

akzente

2/2020

The GIZ Magazine

Tracking down
the truth

Supporting forensic
scientists in Mexico

Together against
flooding

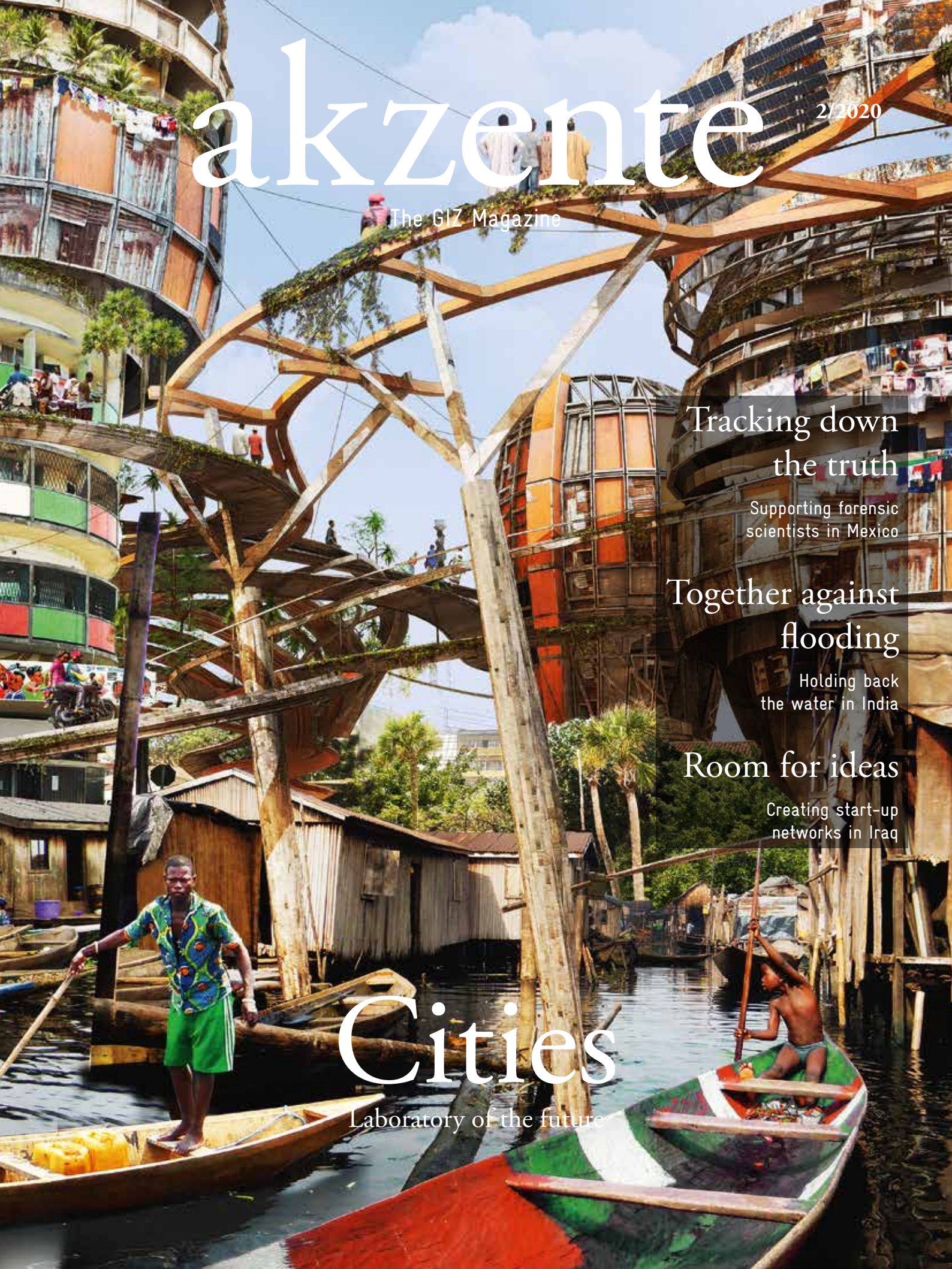
Holding back
the water in India

Room for ideas

Creating start-up
networks in Iraq

Cities

Laboratory of the future



I'M TAKING NEW
KNOWLEDGE BACK HOME WITH ME.

CHAKRIT CHAIYAWUTTAPARUK

The electrical engineer from Thailand underwent six months' training in renewable energy in Germany with the aim of taking the knowledge he acquired back home. By 2036, the aim is for renewable sources to account for 40 per cent of Thailand's energy mix.

You can find this and other 'Faces and Stories' online at
www.giz.de/stories



Scan the code with your smartphone to watch the video.

CITIES – LIFE – PEOPLE

Why it makes sense to plan and support urbanisation actively.

CITIES have never been under such pressure. Their role is to build places to live, provide education, ensure air quality, create economic incentives, organise cultural events, manage traffic, fight poverty – and now tackle a pandemic, too. Nowhere is the risk of being infected with coronavirus greater than in areas with a high population density and where social distancing is difficult to practice. From Wuhan to Bergamo, Madrid to New York, and Mexico City to Mumbai, the pandemic is impacting massively on all those living in cities.

EVEN WITHOUT A PANDEMIC, cities face huge pressures. Their non-stop expansion poses ever greater challenges. The urban population has outstripped the rural population since 2007, and by the middle of the century, towns and cities will probably be home to two thirds of the world's population. And these are not new predictions, either: experts were making them 10 years ago, when the city of Shanghai hosted Expo 2010. The theme of the Expo was 'Better City, Better Life'. I visited it twice on business and saw for myself the huge range of approaches to improving human life through smart cities. Two very different approaches have stayed with me in particular. One was a simulation of a city without the flickering lights of street advertising, projected by artists onto São Paulo. This city of 12 million inhabitants – or 22 million, depending on whether you include all the suburbs – is one the world's largest urban areas. Light can put pressure on the population and the environment if there is too much of it. This is what is known as light pollution, as opposed to air pollution. The Danish city of Odense, by contrast, has just 180,000 inhabitants and is peaceful and idyllic. In Shanghai, the city presented its cycle-friendly credentials, inviting visitors to take to two wheels to see for themselves.

A TALE OF TWO CITIES. What these two very different cities have in common is that they put people at the centre of the way they operate. Urban development has traditionally focused on individual sectors, such as water, waste disposal or mobility, taking a more detached, technical approach involving infrastructure measures. Now, though, we need to think more holistically. So our urban expert Carmen Vogt writes in this issue about sustainable urban development that is more than the sum of its many parts. The principle focus, she concludes, is on people.

SO IT IS WORTHWHILE taking a more proactive approach to urban development and tailoring it to what individuals need, rather than simply letting it happen. Density of population is actually a great opportunity: it is possible to achieve a lot within a small space, to develop sustainable solutions for living, to put transport on a more sustainable footing and to create a circular economy. A decade ago, at the Expo in Shanghai, there was already support for the concept of towns and cities as a laboratory, an opportunity to really make use of human creativity and transform cities into what they actually should be, namely hubs for a productive co-existence and a decent quality of life for all. Maybe the current hiatus caused by the coronavirus crisis offers an opportunity to achieve this. At least, that is how Bonn's Mayor, Ashok-Alexander Sridharan, sees it. In an interview with akzente, he explains what the crisis has to do with sustainability and why the pandemic has made this even more important.

WHAT URBANISATION means – and should not mean – for Africa is set out very clearly in a forward-looking essay by Ghanaian urban planning expert Professor Seth Asare



SABINE TONSCHEIDT,
Director of Corporate Communications
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Okyere. He argues that we should be aiming not for glass palaces hidden away behind secure walls, or for smart, hi-tech districts, but affordable housing, adequate green spaces, universal basic services and greater citizen participation. These are the things that make even rapidly expanding cities good places to live in. Finally, our report from the Indian city of Bhubaneswar shows that citizens can indeed achieve great things by working together in areas such as climate change adaptation.

THESE AND OTHER urban development initiatives, both big and small, form the focus of this issue of akzente. And maybe one of the articles will give you some ideas for your own community?

A handwritten signature in blue ink that reads 'Sabine Tonscheidt'.



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IN FOCUS: CITIES

Standing out

For the first time in history, the world is becoming a city. Chaos and opportunity coexist side by side. It is up to us to bring the former under control and exploit the latter.

EDITORIAL

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PHOTOS: GIZ / SANDEEP SAN (P. 4, LEFT), TOMATIUH FIGUEROA (P. 4, RIGHT)



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Joining forces for Europe

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INTRODUCING

Buenos días from San Salvador!

Project manager Jan Bock protects the forests of Central America. p. 50



COVER IMAGE

Our cover shows a futuristic vision of Lagos by Olalekan Jeyifous. You can find out more about the artist and his work at akzente.giz.de/en.



IN FIGURES

1 billion

According to current estimates, there are more than one billion bicycles worldwide and more than half the world's population can ride a bike. Four bicycles are manufactured every second, and someone buys one every two seconds. China is the world's biggest nation of cyclists, with around 450 million bikes on the roads.

Source: World Bank

90%

The volume of data around the world is increasing exponentially. By some estimates, 90 per cent of all existing data has been created in the past two years, and it is projected to increase by 40 per cent annually. Big data offers an opportunity to achieve the SDGs but also involves risk, including in relation to data protection. Source: UN

13%

Museums have been hit particularly hard by the coronavirus crisis. More than 85,000 museums – nearly 90 per cent of the world's institutions – have had to close temporarily during the pandemic. In Africa and the small island states, only 5 per cent of museums have been able to offer online content to their audiences. Nearly 13 per cent of museums – one museum in eight around the world – may never reopen. Source: UNESCO



Smart potatoes

INDIA Technological innovations are transforming agriculture. The SolAntenna, a smart sensor in the shape of a potato, is a good example. Farmers in India put it in among the real things to measure moisture, temperature, GPS and CO₂ levels. The SolAntenna monitors conditions along the value chain, from cold store via lorry to final destination. GIZ is using these smart potatoes to solve problems in the transport cycle. Analysing the data has already led to positive changes – and a better quality of potato.

‘We need nature more than ever, as a solution, as a resource, for respite and for life on earth.’

RICHARD DEVERELL,
Director of the Royal Botanic Gardens, Kew, London



PHOTOS: GIZ / SANDEEP SAN (P. 6), FORUM SUSTAINABLE COCOA / GAEL GELLE (P. 7), ILLUSTRATION: JULIAN RENTZSCH (P. 7)

A bountiful harvest

CÔTE D’IVOIRE Most of the cocoa grown in Côte d’Ivoire is produced by small family farms. With support from GIZ, they are now able to increase their yields and improve the quality of the cocoa they produce. Following a successful first phase, the PRO-PLANTEURS project has been extended for a further five years. GIZ has advised 35 cooperatives in the south-east of the country and trained 7,700 cocoa growers in farm management and a further 5,400 in good agricultural practice. 20,000 farmers have so far received support, and the aim is to reach 10,000 more. The project focuses particularly on wom-

en: more than 2,100 women have seen their earnings increase, and PRO-PLANTEURS has trained 76 female rural advisors to advise 22,700 families on good nutrition. Meanwhile, to boost climate resilience, the project has distributed 60,000 trees to provide shade for cocoa plantations. PRO-PLANTEURS is a joint project by the German Federal Ministry of Food and Agriculture (BMEL), the German Federal Ministry for Economic Cooperation and Development (BMZ), the German Initiative on Sustainable Cocoa and Côte d’Ivoire’s Conseil du Café-Cacao (Coffee and Cocoa Board).

THREE QUESTIONS FOR



VERÓNICA NUÑEZ

The 24-year-old product designer from Peru completed a German-style course of dual training. It included a placement at Faber-Castell Peru, where she developed a box for felt-tip pens that is now sold across the country.

Why did you leave university to take up a dual training course?

When I left school, I was advised to study communications, but I could see that it wasn’t for me. I’m very creative and like designing and making things. So when I heard about the dual training programme in product design, I knew that was what I wanted to do.

Has the dual training programme helped you access the labour market?

Definitely. Alongside the theoretical training at the Toulouse Lautrec institute in Lima, I gained practical experience at Faber-Castell as part of a vocational training programme accredited by the German-Peruvian Chamber of Industry and Commerce. Studying at the institute and working in the company at the same time was quite demanding, but it really paid off. Once I finished my training, the company immediately took me on.

What professional success have you achieved so far?

After four years with the company, I am now self-employed. My portfolio includes product design and jewellery design, and I work for a number of small businesses. Things are a bit difficult at the moment because of the coronavirus crisis, but I have solid training behind me and I know what I want.

www.bmz.de/experts (German only)

Finally being heard

NIGERIA For years, the voice of those living in the slums of Port Harcourt has gone unheard. Almost half a million people live in informal settlements along the waterways running through Nigeria's oil capital, but these communities do not feature on official maps. Now a media platform has been created so that they are no longer ignored. Local people use the platform to report on the conditions under which they live – and what needs to change. They have recorded plays, raps, radio programmes and videos, all of which are freely available to download, and are also involved in developing

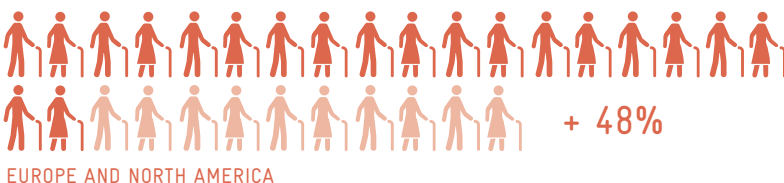
interactive maps. GIZ has helped train people in media production and equipped them with digital devices. The project is particularly important for young people from the slums, who face discrimination and unemployment. The plan is to feed the information gathered into urban planning for Port Harcourt. The project was financed by the Inequality Challenge Innovation Fund, a BMZ initiative that supports innovative approaches to tackling social inequality.

www.cmapping.net/chicoco-show-and-tell



Global ageing

IN COMPARISON The number of people worldwide aged over 65 is set to more than double by 2050, to over 1.5 billion. The biggest increase, from 261 million to 573 million, is expected in East and South-East Asia. The most rapid increase, from 29 million to 96 million, is likely to be in the Middle East and North Africa. The expected growth in Europe is comparatively modest, from 200 million at present to 296 million.



