

# D+C

MONTHLY E-PAPER

DEVELOPMENT AND  
COOPERATION

ENTWICKLUNG UND  
ZUSAMMENARBEIT

D+C

E+Z

International  
Journal

ISSN  
2366-7257  
October 2018

## TURKEY

President Erdogan's  
era of "zero problems"  
seems very long ago

## PUBLIC IMAGE

People around the world  
want Germany to defend  
international principles

## HUMAN RIGHTS

Sea change looming  
after three decades  
of global progress



# Technology and labour

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## FOCUS

# Technology and labour

## Automation in Mexico

The scope for using advanced technology is great in Mexico. Virginia Mercado of the Universidad Autónoma del Estado de México assesses what impacts the increasing use of robots may have on the country's low-wage economy. **PAGE 22**

## Pros and cons

Digital devices and innovative applications are changing the world economy. Leaders must consider what that trend will imply for developing countries, demands Benjamin Kumpf of the UNDP Innovation Facility. D+C/E+Z's Sabine Balk assesses how the G20 could rise to the challenge of digitally enabled trade. **PAGES 24, 27**

## India's digital revolution

Broad-based debate could contribute to making India a leader in terms of socially inclusive digitalisation. High technology must not leave millions of unskilled people behind, argue Patrick Rütther of the Friedrich Ebert Foundation and Vikrom Mathur and Urvashi Aneja of Tandem Research, a think tank. Aditi Roy Ghatak, a Kolkata-based business journalist, points out that the goal is to improve the lives of 1.3 billion people rather than to create as many billionaire business leaders as possible. **PAGES 28, 30**

## Unprepared

In the Middle East and North Africa, young people struggle to find decent employment. Digital opportunities would be welcome, but the region seems to be missing the global trend towards ever more and ever more sophisticated information technology, warns Nassir Djafari, a development economist. Typically, infrastructure and education remain inadequate. In a similar sense, Uganda's new social-media tax is not what is needed for the nation to grasp the opportunities of digitalisation, writes Edward Ronald Sekyewa of the Hub for Investigative Media in Kampala. **PAGES 32, 35**

## The future of labour

In theory, automatisisation may put African jobs at risk, but so far, it is still cheaper to rely on low-wage workers than to use robots, states Nico Beckert, a journalist. Wilfried Lütkenhorst of the German Development Institute assesses current trends on the basis of his own research as well as several high-profile publications. **PAGES 36, 38**



# Wisdom and foresight

“Industry” and “labour” are words derived from Latin. “Industria” originally meant unrelenting effort, and “labour” meant toil. Since the beginnings of the Industrial Revolution in the 18<sup>th</sup> century, technological development served to increase productivity, making workers’ toil deliver ever greater results. To some extent, traditional jobs became redundant, but before the age of computers and robots, innovation did not threaten employment as such.

That may be changing. A current buzzword is “Industry 4.0”. It stands for several trends that are linked to artificial intelligence, automation and big data. Related trends include the internet of things and cloud computing. It is becoming ever more common to have human beings basically supervising and designing production processes, rather than actually toiling physically.

How this will play out, nobody knows for sure. On the one hand, utopian visions foresee everyone living comfortable lives, free to pursue fulfilling interests, while machines do all the heavy lifting. On the other hand, the dystopian perspective is that masses of people will lose their jobs and thus be condemned to poverty and marginalisation. The danger is that only a lucky few can reap the fruits of Industry 4.0.

At this point, we know that simple and repetitive tasks are the easiest to automate. We also know that people will need a good education to contribute to supervising or designing digital processes. So far, robots are still too expensive to compete with low-wage labour in developing countries. Masses of textile workers in Bangladesh or Ethiopia are not becoming redundant, but that is only reassuring to a rather limited extent. The problem is that the well-known development trajectory that let many countries escape poverty may be becoming unviable. Typically, industrialisation would start with low-wage garment production, with countries gradually acquiring new skills and capacities and eventually catching up with the world market. That is what happened in Germany and Japan, later in South Korea and Taiwan and still more recently – and most spectacularly – in the People’s Republic of China.

What our future will look like will depend on human decisions. Technological progress is not an uncontrollable force of nature, driven by market dynamics. When new problems arose, new institutions and rules were invented to deal with them.

In the late 1880s, Germany’s Chancellor Otto von Bismarck established social-protection systems because he understood that labour unrest would otherwise disrupt the country’s development. In 1970, US President Richard Nixon created the Environmental Protection Agency because he was aware of the growing costs of ecological destruction. Neither Bismarck nor Nixon were progressive leaders. Bismarck was a member of Prussia’s authoritarian aristocracy and outlawed the Social Democrats. Nixon’s presidency ended in disgrace; he had to resign to avoid impeachment. However, the new institutions Bismarck and Nixon invented proved to be of lasting relevance and were copied internationally.

In principle, Industry 4.0 can facilitate a world without hunger, marginalisation and toil. To get there, nation states and the global community will need yet more political innovations. Success depends on the wisdom and foresight of policymakers. Simply trusting in market dynamics does not solve big societal problems – it never did.

► You’ll find all contributions of our focus section plus related ones on our website – they’ll be compiled in next month’s briefing section.



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## Debate



### National disaster

A fire destroyed the main building of Brazil’s national museum in early September. Many thousand items that helped to define the country’s identity went up in flames. The blaze was symptomatic of the profound crisis that Brazil is suffering, argues Carlos Albuquerque of Deutsche Welle, the international broadcaster. **PAGE 10**

## Tribune



### One-man state

Thanks to Turkey’s new presidential system, Recep Tayyip Erdogan, the head of state, is no longer restrained by constitutional checks and balances. His problem, however, is the deep economic crisis. Moreover, international trust in him has dwindled because his foreign policies have been quite volatile. Timur Tinc, a Frankfurt-based journalist, considers Erdogan’s options. **PAGE 15**

### Fighting for human rights

After the Cold War, human rights and democracy were making headway internationally. More recently, the mood has changed. To withstand the trend towards authoritarian nationalism, one must understand what is driving it. Michael Windfuhr of the German Institute for Human Rights assesses the matter. **PAGE 18**



Top leaders at this year's G7 summit in Quebec.

## GLOBAL AFFAIRS

# Do what you preach

**Kishore Mahbubani is a public intellectual with a long track-record of criticising western powers. In a somewhat surprising twist, his latest book praises some of their achievements. He also appeals to them to finally practice the multilateralism they have been preaching for decades.**

**By Hans Dembowski**

Mahbubani, who teaches public policy at Singapore's national university, spells out "the west's" interest in a rules-bound global order in a convincing manner. He emphasises, for example, that the EU has brought about lasting peace on a continent that used to be rocked by wars. At the same time, he warns western governments, whose global hegemony is waning

fast, that they are about to waste a great opportunity.

Explicitly referring to Steven Pinker and his many statistics on child mortality, hunger, war and accidents (see D+C/E+Z e-Paper 2018/07, p. 16), the former diplomat writes that people in emerging markets and developing countries are aware of how positive recent trends were internationally. In his eyes, the west should endorse multilateral policy approaches to ensure that global goals are achieved.

He worries, however, that domestic frustration in view of the west's own relative stagnation is leading to short-sighted and destructive nationalism. He makes it quite clear that US President Donald Trump is undermining his nation's influence rather than making America great again.

Mahbubani praises the west for having replaced feudalism with reasoned policy-making, as well as for overcoming fatalism and driving technological progress. One chapter actually has the title "The gift of western wisdom". However, he declares that Asian, African and Latin American countries have learned those lessons and are applying them. Mahbubani correctly points out that China and India – the world's most populous nations – are set to become its largest economies moreover.

On the foundation of "reasoned thinking", the author argues, economies are growing fast, and "the rest" is catching up with "the west". He points out, for example, that the G7's share of global GDP was 31.5% in 2015, whereas the seven biggest emerging markets together accounted for 36.3%.

Mahbubani declares: "The west has been at the forefront of world history for almost 200 years. Now it has to learn to share, even abandon, that position and adapt to a world it can no longer dominate." The former UN ambassador accuses the west of several serious mistakes in recent years.



western arrogance, he argues, has fuelled resentment in many places, including Russia as well as predominantly Muslim countries.

Generally speaking, western interference in foreign countries' domestic affairs, according to Mahbubani, tends to be "thoughtless" and counter productive. The worst example was probably the Iraq war, which former US President George W. Bush launched on the basis of lies, lacking a mandate from the UN Security Council. Mahbubani appreciates the reasons why many US citizens are appalled by Russian interference in the 2016 elections, but he also emphasises that consecutive US administrations interfered in many elections all over the world.

Instead of trying to impose their will, Mahbubani admonishes western governments: "We can and should strengthen multilateral institutions of global governance, like the UN, the IMF, the World Bank and the WHO to take care of common global challenges." He calls for a new global consensus and elaborates that the "Charter of the United Nations and the Universal Declaration of

Human Rights, which espouse many universal values, can provide the foundation". By living up to multilateral principles, the west can entrench those values, which may then bind the rising powers, Mahbubani argues. Attempts to cynically manipulate global affairs, by contrast, will only speed up western decline.

Western policymakers are well advised to pay attention to Mahbubani. He articulates grievances that are shared by many people in developing countries and emerging markets. That said, readers in the less advantaged countries should carefully check whether everything he writes is really accurate.

For example, he offers no serious evidence for his claims that President Xi Jinping of China feels accountable to his people or that Prime Minister Narendra Modi of India is keen on improving governance. Both leaders are known for restricting the civil-society space and maximising their personal grip on power. China's spectacular successes in the fight against poverty, however, occurred before Xi rose to power (see Nora Sausmikat in D+C/E+Z e-Paper

2017/02, p. 33), and its people are less and less allowed to express criticism.

In India, where courageous journalists are still able to express critical views, some people certainly do not share Mahbubani's assessment (see Arfa Khanum Sherwani in D+C/E+Z e-Paper 2018/05, p. 36). Mahbubani's criticism of the west certainly deserves more attention than his praise for authoritarian leadership.

His definition of good governance as "functional" rather than democratic governance is not convincing. Singapore is an unusual country in the sense that it is known both for comparatively authoritarian rule and comparatively low levels of corruption. To people living there it may seem that strongman-imposed order is benign. In most places, that is not so – at least not in the long run. Dictatorship typically goes along with exploitation and abuse. Developmental dictatorships are the exception.

## REFERENCE

Mahbubani, K., 2018: *Has the west lost it? A provocation*. London: Allen Lane.



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## URBAN DEVELOPMENT

# Inclusive cities

**Cities can foster prosperity and drive development. However, they are often spaces of glaring social inequality. In a research paper for the Sussex-based Institute of Development Studies (IDS), Ivan Turok and Justin Visagie assess what inclusive urban development would mean in South Africa.**

By Monika Hellstern

According to the authors, it is no longer convincing to argue that benefits will trickle down to poor communities when economies grow and additional wealth is created. Hence, the concept of inclusive development has become more popular. It is about promoting economic dynamism and gearing it to equality and social inclusion. The authors identify four main features:

- it goes beyond income, tackling cross-cutting issues such as gender or race,
- it considers who is included or excluded as well as who has the power to change things,
- it looks at the root causes and drivers of poverty and prosperity, and
- it considers social inclusion as part of economic processes rather than merely an outcome.

The study builds on the Rockefeller Inclusive Economies Framework, which offers relevant indicators. Those indicators help understand why an economy is not inclusive and how to steer it towards more equity, participation, growth, sustainability and stability.

In South Africa, inclusive development comes up frequently in national discourse. As Turok and Visagie write, the levels of income and wealth inequality are very high in South Africa, and intergenerational social mobility is low. The unemployment rate is between 26% and 40%, depending on how it is measured. Among young people between the ages of 15 and 24, it is as high as 55%. Moreover, disparities are stark in regard to health, education, housing, access to water, sanitation et cetera.

Spatial disparities are often rooted in history, as Turok and Visagie show. More

than 80% of rural people live below the poverty line of R 1,300 (about € 77) per person and month – twice as many as in metropolitan areas. Two-thirds of rural households depend on social grants. In 2016, more people received social grants than held a job. The government has tried to alleviate suffering by redistributing resources, but it has not managed to set in motion economic progress or social mobility.

Many adults move to the cities in search of jobs. Turok and Visagie's figures show that employment prospects are indeed better in the cities. Internal migrants, however, are vulnerable in specific ways. Many end up in informal settlements with inadequate shelter, poor transport and deficient basic services. To become more inclusive, cities would have to offer affordable housing, basic services and skills trainings.

The authors identify striking race-based patterns of exclusion in South African cities. The incomes of white households are three to four times higher than those of black households. Accordingly, black households are mostly confined to the urban periphery. Commuting thus costs them more time and money. Moreover, the best schools

and health facilities tend to be closer to city centres, where security and recreational spaces are better too.

Home ownership in the cities is unattainable for many non-white households, so spatial segregation leads to social segregation. Cities lack attractive public spaces where people can interact across racial difference. This exacerbates the tendency of different groups leading separate lives, Turok and Visagie warn.

The authors conclude with three priorities for inclusive development in South Africa:

- Active citizenship should be supported by the state, for example when people take initiative to start businesses, migrate in search of jobs or become involved in political affairs.
- Urban agglomerations can boost economic inclusion, so they deserve state support for providing affordable housing and facilitating entrepreneurship.
- Government agencies and the private sector need to collaborate to achieve better results of development projects while also including local organisations and communities.

## LINK

Turok, I. and Visagie, J., 2018: Inclusive urban development in South Africa. What does it mean and how can it be measured?  
<http://opendocs.ids.ac.uk/opendocs/handle/123456789/13770>



The township of Soweto, Johannesburg, with low-income housing in the foreground and more affluent suburbs in the background.

## MIGRATION

## Shared standards

**In July, members of the United Nations agreed the Global Compact for Safe, Orderly and Regular Migration. For the first time, the international community has defined common standards. The compact must now be implemented in tangible policies with specific deadlines.**

By Lea Diehl

The heads of state and government from around 190 member nations are set to sign the compact at a summit in Morocco in December. The USA and Hungary are not on board, however, and whether Australia would join was not yet clear when this e-Paper was finalised in late September.

The compact is an important milestone nonetheless. "It feels like a miracle that the compact has been concluded at all," says Steffen Angenendt, a scholar, who specialises in migration issues. At a conference hosted by VENRO, the umbrella organisation of Germany's developmental and humanitarian non-governmental agencies, in Berlin in September, he pointed out that international cooperation often proves difficult and that migration triggers resentment in many places.

The compact emphasises that migration, if appropriately managed, results in developmental opportunities. The compact lists 23 goals that serve to control migration more stringently, whilst boosting regular migration. An important precondition is to increase investments in education and skills training. Participants in the VENRO event, however, warned that brain drain is a real risk and should be prevented, particularly in the health sector.

Another compact goal is to make migrants' monetary transfers to their countries of origin faster and safer. Yet another goal is to facilitate returning home safely and reintegration into society. Members of migrants' organisations point out, however, that migration is often circular, with individuals travelling several times in either direction.

