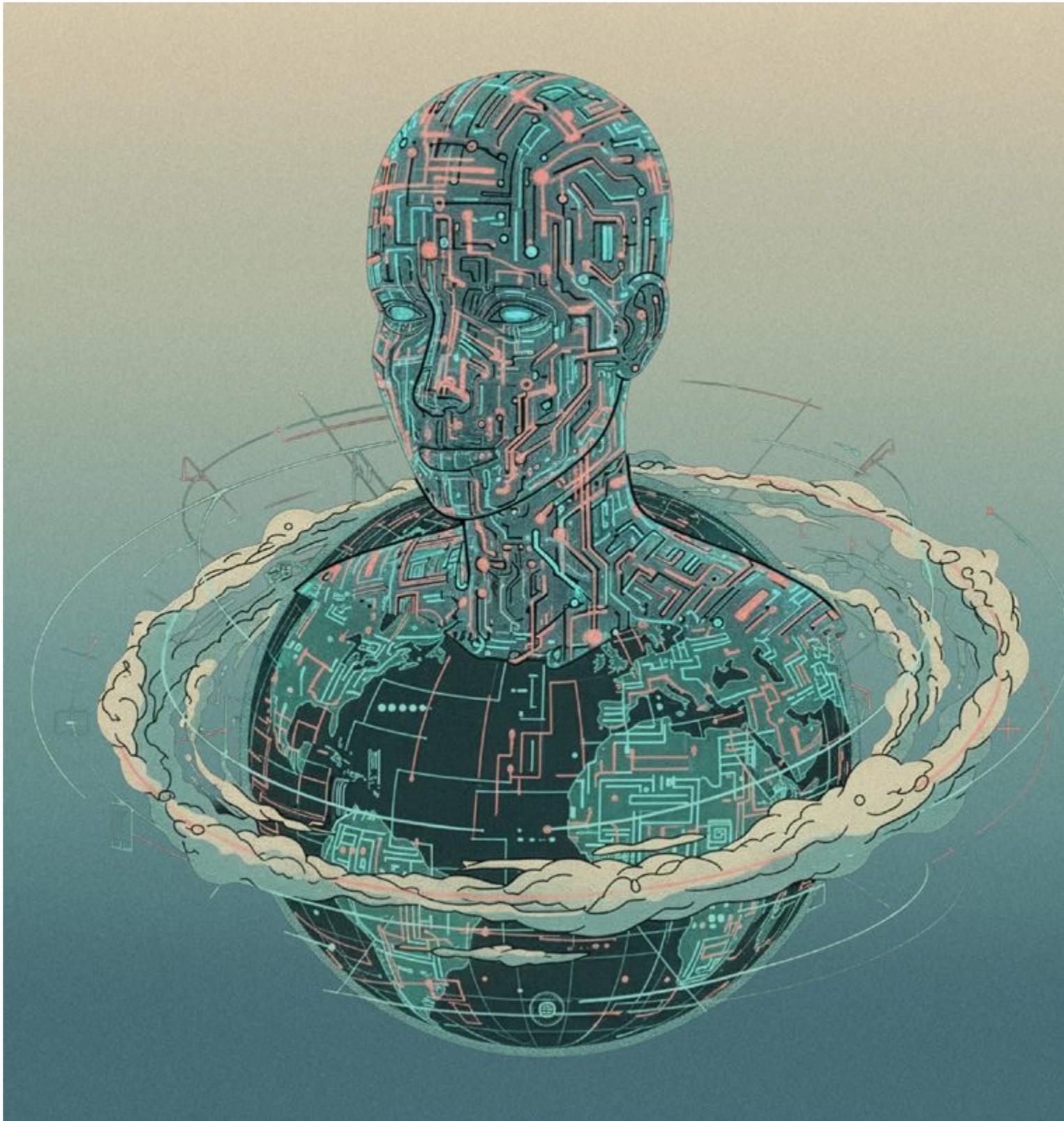


## AI is here. Are we ready?

— **Focus:** How artificial intelligence is shaping our world — **Opinion:** The US and Israel are acting in violation of international law in the war against Iran — **Opinion:** Without strong institutions, there will be no lasting peace in northern Ethiopia — **Around the world:** Sex workers in India walk a fine line between self-determination and exploitation



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Photo: picture alliance / Anadolu / Stringer



Photo: Kim Berg

In former war zones such as Syria, landmines and unexploded ordnance pose a significant danger, p. 20.

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Photo: D+C, AI generated



AI is already having a profound impact on our daily lives. The key question is who controls the technology. It is not only in conflicts that AI accelerates the spread of deceptively realistic fakes and makes it harder to distinguish reliable information from manipulation. At the same time, it opens up great opportunities: from better healthcare services to more efficient electricity grids, crisis relief and support in adapting to climate change. To ensure that this potential is not overshadowed by surveillance, disinformation and profit-driven power interests, we need faster regulation, data security and clear ethical guidelines – even in the face of pressure from large tech corporations.



VIDEO

## Reporting from Chad

Together with the International Rescue Committee (IRC), our editor Katharina Wilhelm Otieno travelled to eastern Chad, where the situation is deteriorating after massive aid cuts. [A short video](#) with some visual impressions from her trip is available on our LinkedIn-Channel.

## The good news

A comprehensive approach to strengthening healthcare has helped India reduce under-five mortality from 48 to 28 per 1000 live births between 2015 and 2023, according to a report by the [UN Inter-agency Group for Child Mortality Estimation](#). During the same period, neonatal mortality declined from 28 to 17 per 1000 live births.

This development aligns with the broader picture outlined by a widely cited [Lancet study](#) on global mortality trends, which shows a steady decline in under-five mortality since 1970, although progress has slowed since 2010. The study also finds that overall life expectancy has recovered to pre-COVID levels.



# \$40

is what a 4G-capable smartphone is expected to cost in future. This emerges from [a pilot project](#) initiated by the Handset Affordability Coalition, part of the global mobile industry association GSMA, which aims to reduce the cost of internet-capable devices. In collaboration with local stakeholders, the project will test in six African pilot markets – DRC, Ethiopia, Nigeria, Rwanda, Tanzania, and Uganda – whether lowering prices alone can increase usage. The goal is to narrow the significant digital divide in Africa and expand access to mobile internet. Millions of people live in areas with broadband coverage but still do not use the internet.

## INTERNATIONAL LAW

# Iran war: call out violations of international law, push for reform

*Under international law, the US and Israel should have first exhausted all diplomatic avenues – particularly within the framework of the UN's collective security system – before resorting to military force. The war makes it painfully clear that a reform of the multi-lateral peacekeeping system, particularly the UN Security Council, can no longer be postponed. The EU and Germany should work toward this goal while at the same time reaffirming their commitment to international law.*

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BY KAI AMBOS



Photo: picture alliance / Anadolu / Stringer

This elementary school for girls in the city of Minab in Iran's Hormozgan Province was destroyed by a US missile. The attack in late February claimed the lives of many civilians, most of them children.

The prohibition on the use of force enshrined in the UN Charter (Article 2(4)) is not a mere formalism; it is a fundamental principle of the post-war international legal order and a true civilizational achievement. Renowned international law scholar Hans Kelsen called it a cornerstone of the international order. According to Kelsen, international law cannot be regarded as a “legal order” unless it bans the use of force for reasons of principle. If any state were permitted to deploy military force against another state at its own discretion, no sphere of state protection would be left to exist and international relations could not be described as a “legal state”.

The prohibition on the use of force doesn't express a romanticised idealism or pacifism; rather it rests on the historical conviction – as a consequence of the brutality and inhumanity experienced during two world wars – that the use of military force is not a sustainable means of resolving interstate conflicts and, because of the costs it entails, can only be viewed as a last resort. The architects of the UN Charter, and especially US President Franklin D. Roosevelt, were deeply convinced that the ban on the use of force and the multilateral and institutionalised peacekeeping system introduced by the Charter to enforce it were necessary to prevent future wars.

Today we know that using military force as a problem-solving *prima ratio* is dysfunctional and that diplomatic-multilateral conflict resolution proves to be more sustainable than military force, which at best produces short-term success. This is why the UN Charter permits military force only in exceptional cases, namely to defend against an armed attack and when authorised by the UN Security Council.

The “inherent” right of individual or collective self-defence (Article 51 of the UN Charter) permits preventive self-defence in situations where an attack is imminent and cannot be averted by any other means (“window of last opportunity”) – despite the Charter's stricter wording (“if an armed attack occurs”). Even then, however, the state seeking to defend itself is not supposed to act outside the scope of the multilateral Charter system. According to Article 51 of the Charter, it is required to “report” measures taken in the exercise of this right of self-defence to the UN Security Council and provide a justification for such measures, particularly in the case of preventive self-defence in response to an imminent danger that cannot be averted otherwise. The Security Council itself is then supposed to take “such action as it deems necessary in order to maintain or restore international peace and security”. In other words, even when it comes to self-defence, the Charter reaffirms the firm belief that preserving and securing peace is best done multilaterally.

#### MANY CIVILIANS KILLED OR DISPLACED BY IRAN WAR

The ongoing Iran war demonstrates by the day, and increasingly so, the validity of such a critical approach to the use of force: well in excess of 1000 civilians have already been killed in various countries, including at least 168 – for the most part children – in a primary school in Iran that was hit by a US cruise missile. More and more civilian objects, including cultural heritage, are being destroyed. Millions of people from Iran, Lebanon and the Gulf states are fleeing. The global economic ramifications can also be felt in Germany in the form of massive energy price rises. The higher oil and gas prices – and the easing of US sanctions – are helping Russia fund its war of aggression against Ukraine.

“The priority now is to soberly analyse the strengths and weaknesses of this law so as to then undertake the necessary reforms – of the UN Security Council in particular.”

And not even the vague war aims seem to be currently achievable: The Iranian uranium stored in deep bunkers can only be secured militarily through a special operation involving ground troops. Just as the Twelve-Day War did not, this air war will not decisively weaken Iran's nuclear capabilities. Nor can the overthrow of the Iranian regime – and thus an improvement in the situation of the Iranian people – be achieved without the deployment of ground troops and/or an armed opposition. On the contrary: there is a risk that both repression within Iran and the country's nuclear ambitions will intensify even further after the war ends.

At the same time, however, it needs to be stressed that modern international law is not blind to the brutal repression practised by a murderous regime. Indeed, already the Charter is committed to the universal protection of human rights and does by no means permit a rights violating regime to massacre its own population in the name of state sovereignty. The importance of human rights has been confirmed in numerous post-Charter developments, beginning just three years after the UN was founded through the Universal Declaration of Human Rights (1948), and, more recently, through the “Responsibility to Protect”

principle adopted by the UN General Assembly in 2005. This principle resolves the conflict between state sovereignty and human rights protection as follows: in the event that a state commits serious international crimes against its own people, the “international community” is allowed to intervene to protect this people. However, this intervention must take place within the framework of the multilateral UN system, specifically by referring the matter to the UN Security Council, which may then also authorise the use of military force.

As to the current Iran war this means that the US and Israel should have first exhausted all means of diplomacy and non-military sanctions before using military force. They should have seized the UN Security Council of the matter and then, as a subsidiary course of action, the UN General Assembly. They could have submitted a resolution to the latter threatening concrete measures, including military action, against the Iranian regime. Even if the Security Council alone has the power within the Charter system to authorise military force, a General Assembly resolution certainly lends legitimacy to the exercise of it. At the very least, the US and Israel could have first attempted to involve other states in a “coalition of the willing”. As parallel steps, non-military pressure on Iran could have been intensified and the Iranian protest movement given greater and more targeted support. All in all, the course of the war makes it clearer every day that the aforementioned war aims could rather have been achieved through negotiation than through waging a war – and without the many negative consequences.

## REFORM OF THE UN SECURITY COUNCIL IS LONG OVERDUE

The Iran war is the latest example of how countries continue in the 21st century to bypass the UN Security Council and use military force to assert their interests. However, this does not mean we should start lamenting the death of international law, or, more exactly, the international law of peacekeeping. The priority now is to soberly analyse the strengths and weaknesses of this law so as to then undertake the necessary reforms – of the UN Security Council in particular.

Europe could play a lead role in this context if France and the United Kingdom were to give up their permanent seats on the UN Security Council in return for one European seat. By working with civil society movements and like-minded states, in the Global South and beyond, this could ratchet up the pressure on the three other permanent members (China, Russia and the US) to facilitate Security Council reforms. Though their permanent membership is most probably not up for debate, the possibility of

increasing the number of permanent members could be discussed with a view to achieving genuine global representation and, in particular, overcoming the rigidity of the current veto system.

This, after all, is the main reason for the Security Council’s dysfunctionality in the area of peacekeeping: if, as is the case under the current system, a single permanent member did not have the power to prevent the Security Council from authorizing military action, a majority of the 15 Security Council members might conceivably have authorised military measures against Iran as a last resort.



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## CONFLICT

# Just because no one has started shooting again does not mean that there is peace

*When the guns fell silent four years ago in Tigray, northern Ethiopia, many hoped that peace had returned. Four years later, the reality is sobering: state authority remains contested, displaced persons cannot return, political institutions lack credibility, and tensions with neighbouring Eritrea could escalate at any moment. Ethiopia's experience shows that ending a war is only the beginning. Restoring governance is the real challenge.*

---

BY HAFTE GEBRESELAASSIE GEBRIHET



Many people are still living in refugee camps, as here in the Tigrayan capital, Mekelle.

When large-scale fighting in northern Ethiopia ended in November 2022, many observers treated the Pretoria Agreement (or the “Cessation of Hostilities Agreement”) as a turning point. The agreement, signed on 2 November 2022 in the South African capital, officially brought an end to the two-year war between the Ethiopian federal government and its allies – including Eritrean forces and regional militias – and the Tigray People’s Liberation Front (TPLF), Tigray’s dominant political party.

The conflict erupted in November 2020 after tensions escalated between the federal authorities in Addis Ababa and the Tigray regional government in Mekelle. The hostilities date back decades and have been exacerbated in recent years by the Tigray leadership’s view that Ethiopian President Abiy Ahmed’s reforms were an attempt to centralise power and destroy Ethiopia’s federal system.

After two years of devastating war, one of the world’s deadliest armed conflicts of the 21st century that claimed more than 600,000 lives, the ceasefire raised hopes that the country could begin rebuilding its political and administrative foundations. International partners gradually shifted from emergency response to recovery. Development organisations resumed programmes. Diplomatic engagement focused on stabilisation.

Four years later, nothing is certain anymore. Relations between Ethiopia and Eritrea have steadily deteriorated since the cessation of hostilities in Tigray. Although Eritrean forces fought alongside Ethiopian federal troops during the war, Eritrea was not an official signatory to the Pretoria Agreement. While the agreement brought the military operation against the TPLF to an end, it failed to achieve Eritrea’s objective of completely dismantling the TPLF politically and thereby eliminating it as a future security threat. This has contributed to tensions between the two governments.

The situation in Tigray remains fragile. Many displaced people have still not been able to return to their homes, and some areas remain under the control of forces from the neighbouring Ethiopian region of Amhara. These unresolved issues have led to a tense standstill rather than a stable peace. At the same time, instability in neighbouring Sudan and the shifting geopolitical constellations in the Horn of Africa have further complicated the security situation in the region.

But it is not only the immediate threat of a new war that shows that the Pretoria Agreement has failed to create the institutional foundations necessary for lasting peace. In large parts of Tigray, state authority remains fragmented. Administrative structures function inconsistently. Judicial mechanisms lack credibility. Political divisions within the

Tigray leadership have deepened. Security measures continue to be guided by political interests. For many citizens, the state still appears less as a reliable guarantor of rights and services than as a selective instrument of political control. This failure of effective governance lies at the heart of Ethiopia’s current political challenges.

## FAILED IMPLEMENTATION

The Pretoria Agreement was presented as a framework for restoring constitutional order. Its provisions covered humanitarian access, territorial administration, security reform, political reintegration and transitional justice. These elements were intended to rebuild state authority in Tigray and reconnect the region to federal governance.

In principle, the agreement reflected widely accepted peacebuilding standards. Disarmament was linked to civilian protection. Political normalisation was tied to administrative and territorial restoration. Justice mechanisms were meant to support reconciliation. Monitoring structures were established to oversee compliance.

If implemented consistently, these measures could have paved the way for peace and functioning institutions. However, Ethiopia failed to take this path, mainly due to five factors:

1. Unresolved territorial jurisdiction. Western Tigray remains de facto outside the authority of the Tigray regional government. Forces of the Amhara region, which took control of the area during the war, continue to administer and secure the territory. Approximately one third of Tigray’s administrative territories are under the control of Amhara or Eritrean forces. Without territorial clarity, lawful administration cannot function reliably.
2. Fragmented security governance. Disarmament began before civilian protection and political guarantees were firmly established. And while Tigray’s forces were required to disarm, Eritrean forces and Amhara militias remained present in parts of the region. This asymmetry has weakened the ability of Tigray’s security institutions to function as neutral guarantors of public order. Instead, security structures remain entangled in unresolved political conflicts.
3. Lack of transparency. Important decisions in the areas of security, administration and political participation are being made through informal negotiations rather than transparent institutional procedures. This weakens the autonomy of the administration and limits the ability of public institutions to apply rules consistently.
4. Limited supranational enforcement. The African Union’s monitoring mechanism documents compliance with commitments but lacks the authority to enforce them. Internatio-

nal partners have prioritised dialogue and technical assistance over policy conditions. This has reduced the incentives for full compliance with institutional commitments.

