

DEVELOPMENT AND COOPERATION

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Internet Digitalisation has a bearing on human rights

Primary schools Ample room for improvement in rural India

Doping Malpractice distorts global sports



Focus: Garbage challenges

Living amidst filth

Nepal's capital Kathmandu needs better waste management. There are many good proposals, but not much action, writes **Roshan Sharma**, a postgrad student at the Cologne University of Applied Sciences. **Page 14**

A system for collecting waste

Emerging markets are generating ever more waste. In Mumbai, the plastics industry is taking an approach that involves local people in recycling, reports **Oliver Möllenstädt** of the German Association of Plastics Converters (GKV). **Page 17**

Sierra Leone's cleanest city

In the past, most of Bo's rubbish ended up in dumps, courtyards and sewers – or was burned. Today, the municipal waste-management authority and private collectors deposit and recycle 45 % of all waste generated in a formal landfill. **Jochen Moninger** and **Raphael Thurn-Valsassina** of Welthungerhilfe, a non-governmental organisation, assess the situation. **Page 19**

Learning from one another

Cape Town and Aachen are cooperating to promote sustainable urban waste management. The two cities face different challenges, but have some things in common.

Regina Brück, Hermann-Josef Ostlender, Mona Plate and Gabriele Schütz-Lembach give account. They work for the city of Aachen and a local waste-management company.

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Sorting unites

Masses of Syrian refugees are overburdening Lebanon's capacities. In a small town in the Bekaa Valley, people have begun to take care of garbage issues themselves.

Journalist Mona Naggar has spoken with them. Page 26

Indispensable resources

Waste from electric and electronic goods contains many valuable substances. Proper recycling is essential and should be the norm, as **Ruediger Kuehr** from the UN University told Hans Dembowski in an interview. **Page 28**

Turning wastewater into drinking water

Inappropriate wastewater disposal is a problem in many developing countries. Omniprocessor technology serves better hygiene and also delivers drinking water, electricity and fertiliser. **Andreas Hauser** of TÜV SÜD, a provider of technical services, elaborates why international standards would contribute to spreading this technology. **Page 31**

Editorial

Consumerism's side-effect

Humans produce waste. That is almost inevitable. The amount, however, reflects the standard of living, but must not grow unchecked. As wealth and purchasing power increase, so does the consumption of goods, and ever more waste is generated. The OECD countries produce about half of the world's waste, while Africa and South Asia produce the least. But things are changing. China has surpassed the USA and become the biggest generator of garbage in absolute numbers.

Waste is a by-product of urbanisation. It is noteworthy, though, that the amount of municipal solid waste is growing faster than the urbanisation rate.

Plastic is now found in the remotest corners of the world, making life more comfortable and daily chores like fetching water easier. Unlike formerly used natural materials such as weeds or wood, however, plastic doesn't rot — as is evident in huge garbage patches floating in our oceans. Plastic debris is often laced with chemicals. It harms humans and animals alike. When it is burned, unhealthy smoke is a result. Generally speaking, plastic needs to be made much longer and better use of. So far, it is hardly being recycled properly either.

Coping with rubbish is a huge challenge. Informal dumps are a big nuisance in developing countries. Rubbish causes flooding, air pollution and many other public health problems.

Formal waste management is needed. Typically, this is one of the most important municipal services, with great impacts on the functionality and sustainability of urban life. In low-income countries it is usually a city's largest budget item. Many workers are involved, but all too often, they lack formal employment and any kind of social security. Labour standards and occupational safety matter in this sector as in every other one. At the same time, many small-scale initiatives that deal with the collection, separation and recycling of waste provide income to poor people in developing countries.

Reducing waste is important, and so is reusing waste. Recycling is the third best option. For organic waste, composting is the way forward. Sound waste management provides win-win solutions, generating employment, recovering valuable resources and reducing the space needed for landfills. Only what cannot be used at all anymore should be disposed of in landfills.

Industrial waste is more problematic than residential waste since it often contains hazardous substances. Unless there is proper treatment, toxic waste pollutes the environment, contaminates water and harms human and livestock health. Unfortunately, some of those responsible prefer informal ways to get rid of it, and corruption plays a role too.