From a developmental point of view, the second goal is particularly important.

It is to tackle what causes people to flee. It is important to reduce hardships that cause people to leave their homes. At the same time, the compact stresses that migrants and diaspora committees can contribute to the achievement of the Sustainable Development Goals (SDGs), and that such efforts deserve support.

Civil-society organisations appreciate that the compact is not only based on hu-

countries of origin must cooperate at eye level to implement the new standards. In this context, goal 23 should prove useful: it is international cooperation and global partnerships on safe, orderly and regular migration.

Like the Paris Agreement on Climate Change, the new compact is not legally binding. It does not restrict national sovereignty in any way, since governments decide for themselves how to implement the compact.

Migration scholar Angenendt says it remains to be seen what impact the new global agreement will have in practice. In his eyes, it is a compromise that reconciles the diverging interests of many UN member countries. For success to become measura-



**At state-run hospitals in Vietnam, doctors don't earn much money, so many are tempted to look for employment abroad.**

man rights and is even geared to protecting vulnerable population groups. Meike Riebau of Save the Children welcomes the fact that children's rights are mentioned explicitly. Moreover, the compact demands the protection of all people, regardless of their legal status in any given country.

On the other hand, civil-society activists bemoan that the compact basically serves the interests of the global north. They demand that host countries and

ble, it is necessary to define targets and policies. Moreover, clear timelines are needed. "Without deadlines, nothing ever happens," the scholar says.

### REFERENCE

**Global compact for safe, orderly and regular migration (draft):**

[https://www.un.org/pga/72/wp-content/uploads/sites/51/2018/07/180713\\_Agreed-Outcome\\_Global-Compact-for-Migration.pdf](https://www.un.org/pga/72/wp-content/uploads/sites/51/2018/07/180713_Agreed-Outcome_Global-Compact-for-Migration.pdf)



MAFIA

# Gangsters colluding with governments

The international trade in illegal drugs is a multi-billion industry. The war on drugs has not gone well. Masses of people have died, but illegal substances are still available in all of the world's major cities. Thiago Rodrigues, a Brazilian scholar, assesses important dimensions of the policy challenge in a recently published essay.

By Hans Dembowski

The title of Rodrigues' essay is "Symbiotic interactions". It is included in the summer edition of International Reports, the Konrad Adenauer Foundation's quarterly publication. As the author elaborates, the modern notion of the state was initially about the government enforcing its will, establishing a monopoly on the use of violence and

dominance is respected. It is quite obvious that mafia gangs operate in a similar way. They organise crime in a specific area and collect protection money. Like the state, they provide clients with a sense of safety.

Because protection money resembles taxes to some extent, it is often argued that organised crime is a kind of "parallel state" that challenges the official state. Rodrigues disagrees fundamentally. In his eyes, the relationships of mafia gangs and state agencies are mostly symbiotic.

Rodrigues' argument is based on several points:

- The trade in illegal drugs is very lucrative because it is illegal. The experience of past decades proves that the ban does not eliminate demand. People keep buying drugs. Selling the substances is risky, how-

to marginalised youngsters from disadvantaged communities. In Brazil's cities, the drug trade is the dominant industry in some favelas. At the same time, the drugs contribute to sedating their peers.

- The gangs bribe security forces, judges and policymakers. Typically, a precarious equilibrium is found, reducing risks for all parties involved and delivering considerable benefits to the most powerful players. The lives of young recruits from the slums tend to be brutal and short, while the big men live in comfort.

- Prisons serve gangs' networking purposes. In Brazil, top gangsters have even been known to command their fighters from prison cells.

In the last years of Brazil's military dictatorship, that lasted until 1985, drug gangs became involved with radical leftists in prison. As a result, extremist groups became involved in drug peddling and some mafia outfits adopted leftist rhetoric. As Rodrigues convincingly argues, however, such politicisation is the exception, not the norm. He insists that mafia organisations generally accept the predominance of the state.

Only very rarely do drug trafficking organisations challenge the state and demand some kind of sovereignty. They are more likely to wage war on one another than on a country's police or armed forces. On the other hand, the involvement of security forces may well be geared to supporting one gang against another rather than to eradicating organised crime. This is how Rodrigues assesses the Brazilian experience, but it fits many other countries too.

If, as Rodrigues convincingly argues, prohibition of drugs is a root cause of drug-related violence with criminal networks often including state agencies or colluding with them, prohibition needs to be reconsidered. The issue raises difficult questions. Mind-altering drugs are dangerous. Heroin and other opiates often prove deadly. Addiction destroys people and badly affects their families and communities. Rodrigues does not discuss these things, but warns that prohibition may be worsening drug-related problems rather than solving them.

## LINK

Konrad Adenauer Foundation – International Reports:

<http://www.kas.de/wf/en/34.5/>



Whose side are you on? Security forces operating in a favela in January 2018.

collecting money from all those to whom it provided a sense of security. The government made the law, but was not necessarily bound by it. Notions of the rule of law, democratic deliberation and social welfare emerged later.

The principal function of the modern state is to establish its monopoly on the use of legitimate force and make sure its pre-

ever, so those who supply the drugs command higher prices. Dealers profit most from the most potent and most addictive drugs.

- Because of profit margins, in turn, the market is contested, but competition is not about prices. Gangs resort to violence to enforce local monopolies.

- The gangs provide livelihoods and even something like career opportunities



# Men of God fighting each other

In many developing countries, the numbers of evangelical churches keep rising. These churches typically have charismatic leaders. In Uganda, they tend to become rivals in a flourishing business called religion.

All over Africa, churches of so-called “born-again” Christians are mushrooming. They neither belong to the Roman Catholic Church nor to the Protestant mainstream of Lutherans, Anglicans, Presbyterians et cetera. In Uganda, evangelical churches have florid names like “Evangelical Truth Ministry” (ETM) or “Miracle Centre”.

The pastors usually insist on literal interpretations of the bible, and their personal authority is not restrained by any major organisation. Some faith leaders are clearly business-oriented and focus on collecting donations. Around the world, charismatic evangelical pastors are known to have become quite rich.

In Uganda, evangelical churches are spreading fast. One example is the Kampala neighbourhood of Najjanakumbi, which is close to the central business district. It has a Catholic and an Anglican church – plus 23 evangelical churches.

Believers give money or material goods to churches, says Veronica Mukasa, who is a member of a Najjanakumbi church. Many pastors openly demand money from worshippers. “The notion is, more followers – more money,” Mukasa explains.

Sometimes conflicts between evangelical leaders originate from financial matters. Pastor Julius Okwii of the “Glory of Life Ministry” describes some other evangelical leaders as “greedy and exploitative”, accusing them of “luring people into their congregation and ripping money off believers” rather than preaching the gospel.

A local evangelical radio station recently broadcast a renowned city pastor turning vulgar. He insulted other pastors. A woman backed him up, claiming that another popular preacher was faking faith healings. Her story sounded somewhat rehearsed however. In any case, listeners who were expecting inspirational Christian messages found themselves listening to verbal attacks.

Brother Ronnie Makabai is another prominent pastor. He runs a broadcast station, reaching out to millions of worshippers. Some say that he is a charlatan, but in spite of such publicity, many believers flock to his church in hope of healing and deliverance. Every Thursday, thousands of sick people from all over East Africa gather at Brother Ronnie’s “Peace Centre” for healing. Many claim to have been cured after a simple touch by Brother Ronnie.

William Baluku, a worshipper at the “Miracle Centre”, knows that there are disputes between faith leaders. But he points out that prayers bring peace and harmony to families and communities. “Many people see churches as shelters for healing, deliverance and financial breakthrough.” In his eyes, it is “safer to turn to God than to witchcraft”.



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## IMPRINT

D+C DEVELOPMENT AND COOPERATION

Vol. 45, 2018

D+C is the identical twin of the German edition E+Z

Internet: [www.DandC.eu](http://www.DandC.eu)

D 12 107 ISSN 0721-2178

D+C Development and Cooperation is funded by Germany’s Federal Ministry for Economic Cooperation and Development and commissioned by ENGAGEMENT GLOBAL. D+C does not serve as a governmental mouthpiece. Our mission is to provide a credible forum of debate, involving governments, civil society, the private sector and academia at an international level. D+C is the identical twin of E+Z Entwicklung und Zusammenarbeit, the German edition.

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FAZIT Communication GmbH

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Frankenallee 71–81, D-60327 Frankfurt am Main, Germany

This is also the legally relevant address of all indicated as responsible or entitled to represent them in this imprint.

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Layout: Jan Walter Hofmann

Translators: Malcom Bell, Claire Davis

Disclaimer according to § 5,2 Hessian Law on the Freedom and Rights of the Press: The shareholders of the company are Frankfurter Allgemeine Zeitung GmbH (40 %) and Frankfurter Societät GmbH (60 %).

ADVERTISING AND SUBSCRIPTION SERVICE:

FAZIT Communication GmbH

c/o InTime Media Services GmbH

PO Box 1363

D-82034 Deisenhofen, Germany

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[fazit-com@intime-media-services.de](mailto:fazit-com@intime-media-services.de)

PRINTING:

Westdeutsche Verlags- und Druckerei GmbH

Kurhessenstraße 46

D-64546 Mörfelden-Walldorf, Germany

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PRICES (INCL. MAILING CHARGES):

single issue: € 2.20

annual subscription, Germany: € 14.00

annual subscription, world: € 18.00



## CULTURAL LOSS

# National disaster

**In the night from 2 to 3 September, a fire destroyed the main building of the Museu Nacional, the National Museum in Rio de Janeiro. Irretrievable exhibits were lost, parts of the national memory were destroyed. The fire is symptomatic of the country's current state.**

By Carlos Albuquerque

On the morning of 3 September, a professor of literature at Rio's Federal University posted a message on her Facebook page: "Guys, nothing has been saved from linguistics. We lost the entire collection of indigenous languages: the songs in many languages without live speakers, (...) the original ethnic-historical-linguistic map with the location of all ethnic groups in Brazil, the only record we had dating back to 1945, the ethnographic and archaeological references of the Brazilian ethnic groups since the 16<sup>th</sup> century ... In short, an irreparable loss to our historical memory. It hurts too much to see everything in ashes."

The fire is estimated to have destroyed 90% of the museum's collection of 20 mil-

lion objects. But the tragedy did not come out of the blue. As recently as April this year, Alexander Kellner, the museum's director, drew attention to the wretched state of the institution. Although it owned one of the most important natural-history collections in Latin America, water was dripping from ceilings. The Museo was operating well below capacity, registering far too few visitors a year. Kellner wanted to change things.

The bitter irony is that an agreement was reached in June for a financial injection of 21.7 million reais (around 4 million euros) to be made by the Brazilian Development Bank (BNDES). The first payout (3 million reais) was due in October. Kellner planned to use some of the money to improve fire safety. The Museo lacked a fire safety certificate and should actually not even have been open to the public at all. Without sprinkler system, fire alarms and adequate water pressure for hydrants, the 19<sup>th</sup> century building had no protection from the flames that devoured it.

This tragedy reflects the sorry state of affairs that has marked Brazil for several years. The country is struggling. It is losing

its past, present and future while its people sleep. The day after the fire, hundreds of people invaded the gardens of the burnt-out building, and thousands later took to Rio's streets waving placards with messages such as "A people with no public spirit and no history". I felt that the presence of an absence was never so acutely felt.

President Michel Temer spoke of an "incalculable loss". Culture Minister Sérgio Sá Leitão blamed previous governments and Rio's Federal University, to which the museum formally belongs, for its sorry state and the lack of investment, but he did not assume any responsibility himself.

The fire became a political issue and drew attention to the state of other culturally relevant institutions in Brazil. The Federal Prosecution Office sought a federal court order for the immediate closure of six state museums in Rio. They too are operating without a fire safety certificate. On the other hand, the fire highlighted the desperate state of Brazil's cultural policy: only two of 13 candidates in the upcoming presidential elections have included specific museum-related proposals in their campaign manifestos.

The fire was a wake-up call. It has focused people's minds, made them culturally and also politically more aware. The far-right presidential candidate Jair Bolsonaro is now more closely scrutinised and seems to be losing approval among certain groups of voters such as women. Bolsonaro responded with scorn to the museum fire. Culture does not figure in his manifesto at all. One day after the fire, Bolsonaro was stabbed and seriously injured. The assailant's motive is still unclear. The fact that Bolsonaro now presents himself as a victim further fuels the polarisation of the Brazilian electorate that he has fomented.

One small consolation about the National Museum is that at least some of the documents in the ethnographic collection were digitalised and are thus not completely lost. And there is still hope that the skull of "Luzia", the oldest homo sapiens fossil found in America, may yet be found in steel cabinets in the rubble.



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Irretrievable losses: Rio's Museu Nacional went up in flames.



## DEMOGRAPHIC CHANGE

# Progress may not be sustained

**On average, people in Benin can expect to live 23 years longer than their grandparents could when the country became independent from France in 1960. It is worrisome, however, that poverty rates have been increasing in recent years.**

**By Karim Okanla**

In Benin, the average life expectancy has increased from 37 years in 1960 to more than 60 years today. However, there are still big discrepancies between urban and rural areas. In the big urban agglomerations of Cotonou and in smaller towns like Porto Novo, Ouidah or Parakou basic social-service infrastructure exists, including hospitals, laboratories for clinical tests or pharmacies. During immunisation campaigns, many people are vaccinated free of charge. Maternity clinics ensure that babies are also provided with free immunisation.

People living in villages are disadvantaged, however, especially in the remote areas of the north. They are generally denied access to the most basic health services. Women there often give birth at home, which increases the risks of death for both mother and baby.

In 2015, 405 women died per 100,000 live births, according to UN data. In comparison, the maternal death rate was 576 in 1990. Of 1,000 babies, 65 died in 2015. The figure for 1990 was 107. On average, women still have 4.6 children, two fewer than in 1990, World Bank statistics show.

According to UN, about three quarters of the people had access to safe drinking water from an improved source in 2008, but only 12% had access to improved sanitation. This is worrisome since safe drinking-water supply cannot be guaranteed in the long run if sanitation stays poor.

Making matters worse, only very few medical doctors are prepared to serve in villages that lack electric power and safe water supply. Moreover, non-communicable diseases such as cancer, diabetes or and hypertension are hard to diagnose in places that lack modern technology and specialists. In

rural areas, antibiotics and other life-sustaining drugs are not always available. In the cities, poor people may be unable to afford them.

On the other hand, some trends have been promising in past decades. Yellow fever has almost been eradicated. Meningitis has become rare. The prevalence of two tropical diseases, sleeping sickness and yaws, has been reduced considerably. Mobile health clinics have been making a difference even in rural areas.



**A doctor examining a child at a hospital on the outskirts of Cotonou.**

Statistics in Africa are not always reliable however. They may not reflect the whole picture. It is bewildering that the number of graveyards seems to be multiplying, and masses of caskets are on sale by the roadside. Sometimes it looks like most urban people in Cotonou, Porto Novo and other towns spend their weekends burying their dead. This impression may be a consequence of population growth. Benin has more than 11 million people today – almost twice as many as in 1995. The cities have grown in particular, so more deaths need not be a sign of worsening living conditions.