5. Unequal political reintegration. Legal and administrative obstacles combined with pressure to move ahead with elections before key political questions have been resolved have limited political space. The legal status of the TPLF remains contested. Under such conditions, political institutions risk contributing to exclusion rather than reconciliation.

Those factors have produced a pattern of fragility. Stability so far has been maintained through ad hoc arrangements and informal compromises. Institutions remain weak because political stability is pursued without adequate institutional autonomy.

### DEFICITS IN GOVERNANCE REINFORCE EACH OTHER

The effects of limited institutional reconstruction are visible in several areas. Many people continue to live in prolonged displacement. Without functioning land administration, local courts and security guarantees, long-term return remains difficult.

The provision of services remains politicised. Banking, telecommunications, aviation and education are subject to varying degrees of political influence. Access depends on decisions taken by the federal government. Recent federal decisions to suspend budget transfers and restrict fuel and cash flows to Tigray illustrate how administrative control over essential services can be used as a political instrument. This undermines public trust.

The legitimacy of elections has been weakened. The next elections are scheduled to take place later this year despite unresolved territorial disputes. In the affected areas, residents are expected to participate only in federal elections, but not in regional elections, which raises constitutional concerns. Representation in the House of Peoples' Representatives, the lower chamber of Ethiopia's Federal Parliamentary Assembly, is based on territorial criteria, and Tigray has a fixed allocation of seats. Holding elections before the legal status of these areas has been clarified risks distorting representation.

Transitional justice initiatives operate without strong legal protection from political interference. Investigations and prosecutions remain limited. Many victims perceive the prosecution process as inconsistent.

The space for civil society remains limited. Independent media, professional associations and interest groups operate in a restrictive regulatory environment. Without a strong civil society space, institutional reforms lack social anchoring.

These governance deficits reinforce one another. Weak justice undermines trust. Low trust reduces cooperation. Limited cooperation weakens administration.

### REGIONAL PRESSURES AND GOVERNANCE TRADE-OFFS

Ethiopia's institutional development is shaped by its regional environment. Increasing tensions with Eritrea and renewed debates over access to the Red Sea have shifted political attention to external security priorities.

Under such conditions, governments are reluctant to tolerate institutional independence that could hinder rapid decision-making. Security concerns justify centralisation, and external uncertainties legitimise internal control.

This dynamic is not an isolated case. In many fragile contexts, geopolitical pressures weaken domestic institutions by strengthening the influence of the executive branch. In the case of Ethiopia, this has led to control taking precedence over reconstruction.

### PEACE BEYOND CEASEFIRES

The Pretoria Agreement ended a devastating war. That achievement remains significant. Yet peace without strong institutions remains fragile, as current developments show.

In Ethiopia, public authority is still negotiated rather than exercised by authorised representatives of institutions. Rights remain conditional. Accountability remains selective. These conditions harbour an ongoing risk of renewed conflict.

Sustainable peace does not emerge from the absence of fighting alone. It emerges from predictable rules, autonomous institutions and credible justice. Ethiopia's experience offers an important lesson for conflict-affected societies and their international partners. Ending violence is only the first step. Rebuilding institutions is the crucial one. Until this task receives sustained political and international commitment, peace will remain a pause rather than genuine transformation.



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## POVERTY REDUCTION

# When poverty is your family legacy

*Nigeria is one of Africa's largest economies, but many of its young people are struggling to break the cycle of limited education, underemployment and poverty. Targeted policies are needed to help the country – and its youth – develop their potential.*

---

BY AUDU MEERA



Photo: picture alliance/ASSOCIATED PRESS/Sunday Alamba

Nigerian youth in Lagos during prayers.

In the dim, overcrowded one-room house the Musa family rents in Kano State in northern Nigeria, the air is heavy with the smell of kerosene from a small lamp. The cracked walls bear the stains of years of dust and heat, and the single window barely lets in light. Outside, the rattle of motorcycle taxis and the shouts of street vendors fill the evening air. Inside, Aisha, the mother of the family, sits on a low stool and sorts onions for the next day's sales. She vividly recalls her father, a subsistence farmer, telling her that "school is for those who can afford to eat every day." Married off before she turned eighteen, she now struggles to raise five children on the uncertain earnings of petty trading.

**"For many, the only way to break this cycle is to leave the country."**

Her eldest son, Yusuf, embodies both the promise and the disappointment of his generation. A university graduate, he once imagined himself in an office, managing projects or drafting policies. Instead, he spends his days navigating Kano's chaotic streets in a battered taxi, weaving between potholes and traffic jams and listening to passengers lament the rising cost of food or the latest political scandal. "I didn't study for four years to end up here," he says quietly. His sister Fatima, bright and determined, dreamed of becoming a nurse, but the tuition fees were an insurmountable barrier. For the Musas, as for millions of Nigerians, each generation inherits the same cycle: limited education, underemployment and poverty.

This is the paradox of Nigeria: Africa's third-largest economy is rich in oil, gas and human talent, yet it also is among the countries with the highest number of people living in extreme poverty worldwide. The World Bank estimates that 30.9 % of the country's population lives below the international extreme poverty line. Youth bear the heaviest load: unemployment for people between the ages of 15 and 24 is significantly higher than the national average. Underemployment swells the figure further, as graduates like Yusuf take on work far beneath their qualifications.

#### **NOT JUST AN ECONOMIC PROBLEM**

The Musa family's story is a microcosm of generational poverty. When parents cannot afford quality schooling, their children enter adulthood without the skills needed for formal employment. Even those who beat the odds

and graduate often find themselves stranded in a labour market that has no place for them. The International Labour Organization warns that youth unemployment is not just an economic problem – it fuels frustration, erodes social cohesion and drives migration. Without decent jobs, young Nigerians cannot save, invest or educate their own children and thus end up perpetuating the cycle.

For many, the only way to break this cycle is to leave the country. Nigeria has become one of the largest sources of irregular migrants in the world. Every year, thousands risk their lives in the Sahara and on the Mediterranean in pursuit of the promise of work in Europe or the Gulf. Yusuf has considered it more than once. He's aware of the opportunities migration might bring, but also of the dangers. "If I stay, I'm wasting my life. If I go, I might lose it," he sums up. While remittances can ease the strain for families back home, the exodus robs Nigeria of the very talent it needs to develop. The current brain drain will undoubtedly have long-term costs.

The consequences of youth unemployment are also not merely financial. Idle youth are more vulnerable to recruitment by extremist groups, militias or criminal gangs. In the Nigeria's north, where the poverty rate is very high, insecurity has worsened, creating a vicious cycle in which violence deters investment and job creation, which in turn fuels more unrest. Trust in government is thin; promises of job creation are met with scepticism borne of years of disappointment.

**"Nigeria faces two scenarios: transform its demographic boom into a dividend that drives inclusive growth, or allow it to become a demographic disaster."**

## BREAKING THE VICIOUS CIRCLE

Breaking this cycle is possible, but it will require more than rhetoric. Expanding access to quality education should be the first step. Countries like Rwanda have shown how targeted scholarships and investment in girls' education can transform outcomes within a generation. For Fatima, such a policy could have meant a nursing degree instead of a stalled dream. Diversifying the economy is critical too. South Korea's post-war transformation from an agrarian society to a manufacturing powerhouse offers lessons on how strategic investment and industrial policy can create millions of jobs. Nigeria could replicate elements of this by boosting agriculture, manufacturing and the digital economy, while at the same time promoting youth-focused entrepreneurship programmes.

“I didn't study for four years to end up here.”

Labour market reforms must bridge the gap between skills and demand. Apprenticeships, vocational training and private sector partnerships can align education with real opportunities. Yet these measures face barriers: corruption, poor infrastructure and policy inconsistency have derailed many well-intentioned programmes. Poorly designed job schemes risk creating dependency rather than empowerment. Social protection, through conditional cash transfers and microcredit, can provide immediate relief, as seen in Brazil's Bolsa Familia programme, which lifted millions out of poverty while improving school attendance.

Migration governance also needs attention. Legal migration channels and bilateral labour agreements could allow Nigerians to work abroad safely, send remittances home and return with skills – thereby turning the brain drain into brain circulation. The African Development Bank notes that such frameworks, if well-managed, can benefit both sending and receiving countries.

The cost of inaction, on the other hand, is staggering. With Nigeria's population projected to exceed 350 million by 2050, failing to harness the potential of its youth could deepen poverty, fuel instability and strain governance to the breaking point.

The Musa family's future – and that of millions like them – hangs in the balance. Imagine Yusuf managing a logistics firm instead of driving a taxi, Fatima tending patients in a well-equipped clinic and Aisha expanding her trading

business with access to credit. These are not impossible dreams; they are the tangible outcomes of deliberate, sustained policy action.

Nigeria faces two scenarios: transform its demographic boom into a dividend that drives inclusive growth, or allow it to become a demographic disaster. The Musa family's cramped room in Kano is more than a symbol of hardship – it is a reminder of the urgency to act. The nation's greatest resource is not its oil, but its people. To waste them is to squander the future.



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Photo: picture alliance/ASSOCIATED PRESS/Bikas Das

Sex workers and activists demonstrate on the eve of International Labour Day 2022 in Kolkata.

## LABOUR RIGHTS

# Selling sex and seeking respect

*Female sex workers in India face poverty, abuse and social exclusion. Drawing on fieldwork in red-light districts, the political scientist and gender studies scholar Khushboo Srivastava explores the complex realities of sex work and the ongoing debates over rights, regulation and recognition.*

---

BY KHUSHBOO SRIVASTAVA

Few stories are as old – and as fiercely contested – as those of women who sell sex to survive. In India, sex work exists in a paradox: it is both hyper-visible and invisible at the same time. It is entrenched in history, hidden in back alleys and constantly controlled by law, morality and stigma.

Sex workers are rendered invisible in public discourse even as they are hyper-exposed to a societal gaze that reduces them to stereotypes. This contested terrain has divided feminist politics for decades. Sex work is alternately met with silence, framed as harm and violence or defended as a matter of choice and agency. Sex workers are subjected to verbal, physical, emotional and psychological abuse, as well as to paid and unpaid violence and explicit and tacit coercion.

Formal and informal state institutions have exacerbated the situation. The Immoral Traffic (Prevention) Act of 1986 defines prostitution as “sexual exploitation or abuse (...) for commercial purposes.” On paper, the law criminalises brothel-keeping, pimping and public solicitation – but not the act of selling sex itself. In practice, enforcement is inconsistent and often cruel. Police raids routinely target sex workers, while clients, traffickers and brothel owners go unpunished.

Across India’s red-light districts – from New Delhi’s Garstin Bastion (GB) Road to Kolkata’s Sonagachi – sex workers live in overcrowded brothels, sharing tiny rooms and enduring harassment from police, clients and sometimes their own families. Many did not choose this work freely but were pushed into it by poverty, domestic violence or abandonment. And yet, many also say that sex work – difficult and stigmatised as it is – has offered them financial autonomy and a fragile sense of dignity. For many sex workers, selling sex is less degrading than enduring an abusive marriage or starvation wages.

One woman in GB Road put it bluntly: “This is the only work that feeds my children. Even if I quit, society will never forgive me.” Others echoed her, recalling attempts at factory or domestic work where the pay was worse, the harassment equal and the security non-existent.

### ANCIENT ROOTS, MODERN BATTLES

Prostitution’s roots in India run deep. In Vedic times, concubines and courtesans – often slaves – were presented as gifts to kings. Kautilya’s treatise Arthashastra laid down rules for prostitutes, and Vatsyayana’s Kamasutra classified them by status, rank and skills. Under the Mughals, tawaifs were highly trained performers and cultural icons. But colonial policies and economic upheavals pushed the trade into marginal, criminalised spaces. What was once patronised by royal courts and other centres of power became associated with crime, disease and moral decay.

Today’s debate is not limited to India and is sharply polarised between radical and liberal feminists (see text p. 18). At its heart lies a single question: should prostitution be abolished as a system of sexual slavery, or should it be recognised as legitimate work, to be regulated and protected like any other occupation?

Radical feminists like Andrea Dworkin and Carole Pateman argue that prostitution amounts to sexual slavery – a system built on inequality in which men buy women’s degradation. To them, consent under economic coercion is not real consent, and legalisation would only hide exploitation. Dworkin states: “In prostitution, no woman stays whole.”

Liberal feminists, on the other hand – like Martha Nussbaum and Prabha Kotiswaran – see sex work as labour that, if decriminalised and regulated, could offer safer conditions and bargaining power. They emphasise the agency of women navigating harsh economic realities and argue that selling sexual services is not so different from other forms of bodily labour and that moral panic does little to address structural poverty or gender inequality.

“We can never  
proudly say that we  
work as sex workers  
because the state  
and society have  
always seen us as  
dirty.”

### HOW INDIA’S LAWS FAIL SEX WORKERS

The debate around sex work in India is also shaped by long-standing tensions in law and policy. Three conflicting views dominate: the moralist position, which sees prostitution as violating moral sensibilities and demands its eradication; the institutionalist view, which treats prostitution as the “oldest profession” that the state can marginally control; and the aforementioned feminist perspectives, which frame prostitution as one aspect of unequal gender relations.

In India, laws on commercial sex work are scattered across the Constitution, the Indian Penal Code and the Immoral Traffic (Prevention) Act of 1986. Yet cultural misrepresentations of women, colonial moral policing and elitist assumptions are embedded in these frameworks.

While caste stratification existed in early South Asian societies, its boundaries and associated sexual norms were not fixed. Early texts such as the Arthashastra and Kamasutra reflect a social world in which prostitution was regulated and, in some contexts, socially recognised. Over time, however, caste hierarchy and Brahmanical patriarchy hardened, producing more restrictive sexual norms. Colonial rule intensified this shift by introducing Victorian moral logics and criminal law that recast consensual sex work as social deviance. Post-independence, little changed.

“This is the only work  
that feeds my children.  
Even if I quit, society  
will never forgive me.”

The legal framework in India has contributed to sex workers being treated as criminals rather than citizens, forcing many underground. Although prostitution per se is not unlawful, the Immoral Traffic (Prevention) Act criminalises key aspects of the trade: Sections 3(1) and 3(2) penalise brothel-keeping and the renting or letting of premises for brothel use, while Sections 7 and 8 prohibit prostitution near public places and penalise solicitation. By criminalising workplaces and visible forms of exchange, these provisions have pushed sex work into unsafe environments and deepened many workers' dependence on brothel owners or intermediaries.

The state's neglect has left sex workers vulnerable to harassment, detention and exclusion. Courts have occasionally intervened to uphold rights – most notably the Supreme Court's May 2022 judgement (Criminal Appeal No. 135/2010), which recognised sex work as a legitimate profession. The ruling affirmed sex workers' entitlement to dignity and protection from violence, cautioned against routine police interference, underscored the right to privacy and laid down guidelines for responsible media reporting.

### VOICES FROM MUMBAI'S RED-LIGHT DISTRICT

In Mumbai's Kamathipura – the city's oldest and most infamous red-light district – these legal abstractions are lived realities. Here, the state's neglect and society's disdain shape sex workers' daily efforts to survive. Ranjana (38) shared: “Most of my family has been in sex work and all of them had to hide it. We can never proudly say that we work as sex workers because the state and society have always seen us as dirty, and our work is seen as a crime.”

Nima (31) reflected: “Even our shadows are dirty. You know why? Because we are not like you or your mother who has a ‘decent’ job, is married and lives with her husband and children. But nobody imagines that we too have families and that we are not trafficked.”

Despite their invisibility in policymaking, Kamathipura's women navigate complex identities: they are breadwinners, caregivers and community organisers. Many follow legal developments, hoping for relief. Chaya (29) explained: “We follow the courts closely. When the police fail to register our complaints, everyone tells us that we should go to the court. We trust it to protect our rights.”

For many, the recognition of sex work as work offers a glimmer of dignity amid decades of criminalisation. Rani (36) summarised: “Sex work is neither good nor bad. The laws have failed to see this. Our demand has been to not criminalise but rather make provisions for health, education and sanitation. The court highlighted the need for these too.”

Sex work in India is not an isolated social ill but a mirror that reflects our discomfort with sexuality, our economic inequalities and our unwillingness to grant dignity to the marginalised. To confront sex work honestly is to confront these deeper injustices. The question is not whether prostitution should exist – it always has – but how society chooses to treat those who engage in it.