Development assistance can contribute to improving waste management in developing countries and emerging markets. The solutions to standard problems are well understood. However, it needs to be stressed that rich nations produce the bulk of waste – and they don't always deal with it in an exemplary way themselves. Yes, poisonous plastic residues haunt the OECD's food chains. Too often, moreover, digital devices that contain rare earths and precious met-

als are simply dumped, even though they need to be recycled. The imperative is to prevent waste, but the rich agglomerations basically excel at collecting it. They generate more per head than all other human settlements.



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Monitor

Pochan Sharma

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Comments on Kenyan plans to close two major refugee camps, authoritarian populism and human-rights infringements in the context of the Sochi Olympics

Tribune



Two sides of the same coin

Digital technology facilitates access to services and allows people to exercise their human rights.

However, it can also serve to infringe people's rights, warns **Nanjira Sambuli**, who used to work for Nairobi's i-Hub. **Page 34**

Room for improvement

In India, almost all children aged six to ten years go to school these days. Especially in rural areas, however, governmental primary schools still have to get much better. That is the assessment of **Boro Baski**, who belongs to the Santal tribe of Adivasis. Page 36

Debate



"Do not close the camps"

Kenya's government has announced it will close the two refugee camps of Dadaab and Kakuma. The residents of Dadaab have been told to return to their home countries or move to a third country by the end of May 2017. The refugees are devastated, writes **Peter Okello**, a journalist who grew up in Kakuma. **Page 40**

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Multilateral banks' honeymoon

In May, the Asian Development Bank (ADB) and the Asian Infrastructure Investment Bank (AIIB) announced their first co-financing project during the ADB's annual conference in Frankfurt. They will join forces to fund transport infrastructure in Pakistan. It remains to be seen whether or not they will turn into adversaries in the long run.

Takehiko Nakao, the ADB president, said that the details of the deal had not been agreed yet, but that both multilateral insti-

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tutions will invest the same amount. According to him, up to \$300 million are at stake. The ADB will manage things on the ground, given that

the AIIB only began operations last year and does not have an extensive network of country offices yet. According to Nakao, ADB rules and standards will apply.

Among western donor governments, the AIIB is a controversial institution. The US administration considers it an instrument of Chinese policymaking and wanted its allies to reject Beijing's invitation to join it. Major EU countries, including Germany, became members nonetheless, arguing that they wanted to influence the new institution from within and tie China more firmly into the system of global governance.

Jin Liqun, the president of the AIIB, took part in the ADB conference in Frankfurt. He used the occasion to emphasise that all sides benefit from cooperation. The road project in Pakistan is an example. Better transport infrastructure will obviously benefit Pakistan's economy. At the same time, the intended co-financing fits into what Beijing calls the "One Belt One Road" programme, which is meant to improve sea links in the Pacific and Indian Oceans and to rebuild something like the ancient silk road. Such infrastructure would boost Chinese exports, and Chinese companies can get assignments building it.

Common interests

Jin correctly points out, however, that the One Belt One Road initiative does not merely serve Chinese interests, insisting that the policy was launched by the People's Republic, but is not owned by it. In his eyes, the owners are the countries that get the new infrastructure. It is true, of course, that, if Pakistan's road links to western China improve, not only people there will get better access to Pakistan's seaports. So will people in land-locked Central Asian countries with links to China. All summed up, world trade would become easier.

Jin is happy to point out shortcomings of global development. In his assess-

ment, the least developed countries are being left behind, not least because they cannot afford loans from multilateral banks to build essential infrastructure. He proposes that all multilateral banks get together and think outside the box to improve matters. In Frankfurt, however, he did not comment on a proposal made by Norbert Kloppenburg, a board member of Germany's KfW Banking Group. According to Kloppenburg, it would make sense to grant very poor countries loans denominated in their own currencies so they would not bear any exchange-rate risks.

Rather than delve deeply into specifics, Jin expressed a general interest in cooperation in Frankfurt. His counterpart at the ADB similarly showed himself open to joint action. Nakao reported that the ADB was planning further to do cofinancing with the AIIB as well as discussing joint projects with the Shanghai-based New Development Bank (NDB), which, like the AIIB, was launched last year. It is owned by Brazil, Russia, India, China and South Africa (BRICS).

Beijing's foreign policy stance

Whether the current honeymoon between the new and the established multilateral development banks will last remains to be seen. According to a German government officer, cooperation with the new multilateral banks may yet become "very difficult" in spite of the promising start. It is evident, for instance, that Jin endorses Beijing's foreign-policy stance. Asked whether tensions in the South China Sea, where the People's Republic is building airstrips on islands that are also claimed by other nations, could hurt economic cooperation, he responds that China's approach is consistent: it wants difficult issues of sovereignty to be resolved "amicably".