On the other hand, poverty has recently been becoming worse, and that may have

an impact on life expectancy. Many people lack sufficient resources to adequately feed themselves and access appropriate health-care services.

According to a UN Development Programme report of 2014, monetary poverty has increased in Benin, and progress in health-care delivery and education was not enough to sustain higher life expectancy in the long run. In other words, the progress made did not look good enough in the eyes of the UNDP.

The World Bank paints a similar picture of Benin. It reports that poverty is on the rise in spite of moderate annual GDP growth rates of four to five percent over the past two decades. The national poverty rate, according to its data, was 35% in 2009 and 40% in 2015.

Part of the problem is that the informal sector makes up about two thirds of the economy, employing more than 90% of the work force, according to the World Bank (also see my essay in D+C/E+Z e-Paper 2017/11, p. 16). “Benin’s economy relies heavily on its informal re-export and transit trade to Nigeria, which makes up roughly 20%,” the Bank states. To fight poverty in a sustainable way, Benin’s economy must modernise.



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KOFI ANNAN

# Special relationship with Africa

**Kofi Annan is regarded as one of the UN's most successful Secretaries-General. A Ghanaian by birth, he always had a special relationship with Africa. But his agenda was not at all times well received on the continent. Annan died on 18 August 2018 in Switzerland aged 80.**

**By Friederike Bauer**

Kofi Annan was elected to the highest office of the United Nations in 1996 with a strong endorsement from the USA. He held the office for ten years. With his exceptional polyglot background, he was seen at the time as the prototypically credible UN diplomat. Because of the circumstances of his election, however, he was also considered "America's poodle". He seemed charismatic but also conflict-shy, popular but also easily influenced by Washington.

Accordingly, African opinion was divided on Secretary-General Annan. Off the record, an African at the UN said back then: "He is not really one of us." He was particularly not forgiven for his failure to prevent the Rwandan genocide in 1994, or at least take some meaningful action against it. At the time, he was the UN-Undersecretary-General for Peacekeeping Operations.

When he visited Rwanda later on, then already as Secretary-General, he got a cool reception. In parliament, there was stony silence when Annan entered the chamber to deliver a speech.

His "war on AIDS" in the late 1990s was another divisive issue. It may have won him favour in the west but not necessarily in Africa. Though infection rates were particularly high across the continent, some government officials were still recommending garlic as a remedy for AIDS back then. Annan stuck to his guns and told a press conference in the presence of then South African President Thabo Mbeki, one of the most prominent AIDS deniers, that it was high time to face the facts and change course.

The reaction of the political elite was similarly subdued when Annan presented a report on the causes of conflict in Africa in

1998. Thirty years after gaining independence, he wrote, the African continent had to look beyond its colonial past, which in itself was not a sufficient explanation for Africa's many crises. Speaking bluntly, he warned that "corruption, nepotism, complacency and abuse of power" mattered too. His words were not music to all African ears.

Annan himself in contrast was fully aware of his African identity. He prided himself on having done more for Africa than for any other region in the world. During his time in office, he launched a reform for peacekeeping operations to avoid another disaster like Rwanda's. He persuaded the members of the UN to adopt the "responsibility to protect" civilian populations from mass crimes.



**Kofi Annan visiting Rwandan genocide memorial as UN Secretary-General in 1998.**

It was also at Kofi Annan's initiative that a Global Fund to Fight AIDS, Tuberculosis and Malaria was set up in 2002. But his greatest achievement was perhaps the adoption of the Millennium Development Goals (MDGs) in 2000, which evolved into the Sustainable Development Goals (SDGs) in 2015. The MDGs were universal in scope but directly targeted Africa. The MDGs were a world's first: eight tangible objectives to overcome the worst evils of our time – scourges such as hunger and poverty. "I think I have made a contribution by putting development, poverty and hunger firm-

ly on the international agenda," Annan said towards the end of his tenure.

Despite his international career, Annan always felt close to his home continent, as he once told this author in an interview. He described his childhood in Ghana as the "most formative time" of his life; he was "deeply rooted" in Africa, he said, and felt a constant longing for its climate, its landscapes and its people.

Yet Annan spent only around 25 of his 80 years in Africa. The rest of his life was divided mostly between the US and Europe, where he began his career as an administrative officer with the World Health Organization (WHO). Annan started out at the lowest staff level for university graduates. Over the next 35 years, he climbed the career ladder to the highest UN office. He was not only the first black African to be appointed to the post, he was also the first – and so far only – UN Secretary-General to ascend through the ranks within the organisation. What is more, he was the first UN chief to be awarded the Nobel Peace Prize during his lifetime.

The times when Africans viewed Annan critical are long past. Instead they became reconciled with this celebrated policy-maker. Detractors are rarely heard anymore. On the contrary, after his death Annan seems to have been placed on a pedestal right next to Nelson Mandela – universally admired and a source of inspiration.



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## REFUGEES

# The west is not adhering to its values

**How the west treats refugees is disgraceful and irresponsible. It is unacceptable to see ships full of Africans, some of whom need medical care, cruising off Italy's coast. They are not allowed to enter a port, because the new populist government in Rome does not want them and the EU is incapable of finding a solution. Too many refugees, moreover, drown in the Mediterranean Sea because their rescue is politically not wanted.**

By Katja Dombrowski

In the USA, government officials separated hundreds of migrant children from Latin America from their parents when they entered US territory. They failed to thoroughly document the proceedings and are now unable to reunite all families, although a court judgement obliges them to do so. Some parents have been deported and apparently cannot be reached. On both sides of the Atlantic, administrative harassment, precarious housing and questionable deportations are all too common.

There is a huge gap between ambition and reality. On the international stage, the west upholds its values and – rightfully – insists on human rights being universal. It is part of the west's self-perception, moreover, to act not only legally, but also morally. Both implies adherence to human rights, including the Geneva Convention on Refugees, and humanitarian principles. Simply spoken, it means helping people in need. US President Donald Trump's "zero-tolerance" policy is pretty much the opposite.

His attitude is prevalent in parts of Europe too. It is supposed to protect citizens. But although many people fear that refugees are dangerous, that is not so from an objective point of view. One million people per year that come to the EU, which has more than 500 million inhabitants, do not threaten Europe's foundations. They will not ruin us financially, nor will they overburden our infrastructures or social

systems. Their languages, traditions and religious faiths will not displace ours. Migrants do not steal jobs – on the contrary, additional workers would be quite helpful

the absolute essentials. More than 700,000 Rohingya are stranded under dreadful conditions in Bangladesh. In Latin America, 2,3 million Venezuelans have fled to neighbouring countries. According to the UN, there are 250 million refugees worldwide.

All of them concern all of us. Indeed, the international community recently agreed a global compact for migration. It is set to be adopted in December (see article p. 7). While it is not legally binding, it does spell out important guidelines to protect migrants. Almost all UN members are part of it. The USA however is shying away from its



African refugees arriving in Tarifa, Spain, in July 2018.

in ageing societies. Finally, statistical data from North America and Europe prove that, on average, migrants commit fewer crimes than a nation's citizens. Xenophobic fears are irrational – but powerful. Some politicians take advantage of them. It is not the refugees who divide Europe, but nationalist and populist leaders, some of whom hold governmental positions.

Compared with other world regions, Europe's problems are small. Millions of Syrians have fled to Jordan, Lebanon and Turkey, where they are provided only with

responsibility, just as it did when pulling out of the Paris climate accord. In response, the rest of the world must take the compact seriously. The EU could – and should – assume a leading role instead of further disgracing itself.



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# Letters to the editor

## TRADITIONAL SWEET POTATO HAS DISAPPEARED

D+C/E+Z e-Paper 2018/06, p. 10:

**Raphael Mweninguwe: Local seeds resist climate change better**

The article touched me because I have been an advocate of improving our Malawian farming. Most of our traditional seeds have been lost. It is not only the seeds. I have fond memories of local sweet potatoes from Nsanje. I used to enjoy them, but now the variety is nowhere to be seen. Foreign ideas and ideologies are not more reputable than promoting local varieties. I would suggest funders of agricultural schemes should identify local indigenous partners or stakeholders who can work independently to revive and promote local varieties. I am ready to start the promotion of manure and local cassava cuttings as I have a great passion in organic agriculture.

**Jonathan Kandodo, Machinga, Malawi**

## DECISIVE GAP

D+C/E+Z e-Paper 2018/07: Focus section: Climate change

I am sorry to say that the decisive issue is not among the three things you list in your editorial. I once wrote guidelines on how to consider climate change appropriately when planning development projects. It struck me that we need comprehensive and decentralised transfer of know-how to facilitate climate proofing internationally. The World Meteorological Organisation has raised such demands; and it uses the term "climate service centres".

A billion-euro effort is needed to promote know-how around the world. Otherwise, it will prove impossible to design infrastructure in ways that meet the challenges of climate change. Germany, by the way, needs to do some homework too. In 2017, two official strategies on standard setting were published here, but neither one even mentions climate change. To raise awareness, a lot needs to happen at the domestic level.

**Dr. Hans-Jochen Luhmann, Wuppertal**

## CHILDHOOD AND LANGUAGE POLICY

D+C/E+Ze-Paper 2018/04, Focus section: Tough childhood

The contributions in this section do not pay attention to the issue of language, or only do so in a rather rudimentary way. In childhood years, when schools lay the foundations for adult life, the pupils' linguistic background matters very much in many African, Asian and Latin American countries. When chil-

For as long as possible, an educational system should use the language that the children are most familiar with. Experts generally agree that this principle should apply at least to elementary teaching subjects like reading, writing and arithmetic.

In the eyes of the ruling elites, however, non-African languages have a particular appeal. They make sure that their own children are taught in – and thus learn – the official languages. Typically, they argue for



**In rural areas, African languages predominate, and children normally do not speak English, French or Portuguese: pupils going to school in Burkina Faso.**

dren first go to school, many of them hardly speak the medium of instruction, and some do not do so at all.

Especially in sub-Saharan Africa, success and failure in formal education depend on language policies. UNESCO and other organisations have pointed out time and again that only a few children are familiar with English, French and Portuguese, the languages that were imposed in colonial times. Particularly in rural areas, African languages predominate.

those languages to be used as early as possible. Even when African languages were promoted as medium of instruction, for example by the GIZ (in countries like Ghana, Namibia, Malawi, Niger and others), government decisions later reversed that course. This happened in Malawi in 2013, when English was made again the school language from grade one onwards, and, about ten years ago, when Rwanda introduced English as school medium practically overnight.

**Prof. Dr. Karsten Legère, Vienna**



TURKEY

# One-man state

**In June, Recep Tayyip Erdogan became head of state in Turkey's new presidential system, which grants him enormous powers. But the country is in the midst of a veritable economic crisis. Erdogan has his back against the wall — this time without a scapegoat whom he can make responsible for his home-grown problems. On top of everything else, his shifting alliance policy has destroyed trust in Turkey abroad.**

By Timur Tınç

When Recep Tayyip Erdogan was elected president on 21 June 2018, Turkey bid a final farewell to democracy and the rule of law. The former parliamentary republic has become an authoritarian one-man state. The new presidential system grants the 64-year-old greater authority than any elected leader has ever possessed in the country's 95-year history.

For two years following a failed coup d'état, a state of emergency was in place that allowed Erdogan to rule by decree. These special rights have now been converted into ordinary laws. In other words, the state of emergency has been declared permanent. Consequently, Erdogan can appoint governors, impose curfews, forbid protests and demonstrations, shut down associations and more closely monitor individuals and communication. Erdogan can also appoint

12 of the 15 constitutional judges. He is the commander-in-chief of the armed forces. He chooses the ministers and is the leader of the conservative Islamic Justice and Development Party (AKP). Parliament has been reduced to simply rubber-stamping his policies. There are no checks and balances as are typical of the presidential systems in France and the USA.

Nonetheless, the snap election in June did not unfold quite as Erdogan had hoped. Receiving 42.6% of the vote, the AKP fell six seats short of an absolute majority in the 600-member parliament. It was forced to enter into a coalition with the extreme-right MHP. In response, Erdogan sharpened his tone towards the Kurdish HDP, which, in spite of all reprisals, once again managed to clear the 10% hurdle and is thus represented in parliament once more. Shortly after the election, Erdogan was quick to threaten cities in south-eastern Turkey whose municipal administrations are led by HDP members that they would "pay the price" for allegedly passing on tax money to the terrorist organisation PKK.

Erdogan would actually welcome a new flare-up of the Kurdish conflict because it would distract from Turkey's most urgent problem. The currency crisis has become a full-blown economic crisis. "Give this brother of yours the authority and he

will show you how to deal with interest rates and all the rest," Erdogan had boasted before the election. The reality looks different. The lira is in free fall. In August, the inflation rate rose to 17.9%. Turkey is facing stagflation, a situation in which economic growth slows while consumer prices rise. The private sector is already having enormous difficulties servicing its foreign, dollar denominated debts (see E+Z/D+C e-Paper 2018/09, p. 13). The next few months could bring company closures and redundancies.

## CONFORMIST MEDIA

Many people in Turkey are totally unaware of the economic drama's ramifications because they are being lied to on a daily basis by the largely conformist media. "Foreign powers" and the "interest lobby" are being painted as the guilty parties. In fact, it was Erdogan himself who sparked the currency crisis by casting doubt on the autonomy of the Central Bank and publicly rejecting the interest system. Nevertheless, even an autocrat cannot flout economic logic forever. The various financial injections Qatar has given Turkey are not the solution, nor does it help that Erdogan supporters have been exchanging their dollars for lira.

The Turkish economy is also being put under pressure by the government's tensions with the USA. The root cause is the detainment of Andrew Brunson, the American pastor. He is accused, absurdly, of supporting terrorism. Erdogan has a tendency to declare anyone who opposes him an "enemy of the state". This approach has destroyed trust in the independence of the judiciary once and for all. Erdogan has long wanted to exchange Brunson for Fethullah Gülen. Gülen is a controversial Turkish imam who lives in the US, and whom Erdogan blames for the attempted coup d'état of 2016.

US President Donald Trump responded to Brunson's arrest with massive sanctions. The US has demanded a resolution of this issue by mid-October. Otherwise, tensions between the two countries could escalate.

The Turkish president is in a tighter spot than he has ever been before. And whenever he finds himself in a difficult position, he is known to perform a political about-face. In the past, for instance, he criticised China for persecuting the Uighurs, styling himself as a protector of the Muslim minor-



**President Recep Tayyip Erdogan has more power in his hands than any elected statesman in the history of Turkey.**

ity. Now that he faces a financial crisis, he has dropped the issue. His reward came in July: a loan from China to Turkey, amounting to \$3.6 billion. His sudden overtures towards the European Union (EU) also come as no surprise – the very EU that he had long since turned away from, whose countries he accused of using Nazi practices and whose citizens he is keeping as political hostages, including German journalists.

