of them children, die from diseases such as diarrhoea, which are linked to a lack of access to water, sanitation and hygiene. Women and girls are especially affected. They often spend hours every day fetching water. For many girls, this means less time at school, less education and, as a result, poorer prospects for the future.

WATER SECURITY – A FOCUS OF GERMAN DEVELOPMENT COOPERATION

Access to water is therefore a determining factor when it comes to opportunities, health, economic development and peace. This is precisely why German development policy has made water a strategic priority and is stepping up its commitment – together with partner countries, at the regional and multilateral level. Water security for all, a core principle of the 2030 Agenda and its Sustainable Development Goal 6: Clean Water and Sanitation, is also at the heart of our commitment.

Together with our partner countries, we are working to realise the human rights to water and sanitation. Municipalities and municipal enterprises are key actors in this effort. They are often responsible for the planning, operation and maintenance of the water infrastructure. For example, we are assisting Iraq and Jordan in reducing water loss caused by leaks in the drinking water system and in recycling wastewater. In Mali and Kenya, we are supporting efforts to

“Water crises are not a law of nature. They are often the result of political decisions, structural inequality and a lack of preparedness.”



Photo: picture alliance/dpa/Eva Kratoch

Women and girls, in particular, often spend hours every day fetching water. For many girls, this means less education and, as a result, poorer prospects for the future.

develop small-scale irrigation networks for smallholder farmers. And in Namibia, we are helping to modernise a sewage treatment plant and build a water treatment plant in the capital, Windhoek, which will treat wastewater back into drinking water, thereby strengthening the country's resilience to drought.

We are also working with local and national authorities to strengthen water governance. This means shaping the legal and institutional framework so that water resources are protected and distributed in a socially equitable manner. We are helping countries such as Jordan and Tunisia in efforts to reform their national water strategies and modernise their water legislation. Our projects place particular emphasis on disadvantaged groups and regions, which often still have inadequate access to water and sanitation. It is important to structure water charges so as to make them affordable for all citizens. Socially equitable tariffs and targeted investment are key tools for achieving this.

Jordan is a prime example of why water security is now a matter of security policy. Jordan is one of the most water-scarce countries in the world. During the summer months,

the available water is often insufficient. In addition, groundwater levels have been falling for years, and climate change and population growth are putting them under further pressure. Germany is supporting Jordan in its efforts to improve its water infrastructure and set up a centralised system for collecting water and energy data. This helps to reduce water loss, cut water consumption and protect groundwater. We are contributing to the financing of a seawater desalination plant and the construction of low-emission sewage treatment plants. This makes wastewater usable for agriculture and ensures that larger amounts of valuable drinking water are available for the population. In the north of the country, water and wastewater pipes have been installed, giving hundreds of thousands of local people and refugees access to drinking water and sanitation.

WATER KNOWS NO BORDERS

Countries like Jordan rely on rivers such as the Jordan for their water security. And, like a large proportion of the world's available fresh water, the Jordan flows across national borders. This harbours the potential for conflict and makes cross-border cooperation essential. At the same time, peaceful cooperation on water issues also offers great opportunities.

Germany supports regional cooperation among countries sharing water resources. The aim is to prevent conflicts, promote the equitable distribution of water and protect ecosystems across borders. To this end, joint management plans for river basins, lakes and groundwater bodies are being developed, data on water resources is being exchanged, and coordinated early warning and crisis response mechanisms are being established. We support regional organisations – such as river basin organisations and regional banks – so that they can bring stakeholders together and promote joint investment in water infrastructure. This facilitates the development of binding rules on the use and abstraction of water.

This is evident, for example, in the Lake Chad Basin, whose waters are both a lifeline and a source of conflict between the bordering countries of Cameroon, Niger, Nigeria and Chad. The BMZ is working with the Lake Chad Basin Commission (CBLT) to establish climate-resilient, transboundary water resource management. A key aim in these efforts is to strengthen the Commission's own capacities. Together, we want to expand regional information systems on water resources and establish planning tools that involve everyone.

GLOBAL ALLIANCES TO PROMOTE WATER SECURITY

At the multilateral level, too, Germany's development policy is committed to dialogue and to striking a balance between the interests of all user groups. We are working explicitly to strengthen partnerships for water security and are advocating for a stronger role for UN Water so that the water programmes of the various UN organisations can be better coordinated. The UN Water Conference in Abu Dhabi this December is an important milestone for agreeing on ambitious measures at the international level to ensure global water security. Similarly, we support an active role for multilateral development banks – for example as implementing partners for the World Bank's Water Forward initiative, which mobilises additional funding for climate-resilient water and sanitation services. And as the host country for the Secretariat of the United Nations Convention to Combat Desertification (UNCCD), we are using our special responsibility to put the issue of drought resilience on the global agenda.

A MATTER OF SURVIVAL

Water crises are not a law of nature. They are often the result of political decisions, structural inequality and a lack of preparedness. That is why political responses are needed to the worsening water crisis: decisive action to uphold the human rights to water and sanitation, consistent climate action and close international cooperation.

During my visit to Amman last year, Jihad Al-Mahamid, Secretary-General of Jordan's Ministry of Water, under-

scored just how vital this cooperation is. When asked what would happen if Germany were to withdraw its support, he said, "We would all die. There would be no more water in Jordan – we would all die."

That sentence has stayed with me ever since. It makes it clear what water security is ultimately about: not pumps or pipelines, but human lives, economic prospects and peace. Especially in these times of geopolitical tensions, it is evident that investing in water today is not just investing in infrastructure. It is investing in health, resilience to climate change and economic development – and thus in security and peace.

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On the Pacific island of Pele, in Vanuatu, which is repeatedly affected by climate crises, gravestones from a submerged cemetery have been washed ashore.

MIGRATION

“The key is to invest earlier”

From early warning systems to planned relocation, climate mobility requires practical solutions that prevent displacement crises. Amy Pope, the director general of the International Organization for Migration (IOM), outlines what policymakers should prioritise. She argues that mobility should be made part of adaptation policy.