Source: United Nations, Department of Economic and Social Affairs, Population Division

Protecting water

COSTA RICA An innovative approach to charging for water is now financing protection of the Río Barranca catchment area. Consumers pay a modest levy on top of their water bill to fund support for protected areas. This will raise USD 1.2 million over the next five years to help rehabilitate the Río Barranca and the country's agroforestry and sustainable agriculture. If all of the country's 1,800 water producers' associations were to introduce the levy, this would raise a further USD 10 million a year for investment in water protection. The Río Barranca catchment area includes four biocorridors linking major ecosystems. On behalf of the German Environment Ministry (BMU), GIZ advised Costa Rica's national regulatory body and its Ministry of Environment and Energy on designing the levy. Proceeds go to the National Forestry Financing Fund, which backs environmental projects run by local water producers' associations. The concept has already been successfully adopted and rolled out in more than 200 associations.



‘Good health systems are important to us all’

For 12 years, GIZ planning officer Susanne Grimm managed health programmes in Asia and Africa. Since 2018, she has been part of the Health competence centre in Eschborn.



What is pandemic preparedness, and what experience does GIZ have in this area?

Pandemic preparedness goes far beyond well-equipped hospitals. Societies need functioning health systems

to ensure that their population is fully protected against infection and to provide effective treatment, but they also need public information. We learned lessons from the 2015 Ebola outbreak in West Africa, in which the turning point came when a well-informed population began to adopt the right behaviours.

How is GIZ supporting its partner countries in the coronavirus crisis?

We immediately supplied protective equipment and testing kits and supported public information campaigns. The digital notification system in Ghana and Nigeria has been expanded: COVID-19 data is now recorded quickly and centrally. In West and East Africa, we have been assisting with regional epidemic plans and cross-border field simulations since 2015, and that is proving really beneficial in the coronavirus crisis.

How is the coronavirus pandemic changing GIZ’s work?

COVID-19 is placing greater pressure on us all, and digitalisation is now the ‘new normal’. We are very pleased that cooperation has expanded beyond individual sectors. And what is even more positive is that, by taking rapid action on the ground, we have helped to contain the COVID-19 outbreak in many partner countries. —

COVID-19 PROJECTS



Protection against infection

NIGER For refugees seeking a better life, Niger is a major transit country. When the coronavirus pandemic hit, GIZ took action rapidly to improve the equipment in more than 25 hospitals and health centres along migration routes. On behalf of BMZ and the EU, it supplied them with 100,000 masks and protective gloves each, as well as 21,000 bars of soap, 300 handwashing stations, 250 thermometers, and safety goggles. This equipment will help to protect doctors, nurses and patients alike from contracting the disease.



A mission to spread joy

JORDAN These musicians are playing in isolation but also together: each musician records a piece of music at home, and the recordings are then edited into a single video and posted online. Ihssan Al-Maani from the Jordan Youth Orchestra sees this as ‘a mission to spread joy and happiness through our music.’ GIZ launched the initiative on behalf of BMZ and also oversees video production. Each musician receives a fee, which goes a small way to making up for the loss of income from concerts cancelled during the lockdown.



Apprenticeship by video

MOLDOVA Apprentices are learning online during the lockdown. Video technology means they are able to stay in touch with their training company as instructors demonstrate individual processes. Afterwards, they discuss the video virtually with their group. On behalf of BMZ, and with combined financing from the Swiss Agency for Development and Cooperation (SDC), GIZ is supporting businesses and the Chamber of Industry and Commerce in improving the quality of in-company training in Moldova.

PHOTOS: BETTY IMAGES / ISTOCKPHOTO (P. 8), MAIRE ABALAK (P. 9), LEFT BELOW



Report

TRACKING DOWN THE TRUTH

More than 61,000 people are believed to be missing in Mexico. And 37,000 bodies have still not been identified. A Mexican-German team shows how forensic science can help bring certainty for families.

TEXT KLAUS EHRINGFELD

PHOTOS TONATIUH FIGUEROA

Tracking down the truth

PAINSTAKING WORK

Experts carefully examine a piece of mummified skin. Traces of a tattoo may well provide a crucial clue to the identity of the deceased.





Mexican-German cooperation: (from left to right) Guadalupe de la Peña, Franziska Holz and Christoph Birngruber around the dissecting table in the Jalisco state Forensic Science Institute in Guadalajara.

The project contributes to the following United Nations Sustainable Development Goal (SDG):



It is a piece of human skin about the size of a sheet of A4 paper, dark and leathery; ‘mummified’ is the term used in forensics to describe it. Guadalupe de la Peña and Franziska Holz unwrap it carefully from the blue paper protecting it and lay it gently on a dissecting table. The piece of skin is a valuable find and may help to answer the question of whose body it came from.

German forensics experts Franziska Holz and Christoph Birngruber, their Mexican colleague Guadalupe de la Peña, and anthropologist Dalia Miranda are trying to get closer to answering that question. All that remains of this individual, whose body was found a year ago, is this piece of skin, the skull and some bones. And all anyone can say for sure is that he was a male aged between 31 and 51.

Every aspect of the work is hard. And it begins with looking carefully. Under the artificial light of the basement of the Forensic Science Institute in Guadalajara, the four professionals peer at the piece of skin. If you look carefully, you can see some

coloured marks that were once part of a tattoo. More than five million people live here in Mexico’s second largest city, in the west of the country between the Pacific and the capital, Mexico City. This is where the Mexican cartels began life, almost half a century ago, and this is where they still compete for routes and territories for drug trafficking and other illegal activities. And they are in a battle with the state. Guadalajara and the state of Jalisco are the epicentres of violence in Mexico.

In 2019, 100 people were murdered every day in this Latin American country. The National Search Commission believes that a total of more than 61,000 people have disappeared nationwide, including 9,000 in Jalisco. 2,700 people were murdered in the state last year. Many of the victims are buried in mass graves, and last year alone, almost 900 such graves were discovered across Mexico, many of them in and around Guadalajara.

Most victims of cartel violence have no means of identification on them, and most are naked when their bodies are found. ‘This is the sad reality we are facing here,’ says Guadalupe de la Peña. Every day, the Institute typically receives eight to ten bodies,



Anthropologist Dalia Miranda (second from left) is a key member of the team. Here, she scrutinises infrared photographs.

of which around half are unidentified. The task the experts face is difficult. How can they find out who these people were? Identification is often made even more difficult by the condition of many of the body parts.

Tattoos provide a clue to identification

Forensics experts in Germany would be able to rely on DNA samples, dental records or simply fingerprints. But Mexico does not have a central fingerprint database, and Mexican dentists do not keep detailed dental records. ‘That means we have to rely on secondary characteristics, such as tattoos,’ explains Franziska Holz.

She and Christoph Birngruber worked with Mexican colleagues for six months from October 2019 to improve identification. On behalf of the German Federal Foreign Office, GIZ is supporting the Latin American country in strengthening its forensic science institutes. ‘Identification needs to be better and faster,’ says Birngruber, who normally works at the university hospital in the German city of Frankfurt. There is a growing backlog of cases for identification, creating an increasing workload for the institutes – and delays.

Every day, mothers, wives and children arrive at these institutes looking for sons, husbands or brothers who have disappeared. They go directly to the forensics institutes rather than to

MEXICO

Capital: Mexico City / **Population:** 126.2 million / **GDP per capita:** USD 9,180 / **Economic growth:** 2.1 per cent / **Human Development Index ranking:** 76 (out of 189)

Source: World Bank 2018



Mexico is the world's largest Spanish-speaking democracy, but the **rule of law faces a crisis** there. The high murder rate, tens of thousands of missing people and almost complete **impunity** even in the event of the most serious crimes are devastating the country. The current government took office in late 2018, pledging to tackle this humanitarian crisis.



Mothers in search of their sons: Mónica Chavira (left) and Silvia Liviere from the 'Por Amor a Ellxs' (Out of Love for Them) collective on the streets of Guadalajara

'Our hope is to contribute to social peace in Mexico and improve trust in the rule of law.'

MAXIMILIAN MURCK, Director of the Strengthening the Rule of Law programme in Mexico. Read the full interview at [akzente.giz.de/en](https://www.akzente.giz.de/en)

the police because they mistrust the investigating authorities, says Mónica Chavira, a 56-year-old woman with some very firm views. She is a member of the 'Por Amor a Ellxs' (Out of Love for Them) collective, a self-help group for women whose husbands and sons have disappeared without trace. Since September 2013, Chavira has had no news of her husband or her son. They have simply vanished without any trace whatsoever. For her, and for other families, the uncertainty is extremely distressing. 'The police and the public prosecutor are not doing their job properly,' she says, referring to serious shortcomings in the security and justice system. Investigations are inadequate, if they take place at all, says Chavira, either because the relevant agencies do not know how to proceed or because they are hand in glove with the cartels.

Over recent years, Chavira, a teacher, has on more than 30 occasions appealed to the police, the public prosecutor's office and the Forensic Science Institute in Guadalajara to search for her husband and son. Every time, she has been asked to submit the same documents and answer the same questions – about age, height, fingerprints, identity documents, permanent features,

and DNA samples – but so far to no avail. ‘It’s great that people from other countries are now taking a look at our systems,’ she says. ‘The pressure from foreign governments will help improve things.’

In order to achieve this, the Mexican and German forensics experts have worked together to systematise databases and have, for example, categorised distinguishing features such as scars and tattoos. This means that specific features found on a body can be compared with characteristics reported by relatives. ‘We wanted to ensure that families don’t have to go through all the information again every time they make a request but that forensics institutes can use data already on file,’ says Franziska Holz, a forensics expert with Frankfurt’s Goethe University. It’s an ambition she shares with Guadalupe de la Peña, who is thrilled at how the Mexican-German team is collaborating: ‘The great thing about working with Franziska and Christoph has been cooperating on making real improvements.’

Infrared photography and hydrogen peroxide

New methods make it easier to discover more identifying marks. Hydrogen peroxide, for example, is fairly easy to use. Applying a dilute solution of this pale blue liquid, a compound of hydrogen and oxygen, lightens the skin for a while, so tattoos stand out more. And where bodies are already mummified, infrared photography can help. The Mexican-German team is using this technology to decipher the tattoo on this A4-size piece of skin.

Franziska Holz takes a paintbrush and carefully brushes the earth away from the fragment, which comes from the victim’s back and is adorned with a large tattoo. An outline and traces of colour can be seen. The team turn the piece of skin around, throwing out ideas in a mixture of German, Spanish and English as to what the design might be.

A single-lens reflex camera makes the task easier: simply changing the filter turns it into a valuable identification tool. Photographing solely infrared light means that blood can be detected on dark fabric, for example, or pigments in tattoos show up. De la Peña photographs part of the skin. The display on the digital camera reveals a black and white image of what looks like a clown or a mythical creature. The young forensics expert then combs the internet for comparable images. ‘This could be it,’ she exclaims suddenly. ‘It’s a harlequin.’ Piece by piece, and centimetre by centimetre, the team photograph the section of skin. Later, anthropologist Dalia Miranda scrutinises the computer images, trying to piece the puzzle together. Her work is just as challenging as that of her forensics colleagues. The finds Miranda and her colleagues examine range from single bones to complete skeletons. They have to assess whether remains belong to one individual or several. Traces of recent injury to bones can also reveal the cause of death. In most cases, only bones or skeletons remain of a victim, making the work of anthropologists crucial to the process of identification.

STRENGTHENING THE RULE OF LAW

Strengthening the rule of law is one of the major challenges facing Mexico. This includes giving the victims of violent crime a name. On behalf of the German Federal Foreign Office, GIZ is working with Mexican state institutions and civil society to improve the identification of the deceased as well as the **structures underpinning forensics and the national system for searching for missing persons**. The programme provides a range of support for devising and implementing an ‘extraordinary mechanism’ for identifying more than 37,000 unnamed bodies currently stored within forensics institutes, and for exhuming thousands of graves, many of them mass graves. To record victims’ details effectively and to ensure that the recording system operates beyond state boundaries, it is compiling databases and providing appropriate training for Mexican partners. The programme works closely with the United Nations, the International Committee of the Red Cross and the German Embassy in Mexico. It has published newspaper and journal articles in Mexico about the cooperation with German forensics experts. Furthermore, public discussion is now focusing increasingly on structural changes in the process of identifying unnamed bodies.

Contact: Maximilian Murck, maximilian.murck@giz.de

A few weeks later, the tattoo has not been completely deciphered, but it is clear that it is based on three interlinked heads of mythical creatures. Dalia Miranda finds similar tattoos on the internet. This will enable forensic science institutes to search the databases for reference to this kind of tattoo in the information families have registered about missing loved ones.