The EU has no interest in allowing Turkey to slide into a full-fledged economic crisis because its banks have issued sizeable loans to Turkish financial institutions. If the loans are not serviced, the EU will get in trouble. Furthermore, the EU needs Turkey to act as a buffer to prevent even more refugees from coming into Europe and thereby strengthening right-wing forces. Moreover, Turkey depends on EU investments and cannot afford to be completely isolated. That is why it cannot assume a position of strength with regard to the EU in spite of the refugee problem. Europe now has an opportunity to exert pressure on Turkey and demand that it comply with the rule of law, particularly when it comes to its own citizens. The option of Turkey joining the EU is not even discussed anymore.

Another trouble spot for Erdogan is the war in Syria. In mid-September, he reached an agreement with Russian President Vladimir Putin to create a demilitarised buffer zone in the Syrian region of Idlib. In doing so, the leaders averted the risk of another humanitarian crisis for the time being. An attack by Syrian and Russian forces would result in millions more refugees. Turkey has already taken in 3.5 million people who have fled from Syria or Iraq. Despite the provisional agreement, Turkey faces grave dangers. What will the jihadist groups do who have already reached the Turkish border? What will happen with those who are still fighting in Syria? And what will be the reaction of the PYD, the Syrian offshoot of the PKK?

The Turkish opposition can't capitalise on any of these problems. Their work is either being hindered by arrests, as in the case of the HDP, or is not receiving any media attention, as in the case of the İyi Parti (the Good Party). What's more, the largest opposition party, the CHP, looks torn by infighting. Its leader, Kemal Kilicdaroglu, is adamantly refusing, after yet another failed campaign, to make way for Muharrem Ince, who received over 30% of the vote in the presidential election. Many hoped that Ince

would be a breath of fresh air. The results of his party at the parliamentary election were relatively poor – they only got 22.6% of the votes. At the presidential election Ince himself got even votes from other parties' supporters. But the rising star Ince died down as quickly as the Turkish lira lost value.

Despite all the power he holds, Recep Tayyip Erdogan is facing the most difficult moment of his political career. His aggressive policies have put off allies like the US and the EU. Instead of single-handedly building relationships with a variety of countries, the only room to manoeuvre that he still has in foreign affairs is exploiting the weaknesses of other states and the conflicts that they have with each other.

There is no scapegoat that he can blame for the economic crisis. Ultimately, everything will depend on when his voters begin to ask questions and how they react when they discover that they have no more money in their pockets. Only once they take to the streets will Erdogan's system begin to crumble.



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## INTERNATIONAL RELATIONS

# A call for global engagement

**Germany is well respected worldwide. As a recent study by GIZ shows, many people from around the globe want the German government to uphold with confidence values like democracy, human rights and multilateral cooperation.**

**By Sabine Tonscheidt**

Starting in the new year, Germany will be a member of the UN Security Council for the sixth time, allowing it to actively influence world politics at the highest level. The vote took place in June. Germany immediately won an overwhelming majority in the first round: it received 184 out of 190 votes

in the General Assembly for one of the ten seats reserved for non-permanent members.

The vote can be taken as a sign of confidence. And it echoes the results of a study done by GIZ on how Germany is perceived abroad. The study shows that Germany has become a respected and appreciated member of the global community. Nevertheless, in the eyes of the world, the country would do well to act more decisively on the international stage.

In 2017, for the third time in six years, GIZ asked 150 experts on Germany from every continent about their views of the country. It compiled around 4,200 qualita-

tive statements and responses that provide an impression of how Germany is perceived abroad. One major finding was the clear wish on the part of respondents for greater German engagement – more and more strongly expressed from study to study. The consensus was that Germany is needed now more than ever as a guardian of western values, a proponent of international cooperation and a well-meaning advocate of active multilateralism.

## FILLING THE VACUUM

Many people want Germany to act as a counterweight to the US, Russia and China, which are now, each in their own way, harkening back to narrow definitions of national interests and occasionally exhibiting Cold War reflexes. A rise in populism and threats to free trade, combined with the reshaping of international power-sharing and burden-sharing arrangements, further increase the



Images like this one have boosted Germany's reputation: a refugee taking a selfie with chancellor Angela Merkel.

need for Germany to take on a stronger role. Survey participants said that a political vacuum has emerged internationally, not least due to the actions of US President Donald Trump. They only trusted a few states to stand up to him, including Germany.

Changes in the international scenario have resulted in more and higher expectations of the middle power at the heart of Europe. The expectations relate to issues ranging from peace and security to development cooperation and climate protection.

However, people do not want Germany to take on an isolated leadership role, but rather a collaborative one within the EU context. Germany can and may pursue its legitimate interests, but it should express them clearly and consider that this is best done by striving for the greater good. Germany should act as a "soft power" with international influence, able to actively promote peaceful coexistence and cooperate with others on rising to our era's great challenges.

A typical statement from Brazil reads: "When I think of Germany, I see its important and stabilising role within the EU and regard it as a major counterweight to the USA under Trump." In India, a respondent observed: "From a historical perspective, it is inevitable that Germany will take on a leading international role in the future."

And a Canadian stated that "Germany has the opportunity to ... enhance international cooperation on security, the environment, climate change and free trade."

In order for Germany to muster the courage to take a more active role in global policy, it must "emerge from the shadow of the past", respondents frequently recommended. Germany's history is a fact and must never be forgotten, but instead of continuing to be a limiting factor, it should become a motivating one. Precisely the way it addressed its totalitarian history was what makes Germany a credible champion of international cooperation in the eyes of the world.

### A CULTURE OF WELCOME

One issue that has deeply divided public opinion in Germany seems to have inspired particular faith in the country internationally: the acceptance of refugees starting in September 2015. The situation might have caused domestic turmoil, to put it mildly, but to the outside world, the culture of welcome did not harm Germany's reputation. On the opposite: it inspired new respect for – and trust in – the country.

That does not mean that related difficulties are being overlooked. People in other

countries are certainly aware of the problems, and they believe that Germans' general outlook should become yet more open and international. In any case, the treatment of refugees has softened Germans' image as a capable, efficient and sometimes hardened people and added a new characteristic of a global humanitarian citizen.

Participants in the study want to see Germany exhibit more of that attitude in every arena, from the global energy transformation to respect for human rights, and in every body, including the UN Security Council.

The expectations are high. And they are remarkably uniform: according to the GIZ study, the era of German restraint is over. What is in demand now more than ever is visionary and active international cooperation.

#### LINK

GIZ, 2018: Germany in the eyes of the world.  
[https://www.giz.de/en/downloads/180509\\_giz\\_d-studie3\\_EN\\_rz\\_02\\_web\\_rgb.pdf](https://www.giz.de/en/downloads/180509_giz_d-studie3_EN_rz_02_web_rgb.pdf)



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Presidents with authoritarian tendencies: Donald Trump and Vladimir Putin.

## A worrisome trend reversal

**After the end of the Cold War, democracy and human rights were gaining ground worldwide. Lately, however, the mood seems to have shifted. In order to resist the trend towards authoritarian populism, it is important to understand its causes.**

**By Michael Windfuhr**

After the end of the Cold War, the World Conference on Human Rights was held in Vienna in 1993. It delivered a new and powerful acknowledgement of the fact that all human rights are interrelated, indivisible and universally applicable (see box, p. 20). The canon of human rights has since become more specific and was even expanded to include new topics (such as racism, torture, migrant workers and forced disappearance) and groups (such as women, children and the disabled). In many instances, relevant principles have trickled down into

national legislation, new constitutions and jurisprudence.

The 1990s were a decade of change. Democracy seemed to be taking hold worldwide. The UN organised a series of world conferences, which fed the hope that the key challenges of the future would be solved in multilateral settings. Examples include the Earth Summit in Rio in 1992, the World Conference on Women in Beijing in 1995, the World Summit for Social Development in Copenhagen in 1995 and the World Food Summit in Rome in 1996.

These conferences did not only establish guidelines for national and international policymaking, they also drove the growth of a global civil society. That trend too shaped many countries. The number of civil-society organisations rose quickly. Simultaneously, important framework agreements on economic globalisation were created. The World Trade Organisation

(WTO) and the North American Free Trade Agreement (NAFTA) both emerged in 1994 and the European Single Market came into being in 1993.

Today, the basic mood is very different. The number of countries in which authoritarian tendencies can be observed is increasing. New laws are restricting people's freedoms in many places. A new, authoritarian nationalism is casting doubt on multilateral cooperation.

Of course, the question of whether we are experiencing a fundamental trend reversal is up for debate. Development progress of the type that Hans Rosling and Steven Pinker impressively document in their books should not be overlooked (see e-Paper 2018/9, p. 39 and 2018/7, p. 16). It was good that both the Paris Climate Agreement and the Sustainable Development Goals (SDGs) were adopted in 2015. Currently, 56.5% of all people live in countries that are categorised as democratic. Elections are widely recognised as the basis for legitimate governance, although voting is now being manipulated in many countries. Political scientists like to point out that the talk of democracy being in crisis is as old as democracy itself.

Nevertheless, the observation is fully justified that a trend reversal is taking place. It makes sense to use this term in order to assess current events. Resistance to the present form of global multilateralism is growing, acceptance of democratic institutions is declining, and civil-society organisations' scope for action is becoming ever more limited. President Donald Trump is living proof of the fact that even in the U.S. respect for an independent judiciary and a free press can no longer be taken for granted.

But democracy and human rights remain essential prerequisites for rising to global challenges, as the SDG agenda has clearly spelled out. If we want to resist the authoritarian-populist trend, we have to understand why the optimism of the 1990s has turned to pessimism in so many cases.

## SIX PROBLEMATIC DEVELOPMENTS

Six, to some extent interrelated trends have changed the atmosphere:

1. Economic globalisation was driven by radical market-orthodoxy and has progressed fast. It has substantially weakened state power. After privatisations, deregulations and the cutting taxes and tariffs, even the governments of rich countries struggle to fund infrastructure and social-protection systems. At the same time, wealth is increasingly concentrated in the hands of the very few, whose financial power allows them to wield enormous political influence. At the same time, democratically elected governments are able to achieve less and less. Many people no longer trust their government to take appropriate action in order to address the current serious challenges. The financial crisis, which began ten years ago with the bankruptcy of the Wall Street investment bank Lehman Brothers, made these issues quite obvious to the general public.

2. The decline in statehood was accompanied by a minimalist understanding of democracy, according to which elections in particular form the core of the democratic model. This stance disregards the fact that free and fair general elections are only effective ways to democratically steer societies if citizens' rights are preserved, the separation of powers is upheld and social justice is pursued. We are now seeing that minimalist democracies – for instance in Africa or Eastern Europe – tend to be weak democracies.

In some cases, elections can actually make conflicts worse, for instance if party-political divides reflect ethnic ones.

3. In contrast to the wave of opening up in the 1990s, many governments are now becoming more repressive. They ward off demands for accountability, transparency and an end to corruption. Particularly in places where economic power is highly concentrated among the few, governments find such demands unpleasant. In recent years, new laws have been passed to restrict the opportunities and scope of political action of civil society organisations in around 70 countries, according to CIVICUS, the international citizens' rights organisation. The trend towards limiting civic space and increasing control is evident even in supposedly stable democracies, as new laws to control civil society show in countries like India or Israel.

4. Doubt in the capabilities of the democratic nation state is growing in many contexts. It is not always clear if this uncertainty is based on actual problems, or rather on the fear of potential problems. Links between the fear of downward mobility and growing populism is empirically evident. In rich industrialised countries, average incomes have stagnated and purchasing power has often dropped. In the eyes of Oliver Nachtwey, a sociologist, even Germany, which has a comparatively strong economy, has become a "society of downward mobility" (see D+C/E+Z e-Paper 2017/02, p. 26). However, anti-democratic rhetoric does not necessarily resonate with the poor or the especially disadvantaged. More typically, fears of personal decline are manipulated to agitate against marginalised groups. Any government action that benefits people other than oneself is opposed, and demands for the preferential treatment of one's own group are becoming louder. Such sentiments can be, and often are, ethnically or religiously charged.

5. It is clear that neither national nor multilateral policies are responding appropriately to environmental dangers so far. If the current trends continue, the Earth will warm by more than three degrees – even though the Paris agreement sets a limit of two degrees at most and, if possible, as little as 1.5 degrees. To achieve that, a global economic transformation would be necessary, but there is no sign of global consensus on the matter. On the contrary, populists

are receiving support in part because they deny the problem and reject the obvious implications. Instead of accepting that lifestyles must change, they promise unlimited growth. Often they are financially supported by special interests that would be hurt by ecological transformation – as the example of Trump, whose campaign benefitted inter alia from oil and coal money, shows.

6. After the attacks on 11 September 2001, the west, in particular the USA, contributed to calling into questions its own fundamental values. In reaction to organised terrorism, war was waged in Iraq, and lies served to legitimise the invasion. The human rights violations committed by western actors were particularly damaging. Torture in military prisons sent a disastrous signal to other governments that are known to abuse human rights. It was naïve, moreover, to hope that primarily elections would be sufficient for long-term regime change. There was a lack of detailed and substantive discussions on how to build stable institutions in countries like Afghanistan, Iraq and Libya. As argued above, minimalist democratisation does not lead to real democracy.

The change in attitudes described here happened remarkably fast. We are at risk of entering an era of nationalism, majoritarian tyranny, repression of anyone who is "different", as well as of old and new forms of discrimination. If that happens, international development successes will be undone, and global problems will only intensify. The fight for democracy and human rights is as essential as ever, forming the core of any effort to achieve the transformation we need. Civil-society actors have to wage this fight at the national and international level. It goes without saying that the government agencies of democratic countries have to do their part too.

However, it is also clear that democratic governments must offer solutions to pressing problems ranging from social welfare to environmental protection. Experience has shown that free markets and minimalist democracy alone are not enough.



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## 70 years of human rights policy

2018 marks the 70<sup>th</sup> anniversary of the adoption of the Universal Declaration of Human Rights (UDHR). This central human rights document was drafted and adopted in reaction to the Nazis' total negation of human dignity.

The declaration contains a global consensus on what human dignity consists of. It encompasses civil and political rights as well as economic, social and cultural rights. It emphasises that, in order to guarantee the dignity of every human being, all of these rights must be respected, protected and guaranteed.

The nascent Cold War quickly led to an instrumentalisation of human rights, however. The west concentrated on civil and political human rights, criticising their corresponding abuses in the east, whereas the east called attention to the west's failure to fully implement economic, social and cultural human rights.

The conflict prevented the development of a single human rights agreement. Instead, human rights were codified into binding international law in two separate agreements: a treaty on economic, social and cultural human rights and a treaty on civil and political rights. Both were adopted by the UN General Assembly in 1966 and have been in force since 1976. Due to the Cold War, the impact was small however.

Things changed after the fall of the Berlin Wall. The competition between the USA and the Soviet Union had ended and the UN became a forum in which international con-

sensus on various topics was formulated. All dimensions of human rights gained in importance.



The fall of the Berlin Wall in 1989 was a turning point.