Statements like this make some observers flinch. Building militarily relevant airstrips is not exactly amicable after all. In regard to development affairs, moreover, there are marked differences between the approaches taken by established donors and emerging markets.



Jin Liqun, AIIB president, with his ADB counterpart, Takehiko Nakao.

The former want governance to improve, human rights to be respected and sustainability principles to apply. The latter, in contrast, are more interested in unrestricted economic growth. The Indian government, for instance, is pressing ahead with projects disregarding the ecology and marginalised people. The emerging markets want more say in the management of multilateral development banks and have recently been providing more capital to the ADB.

For decades, on the other hand, civilsociety activists have been accusing multilateral development banks of harming poor people and the environment. Today, however, many of them worry that the progress made towards serious social and environmental safeguards will be undone as established development banks compete with the new ones for business (see box below). While non-governmental organisations still see many contentious issues in regard to established IFIs, they have even less trust in the BRICS and the development banks they have launched.

ILO norms

Gerd Müller, Germany's federal minister for economic cooperation and development, is known to support many causes promoted by civil-society organisations. At the ADB's annual meeting, he presented the Frankfurt Declaration that was agreed by Germany and the ADB. It includes commitments to climate protection and adaptation as well as to profes-

sional and vocational training. According to Müller, it does not make sense to build infrastructure without enabling the young generation to find good jobs.

In a similar vein, he praised the ADB and the World Bank for making observance of the International Labour Organisation's core labour norms a condition for granting loans. Germany promoted the cause, and doing so is probably easier in the context of the established international financial institutions than the new ones. It also has more impact since the established banks have greater financial clout. The ADB granted loans worth over \$ 16 billion last year and expects that figure to rise to \$ 20 billion by 2020, says Nakao, while the AIIB probably can invest up to \$ 5 billion or so in 2016. Hans Dembowski

Let's race to the top

Civil-society organisations regularly accuse the Asian Development Bank (ADB) and other international financial institutions of only insufficiently protecting the environment and the rights of poor people – but they consider national governments an even bigger problem.

Building infrastructure is the core component of the ADB's mission. Civil-society activism has contributed to improving the Bank's social and environmental safeguards over the years. Today, activists are not calling for more stringent rules, but for more stringent implementation.

In a similar vein, the activists appreciate the work of the Bank's Compliance Review Panel (CRP), to which people can turn when ADB rules are not followed. However, they bemoan that victims of forcible displacements, for instance, are often not compensated even when the CRP rules in their favour. They warn that things may deteriorate because, due to recent decisions, the CRP's mission no longer includes proposing remedial action in cases where ADB rules were breached.

When these matters were discussed at the ADB's annual meeting in Frankfurt in May, leading Bank officers agreed that there was room for improvement. In their eyes, however, ADB jurisdiction is limited because the governments of the countries where projects are implemented are not



In front of the ADB headquarters, Greenpeace protesters expressed discontent with funding for coalbased power infrastructure in 2012.

under its control. Expressing themselves in favour of strengthening the rule of law everywhere, they suggest that non-governmental organisations can help the ADB reach out to marginalised people and engage in the fight to ensure the rule of law.

Civil-society activists, in any case, are resolute about preferring ADB safeguard systems to those of the countries concerned. They point out that the latter are less stringent. While ADB rules give the public 120 days to comment on an environmental impact assessment, for example, Indonesian law foresees a mere 10 days. Moreover, they bemoan that many Asian governments do not obey their countries' laws.

ADB officers agree that the ADB system is stronger and thus preferable.

The Asian Infrastructure Investment Bank (AIIB) and the New Development Bank are adding to NGO worries (see Korinna Horta in our D+C/E+Z e-Paper 2016/03, p. 17). Both new multilateral banks are based in – and backed by – China. Its leaders express commitments to international standards, but what kind of safeguards and compliance mechanism they will use is not clear. NGOs worry that there will be an international downward spiral. The response of Mario Sander, who represents Germany, Turkey, Britain, Austria and Luxembourg on the ADB board, is that he hopes there will be "a race to the top".