AMY POPE IN AN INTERVIEW WITH KATHARINA WILHELM OTIENO

Many governments primarily treat climate change as an environmental or development issue. How would you explain the security dimension of climate impacts, and what role does migration play in this?

Climate change is increasingly shaping stability by affecting livelihoods and access to resources. When communities face pressures such as water scarcity, food insecurity or repeated disasters, this can increase vulnerability and contribute to tensions.

Migration is part of this picture, but it should not be seen as a threat. It is often a coping or adaptation strategy. The priority is to manage mobility in a way that reduces risks, supports communities and prevents situations where people are forced into unsafe or irregular movements. From IOM's perspective, the focus is on practical solutions that reduce vulnerability, support resilience and ensure that mobility, when it happens, is safe, orderly and dignified.

The term “climate mobility” includes both short-term displacement due to extreme events and planned relocation. Which types of movement are currently growing the fastest and in which locations?

Most climate-related movement today takes the form of internal displacement linked to sudden events such as floods, storms or extreme weather. These are increasing in frequency and impact across regions including parts of Africa, Asia and Latin America.

At the same time, we are seeing a gradual increase in mobility linked to slower-onset pressures, such as drought or environmental degradation, particularly in regions where livelihoods depend heavily on natural resources.

Planned relocation remains more limited but is becoming more relevant in specific contexts, including small island settings and areas exposed to recurrent risks. But across all forms of climate mobility, the key trend is that movements are primarily local or regional.

“Across all forms of climate mobility, the key trend is that movements are primarily local or regional.”

Are there indicators to identify hotspots for climate-related tensions and displacement at an early stage? What measures can then be taken, and where has this worked in practice?

Yes, but these indicators should be understood as early warning tools, not as predictions of crisis or conflict. What we can increasingly identify are areas where climate hazards, displacement risks, livelihood pressures, weak services and other vulnerabilities overlap.

This means looking at data on floods, droughts, storms and sea-level rise alongside information on population movements, housing, livelihoods, access to services and local coping capacity. When these pressures are seen together, governments and partners can act earlier.

IOM is supporting this kind of work through its Climate Mobility Innovation Labs, including the Risk Index for Climate Displacement. In the Philippines, for example, this work is helping to bring together climate risk, displacement and vulnerability data to better identify areas where communities may face higher risks and where investment in preparedness, adaptation and local services is most needed.

The measures that follow are practical: improving early warning, strengthening local infrastructure and services, supporting livelihoods, planning safer sites or relocation where necessary and using mobility data to guide preparedness and recovery. The goal is to act before climate pressures become displacement crises.

While climate mobility is expected to increase, resistance to immigration is also growing in some countries. What additional tensions or conflicts could arise from this?

Tensions related to human mobility can emerge when communities already under pressure face sudden increases in demand for housing, land, water, jobs, schools, health services or public infrastructure. These pressures can affect both people on the move and the communities receiving them.

There is also a political risk. When migration is presented as a security threat, or when climate mobility is confused with irregular immigration, it can fuel fear, discrimination and xenophobia. That can make it harder to protect people, harder to support host communities and harder for governments to plan practical solutions.

This is why IOM emphasises early planning, good data, community engagement and support to local authorities. The objective is to help people move safely where movement is necessary, to help people stay safely where that is possible and to ensure that host communities receive the support they need.

“The first priority should be to invest earlier in resilience and adaptation in the places most exposed to climate impacts.”

The refugee definition under the Geneva Convention does not explicitly cover climate-related displacement. What realistic ways for reform or complementary approaches do you see to address protection gaps?

The first point is to be precise. The 1951 Refugee Convention and its 1967 Protocol remain central to international protection, but climate change or disasters are not, by themselves, standalone grounds for refugee status. That does not mean there are no protection needs, and it does not mean existing law is irrelevant. In some situations, refugee law, human rights law or regional protection frameworks may still apply, especially where climate impacts interact with conflict, persecution, violence, discrimination or serious threats to life and dignity.

The most realistic way forward is not a single new global treaty in the near term, but a combination of complementary approaches. At the international level, this means better use of existing human rights obligations, non-refoulement principles, disaster risk reduction frameworks, the Global Compact for Migration, the Global Compact on Refugees, where relevant, and the work of state-led initiatives such as the Platform on Disaster Displacement.

What about the regional or bilateral level?

At the regional level, there is significant scope to develop practical arrangements that reflect actual mobility patterns. This can include free movement protocols, temporary protection or stay arrangements after disasters, humanitarian visas, labour mobility schemes, cross-border pastoralist arrangements and agreements that allow people to move safely before, during or after climate-related shocks.

At the national and bilateral level, governments can make a major difference through regular migration pathways, planned relocation frameworks, evacuation and admission arrangements, access to documentation, portability of social protection, recognition of skills and qualifications and measures to ensure that migrants and displaced people can access basic services without falling into irregularity or exploitation.

How should climate finance, disaster preparedness and migration management be better aligned so that resources are invested proactively in resilience, host communities and safe mobility pathways, rather than only after crises occur?

Those three aspects need to be planned together, not treated as separate tracks. The key is to invest earlier: in the places people are leaving, in the communities receiving them and in safe mobility options where movement is necessary or already happening.

For IOM, this means helping governments to turn climate mobility risks into practical investment priorities. Through the Climate Mobility Investment Facility, IOM supports countries to develop bankable pipelines for adaptation, resilience and development investments – for example around flood risk, drought, sea-level rise, planned relocation and host community support. This is also why IOM's Climate Mobility Innovation Labs are important: they use data and local partnerships to identify climate mobility risks and develop practical, locally led solutions.

So the shift we need is from responding after displacement occurs to financing preparedness, resilience and safe mobility before crises escalate. That means stronger early warning, anticipatory action, local services, resilient infrastructure and regular pathways that allow people to move safely and with dignity when staying is no longer viable.