Generally speaking, all constitutions that have been adopted since the end of the Cold War contain a comprehensive catalogue of basic rights. One example is the South African constitution from 1994, which includes economic, social and cultural human rights in its list of basic rights. Moreover, the two central human rights agreements are on track to achieve nearly universal ratification. For example, 110 countries now have a national institute for human rights that cooperates with the Global Alliance for National Human Rights Institutions.

The institutes provide monitoring for their own countries, as well as observe international trends. That is what the 1993 Vienna Conference on Human Rights called for. Of course, the national institutes cooperate with human rights defenders

man rights defenders. Each of these expansions is of course always also the result of social conflicts and processes of change.

However, it is also clear that the pendulum is now swinging the other way. The international citizens' rights organisation CIVICUS (2017) reports that in over 70 countries in recent years, new laws have been passed to restrict the opportunities and scope of political action of civil society organisations. CIVICUS is a particularly reliable observer of abidance by democratic rights.

The Bertelsmann Transformation Index has identified the same trend. The index appears every two years. The edition of 2016 bemoaned the dwindling scope of action for civil society actors. The edition of 2018 observes that, in order to shore up their power, governments of democracies that were deficient to begin with are now increasingly curtailing or even suppressing the rule of law. (mw)

### LINKS

**Bertelsmann Stiftung (Ed.) 2018:** Transformation Index BTI 2018.

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**Deutsches Institut für Menschenrechte:**

<https://www.institut-fuer-menschenrechte.de/en/homepage/>





Ghanaian internet café: using Google, Facebook and other website results in corporations gathering enormous troves of big data.

## Technology and labour

Artificial intelligence, big data, automation and other digital trends are shaping humankind's future. Increasingly, people's employment opportunities are likely to depend on higher education and advanced skills. The established pattern of newly industrialising countries first specialising in low-wage production and then gradually adding ever more value may be becoming unviable. Policy-makers must do two things: adapt to technological change and shape that change.



# Automation in a low-wage country

**Evermore industrial robots are being used in Mexico, where the potential for automation is great. To what extent robots will really replace low-wage labour remains to be seen however.**

**By Virginia Mercado**

Mexico has historically been a low-wage economy. In the past, the USA's southern neighbour mostly attracted foreign investors with low production costs which basically resulted from cheap labour. Among the members of the OECD (Organisation for Economic Co-operation and Development), a club of advanced economies, Mexico has the lowest minimum wage. It is a mere 88.36 pesos per day. At the current exchange rate, that is the equivalent of merely \$4.6. In some industries, pay is considerably better however. Income inequality is pronounced in Mexico, not least because informal employment is widespread.

In Mexico's strong car industry, workers earn a bit more than seven dollars per hour, according to the Center for Automotive Research (CAR), a non-profit think tank based in Michigan in the USA. By contrast the Colegio de México, a high-profile academic institution, estimates the average wage in the car industry to be slightly more than three dollars. According to news paper reports, some car workers make as little as two dollars per hour.

By contrast, wages of \$20 to \$30 per hour are considered normal in the car industry north of the border. The big difference between the two countries was an issue in the recent trade talks held by Mexico and the USA with an eye to concluding a follow-up agreement to the North American Free Trade Agreement (NAFTA). Negotiators agreed that, for a car to be exempted from tariffs in the USA, 40 to 45% of its components would have to be made by workers who earn at least \$16 per hour. A tariff of 2.5% would

apply to carmakers who do not comply. It is not obvious, however, that such a low rate would make much of a difference. Moreover, it remains to be seen whether legislators will make the provisional agreement legally binding. Negotiations with Canada were ongoing when this e-Paper was finalised in late September.

It is clear that the new rule would affect Mexico's traditional comparative advantage of low wages. The rule would be an incentive to produce cars and car components in high-wage countries. At the same time, it may make automation more attractive in Mexican production facilities.

## IMPORTING ROBOTS

Industrial robots are becoming increasingly common in Mexico. According to the International Federation of Robotics (IFR), Mexico is among the most important emerging markets in regard to importing such machines. IFR statistics show that Mexico imported 5,900 industrial robots in 2016; the expected figure for 2020 is 9000. The car industry, in particular, is using robots. Automation is also having an impact on other sectors, including food, animal feed, electric goods and health care.

In the car industry, robots tend to be doing the heavy lifting and other kinds of hard physical work, whereas human beings are still doing most of the more complicated jobs. In the food and drinks industry, robots are used for packaging and palletising apart from lifting.

In the financial-service sector, computer applications are making human work redundant moreover. For example, the bank BBVA Bancomer recently announced the dismissal of 1,500 workers because of an IT digitalisation project.

Automation is becoming more relevant among small and mid-sized enterprises (SMEs). However, there is opposition to this trend, given that SMEs employ most of the workforce. At this point, it is impossible to predict whether and to what extent automation will kill jobs.

McKinsey, the business consultancy, argues that up to 52% of jobs in Mexico could be made redundant by automation. The potential is greatest in manufacturing, where 4.9 million jobs – or 64% of total employment – might be affected. In absolute numbers, however, the retail industry



Robots are common in car production: VW production line in Puebla, Mexico.



comes first. 5.5 million jobs – or 51% of employment – are considered to be at risk. Digital checkout points facilitate automated store-keeping as well as optimisation of supply chains. Supermarket chains in particular would benefit, though there could be advantages for consumers and economic development too. Tilman Altenburg of the German Development Institute recommends that prudent policies should guide this kind of social change (see D+C/E+Z e-Paper 2017/10, p. 38).

According to McKinsey, 59% or 4.7 million jobs might be made redundant by machines in the primary sector, which includes agriculture, forestry, fishing and

hunting. The consultants point out that repetitive physical tasks are most suited to being automated, with data collection and processing coming second. To what extent automation occurs is said to depend on five issues:

1. technological feasibility,
2. the costs of automation,
3. availability, skills and costs of the workers who would otherwise perform the tasks,
4. advantages of automation that go beyond labour costs, such as greater precision for example, and
5. the regulatory environment, which reflects public acceptance.

Obviously, business decisions depend on costs. What is not clear, however, is whether replacing labour, which is traditionally cheap in Mexico, with robots actually helps to cut costs. In various economic sectors, such uncertainty may prove to be the greatest obstacle to investments in high-technology.

Another challenge is skills training. If companies want to transform the way they operate, they need staff with more sophisticated skills and greater specialisation (see

box below). According to McKinsey, automation and artificial-intelligence applications require staff with technical, social and emotional competencies, whereas physical strength and manual dexterity are gradually set to lose relevance. Workers will have to adapt to a changing work world, and so must the education system.

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## Cultural change

Manufacturing is increasingly marked by robotics and automation. The trend implies that new skills are needed, which in turn means that educational institutions must adapt.

In Mexico, education is lagging behind technological trends, says Carlos Gómez Payán, a professor of engineering and computer sciences at the Instituto Tecnológico y de Estudios Superiores de Monterrey. Though universities and polytechnical schools are considering up-to-date skills-demand, there is a lack of data concerning how well their graduates actually succeed in labour markets. To find their place in technologically ever more de-



**Robot-assisted surgery in Mexico City.**

manding sectors, young people must prepare well, and only those who are willing to adapt

will find good opportunities, the professor warns.

"In industrial manufacturing and electronics, an ideal employee should have all the relevant knowledge and skills," says Gómez Payán. Staff must be able to handle hardware and software, know how to configure systems and platforms of products, and be capable of designing products in a way that they serve their purpose. "New technology areas matter, including virtual reality, the Internet of things, automation, intelligent systems, big data et cetera," the scholar states. He expects dramatic innovation in areas like biometric recognition, artificial intelligence, health monitoring and various smart electronic devices. Change is likely to go beyond mere production processes,

moreover. Gómez Payán speaks of cultural change that will at very least concern everyone with access to the innovations.

People who specialise in the analysis of statistics and mathematical data processing should have good career opportunities, the professor predicts, because data-based systems are becoming increasingly important in business. Industry 4.0 is the buzzword experts use when discussing the economic future. Among other things, digital technology will probably facilitate production in sync with demand. The members of future generations are expected to become ever more adept at using digital devices, and accordingly they are likely to demand ever more sophisticated products and services. (vm)



# Generating broad-based wealth

Digital devices and applications are changing the world economy. The impacts on developing countries need to be understood – not least by policymakers and development agencies. Benjamin Kumpf, who works for the UNDP as an innovation expert, told D+C/E+Z about the pros and cons of recent tech trends.

Benjamin Kumpf interviewed by Hans Dembowski

**Robots are designed to replace human workers, and they are becoming ever more effective. Is advancing information technology making the established development pattern obsolete, according to which a poor country starts to industrialise on the basis of cheap labour and then gradually catches up with the world market in other fields?**

I would argue that some robots are designed to replace human labour, others to augment it or to offer entirely new services. Projections on the impact of automation in developing countries range from a loss of employment up to 55% in Uzbekistan or 85% in

Ethiopia. In the US, for example, a number of companies are currently investing heavily in robotics with the aim to bring back significant parts of the sewing industry. There are, however, two ways to look at it. The first is to bemoan that a development trajectory that we have become used to is becoming unviable. The other is to look for better development trajectories. Low-paid labour is evidently a comparative advantage of developing countries and used to hold the promise of economic productivity gains and employing low-skilled labour. This is likely to change. In addition to striving for environmental sustainability, reducing inequalities and ensuring fair wages, developing countries will have to work on trajectories that are not build on the historic advantage of low-paid labour. A herculean task. To tackle it, most policy recommendations focus on capabilities and connectedness, so education and trade based on comparative niche advantages.

**Can digital technology be useful for that purpose?**

Yes, there are opportunities to redefine development trajectories through digital leap-frogging, but it will only be possible if it goes along with many other investments. Basic infrastructure, human capital, business environments, redistribution and social safety nets must all improve. To compete with currently available IT applications, people increasingly require a tertiary education, which is still rare throughout the developing world. There is thus a need to act at several levels. We need public discourse on redistribution and how a society defines the creation of value.

**In any case, we must prepare for human labour being made redundant?**

We are facing serious problems, no doubt. Policymakers are well advised to ponder what may happen in the future. Historical experience inspires some slight optimism: since the start of the Industrial Revolution in Britain in the 18<sup>th</sup> century, people have kept worrying about machines replacing workers. Indeed, technological progress can affect lower and middle classes negatively. On the other hand, new technological options have historically created more jobs than they made obsolete. The nature of work is changing – in parts fundamentally. We need to understand whether the negative impacts on labour are of a transitory

## Four important tech trends

**Artificial intelligence** means that computer programmes perform cognitive and intellectual tasks that only humans were capable of previously. Speech recognition is an example. Typically, algorithms analyse databases of human behaviour to pick the correct choices. Depending on what job needs to be done, the databases vary. Highly sophisticated programmes are designed to support medical doctors' diagnoses, and they will be based on the decisions of physicians who specialise in the relevant fields. Algorithms of online re-

tailers that show you items that people liked who bought the same items that you bought are obviously much simpler.

**Big data** refers to huge databases. Systematically analysed, they can reveal trends that would otherwise not be obvious. At the same time, the scrutiny of an individual person's data trail can disclose private information concerning his or her health status or political preferences, for example. Big data is systematically generated by consumers who use the

internet, smartphones or other appliances. The records of insurance companies and utility companies can amount to big data too. Moreover, satellite imagery is sometimes considered big data.

**Blockchain** technology serves to create files that cannot be manipulated after being transferred from one computer to another. The reason is that the files automatically contain encrypted documentation of all previous transactions. The best known application of blockchain technology is Bitcoin, the crypto currency. Proponents argue that it is a safe kind of money because it cannot be

manipulated by government institutions. Recent experience, however, showed that the value of Bitcoin can be quite volatile due to speculation.

**Automation** means that machines perform tasks without being directly operated by a human being. Computer programmes steer the machines which require elaborate sensor systems and are able to use tools. Robots have been very important in the car industry since the 1990s. Increasingly, AI's systems are used to operate automated machines. Self-driving cars are expected to be viable in the near future.

(dem)



Self-driving cars could reduce congestion in megacities like Nairobi.

nature and can be dealt with through re-skilling, or whether there are some mechanisms at play that should make us worry about excessive automation. Projections show widening disparities and decreasing opportunities for low-skilled labour. In view of these trends, governments and development agencies have a role to play in shaping narratives. It makes sense to collectively rethink what kind of work should be automated and how different kinds of labour are valued and remunerated. It is necessary to appreciate manual labour and reward it fairly. Innovative policies are needed, and concepts such as a universal basic income will become increasingly important. After all, “Leave no one behind” is a guiding principle of the Sustainable Development Goals.

#### **Does digital technology offer opportunities to people with higher education in developing countries?**

Yes, we see creative work being decentralised internationally. Tech hubs have emerged in places like Bangalore, Nairobi and elsewhere. Opportunities for digital workers are opening up across the world. Moreover, new technologies offer opportunities to protect the environment. Satellite images and machine learning can contribute to better understand the implications of current policies on biodiversity, for example, and crowdfunding can make invest-

ments in renewable power generation affordable, to name only a few examples.

#### **Let's discuss the upsides and downsides of important technological trends. If unemployment is the risk that is posed by automation, what advantages can developing countries expect?**

First of all, let me highlight persistent barriers to technology access. Today, over a billion people still lack electricity, and three billion lack access to clean and safe cooking technology. Illiteracy is still a serious problem in many places. Less than half of the world population uses the internet. That said, the potential benefits of emerging technologies are considerable. Bear in mind that the cell phone has been and continues to be a game changer for financial inclusion. Drone delivery of pharmaceuticals and vaccines to remote rural areas is a more recent example of technology-driven progress. Drones make it easier to provide hard-to-reach communities with health care. Another example is self-driving cars. They hold the promise to massively reduce congestion and pollution in megacities like New Delhi, Nairobi or Lima with potentially immense positive effects on economic productivity too.

**Apart from automation, there are two other decisive trends as far as I can tell: big data and artificial intelligence. Am I missing something important?**

Well, there are many important trends, and they tend to be interrelated. I think policymakers should focus on the trends you mentioned plus blockchain and bioethics. Humans are generally bad in predicting the future, especially if scenarios look threatening. It is important to plan for unexpected scenarios.

#### **Let's take a look at big data. Do you have examples of tangible advantages?**

Yes, I do, but let me state first that big data alone often does not suffice. The data generated by consumers who use mobile phones, social media, online search engines usually needs to be backed up with other data such as household surveys, national censuses et cetera. Otherwise, we may get distorted pictures. For example, we know that more men than women use digital devices, so the data trails tell us more about men's preferences than women's. We can address the sexist gender gap, but to do so, big data usually needs to be complemented with the thick data of statistics generated by conventional means and additional qualitative research to gain insights about those who are most marginalised. Done properly, big data analysis will provide relevant insights into the lives of people, including at the base of the pyramid. In recent years, UNDP has been investing in the matter, often in collaboration with UN Global Pulse and national governments. The results are interesting.



- In Sudan, for example, UNDP is working with partners including German academic institutions on real-time insights on poverty. Official poverty statistics are being complemented by big data from night-time lights, mobile phones and electricity consumption. Policymakers thus get a more complete picture of where poor people live. The approach has made data collection much more efficient.