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Media under assault

The independent organisation Reporters without Borders (RSF) has published its annual Press Freedom Index. As last year, Finland leads the list as the nation with the comparatively freest media, while the last three ranks also remain unchanged, with Turkmenistan, North Korea, and — as the last one of 180 states — Eritrea. Egypt is a reason for concern.

Some countries have made remarkable progress. Tunisia, for instance, has risen 30 ranks since last year. Nonetheless, RSF complains about continuing harassment of Tunisian journalists and self-censorship. On the positive side, the international NGO points out that "online media outlets are trying to change this."

RSF explicitly praises the web magazine Inkyfada, which "provides investigative coverage of very sensitive subjects." Inkyfada co-published, for example, the "Panama Papers", documents about secret bank accounts in Panama. According to Malek Khadhraoui of Inkyfada, more than 20 Tunisian nationals were mentioned in these documents concerning money transferred to tax havens. Even the leader of a political party is named. Reporters without Borders considers Inkyfada a proof of growing press freedom in Tunisia.

Other North African countries are faring worse, for instance Morocco. The country has slid down one rank. "Journalists and citizen-journalists are threatened by censorship, surveillance, intimidation, heavy fines and imprisonment," RSF states. This judgment is endorsed by Ali Anousla from the Moroccan news website Lakome.com. He is living abroad since his website was blocked.

Egypt is even worse. Five years have passed since the uprising of 2011 that marked the Arab spring, yet the situation of the media keeps deteriorating. Egypt has fallen one rank in the recent 2016 World Press Freedom Index and is now 159th of 180 countries. According to the international Committee to Protect Journalists (CPJ), only China holds more journalists in jail than Egypt, calling this a "systematic imprisonment to silence criticism."

Ever since the coup d'état of 2013 that ousted Mohamed Morsi, who was the elected Muslim Brotherhood-affiliated president, the authoritarian regime has expanded its power at the expense of human rights and freedom of speech. Journalists are being detained on charges related to their work.

Even some seemingly innocuous topics can prove problematic, reporting about refugees, for instance. There are Syrian and Sudanese refugees in Egypt, yet the media hardly ever mention them. Online journalist Doaa Sultan claims that "we write more about refugees in Europe than about those living in Egypt."

Despite the continuous crackdown on freedom of speech, the media still tries to cross the red lines. The recent deal between Egypt and Saudi Arabia in April 2016, in which Egypt agreed to cede its sovereignty over two Red Sea islands to Saudi Arabia, sparked anger among the citizens. Many people took to the streets to protest the controversial deal – and this was reported in the media. The regime quickly reacted: at least 30 journalists were arrested while covering demonstrations, according to the CPJ. The daily newspaper of El-Masry Al-Youm – a widely circulated privately owned newspaper was stopped in the printing press to amend the front-page headline that criticised the visit of Saudi King Salman to Egypt. The original headline read "Two islands and a PhD to Salman ... and billions to Egypt". The headline had to be changed to "Salman visit's toll: agreements worth \$ 25bn". This marked the first case of open media censorship in 2016.

The tension between journalists and the Sisi regime reached another climax on 1 May 2016, when security forces stormed the headquarters of the Press Syndicate to arrest two journalists accused of stirring public unrest. According to CPI, dozens of plain-clothes policemen stormed the building, assaulted the syndicate's private security officers and broke furniture in the lobby. The Interior Ministry, however, denied using force. Yehia Qallash, the syndicate's president, called the raid "unprecedented." The organisation's headquarters had been a safe place for protests for 67 years. Ironically, the assault on the syndicate came one day before World Press Freedom Day. Ingy Salama



Links

Reporters without Borders – Press Freedom Index 2016: https://rsf.org/en/ranking
Web magazine Inkyfada, Tunisia: https://inkyfada.com/
Syndicate of Journalists, Egypt: http://www.ejs.org.eg/

Managing migration in Africa

Many Europeans regard African migration as a European problem. For Africans, however, it is an internal matter — and not necessarily a problem either.

Florent Kossivi Tiassou, a journalist from Germany's international broadcaster Deutsche Welle (DW), recently visited a refugee camp on the Burundian-Tanzanian border. "Many people there asked me: How can we get to Europe?," he recounts. But not all Africans on the run are heading for Europe. "Many people want to stay in Africa," Tiassou says. For Burundians stranded in Tanzania, moreover, going to Europe will always remain a dream. They are poor, and Burundi is situated in the heart of the African continent.