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## FEMINISM

## Is prostitution work or exploitation?

**Radical and liberal feminists agree that prostitution is shaped by inequality and harm – but they disagree on what should be done about it. Their visions range from abolition to decriminalisation.**

BY KHUSHBOO SRIVASTAVA

For radical feminists, prostitution occupies the lowest rung on the ladder of male hegemony. Their central objection is the inescapable harm of commodification itself. When sex is bought and sold like any other good on the market, a woman's body becomes the product, and commodification in itself is harmful, regardless of the conditions under which it takes place. Violence, they argue, is not incidental to prostitution, but integral. They describe two types:

- Paid-for violence: the everyday violence of unwanted, often painful penetration.
- Unpaid-for violence: rape, beatings, harassment, murder, torture and the host of physical and psychological consequences – STDs, injuries and post-traumatic stress – that follow.

The radical feminist position is that prostitution as a social practice perpetuates inequality and that the damage it causes is irreparable. Legalisation and decriminalisation, far from healing the damage, merely render it invisible.

At the core of this critique lies scepticism about consent. Radical feminist legal scholars such as Catharine MacKinnon argue that consent in prostitution cannot be understood as freely given, since economic compulsion fundamentally shapes the exchange. From this perspective, payment does not neutralise coercion but instead operates as a mechanism through which inequality is enforced, rendering consent structurally compromised rather than genuinely voluntary.

Andrea Dworkin describes the prostitute as treated as “vaginal slime,” a body rendered disposable and contaminated through repeated sexual use, marked by injury, degradation and the normalisation of violation. Other feminists

argue that while such treatment could be directed at any woman, the commodification of prostitutes' bodies legitimises subordination and degradation, reinforcing men's sexual entitlement through market exchange. Thus, for radical feminists, sex work cannot be considered “work” at all but rather is paradigmatic violence, a form of slavery masquerading as a contract. From this, three claims follow:

- That what men purchase is not just sexual access but the prostitute's degradation itself.
- That prostitution thrives on inequalities of power – economic, social and gendered.
- That prostitution reproduces these very inequalities, publicly affirming men's sex-right over women.

Radical feminists also critique the liberal notion of sex work as “work” by arguing that the idea that one can sell services without selling oneself is a myth – one that disguises oppression as freedom. For them, sex work is the most pernicious form of contract, transforming women's bodies into commodities under the guise of choice, while leaving untouched the deeper reality of patriarchal domination.

“The radical feminist position is that prostitution as a social practice perpetuates inequality and that the damage it causes is irreparable.”



Photo: picture alliance/NurPhoto/Indranil Aditya

Sex workers from Kolkata celebrate the Indian Supreme Court's ruling in May 2022 recognising sex work as a profession.

### PROSTITUTION AS FREEDOM AND AUTONOMY

Liberal feminists do not deny the harms that prostitution can cause. They too acknowledge women's poverty, powerlessness and histories of abuse. But the two positions part ways when it comes to the question of what should be done. For liberals, abolition is not only unworkable but also unjust because it would deny women whatever autonomy and benefits they may gain from sex work.

Liberals argue that under less-than-ideal conditions, prostitution may still represent a woman's occupational choice. It can afford her freedom, financial autonomy and a form of sexual self-determination. If society accepts women selling their mental and manual labour – often under exploitative conditions – why should the sale of sexual services be uniquely disqualified? For some women, they argue, it is the best available option. The liberal case for decriminalisation rests on several pillars:

- It recognises prostitution as work, not a crime.
- It allows for unionisation, giving prostitutes the means to resist brothel managers, pimps and police.
- It opens access to welfare measures like healthcare, childcare, education and social security.

- It helps erase the stigma of immorality and criminality.

Liberals respond directly to radical claims: Yes, prostitution as it exists is degrading. Yes, it reflects and reproduces inequality. But prohibition does not solve these problems. At best, it drives the trade underground, worsening the very harms radicals want to eradicate. At worst, it strips women of the limited autonomy and livelihood that sex work provides.

To the liberal eye, what matters is how to regulate prostitution under real-world conditions. The hope is to reform circumstances – to regulate the industry, reduce harm and shift society's attitudes toward sex workers themselves.

In the end, the divide between radicals and liberals is not about whether prostitution is harmful – both camps agree it often is. The difference lies in whether this damage is unavoidable and irreparable or conditional and remediable. What remains unresolved is whose voices should carry the most weight. Radicals speak of systemic injustice, liberals of individual autonomy. But somewhere between these polarised positions stand the sex workers themselves, whose daily lives are shaped less by theory and more by the struggle to survive (see text p. 15).



Experts from The HALO Trust educate schoolchildren in Idlib province about the dangers posed by mines and unexploded ordnance.

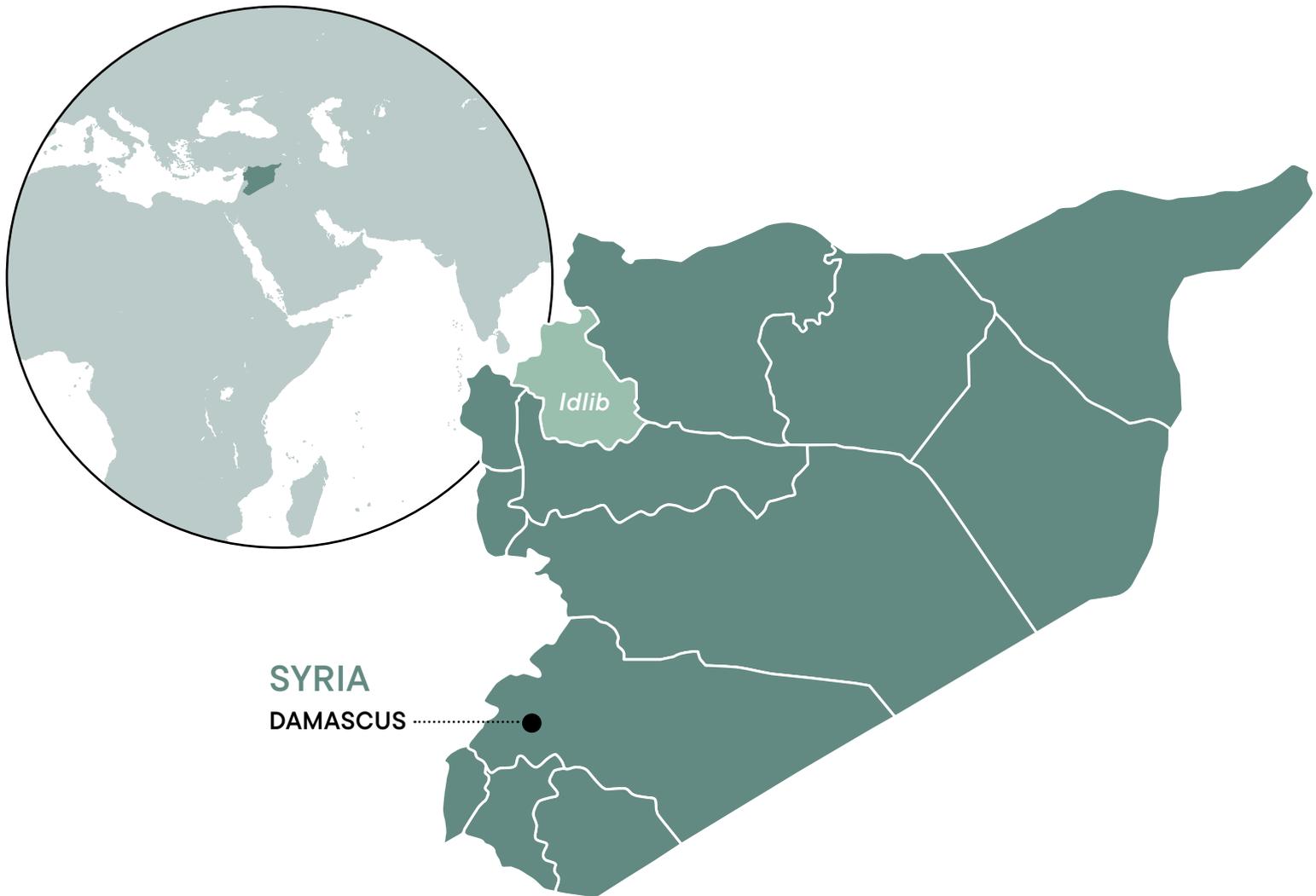
HUMANITARIAN AID

# Landmines: a lethal obstacle to Syria's reconstruction

*Following the fall of the Assad regime in late 2024, hundreds of thousands of Syrians have returned home from abroad. However, what awaits them is not only a country ravaged by civil war but also land fraught with hidden dangers: mines and unexploded ordnance. A visit to The HALO Trust, a civil society organisation that is clearing mines to make Syria a safer place – one square metre at a time.*

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BY KIM BERG



**A** former front line close to Khan Shaykhun, a town in Syria's north-western province of Idlib: where not so long ago troops of the Assad regime battled against the Islamist militant group Hayat Tahrir al-Sham (HTS), a tractor now trundles its way laboriously through the churned-up brown earth. Equipped with heavy rotating metal blades at the front, it lifts and sifts the soil. Though every possible precaution is taken, the operation is fraught with risk every inch of the way for the HALO team driving the tractor, as the blades regularly unearth all manner of hidden explosive devices that could go off at any time.

“Besides the mines that the regime installed for defensive purposes, a large amount of unexploded ordnance also remains in the fields here,” explains Bara al-Mustafa. He is a team leader with The HALO Trust, one of the world's largest humanitarian mine clearance organisations. Founded in Afghanistan in 1988, it now operates in more than 30 countries and territories in Africa, Asia, Europe, Latin America and the Middle East. As well as removing landmines and unexploded ordnance, it educates people about the dangers, maps contaminated areas and trains local experts. Its goal is to make land safe so it can be used again – for example for housing, agriculture, infrastructure and economic development.

“More than 1.2 million people went back to Syria in the first year after Assad was overthrown; for many of them, it was the first time they had returned to fields, roads and ruined buildings that had long been situated at or close to the front line.”

HALO teams have been hard at work mapping and clearing the former front line in Idlib since February 2025. So far, they have secured around 60 % of the land by detonating, defusing or otherwise making safe 21 anti-personnel mines, nine anti-tank mines and 16 unexploded devices. Day in, day out, 36 experts go about their extremely hazardous business here, covering roughly 1500 square metres per day.

Their work is made more complicated by a main road that runs directly through the mined area. “We can’t close the road completely,” says Bara al-Mustafa. Civilians cross the contaminated land from time to time and can’t always keep 100 metres away from the mine clearance operations – the required safety distance. Though no accidents involving humans have occurred so far, four sheep have reportedly trodden on mines. “Once the land here has been cleared, it is to be used for farming purposes again,” explains Bara al-Mustafa. Until then, however, every step remains a carefully calculated risk.

### MINEFIELDS DELAY RECONSTRUCTION

Many people in Syria are still struggling with the economic consequences of the civil war. According to the German Red Cross (GRC), around 90 % of Syrians are living in poverty, while two thirds of the population – some 16 million people – are reliant on humanitarian aid.

“The remnants of the war not only continue to claim lives; they are also putting the brakes on Syria’s development.”

Minefields like those in Idlib are to be found across much of Syria. “The degree of contamination is enormous. We receive several reports each day about explosive remnants of war and minefields,” says Farouk al-Mustafa, who runs HALO’s operations in Syria. The organisation has stepped up its activities in the country since the Assad regime was ousted in late 2024 and maintains several offices in different regions.

The work being done by The HALO Trust is a race against time. More than 1.2 million people went back to Syria in the first year after Assad was overthrown; for many of them, it was the first time they had returned to fields, roads and ruined buildings that had long been situated at or close to the front line. “Now that people can move around freely again, they are at greater risk of accident and injury,” says Seba Abdulkareem, who is responsible for non-technical surveys (NTS) at The HALO Trust. Her teams survey local residents, casualties and stakeholders, document information about minefields and pass this potentially lifesaving information on to the mine clearance teams – which have meanwhile

removed explosive remnants from more than 330,000 square metres of Syrian land.

### HUNDREDS KILLED BY LANDMINES AND UNEXPLODED ORDNANCE

This help has come too late for many, however. According to The HALO Trust, at least 585 people, including 165 children, were killed by mines and unexploded ordnance in the first eleven months after Assad was ousted. Over 1000 others were injured. The actual number is likely to be significantly higher given that no central database or nationwide coordinating authority exists. Alongside Myanmar, Syria is currently among the countries with the most landmine casualties.

The remnants of the war not only continue to claim lives; they are also putting the brakes on Syria’s development. Idlib province, for instance, was once the country’s bread basket. Now, however, many farmers are afraid to till their fields for fear of encountering landmines or unexploded ordnance. Rebuilding of key infrastructure is also being hampered or delayed for the same reason.

As important as the work of organisations such as The HALO Trust is, the extent to which they will be able to help in future is uncertain. Cuts to humanitarian funding (see article on next page) are also putting massive pressure on mine clearance operations. “We are taking advantage of all available resources,” says Farouk al-Mustafa. “But Syria needs more support to make life safe and sustainable for everyone.”

### LINK

The HALO Trust: [halotrust.org](https://halotrust.org)



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## CONFLICTS

## More landmine casualties, less humanitarian aid

**As more and more people worldwide are being killed by industrially produced landmines, international funding for mine clearance operations faces an uncertain future.**

**BY KIM BERG**

At least 6279 people worldwide were killed or injured by mines or unexploded ordnance in 2024 – the highest figure since 2020, reports the Landmine Monitor 2025. According to the report issued by the International Campaign to

Ban Landmines (ICBL), 90 % of the casualties were civilians and nearly half were children. It is particularly alarming to read in it that the number of victims of industrially produced anti-personnel mines has tripled since 2020.

Mines pose a major obstacle to development in at least 57 countries: they render large swathes of land unusable by hampering agriculture and preventing the construction of roads, schools and power lines. This makes it more difficult



Photo: Kim Berg

Since the fall of the Assad regime in Syria, hundreds of people have been killed by mines and unexploded ordnance. Mine clearance services, such as those provided by the teams of civil society organisation The HALO Trust, remove explosive remnants from the earth.

for millions of refugees to return home, stress international organisations such as the ICBL and the United Nations Mine Action Service (UNMAS).

### **WARNING ABOUT INCREASED USE OF MINES**

The rising numbers of casualties coincide with a period of political erosion. Several European states – among them Poland, Estonia, Latvia, Lithuania and Finland – have withdrawn from the Ottawa Treaty. Concluded in 1997, it bans

“Despite growing urgency and landmine contamination, international mine clearance operations continue to be funded largely by a small group of official donors.”

the use, production and transfer of anti-personnel mines. Against the backdrop of Russia’s war of aggression against Ukraine, these countries once again see mines as a vital defensive weapon.

Russia, which did not sign up to the Ottawa Treaty, is extensively deploying anti-personnel mines in its war against Ukraine, claims the Landmine Monitor. The report offers evidence that Ukraine, though formally bound by the Treaty, is also using anti-personnel and anti-tank mines in the war against Russia. The Landmine Monitor warns that the renewed and increasing deployment of mines is putting pressure on a central tenet of international humanitarian law – with direct consequences for civilians, even those not in current war zones.

### **LESS MONEY, MORE RISK**

Despite growing urgency and landmine contamination, international mine clearance operations continue to be funded largely by a small group of official donors. In 2024, the five leading donors combined – the United States (26 %), Germany (13 %), the European Union (9 %), Norway (8 %) and Switzerland (6 %) – accounted for nearly two thirds of international donor funding.

The contribution of the US – traditionally the largest single donor – had already been slashed by more than a third year-on-year in 2024. And last year’s abrupt withdrawal of US foreign aid also hit funding of mine clearance programmes. Some operations were temporarily suspended. Though funding for a number of these programmes was subsequently reapproved, aid from the US faces an uncertain future.

Germany’s support for humanitarian clearance of mines and explosive ordnance is paid for out of the Federal Foreign Office’s budget for humanitarian assistance. In 2025, however, this budget was cut by more than half compared to 2024. This is not good news for mine clearance projects, which rely on being able to plan with certainty several years ahead – for example, in countries like Syria where explosive remnants are hindering reconstruction and the return home of millions of people (see previous text).

### **LINK**

Landmine Monitor 2025: [the-monitor.org/reports/landmine-monitor-2025](https://the-monitor.org/reports/landmine-monitor-2025)

## GENDER EQUALITY

# Algeria's legal recognition of women's rights must be put into action

*Algeria has taken meaningful steps towards achieving gender equality, most recently by lifting its reservation on a crucial article of the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW). However, patriarchal structures in its Family Code and in society as a whole are standing in the way of true reform.*

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BY KHADIDJA KELALECH



Algerian women call for the protection of women's rights on the occasion of the International Women's Day 2021 in Algiers.

In a critical decision, Algeria officially lifted its reservation on Article 15(4) of the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), a landmark international bill of rights for women, in August 2025. This article guarantees women the same rights as men with regard to freedom of movement and choice of residence. Algeria's move marks a significant legal shift towards gender equality, particularly in a country where women's autonomy in mobility and residence has long been constrained by patriarchal interpretations of family and moral codes.