Planned relocation is a sensitive but sometimes necessary tool. What conflicts can arise from this? What standards are needed to ensure that planned relocation respects rights, cultural ties and livelihoods?

Planned relocation is one of the most sensitive areas of climate mobility. It should never be treated simply as moving people from one place to another. It affects land, livelihoods, culture, identity, family unity, access to services and relationships with host communities.

If relocation is poorly planned, it can create new tensions – over land ownership, compensation, jobs, public services or the loss of cultural and ancestral ties. That is why it should be considered carefully, usually as a measure of last resort, when risks cannot be managed safely in place.

The key standards are clear: relocation must be government-led, rights-based and community-centred. Affected people need to be consulted from the beginning, have access to clear information and be supported to protect their livelihoods, housing, cultural ties and social cohesion. The objective is not relocation for its own sake, but to expand people's choices – helping communities stay safely where possible and supporting planned, rights-based movement where staying is no longer safe.

IOM has supported work on planned relocation and climate mobility in the Pacific, where sea-level rise, coastal erosion and recurrent hazards are already affecting communities. In countries such as the Solomon Islands, the focus is on helping governments and communities plan ahead, assess risks and ensure that any movement is safe, dignified and sustainable.

“Success should not be measured by whether people move less.”

Cities are key destinations for both internal and cross-border climate-related migration. Which approaches can support municipalities in practice to prevent security risks?

Cities are important in many mobility contexts, but we should be careful not to overstate the point. Climate-related mobility takes many forms. Some people move to towns and cities, while others move temporarily, locally, across rural areas or within their own region.

Where municipalities are receiving people affected by climate impacts, the issue is not migration itself as a security risk; it is whether local authorities have the resources, data and planning tools to manage population change in an inclusive way.

Municipalities need support for housing, basic services, healthcare, education, skills development and access to decent work. They also need to be able to include mobility and displacement risks in urban planning, infrastructure investment and climate adaptation plans.

Social cohesion is essential too. That means supporting both newcomers and host communities, reducing pressure on services and creating opportunities for participation at the local level.

What three priorities should the international community set in the next two years to address climate, security and migration in a coherent way, and how could success be measured?

Over the next two years, the first priority should be to invest earlier in resilience and adaptation in the places most exposed to climate impacts.

The second priority should be to make mobility part of adaptation policy. This includes planned relocation where

necessary, better support for internally displaced people and host communities, and safe and regular pathways where migration can help people adapt.

The third priority should be to align climate, development, humanitarian and migration finance. Too often these systems work separately, while communities experience the risks together. More coherent financing, better data and stronger local partnerships are needed to move from reacting after crises to acting before risks become displacement emergencies.

Success should not be measured by whether people move less. It should be measured by whether fewer people are forced to move in crises, whether communities have safer choices, whether local authorities are better prepared and whether affected people have access to protection, livelihoods, services and dignity.



AMY POPE

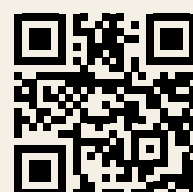
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DISASTER MANAGEMENT AND PREPAREDNESS

More than just survival

Bangladesh has succeeded in ensuring that its people are much safer during cyclones than they used to be. The focus now is on safeguarding their livelihoods in the periods between cyclones. One key issue is the fight against salinisation.

BY MD. BODRUD-DOZA

Due to its location on the Bay of Bengal, Bangladesh is repeatedly hit by powerful cyclones. The low-lying country has a high population density and has suffered an enormous number of casualties in the past: at least 300,000 people lost their lives when Cyclone Bhola struck East Pakistan – now Bangladesh – in 1970. In 1991, around 140,000 people died in a cyclone in the Chittagong district.

It is therefore a major achievement that, since 2007, Bangladesh has not recorded more than 200 deaths in any given year, despite severe cyclones. Various measures have contributed to this, such as early warning systems, cyclone shelters, trained volunteers, school-based programmes and local evacuation plans. In fact, Bangladesh has now become a role model for other countries when it comes to protection against cyclones.

Although disaster preparedness has improved significantly, the population still faces considerable damage caused by cyclones. The next major challenge for Bangladesh is therefore already on the horizon: ensuring that people can continue to live safely even after severe cyclones. Securing people's livelihoods more effectively is more urgent than ever due to the advancing climate crisis.

DEMOLISHED EMBARKMENTS, DESTROYED HOUSES

A look at Satkhira, a district in south-western Bangladesh, part of which lies on the coast, illustrates the problems that

can arise and how they can be tackled. When I travelled to Satkhira for the first time in 2011, it had been two years since Cyclone Aila had devastated much of Bangladesh's south-western coast. I still remember the damaged embankments, the saline water, the broken homes and the people trying to rebuild their lives long after the storm had disappeared from the news.

Since then, I have visited the coastal region of Satkhira many times. Among other things, I have worked with communities in climate-vulnerable areas on adaptation. One realisation stood out in particular: a cyclone does not end when the wind stops. Or, as one resident put it during a field discussion: "The cyclone comes and goes, but the salt stays in soil and water."

THE BATTLE AGAINST SALTY WATER

Salinity intrusion is one of the biggest problems the population faces in the wake of cyclones. Salty seawater pushes inland – particularly when embankments are damaged – and causes enormous damage. It floods freshwater ponds, fields and canals, can affect the groundwater and also limits the range of crops that can be grown. The consequences of salinisation include drinking water shortages, crop failures and increased health risks.

Recent research shows that salinisation is spreading along the coast of Bangladesh, where it is changing everyday life. A 2025 study in Satkhira found that exposure to salini-

sation is linked to reproductive health problems among women aged 18 to 49. According to the study, women are more likely to experience such problems if they work in jobs involving contact with salt water and have to travel long distances to reach the nearest safe source of drinking water or healthcare facility.

Tackling the consequences of salinisation requires resources that many families do not readily have at their disposal. Some have to borrow money, sell assets or even send a family member away to find work elsewhere. For them, therefore, the disaster does not end when the storm has passed, but continues in the form of damaged infrastructure, loss of income and daily uncertainty.