Such painstaking identification processes are needed for many of the victims. But, as Guadalupe de la Peña knows, the work of bringing cases to a successful closure is important: ‘It means families can finally start grieving.’ And that is one of the main reasons she does this work. ‘In Mexico, there is less focus on the victims,’ she argues. The system is not set up to show sensitivity and empathy when dealing with families, she adds, but ‘I am so glad that the work we do can help them achieve a little more peace of mind.’ —



KLAUS EHRINGFELD has been living in Mexico since 2001 and reports regularly for the German media. For him and his Mexican colleague, investigating the story around the dissecting table was a unique experience.

TONATIUH FIGUEROA works as a photographer in Guadalajara.



IN FOCUS

CITIES

For the first time in history, the world is becoming a city. Chaos and opportunity coexist side by side. It is up to us to bring the former under control and exploit the latter.



REPORT

Together against flooding

How citizens in the Indian city of Bhubaneswar are playing a game to beat flooding. **p.18**

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The cities of women

Groundbreaking projects that incorporate a female perspective into urban planning **p.22**

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Agile or fragile

Professor Seth Asare Okyere on the ideal African city of the future **p.24**

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Blessing or curse?

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‘Sustainability remains a key issue’

Mayor Ashok-Alexander Sridharan on the role of cities in creating a more sustainable world **p.32**

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The future is urban

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EXAMPLES OF GIZ'S WORK

Stronger together

Protecting the climate, combating poverty and building safer cities. GIZ is involved in a wide range of urban projects. **p.37**

In focus: Cities



Active citizens getting out and about in Bhubaneswar as Mu City Savior ('city saviours') to improve life for those in their community.

Together against flooding

The Indian city of Bhubaneswar is working to curb flooding and unblock drains. Using a game in a smartphone app, citizens are helping to solve the problem.

TEXT MATHIAS PEER

The main traffic arteries are clogged with water and commuter traffic barely moves for hours. The start of the year is usually a relatively dry period in the large eastern Indian city of Bhubaneswar, but this can no longer be guaranteed in times of climate change. On a Wednesday morning in late February 2020, local meteorologists reported 78 millimetres of rain within 24 hours, the highest figure for this time of year since records began.

Bhubaneswar is the capital city of the Indian state of Odisha and is considered an emerging hub for digital technology in India. Home to around one million people, the city has seen rapid growth, although this has not been planned in every neighbourhood.

The effects of this and of extreme weather phenomena are visible. The drainage systems are unable to cope with floodwaters as they become blocked by mud and refuse. Cleaning teams have to be brought in to ensure the rain can run off properly. The authorities in Bhubaneswar have been grappling with the problem for a long time. While the city has numerous waterways for collecting rainwater and diverting it away from the roads, these are

blocked in many places by illegal buildings on the banks or by tonnes of household waste.

Weatherproofing Bhubaneswar is an enormous challenge for the city authorities, not least because they lack up-to-date information. They simply do not have the human resources available to monitor on an ongoing basis which areas are currently seeing a build-up of water. There have been no alternative technological possibilities for doing this in the past, but now Bhubaneswar intends to use a new app to solve the problem. Developed by representatives from different departments of the city administration, civic organisations and universities in cooperation with GIZ, the app is an example of how GIZ is working on behalf of the German Federal Environment Ministry (BMU) to assist municipalities in adapting to the effects of climate change.

In the process, Bhubaneswar is counting on the population quite literally playing along. Aishwarya Nandita is here today to explain to residents of the million-strong metropolis how the app works. The 24-year-old student has travelled with a group of volunteers to a marketplace in the city's Nayapalli neighbourhood, which

SHARING SOLUTIONS

There are a number of strategies cities can employ to protect themselves against the effects of climate change, whether in the form of heavy rainfall or heatwaves. Mu City Savior is one example of how the global ICT-based Adaptation to Climate Change in Cities project is establishing responsive innovation processes to foster **transformative climate change adaptation**. Selected cities in India, Mexico and Peru are participating in this global programme. GIZ is working with the German Federal Ministry of the Interior (BMI) on behalf of the German Federal Environment Ministry (BMU) to advise these cities on developing, implementing and scaling **responsive digital solutions**. The findings from the three pilot cities, namely Bhubaneswar, Guadalajara and Trujillo, will be shared around the world. Using open source software, which is freely accessible and adaptable, allows other cities to benefit too. GIZ has developed the www.climate-digital-cities.com platform to encourage networking. It offers information about the 'Internet of Trees' from Mexico and digital support from Peru for locating relatives after flooding.

Contact: Teresa Kerber, teresa.kerber@giz.de



Above: Student Aishwarya Nandita is one of Bhubaneswar's everyday heroes. She works as a volunteer publicising the new app for combating flooding.

Left: The roads of the Indian city regularly flood following rainfall.

INDIA

Capital: New Delhi / **Population:** 1.3 billion / **Economic growth:** 6.8 per cent / **Human Development Index ranking:** 129 (out of 189)

Source: World Bank 2018



India is one of the ten countries most severely affected by **climate change** in the world. The subcontinent is seeing an increase in extreme weather conditions.

experiences frequent flooding. She asks people there about their experiences of the floods. A nurse tells her that she regularly has to wade through flooded roads on her way to work, getting her uniform soaked every time.

Like a computer game

Nandita produces her smartphone and shows them the app. It is called Mu City Savior, a combination of English and the local language Odia, which translates as: 'I'm the city saviour.' But how do people become everyday digital heroes? Very easily: the app is set up like a computer game. It begins by displaying a map of the city on the screen showing the key junctions in the drainage system. Those wishing to advance to the next level have to get out and about. Users are shown by navigation system the nearest position from which they can get a good view of the drain. Once they arrive at that position, the app asks them three

short questions: How much refuse is in the drain? How high is the water level? How well is it currently draining away? There are three possible answers in each case and a 50-point reward is issued to users for the leaderboard in which the 'city saviours' compete with one another.

The data that is collected is fed through to Seshadev Panda. A former wing commander in the Indian Air Force, he is now the General Manager for Technology at the agency Bhubaneswar Smart City Limited. He worked with local GIZ staff to drive the app's development. The project was launched in mid-2018 with the intention of determining how digital solutions could help the city in tackling climate change. Flooding was identified as the most pressing issue in discussions. 'I can still remember it well. On one day, we'd barely had two hours of rainfall and yet the city's roads were flooded,' says Panda. 'That's when it became clear to us that something finally had to change.'

Ninety per cent of floods in the metropolis can be attributed to blocked drains. The water is usually impeded by carelessly discarded packaging, broken branches or rubble dumped illegally. ‘We rely on citizens to help us combat this,’ says Panda. It was this recognition that gave rise to the basic idea for the app. External programmers assisted with its implementation. After a year or so, the first version of the app was ready. It is to be made freely available to other municipalities in future in line with the open source principle. Panda describes the approach as a challenge for the administration: ‘Working with citizens and other partners to solve a problem rather than setting the direction ourselves from the outset was a completely new approach for us,’ he says. ‘It took us some getting used to initially.’

He believes the experiment has paid off. The Mu City Savior data is fed into an algorithm, which uses it to produce a priority list, updated on an ongoing basis, for drainage works. From October 2020, things will be taken a step further, with the city also collecting the information in

a new control room which will manage the metropolis’s resources in real time. ‘We could also use cameras and sensors to monitor the drains,’ says Panda. ‘But that kind of technology would be far more expensive and extremely high-maintenance.’

Praise from the Indian Government

According to Shabaz Khan, who works as a GIZ technical advisor in India on urban projects for combating climate change and supported the project, there is another key benefit to opting instead for citizen participation: ‘When local residents play their own part in ensuring the proper functioning of the drainage system, they feel a greater sense of responsibility for ensuring that refuse is disposed of correctly in future rather than ending up in drains.’

Volunteer Aishwarya Nandita also appeals to people’s sense of responsibility. She and her fellow volunteers have rehearsed a brief play, which they perform on the street, about students in a hall of residence

who lose their books and documents in a flood. ‘We wanted to show that flooding is a problem that could affect everyone if we don’t work together to solve it,’ says Nandita. The performance has been a resounding success: ‘Many people installed the app straightaway.’ It was downloaded some 600 times after the first few information events. Other opportunities will be used in the coming weeks to publicise the app further.

And the idea is already attracting attention beyond the city’s boundaries. Mu City Savior has been recognised by the Indian Government as the best Climate Smart Cities project of 2020. It is making waves as an example of a digital and citizen-centric response to climate change. Around 2,000 kilometres away, the southern Indian city of Kochi lies at the heart of a two-million-strong metropolitan area. The municipality on the Malabar Coast, which experiences regular flooding, has already expressed interest in introducing the app itself. This is good news to Shabaz Khan: ‘Every city wishing to use the app is most welcome to do so.’ —



Global network: The Mu City Savior vehicle shows the other locations in the Climate Digital Cities network.

The project contributes to the following United Nations Sustainable Development Goals (SDGs):



The cities of women

Women live differently to men in cities. They move differently and have different routines and needs. Despite this, their wishes have long been overlooked. This is changing gradually. We present a number of unconventional initiatives that place a particular emphasis on women.



In the cities of Latin America

Nowhere else do a higher percentage of people live in cities than in North and South America. According to UN-Habitat, urban dwellers account for around 80 per cent of the total population. It is therefore unsurprising that women across Latin America have joined forces to campaign for better conditions and greater equality in cities. The non-governmental organisation Red Mujer y Hábitat América Latina y Caribe was established in 1989 to give women a voice and a platform to highlight their concerns. Operating in 14 countries, the network comprises institutions and individuals who are united by the common goal of quite literally creating more space for women in cities. The topics they seek to promote include safer cities, affordable housing, appropriate services and involvement in local decision-making processes. To this end, they develop initiatives, programmes and projects, and share their insights with groups from the other countries. For instance, there are offshoots of the organisation in Rio de Janeiro, Quito, Managua and San Salvador. —

In the planning offices of Vienna

Many cities have failed so far to give sufficient consideration to the needs of families and women. There are not enough public toilets, cars have more space than buses, childcare places are lacking and playgrounds are dirty. This was also true of Vienna for a long time. The Austrian capital now uses a gender planning approach, which requires that specific account be taken of the various requirements and interests of different groups. As a consequence of the gender-sensitive planning processes, pavements have been widened, as women traditionally walk more than men. In an effort to make public spaces safer, roads are better lit and paths are more open to view. One of the goals is also to redress the balance concerning the preponderance of streets named after men. Until a few years ago, this figure stood at more than 90 per cent. It is now increasingly common to find Viennese street signs bearing names such as Christine Nöstlinger (author), Maria Trapp (singer) and Rosa Tree (businesswoman). —



In the slums of Nairobi

Kibera is a slum in the south-west of the Kenyan capital Nairobi and one of the largest in Africa. It consists of row upon row of huts, most of them without access to clean water, toilets or showers. Rubbish lines the muddy paths. Life here is especially hard for girls and women. Besides generally lacking the privacy they really need for taking care of their hygiene,

safety is always an issue too. The organisation Women for Women in Africa organises and finances courses and classes for girls and young women in Kibera to improve their prospects in life. They learn to read and write and, where possible, obtain their school-leaving certificate, which affords them greater independence and freedom. —

On the streets of Khobar

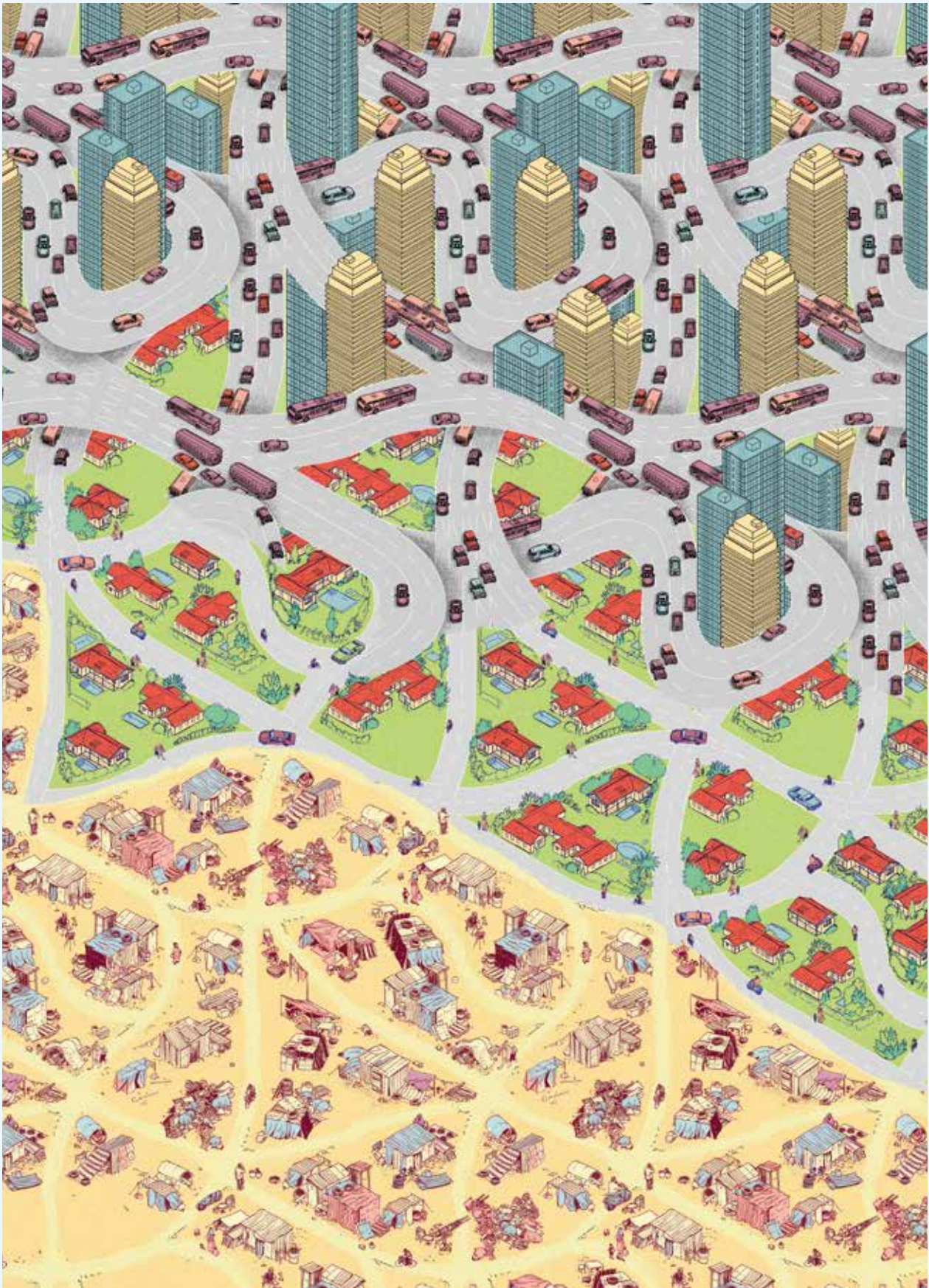
Manal al-Sharif set up the Women2Drive campaign in Saudi Arabia to oppose the ban on female drivers in the country. In May 2011, she had a female friend film her driving a car in the city of Khobar and posted the video online. Until then, women had not been permitted to take the wheel in the Arab country, something that Manal al-Sharif considered antiquated in the 21st century. The young woman even served a brief prison sentence as a result, but her actions paid off, galvanising a movement and ultimately bringing about a legislative change allowing women to obtain their driving licence and drive in Saudi Arabia since 2018. —