Some migrants cannot go to Europe, and others do not want to. Accordingly, the majority remains in Africa. There are millions of internally displaced persons in their own countries and millions more in immediate neighbour states.

Administration of refugees and their inclusion in society often work much better in Africa than perceived from far away, says Hamidou Bouba, vice-president of the Central Council of the African Community in Germany, an umbrella organisation for the African diaspora. "If a society is ready to include people, it will happen – even when the political and administrative system is overwhelmed."

Target countries often benefit from migration economically. Countries of origin, on the other hand, lose their young people and part of their workforce. Such brain drain is a big loss.

Although there have always been flight and migration, both phenomena have been attracting more attention in Europe since more than 1 million people came to the continent in 2015. In Germany, politicians and media increasingly discuss combating the causes of flight as a task of development assistance.

Benjamin Schraven of the German Development Institute (GDI) does not agree. In his view, it is more important to manage migration in a development-conducive way than to prevent it. Free movement of people – as the Economic Community of West African States (ECO-WAS) foresees, for instance, – should be fostered, he said at an event organised by GDI, the European Association of Development Research and Training Institutes (EADI) and VENRO, the umbrella organisation of development and humanitarian aid NGOs in Germany, in Bonn in May.

Elke Löbel, who is in charge of the refugee issue at the German Ministry for Economic Cooperation and Development (BMZ), points out that development assistance already has an impact on migration in Africa. One example is Morocco, one of the few countries in Africa that has an asylum law as well as a programme for returnees. The BMZ advises Rabat on migration policy.

Tiassou, the DW journalist, takes a critical stance on the cooperation with

Morocco, because that country treats black Africans extremely bad and denies them all rights. "The EU tries to use Morocco as a buffer for asylum seekers," he says. According to his knowledge, the money flowing into Morocco does in no way benefit the refugees.

Regarding the causes of flight, Tiassou points to the roles Western companies play in Africa. The French energy group Areva, for instance, makes a lot of money mining uranium in northern Niger. But the local people are not well off. "There are no roads, no schools, no hospitals," Tiassou says. "The money flows to Europe – and the people follow suit."

In contrast, he considers HeidelbergCement a positive example. This German multinational is running a clinker plant in Tiassou's home country Togo. Close to the plant, the company has built a model village with good infrastructure. "Such action is important to stop the exodus," Tiassou says.

Katja Dombrowski



Africa attracts migrants: this man from Pakistan has an electronics shop in Cape Town, South Africa.

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"It is good when walls come down"

Germany's Federal Government launched the weltwärts programme seven years ago to second young German volunteers to social projects in developing countries. Since 2013, volunteers have also travelled in the other direction. Young people from developing countries are working in Germany.

Weltwärts volunteers are sent to developing countries by 155 German civil-society organisations (CSOs), while 66 German CSOs and 245 foreign ones are involved in south-to-north youth exchange. So far, 400 volunteers have come to Germany, and the number expected for this year is 600.

Jacob Betmou is from Cameroon and has spent the past ten months in Germany, working as a volunteer with a CSO called Slow Food. The Prostant charity Brot für die Welt organised his stint in Germany. He is interested in agriculture and soil. "In our society," he says, "we think more about how we can eat and produce food, and less about how to protect our soil." In his eyes, too much pesticide is used in Cameroon. He says he will pass on his new insights when he comes home. "My organisation

teaches youngsters to grow vegetables. My experience with Slow Food will allow me to show them how to make do with less pesticide."

In view of globalisation, Horst Heinrich Bammer of the South African embassy in Berlin considers international exchange more important than ever before: "All the huge challenges that endanger stability, like human or drug trafficking, migration, terrorism, are international, except for one: nationalism." To tackle these challenges, cooperation is needed. "That is why this programme is so valuable," was Brammers comment at a weltwärts conference that was held by ICJA, a CSO, in Berlin in May.

Bernhard Felmberg of Germany's Federal Ministry for Economic Cooperation and Development (BMZ) sees things in a similar light. Weltwärts, according to him, is grassroots-level cooperation. Having grown up in West Berlin, he appreciates that "it is good when walls come down".

All organisations involved want the volunteers to stay engaged after returning home. Experience shows that things are running well in regard to the German

volunteers. More than 70% of those who have been abroad are active in some kind of initiative or plan to become active soon. So far, however, there is no reliable data about those who return home from Germany. However, Meena Bedarkar works for an Indian CSO and says: "They come back with the awareness that they can make a change."