The escalating climate crisis is exacerbating the situation. A recent MIT study warns that the risk of storm-tide hazards

“A recent MIT study warns that the risk of storm-tide hazards along Bangladesh’s low-lying coastline could increase dramatically, particularly due to rising sea levels and more powerful cyclones.”

Photo: picture alliance / Hans Lucas / Martin Bertrand



The village of Pratab Nagar in Satkhira Province is one of the many places in Bangladesh severely affected by climate change, including rising water levels, erosion and salinisation.



“The real test lies in whether, over time, people become less vulnerable to the life-threatening impacts of disasters.”

along Bangladesh’s low-lying coastline could increase dramatically, particularly due to rising sea levels and more powerful cyclones. Under medium to high emission scenarios, the return period for severe storm-tide events could shorten significantly, from decades to just a few years.

This means that Bangladesh’s existing protection systems could come under increasing pressure. The climate crisis threatens not only the water supply of coastal communities but also their health and infrastructure. More storm surges also mean a higher risk of coastal erosion. Overall, these risks interact and reinforce one another. Where, for example, agriculture and fish farming are affected by salinisation, people lack the economic foundation to protect themselves against future disasters – which in turn means that disasters have potentially more severe consequences.

HOW THE POPULATION IS RESPONDING

During my work for the International Centre for Climate Change and Development (ICCCAD) and BRAC, one of the world’s largest development organisations – both based in Bangladesh – I saw how adaptation projects tried to respond to changing realities. Some projects, for example, supported climate vulnerability assessments at community level and local resilience planning. Others focused on drinking water, climate-resilient livelihoods, women’s empowerment, awareness-raising and institutional capacity-building.

All these efforts matter. They reduce suffering and provide communities with the tools to manage risks that are already affecting people’s lives. They also highlight a central lesson from Satkhira: the success of an adaptation project should be judged not only by what it achieves during the

“The consequences of salinisation include drinking water shortages, crop failures and increased health risks.”

project phase but also by whether people become less vulnerable after the project has ended.

Not every adaptation measure is sustainable or fair. If residents switch from agriculture to shrimp farming, for example, they may be able to earn a higher income. However, the switch can also increase the salinity of the soil or concentrate profits in the hands of more powerful landowners and investors. A study on the shift from rice to shrimp farming in coastal Bangladesh found, for example, that the expansion of shrimp farming increased soil salinity, thereby worsening conditions for rice cultivation. Consequently, parts of the local population aspire to migrate.

Such forms of adaptation can lead to more insecure work rather than real resilience, particularly for poor households. If they are left with fewer choices but more debt, or no option except forced migration, then adaptation has not been successful.

BETTER MAINTENANCE

Another key aspect of safeguarding livelihoods in Bangladesh is to maintain embankments, drainage systems, cyclone shelters and drinking water supply systems more effectively than has been the case to date. This also requires transparent planning and coordination among government agencies, civil society organisations and local communities. The MIT study concludes that Bangladesh needs to reassess its coastal protection strategies in light of future storm-tide hazards, including risks posed by successive and intensifying cyclone and monsoon events.

The government should regard climate security as a fundamental public service. This includes:

- reliable freshwater services,
- preventive maintenance of embankments, drainage systems and cyclone shelters,

- routine monitoring of salinity and its health effects and
- social protection for households whose livelihoods are already being disrupted.

Moreover, it is important to strengthen local authorities. They need more powers and resources to identify risks before they become disasters. Civil society organisations should continue to support communities while also helping people to hold authorities accountable for services, infrastructure and climate finance. Finally, the private sector should operate aquaculture responsibly and advocate for fair markets, climate-resilient jobs and affordable insurance that includes poor households rather than excluding them.

Around the world, many coastal regions are currently experiencing a shift from sudden disasters to recurring climate-related uncertainty. Like Satkhira, they too can benefit from placing greater emphasis on sustainable success when assessing adaptation strategies. The number of people trained, households reached, shelters built, drinking water points installed or women supported – all these are valuable statistics. However, they are only part of the story. The real test lies in whether, over time, people become less vulnerable to the life-threatening impacts of disasters, and whether freshwater resources, land, health and infrastructure are protected in the long term – and with them the dignity of the people who struggle to make a living under difficult conditions.



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THE SAHEL

“The Sahel states have to make peace with their own peripheries”

In the Sahel, ongoing conflicts between governments and terrorist groups are undermining people's ability to adapt to climate change and forcing them to abandon traditional coping strategies. At the same time, climate change is sometimes misused as a convenient explanation, while political failures are fuelling conflict. To break this vicious circle, states must address the crucial issues of land, security and mobility to regain the trust of populations in peripheral areas, says political geographer Kamal Donko.

KAMAL DONKO IN AN INTERVIEW WITH MARIUS MONIAK



A fighter of the Azawad Liberation Front (FLA) stands in front of the Regional Academy of Education building in Kidal, northern Mali, in May. The building was severely damaged during fighting prior to the FLA's capture of the city.

Since 2012, violent conflict has affected the western Sahel. In Mali, Burkina Faso and Niger, military leaders seized power in coups between 2020 and 2023. One of the juntas' main promises was greater security. Have they been able to keep that promise?

By independent measures, violence has intensified. Burkina Faso, Niger and Mali are all among the five countries most affected by terrorism in the Global Terrorism Index 2026. Millions of people remain internally displaced across the region. Large parts of Burkina Faso and rural Mali remain outside effective state control.

In April, Jama'at Nusrat al-Islam wal-Muslimin (JNIM), an alliance of jihadist groups and the Tuareg-led Azawad Liberation Front (FLA) launched one of the largest coordinated offensives in Mali since 2012. The FLA claimed control of the province of Kidal, while coordinated attacks struck multiple sites, including targets in and around the capital, Bamako. Mali's Defence Minister, Sadio Camara, was killed.

Yet, the most important developments often remain hidden behind the headlines. Armed groups like JNIM do not

need to control Bamako to exercise power. They can exert influence over key trade routes, fuel supplies and cattle markets, while also extorting ransoms.