In museums worldwide

The arts scene is male. This was the conclusion of seven female New York artists in 1985 when the Museum of Modern Art (MoMA) was reopened with the goal at the time of displaying the world's leading contemporary artists. In reality, however, less than 10 per cent of those artists were female. This was something the group was not prepared to accept and so they decided to engage in an unconventional form of protest. They formed the Guerrilla Girls and have campaigned for their cause in gorilla masks ever since. The activists either wear the masks themselves or place them on posters, flyers, etc. The women remain anonymous at all times and it is not known to this day how many members are in the organisation. They denounce discrimination against women in many of the world's major cities and museums. Other cities besides New York in which the Guerrilla Girls are active include Madrid, London, Paris and Cologne. —



In focus: Cities



Agile or fragile

The future is urban. What cities will look like, whether they service the privileged few or the deprived many, depends heavily on the right management. **Seth Asare Okyere**, Assistant Professor for Urban Development Planning, paints a personal picture of the ideal city development in Africa.

Illustrations: Florian Bayer

It was October 2014 when I frequented Dantodori, Osaka's popular melting pot. It's an entire sea of people. Crowds troop in opposite directions, bodies seamlessly manoeuvre, shops, eateries and anime centres converge. Just beyond, the busy highways carry fast-paced vehicles, the adjoining canal tourist sight-seeing boats, all dwarfed by the very tall concrete or glass buildings of corporate offices while the busy subways can be felt beneath. There is movement everywhere and even the static buildings seem to be in constant motion. This is Osaka, a city of almost 3 million and metropolis of close to 19 million people. Behold, I exclaim to a colleague, what matured urbanisation is: crowded but organised; excessive yet controlled. The huge metropolis of Osaka is on the move and has been since the post-war reconstruction.

IN THIS ARTICLE

1. CHANGE

How rapid urbanisation is transforming the African continent and expanding its cities.

2. TREND

The risks of urban planning processes that fail to take account of the whole population.

3. OUTLOOK

The opportunities unlocked by shifting perspective from lofty visions to urban realities.

Recently, this pattern of urbanisation is finding new ground elsewhere, not the least in Africa, but in a different form and at a different pace. African cities are also on the move, though infant. Despite the fact that the continent is still considered rural (57 per cent), urban population growth was the highest globally between 1950 and 1990 (4 per cent) and it is expected to be more than 3 per cent until 2040. In real terms, the urban population increased from 33 million to 548 million between 1950 and 2018, constituting 13 per cent of the global urban population.

Take Accra, for example. A city that was little more than an indigenous enclave of dispersed settlements of fishermen has grown tremendously since the British colonial administration declared it the capital of the then Gold Coast (now Ghana) in 1877. Between 1960 and 2010, it grew from

about 389,000 to 1,900,000 people, with a metropolitan population of some four million. One can hardly escape this growth experience within the city. Over many visits and stays in the last decade alone, the clustering of dense activities in the central area, the lively markets with their own cacophony of bustling commercial life, and the everyday conflicts as motorists and street vendors compete for limited street space symbolise Accra's growth. The city's cosmopolitan outlook, its multiple languages of commerce and kinship, the aggregation of natives and strangers, negotiation and disagreement, compactness and expansion are deeply felt. Like earlier urbanised cities, Accra is growing and city life is ever moving. But this movement is apparently slow as traffic congestion mostly regulates the pace of everything that moves.

Unlike Asian cities such as Osaka and Singapore, urbanisation has not been driven by economic growth or industrialisation. In fact, urbanisation levels increased between 1970 and 2000 amidst the economic contraction of most sub-Saharan African economies within the same period. If anything is certain, it is that urban growth is expected to continue in the next two decades. What is uncertain is whether urbanisation will drive Africa's urban development to a well-managed human environment that prioritises the needs of its increasing urban population (agility) or engender poor management and vulnerabilities that threaten the wellbeing of its people (fragility). Interestingly, at the moment, it is both.

Expansive rather than compact

More than 10 million people move into African cities each year, especially in small and medium-sized cities. As you read this, someone is moving into a small or bigger city on the continent. This trend manifests in various ways. In terms of space, urbanisation is expansive rather than compact. Indeed,

'Urban development has become privatisation of communal land and displacement of ordinary citizens from their sources of livelihood.'

Africa's urban land expansion is estimated to grow by 600 per cent between 2000 and 2030. Most of this growth is occurring at the edge of cities where wealthy urban residents take advantage of poor urban management to satisfy their appetite for settling in their own worlds away from all that is considered blight and gloomy.

As I walked along the northern edge of Accra city three years ago, it was startling to see all these new town houses and apartments that were mushrooming along the periphery. The lush green spaces, farmlands and undeveloped lands of yesteryear have made way for concrete with no form or logic in spatial terms. One might appropriately wonder: where did all the peri-urban farmers go? What happened to the vast expanse of green that covered this part of the edge of the city metropolis? It takes a cautious look up to see that the mountain is no longer a barrier and unplanned and unregulated developments still go high.

Urban development, as I have experienced, has become privatisation of communal land and displacement of ordinary citizens from their sources of livelihood. A decline in indigenous peoples' access to



land and the alarming rate of loss of ecological resources in peri-urban areas mark trajectories of unsustainable urban development. With climate change effects high on the agenda everywhere, it is perplexing to ponder the nature of urbanisation, and urban development is creating a fragile future of severe vulnerabilities to people and places.

But it doesn't end there. Shortfalls in basic services and infrastructure, pollution, crime and acute traffic congestion abound. It is no secret that urbanisation unravels intense activity: people are on the move to work, home and everywhere in between in dense crowds. Given that Africa's urbanisation runs faster than development planning, the majority of new urban arrivals end up in informal settlements. Yet, such settlements are often located in vulnerable areas where deprivation, infrastructural deficiencies and risks persist.

Unsurprisingly, they are home to more than 60 per cent of the urban population. In central Accra, informal settlements are as visible as the daylight, hosting one third of the population. In Old Fadama (Accra), access to toilets, water and adequate housing is an acute problem. Year in, year out, makeshift houses of iron sheet, clogged drains and crowded housing units are a common sight. Urban deprivation has no hiding place here. In 2015, floods ravaged most parts of the community, killed 150 people and swept away livelihoods. Frequent outbreaks of fire are also prevalent.

However, it's not all gloomy. African urban residents are not watching their local communities deteriorate. It is within the enclaves of so-called fragile living that new collective practices of citizens with community organi-

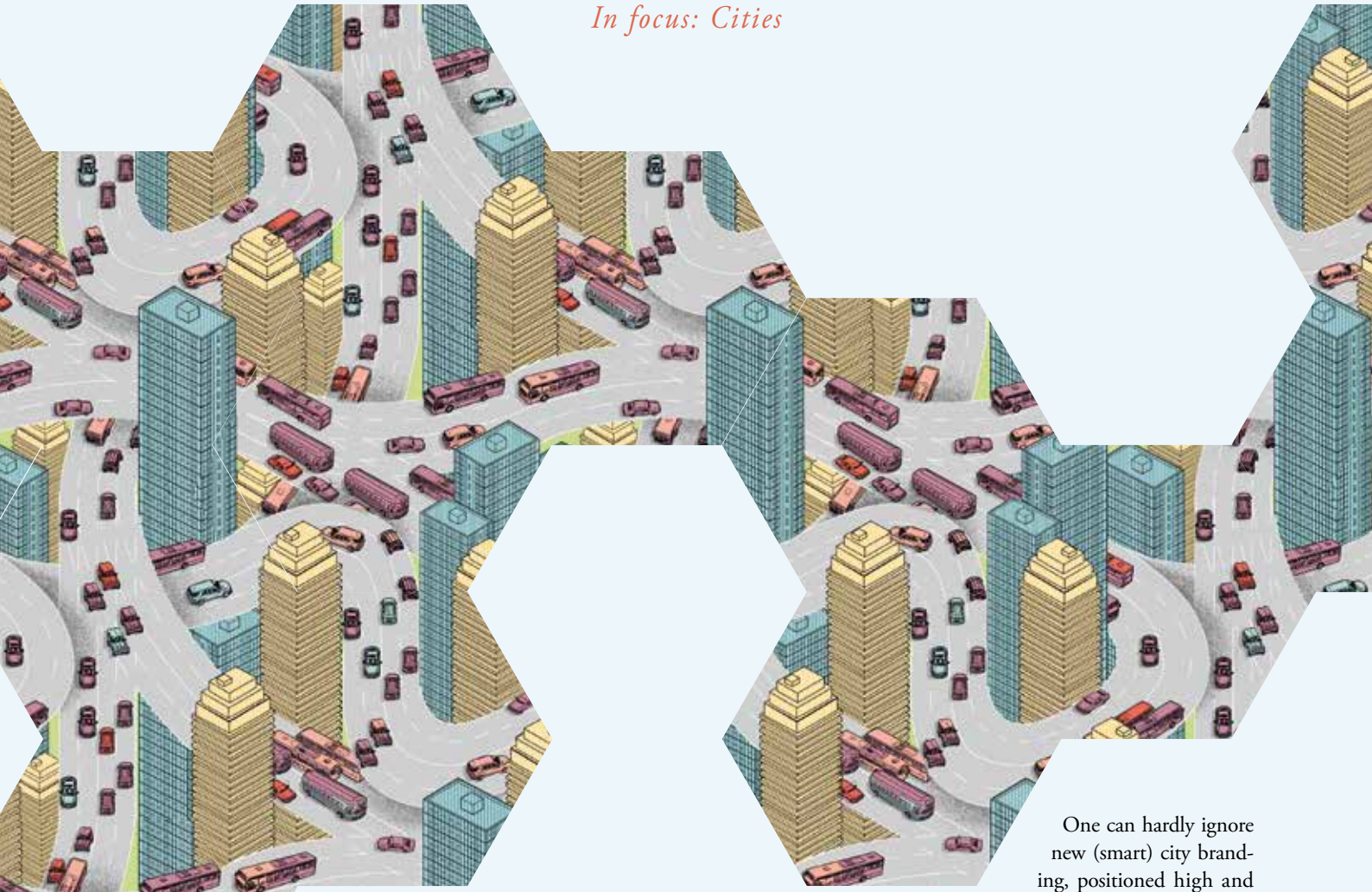
'With climate change effects high on the agenda everywhere, it is perplexing to ponder the nature of urbanisation.'

sations (agility) are arising. Clearly, in light of existing challenges, it's a matter of urban survival for residents to locally collaborate around diverse interests; make little out of nothing.

Community-based initiatives are growing and networking

From the slums of Kibera (Kenya) to the informal settlements of Agbogbloshie (Ghana), community-based infrastructure, collective alliances to reduce disaster vulnerabilities and collaborative mechanisms for affordable housing have emerged. Urban poor federations, for instance, are undertaking community-led mapping and enumeration exercises to negotiate and challenge state neglect. Community savings groups are mobilising finance to improve the condition of houses. In some cases, local coalitions are bringing together NGOs, slum dwellers, professionals and local authorities to address community challenges. These favourable initiatives may offer glimpses of the African city 'yet to come'.





During a study visit to an indigenous informal quarter in Accra, one community leader remarked: 'We're doing things, changing things, creating the kind of community we want.' Observably, residents in this area have not surrendered to deprivation. I have witnessed how local communities have collaborated with traditional authorities to improve the physical condition of houses, provide drainage infrastructure, build community toilets and mobilise local artisans for facility management. Far from exaggerating the potential of community-based initiatives, it is suggested that oiling such local actions can provide enough energy to establish agile urban development on the continent. It appears, however, that a large part of state-supported programmes, such as the well-promoted new 'smart city' initiatives, are not well aligned to the everyday realities of the urban majority.