Yet this development highlights the contradictions within Algeria's gender landscape: even as the country expands its international commitments, its domestic laws and patriarchal practices continue to limit women's autonomy. The Algerian Family Code, enacted in 1984, originally contained provisions treating women as dependants, such as Article 39's duty of obedience. However, a 2005 reform repealed the obedience clause and introduced mutual spousal obligations and the right to include stipulations in marriage contracts, for instance concerning the wife's right to work.

Some restrictive provisions persist: Article 11 of the Family Code still requires a wali (Arabic for legal male guardian) in marriage contracts, and judicial practice has at times treated alleged "disobedience" as relevant to divorce, maintenance or custody outcomes, limiting women's autonomy in family life and by extension their freedom of movement. These residual structures reveal a tension between Algeria's evolving international commitments and its conservative legal culture.

“Even as Algeria expands its international commitments, its domestic laws and patriarchal practices continue to limit women's autonomy.”

#### ALGERIA'S REFORM IN FOCUS

Ratified by Algeria in 1996, CEDAW has long featured in national debates on gender equality. Until August 2025, Algeria maintained a reservation to Article 15(4), citing conflicts with its Family Code – particularly the now-re-

pealed Article 37, which addressed choice of residence – and with tradition. In August 2025, Algeria issued a Presidential Decree formally lifting that reservation and aligning domestic law with international norms.

In theory, the reform could have broad implications for women's lived realities, particularly in cases of domestic violence, forced cohabitation and practices such as charging women with “abandonment of the marital home”, which have been used to shame or penalise women who leave abusive households. Removing the reservation provides new legal ground for advocates to challenge such restrictions on women's mobility and residence.

#### VIOLENCE, MOBILITY AND THE PRIVATE SPHERE

Domestic violence and femicide remain among the most urgent threats to women's safety in Algeria. According to *Féminicides Algérie*, between 2019 and 2024 a total of 315 women were killed. Most of these murders were perpetrated by men within the victims' families: 42.6 % by partners or ex-partners and 27.7 % by relatives such as fathers, sons or brothers. These statistics underscore how violence is rooted in the private sphere and justified through patriarchal notions of control. These are not isolated tragedies, but symptoms of a social order that still treats women's independence as against the rules.

For women seeking to live alone or to escape abusive households, this climate can be life-threatening, as leaving one's family or husband is often seen as a moral affront that invites punishment. The 2020 femicide of Chaima Saadou, who was raped, murdered and later victim-blamed for leaving her home, became a stark symbol of impunity and societal misogyny. Her case ignited the #JusticePourChaima (Justice for Chaima) movement, which exposed Algeria's entrenched culture of victim-blaming and the widening gap between legal reform and actual protections for women. The persistence of such violence illustrates that lifting Algeria's CEDAW reservation must be accompanied by robust protection systems, including shelters, safe reporting mechanisms and law-enforcement accountability, if women are to exercise their right to freedom of movement without fear.

#### WOMEN'S RIGHTS IN MOROCCO, TUNISIA AND EGYPT

This tension is not unique to Algeria. Across North Africa, women's rights have progressed unevenly, often caught between international pressure, religious interpretation and conservative social norms.

**Morocco**, for instance, undertook a landmark reform of its Family Code (Moudawana) in 2004, following sustained

advocacy by women's movements and international encouragement. The reform replaced the 1957–58 code and introduced major advances: it raised the legal age of marriage for women from 15 to 18, allows women to initiate divorce, recognises joint responsibility between spouses and removed the legal duty of obedience. Despite these gains, significant gaps persist in inheritance rights, and

“Women who seek independence or leave abusive relationships are often met with ostracism, economic insecurity or even violence.”

judges retain discretion to authorise underage marriages; both of these issues reflect the continued influence of patriarchal norms. Feminist organisations have since renewed calls for comprehensive reform to align the Moudawana with Article 19 of the 2011 Constitution, which enshrines equality between men and women. Yet progress remains slow due to political and cultural resistance.

**Tunisia**, often regarded as the most progressive Arab country on women's rights, established its reformist legacy with the 1956 Personal Status Code, which abolished polygamy, required mutual consent in marriage and introduced judicial divorce. Tunisia ratified the CEDAW in 1985

and lifted its reservations in 2014 following the adoption of a new constitution that explicitly guarantees equality between men and women. However, since President Kais Saied's consolidation of power in 2021, activists have reported regression in women's rights, reduced funding for gender-based programmes and stalled implementation of the 2017 Law on Eliminating Violence Against Women. In recent years, the government has increasingly invoked national security and public order to justify restrictions on civil society organisations, further narrowing the space for feminist activism.

**Egypt** presents a complex picture. It ratified CEDAW in 1981, but maintains reservations to several articles, including Article 16 on marriage and family relations and parts of Article 2, citing the need to comply with Islamic Shari'a. In 2021, a draft Personal Status Law proposed by the government sparked widespread opposition from civil society, including the Egyptian Centre for Women's Rights (ECWR), due to provisions seen as likely to restrict women's legal capacity. They include men's guardianship over minor children as well as men's control over marriage contracts and women's freedom of movement. The bill was later withdrawn. Nonetheless, many laws still permit male guardians or husbands to control key decisions over women's mobility, divorce and child custody under existing personal status frameworks.

Algeria thus sits at an instructive midpoint between its neighbours. Its legal reforms echo Morocco's incremental progress but lack Tunisia's institutional coherence. Symbolic compliance with international frameworks exists, but implementation and cultural transformation remain elusive.



## ALGERIA'S FAMILY CODE NEEDS TO BE REFORMED

The lifting of Algeria's reservation on Article 15(4) is a promising step, but its practical impact will depend on aligning domestic law and practice with international standards. To translate this reform into real change, Algeria must prioritise revising or repealing Family Code provisions that sustain patriarchal guardianship structures, notably the codified authority of the husband as the head of the family. Judicial and administrative training in gender-sensitive interpretation is equally vital to ensure that judges, prosecutors and police uphold the reform's spirit rather than default to patriarchal precedent.

Socially, the reform will encounter resistance. Even where laws change, stigma remains powerful. Women who seek independence or leave abusive relationships are often met with ostracism, economic insecurity or even violence. Without parallel social transformation, legal reform is at risk of remaining symbolic.

Algeria must therefore accompany legal change with broad-based awareness campaigns targeting both men and women and stronger protection mechanisms. Expanding access to safe shelters, legal aid and psychosocial support for survivors of gender-based violence would not only provide immediate protection but also signal a societal shift towards recognising women's autonomy as a collective gain rather than a threat to traditional social norms.

Finally, Algeria's progress must be anchored in accountability. Internationally, the country's decision enhances its credibility within UN and African Union human-rights frameworks. However, as Tunisia and Morocco have shown, ratification and reform are only meaningful when backed by oversight from civil society and regional bodies. Consequently, partnerships with feminist organisations, transparent data on gender-based violence and measurable progress indicators should guide the next phase of implementation.

### LINK

UN, 1979: Convention on the Elimination of All Forms of Discrimination Against Women.  
[ohchr.org/en/instruments-mechanisms/instruments/convention-elimination-all-forms-discrimination-against-women](https://ohchr.org/en/instruments-mechanisms/instruments/convention-elimination-all-forms-discrimination-against-women)



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EMPLOYMENT

# The hidden yet promising trend of female entrepreneurs in Somalia

*In Somalia's fragile economy, young women are building small businesses from scratch. They provide livelihoods for their families but can barely access markets and finance. With the right government incentives, these women could achieve much more.*

---

BY BAHJA AHMED

In Somalia's capital Mogadishu, work does not always begin in offices or factories. Often, it starts at home, in living rooms, kitchens and on mobile phones. Across the city and beyond, young Somali women are building small businesses from scratch, not because entrepreneurship was their dream but because formal jobs remain scarce. In a difficult economy, creating work has become a necessity – and, for many women, a quiet form of resilience.

Entrepreneurship plays a central role in Somalia's fragile economy. According to the World Bank, an estimated 76 % of all jobs in Somalia are created through entrepreneurial activity, most of it informal. Women are a driving force in this system. In cities such as Mogadishu and Bosaso, women own around 45 % of established formal businesses, and many more operate home-based enterprises across the country. Yet progress is shaped by persistent barriers, including limited access to finance, social expectations and weak market connections.

Kowther Abdikarim, 28, knows this reality well. A network engineering graduate with a postgraduate degree, she spent years searching for formal employment without success. Eventually, she turned to self-employment, launching a home-based business selling fragrances, women's clothing, shoes and bags. Using social media and mobile money, her small venture grew through word of mouth and loyal customers, reflecting a wider trend of women turning skills and networks into income.

Other young women are doing the same. Hawa, 26, transformed her interest in fashion into a neighbourhood micro-boutique, selling locally sourced clothes and accessories. Mariam, 25, combines digital skills with culinary expertise. She runs a dessert business supplying cafés and restaurants while also earning income through TikTok advertising for local brands. In some way, their stories show how women are redefining what proper work looks like.

## BARRIERS TO GROWTH

Still, challenges remain. According to the World Bank, for example, women-owned businesses account for nearly half of the 1600 loan recipients under Somalia's Gargaara MSME Financing Facility since 2019. However, they received less than 10 % of the total loan value, limiting their ability to grow. Most women-led enterprises also remain informal, restricting access to training, larger markets and long-term stability. The UN notes that women's economic participation in Somalia is often shaped by unpaid care work and cultural expectations, pushing many towards businesses that can operate close to home.

For policy expert Fardosa Abdullahi, this trend is both promising and revealing. "Women are showing strong economic leadership," she says, "but without targeted support – such as skills training, access to finance and markets – their growth will remain limited." Economist Uweis Abdullahi Ali agrees. "These are not just survival businesses," he says. "They are centres of innovation and resilience. With the right support, they could transform local economies."

**“When jobs are scarce,  
Somali women are not  
waiting. They are  
building their own.”**

Some progress is underway. UN and World Bank-supported programmes, alongside local initiatives, are expanding financial literacy training and business development support for women entrepreneurs. But for women like Kowther, Hawa and Mariam, the path remains uncertain.

And still, each sale and customer connection is more than just an income. It is like a statement of independence and a reminder that when jobs are scarce, Somali women are not waiting. They are building their own.



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**AI is here.  
Are we ready?**

# The future is still ours to shape

*Humanity is entering a new reality. The question is no longer whether artificial intelligence will change our lives, but how – and who will be in charge.*

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VON EVA-MARIA VERFÜRTH

Two recent AI stories have stuck with me. First, there is the information landscape around the war in the Middle East. Every war is also a battle for images, and this one is shaped by AI like never before. All warring parties are flooding the internet with fabricated information. The Iranian regime has circulated AI-generated imagery even of real events. On social media, synthetic war videos have become so profitable that even X now insists on labelling them. While genuine voices from Iran are barely heard, we are inundated with fakes. When the truth is submerged in a flood of false information, who can we still believe?

The second story: in early March 2026, the Trump administration classified Anthropic – the company behind the Claude AI – as a “security risk.” The reason: Anthropic refuses to make its AI available for mass surveillance and fully autonomous weapons. Does anyone still have doubts about Washington’s intentions with AI? A company that sets even minimal ethical boundaries is clearly not welcome.

## AI COULD ACHIEVE SO MUCH FOR HUMANITY

These two stories reveal just how powerful AI has become – and how much depends on who controls it. For there is no doubt that AI could do a great deal of good for people. A quiet, everyday revolution has been unfolding on screens around the world. AI provides education, legal advice and therapy. It makes work more efficient, improves healthcare services, optimises power grids, supports crisis response and helps us adapt to climate change. It can foster inclusion through language, availability and accessibility.

Several initiatives demonstrate that AI can be built to conserve resources and drive progress. However, if misused, it can erode democracies and enable manipulation. The negative sides of AI are already evident in mass data collection,

distortion of the truth, environmental destruction and a geopolitical race for raw materials.

## REGULATION MUST BE FASTER

The most widespread AI systems are currently in the hands of a few tech companies whose business models are oriented not towards the common good but towards growth and profit. These companies exert pressure on politics and have even lobbied for a ten-year ban on government AI legislation in the United States, an initiative the Senate rejected. It is high time we took action: we need data security, sovereignty and clear ethical limits.

Countries with economic and political weight can lead the way. The EU has adopted its AI Act; now it will take political backbone to enforce it against resistance.

We’ve been far too slow to act on social media. With AI, we need to do better – and move faster. We should champion technologies that serve the common good. AI will shape the coming years in an unprecedented way, but it’s still up to us as humans to determine this future.



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# Seven positive AI stories

Artificial intelligence is already changing our world. Here are seven AI projects that are having a positive impact on the lives of people in the Global South.



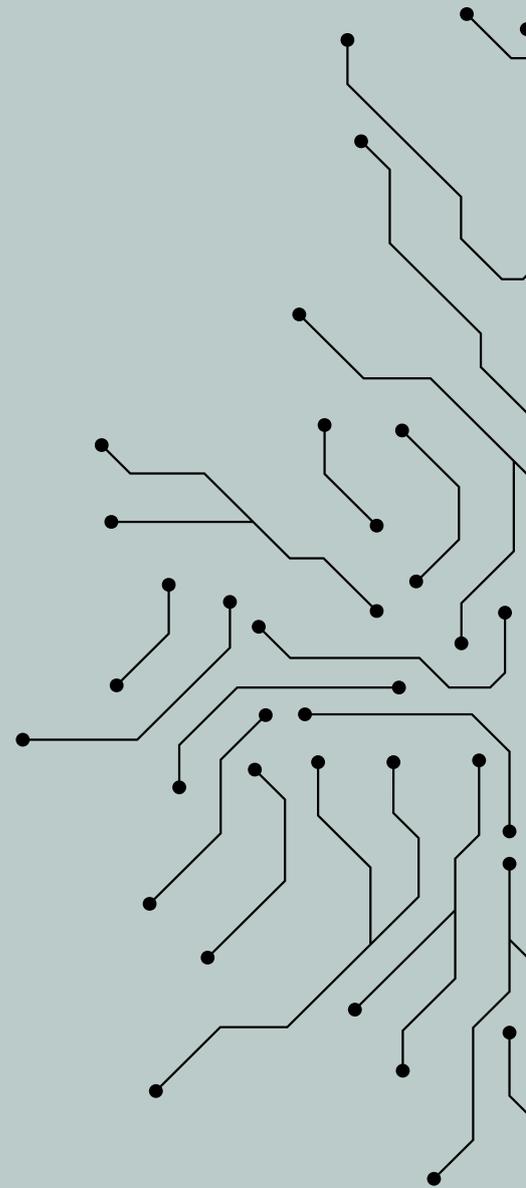
## **TERP 360: SPOKEN WORDS BECOME SIGN LANGUAGE**

Many countries in Africa lack qualified sign language interpreters. This makes it difficult for deaf and hearing-impaired people to access education, employment and public services. This is where Terp 360 comes in, an AI-powered application developed by Kenyan innovator Elly Savatia. The idea for Terp 360 was born during a class in Northern Kenya, where Savatia noticed a critical issue: there was only one interpreter for a total of 300 deaf students.

The app translates spoken language into sign language and displays the translation using 3D avatars. These avatars are designed not only to string individual signs together, but to convey them in a natural-looking form.

Terp 360 is based on a growing dataset of more than 2300 locally recorded signs that are intended to establish a culturally relevant connection. Deaf and hearing-impaired people were involved in the development of the app, which won the Africa Prize for Engineering Innovation last year.

Terp 360 has already interacted with more than 2000 members of the deaf and hearing-impaired community. Savatia plans to expand the app's vocabulary, dialects and colloquialisms.





### **BRIDGING THE DIGITAL LANGUAGE GAP: INKUBALM AND SARVAM AI**

Artificial intelligence quickly reaches its limits when it comes to languages for which there is little training data. Two models from Africa and India are addressing precisely this issue.

The company Lelapa AI is developing InkubaLM, a multilingual large language model (LLM) that can understand and generate text. InkubaLM focuses on African languages that are digitally underrepresented. At launch, the model supports Kiswahili, Yoruba, isiXhosa, Hausa and isiZulu. It is designed to enable basic language tasks such as translation and transcription, as well as other automatic language processing procedures. InkubaLM is based on two data sets. Lelapa AI provides the model and resources as open source.

Sarvam AI, founded in 2023 by Vivek Raghavan and Pratyush Kumar, works with datasets for 22 official Indian languages and is developing several components: a model for automatic speech recognition for 10 Indian languages, a translation model for 110 language pairs, and a speech synthesis model that can read documents, including historical and multilingual ones.



### **MINOHEALTH AI LABS: AI-SUPPORTED IMAGE DIAGNOSTICS AS A RESPONSE TO RADIOLOGY BOTTLENECKS**

In parts of Africa, there is a particular shortage of specialists in diagnostic imaging. Radiologists evaluate X-ray, CT or mammography images and identify signs of disease. Where there are too few of these specialists, diagnoses are delayed – with consequences for treatment and survival rates. This is the starting point for the Ghanaian company MinoHealth AI Labs, founded by AI expert Darlington Akogo.