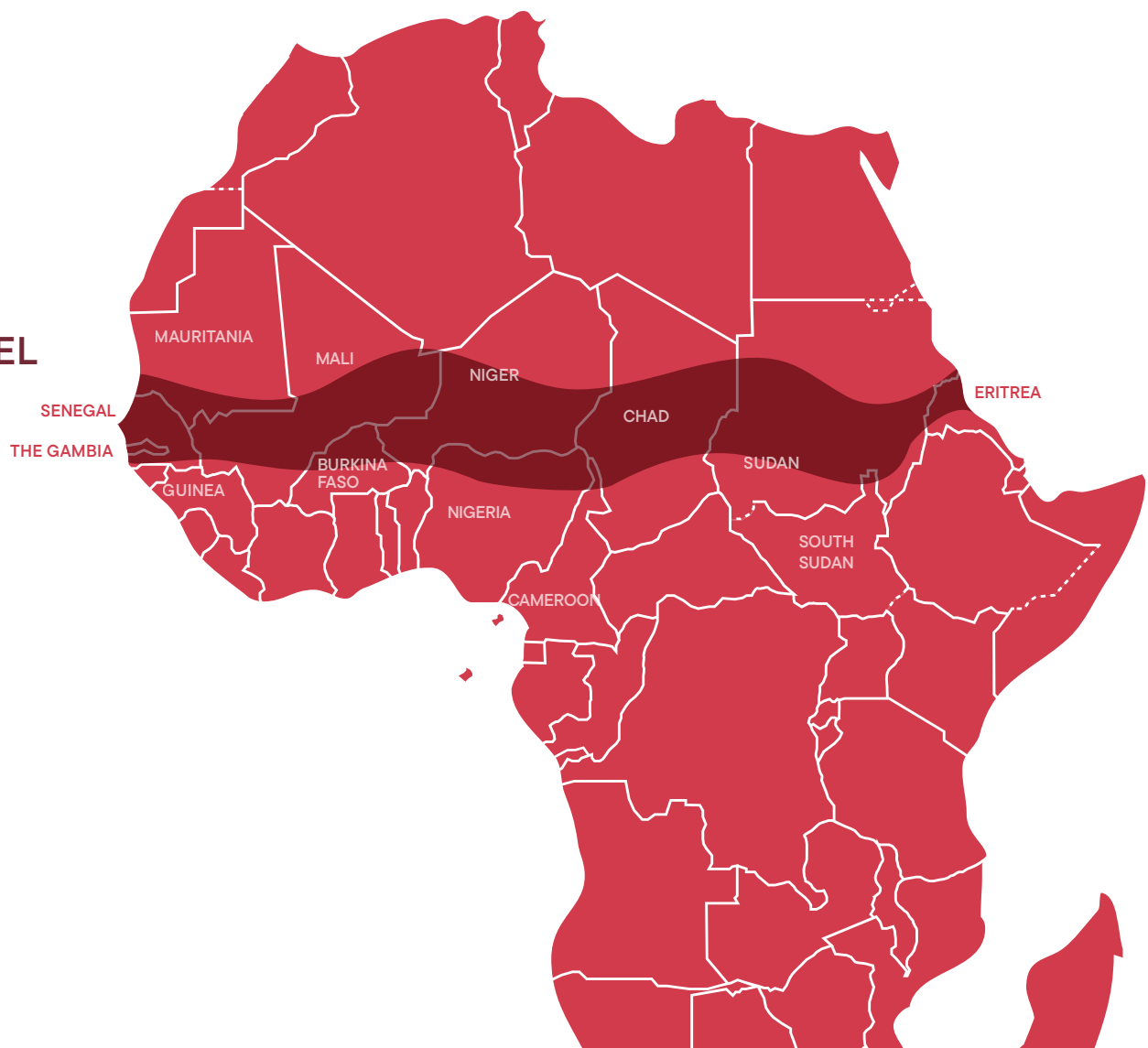
Increasingly, armed groups are seeking to control not only territory but also the movement of goods and people, and with it the economic and social life of entire communities.

How does this affect people's daily lives?

For local communities, survival often depends on who controls mobility. People need to move to cultivate fields, take their livestock to pasture and reach markets. What matters is whether they can move safely. In some rural areas, armed groups such as JNIM increasingly impose the conditions under which movement is possible. Communities may be required to pay levies or taxes imposed by JNIM in order to cultivate, harvest or move goods.

At the same time, many people feel abandoned by state security forces, particularly in peripheral areas. In some rural regions that have been marginalised for decades, JNIM has sought to provide forms of dispute resolution and justice.

THE SAHEL



Are armed groups seen as an alternative to the state? How are national governments responding?

Governments have deployed more soldiers to rural areas, but their military presence has not been matched by effective governance. States have often failed to manage disputes over land or provide reliable access to justice. Human security has remained precarious. In some regions, state security forces have also lost legitimacy because of documented serious abuses. In April 2023, 156 civilians were killed in Karma, Burkina Faso, in a massacre that Human Rights Watch linked to members of the Burkinabè armed forces. In Moura, Mali, a UN fact-finding report found strong indications that Malian troops and foreign military personnel had systematically killed more than 500 people during an operation in March 2022. The Russian Wagner Group is accused of having been involved.

Meanwhile, JNIM is one of the most consequential armed actors in the region and a major driver of jihadist violence across the Sahel. Its operations and networks extend from Mali and Burkina Faso into northern Benin and Togo, while other jihadist organisations, including Islamic State affiliates and Boko Haram factions, remain active across the wider region, particularly around Lake Chad.

“Increasingly, armed groups are seeking to control not only territory but also the movement of goods and people, and with it, the economic and social life of entire communities.”

How is climate change affecting the dynamics of the current conflicts?

The region is facing prolonged droughts, flash floods and other climate extremes. Rainfall has become more erratic, disrupting farming and pastoral calendars and changing how farmers and herders interact with land and water. In some places, shifts in seasonal timing can bring livestock movements into cultivated areas before harvests are complete. Such disruptions can sharpen local tensions, especially where mediation mechanisms are weak.