Visa can be a problem. Even though the Federal Government sponsors weltwärts, German embassies sometimes don't grant applicants access to the Federal Republic. The BMZ is working on a memorandum of understanding with the Foreign Office and several embassies to improve matters.

Funding and picking the right candidates are two more challenges the CSOs face. Bedarkar says her organisation gets 100 applications for five volunteer posts. "We want to pick people who would otherwise be unable to go abroad," she says, "but more funding is needed."

An evaluation is currently being done to assess whether the south-north-exchange is meeting expectations. The results will have an influence on future weltwärts funding. Eva-Maria Verfürth



Two volunteers from Brazil and Indonesia experience the German winter.

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Nowadays: A mouthpiece for women

After the overthrow of the Taliban regime in 2001, Afghanistan saw a media boom. Hundreds of radios and TV stations sprang up, but only few focussed on the most disadvantaged people: women. They are the target group of Radio Rabee Balkhi.

With the ousting of the Taliban, various private radio and TV stations were set up in Afghanistan. Many were funded by former warlords who wanted a personal broadcasting station to promote their interests. The people, on the other hand, wanted something different: entertainment, which the Taliban had forbidden. Serious issues were thus rarely debated on air.

Radio Rabee Balkhi in the town of Mazar-e Sharif in Northern Afghanistan, however, has focussed on women's issues since it was started in 2003. It is funded by a Canadian civil-society organisation. Apart from news and music, it airs programmes on nutrition and health as well as on societal issues and the challenges women face daily. The station is named after a Persian speaking female poet of the tenth century. She was famous for speaking her mind about forbidden issues – like her love to a man.

Mobina Khairandish is the broadcaster's programme director. She resents the continuing male dominance in Afghan society. "Even educated men who



apparently are in favour of women's rights, express reservations when it comes to supporting women in their political activities," she says.

One relevant issue is divorce. Even men who work for foreign agencies are likely to say that it is impossible as marriage "is a choice for life". Another, related taboo topic that Radio Rabee Balkhi tackles is domestic violence. In Afghanistan's maledominated society, it is a great challenge to discuss these issues in public. "Whenever we talk about things like domestic vio-

lence, divorce or safe houses for vulnerable women, we are told that we are trying to weaken the basis of family life," Mobinah Khairandish says.

Radio Rabee Balkhi's purpose it to deal with women's daily challenges. The station cooperates with local civil-society organisations as well as state agencies.

In Afghanistan, radio is the most important medium. Radio Rabee Balkhi offers women in the Northern Afghan region Balkh a forum for free expression and demands for women's rights.

In our column "Nowadays", D+C/E+Z correspondents write about daily life in developing countries.

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Mainstreaming responsibility

India's textile industry has a long history and is the second largest employer in the country. Working conditions remain exploitative however. Civil-society organisations demand more transparency in the supply chain and want to mobilise consumer pressure towards higher production standards.

India's success in the textile industry is driven by a low-cost, highly flexible production system. It is able to respond to sudden fashion changes, as a recently published study by the German feminist initiative FEMNET states. India's economy is marked by a high share of unregistered, informal businesses. As the report bemoans, however, the government supports these small and mid-sized enterprises without explicit requirements concerning social and environmental standards.

FEMNET .V. Die moderne Form der Sklaverei in indischen Spinnereien

Especially in southern India, young girls are abusively employed in spinning mills, critics point out. A camp-laboursystem lures teenagers from poor backgrounds into the spinning mills. The system is traditionally known as "sumangali". The word means "happy bride" in Tamil. The girls work in exploitative conditions for three years and are eventually paid a sum which is supposed to serve as their dowry. The young girls must do heavy shift work for a pittance and sleep in overcrowded and poorly equipped bunkhouses, the FEMNET study reports.

The state government of Tamil Nadu acknowledges that there are accidents, and some of them are deadly. The main cause is said to be exhaustion. However, there is also a lack of vocational training. Viyakula Mary of Social Awareness & Voluntary Education (SAVE), an Indian NGO, says many girls do not know how

> to handle machineries, and such ignorance also leads to accidents. Moreover, suicide. sexual abuse and murder are common in the spinning mills, Mary reports. The teenage workers are not allowed contact to their families, and many suffer from mental stress and illness. Making matters worse, most girls never get any proof of employment, so they cannot go to court if their rights are not respected. Should they leave the camp before the three years are over, they go home empty-handed, FEMNET reports.