'More importantly, a shift from visions to an actual experience of a city.'

One can hardly ignore new (smart) city branding, positioned high and wide to be visible, readable and appealing at strategic locations in a number of African cities. Whether proposed or under construction, they are advertised to appeal to passers-by as visions of the true African future city. They are aggressively promoted by a combination of state actors and private developers (domestic/international) as a 'novel' response to the urbanisation conundrum. And they are branded as the model African future city: slum-free, smart, ecologically integrated, technologically innovative, sustainability-sensitive and efficiently managed. They are often top-down and supported by global capital that has found new profitable ground in growing African cities.

So far, about 70 existing and planned new smart cities in Africa can be counted, including Appolonia City (Accra, Ghana), Eko Atlantic (Lagos, Nigeria), La Cité du Fleuve (Kinshasa, Democratic Republic of the Congo), Roma Park (Lusaka, Zambia), Al Tajamouat Industrial City (Cairo, Egypt) and Sipopo (Malabo, Equatorial Guinea). A couple of years ago on my way from the airport to Accra, I was struck with this new



reality of urban development branding: billboards showing intelligently curated master plans dotted with manicured green spaces, majestic homes and the appeal of smart technologies. It was as if a piece of Singapore or Dubai was being grafted onto the African city space.

The wealthy set themselves apart from the rest of the city

Following the actual developments later, whether in Airport City or Apolonia City, I see exclusive spaces, luxury homes and apartments that speak to the aspirations of the upper class rather than the urban poor majority. These are often gated compounds with (semi-)detached houses of similar Western architectural design and features that suggest conformity to an overall plan. Security, maintenance and order are premium values that are not only provided for but also branded to showcase their distinction from the rest of the city. Sadly, most of these new developments either sweep poor people from their land and livelihood or price those on low incomes out of affordable housing opportunities. It is an apparent paradox that these new models are smart only to a privileged few, as more than 72 neighbourhoods are classified as slums in Accra city alone.

The future of Africa's rapidly urbanising cities is a contested road of divided, vulnerable and underserved communities (fragile) and a potential of locally oriented collaborative improvement (agile). Either way, urbanisation can perform a quintessential role in building future cities that blocks the path of fragility and opens the

way to agility. I am convinced that (rapid) urbanisation can be managed and utilised for the benefits of the urban majority. This journey must be cemented on the central pillar of people, especially the urban majority often ignored. New (smart) cities will not change much while older areas continue to experience inadequacies and deterioration. Neither will uncoordinated policy fixes from above or localisation from below.

Across the cities my feet have trodden and my hands have worked, it is apparent that better results emerge from urban development planning that is organised around a coalition of ordinary citizens, local authorities, policy-makers, civil society organisations, private agencies and universities. Such coalitions are centred on the actual conditions and aspirations of the urban majority. That is, local authorities should roll up their sleeves and get their hands dirty: reach out to local people in their communities to comprehend their lived realities. Also, engage them in the process of defining and framing urban problems, deciding on and experimenting with appropriate solutions, while including their opinions and experiences in reviews and feedback. Ultimately, this is a call for deep local democracy in urban development planning.

Secondly, sustainable finance and mobilisation is needed to support investments in infrastructure services and facilities. To do this, authorities must control the recent exponential growth in foreign direct investments and channel it into sustainable urbanisation issues. At the local level, co-production (community finance with socially responsible investment from private entities) can provide alternative resources for urban improvement. Additionally, local governments should aggressively improve taxation and levies linked to property and urban land investments. It goes without saying that the benefits should be redistributed to tackle the urban challenges of the deprived many.

Thirdly, adequately respond to the challenge of who will plan the future African city. There is a shortage of accredited planners. Uganda, for instance, has one national association member per 463,102 inhabitants. This lack needs to be addressed through investment in planning schools in terms of infrastructure, capacity building and 'indigenisation' of curricula to the realities of Africa's urbanisation. And, fourthly, it means protecting rights to land against elite grabbing.

Arguably, I envisage a future African city that plans for and manages urbanisation to work for the wellbeing of the population, especially the urban poor and vulnerable. An Accra, for example, where growth does not mean chaos and high density does not equal confusion. A city where traffic is well managed through bus rapid transits and light rail, affordable housing is promoted and co-produced with citizens and governments, adequate infrastructure is provided and maintained, and local initiatives are not ignored but supported to build capacity for urban management. A city where green and blue spaces are brought back to give life to its growth. A city where aspirations are achievable and the future is driven by the needs of the majority rather than the interests of the few. More importantly, a shift from visions to an actual experience of a city where one can say, the beautiful African city that was not yet, is now finally born. —



SETH ASARE OKYERE

is a Ghanaian architect and development planner specialising in sustainable and integrated urban development. He has published on a number of topics, including human cities.

Blessing or curse?

Never before have so many people lived in cities. Over half of the world's population now call urban centres home. Facts and figures from the big-city jungle.

Over a million inhabitants

Back in 2000, there were 371 cities with over a million inhabitants. Just 18 years later, the figure stood at 548. By 2030, it is expected to reach 706, thereby almost doubling the 2000 figure in three decades. Source: UN



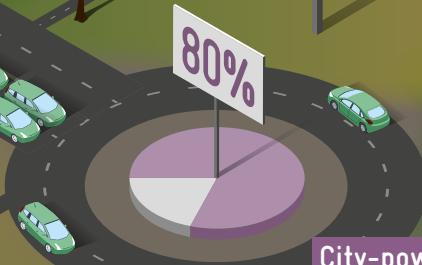
Urban planning

Good urban planning is crucial in order to design new districts with future needs in mind and to prevent cities from expanding out of control. In developing countries especially, there are not enough qualified town planners. Compared to 38 per 100,000 people in the UK, for example, in Nigeria the number is 1.44 and in India just 0.23. Source: UN-Habitat

Transport

2 billion

The number of cars worldwide is forecast to rise from the current total of around 1.2 billion to 2 billion by 2040. At present, the vast majority of car journeys are made in towns and cities in vehicles with a petrol or diesel engine. Switching to electric cars and the widespread introduction of car-sharing could reduce CO₂ emissions from urban traffic by 60 per cent. Source: ITF



City-powered economic growth

80 per cent of the world's total economic output is generated in urban regions. In the Democratic Republic of the Congo, for example, Kinshasa is home to just 13 per cent of the country's population but accounts for 85 per cent of national gross domestic product (GDP). Source: WBGU

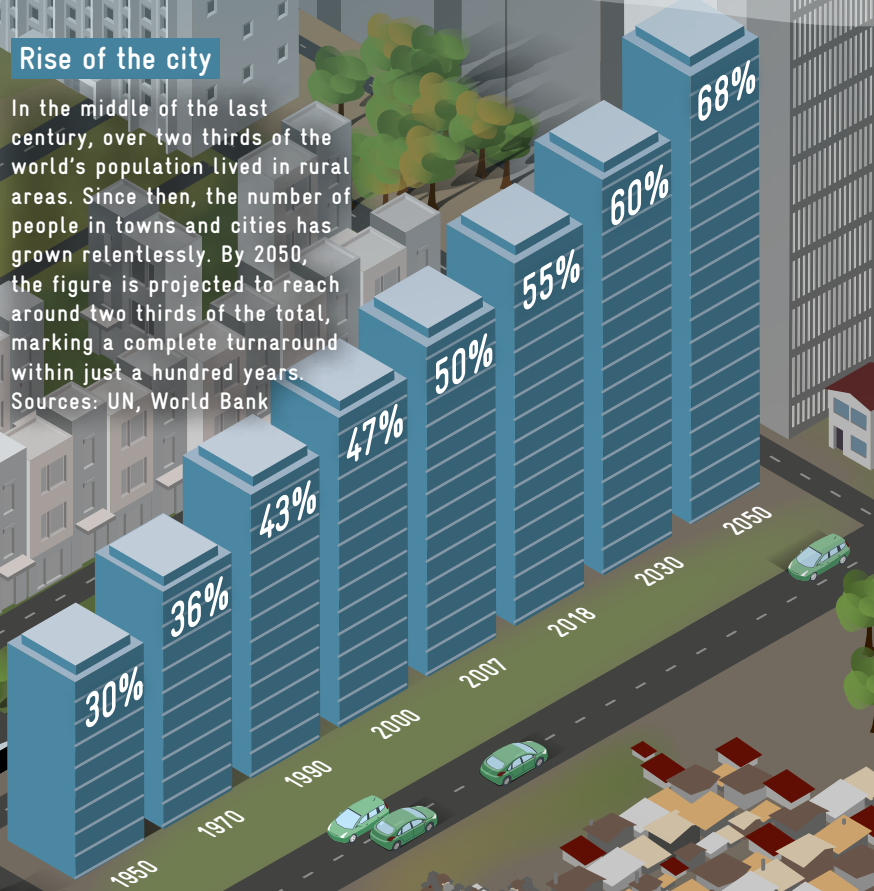
Shrinking cities

Cities occasionally also undergo a period of contraction in the wake of natural disasters or economic crises. This happened to New Orleans in 2005 after Hurricane Katrina, to the Japanese city of Sendai after the huge earthquake in 2011 and to Buffalo and Detroit in the US after the 2008 financial crisis. Source: UN



Rise of the city

In the middle of the last century, over two thirds of the world's population lived in rural areas. Since then, the number of people in towns and cities has grown relentlessly. By 2050, the figure is projected to reach around two thirds of the total, marking a complete turnaround within just a hundred years. Sources: UN, World Bank



Poor air quality

3%

In 2018, only 3 per cent of towns and cities in poorer countries met the WHO's air quality standards. The remaining 97 per cent included New Delhi, Beijing, Lima, Santiago, Kampala and Pretoria. Today, poor air quality is one of the biggest risks faced by urban dwellers. Source: ODI

Protecting the climate

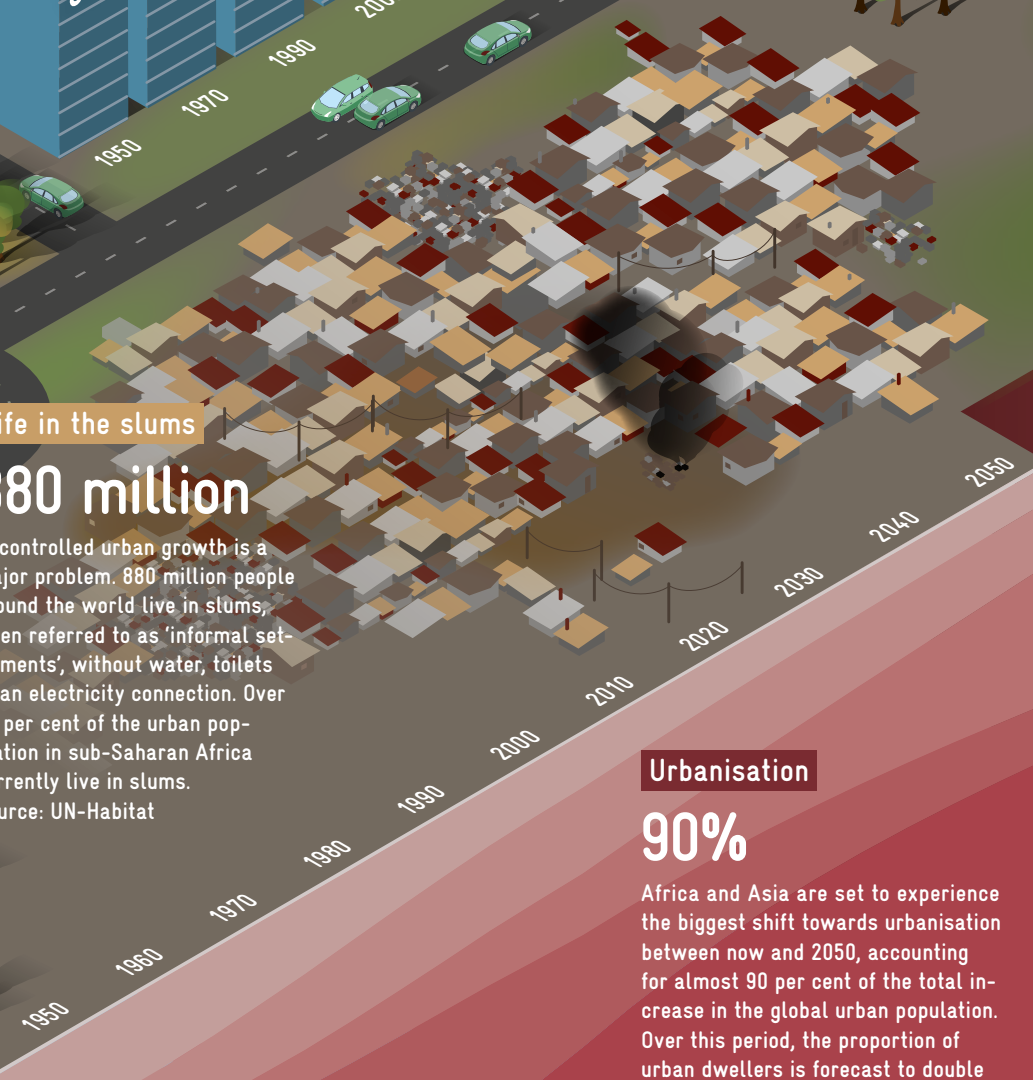
70%

The future of the world's climate will be decided in our cities. Urban areas are responsible for around 70 per cent of all global energy use and the corresponding emissions. That makes them crucial in the fight against climate change. Source: WBGU

Life in the slums

880 million

Uncontrolled urban growth is a major problem. 880 million people around the world live in slums, often referred to as 'informal settlements', without water, toilets or an electricity connection. Over 60 per cent of the urban population in sub-Saharan Africa currently live in slums. Source: UN-Habitat



Urbanisation

90%

Africa and Asia are set to experience the biggest shift towards urbanisation between now and 2050, accounting for almost 90 per cent of the total increase in the global urban population. Over this period, the proportion of urban dwellers is forecast to double in Asia and triple in Africa. Source: WBGU

Oceania
North America
Latin America and
the Caribbean

Africa

Europe

Asia



**ASHOK-ALEXANDER
SRIDHARAN**

grew up bilingual – his father an Indian diplomat, his mother from Bonn. A qualified lawyer, he was elected mayor of Bonn, known as the ‘Federal City’, in September 2015. Before assuming his new role, he held the position of treasurer in the neighbouring town of Königswinter.