Armed groups know how to exploit difficulties aggravated by climate change. In some places, they understand local grievances more closely than distant ministries do. They use disputes over water, land and access to pasture to mobilise people and gain influence, often filling gaps left by the state. Governments have failed for decades to resolve many land conflicts and to invest sufficiently in peripheral areas. Climate stress worsens the conditions in which armed groups operate, but the deeper drivers are political: marginalisation, impunity and unresolved disputes over land, justice and public authority.

Climatic extremes have always required people in the Sahel to adapt. What is new, however, is that conflict and political neglect have weakened the local institutions and forms of self-governance that have long made adaptation possible.

So, climate change is a factor that exacerbates conflict, but not the main cause of the ongoing conflicts?

Yes. Climate change is one of the culprits in this story. But because climate change cannot be prosecuted like a person, it can become a more convenient explanation for governments, and sometimes for donors, than the failures of political decision-makers. The conflict in Darfur in Sudan, for example, was described in 2007 as the “world’s first climate war”, framing what happened primarily as an environmental crisis. That interpretation risked obscuring the very political organisation of violence in Sudan and the responsibility of specific actors.

As the climate crisis progresses, the political conflicts are eroding the ability of Sahel communities to adapt. For generations, people have coped with drought through mobility, migration and reciprocity. War, border closures and insecurity increasingly restrict those strategies. In many areas, communities can no longer safely reach pasture, farmland or markets. When movement is controlled by armed groups, they can decide who may pass, cultivate or settle. This can leave communities dependent on them for access or protection. That gives armed groups a major advantage, particularly where they understand peripheral areas better than state security forces do.

What role do climate-related projects play in building peace in the region?

Too much climate finance still fails to reach precisely those peripheral districts where vulnerability is greatest because they are difficult to access and considered risky by donors. Peacebuilding programmes, on the other hand, frequently focus on power-sharing and disarmament while paying insufficient attention to water, pasture and the everyday disputes that drive conflict at the local level.

What works is usually very local and very specific. For example, mediators such as the Centre for Humanitarian Dialogue have helped to broker agreements between farming and herding communities. These initiatives have included demarcating livestock corridors and establishing agreed rules for post-harvest access to fields. Where such arrangements are locally accepted and enforced, they can reduce recurrent disputes.

Every land commission that works can reduce the space armed groups are able to exploit. JNIM, however, has sought to mediate land and water disputes in local communities to win people's trust. Peacebuilding at the local level has therefore become a competition. The state and its partners need to out-govern armed groups in places where state institutions have previously failed to provide effective governance. This is even more difficult in areas no longer under effective state control.

“Climate stress worsens the conditions in which armed groups operate, but the deeper drivers are political: marginalisation, impunity and unresolved disputes over land, justice and public authority.”

The worsening climate crisis and failures in governance are making it increasingly difficult to rebuild peace. What can be done?

The Sahel states have to make peace with their own peripheries. They need to show presence through justice and public services, not soldiers alone. Togo's emergency programme, which directs services and investment towards its northern regions, points in the right political direction, even while terrorist attacks continue.

I reject fatalistic narratives about climate change. Sahelian societies have long adapted to enormous climatic variability, and they are able to do so in the face of climate change. As mobility is one of their oldest adaptation strategies, it will be of crucial importance to restore people's ability to move freely and safely across peripheries and borderlands.

The lesson for governments and donors is to invest in ways that restore trusted public services in peripheral areas and help to resolve disputes and inequalities that shape people's everyday lives. Climate finance must be designed with conflict sensitivity and reach conflict-affected peripheries, rather than flowing primarily to capitals.

The future of the Sahel will depend in large part on how policymakers address land, mobility and security. We should also remember that the region has one of the youngest populations in the world, vast solar potential and access to growing coastal markets for energy, production and trade. There is considerable potential in the Sahel.



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FRAGILE STATES

Which crisis is the worst?

For many people in South Sudan, climate change means flooded homes, crop failures, dying livestock, closed schools and the search for water and grazing land. Yet, despite the severity of these impacts, the climate crisis is far from being permanently at the top of the list of the country's most pressing problems. It has to compete with poverty, conflict, displacement and food insecurity for a place on the national agenda.

BY ALBA NAKUWA



Children carry their belongings across a flooded field in Northern Bahr el Ghazal State in 2021 – the third consecutive year in which the area had been hit by severe flooding.

South Sudan is one of the countries most vulnerable to climate change in the world. Extreme weather events such as floods, droughts and heatwaves are increasingly undermining people's livelihoods and putting pressure on communities that are already struggling with limited resources. In 2024, according to the UN, more than 1.4 million people were affected by the worst floods in decades, and around 380,000 people were displaced.

According to the UN, more than 95% of South Sudan's population relies on climate-dependent livelihoods. Agriculture and livestock farming are particularly vulnerable to changes in rainfall and temperatures. When climate shocks restrict the availability of resources such as water and land for cultivation, traditional arrangements governing access and freedom of movement come under pressure, and conflicts over land intensify.

In the dry savannah of the northern state of Northern Bahr el Ghazal, for example, a combination of rising temperatures, unpredictable rainfall and frequent flooding alternating with droughts has contributed to crop failures, soil degradation and water scarcity. Time and again, people are forced to flee, and agricultural production and grazing land are in decline.

The situation is also making itself felt in places that have traditionally benefited from more favourable weather conditions. In Eastern Equatoria, a state in the southeastern part of South Sudan that is home to green forests, prolonged drought and insufficient rainfall have disrupted the agricultural cycle, so farmers are unable to cultivate their land or produce enough food.

“The survey found that 93 % of respondents believed climate change was directly affecting their communities.”

The situation is the same across the country: when harvests fail and household food supplies dwindle, families become increasingly reliant on humanitarian aid. South Sudan is thus caught in a vicious circle: erratic rainfall means reduced agricultural production, which exacerbates food insecurity and poverty, while the resulting cri-

ses and conflicts drain resources that could otherwise be invested in long-term climate adaptation measures.