> There are laws that could be used to rescue the girls, savs Anibel Ferus-Comelo, the author of the FEMNET study and an activist with Civil Initiatives for Development and Peace (CIVIDEP), another Indian NGO. In the past few years, media coverage and public-awareness campaigns have prompted government agencies to enforce laws and regulations with an eye to

The study is only available in German. formalising the informal sector.

However, the language of the laws can be gotten around, so the economic and physical exploitation of vulnerable communities prevails. Ferus-Comelo wants manufacturers to provide proof of employment and promote women to positions of authority in both factories and bunkhouses.

In the fashion industry, consumer pressure could prove powerful. Awareness about dismal labour conditions, especially in sewing factories, has been raised again and again. Catastrophes such as the collapse of a factory in Sabhar, Bangladesh stir up the public's attention for a short time, but fail to have a long-term impact on policymakers. That is what Frederike Boll of the Friedrich Ebert Foundation. which is close to Germany's Social Democrats, recently told a conference in Bonn that was organised by the foundation in cooperation with FEMNET. She insists that the entire supply chain must be considered.

One approach to improving matters is to use labels that certify better social or environmental standards. However, no label has been established so far which would really encompass the entire supply chain. Gisela Burckhardt of FEMNET points out.

NGOs appreciate Britain's modern slavery act which was passed last year. It obliges companies to report on sourcing practices. Report author Ferus-Comelo would like other countries to introduce similar laws. "We need to mainstream corporate social responsibility with due diligence," she says. In her view, boycotting fashion firms is not the right way. In the end, poor communities need decent employment, and companies need experienced, healthy workers. The sumangali camps can only be overcome in a multistakeholder approach, involving consumers, companies and the workers themselves, she argues. Floreana Miesen

Link

FEMNET e.V., 2016: Die moderne Form der Sklaverei in indischen Spinnereien (only in German): http://www.femnet-ev.de/images/downloads/sumangali/ Studie-Moderne-Sklaverei_2016.pdf

Transition of power

Tough times

Brazil is experiencing a political crisis in the midst of an economic crisis. Whether Michel Temer, the interim president, will get a lasting grip on power, remains to be seen.

Brazil's military dictatorship ended 27 years ago. Now the country is in crisis again. The political institutions are not being questioned, however, says Ricardo Sennes of Prospectiva, a consultancy. In his eyes, the capacities of political groups are being tested.

In early 2016, 17 parties were represented in the country's Senate and 25 parties in its House of Representatives. This multitude makes it difficult to organise majorities, so any president would need considerable political skills.

Luiz Inácio Lula da Silva had those skills. The predecessor of President Dilma Rousseff, who has recently been suspended from office, forged broad-based and diverse coalitions, even getting rightwing parties to support his agenda. He could rely on about 80% of Congress, the consultant says.

Rousseff, who belongs to the same Workers Party, was less successful. She reshuffled the cabinet to escape his influence and to divert pressure from her coalition partner, the centre-right party PMDB, says Sennes. Moreover, she changed economic policy. The result was, in Sennes

eyes, that she increasingly met with opposition within her coalition.

The recession compounded problems. Inflation and unemployment have risen, and the economy is shrinking. Corruption allegations abound. Sennes speaks of a multifactoral crisis. Politicians from all parties are involved in the bribery scandal concerning the partly state-owned oil corporation Petrobras.

Before the recession, Brazil had had many good years. The share of poor people went down from 27 % in 2003 to seven percent in 2014. The number of university and college graduates tripled from 1998 to 2014. In one and a half decades, life expectancy rose by five years to more than 75. Such progress went along with considerably higher government spending, as Sennes reports in the São Paulo office of DEG (Deutsche Investitions- und Entwicklungsgesellschaft) at the end of April. DEG supports the private sector in emerging and developing countries and is active in Brazil since the 1960s.

The political crisis escalated when the PMDB stopped cooperating with the Workers Party after 13 years of coalition. It became a driving force for Rousseff's impeachment. On 12 May the Senate confirmed the impeachment proceedings that had been started by the House of Representatives. Rousseff has thus been suspended from power for 180 days. In this time, the Senate and the Supreme Court must decide whether the charges against her are valid. She is basically accused of having fudged budget figures. Rousseff speaks of a coup. She says her opponents took advantage of the country's bleak mood to remove her from office without elections.