‘Sustainability remains a key issue’

Ashok-Alexander Sridharan is the Mayor of Bonn. He wants the city of his birth to be carbon-neutral by 2035. In an interview with akzente, he explained how he plans to achieve this and what he has learned from municipalities in other countries.

Interview: Friederike Bauer

Mr Sridharan, you spent most of your childhood in Bonn. You studied here at the university, and have been Mayor since 2015. What do you like most about the ‘Federal City’?

Bonn is the smallest cosmopolitan city in the world. It is home to people from 180 countries and a large number of United Nations organisations. Bonn is also steeped in over 2,000 years of history and tradition. It is a beautiful, mature city with 330,000 inhabitants, so a fair size. Personally, I like the fact that you always come across people you know here. The city is quite large but well-contained, and that makes it really attractive.

Does that mean you are a passionate ‘Bonner’?

Absolutely!

On a more serious note, how do you think Bonn has coped so far with the coronavirus crisis?

At first, like everyone else, we were caught

pretty much unawares by the pandemic – at least by its initial rapid spread. But we very quickly took all the lockdown measures ordered by the federal and state governments. People here in Bonn have largely complied with the lockdown restrictions. As a result, we were able to prevent an even greater crisis.

What do you think are the biggest problems facing Bonn at the moment apart from the pandemic?

As I see it, we face two major challenges. One of those is to modernise our transport systems. We need to reduce the volume of traffic in the city. And second, we need to upgrade our outdated infrastructure.

What kind of infrastructure are you referring to?

I mean everything: roads, bridges, nurseries, schools, cultural centres, sports facilities. We need to tackle that as a matter of urgency. For two reasons. In the days when Bonn was the capital, infrastructure projects were heavily subsidised – to the tune of 70

per cent – by the Federal Government. That central government funding is no longer there, but of course the infrastructure is still in place. Added to this is the fact that investments have been frequently postponed, leaving us in a position over the next few years where we need to undertake a lot of repairs. We have put together some comprehensive plans to tackle that deficit and are pushing ahead with those right now.

What exactly is your new mobility strategy?

We want to get more people moving around the city on bikes and by public transport. That will mean reviewing the timetables. We also have plans to vastly increase our network of cycleways, which already covers nearly 300 kilometres. In fact, we have committed to expanding the cycleways on both sides of the Rhine. We are also looking into building a new bridge over the river that would be solely for cyclists and pedestrians, and we want to improve the cycle links between Bonn and the surrounding region.

‘We need to reduce the volume of traffic in the city. At the same time, we need to upgrade our outdated infrastructure.’



What are your thoughts on upgrading the public transport system?

The idea there is to have trams and underground trains running every five minutes. On top of that, we want to establish 36 mobility hubs, with interconnections between different forms of transport, allowing you, for example, to switch from your car to a bike or public transport. We will also need to ensure that there is enough parking for bikes and cars, including electric vehicles. Our goal is to put all of that in place by 2023 at the latest.

You have said that you want Bonn to be carbon-neutral by 2035. Presumably, the big mobility shift you have just outlined is an important element of your strategy to achieve that.

Yes, it is. But it is by no means the only element. Our buildings are still not as energy-efficient as we want them to be so we plan to upgrade them. After all, the city council needs to set a good example. Other sites such as our waste incineration plant will also be refurbished. There will be lots of other initiatives encouraging local people to make the right environmental choices too – the ‘1,000 roofs programme’, for example, which supports the renewable energy sector by offering a grant of EUR 1,000 to households that install a rooftop solar PV system. We’re planning a veritable cornucopia of measures. I’m absolutely clear that sustainability is a top-priority issue.

Has that priority not changed with the pandemic?

If anything, the coronavirus has shown us that we absolutely must think sustainably. Empty streets, cleaner air, a chance for nature to recover – all of these things have highlighted to us how important it is to use our natural resources with great care. Which is why I hope at least some of those things will stay with us when the pandemic is over – especially video and telephone conferencing, which help to reduce the volume of traffic.

Do you see Bonn as a pioneering city in the field of sustainability?

It’s not really for me to judge, although Pa-



‘Cities need more funding, both from national governments and international financial institutions.’

tricia Espinosa, Executive Secretary of the UN Framework Convention on Climate Change (UNFCCC), did praise the city for its efforts in a recent interview. Generally speaking, in Germany and other countries, my view is that there are not enough towns and cities taking the kind of rigorous action we need on this issue.

There are many other organisations based here in Bonn besides UNFCCC. Both personally and politically, you are in favour of the city’s continued internationalisation. How successful have you been?

First and foremost, that is a matter for the German Government. Ours is merely a supporting role, but we are certainly putting a great deal of energy into it. You’re right, our goal is to attract even more organisations to the city and strengthen its profile as an international centre. I would say that we have been pretty successful at doing that over the last few years. Since I became mayor, a further nine organisations have chosen to base themselves in Bonn, including a country office of the United Nations Industrial Development Organization (UNIDO), the SDG Action Campaign and the Secretariat of the UN’s Global Water Operators’ Partnerships Alliance. Incidentally, GIZ also benefits from the international atmosphere here in Bonn.

You are also President of ICLEI, a global network of city leaders and local governments. What motivated you to take up that role?

I put myself forward because I know how important it is to be part of such networks and to learn from other regions around the world. ICLEI brings together around 1,800 cities worldwide accounting for 30 per cent of the global urban population. As well as being a lot of people, it’s also a great opportunity to share ideas.

What have you learned from other cities?

A lot! To give you an example, Chengdu in China has a high proportion of renewable energy and mobility infrastructure. We’ve been looking into how that can be achieved. I also learned from La Paz how it can make sense to integrate cable cars into the public transport system. In fact, we’ve just launched a project to install a cable car link up to the Venusberg.

The process of urbanisation is gathering pace. What do local authorities around the world need to help them manage that process?

We need support from national governments and, in those countries with a federal system, from individual state governments. Without that support, it’s just not possible. Also, local authorities need to be given a much greater

voice, especially when it comes to sustainability, protecting the climate and dealing with the impact of climate change. After all, it’s the job of those local and regional authorities to implement policies on the ground. That’s why I think it would be a great idea for delegations to the UN Climate Change Conference to include municipal representatives.

Many towns and cities lack the required funds. How can we solve that?

They need more funding, both from national governments and international financial institutions. There still isn’t enough funding available, especially from the latter. It’s really important, though, because without it we just can’t meet the UN’s climate and sustainability goals. —



For more on the way cities are driving change, see our [interview with Ukrainian politician Andriy Sadovyi](#) at akzente.giz.de/en

The future is urban

Cities have a key role to play in efforts to meet climate and development goals. GIZ advises municipalities and supports public involvement in decision-making.

By CARMEN VOGT

Cities and regions are on the front line when it comes to dealing with crises. That role has been underscored by the global coronavirus pandemic. A lot depends on their ability to respond: for example, the interaction between city and regional authorities on the one hand and national governments on the other, and between the private sector and civil society. As we can see right now, reliable information, municipal structures, neighbourhood support mechanisms and properly functioning public services are incredibly important. As economic hubs and centres of innovation, cities will play a crucial role in economic stimulus programmes and in the effective delivery of a ‘green recovery’. Whether we are successful in that also depends on whether societies are resilient and on the degree of social cohesion.

By 2050, just over two thirds of the global population – seven billion people – will live in urban environments. That expansion will include small and medium-sized towns in Africa and Asia that are well connected with their surrounding region. According to the German Advisory Council on Global Change, we need to build as much new infrastructure in the next three decades as we have since the beginning of industrialisation. That will require investment in the order of EUR 3.6 trillion every year. It is therefore clear that the global climate and development targets agreed by the international community of states in the 2030 Agenda and the Paris Agreement can only be achieved in collaboration with local actors. Without cities, two thirds of all national climate targets will simply not be met.

To illustrate the point, look at the materials we use for buildings, roads and cycleways. If we carry on using cement, steel and aluminium, we will not reach the target of keeping global warming to 1.5 degrees Celsius. That is why we are working with the private sector



CARMEN VOGT
heads the Cities Section at GIZ.
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and the scientific community to develop sustainable construction solutions based on locally sourced, low-carbon materials.

Cities need to be more fully involved in planning for the future – as a matter of urgency. At GIZ, that urgency is reflected in our work. Our client base has grown in recent years. In addition to the German Development Ministry (BMZ), we work with the German Ministry of the Interior (BMI) and the German Environment Ministry (BMU) and are expanding established partnerships with city networks such as ICLEI, C40, the Cities Alliance and other multilateral actors. Many countries see their towns and cities as key partners that can provide solutions to the challenges that lie ahead in areas such as climate change, social equality and digital transformation. GIZ has been commissioned by the German Government to support cities and regions in Africa, Asia, Latin America and South-East Europe. For a long time, the focus was on individual sectors such as water, waste and mobility. Today, however, we have a more joined-up, holistic approach in these areas. Why? Because sustainable urban development is

more than the sum of its parts. Our principal focus now is on people.

There is a great deal of interest in this approach, especially in Ukraine, where GIZ is working to improve living conditions in eight cities. 60,000 people have already contributed their ideas in a series of public dialogues. The approach has been a success, as their projects have been incorporated into urban development plans. In Morocco, too, city authorities have been working with local people to draw up strategies for improving public services, for instance regarding the use of green spaces, public areas and buildings. There is a clear demand for opportunities to link up and share ideas with others around the world, and in turn those mechanisms are strengthened by municipal partnerships.

The whole issue of urban development is very exciting and extremely varied, from highly tangible projects that involve building new infrastructure in response to local needs through to trials of digital solutions and measures to implement national policies and ‘smart city’ strategies. There is a real sense of conviction among our partners that cities are the arena in which the success of that transformation will be realised. Working closely with their residents, cities are tracing out a healthy, low-emission future well beyond the present coronavirus pandemic. Although cities and local governments are of course themselves affected by the crisis, it is becoming clear that cities can take action to promote social cohesion, meet people’s basic needs in terms of water, food, transport, accommodation and health, and offer the prospect of a better future. GIZ adopts a flexible approach when working with its partners on responses to the present challenges, for example by developing ideas – for resilient and interconnected cities offering a good quality of life – that can be implemented all over the world once the pandemic is over. —

Stronger together

Cities have an important role to play as partners and actors in our efforts to build a world capable of sustaining a decent quality of life for all. The input of those who live there is vital.

Cities matter

In 2016, as part of its new global Agenda, the United Nations highlighted the key role of municipalities, towns and cities in achieving sustainable development. One of the German Government's core objectives is to strengthen these crucial actors in order to meet the climate obligations under the Paris Agreement. Through its many partnerships, including and especially those with towns and cities, GIZ contributes to the 17 Sustainable Development Goals set out in the 2030 Agenda. —

44 slums

PARTICIPATION The effects of global warming pose a particular risk to slum-dwellers. Although many slums are located in flood zones, urban planners fail to give them sufficient attention. On behalf of BMZ, GIZ implemented a project covering five cities in Bangladesh, ensuring that slum-dwellers are properly included in disaster prevention plans. Around 17,000 people in 44 slums are now actively involved in climate change adaptation measures. —



FINANCE Local authorities often cannot access the funding they need to meet climate targets. The C40 Cities Finance Facility advises municipalities on how to mobilise the funds they require for green infrastructure systems. The plan is to leverage investment of more than EUR 285 million by 2021. GIZ is currently implementing this initiative together with C40 Cities. The project was jointly commissioned by BMZ, the UK Government, the Children's Investment Fund Foundation and the United States Agency for International Development (USAID). —

Use sparingly and protect



INFRASTRUCTURE In Peru, supplies of drinking water to towns and cities are increasingly at risk due to climate-related extreme weather events, population growth and polluted natural resources. Supplies reached critical levels in 2017 due to the Coastal Niño. Clean water is also vital during the current pandemic to keep systems running. On behalf of BMZ, BMU and Switzerland, GIZ is advising the Peruvian Government and city authorities to help them prepare for and respond to climate-related risks. —

16,000 young people

SAFETY South Africa's towns and cities are widely associated with violent crime. Young people are frequently involved, both as perpetrators and victims. On behalf of BMZ, GIZ is supporting measures in the Cape region aimed at preventing violence. Over 8,000 students from 40 schools in Nelson Mandela Bay Municipality attended a series of workshops to develop ideas on improving safety. A further 8,000 young people took part in other activities such as debating clubs and seminars on preventing gender-based violence. —

Learning from one another

DIALOGUE Despite all of the differences between them, many cities are struggling to deal with similar problems and need to find ways of creating neighbourhoods that offer a decent quality of life. The 'urban transformation dialogues' organised by GIZ on behalf of BMI are designed to encourage local authorities all over the world to share ideas and information. The participants work on solutions to urban challenges for up to two years. Their results are used to inform municipal action and national policy. The dialogue format is based on the Leipzig Charter on Sustainable European Cities, signed by EU member states in 2007. —



Swept into slumber

COVID-19 New York City has been hit harder by the coronavirus pandemic than any other city in the United States. By mid-June, it had registered more than 210,000 cases and over 17,000 deaths. There are many reasons why this metropolis has been an epicentre for the pandemic: as both a global business hub and a popular tourist destination, New York has long been a focal point for people from around the world. And with a population of around 8.4 million in an area of just 784 square kilometres, it is by far the most densely populated city in North America.