The approach: AI systems should automatically evaluate medical images and thus support medical teams – cost-effectively and in less than a minute. According to its own information, MinoHealth AI is developing models that can detect 14 findings on chest X-rays – for example, pneumonia, fibrosis or fluid between the lungs and chest wall. The AI is also intended to help detect breast cancer in mammograms. A second field is infectious diseases. MinoHealth AI is developing AI systems for malaria, Covid-19 screening and tuberculosis-related damage that can be seen in X-rays.

Such applications do not replace clinical expertise, but they can help to make more targeted use of scarce resources – provided that data quality, clinical validation and responsible use are in place.



### **CROPPIE: PREDICTING COFFEE HARVEST YIELDS MORE RELIABLY**

Many smallholder coffee farmers face the challenge of estimating their yields as accurately as possible before the harvest so that they can respond to fluctuations. They usually do this manually, which is time-consuming and prone to errors.

This is where “Croppie” comes in. The AI tool helps farmers estimate their yields, giving them more planning security. Here's how it works: Farmers upload photos of their coffee plants to the Croppie app. The AI recognises the coffee cherries on the plant, counts them and uses this information to predict the harvest. Based on the forecasts, the app also provides recommendations for cultivation.

The AI was initially trained using data sets from several thousand farmers in Colombia and Peru. The project has since been expanded to Uganda. The datasets are available as *open-source* for further reuse. Behind “Croppie” are Producers Direct, an NGO by and for smallholder farmers, the International Center for Tropical Agriculture (CIAT), the research institution Bioversity International, and the Ugandan company M-Omulimisa. The project is supported by the GIZ initiative *FAIR Forward – AI for all* on behalf of the Federal Ministry for Economic Cooperation and Development (BMZ).



### **SUNBIRD AI: RENEWABLE ELECTRIFICATION PLANNING IN RURAL AREAS**

To supply rural areas of Uganda with electricity, it makes sense to rely on renewable energy sources such as solar, wind and biomass. However, planning authorities often lack the relevant data to find the best solution: should they expand the existing power grid, set up separate local grids (mini-grids) or install solar panels on residential buildings?

In the Lamwo district in northern Uganda, authorities have the option to consult an AI tool developed by the non-profit AI company Sunbird AI with support from the GIZ project *FAIR Forward – AI for all*, implemented on behalf of the Federal Ministry for Economic Cooperation and Development (BMZ), and the Ugandan Ministry of Energy and Mineral Development. The tool analyses various data sets, including Google's Open Buildings data set, and identifies different types of buildings and the outlines of settlements. Based on these data, it makes suggestions for optimal electrification strategies. All datasets and AI models are accessible [online](#).



### **QUIZAT: LEARNING UNDER DIFFICULT CIRCUMSTANCES**

Hamza Hourani and Bashar Saaduddin Al Jbawi developed the Syrian educational app Quizat to teach students in a playful way and spare parents the expense of high private tutoring. Even before the fall of former ruler Bashar al-Assad at the end of 2024, the founders defied harassment by the collapsing regime and enabled thousands of Syrian students to engage in digital learning amid a devastated educational infrastructure.

Quizat is based on AI-supported learning content and encourages personalised learning with exam-style quiz questions. Subjects offered include Arabic, English and French as well as mathematics, physics, history, religion, geography and general knowledge. The app runs relatively smoothly, even on older smartphones and with poor power supply. The Quizat team, which includes several women, now plans to expand the service beyond Syria's borders.



### **CHEQUEABOT: FIGHTING DISINFORMATION WITH AI**

Disinformation tends to spread faster than it can be debunked – inventing a lie is simply easier than verifying the truth. But while AI has become a powerful tool for spreading fake news, it can also be part of the solution. The Argentine fact-checking organisation Chequeado recognised this early: for nearly a decade, they've been developing an AI-powered bot that helps fact-checkers work faster and more efficiently. Today, Chequeabot is used by fact-checking organisations and newsrooms across multiple countries.

The tool scans news coverage and political speeches for verifiable claims, automatically matching them against a database of existing fact-checks. Fact-checkers get an instant overview: what needs to be verified, and what's already been debunked? Chequeabot can also monitor social media platforms, alerting users when it detects potential disinformation.

## POLITICS

# How artificial intelligence is transforming democracy

*AI is changing the electoral process. Voters may receive calls from digital avatars, and even the deceased can deliver endorsements. At the same time, disinformation and hate speech are on the rise. We asked Katja Muñoz, a technology and politics expert at the German Council on Foreign Relations: Can democracy survive in the age of AI?*

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KATJA MUÑOZ IN AN INTERVIEW WITH EVA-MARIA VERFÜRTH

**There's been plenty of discussion about how digital disinformation campaigns, bots and trolls influence elections – the Cambridge Analytica scandal in the wake of the 2016 US elections or Russia's attempts to manipulate voters immediately spring to mind. These days, the technical possibilities go even further, so how is artificial intelligence (AI) impacting opinion-making and democracy?**

AI is a tool that is accelerating all kinds of processes. For instance, it means that hyper-personalised content can be created very quickly and very cheaply. These days, it's possible to create a ten-second deepfake video for free. Democratic parties wishing to engage in strategic messaging take advantage of this – but so too do actors seeking to manipulate information spaces.

**What do political parties in Germany use AI for?**

For training purposes, for one thing: the Sahra Wagenknecht Alliance (BSW) has been honing its members' debating skills using an AI model that plays devil's advocate. Some members of Germany's Social Democratic Party (SPD) get AI to summarise texts as podcasts they can listen to as they dash from one meeting to the next. Political parties also use AI to better process data and tailor narratives more specifi-

cally to various voter groups. Such strategies were used by the Volt party, for example. The party increased its share of the vote in the European elections from 0.7 % in 2019 to 2.5 % in 2024, which is a remarkable achievement for such a young party.

**When does the use of AI become problematic?**

Obviously, it becomes a problem when AI is used to deceive or imply that false facts are true or when synthetic images are not marked as such. The latter practice is actually illegal now thanks to the EU's AI Act. In Germany, the far-right Alternative for Germany (AfD) party used AI to design posters featuring highly emotional imagery, but without making it clear where the images came from. I was particularly fascinated by one such case in Göppingen: the poster depicted a woman, whose name was given as "Dr Stefanie Müller", along with a quote explaining why she was a member of the AfD. In reality, however, Dr Stefanie Müller doesn't even exist – a fact which wasn't disclosed.

**You mentioned that AI allows political parties to tailor their content to specific target groups. That's nothing new, as parties have always been keen to communicate strategically with their electoral groups.**

**But now this can be done so much more precisely. How is this changing debate in society – is it not reinforcing filter bubbles?**

Definitely, yes. Using AI, it is possible to draw up very accurate voter profiles – including their interests and motivations – for specific regions. Different messages can then be conveyed in different regions on this basis. In Michigan, for example, the Future Coalition Pac linked to Elon Musk portrayed Kamala Harris as a friend of Israel in one neighbourhood with a large Muslim population – and as a Palestine supporter in a nearby neighbourhood that is home to more Jewish and conservative Christian voters. Such extremely personalised use of highly emotional narratives fosters polarisation and makes it difficult for people to reconcile their differences. In the longer term, this has a detrimental effect on the democratic consensus. Though getting an extra percentage point or two at the ballot box may seem attractive in the short term, it undermines the consensus-building process that serves as the long-term basis for democracy.

**Social polarisation has been a growing problem for some time now, especially given the debates on social media. What is new?**

AI is accelerating many processes and making it easier – also for non-state actors – to run campaigns even with limited resources. Autonomous bot networks can be used

much more easily and cheaply than in the past. No large-scale troll factories are needed these days.

**For a 2024 research project, you monitored elections in six countries, including India. How did the political parties there use AI?**

First and foremost, AI had an equalising effect there. For the first time, smaller local parties also had access to resources such as graphic design, copywriting and strategic communication. Meanwhile, the major parties took advantage of AI to broaden their traditional campaigning methods. With an electorate of nearly a billion people, hyper-personalised microtargeting is a huge challenge, but AI made it considerably more manageable. For instance, an AI avatar with the voice of a local state governor was created and used to call up or chat with voters on WhatsApp. The message was adapted to the region in question – in areas with a large farming community, the “governor” would talk to voters about subsidies. People didn’t know they were talking to a bot, though. And if you get a call from the governor and have the chance to chat with him for a while, you of course feel rather special and taken very seriously.

**How else was AI used?**

There was even a deepfake of a politician who had died but still featured in AI videos advising people on who to vote for.

„The high level of participation in the survey reveals that people do still want to be part of the political process and have their say, no matter what is claimed in the media about polarisation. When people feel that their voices will be heard, they are willing to get involved.”



Political parties use AI to create posters and leaflets.

In that case, everything had been properly agreed with the late politician's family beforehand. Not all the applications were so sophisticated, however, with AI also being used a lot just for translations. India has 22 official languages, plus many dialects. Speeches by Prime Minister Narendra Modi were simultaneously interpreted into local languages, with his mimicry also being adapted. This created greater emotional proximity and connectedness, making political content more accessible. Of course, there were also intolerable amounts of disinformation.

**Many of these AI applications are a double-edged sword – they can make politics more accessible but deepen rifts at the same time. Can AI also contribute to strengthening democracy?**

Absolutely. A fascinating civic conversation took place in Kentucky in the US. The town of Bowling Green asked a Google research group – its Jigsaw team – to develop an AI tool and method by which to gather and analyse local public opinion. The town has a very heterogeneous electorate and was keen to improve the way it communicates with inhabitants. Surveys were conducted offline at neutral places where people go in person, such as libraries and hairdressing salons. People could answer questions there or opt to take an online survey. The whole process was anonymous, but people's identities were verified to ensure that nobody could take part more than once. The civic conversation was rolled out across the town and roughly ten percent of the population took part, which is an unusually high proportion.

AI was then used to analyse this data, filter out any insulting or abusive remarks and identify matters that people felt genuinely concerned about – and then pass all the information on to the local government. The high level of participation in the survey reveals that people do still want to be part of the political process and have their say, no matter what is claimed in the media about polarisation. When people feel that their voices will be heard, they are willing to get involved.

**That's an interesting example given that the survey was conducted not only online but also offline. What role can AI play here – and where does its role end?**

AI is not a panacea. Some problems are better resolved by humans. But AI can help to process mountains of data, filter out hatred and highlight underlying needs or grievances; it can also involve people who might not otherwise express their views. That's precisely the opposite of what frequently happens online, where people are very deliberately driven apart. It's hard to counter this, but it is possible. One such example is the election victory of Zohran Mamdani, mayor of New York. He was widely celebrated as an internet sensation, but that isn't the whole story.

**Mamdani's election campaign team spent the months leading up to the election knocking on doors all over the city and seeking to engage in person-to-person discussions. Mamdani himself was also out and about a lot. Was that the secret to his success?**

A combination of online and offline mobilisation was the key factor. Mamdani's campaign was very successful in mobilising people by encouraging them to participate. And that's what democracy is all about: increasing participation. Technology can be used to enable more voices to be heard or to ensure that it's not only the loudest who are able to push themselves to the forefront.

**Regulation is important to set boundaries for the use of AI. You mentioned for example the new compulsory marking of AI content in the EU. Such laws are not in place everywhere, however. What's the situation in the Global South?**

Countries in the Global South tend to lack any regulatory framework. Big tech has developed a very thick skin when it comes to regulations even in Europe, and in many cases completely shrugs off matters important to the Global South. On the other hand, people there are often more aware of the manipulative character of social media. Young people mobilise online but then meet in person at a bar. That's not a deliberate strategy; it's just the way they communicate. And they use technology to fight for their causes: the government in Nepal attempted to suppress the GenZ protests by shutting down the internet, in a move that backfired spectacularly. The protests grew in size, the government resigned and the interim prime minister was elected on Discord. In this instance, a social platform became an instrument of democracy. Here in the Global North systems are more entrenched and can only respond sluggishly to new challenges, which some actors use to sow the seeds of discord. In the Global South, where the young account for a much larger part of the population, levels of frustration are higher, mobilisation is more dynamic, and people are also more willing to use technology in creative and inclusive ways. Which I find pretty impressive.



Photo: DGAP

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## TECHNOLOGY

# Why the Global South can't afford tech pessimism

*AI technologies wield huge opportunities for people in the Global South, yet their realities are vastly underrepresented in these tools. Our interview with Payal Arora, professor of "Inclusive AI Cultures" at Utrecht University, is an urgent call to use the power of AI for the good of people and the planet, not for Silicon Valley.*

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PAYAL ARORA IN AN INTERVIEW WITH EVA-MARIA VERFÜRTH



Photo: D+C, AI generated

AI applications are used, for example, for professional development and for gathering information.

**Over the past year, the darker sides of the internet and artificial intelligence have become ever more obvious. We've seen the concentration of power among a handful of tech oligarchs and risks posed by unchecked AI systems. Your message has always been that AI brings hope and opportunity to people worldwide. Do you still stand by that, given everything we've witnessed in the past year?**

Absolutely. These technologies are transforming the lives of many people, particularly in the Majority World, where people live in resource-constrained, dangerous and often deeply oppressive contexts. Despite all the harms and risks, these tools have become a fundamental part of our public life.

**Can you give an example of the opportunities AI offers in oppressive contexts?**

Since the return to power of the Taliban, women in Afghanistan have been pushed back to a situation we can't even imagine. They can't access education, healthcare, public spaces; they aren't even allowed to stand by a window. They are deprived of the fundamentals of human existence: of connecting with one another. Suicide rates have surged dramatically. For these women, digital technology has become essential, particularly the empathetic nature of AI tools such as Claude or DeepSeek. They can have a dialogue and educate themselves; they can feel visible and heard.

Another example: More than 60 countries in the world criminalise homosexuality, in many cases even with the death penalty. Queer people living in these countries cannot even speak openly to their families, friends or neighbours. So, they turn to AI tools to ask whether what they feel is normal. And GenAI tools will tell them: Yes, it is normal, and it is perfectly healthy. That voice can save many people from depression and suicide if the essential guardrails are met on the safety and security of their data.

**In what sense does AI ease daily life in resource-constrained situations?**

Women in India, for example, spend large amounts of time doing care work on top of their professional work. They use AI tools to answer questions such as: "I have fifteen minutes, these items in my fridge, elderly in-laws with dietary restrictions and children with different needs; what can I cook that will work for everyone?" These are mundane but essential ways of coping with a crippling load. Or think of children who are first-generation learners and whose parents cannot help them with homework, which is actually a significant share of pupils worldwide. If their parents cannot afford tutoring, AI can act as their tutor. Yes, AI tools hallucinate, but it is better than having no support at all.

"Instead of discussing whether or not to ban technology, we should view the rise of AI as a call to reform our institutions."

**Critics warn of the risks of unregulated AI use. Think, for example, of potentially harmful health advice. Aren't strict regulations inevitable?**

We keep having these conversations about whether to ban social media or restrict AI, without really paying attention to people's experiences. Why have AI tools like ChatGPT and DeepSeek broken download records? Why do billions of people use them for health advice or education? It's because most people especially in the Majority World simply do not have adequate access to quality healthcare or education. This is even true in the West: think of how long it takes to get access to psychological therapy through public health systems in European countries – and once you do, the therapist may not even understand your cultural context. AI is not replacing teachers or quality mental healthcare practitioners; it is stepping in where access or quality is lacking. It's uncomfortable to realise, but in many cases, AI is providing better services than our institutions. Instead of discussing whether or not to ban technology, we should view the rise of AI as a call to reform our institutions.

**In short, you say it's all about making sure these tools serve the people better, right?**

Exactly. We should put our energy into improving these tools, particularly as budget cuts to public services demand that we deploy resources smartly. However, we also need to make sure they are safe to use – that they cannot be predatory towards children and that deepfake abuse is addressed, for example. That's why I've been championing a rational optimism concerning these technologies. Pessimism is a privilege for those who can afford to despair. The people who are most pessimistic are often those who are well-off – those who say they need to go offline because they have too many followers or detox because they have five devices. There is a whole ecosystem of academics, researchers and futurists who are making their living selling a binary narrative of doom. It generates clicks, it triggers fear, and it moves people in the entirely wrong direction.

**The discussion around social media has been very similar: the platforms have transformed lives but also given way to abuse. Is this the same with AI?**

Yes. Social media enabled the MeToo and Black Lives Matter movements. The problem is not the technology – it is the hyper-concentration of power in very few hands. The companies behind these platforms are not driven by public interest, and there is no meaningful mechanism to hold them accountable.