- In Indonesia, big data is helping to improve flood preparedness as well as responses to flooding. Twitter is very popular in Indonesia, so the analysis of Twitter conversations is useful, generating insights and enabling various partners from civil society and the government to act. This method helps to verify reports and reach out to flood victims in real time, for example.

#### And what are the risks of big data?

There are serious issues of privacy. If you assess a person's browsing preferences, for example, you can gain multiple insights, concerning the person's sexual orientation, political views or health status. Such information can be misused. A significant part of the data that consumers generate is in the hand of a few powerful private-sector companies, including online retailers, telecom companies, social media platforms or search engines. To the extent that governments get access to such data, they may use it to stifle opposition and block civil disobedience. Such negative impacts will haunt us if we do not establish data protocols and accountability systems. More generally speaking, we need to invest in supporting individuals to develop an emancipatory and yet protective relationship with their own data.

#### Let's consider artificial intelligence (AI). What potential do you see?

There is scope for important efficiency gains. AI can widen policymakers' horizons for example. Algorithmic scrutiny of big data can literally open their eyes on issues such as the effects of current paces of deforestation. In Central America, for example, AI can show what impacts current policies for pineapple production have on biodiversity. All too often, the people who take decisions are not aware of implications for the larger system. Another area in which artificial intelligence may prove useful is criminal justice. Judicial systems are over-burdened in



Using big data: Twitter is very popular in Indonesia, so it makes sense to monitor tweets in regard to flooding.

many countries and people's trust in them is decreasing. Algorithms can contribute to managing judicial affairs better and speed up procedures.

**But couldn't AI just as likely compound existing problems? To my knowledge, AI is generally based on big samples of human action, with computer programmes being designed to replicate the decisions made by most of the human beings who are considered to be relevant in a specific context. If a country's legal system is biased against a certain minority, the decisions of relevant people will reflect that bias, so won't AI reinforce it as well?**

Yes, that has already happened. In some countries, algorithmic decisions were indeed biased against minorities – due to biases in the data that was provided to train the algorithm. But it would also be possible to design the programmes in ways to avoid biases. This is a prime example of technological progress offering opportunities and posing risks at the same time. It is possible to improve – rather than merely replicate – performance. For this to happen, we need transparent scrutiny for data sets that are provided to algorithms and diversity among those who write the programmes. That would happen if more young women and more members of minorities graduated in STEM – science, technology, engineering and mathematics. Governments should promote them. At the same time, private-sector companies must ensure diversity among their staff. We need multi-sectoral fora that discuss AI progress, principles and accountability systems.

**My suspicion is that artificial intelligence isn't actually very intelligent. If it is basically designed to replicate the average behaviour of relevant human beings, performance will by definition be mediocre. That is preferable to bad performance, of course, but worse than excellent performance. We are increasingly being admonished to "think outside the box", but can AI do that at all?**

Well, the standard uses of AI so far are not thinking outside the box, but technology is advancing. We are now seeing creative AI, with programmes writing poems or composing music. We are discussing the emergence of Artificial Super Intelligence – AI that would be able to make creative choices better than humans do, generally surpass human cognitive capabilities and be able to undertake reasoning. That is the kind of AI some technology enthusiasts like Tesla founder Elon Musk warn us about. One of my favourite quotes is from the Italian politician and philosopher Antonio Gramsci. He said: "I am a pessimist by intellect, and an optimist by will." To guide technological future on a trajectory that benefits human fulfilment and freedom, this seems to be a good paradigm.

#### LINK

In its recently published annual report, the UNDP Innovation Facility shares case studies from over 25 countries:

<http://www.undp.org/innovationreport>



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# The digitalisation of world trade

**So far, the World Trade Organization (WTO) does not have a mandate for digitally-enabled trade and related regulations. Many innovations are still evolving, moreover, and that adds to insecurity. A group of experts has made proposals on how the G20 – the group of 20 major economies – should rise to these challenges.**

By Sabine Balk

The expert report first assesses the challenges G20 members are facing. Multilateral regulations for digital trade are only evolving very slowly. Since the implications for global development in the world economy may turn out to be serious, the scholars argue that WTO efforts in this area deserve support. They also insist that the risks of the digital divide widening further must be controlled.

The global trade order is not currently designed for advanced technological applications. To close the gaps, the expert group calls for more and more effective international coordination. In its view, national governments must promote this cause. One danger they identify is tax avoidance as profits are shifted from country to country. Clear rules are needed concerning issues like this, they insist.

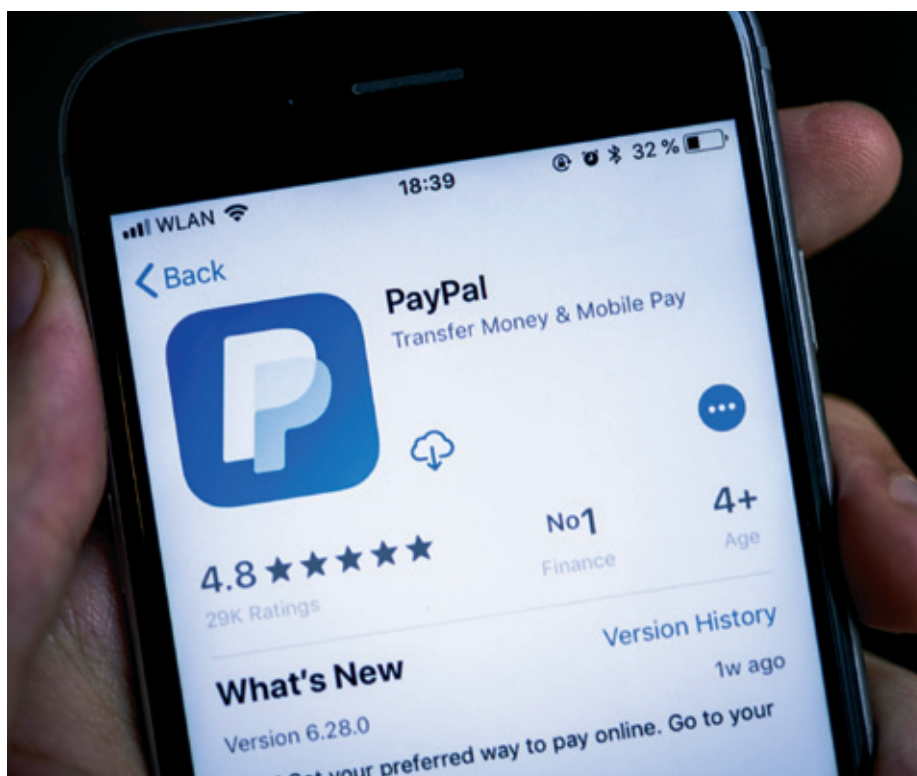
The experts propose that the G20 presidency convene the ministers in charge of trade. They should be given the assignment to negotiate a Memorandum for Cooperation on Digitally Enabled Trade. That could happen at the summit in Buenos Aires in late November.

The experts also propose to use the term “digitally-enabled trade” because terms like “e-commerce” or “digital trade” can be confusing. “Digitally-enabled trade” is more precise because it includes all trade related applications of digital technology. The authors explicitly refer to block chain technology, which facilitates transactions that cannot be manipulated ex post, and to distributed ledger technology, which allows for falsification-proof cooperation with several partners working all over the world.

The report emphasises that the Memorandum should tackle numerous feedback loops because digital technology and trade are becoming ever more intricately inter-

ter. The authors stress that all parties must assign experienced staff to deal with related tasks.

The report explicitly tackles taxes. The international community is said to need a coherent system, but obstacles include the lack of consensus on how to deal with digitalisation. The expert group suggests the G20 should establish an Intergovernmental Panel on Taxation in the Digital Economy.



The G20 must rise to the challenge of digitally-enabled trade.

twined. Moreover, it points out that the digital divide between highly-developed and less-developed countries deserves attention. The expert group's vision is a comprehensive deal on trade and investments. It would give market participants great scope for action, ensure legal certainty and improve digital infrastructures. Public-private partnerships could contribute to ensuring worldwide access. Moreover, the expert team calls for aid for trade and other forms of support to low-income countries.

The team wants the G20 to confirm the leading role of the WTO on digitally-enabled trade. In their eyes, the WTO needs an expert office to facilitate international cooperation and coordination on the mat-

This panel could then advise policymakers and draft expert reports.

## LINK

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# #AlforAll

**Due to its sheer size, India may become the central battleground for “decent digitalisation” in emerging markets. Its high-tech companies must not fall behind in technological development, but automation must not make millions of unskilled workers redundant.**

**By Patrick Ruether, Vikrom Mathur and Urvashi Aneja**

The parking lot at Delhi airport gives you an idea of what the digital future may look like in India. For the barrier to open, you must scan your parking ticket. In most other countries, you would do that yourself. In Delhi, however, you hand over your ticket to someone who will do it for you.

The parking lot uses up-to-date technology, but staff members who are not really needed anymore are still employed. The general assumption is that technology boosts productivity by allowing employers to make workers redundant. It does not seem to apply in Delhi.

This may actually be a good sign, given that some 1 million Indians are estimated to join the labour market every month. Job-killing automation could cause a lot of harm. Foregoing automation, on the other hand, could hamper long-term development. Keeping staff to handle automated processes may seem counter-intuitive to most management consultants, but it makes sense in socio-political terms.

This issue is at the heart of how the future of work and artificial intelligence (AI) are currently being debated in India. At first glance, India seems to be doing pretty well in terms of growth and investment. The economy is expected to grow by around 7.4%. That is one of the best rates internationally. In 2017, the country improved its World Bank’s Ease of Doing Business ranking by 30 places and rose to the 100<sup>th</sup> rank.

At second glance, things look more challenging. Growth is mostly driven by government spending (almost 11% of GDP), not by private consumption or investment. Even more disturbingly, the current growth rate is insufficient for generating

the millions of new jobs that India needs. Indeed, India’s unemployment rate is rising. According to the Centre for Monitoring Indian Economy, around 31 million Indians are currently unemployed (seven percent). This figure, however, can be somewhat misleading because it does not include 270 million Indians living in poverty, many of whom depend on informal employment.

Compounding the employment problems, half of India’s population is still engaged in agriculture, but environmental stress – not least due to climate change – is reducing productivity significantly. If digi-

talisation is done well, it might have beneficial impacts (see page 32). On the other hand, many poor people are still hardly literate – and that may prove an obstacle to rural modernisation.

There can be no doubt, however, that the future of work is critically linked to the future of employment. This is the context in which technology can make a difference – for the worse or the better. As is true of globalisation, digitalisation and technological progress will create winners and losers. In this regard, India does not differ from other countries. Due to its sheer size, however, it may well become the central battleground for “decent digitalisation” in emerging markets. The challenge is two-fold:

- In the global race for technological leadership, India can build upon its existing and quite reputable IT sector if it adapts to



Even information-technology jobs are not safe: WIPRO headquarters in Bangalore in 2016.



innovation fast. To do so, massive investments in research and development (R&D) and human skills are necessary.

- India must create high-quality employment that caters to the needs of the young and aspirational generation, in terms of both jobs and livelihoods.

Prashant K. Nanda of the business website [livemint.com](http://livemint.com) estimates that out of the one million new job seekers per month, half lack employable skills. According to a similar essay by Dilip Chenoy in the *Hindustan Times*, nearly 400 million people in India are unskilled.

India's Industrial Training Institutes used to have a good reputation, but they have lost track of modern industrial production. New centres for skills training are mushrooming, but they seem to be chasing government subsidies and specialising in rent seeking. Most of them do not teach up-to-date vocational skills. Given that they are not rising to today's challenges, one should not expect them to rise to tomorrow's challenges. On the other hand, nobody – whether in India, Europe or elsewhere – really knows exactly what skills will be in labour-market demand in the future.

What impact digital technology will have, differs from sector to sector, of course. The Friedrich-Ebert-Stiftung, a foundation linked to Germany's Social Democrats, recently held a workshop on the matter in the Delhi agglomeration. Leading business experts agreed that the sectors least likely to be affected by digitalisation are construction, domestic and/or care work as well as hospitality.

Business leaders at the FES event expected lay-offs to concern mostly workers with some, but not very sophisticated skills. Repetitive tasks in manufacturing are the easiest targets for automation. This is a common pattern, and it explains why growth often remains jobless.

## MUMBAI BEATS HAMBURG

Logistics is among the front runners in technological innovation. When talking to trade union members in logistics, one gets a feeling for the enormous challenge ahead. For example, the Jawaharlal Nehru Port in Mumbai is now one of the world's most digitally controlled ports. It is the largest container port in India and among the global top 25. Currently, it handles 10 mil-



lion containers annually with a mere 1,700 permanent employees. The comparative figures for the Hamburg Port Authority are 8.8 million containers and 1,800 staff. To judge by these numbers, Mumbai's port is more digitally advanced than Hamburg's. In both cities, however, the docks used to be crowded with workers. Now they are empty and digitally managed. The trend is good for business, but bad for employment.

India is famous for its strong ICT sector. Corporations involved in information and communications technology have been making international headlines for about two decades. Nonetheless, even their jobs are not safe. It surprised many when the sector drastically cut jobs last year. The leading corporations – including Infosys, Wipro, Tech Mahindra and HCL – laid off more than 50,000 employees. International competitiveness had suffered due to a lack of investments and innovations, so managers had to adjust.

The ICT sector is supposed to be the future. Its staff members belong to the middle classes and include many women. Job losses in this sector are therefore especially painful. And more bad news seem likely because artificial intelligence is expected to be a game changer. The work done in call centres and comparatively simple computer programme writing may soon be taken over by advanced computer programmes.

The government is aware of the challenge. Its National Institution for Transforming India (NITI Aayog) recently published a "National Strategy for Artificial Intelligence #AIforAll". It reads like a new development paradigm. The government wants to claim digital territory and, at the same time, promote social innovations to the benefit of all. "Making digitalisation work" is certainly the imperative of the hour. Nonetheless, the strategy is less than

convincing. It lacks sufficient data on what is actually happening.

Tandem Research and FES are therefore convening a series of six workshops with diverse stakeholders in India – including the government, civil society and private sector. The goal is to collectively evaluate and identify the narratives, social frameworks and key players for shaping AI in India.

The country faces opportunities and challenges. Advances in AI-based technologies could improve the quality, accessibility and affordability of health care and education for under-served populations, for example. On the other hand, unguided AI may cause serious problems in terms of job displacement, data privacy or the transparency of accountability of decision-making by algorithm. Moreover, the gains of progress need to be shared fairly. Broad-based debate is needed to ensure that #AIforALL does not become empty rhetoric.

India must shape new technologies to bring jobs and opportunities to the bottom of the pyramid and to solve persistent development challenges of providing health care, education and a clean environment. In the short term, it is indeed smart to adopt automation technology and keep unskilled staff to operate it – as is the case at Delhi airport's parking lot.