Photo: REUTERS/Andrew Kelly



Joining forces for Europe

On 1 July 2020, Germany took up the Presidency of the Council of the European Union. To mark the launch of our akzente online special, we report below on the priority areas of the Presidency and selected projects.



SIEGFRIED LEFFLER

Economist Siegfried Leffler has been Director of the GIZ Representation in Brussels since 2016. He manages GIZ's cooperation activities with the institutions of the EU, primarily the European Commission.

Germany took up the EU Council Presidency on 1 July. Africa, sustainability and digitalisation were the topics originally on the development policy agenda. Will the coronavirus pandemic now dominate matters instead?

COVID-19 is sure to play a big role, as it's clear that the pandemic is anything but over. The other topics are still on the agenda, however. The forecasts so far indicate that the economic impact of the coronavirus crisis will hit Africa particularly hard, and this will need to be mitigated. Sustainability remains relevant, climate change will not go away. And digitalisation has actually become more important as a result of COVID-19. We are all experiencing that in our work. Expectations were high regarding the German Presidency of the Council of the EU to start with, and are now more so than ever.

‘Sustainability remains relevant, climate change will not go away. And digitalisation has actually become more important as a result of COVID-19.’

A new EU strategy on Africa is anticipated later this year. Why?

The existing strategy is from 2007 and out of date. The EU is also feeling the competition from other actors and therefore considers it essential to recalibrate its strategy and offer Africa attractive, partnership-based proposals. This will mean an upswing for the continent that is both digital and green. All this is a good match with Germany's development policy focus, which has set similar priorities in its Marshall Plan with Africa and the Compact for Africa.

How do you see GIZ's work for the EU?

GIZ's business volume with the EU has increased steadily in recent years and has more than doubled to EUR 375 million since 2015. We see this as an expression of the EU's trust in the effectiveness and quality of our work. Yet that is only part of our work. We also ensure that Germany's visions for development policy are heard in Brussels. In collaboration with the Practitioners' Network for European Development Cooperation, we endeavour to set standards and to help shape European development policy.

Where does GIZ stand in relation to other development actors vis-à-vis the EU?

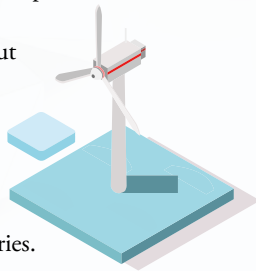
We are one of the largest in terms of turnover, but we also engage more in dialogue on technical and specialist issues with the Commission. If anything, cooperation is likely to intensify in the coming years. —

ON BEHALF OF THE COMMISSION

The European Union works to promote development, peace and democracy across the globe. GIZ implements numerous projects around the world on behalf of the EU. Whether tackling climate change, fighting for human rights, working with refugees or promoting economic development and employment, GIZ's work helps to achieve the EU's objectives.

Supporting climate action

WORLDWIDE Setting up climate councils in Brazil, supporting Russia with its decarbonisation process and promoting exchange with South Africa on energy policy – all these initiatives and more are taking place on behalf of the EU and BMU as part of SPIPA, a programme supporting non-European G20 countries with the implementation of the Paris Agreement. Efforts to reduce emissions within Europe are crucial, but the EU produces less than 10 per cent of all greenhouse gas emissions. Slowing down global warming requires other major emitters to reduce their own emissions as well. SPIPA is cooperating in this area with 15 countries.



Giving everyone a say

UGANDA It is not a given in Uganda that people can participate and have a say. That makes it all the more important to involve civil society wherever possible. For example on energy topics, which are extremely important due to the shortage of energy. A programme being implemented by GIZ on behalf of the EU and BMZ is allowing citizens to help reshape energy policy for the first time – and to practise democracy while doing so. —

Leave no one behind

TURKEY Almost four million refugees live in Turkey. This places a huge burden on the country but particularly on those directly affected. To enable individuals and families in greatest need to survive day to day, GIZ is providing support on behalf of the EU, for example with bureaucratic procedures, legal advice and, where necessary, psychosocial support. The principle of 'leave no one behind' applies here too. —



Halting the flood of waste

SOUTH-EAST ASIA Increasing amounts of plastic waste are ending up in our seas. If this does not stop soon, then it is estimated that, by the middle of the century, there will be more plastic than fish in the oceans. To try to halt the deterioration, GIZ is working on behalf of the EU and BMZ with seven Asian countries. It is involved in around 20 pilot projects with the objective of improving waste management, reducing plastic and changing consumer behaviour. The aim is to create a circular economy. —



During Germany's EU Council Presidency, we will be reporting regularly on GIZ topics connected with the EU: in reports, analyses, interviews and guest articles. Curious to know more? You can find our extensive online special at akzente.giz.de/en.

ROOM FOR IDEAS



A vibrant start-up scene is developing in Iraq. The Lab:Suli, an innovation centre in the university city of Sulaymaniyah, has joined forces with GIZ to support young people on the digital path to a better future. And they have already been successful, as these four stories show.

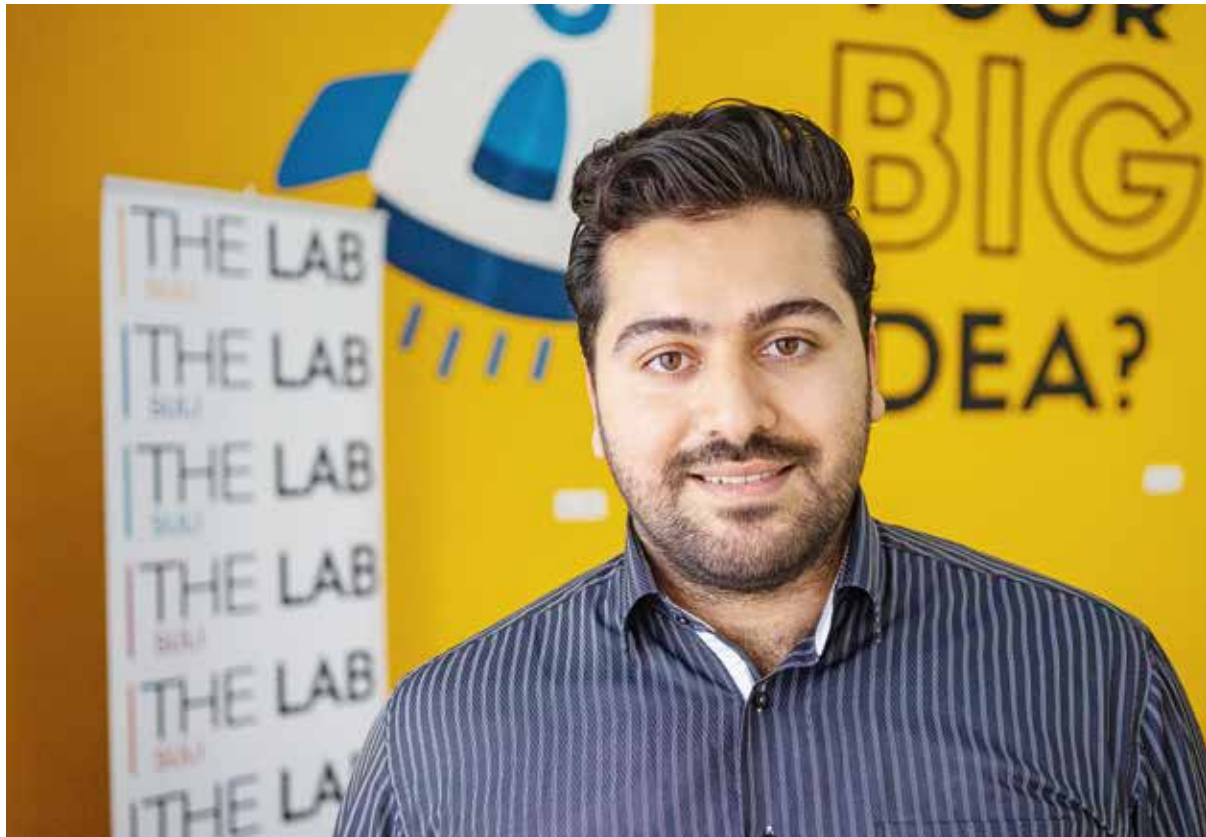
TEXT AND PHOTOS: OLIVIA CUTHBERT

‘Many investors do not know about the start-up scene here.’

ALICE BOSLEY (31), Executive Director of Five One Labs, an initiative for business founders in the autonomous Kurdistan Region

‘We provide a protected space for founders in which germinating business ideas can become reality. We offer a three-month full-time programme for tech companies that are developing ideas or are at an early business stage. It covers all areas – from market research and product development to sales strategies. Between 10 and 15 individuals take part in each programme. We try very hard to adapt the content to the local market. With GIZ’s support, we have been able to invite international experts, such as Josh Williams, Senior Product Manager at Starbucks, and Marios Harrane from Careem, a successful ride-hailing app in the region. We also organise events such as hackathons. At these kinds of large-scale digital events, the teams jointly develop solutions to a particular problem. And in university lectures, students find out more about entrepreneurial skills. We also want to show investors from the whole region and across the globe that a great deal is happening in this country. Iraq is a huge market. Although many investors are aware of the business potential, they do not know about the existing start-up scene. In the course of our partnership with GIZ, we have also found out about other start-up initiatives in Iraq. Setting up a tech company here is not easy because the government is constantly issuing new requirements. At the same time, the dynamic nature of these kinds of companies is fantastic. We have introduced grants for women founders because we realised that it is often more difficult for women than for men to drive their company forward. All the women who have taken part have been able to establish their business. Some have now appeared at public events.’ —





**‘This generation
is really
innovative.’**

RAVIN BUHRAN (27),
*corporate trainer and employee at The Lab:Suli,
a start-up centre in Sulaymaniyah that is part of
the Five One Labs*

‘I am a web design expert and I help companies in the fields of design, user experience, user interface, setting up a technology team and project management. We meet at least three times a week, and it’s fun to see the progress made. The start-ups improve their web design, for example, or refine their products. Some of the young companies that we support are already enjoying rapid growth, including Larixca, an e-commerce trading company for sustainable clothing, and Chara Plus, a simple app with which you can order medicine to be delivered to your home. Our portfolio is very diverse, with ideas that offer solutions to everyday problems. One example is Tasty not Wasty, a delivery service that sells leftover food from restaurants at a lower price, therefore avoiding waste. There are so many ambitious, creative people here and so many possibilities for positive change. This generation of young Iraqis is really innovative, and our focus is on supporting them by means of training and networks. There is a lack of jobs in Iraq. Many people don’t know what to do after graduating from university. We try to support the private sector so that more jobs will be available in future. Today’s investors are looking for new ideas in areas other than the old business sectors such as construction or oil production. The new start-ups don’t need major investment, which makes them attractive options. Some are already having a positive impact on people’s lives. They offer services that people really need. These providers are redefining the market in these areas.’ —



‘I realised straightaway how good the quality of training is.’

ZAHRA FAHDIL (33),
founder of Fix IT,
a portal to find tradespeople

‘Last year, I was at home with my child and the kitchen sink was leaking. I needed help but I couldn’t find a qualified plumber. I originally come from Najaf, south of Baghdad, and don’t speak very good Kurdish yet. That makes it more difficult to solve everyday problems here in northern Iraq. That’s how I had the idea of developing a basic app which people can use to contact tradespeople such as electricians and plumbers. I knew that I needed expertise to make sure my business idea worked. While searching on Facebook, I discovered the range of courses offered by Five One Labs. I didn’t really expect them to accept me. When it started, I realised straightaway how good the quality of training is. I felt I was part of a family. I’ve made very many new friends. I’m currently in the third month of the founder programme and am learning the skills you need to lead a successful company. I’ve also already started developing the app, setting up a team and marketing the product name too. The brochures and flyers have been printed and distributed as well. After the course, I want to stay on here as a volunteer and help organise events. The events here are tailored precisely to the skills we need. I think my business idea has a good chance, because there are a lot of houses that are in need of proper repair work. I’d like to roll out the app across Iraq so that other people don’t have the kinds of problems that I had. I hope they can use the app to find the service provider they need easily and conveniently.’ —

The project contributes to the following United Nations Sustainable Development Goals (SDGs):





‘I’ve already found two investors.’