**Some countries, like India and the EU member states, are currently making efforts to become less dependent on US tech companies. Can you explain what the India Stack and the EuroStack are, for example?**

Such efforts are urgent and overdue given the current geopolitical shift. The US is no longer a reliable ally, and even if the current administration changes, the lesson is clear: any entity with a high concentration of power will tend to corrupt and abuse that power. The India Stack is a government-run digital service infrastructure which includes identification verification and digital payment systems, data storage, health record sharing and other essential services. Europe is currently developing EuroStack, which is partly inspired by the India Stack. Both are driven by the shared goal of moving away from dependence on Silicon Valley. That said, both the European and Indian approaches have a significant weakness.

**What do you mean?**

A lot of energy goes into building the infrastructure, while little attention is paid to the users. But if people do not find these tools intuitive, they will revert to commercial Generative AI tools. This would be a huge waste of public resources. User experience must be at the heart of the process. US American companies are very good at this: they optimise user engagement for the scaling of their products and services.

**AI infrastructure requires significant investments, and US tech companies have vast resources. Can governments or smaller companies compete at all?**

We will always have far less resources than Silicon Valley, and they're not a role model either. The US tech giants run extraordinarily wasteful data centres that consume enormous amounts of resources. The goal should be targeted innovation: how can we consume less and yet build power with greater diversity? Initiatives like Sarvam AI and Lelapa AI are excellent examples.

**Both companies develop AI tools for users in the Global South, especially by incorporating local languages and accents. Sarvam AI is being developed in India, with all data gathered and stored**

**locally. Lelapa AI specialises in African languages and focuses on building resource-saving tools.**

Sarvam AI is part of India's broader data sovereignty initiative. This federal approach aims to secure citizen data, given that India has the largest young population in the world, and tech companies are very interested in accessing their data. Lelapa AI takes a more grassroots approach. It is driven by civic organisations and a broad coalition of partners.

**Why is inclusion important in AI?**

The Majority World is vastly underrepresented in the data that powers AI systems. Ninety percent of young people worldwide live in the Global South, as do 85 % of the global population. Yet they remain largely invisible in these datasets: their languages are not supported by the tools, their accents and ways of speaking are absent, and entire villages do not appear on Google Maps.

**You hold the chair of “Inclusive AI Cultures” at Utrecht University, and one of your projects is the “Inclusive AI Lab”. Can you tell me more about it?**

Our “Inclusive AI Lab” is a Global South and women-led AI initiative. It incubates leaders and helps develop AI tools, products and services that put the global majority at the centre. For example, we are collaborating with Google to build a Gender AI safety protocol that takes to heart the cross-cultural nature of deepfake abuse. We also work with creative tech companies like Adobe to train creative AI accounting for the way people from the Global South are visually represented, while also catering for creators from a variety of backgrounds. If you search for images of African children, for example, the results overwhelmingly depict poverty because, for decades, this content has been created by aid agencies that have perpetuated a singular narrative. Poverty certainly exists in Africa, but it is not the only story. Most African parents and communities would portray their children very differently. Beyond such projects, we work with governments, thinktanks, civic organisations and scholars from the Global South to build fair futures through data sovereignty and agency.

Photo: M. Muius



**PAYAL ARORA**

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## MEDIA

# How Indonesia's media landscape is dealing with AI

*AI tools are spreading in Indonesian newsrooms as quickly as anywhere else in the world, but their introduction brings new risks and business challenges. Media outlets are using AI for routine tasks and building internal systems while tightening policies to ensure accuracy, credibility and revenue.*

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BY ANASTASYA ANDRIARTI

**A**I made its way into Indonesian media organisations in 2023. A year later, outlets began using AI across production workflows. They apply it to editing, automated tagging (software-generated labels for organising content), voice generation and even the creation of on-screen avatars.

A 2024 briefing paper by the Alliance of Independent Journalists (AJI) described how industry leaders tested AI for content distribution and technical assistance as well as creative applications such as headline suggestions. The paper also highlighted risks: disinformation, algorithmic bias and unresolved questions about copyright protection for AI-generated or AI-assisted material.

By 2026, the use of AI had shifted from experimentation to routine practice, according to a BBC Media Action study titled "Understanding the Use of AI in Indonesian Newsrooms". Based on a survey of 212 journalists, the study reports that 75% are using AI tools as part of their daily work.

The study also shows which tools dominate. ChatGPT leads by a wide margin: 86% of respondents rely on it, followed by Gemini (63%) and DeepSeek (12%). For design and other

creative tasks, Canva ranks highest (32%). Respondents also mentioned Adobe Podcast or CapCut for audio and video editing. Journalists remain more hesitant about using AI for verification. Only 28% turn to it for factchecking, though nearly half of that group relies on it every day.

Overall attitudes are ambivalent rather than enthusiastic or dismissive. Around 70% describe AI as an opportunity, but 45% of the study's participants simultaneously perceive it as

**“More bots now extract and record journalistic content without licence agreements or payments to publishers, which is creating a serious challenge for the industry.”**

a potential threat. More than half associate AI with benefits such as faster workflows, greater creative capacity and improved data analysis. At the same time, 30% warn of harms, including weaker journalistic values, fewer job opportunities and heightened risks of plagiarism and content duplication.

### **CRAWLING AND ZERO-CLICK SEARCHES**

Indonesia's media industry, like media elsewhere, faces disruptive change as AI rapidly develops. Generative AI has begun to affect both the business models of media companies and the long-term sustainability of newsrooms.

Wahyu Dhyatmika, chairperson of the Indonesian Cyber Media Association (AMSI), describes two recent shifts that, in his view, have reshaped the landscape. First, generative AI tools have proliferated, notably ChatGPT and Google AI Overview, which he links to "zero-click searches" in which users get answers on a platform without visiting the publisher's site. Outlets that depend on organic traffic (visitors who get to a website via unpaid search results) have seen visits fall, sometimes by more than 50%, he says, as audiences increasingly turn to AI platforms for condensed summaries. These summaries often draw on reporting produced by the very outlets losing traffic.

Secondly, Dhyatmika points out that automated bots that scan websites ("crawlers") have also surged in number on news sites. He says more bots now extract and record journalistic content without licence agreements or payments to publishers, which is creating a serious challenge for the industry. According to Dhyatmika, fewer than five percent of AMSI's roughly 500 members have put technical controls in place, such as machine-readable instructions for bots or whitelist/blacklist protocols to manage crawler access. AMSI is therefore developing infrastructure based on OpenMind AI to monitor crawling activity and pursue compensation from AI systems that mine journalistic content. The organisation is currently piloting the system with three members.

### **BACKLASH OVER AI ERRORS**

The use of AI in newsrooms has already sparked some controversy in Indonesia, with several outlets facing public backlash over errors linked to AI-generated content.

CNN Indonesia came under criticism last year after publishing an article about US President Donald Trump that still contained AI-generated recommendations. The error quickly spread on social media and raised questions about basic editorial procedures.



Photo: D+C, AI generated

Using AI effectively and responsibly is a challenge for media professionals worldwide.

In January, the newspaper Radar Tulungagung was accused of circulating false information about an alleged promise by President Prabowo Subianto to appoint new civil servants. The article also used an illustration sourced from Gemini.

Together, these incidents highlight a key risk of AI in journalism: the pursuit of speed and automation can compromise accuracy and, with it, credibility. As Indonesian journalists continue to experiment, they face the same practical challenge as their counterparts around the world: How can AI be integrated into workflows without compromising journalistic standards?

**“In Indonesia, virtually all online outlets are now seeing shrinking Google traffic.”**

### AI PIONEER

Since the launch of ChatGPT in November 2022, Kompas.com – one of Indonesia’s first online news outlets – has positioned itself as an active AI pioneer in the country’s media landscape. “We see that society and technology are moving toward AI and civilisation itself will follow. That’s why we explore AI,” says Johannes Heru Margianto, managing editor of Kompas.com, which is part of the large Kompas Gramedia Group. Kompas.com gives journalists and content creators broad leeway to test AI and use it throughout the workflow, from pre-production to distribution.

The outlet has also integrated AI into its content management system (CMS), the software used to produce and publish articles. In this setup, AI helps detect typos and suggests alternative story angles and narrative options. At the same time, Margianto says the newsroom is cautious about using AI as an information source because it can be inaccurate and therefore misleading, especially when staff lack the relevant factchecking skills.

That concern prompted Kompas Gramedia’s media unit to formalise rules. In October 2023, Margianto and 11 colleagues drafted the KG Media Guidelines on AI Utilization. The document sets out practical requirements for AI use and specifies legal and disciplinary consequences for violations, ranging from written warnings to termination.

The KG Media Guidelines frame AI as a supporting tool that must remain under human oversight. Margianto argu-

es that journalists may use AI to compare and develop ideas, but they should avoid fully delegating content creation to AI, as this weakens the authenticity of journalistic work. Even for routine content – such as weather forecasts, prayer schedules or sports fixtures – editors at Kompas.com still curate AI-produced material.

Indonesia’s Press Council later published its own guidelines in January 2025. They emphasise that newsrooms must align AI use with journalistic ethics and that journalists remain ultimately responsible for verifying any AI-assisted content.

### ECONOMIC PRESSURE

Economics has become a second, closely linked challenge. As AI quickly spreads, it reshapes the media industry’s basic assumptions and raises questions about outlets’ long-term competitiveness and relevance. Kompas.com has responded by blocking AI bots from automatically extracting and saving (“scraping”) its articles and has chosen instead to sell its journalism directly to AI platforms.

Margianto links the shift to changes in audience engagement. “Globally, the largest traffic source has always been Google. That’s why SEO became so important,” he says, referring to search engine optimisation – tactics that help content rank highly in search results. With AI-generated answers and summaries, however, Google-driven traffic is declining worldwide. In Indonesia, he adds, virtually all online outlets are now seeing shrinking traffic.

At Kompas.com, Margianto estimates the decline at roughly 20%, which he considers less severe than the drops other outlets have reported. Still, he argues that AI does more than change consumption habits: it undermines the very mechanics of the media economy. “The core of the media business is the crowd. That’s what gets monetised. When the crowd disappears, the business foundation collapses,” he says. For him, the fundamental problem goes beyond monetisation: the media must redefine their role as their traditional functions – informing and educating the public – are increasingly being taken over by social media and AI systems.

### AI FOR IN-DEPTH REPORTING: ZONA UTARA’S PIVOT

Other companies are taking a different route. Zona Utara, a North Sulawesi media outlet, has experimented with AI in newsroom operations for the past three years. But instead of competing in the high-speed daily news cycle, it now prioritises long-form and investigative reporting.

Founder and editor-in-chief Ronny Buol says the shift reflects changing audience behaviour. “People don’t open Google anymore. They go straight to AI. So why should we

keep producing daily news?” he asks. Zona Utara still publishes daily stories when major events occur, but it no longer organises its work around routine updates.

The new editorial focus does not mean the outlet has abandoned AI. Over the past year, Zona Utara has advanced by developing its own tools. Buol argues that using general-purpose systems for news invites “hallucinations” and misinformation. “That doubles our workload because we have to verify everything,” he says.

So, Zona Utara built its own AI agents into its CMS. The agents follow strict prompts that mirror newsroom standards: they must cover the 5W+1H (who, what, when, where, why and how), include verification steps and provide a clear byline. Buol says he and his colleagues taught themselves to build these tools despite not having an IT team.

Even as it shifts toward investigations, the outlet still publishes “evergreen” content – also with the help of AI. Buol cited ship schedules as an example: Zona Utara takes data from Indonesia’s national cargo and passenger shipping company, converts the datasets into articles and produces interactive maps and visuals.

To protect quality, the newsroom introduced internal AI guidelines in late 2024. Reporters may not use generic AI tools, both to reduce bias and to protect sensitive internal data. The rules also require transparency: any AI-assisted content must carry a disclaimer.

The pivot is paying off. Since mid-2025, readers have spent more time on the site. “We have loyal audiences for in-depth coverage,” Buol says, adding, “maybe because AI doesn’t provide investigative reports.”



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Photo: DC, AI generated

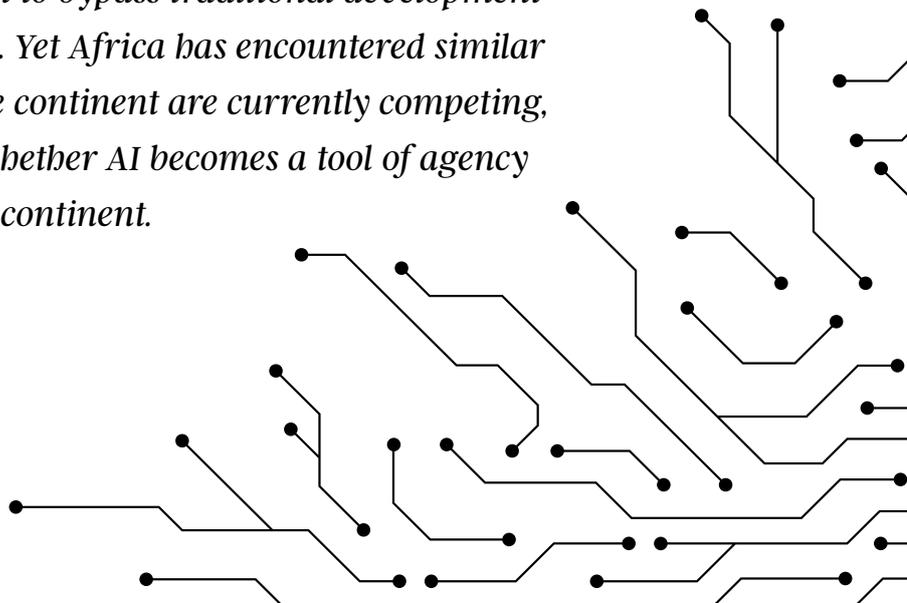
Should Africa invest more in exportable applications or data centers?

DIGITAL ECONOMY

# Africa's AI future is a strategic choice

*Artificial intelligence is increasingly framed as Africa's next leapfrogging opportunity – a way for the continent to bypass traditional development stages and accelerate social inclusion. Yet Africa has encountered similar narratives before. Two visions for the continent are currently competing, and they come with the question of whether AI becomes a tool of agency or a new form of dependency for the continent.*

BY ROGER B. JANTIO



The hour of AI is striking under unusually compressed conditions. Global investment in AI now runs into trillions of dollars, yet early evidence suggests that returns are highly concentrated in a narrow set of firms and geographies. Many projects never reach commercial viability. The distance between technical promise and economic sustainability is widening.

Having lived through earlier technology cycles, including the dot-com era, one lesson stands out: hype does not fail all at once. It fractures. Valuable ideas survive the crack; capital-intensive illusions do not.

For Africa, the debate is often framed as whether the continent should “build AI.” But the real question is whether it will own intelligence or merely host consumption. Two competing visions now shape Africa’s AI future – and they differ not only in cost and timelines but also in terms of who benefits from it, how risks are managed and whether dependencies or leverage result from it.

One emphasises infrastructure replication: building data centres, sovereign clouds and domestic compute capacity to mirror advanced economies. The other prioritises skipping some of the traditional stages of development in a process known as “leapfrogging” and moving straight to developing specialised, context-aware AI systems that solve real-world problems and can travel globally with modest infrastructure.

#### **VISION ONE: INFRASTRUCTURE REPLICATION**

Across Africa, governments and institutions are advancing plans to invest in national AI infrastructure: domestic data centres, sovereign cloud platforms and ambitions to develop local large-scale models. Such infrastructure-first strategies are appealing to policymakers because they promise data sovereignty in a world where information is strategic, reduce dependence on foreign platforms and signal geopolitical seriousness.

This logic echoes earlier development eras: just as industrialisation required power plants and transport networks, AI competitiveness is assumed to require ownership of foundational infrastructure. In capital-scarce environments, such visible investments also provide proof that the state is acting decisively.

This vision has political logic, but it is also structurally flawed. AI infrastructure is capital-intensive and technologically volatile. Data centres require not only billions in upfront investment but reliable electricity, cooling, water and long-term operational capacity. Hardware and model structures depreciate rapidly; what appears strategic today can become obsolete within years.

More fundamentally, infrastructure replication places African states in direct competition with global hyperscalers, which are difficult to match. Moreover, public capital tied to fixed assets is capital unavailable for market creation, education or application deployment. Investing heavily in infrastructural foundations may turn out as a strategic misalignment if value migrates toward applications, data rights and specialised AI.

“The global AI economy is moving away from the assumption that bigger models are always better.”

#### **VISION TWO: APPLICATION LEAPFROGGING**

A different vision has emerged from observing how this AI value is increasingly created. Instead of prioritising scale and infrastructure ownership, this approach emphasises specialisation, speed and exportability. The global AI economy is moving away from the assumption that bigger models are always better. Value is increasingly generated by smaller, fine-tuned systems: domain-specific language models, decision engines and hybrid AI tools that integrate data, rules and human oversight. These systems are cheaper to train, faster to deploy and easier to adapt across markets.

The cost differential is striking. Big models require tens or hundreds of millions of dollars in compute. In contrast, a Mauritius-based AI team recently trained and benchmarked a model for under a dollar per run on standard commodity cloud infrastructure, demonstrating how capital-light iteration is becoming possible outside Silicon Valley’s compute arms race. While narrower than big models, their ability to iterate rapidly and deploy on modest infrastructure makes them particularly suited to emerging markets.