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# Digital forces and ethical challenges

**Innovative digital applications will have serious impact on social life. They will affect everything from morality to manufacturing; from cyber security to crop management. India must prepare for change and not just talk about it.**

By Aditi Roy Ghatak

India is currently witnessing a massive state-sponsored push for digitalisation, and whether or not every Indian welcomes it, it will shape the future in ways the vast majority does not yet imagine. The concerns, however, are around four “E”s: employment, entrepreneurship, economics and ethics:

- Machines are increasingly doing standard IT work. That puts India’s position as the global hub of IT outsourcing at risk. World-class business such as Infosys, Wipro or Tata Consulting expect harsh competition and must embrace artificial intelligence (AI) and other tech trends that are eroding their competitive advantage of low-cost staff with basic but not, necessarily, specialised IT skills.

- The upside is that new technology offers new opportunities. Accenture, the business consultancy, expects some 5,200 tech start-ups to burst upon the Indian scene with impacts on many sectors. Given that India is the world’s fastest-growing start-up ecosystem, they are likely to come up with innovations that will be significant and perhaps even transformational for India’s 1.2 billion citizens. AI looks promising in commercial agriculture, for example. The livelihoods of half of India’s people depend on farming (see box next page).

- The downside lies in the huge share of India’s economy that may be left behind. Many businesses simply cannot afford advanced technology. In the informal sector and smallholder agriculture, people are struggling at subsistence levels. The outlook of masses falling ever further behind is worrisome (see my essay in D+C/E+Z e-Paper

2017/10, p. 35). It does not help that the country lacks the infrastructure to make best use of IT everywhere.

- Another risk is even more sinister. AI has the ability to intrude into ordinary lives in frightening ways. Private data is likely to be shared indiscriminately with foreseeable abuse of power and widening social disparities. The question is whether India can

diversity”. In his eyes, other factors should also contribute to “developing ethical AI algorithms and ensuring that AI is beneficial to broad numbers of people”.

That would certainly be desirable. The nation needs innovation that drives social development and it would make sense to use technology to reduce the strong stratification of society. Experts agree that this can be done though – with a caveat: social biases may be built into AI programmes, especially if algorithms are designed to replicate human behaviour. Many Indian institutions are known to discriminate against minorities and lower castes.

It adds to the worries that the most important databases are in the possession of rather few private-sector giants, including



Taxi driver checks address on smartphone in Kolkata.

provide leadership to counter these threats. Such leadership is needed at both national and global level, given that technology transcends borders.

Paul S. Triolo of the Eurasia Group, a policy consultancy, foresees India making a major positive difference in terms of ethics. He emphasises the country’s “traditions of democracy” and “sensitivity to

multinational ones. Obviously, these corporations also command most data-related expertise. Their databases can result in massive competitive advantages unless third parties get access to the information too. Data-intensive enterprises must, therefore, be regulated prudently.

It is of great concern that there is no convincing evidence of someone guaran-

teeing that IT applications are used to close disparities and boost opportunities for everyone in India. Instead, there is fear that technological superiority of selected companies is driving the central government. Moreover, instead of celebrating the nation's diversity, it has lately been promoting Hindu supremacy with a bias towards the upper castes.

Violent attacks on members of minorities – especially, but not exclusively, Muslims – have become all too common. So has the harassment of civil-society activists and journalists who dare to criticise the Modi government (see Arfa Khanum Sherwani in D+C/E+Z e-Paper 2018/05, p. 36). In a shocking country-wide raid, five leading civil-rights activists – Arun Ferreira, Gautam Navlakha, Vernon Gonsalves, Sudha Bharadwaj and Varavara Rao – were arrested in August 2018.

On the business front, the current trends indicate a battle for monopolistic tech-superiority rather than social inclusiveness. Leading companies are making use of political networks to crowd out competitors. The focus is not on solving long-standing social problems but on securing short-term advantages to ensure long-term profits and lasting influence. In fact, the prime minister is using his good offices with global leaders to secure such benefits for the leading industrial coterie.

At the domestic level, a governmental programme called “Digital India” is promoting IT related issues. Its current annual budget has been doubled to the equivalent of \$480 million. Investments are planned

in various fields, including research, training and skill development, digital manufacturing, robotics, big data intelligence and so on. Given past experience, one is sceptical about the final outcome of these moves.

Debate on IT often revolves around employment. The fear of machines taking over repetitive jobs is valid, though India may actually gain jobs on balance. The international consultancy Gartner predicts that AI will create 2.3 million jobs in India by 2020 but eliminate 1.8 million in the same time. By 2025, the number of additional IT workers might even swell to 3 million, though Gartner warns that the people concerned will have to skill themselves. Currently, Gartner reckons that there are 4,000 IT job vacancies. These numbers may look big but they are small given that 12 million young people join the job market every year (see essay on p. 28).

What exactly is the perceived threat from AI? The 2018 UNDP India Skills Report estimates that 50 % of current economic activities could be automated to some extent, but only five percent can be fully automated. Thus the nature of many jobs is likely to change, while overall employment may not be threatened by complete automation at this stage. On the upside, AI can help to use all kinds of resources – commodities, human capital, funding – more efficiently. India's financial sector, plagued by fraud and malfeasance, may profitably use AI as a gatekeeper.

It is also hoped that technology will improve conditions in public health and

education. India desperately needs more doctors, nurses and teachers. Government figures show, for example, that there are about 200,000 vacancies in state-run elementary and secondary schools. The actual need is greater since many teachers lack proper training themselves. The shortage of professionally qualified teachers runs into several millions.

Only about a third of Indian youngsters go to secondary school, which means that two thirds of the young generation will almost certainly never work in IT. The low enrolment rate has a lot to do with the quality of teaching. Smart IT programmes might fill some of the gaps, with tutoring systems easing the country's academic agony. In a similar sense, automated programmes might assist doctors, and robots might do nurses' heavy lifting.

In the past, many Indians used to be technology averse, but that is changing with even remote villages embracing telecommunications. Today, mobile phones are a common sight. The foundation has thus been laid for new digital applications to spread fast. What will ultimately determine India's success is not whether a handful of corporate investors become billionaires, but whether life becomes better for its vast majority.



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## Digital farming

Artificial intelligence (AI) could help Indian commercial farms by assessing weather data, identifying diseases and pests or suggesting best practices to improve yield among others. It might also contribute to reducing wastage, for instance by improving retailers' supply chains.

Cropin Technology Solutions is an interesting company. It is based in Bangalore and aspires to make farms more profitable. Cropin has collected data for some 3,500 crop varieties from more than 3.5 million acres of agricultural land. The goal is evidence-based improvement of crop planning.

The company helps farmers to make informed decisions around sowing, harvesting and the use of pesticides. It also supports financial-sector firms that provide services, including crop insurance, to farms.

“We deliver decisive decision-making tools that bring consistency, dependability and sustainability to agri-businesses,” the Cropin website promises confidently. Among its core values, the company mentions sus-

tainability, integrity and commitment to partners' success.

Cropin's ambitions are global. The website offers content in English, Portuguese, Russian, Spanish, Thai and Turkish, but not in Indian languages. One wonders: are the nation's poor smallholder farmers its target group? (arg)

### LINK

**Cropin Technology Solutions:**  
<http://www.cropin.com/>





A Dutch vegetable producer in Tunisia: the MENA region is short of businesses like this.

## Bundled measures needed

A lack of jobs and bleak social prospects for young people in the Middle East and North Africa (MENA) undermine the political stability of what is already a deeply troubled region. The problem cannot be solved by modernising education and labour markets only. Broad-based economic growth is needed – and so is support for small and medium-sized businesses to achieve such growth. Private-sector companies and government agencies must catch up with digital change if they want to create new jobs and make them sustainable.

By Nassir Djafari

The countries of the Middle East and North Africa are wasting their most important resource: youth. In a recent survey of 16 to 30-year-olds in eight countries across the region, 43 % of respondents said they did not have a job and were neither attending school nor university. Actually, many had never had an employment. Only one in five was gainfully employed (Gertel and Hexel, 2017).

Among young women, the share of the non-employed is particularly high. Nowhere in the world is female participation in the labour force as low as in the Middle East and North Africa.

In the past, the state apparatus used to serve as an overflow basin for the annual flood of young people newly entering the labour market. In view of reduced tax revenues and nascent structural reforms, the public sector is increasingly unable to play that role.

Educational curricula mostly do not meet the requirements of the economy, especially those of private-sector industries. So it is unsurprising that recruiting companies pay more attention to work experience than to formal qualifications.

To give young people any chance of a job at all, governmental labour-market programmes have been arranging internships in companies. This has been done in Tunisia, for instance, where the internships generally last 12 months. Apart from going to work, the participants attend training courses. State-funded wage supplements

top up their income. The government's aim is to offer a mixture of financial incentives and sanctions in order to motivate employers to provide long-term jobs for young people. The programme equally targets young women and men.

Similar programmes are in operation in other countries of the Middle East and North Africa. Unfortunately, they do not make much difference to youth unemployment. Employers readily accept the state-subsidised interns, but they do not necessarily create more jobs. Who gets an internship is another critical issue. Young unemployed academics and graduates of higher education institutions enjoy priority, while the majority of young people with lower educational qualifications are ignored.

But regardless of conceptual shortcomings, the main problem is that these measures' impact is limited from the outset. The reason is that the companies concerned do not grow fast enough to be able to offer interns a prospect of long-term employment.

### START-UP ASSISTANCE AND SUPPORT FOR SMALL BUSINESSES

Initiatives that help jobless young people become self-employed or start up micro businesses are arguably more effective than government-sponsored internships. A number of governments in the MENA region has adopted programmes to promote this cause. Participants receive free training and advice to prepare them for business and are eligible for grants that facilitate transitional funding. There are also a number of international support programmes offering micro, small and medium enterprises (MSMEs) access to loans. Such initiatives take account of the fact that around 80 % of people in gainful employment work for MSMEs or their own small business.

Lack of finance is a major obstacle to growth for many small businesses. Shortage of qualified labour and managerial skills is another. This bottleneck affects start-ups that receive special state support in many MENA countries. Sales, business development and business leadership skills are particularly weak, so MSME support programmes that combine better access to credit with training opportunities generally promise to deliver the best results.

One reason small and mid-sized enterprises are not tapping their full potential is that they hardly use the internet. In Egypt, for example, a mere seven percent of MSMEs are online. Companies with stronger digital networks could increase exports and expand employment. Research in Turkey has revealed that the annual growth rates of MSMEs which use the internet exceed those of their more conservative peers by a factor of seven. Programmes that aim to support young businesses should therefore emphasise digital skills and provide for funding in information and communication technology (ICT).

However, educational reform, labour market programmes and MSME support alone do not significantly help to reduce youth unemployment unless progress is made on eliminating structural development constraints. Because of the low level of growth in most MENA countries, new jobs are not created fast enough to meet the needs of a growing population.

This is due not only to the political instability of the countries concerned. Another serious challenge is international competitiveness. The productivity of businesses in Tunisia and Egypt, for instance, virtually did not increase over a 35-year assessment period. By contrast, firms in India, Mexico and Turkey doubled or trebled their productivity in the same timeframe. One reason is, of course, that the digital economy is less developed than it is in other emerging markets. People with ICT skills are rare, and the digital infrastructure still has huge gaps.

Low economic diversification is another challenge. Except in the oil-rich Gulf monarchies, an average of one in three economically active people work in agriculture, but this sector accounts for only 12 % of gross domestic product (GDP) today.

The manufacturing sector's contribution to GDP in the MENA countries – at an average of only around ten percent – is low and has been flat-lining or even declining for years. This is due partly to the failure of the state-controlled industrialisation model launched in the 1960s and partly to the free trade agreement with the European Union, which has resulted in the loss of many jobs, especially in labour-intensive sectors (see my article in D+C/E+Z e-Paper 2018/05, p. 11).

The majority of people in gainful employment work in services today – in jobs that require comparatively simple skills.

Most workers have only low value-adding jobs, often in the informal sector.

### CONCLUSION

Without broad-based economic growth, youth unemployment cannot be sustainably reduced. So, support for employment-intensive sectors such as MSME is vitally important. But it is not enough just to create more jobs; they also need to be better jobs. Otherwise, it will be impossible for a self-sustaining economic process to gain momentum. It is striking that the region is largely unprepared to make use of digital technologies. This world region is at risk of falling even further behind in terms of international competitiveness, and that would exacerbate unemployment.

It is thus imperative that the education system should deliver more practical training geared to the needs of the economy, especially the private sector. Above all, an intermediate level of technical qualifications needs to be created. This will also require a change in thinking on the part of young people, so that non-academic training programmes lose their stigma. To act responsibly, public institutions and private-sector companies must invest in the digital fluency and ICT skills of employees as well as job seekers.

The integration of women in the labour market, which has already been initiated, is not just a matter of fairness. It is essential if the MENA countries are to realise their full economic potential.

Educational reform and labour market programmes can have only a limited impact, however, unless they are accompanied by structural reforms aimed at removing obstacles to private-sector development and competition and paving the way for economic diversification.

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## Low standard, wrong content

Young people in the MENA region today are better educated than their parents' generation. But higher educational attainment does not open doors to better jobs. Many youngsters go from university straight into unemployment. They are not prepared for what the labour market demands today – and even less, for what it may demand in the future.

The MENA region has the highest graduate unemployment rate in the world. In 2016, around 42% of those leaving higher education in Egypt, for instance, failed to find employment. There is a yawning gap between supply and demand in the labour market. School-leavers choose learning paths in further and higher education on the basis of the prestige associated with them and not the job prospects they offer.

As a result, universities year after year produce a host of humanities and social science scholars who do not have the slightest chance of getting a job. The number of students who opt for scientific and engineering disciplines is significantly smaller. Curricula, however, are generally not geared to practical purposes. Whether they have studied social or natural sciences – graduates normally have not developed skills that an up-to-date knowledge economy needs. They are neither computer savvy nor have they developed their capacity to solve problems creatively. Instead, they have been taught to give the correct answers to pre-defined questions. Independent thinking and a willingness to get involved in messy real-

world problems would help graduates to prove their worth in the private sector. Such attitudes, however, are largely discouraged in the universities' ivory towers.

Skilled industrial workers are in particularly short supply and vocational training capaci-

ties are hardly proactive. The number of firms offering formal training in the MENA region is lower than anywhere else in the world.

The situation is made worse by the fact that the quality of teaching at all levels is generally low. According to comparative international studies, nearly all MENA countries achieve below average results. Education and vocational

have adopted plans to promote digital competencies. Their starting points are quite different however. The oil-rich Gulf monarchies have been making headway in terms of building broad-band infrastructure, and the vast majority of the people there use the internet.

The aspiration is to become global hubs for high technology. They are invest-



Young women on a youth centre sewing course in Egypt: Young people in the MENA region lack the right training and education.

ties are limited. Most MENA countries in recent years have redoubled their efforts to up-scale vocational training but many have had little success, as evidenced by a number of country-wide evaluations.

Jordan failed to reach the targets it set, for example, because the training offered lacked practical relevance and the private sector was not sufficiently involved. Companies

training are still geared to public service. This is partly because of a history of state-controlled economic development and partly because for a long time the state employed a large proportion of the workforce. The ultimate outcome: lower productivity and efficiency in both the private sector and public administration.