The 2024 survey “Public Perceptions of Peace” quantifies how these pressures are perceived by the people in South Sudan. Conducted among 4769 participants across all ten states and one administrative area, the survey found that 93 % of respondents believed climate change was directly affecting their communities. 67% said members of their communities had been displaced by flooding or drought in the previous three years, while 89% said climate change had severely affected farming, and 79% reported impacts on pastoralist activities.

“76 % of South Sudanese live below the national poverty line.”

Yet the survey also revealed a gap between the scale of the problem and confidence in the state response. While 54% felt the government was doing enough to address climate change, only 19% considered the national government the most effective institution in helping communities cope, compared with 43% who identified UN agencies.

THE WORLD'S YOUNGEST COUNTRY

The UN notes that climate stressors in South Sudan and elsewhere do not, in themselves, trigger conflicts. Rather, they interact with pre-existing political, economic and social vulnerabilities, thereby exacerbating tensions over land, water and other resources.

South Sudan gained its independence in 2011 and is considered the world's youngest country. Following independence, years of conflict and political instability meant that many institutions and the country's economy were unable to establish themselves properly. This situation is exacerbated by recent developments, as the country is struggling to cope with the repercussions of the war in neighbouring Sudan, for example.

A World Bank study from 2024 found that 76% of South Sudanese live below the national poverty line. More than two-thirds of the population live in extreme poverty and have to make do on less than \$2.15 a day. The World Bank attributes the poverty in the country to a combination of conflicts, weak governance, limited state capacity and recurring natural disasters.

SCHOOLS SHOW LONG-TERM CONSEQUENCES

When these natural disasters strike, communities need food, shelter, clean water and medical assistance. Roads and schools need to be repaired. People who have lost their homes need to be relocated. And these are just the short-term demands being placed on the government, which are draining its already scarce resources for emergency aid.

“Treating climate change as a secondary issue because there are more pressing problems could prove to be a costly mistake.”

But in the long term, without sufficient investment in flood defences, early-warning systems, climate-resilient infrastructure and alternative livelihoods, the same communities will find themselves in the same emergencies time and time again.

The bottom line is that climate change is quietly and steadily undermining development progress. Schools are a clear example of this. Extreme heat disrupts lessons, whilst flooding forces schools to close or turns educational establishments into emergency shelters. When children repeatedly lose access to education, the consequences extend far beyond the immediate disaster.

EVERYONE IN SOUTH SUDAN IS AWARE OF CLIMATE CHANGE

South Sudan needs to ensure that climate-related considerations form part of the country’s overarching development, peace and humanitarian planning. The construction of roads that remain passable even during floods, the improvement of water infrastructure, the strengthening of early-warning systems and support for farmers and livestock keepers in adapting to changing conditions can help reduce future humanitarian costs.

For South Sudan, the question is no longer how to raise awareness of climate change. Everyone in the country is aware of it. The more difficult question is rather how a country struggling with poverty, conflict and other humanitarian crises can muster the resources to prepare for the next climate shock before it strikes.

South Sudan’s experience highlights the dilemma facing many vulnerable countries: those most exposed to climate shocks also have the fewest resources with which to prepare for them. However, treating climate change as a secondary issue because there are more pressing problems could prove to be a costly mistake. For South Sudan, climate action is not a luxury for a more prosperous future. It is increasingly part of the country’s struggle for food security, peace and development.

SOURCE

Deng, D. et al., 2024: Climate security in South Sudan: findings from the 2024 public perceptions of peace survey.



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Information boards for visitors highlight the progress made in protecting the Kasibo Wetland.

WETLANDS

How the village of Kasibo reinvented itself

Wetlands are valuable ecosystems, and for some communities, they also form the basis of their economic livelihood. After years of drought, a village in Zimbabwe succeeded in restoring a wetland, thereby boosting residents' incomes and improving the local environment.

Soon after getting her child ready for school, Gertrude Moyo heads to her village's community field. It is a routine she has grown accustomed to over the past few years. The field in the village of Kasibo, in the Hwange district in western Zimbabwe, has become her workplace; it provides the vegetables her family needs.

Just a few years before she started growing vegetables, the 43-year-old had almost given up hope of earning a living in Kasibo. There had been several successive years of drought, which, for many villagers, was a clear sign of climate change in a region already characterised by low rainfall and high temperatures. "The situation was dire. I couldn't sustain my family through farming," Gertrude Moyo recalls.

The main economic sectors in the Hwange district include coal mining, nature conservation and tourism. However, the majority of the population relies on agriculture to make a living.

While some community members were weighing the risks of emigrating to South Africa due to the droughts, others recalled that a wetland had once provided the area with sufficient water. But then the population grew, and people started keeping more and more livestock. Water demand rose and the cattle encroached on sensitive areas of the wetland, which was not well managed and degraded over time.

"Our children did not know about this wetland because it was wholly destroyed," says Nomsa Ncube, Gertrude Moyo's neighbour. "As for us, we were among the people who had

destroyed it and could see nothing wrong – until the effects of climate change were worsening."

FROM DEGRADATION TO TARGETED MANAGEMENT

The community decided to restore the wetland. A group of 31 women and nine men from the community launched the Kasibo Wetland Project in 2017. With the help of government agencies and other supporters, they succeeded in significantly improving the management of the area. Among other measures, a core area was fenced off and steps were taken to better protect the springs. "We tried and it is working," says Nomsa Ncube.

Supporters of the project include Zimbabwean authorities such as the Environmental Management Authority, the Agricultural Rural Advisory Services and the Hwange Rural District Council. Further support came from the UN World Food Programme, the civil society organisation World Vision and the Zimbabwe Parks And Wildlife Management Authority.