Africa’s complexity demands AI systems that reason under constraint: fragmented logistics, informal economies, multilingual societies and uneven infrastructure. Solutions built for these conditions are often particularly robust. Crucially, they are exportable to other emerging markets facing similar realities across the Global South.

“Specialised AI systems can be delivered through mobile devices and low-bandwidth channels, operating in local languages and supporting users with limited literacy.”

African-founded AI firms already demonstrate this logic. Some export decision-optimisation systems for logistics and manufacturing; others produce climate intelligence derived from sparse data environments; still others build language technologies for under-resourced languages. These firms are not exporting hardware or raw data. They are exporting intelligence – models, Application Programming Interfaces (APIs) and decision tools that embed African problem-solving expertise.

Application leapfrogging also aligns more closely with development priorities. Specialised AI systems can be delivered through mobile devices and low-bandwidth channels, operating in local languages and supporting users with limited literacy. Small language models dramatically lower the infrastructure threshold for participation. They do not require constant connectivity to hyperscale data centres and thus foster inclusion by design.

### **ECONOMIC VIABILITY BEATS EXPENSIVE INFRASTRUCTURE**

Limited capital forces African governments to make a choice. They should consider that, from the standpoint of capital allocation, AI strategies that require years of infrastructure build-out before producing deployable applications entail significant disadvantages. What’s at stake is the question whether scarce capital compounds or is locked into assets that yield uncertain, delayed returns.

In my work as an AI investor across regions, one rule has proven consistent: if a system cannot reach real users within 12 months and demonstrate transferability across

markets within 18, it does not count as part of an export industry. It counts as a pilot project. Behind this insight lies a market mechanism: capital tends to flow toward models that demonstrate their usability and scalability early on, rather than toward those that require a lengthy infrastructure build-out before they can be validated.

The logic applies not only to investors but also to public institutions. In lower-margin, infrastructure-constrained environments, durable advantage comes from specialisation, fast iteration and exportable problem-solving. Consequently, AI strategies should be judged not by ambition alone, but by how quickly they generate real-world feedback and economic proof. In capital-constrained economies, AI strategies that require billion-dollar bets before value is proven are thus not so much a strategy, but a risk.

### **WHAT IS ALREADY WORKING**

African-founded AI firms already illustrate the feasibility of application-led strategies. InstaDeep, founded in Tunisia, built decision-optimisation systems deployed globally before being acquired for \$ 682 million by a major biotech firm. Amini AI produces climate intelligence by combining sparse local data with satellite inputs. Le-lapa AI develops language technologies for under-resourced African languages. DataProphet, originating in South Africa, applies AI to manufacturing optimisation for international clients.

These examples illustrate a structural shift: Africa’s competitive advantage in AI lies not in owning infrastructure but in exporting intelligence. These firms achieved global commercial success without owning a data centre. They also send an important signal to capital markets: globally competitive outcomes can be achieved even with modest capital bases when solutions are closely tailored to real-world constraints. They share common traits: modest infrastructure, deep domain expertise and exportable intelligence.

If application leapfrogging is to succeed, it must be paired with deliberate governance. Three immediate actions would accelerate Africa’s application-led AI strategy:

First, African governments and development finance institutions should prioritise investing in and deploying AI applications rather than funding AI infrastructure. Second, they should establish Pan-African data standards that enable innovation while preventing extraction. The African Union’s data governance initiative provides a foundation, but it needs acceleration and enforcement mechanisms. Third, African AI initiatives should be judged not only on local impact but on exportability to Global South markets.

## AVOIDING NEOCOLONIAL STRUCTURES

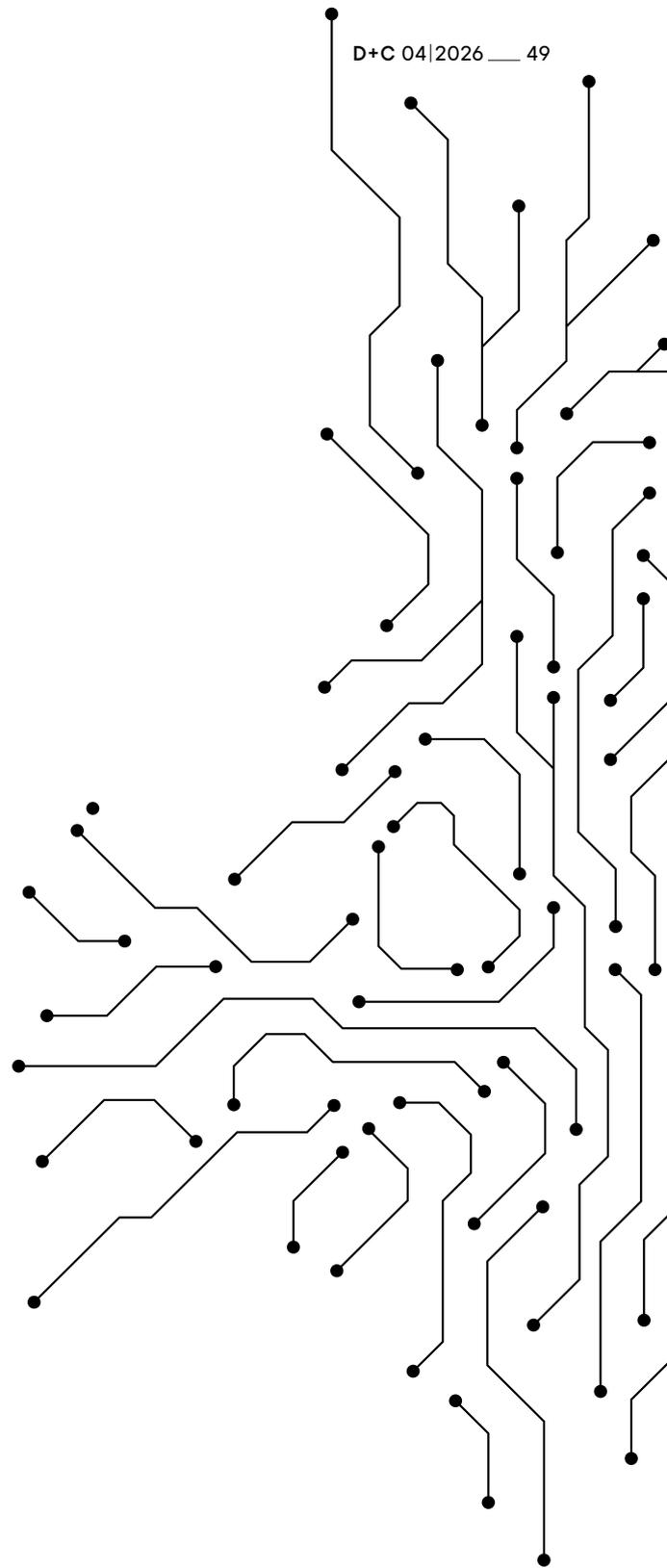
No matter which path African governments and the local AI industry choose to take – no African child should have to work in mines extracting raw materials used for the chips and batteries of major AI corporations. No African worker should be mining those rare earth elements, without which technological progress would be impossible, under utterly precarious conditions. And no resident of the Democratic Republic of the Congo or elsewhere should suffer from the massive environmental pollution caused by raw material extraction.

“Africa’s competitive advantage in AI lies not in owning infrastructure but in exporting intelligence.”

At the same time, we must prevent Africa from becoming a data colony. In today’s AI economy, the added value primarily benefits those companies that control platforms, capital, and intellectual property – and most of them are based outside Africa. Thus, the data of African AI users flows outward, while revenue and decision-making power remain in the hands of others. Moreover, systems trained predominantly on Western datasets often misinterpret African languages, social norms, and behaviours.

This exploitation must end. Africa must shape its own AI development to the greatest extent possible. A major obstacle here is the lack of basic infrastructure: reliable power supply, internet connection and modern devices are prerequisites that are still very unevenly distributed across the continent. Poorly designed measures even risk deepening digital divides by benefiting urban elites while rendering others digitally invisible.

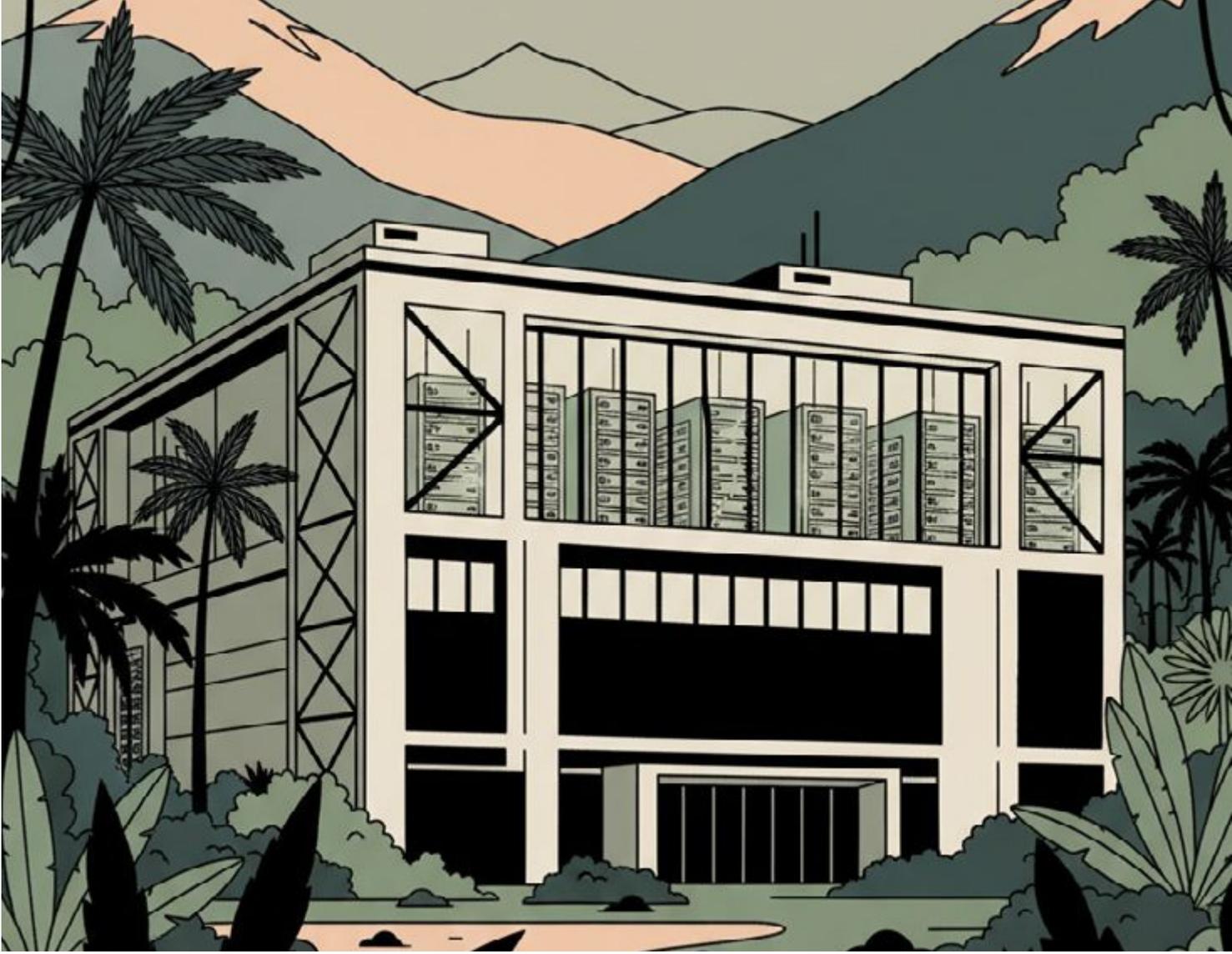
All of these disadvantages do not argue against the use of AI per se, but certainly against the capital-heavy, opaque and extractive models that dominate the current AI economy. African governments and AI institutions should make sure they play their part in shaping a new AI era.



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The operation of generative AI data centres requires huge amounts of natural resources.

AI INFRASTRUCTURE

# How AI firms are appropriating Latin America's resources

*US AI firms need tremendous amounts of energy, water and land for their new generation of data centres. They are finding the resources they require in Argentina, Mexico and other Latin American countries where governments are willing to bend the rules for a lucrative deal. The risk is that the local population and the environment will end up paying the price.*

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BY JULIA GAVARRETE

In October 2025, OpenAI – the US company behind AI chatbot ChatGPT – and Argentinian firm Sur Energy jointly announced their intention to spend \$ 25 billion building a new data centre in Argentina. The plan is to invest in Patagonia, a region in the south of the country boasting a great variety of nature reserves. It's not yet clear exactly where the project will be sited. It didn't take the Argentinian government led by Javier Milei long to enthusiastically promise that the project would transform the country into a regional and global hub for artificial intelligence. The deal was quickly sealed.

Several Latin American states are keen to jump on the “new digital era” bandwagon and become AI pioneers. Besides Argentina, they include Brazil, Mexico and Chile. Thanks to their size and resource wealth, these countries dominate the sector in the region. They ensure the industry has sufficient energy and water – even as local populations repeatedly suffer water shortages and power outages. This blatant contrast has been highlighted and criticised time and again by regional media such as the transnational journalistic research project “Big Tech's Invisible Hand”, which is coordinated by the Brazilian platform Agência Pública and the Latin American Centre for Investigative Journalism (Centro Latinoamericano de Investigación Periodística, CLIP). All the same, there's a distinct absence of any broad-based public debate about the construction of new AI infrastructure in Latin America.

As global demand for AI applications soars, data centres also need ever more computing capacity and energy to operate. Asking questions of generative AI models such as ChatGPT is known to consume far more energy than using a search engine like Google. To meet this demand, what are known as hyperscale data centres are necessary. Based on complex and costly infrastructure, they use significantly more power in total than their predecessors. According to the International Energy Agency (IEA), the industry is currently responsible for one to two percent of global electricity consumption – a figure expected to rise to three percent by 2030.

The US government and companies based there are perfectly well aware that they will need far more energy to expand their data centres. They see Latin America as a game-changer. Speaking before the US Senate Committee on Foreign Relations in May 2025, US Secretary of State Marco Rubio for example called for a debate about which countries could help meet the demand for AI energy. Rubio stressed that energy would be at the forefront of American foreign policy “for the next 100 years”. “We need to discuss how we will invest in countries with the kind of energy supply that can meet that demand,” he said. He

## “Several Latin American states are keen to jump on the “new digital era” bandwagon and become AI pioneers.”

cited Paraguay as an example, claiming it had surplus energy capacity from hydroelectric power following the expiry of its contract with Brazil.

### EXPANDING POWER GRIDS

Energy, be it from renewable or fossil sources, is crucial to the AI industry. In response to the rampant growth of data centres in Latin America, some countries have decided to expand the capacity of their power grids. In 2024, Mexico's Federal Electricity Commission (CFE) announced that the capacity of the electricity network in the country's Querétaro state would be stepped up by 50 %, citing the construction of data centres in the region as one of the main reasons. The CFE also declared that a new gas-fired power station would be built to produce electricity. More electricity generated using gas means more climate-damaging emissions.

Alongside energy, water has traditionally been a vital resource in data centre infrastructures. Used to cool buildings, it keeps temperatures at a steady 18 °C to 27 °C to prevent servers from overheating. This evaporative cooling method with water is no longer used these days, at least not by OpenAI, stresses the firm's CEO, Sam Altman. However, though new cooling systems promise to slash water consumption, or indeed eliminate it completely, it will be a long time before they are deployed in all data centres. Altman was thus unable to refute allegations that the industry continues to use substantial quantities of water.

It is simply a fact that some data centres are being built in specially protected regions or areas already suffering from water stress. Neuquén province in Patagonia, for example, where OpenAI is planning its data centre, is facing increasing water scarcity. And the AI industry also has its sights on Querétaro, despite the veritable water crisis the state is facing. It knows that governments tend to show political flexibility when it's a question of attracting AI investments. Indeed, by 2025 the Sustainable Development Ministry

(Secretaría de Desarrollo Sustentable) in Querétaro had already greenlighted 20 projects for additional data centre infrastructure – even though a local environmental agency had recommended not granting any new approvals involving water consumption, as the “Big Tech’s Invisible Hand” project discovered.