To escape this trap, most countries in the MENA region

are investing massively in updating vocational training to achieve that goal. So far, however, they must still rely on experts from foreign countries. Countries in North Africa and the Levant, by contrast, do not have the resources their richer neighbours have. Moreover, political instability and problematic governance make it hard them to adapt to digital change. (nd)



# Negative impacts

**Governments of developing countries should prepare for high technology disrupting their nations' labour market. Considering new taxes may be part of such efforts. Uganda has started to tax social-media interaction, but that seems to fail the test. The tax is more likely to make the internet less useful and stifle public debate than to help the country to prosper.**

**By Edward Ronald Sekyewa**

Since the beginning of July, Uganda is imposing a tax on the use of several internet applications. The daily rate is the equivalent of € 0,05. It may seem low, but the average monthly income per capita is not even € 50.

With this tax in place, people are now reverting back to sms for messaging. At the same time, Twitter is still considered elitist in Uganda, a platform that is used by the "learned" and "wealthy", so its users tend to be able to afford the tax and are not complaining much. Facebook, however, was quite popular. Facebook has instituted legal proceedings against the government for taxing the subscribers on its platform, and no one knows where this process is going to end.

Generally speaking, social media and especially Facebook are on an upward trend in Africa. User numbers are growing every month. Experts reckon that at the beginning of this year, slightly more than a third of Africans used social media.

They oppose the tax and want the government to rescind it. Critics argue that taxation really serves the government to curtail freedom of expression. By making internet use less attractive and accessible, the authorities are curbing dissenting voices. After all, activists and politicians rely on social media for mobilisation purposes.

Business issues are important too. Many private-sector companies are likely to be hurt by the tax as many Ugandans will probably abandon social-media sites. Even informal businesses were known to use Facebook to attract customers and advertise their goods or services.

The Ugandan tax will hamper that approach, warns Nunu Ntshingila, Facebook's regional director for Africa. She says: "Since we first established a direct presence in sub-Saharan Africa in 2015, Facebook has grown from strength to strength." She reports that Facebook is cooperating "closely" with various partners, including entrepreneurs, developers and small businesses. For all of them, Facebook has been a platform for growth. Ntshingila says: "It's inspiring for us to learn from the continent and to play a role in helping people and organisations connect with the world."

The tax is affecting online media in a particularly adverse manner. Online-media houses normally use social media to promote their stories. Compounding the problems, they basically rely on advertising to generate revenues. Paid content and other sources still only amount to about two percent of online-media's sales, according to the Online Media Organisation of Uganda (OMA-U). "That is one area that we have to look into seriously," says Giles Muhame of the OMA-U. The association had initiated talks with the likes of Facebook and Google, but the new tax will certainly make it harder to earn money on the web.

The government, by contrast, has tasted the sweetness of the tax. Even though many Ugandans abandoned social media after 1 July 2018, it was able to collect over 5 billion shillings (1.1 million euros) in the first two weeks.



**Social-media users in Uganda.**

Those who do not pay, do not get access to the apps – unless they find tricky ways like virtual private networks (VPN) to bypass the government's revenue collection system.

In Uganda, WhatsApp had almost replaced the sms (short messaging services).

In Uganda, the new tax has abruptly changed that growth trend. The long-term impact remains to be seen of course. The tax has political and economic implications.

Journalists and various activists have rallied in the country's capital Kampala.



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# The exaggerated threat of robots

**A lack of jobs and insufficient industrialisation are hampering the development of many African countries. Now another threat seems to be emerging: the automation of production. However, it will take quite a lot of time before robots become cheaper than workers in Africa.**

**By Nico Beckett**

All industrialised countries used low-cost labour to build industries and manufacture mass-produced goods. Today, labour is relatively inexpensive in Africa, and a similar industrialisation process might take off accordingly. Some worry that industrial robots will block this development path. The

reason is that robots are most useful when doing routine tasks – precisely the kind of work that is typical of labour-intensive mass production.

At the moment, however, robots are much too expensive to replace thousands upon thousands of workers in labour-intensive industries, most of which are in the very early stages of the industrialisation process. Robots are currently best used in technologically more demanding fields like the automobile or electronics industry.

## DIFFICULT DIGITAL ENVIRONMENT

Even a rapid drop in robot prices would not lead to the replacement of workers by robots

in the short term in Africa where countries lag far behind in terms of fast internet and other information and communications technologies. They also lack well-trained IT experts. Other problems include an unreliable power supply, high energy costs and high financing costs for new technologies. For these reasons, it would be difficult and expensive to integrate robots and other digital technologies into African production lines.

Correspondingly, there is still ample opportunity for labour-intensive industrialisation. African countries probably will not leapfrog multiple stages of technological development. It is far more likely that their business environment will steadily improve as it did elsewhere. Basic infrastructure – including reliable power supply, roads, ports, finance and also the building of human resources and funding – must be established first. On that foundation, companies can build up job-intensive industries.

Once the digital environment becomes good enough, it will make sense to use robots that will eliminate some jobs. But at the same time, the countries in question will be in a position to use new technologies to manufacture new products, which will in turn create new jobs.

## INTERNATIONAL COMPETITION

There is a different threat, however. It concerns international competition. Industrial robots are allowing countries like Germany, the US, Japan and China to produce even more competitively than they did before. In these countries, robots are cheaper than well-paid industrial workers. Robot-using companies in these countries may out-compete African companies, the main competitive advantage of which is low wages.

This threat is not really new, however. Technologically advanced and innovative producers have always pushed other companies out of the market and made it difficult for companies from less innovative countries to catch up. How governments respond to this danger is what really matters.

China put in place policies to promote technologically demanding industries like automobile and electronics manufacturing. For example, foreign car companies were required to form joint ventures with Chinese firms in order to produce in the People's Re-



Robots assemble VW components in Germany.



public. That strategy gave Chinese partners access to foreign corporations' technologies.

According to the UN Conference on Trade and Development (UNCTAD), the automation of production through robots and the corresponding cost savings could lead, in the medium-term, to companies shifting production away from developing countries and emerging markets back to industrialised countries. That would harm the growth of African industries that are involved in global value chains.

At the moment, however, the production capacities set up by western companies abroad exceed those that are brought back home by a factor of three. A discussion paper by the German Development Institute reports that the Chinese government expects 85 million jobs to migrate away from the country's low-wage industries – of which a share might go to Africa.

It remains to be seen whether the trend will last or may eventually reverse itself. Relocating jobs back to a company's home country only makes sense when automated production at home becomes cheaper than low-wage production in Africa.

Calestous Juma, the former professor at the Harvard Kennedy School of Harvard University who passed away in 2017, emphasised: "Jobs are not created or lost because of a single technology, but because of the business models designed to leverage the power of the technology". As was the case with previous automation processes, African states are finding it difficult to reap the benefits of this new technology because of their limited ability to compete and their digital shortcomings.

Africa needs trade and industrial policies that give it leeway to develop its industries. Digital infrastructure, well-trained employees and affordable financing opportunities must become features of the business environment. Otherwise, it is impossible to make profitable use of robots in production processes. If, on the other hand, African capacities for innovation improve, that would also help to ameliorate the negative impacts of automation. Technology-driven modernisation should thus prove benign both in terms of innovative products and job creation.

## LINKS

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# Digital disruption

**General-purpose digital technologies are disrupting the ways in which we produce, trade and consume goods and services. This trend is likely to affect the economic future of developing countries by redefining patterns of global trade and value chains.**

By Wilfried Lütkenhorst

For many years, the underlying forces of industrial production and competitive integration of world markets have remained unchanged. Past decades were marked by a steady increase in the globalisation of economic activities. This trend was only temporarily dented by the global financial crisis after 2008. Currently, the trend of competitive global integration even seems to withstand growing protectionist pressures.

Yet the relative importance of countries has changed. The share of developing countries and emerging markets in global production and exports has increased with China's fast and uniquely successful rise making the biggest difference.

If business continues as usual, we could expect an on-going trend towards an ever more interconnected global economy, with international value chains becoming ever more important. However, some things may change dramatically in the years to come. While the speed and magnitude of technological change remain unpredictable, patterns of international specialisation are likely to be redrawn.

Technological innovations – ranging from robotics to additive manufacturing, big data and the internet of things (OECD 2017) – will have significant impacts on the prospects of developing countries making efforts to industrialise. Some observers even suggest that the conventional manufacturing-driven pathway to prosperity may gradually be closed (Hallward-Driemeier/Nayyar 2018).

For many decades, we have observed the so-called “flying geese” dynamics. Industrialisation typically took off on the basis of low wages. The countries concerned became increasingly competitive, kept upgrading their capabilities and eventually

opened up space for other newcomers. Other emerging markets would industrialise according to the same pattern, with wages increasing in line with enhanced skills. Today, some observers consider the impact of new digital technologies to be so dramatic that the next goose may no longer fly behind the previous birds. Industrialisation, specifically manufacturing, may not be a viable path to economic development anymore.

Compounding this challenge, the boundaries between manufacturing and

services are becoming increasingly blurred. Ever more services are contained in manufactured goods (“embodied services”) or sold in packages with manufactured goods (“embedded services”).

So, does this spell the end of latecomer industrialisation as a viable development path? Dani Rodrik (2015) speaks of a trend towards “premature deindustrialisation”, claiming that developing countries are becoming service economies before reaping the full benefits of industrialisation. Digital technology might reinforce such a trend.

Things may also turn out quite differently, however. A sober assessment must acknowledge the following points:

- So far, we do not have conclusive evidence on the correlation of digitalisation-



Research team working on the first African electric car.



induced job losses and per-capita income levels. It is therefore unclear to what extent low-income countries will be affected.

- We have far more evidence concerning what is technologically feasible than what is economically viable. It may take a long time before digital technology really affects labour-intensive production in developing countries. Furthermore, the process will differ from sector to sector. Digital automation and robotics are rapidly changing the electronics and automotive industries, but are being introduced in the garments and footwear sector more slowly.

- The alleged trend of industrial production being “backshored” (i.e. moved back to advanced economies after an earlier offshoring) is more hype than reality. The few systematic studies available (in particular De Backer et al. 2018) suggest that the scope and speed of offshoring to developing countries is being gradually reduced by robotics, but there is only anecdotal evidence of genuine backshoring.

Digitalisation does not happen overnight. Low-income countries at incipient stages of industrialisation are likely to enjoy some breathing space. Hence, in the medium term building up low-skill, labour-intensive industries should remain a viable option. Recent research differs widely on the magnitude and timing of technology-induced job losses, but it should take digitalisation two to three decades to fully permeate the world economy. Speed will depend on various factors including labour markets (wage and skill levels), regulatory environments and societal acceptance.

That said, the impact of new technologies can prove fast and wide ranging at the micro level of individual factories. For example, Vietnam’s leading manufacturer of ceramics and porcelain reduced the number of workers through automation from 400 to just 20 without any loss in quality. In the same country, a food producer has fully automated egg processing with machinery imported from the Netherlands. Such innovations are not only brought about by foreign investors. Domestic companies producing for their home markets are involved as well.

As I argued in a study prepared for the German Development Institute (Lütkenhorst 2018), developing countries should prepare now for the impact of digitalisation. Generally speaking, they should adopt a forward-looking industrial policy and actively promote their potential competitive advantages (also see D+C/E+Z e-Paper 2018/O1, page 16). This involves rallying all relevant stakeholders behind a shared vision. More specifically, it is important to build digital infrastructure and to foster digital skills. Low- and middle-income countries need to build up digital platforms for communication, finance, consumption and production. Internet access must become universal and affordable.

Moreover, the requisite skills must be developed and upgraded. Vocational training and the general education system must rise to the challenge of fostering:

- genuine ICT skills (programming, handling of complex databases et cetera),
- complementary ICT skills required for working in digital environments (for instance planning digital work processes),
- basic skills (literacy and numeracy) as well as
- a set of soft competencies.

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## ULTIMATE LINE OF RESISTANCE

Indeed, creativity, emotional intelligence and social competence are of crucial relevance. In a way, they represent the ultimate line of resistance to digital automation. They will grow in importance in increasingly complex manufacturing-service systems. Ways to promote such skills include:

- gearing schools to the needs of vocational and technical training,
- involving the private sector in educational partnerships aimed at designing innovative training programmes,
- encouraging on-the-job training and internships and
- providing financial incentives for training efforts.

Especially small and medium-sized enterprises (SMEs) will need support. SMEs often do not have the resources to implement their own skills upgrading. At the same time, existing training programmes often do not meet their specific needs.

Positive good-practice examples are subsidised training consortia in South Korea or the Skillnets facility in Ireland. The latter is state-funded yet enterprise-led. Development cooperation programmes could play an important role in disseminating key lessons learned in such successful digital training schemes.

Low-income developing countries may benefit from future employment opportunities arising from innovative IT-enabled services. This is illustrated by various IT-service clusters in Kenya and Rwanda, for example. Moreover, the digitalisation of a range of services from online purchase transactions to online banking can drive productivity.

Inevitably, some of the above reflections remain speculative. We find ourselves on the cusp of radical change, and we are only beginning to understand the longer-term implications. Discussing digitalisation, Michael Spence, the economics Nobel laureate, remarked a couple of years ago: “No one knows fully how all of this will play out”. That is still true.

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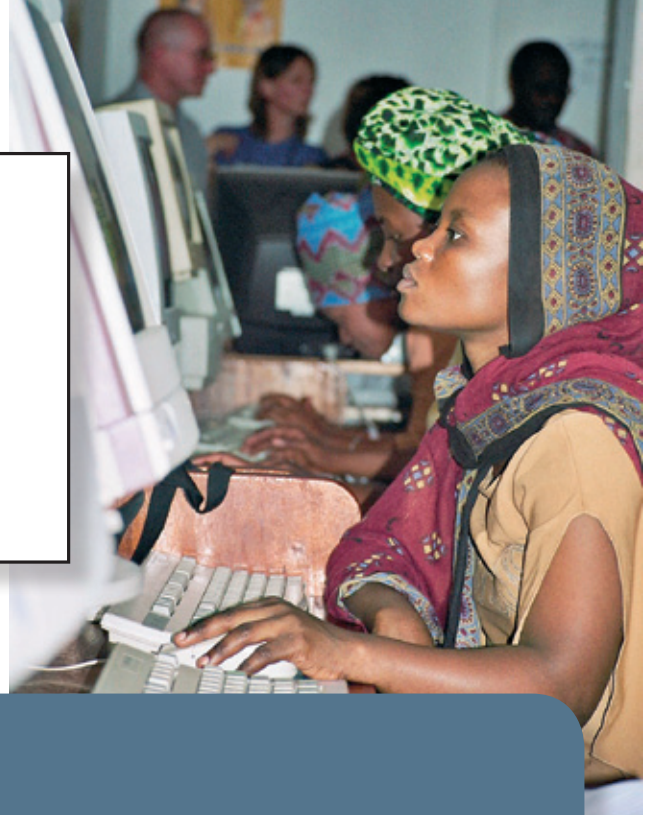


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