LAYLAN ATTAR (29),
founder of Dada Babysitting, a digital platform for arranging childcare

The project contributes to the following United Nations Sustainable Development Goals (SDGs):



‘I was employed in the private sector when I became pregnant. My employer disbanded the division I was working in at the time, so it was easy to make me redundant. I was looking for a new professional challenge. I knew about the problems that families without childcare face, so I thought: why not set up a babysitting service? In March 2019, I registered the name of my firm and we’re now in the test phase. People usually send their children to kindergarten or have help from their families. My idea is to establish a culture and a concept for new forms of childcare. So far, it’s all happening by word of mouth, but we’ve still already had more than 50 enquiries from interested parents. It’s easy for people to register on the website. All of our babysitters go through a strict selection process to ensure that they are suitable and qualified. We’re still offering the service free of charge at the moment, because we want to become known. Not everything has gone smoothly, but Five One Labs has given me a great deal of self-confidence and support. I’ve been able to extend my knowledge and I now have access to various networks. The staff also make you feel that anything is possible. I was far on in my pregnancy when I started the Five One Labs course and didn’t really believe that I would manage to set up the company. And now I’ve found two investors, one from Iraq and one from London. It’s very helpful being in a community that is facing the same challenges. The centre is also helping to put this part of the world into the spotlight and to show that a lot of new things are happening in Iraq and in the autonomous Kurdistan Region.’ —

INTERVIEW



BUSE AYŞEN ÇUBUK

GIZ advisor on information and communications technology (ICT) – prospects for modern young people in Iraq

Ms Çubuk, how have the young tech-loving Iraqis in the innovation centres responded to the challenges of the coronavirus pandemic? Initiative and creativity are key features of the digital ecosystem in Iraq. That has now

become remarkably apparent during the COVID-19 pandemic. In the innovation centres, people immediately began using modern technologies such as 3D printers to respond to local shortages in the health system. The makerspaces quickly changed over to developing protective face shields. They only use locally available materials, so they're not dependent on imported products in the current crisis. More than 10,000 of these shields have already been produced and distributed to hospitals throughout Iraq over the past few weeks.

So setting up local digital infrastructure has proved useful?

Definitely. The current situation is showing how important local innovation centres are. They responded rapidly to the different needs in the various regions of Iraq. Tailor-made products have been developed for the health system directly where they were needed. In order to continue optimising the prototypes, the individual innovation centres across the country are in constant contact with one another. This networking,

flexibility and regional proximity reflects the great potential of the innovation centres and the young people there. They have adapted to the crisis spontaneously and developed innovative solutions for the people of Iraq.

What obstacles are there in the production of face shields? And how is GIZ supporting its partners in this acute situation?

The lockdown resulting from the pandemic initially made it difficult to give the teams access to the makerspaces. In addition, we had to find out about local needs for protective clothing and medical equipment in the hospitals. Our GIZ project linked up the partners with the relevant authorities and local ministries. Moreover, we are now jointly identifying available materials and production sites in each region. The aim is to scale up manufacture of the face shields and to move it from the makerspaces to local producers. This will also benefit the local economy and will free up the makerspaces to focus more on product development again. –

DIGITAL TRANSFORMATION

The innovation centre in Sulaymaniyah is one of five throughout Iraq. As well as giving young people the opportunity to gain the skills needed on the labour market, it is also a space where they prepare for self-employment. GIZ is collaborating with these digital hubs on behalf of the German Development Ministry, thereby helping to open up **job prospects for Iraqis in the ICT sector**. That is important in a country in which two thirds of the population is younger than 25. Many are **internally displaced people or refugees** from neighbouring countries. The unemployment rate is 20 per cent. In Baghdad, Basra, Erbil, Sulaymaniyah and Mosul, GIZ has equipped the innovation hubs with workrooms and technologies such as 3D printers, laser cutters and robot technology. More than **5,500 people** (30 per cent of whom were women) have attended programming courses, business training and lectures at the centres. The hubs are also setting up networks. That was impressively demonstrated at the country's first jointly organised hackathon. More than **700 young people** came along in person to search for digital solutions to challenges facing their



country, and more than **10,000 people** took part online. During the coronavirus pandemic too, they are teaming up to search for solutions and are producing face masks (see photo). **Contact: Inga Niere, inga.niere@giz.de**

EDITOR'S *Digital Picks*

Invaluable

CALCULATOR From domestic chores to caring for loved ones, around the world people collectively spend 16 billion hours on unpaid care work every day. This work largely falls on women – and increases in times of crisis. UN Women uses simple questions and an online calculator to highlight how many years people will spend in the course of their lifetime on unpaid care work and domestic chores. It's worth trying out! –

<http://unwo.men/JS4U50zsHNs>



Sustainably delicious

CAMPAIGN The ActNow climate campaign launched by the United Nations aims to motivate us all to change our daily habits and achieve great things together. In 2020, the campaign is focusing on the topics of fashion and food. —

<https://actnow.bot>

Around the world in 20 minutes

PODCAST The World Bank's Development Podcast opens a window to the world of international cooperation. It examines the biggest challenges facing the international community and takes a look at solutions that are currently being developed. It not only outlines prospects on the ground but also explains the global context. —

worldbank.org, Search for: development podcast

Through other eyes

APP Who can you see in this photo? Is the milk in the fridge past its sell-by date yet? Everyday questions create big problems for blind people. This is where Be My Eyes can help. The app links up sighted volunteers and blind or low-vision people through a live video call to solve problems. Almost 3.8 million volunteers in more than 150 countries have joined up. —

www.bemyeyes.com

Culture for you

PLATFORM The Goethe-Institut has launched kulturama.digital to promote culture during the coronavirus crisis. Artists from every genre can use the platform to present their event – whether it is a concert in a living room in Berlin, a virtual tour of an exhibition in New York or an online film lab from the Philippines – to a global audience. Viewers can donate money directly to support their favourite act. —

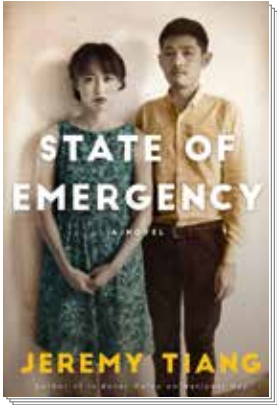
<https://kulturama.goethe.de>



PHOTOS: UN (P. 48 ABOVE), UN (P. 48 MIDDLE), KITTY KAHANE (P. 48 BELOW)

GOOD READS

from around the world



STATE OF EMERGENCY

An undeclared war has dispersed the family to every corner of the globe. Jeremy Tiang from Singapore sets the fates of three different generations alongside one another like pieces of a mosaic. He tells a trenchant and gripping tale of the wars of independence in the 1950s and 1960s. Some of the massacres are still reverberating in present-day Oxford. —

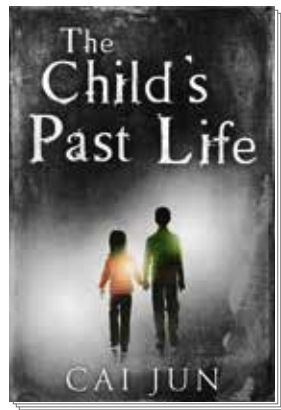
Jörg Plath

Jeremy Tiang, Singapore/United States. Epigram Books, 280 pages

LITPROM RECOMMENDS

Litprom – the Society for the Promotion of African, Asian and Latin American Literature – provided these reviews for akzente. The titles were selected from Litprom's list of the best new releases.

www.litprom.de/en



THE CHILD'S PAST LIFE

What a crazy book from China! A thriller that almost explodes from the sheer joy of the plot. A delirious tap dance where crime and fantasy fiction meet. The 'new China': corrupt, brutal, greedy and violent. Fascinating and explosive. —

Thomas Wörtche

Cai Jun, China. Translated from Chinese by Yuzhi Yang. AmazonCrossing, 470 pages

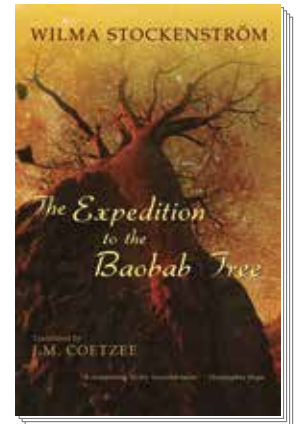


WHEN I HIT YOU: OR, A PORTRAIT OF THE WRITER AS A YOUNG WIFE

A budding young author gets married. Her husband is a Marxist and a famous intellectual. What follows is verbal, physical and sexual violence. Kandasamy presents a multi-layered script about domestic abuse – and gives her heroine the energy to write herself free: using the weapons of literature. —

Claudia Kramatschek

Meena Kandasamy, India. Juggernaut Publication, 272 pages



THE EXPEDITION TO THE BAOBAB TREE

Towards the end of her life, a former slave seeks shelter in the hollow of a tree and reflects on her life. With bated breath, we follow the narrator's path through the whole of Africa during the times of slavery and slave catching. A masterly account. —

*Anita Djafari,
Managing Director, Litprom*

Wilma Stockenström, South Africa. Translated from Afrikaans by J. M. Coetzee. International Publishers Marketing, 115 pages

GIZ is always looking for experts for its projects. Why not visit our 'Jobs and careers' page: www.giz.de/careers

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From: Jan Bock >
To: ★ all akzente readers

Protecting Central America's forests

Today, 9:41 am

Buenos días from San Salvador!

I've always wanted to do what I've been doing here in El Salvador for the past three years. I studied forestry and it's very important to me that we manage natural resources sustainably. We cannot solve increasingly urgent issues such as how to deal with climate change, protect biodiversity and promote the rights of indigenous peoples without preserving forests and managing them sustainably. That's exactly what I and my team of 20 people are committed to doing in Central America. We work for two regional programmes covering eight countries, the aims of which include restoring woodland and protecting the forests. The forests here are under threat from overexploitation and the conversion of forest into farmland for cattle.

We're working with the Central American Commission for Environment and Development and the environment ministries of the eight countries involved. Due to the coronavirus pandemic, most of the partners are working from home at the moment, but I usually meet them regularly. About half of my work consists of business trips and half of it is a normal office job.

I've known Latin America for many years now, because I carried out research in Brazil, Paraguay and Argentina during my time at university and then worked for the German Development Service (DED) in Nicaragua. San Salvador actually has a reputation for being threatened by gang violence, but we feel safe in most districts. My wife and I have many friends from El Salvador, which I think is extremely important. We have barbecues or go and eat pupusas – stuffed corn tortillas – together. We also go on trips – it's a small country and it doesn't take long to get to the sea or the mountains. The climate is typical for the altitude: it's 'eternal spring' here. And the capital is very urban; there's a broad range of cultural activities on offer, such as concerts. Music plays a key role in my life. At the moment, I regularly record a podcast to celebrate the Beethoven Anniversary Year. I've also established contact with the local orchestra for the podcast.

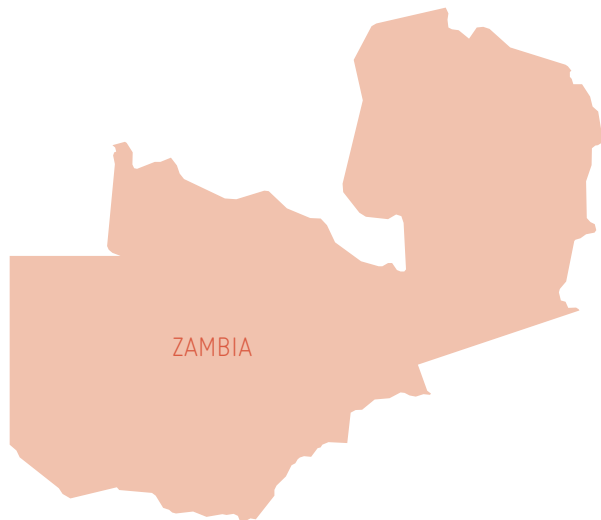
What I really miss very much is cycling to the office or out into the countryside.

Best regards,
Jan Bock



SUSTAINABILITY

A look back at a project and its results



Project: Strengthening Good Financial Governance in Zambia /
Commissioned by: German Federal Ministry for Economic Cooperation
and Development (BMZ) / **Term:** 2016 to 2018

THEN

In 2016, Zambia's **public finances** were in an extremely precarious position. Although the economy recovered briefly following a serious crisis in 2015/2016, government spending continued to significantly outpace revenues. On the one hand, **tax revenue was too low**; on the other, funding was awarded for political reasons without approval from parliament. From 2011, the public debt as a percentage of gross domestic product (GDP) rose almost tenfold from **8.4 per cent to around 80 per cent**. In 2018, around 80 per cent of the budget was firmly earmarked to pay the salaries of public officials and to service debts. This meant that there was almost **no financial scope** to implement development-oriented measures. To alleviate this situation and pave the way for a budget with more foresight, GIZ supported the Zambian Government in **enhancing the transparency, credibility and effectiveness** of public finance.

NOW

GIZ and the Government introduced **results-oriented budgeting** to ensure that scarce resources are used in a targeted way to promote the **country's development**. As a result, the Ministry of General Education can now assess how to use **funds to ensure** that more children have access to education, for example. To obtain **more revenue**, GIZ and the tax administration developed ideas for companies and individuals. A strategy for small and medium-sized enterprises (SMEs) and within the administration helped improve operations. The number of company audits for SMEs therefore rose from 7,651 in 2015 to 9,829 in 2017, an **increase of 28 per cent**. One of the big problems for citizens was the **long waiting time at the tax office**. In order to lower the threshold for paying tax dues at the tax office, the tax administration teamed up with GIZ to develop an electronic queue management system. This reduced the waiting time from several hours to **less than 20 minutes**.

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City [siti] A large, densely populated settlement that has specific rights and forms the administrative, economic and cultural centre of a region; a large cluster of houses [and public buildings] accommodating many people within a single administrative unit.

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