**ONE LAW FOR THE INDUSTRY**

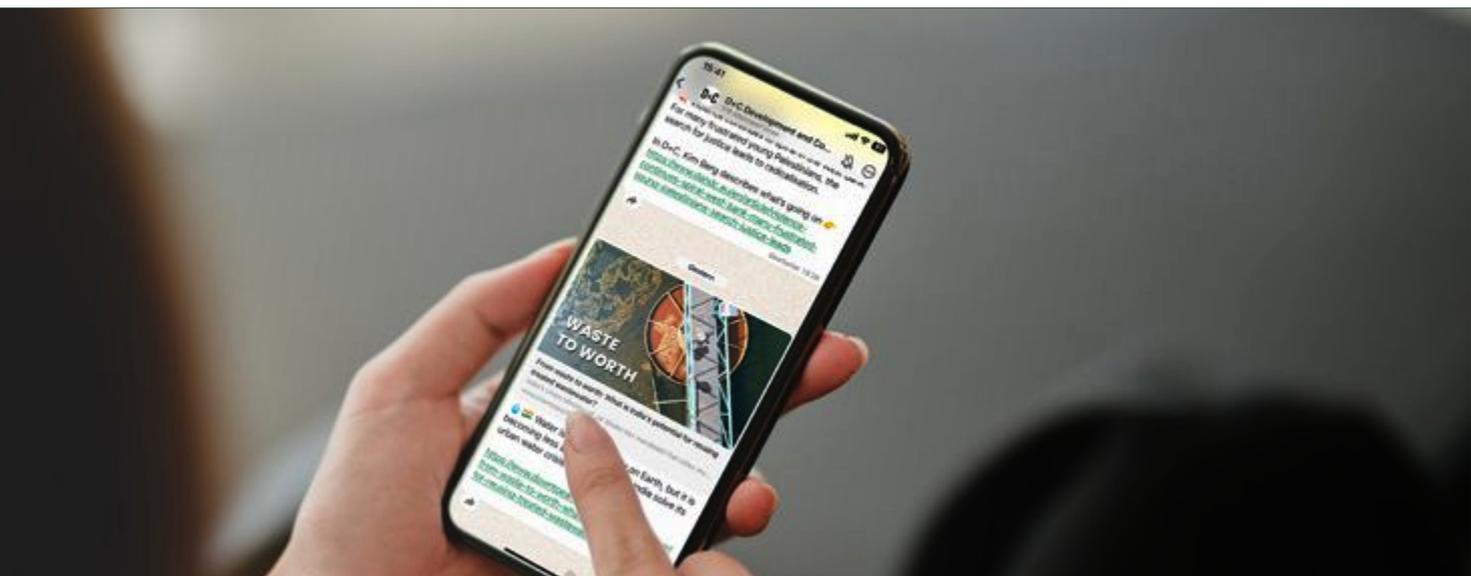
This raises an important question: What limitations should countries in Latin America and elsewhere impose on the AI industry? As things currently stand, regulations are often flexible or don’t exist at all. In fact, the AI industry engages in massive lobbying to ensure that laws are tailored to suit it. Government representatives meet with senior executives of companies like Microsoft, Amazon, OpenAI or Google, and countries sign deals worth millions with them. The governments know full well that their countries will have to offer something if they want to be part of the new AI era: building land, inexpensive energy and other resources, industry-friendly tax incentives or simply agreements that allow the tech giants to continue expanding their operations.

The narrative governments tell their citizens is that the investments will boost the local economy, arguing that new jobs and development will be the result. At the same time, however, social organisations are increasingly critical of

big tech companies – because of the environmental impacts and other shortcomings in terms of regulations. They rightly ask key questions such as: What long-term effects will the AI data centres actually have for the local population and the natural environment it relies on for its livelihoods? Who will have control over the data? And could AI perhaps be used in a different, more sustainable way? Governments would be well advised to listen to these critical voices to make sure that AI investments don’t end up doing more harm than good.



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Photo: D+C, AI generated

Some AI projects have noble aims. But how useful are they really?

SUSTAINABILITY AND PUBLIC INTEREST

# “The image of AI as a tool is far too simple”

*Does artificial intelligence have more positive or negative consequences for society and the planet? Theresa Züger and her research team have developed an audit method to answer this question for individual AI projects. In this interview, she discusses why AI can be problematic even when it is used in projects with noble goals.*

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THERESA ZÜGER IN AN INTERVIEW WITH JÖRG DÖBEREINER

**You developed a method that should help determine whether a certain AI project is essentially beneficial or harmful. What criteria do you think make sense in this context?**

Our criteria are based on universal human rights and the UN Sustainable Development Goals (SDGs). We also orient ourselves towards other standards, such as the European Union's AI Act, one of the most comprehensive AI laws in the world. We focus on the impact of AI applications on the public interest and sustainability, both of which are well-established social concepts. We ask ourselves: When an AI project has a certain goal related to sustainability, does it reach it? What negative effects could occur? To evaluate that, we use our audit method to examine various dimensions of sustainability, such as social, economic and ecological aspects.

“Many statements that Big Tech companies make about using AI for sustainability are not sufficiently based on evidence.”

**Before we discuss your method in more detail, let's take a look at the context: to what extent is AI already helping to promote sustainability and the public interest?**

First, I think it's important to clarify what we mean when we say “AI”. A rough distinction can be made between generative and non-generative machine-learning models. Generative AI creates new content such as text, video or programming code on the basis of deep learning and in response to textual instructions, so-called prompts. It includes popular chatbots like ChatGPT, Claude or Gemini. Non-generative models, which are used for instance to detect patterns, have been around much longer. These models generally use smaller amounts of data than generative AI.

Non-generative models in particular are already being used in numerous projects that aim to improve sustainability and advance the public interest. For example, they help with biodiversity research by observing animals and evaluating data through pattern recognition. Or they analyse satellite imagery to improve reforestation. Other applications are designed to help reduce climate-damaging

emissions, for instance in building climatisation or during the optimisation of industrial processes.

From a global perspective, however, it is difficult to say how powerful the positive impact of AI is in these fields, also because of the so-called rebound effect. These are changes that negate any savings that have been achieved. For example, if a company conserves resources in one area with the help of AI systems, but then expands elsewhere and consumes more resources, no net savings remain. Such effects can only be determined retrospectively as part of a more comprehensive evaluation.

**But you can't blame AI for that kind of rebound effect.**

True. But you can't blame AI itself for anything. It's always a human decision to use an AI system for a particular purpose, such as conserving resources. The important thing is to look beyond short-term savings. Unfortunately, many aspects of digitalisation have shown that while savings may be possible, they often do not lead our economy to ultimately consume fewer resources. Moreover, many statements that Big Tech companies make about AI serving a sustainable transformation are not sufficiently based on evidence. At the end of the day, while AI can have positive effects, these can only be gauged for individual projects and not easily for the sum of society's AI systems.

**One of the clearly negative impacts of AI on the public interest is its use in the service of disinformation, for instance to manipulate images and videos. But you write that AI has problematic aspects even when it is used for ostensibly “good” reasons. What do you mean by that?**

This point is not meant to question whether AI systems can have positive social effects in specific scenarios. At issue is rather the fundamental dilemmas that are currently associated with the generative AI industry. Generative AI in particular tends to consume a great deal of resources, from energy to water and minerals to disposal as e-waste. Many data workers who train AI and moderate content are poorly paid, work under very precarious conditions and suffer from severe psychological stress. Other important questions relate to global justice: Which nations and industries profit the most from AI? Who is more likely to suffer from resource depletion and poor working conditions? Some researchers are already talking about new forms of colonialism.

**How are advantages and disadvantages distributed in this context?**

Very obviously, it is the “global majority” who is most likely to suffer: People with African, Asian, Latin American or mixed backgrounds who make up the majority of the glob-

al population. Poorer countries, where many of the data workers live but where no large AI industry is located, tend to be disadvantaged. Conversely, Western nations, and above all the USA, are profiting from the affordable labour in these countries and their ability to extract resources and export e-waste there.

We also have to be clear that the AI industry is backed by very powerful people – particularly in the USA – who are advancing anti-democratic ideologies. Elon Musk and others have declared the goal of replacing state apparatuses with automation. Since the beginning of Donald Trump's second term, we've seen that this isn't fiction but rather a scenario that is actively being pursued.

All of this doesn't necessarily mean that we shouldn't use AI. But we should be aware of these issues, particularly when we talk about using AI to serve the public interest. And we should consider how we can change these conditions politically or adapt our individual usage.

#### **Should AI be seen as a tool that can be used for various purposes, beneficial as well as harmful?**

The image of AI as a tool is far too simple. It conceals the enormous complexity behind it. AI is an umbrella term for very different forms of technology. These are connected to each other over a huge network of material structures, like data centres and the industrial infrastructure in which data workers operate. These technologies are also being used under very difficult social conditions that confront us with the dilemma described above when we want to employ AI to promote sustainability and the public interest.

#### **That brings us back to the audit method you developed to evaluate AI projects. How does that work?**

At first, we and our partners, Greenpeace and Gemeinwohl-Ökonomie Deutschland (Economy for the Common Good Germany), identify potential projects and hold preliminary discussions about whether an audit can take place. It's important that an AI system already be in use and not just in the research phase. Then we request documents and conduct interviews. For example, we are interested in the goals the projects are pursuing and how these goals are evaluated. But we also take a look at the technical infrastructure and consider the ecological footprint.

We ask a total of over 200 questions, including: Do users have a way to contact a project directly? Can they criticise a project if they are impacted by an application and notice a problem? How were decisions about the system's design made and on the basis of what arguments? This goes significantly deeper than a traditional impact assessment. We want to understand the context of the pro-

jects more precisely, and to that end we have integrated various existing methods into our model.

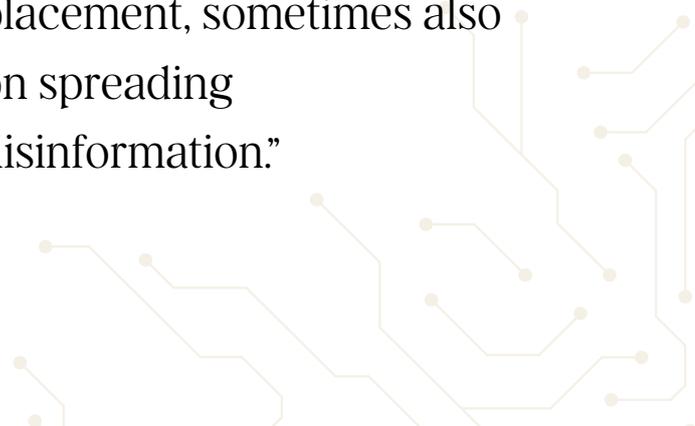
#### **How do you evaluate the data?**

We analyse the content qualitatively and also assess metrics and numbers. Then we evaluate individual aspects of a project using a five-point scale. The criteria are inspired by those that the UN defined for its own AI projects, the UN Principles for the Ethical Use of AI. They include, for instance, the question whether a system is necessary and appropriate, or in other words whether there is a much simpler way to solve the problem at hand. Other aspects play a role too, such as security, discrimination, human oversight, transparency and data protection.

#### **Who is your audit intended for?**

So far, we have audited two projects by established NGOs in the area of AI and democracy: one on fighting disinformation and one on democratic opinion formation. The next will be in the area of administrative digitalisation. To date, we have limited ourselves to projects that aspire to contribute to greater sustainability and promote the public interest. But it would be possible to evaluate other projects using the same criteria.

“Many of the AI systems that we see being used have goals that are completely different from promoting the public interest. Often they are focused on more consumption and ad placement, sometimes also on spreading disinformation.”



**Do you think leading AI companies would be interested in having their own products evaluated according to these criteria?**

In the context of the global trend towards generative AI, we tend to see the opposite: sustainability and the public interest are being put on the back burner. This can even be seen in the Big Tech companies' sustainability reports, which have revised goals that were already set. Many of the AI systems that we see being used have goals that are completely different from promoting the public interest. Often, they are focused on more consumption and ad placement; sometimes also on spreading disinformation. Control and surveillance are also areas of application in which AI development is increasingly running counter to the principles of public interest and sustainability.

But especially because of these developments, Europe has the chance and the responsibility to develop a different vision and ecosystem for AI, which could centre around an alternative democratic and sustainable future.

**LINK**

"Impact AI" project at the Alexander von Humboldt Institute for Internet and Society: [hiig.de/project/impact-ai](https://hiig.de/project/impact-ai)



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# ChatGPT, how would you conduct development policy?

**What should be done when money is short, but problems are big? We asked one of the most widely used AI chatbots one of the most urgent questions in development cooperation. ChatGPT recommends weighing impact and risk like an investor. But read for yourself.**

## CHATGPT IN AN INTERVIEW WITH D+C

*Editors' note: This interview is an experiment that should at best provide food for thought. The answers have sometimes been shortened but not edited for content, for example in the context of a fact check. The AI was not preset or trained.*

### **I would like to talk to you about development policy. What would you do with \$ 100 billion?**

Interesting question. \$ 100 billion is about the level of annual official development assistance provided by major donor countries – enough to catalyse structural change, but not enough to solve “every problem”. I wouldn't treat the money as a single project, but rather as a strategic ten-year transformation programme with clear priorities, leverage effects and measurable goals.

#### **1. Climate & adaptation – \$ 30 billion**

Goal: 200 million people gain access to cleaner energy; measurable reductions in climate risks.

#### **2. Strengthening health systems – \$ 20 billion**

Goal: Significant reductions in maternal and infant mortality rates in priority countries.

#### **3. Education & digital infrastructure – \$ 20 billion**

Goal: 50 million additional children gain access to high-quality basic education.

#### **4. Economy & jobs – \$ 20 billion**

Goal: Millions of productive jobs.

#### **5. Governance & institutions – \$ 10 billion**

Goal: Higher domestic public revenues and better accountability.

\$ 100 billion could also be used radically differently: direct cash transfers (along the lines of GiveDirectly), massive contributions to multilateral funds such as the Global Fund, climate financing through the Green Climate Fund or education partnerships with UNICEF. Each of these options would have different implications for efficiency, visibility, political control and systemic change.

I'm interested in your perspective: Should the money reduce poverty directly, strengthen global stability, reduce migration, protect the climate or primarily encourage economic growth? I would allocate the \$ 100 billion very differently depending on the goal.

### **It should be allocated in such a way that the limited funds deliver the greatest possible benefits to people.**

Then I would prioritise the funds strictly according to cost-effectiveness – in other words, invest where each dollar would produce the largest measurable improvement in lifespan, income or education. That argues strongly in favour of evidence-based measures such as deworming programmes, vaccination campaigns, cash transfers and basic primary healthcare. A portion should also go towards systemic reforms (like tax administration or digital public administration).

### **That's interesting. In your first answer, you focused on climate, and you also would have spent a lot on education and the economy. Why did you shift the focus when effectiveness was at issue? Are the other measures ineffective?**

Good observation – the difference isn't due to the fact that spending on climate, education or the economy would be “ineffective”, but rather the time frame and measurability of the results.

If the goal is “transformation” in general, then investments in energy, education systems or economic structures are plausible. But when you explicitly say “deliver the greatest possible benefits per dollar with limited funds”, then the

benchmark shifts to short- and medium-term measurable, causal effects – and in that area, many basic health and poverty interventions perform extremely well empirically.

The underlying normative question is interesting: Should only the short-term measurable impact count or also structural, long-term changes, despite their greater uncertainty?

### How would you answer this question?

I wouldn't focus purely on the short-term or purely on structural changes but instead take a portfolio-based approach – like an investor weighing risk. A large share (for example 60–70 %) should go to highly evidence-based, immediately impactful measures, because they reliably reduce suffering and are extremely cost-effective. A smaller but still significant share (30–40 %) should go towards structural transformation – like energy infrastructure, institutions or education systems – even if the impact is less certain, because the potential long-term returns in these areas are enormous. I would prioritise measurable short-term impacts, but also systematically co-finance structural levers in order to multiply future gains.

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### How did you arrive at this assessment?

I arrived at this assessment based on three considerations:

#### 1. Moral intuition under conditions of scarcity

When funds are limited, preventable deaths or extreme poverty carry enormous weight. Measures with clearly demonstrated effects often produce huge, reliable improvements per dollar – ethically speaking, this argues for placing heavy emphasis on short-term measurable effects.

#### 2. Uncertainty and risk

Structural reforms (energy, institutions, economy) can have enormous long-term effects, but they are riskier from a po-

litical, institutional and contextual standpoint. Diversification is rational in uncertain environments: one share for reliable returns, one share for long-term bets.

### 3. Intergenerational fairness

Focusing solely on short-term optimisation ignores future generations. Making exclusively long-term investments ignores acute suffering today. A portfolio-based approach balances the two and reduces the risk of moral one-sidedness.

### What is the current situation among the major donor countries? Do their funding allocations line up with your proposals?

Current patterns among major donor countries line up only partially with my proposals. OECD data show that health, humanitarian aid, infrastructure, governance and education are traditionally the largest sectors in official development assistance (ODA). However, a substantial share of ODA is non-structural, like spending on refugees in donor countries or geopolitically motivated transfers. Over time, the share that many donors spend on education has dropped. Spending on health is also declining again after peaking during the pandemic. And governance/political priorities as well as short-term humanitarian aid are once again becoming more important.

That means that my approach – a mix of highly effective basic interventions and long-term structural investments – is being followed to some extent. But in current practice, structural interventions often receive less attention or are overshadowed by geopolitical priorities.

*What do you think of these proposals, dear reader?  
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