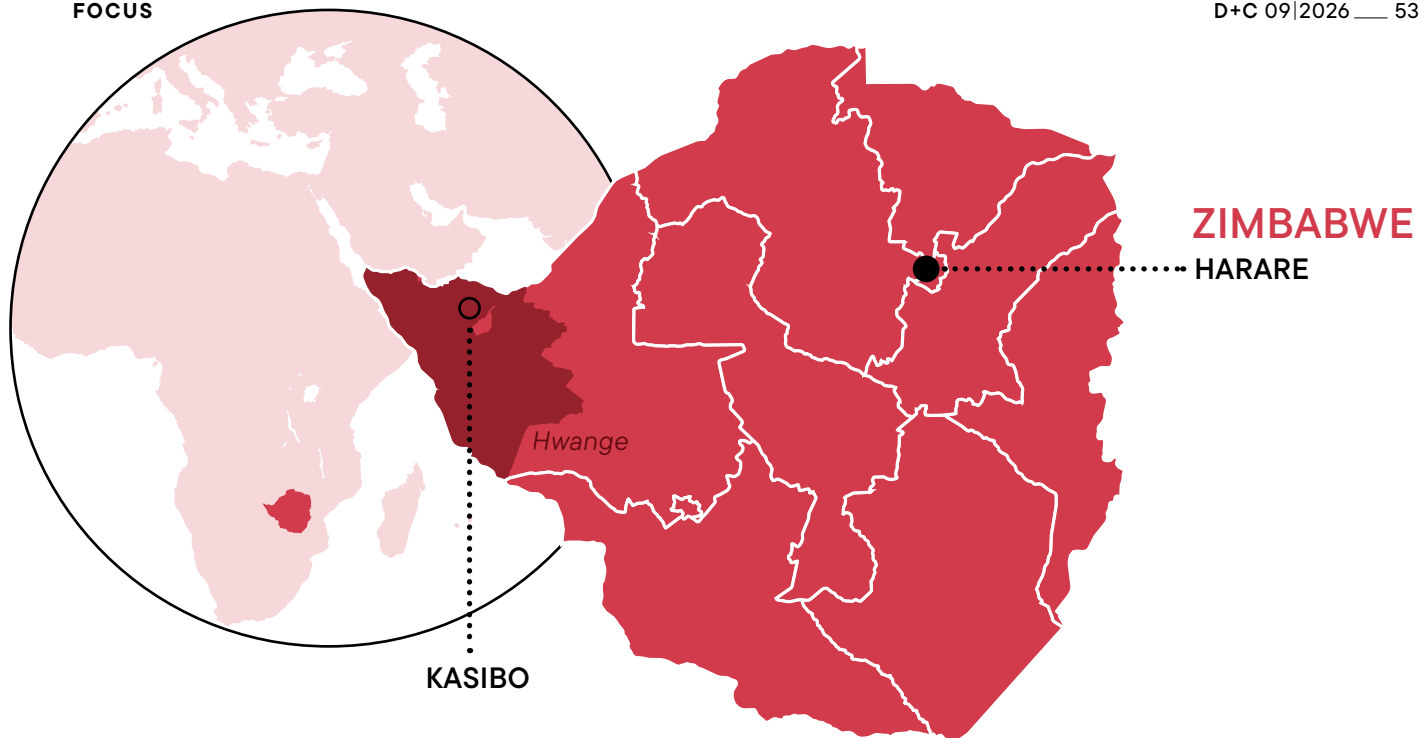
At the heart of the project is a farm covering two hectares of land. The community grows vegetables, mangoes and oranges, and it also keeps bees. The fruit and vegetables are shared amongst the members, some of whom sell them in the nearby city of Hwange. Some members are planning to tap into other lucrative markets, such as the nearby town of Victoria Falls, situated near the world-famous waterfalls of the same name.

Beyond providing economic benefits to the residents, the Kasibo Wetland is home to a rich ecosystem, featuring

Photo: Calvin Manika



The plot provides several families with fruit and vegetables.



“At the heart of the project is a farm covering two hectares of land. The community grows vegetables, mangoes and oranges, and it also keeps bees.”

antelopes, otters and a variety of fish species. Kasibo is thus one of two functioning wetlands in the Hwange district. Three others are degraded, with no restoration plans currently in sight. According to the civil society organisation Zimbabwe Environmental Law Organisation (ZELO), wetlands cover around three percent of Zimbabwe's land area. Of these, only 21% are in a stable condition, while 18% are severely degraded and 61% are moderately degraded.

SEVEN PARTICULARLY PROTECTED WETLANDS IN ZIMBABWE

Zimbabwe is a signatory to the Ramsar Convention, a global intergovernmental treaty promoting national measures and international cooperation for the protection of wetlands. The country has designated seven wetlands of international importance that are particularly protected: Victoria Falls National Park, Cleveland Dam, Mana Pools National Park, the Chinhoyi Caves, the Driefontein grasslands, Monavale Vlei and the area comprising the lakes Chivero and Manyame. The total area of the Ramsar sites in Zimbabwe is over 450,000 hectares.

The growing awareness of how important wetlands are to Zimbabwe is also reflected in the fact that the 15th Conference of the Contracting Parties to the Ramsar Convention took place in Victoria Falls in 2025. It was the first time that Zimbabwe had hosted the conference. Representatives from more than 170 countries reaffirmed, amongst other things, their intention to better protect waterbirds and river dolphins. As part of the conference, participants also visited the Kasibo Wetland.

Gertrude Moyo, Nomsa Ncube and other members of the project have become advocates for wetland conservation in their village and neighbouring communities. They are committed to protecting these precious resources, not least to mitigate the growing impacts of climate change.

Such commitment is more important than ever. Wetlands are not only useful as sources, reservoirs and filters of precious water and as habitats for numerous species. They can also store 50 times more carbon than rainforests and thereby help in the fight against the climate crisis. Nevertheless, according to the *Global Wetland Outlook 2025*, wetlands continue to degrade in many regions of the world, particularly in Latin America, the Caribbean and Africa, but also in Europe, North America and Oceania.

SOURCE

Global Wetland Outlook 2025



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