Vice President Michel Temer of the PMDB is now the interim president. He is tainted by corruption, however, and may be impeached himself. Because of a campaign-finance scandal, he is barred from running in elections for eight years.

Temer has taken office, ending 13 years of leftist government by Lula and Rousseff. His cabinet consists of

Monitor

elderly white men. They are now running a country in which the majority is female and considers itself black or coloured. Many observers doubt the new administration will get a grip on the country's problems.

Temer uses market-oriented rhetoric, but has also pledged to maintain social protection. His agenda includes making labour laws more flexible, reforming the pensions system and reducing social spending however. In Sennes' view it has been obvious for many weeks that Brazil's economic policy must change – and that enforcing such change will prove difficult.

Dagmar Wolf



Temer und Rousseff last summer.





Living amidst filth

It is quite common to see garbage piling up on the streets of Kathmandu, Nepal's capital city. The agglomeration needs better waste management. There are many good proposals, but not much action.

By Roshan Sharma

Kathmandu's open spaces, roads, sidewalks and waterways are littered with waste. People dump their garbage in public places because no proper waste-management system is in place. Things become worse in the monsoon when solid waste clogs the sewage system and the drainage canals, causing flooding all over the city.

According to the Central Bureau of Statistics, Kathmandu Metropolitan City had a population of about 1.7 million in 2013. The city is very crowded. Resources are scarce, and the pressure on infrastructure is huge. The local government cannot provide all services it should. This includes waste management. Political unrest in decades and the earthquake in April 2015 has worsened the situation. People worry about daily survival and subsistence, not garbage, hygiene and sanitation.

In the past, the people were responsible for their waste. Households composted organic waste in piles. Plastic was hardly used, and plastic items were reused and recycled. As the population grew and economic development set in from the 1960s on, the waste quantities started to rise. Currently, around 450 metric tons

of solid waste is generated in Kathmandu every day, but there is no waste management. It became common to dump garbage in the river and elsewhere.

In 1971, Germany's GTZ (which has since become GIZ) provided assistance to start a landfill in Gokarna. It became operational in 1986. For 14 years, it was repeatedly closed and reopened, until it was permanently shut down in the year 2000. Since then, Kathmandu Metropolitan City Office (KMC) has installed several landfills in and around the city but they tend to be temporary and informal.

From 1994 to 2000, the KMC used the western banks of the Bishnumati and Bagmati Rivers. The garbage dump along the Bishnumati River had to be closed, however, because it attracted birds that posed risks to airplanes taking off from the nearby airport. Later, an area near the confluence of the two rivers was used, but in view of protests and environmental concerns, it too was shut down in 2005.

Plans for new landfills always face strong public opposition (see box, p. 15). People want hospitals, schools and better roads, and they want their homes to be linked to the water pipes and the power grid. They don't want a landfill in their vicinity.





Dead rivers

Improper waste disposal has left the Bagmati River aesthetically destroyed and biologically dead. There is virtually no aquatic biodiversity in the river and only some patchy riparian vegetation. Consequently, the attractiveness of traditional monuments along the river and its tributaries has been eroded. Nepal's economy depends on tourism, so the country cannot afford to neglect cultural heritage this way. However, all river banks have become informal dumping sites.

Since 2005, the authorities have been using a temporary landfill in the neighbouring district of Nuwakot. Its capacity is too small, so adjacent areas have been used too. Moreover, there have been disputes over the main site. As a result, the rivers suffer. There is currently only one waste collection and treatment centre. Unfortunately, it is too small too.

Waste is increasingly becoming a public health concern in the densely populated capital. Land, water and food are contaminated. The garbage piles stink. Frequent waste fires pollute the air. The urban poor in particular are exposed to health hazards, not least as waste has an impact on water supply. Many public taps are near waste disposal sites, so there are risks of water-borne diseases. Moreover, clogged drains create small ponds where mosquitos and other disease vectors breed.

As in many major cities of developing countries, waste issues have never been managed well in Kathmandu. Even the Gokarna landfill was never up

to task and caused public outrage soon after inception. Neither the national government nor the local authorities have been able to rise to the challenges.

Inadequate urban planning is indeed a huge challenge. Many roads are too narrow for garbage trucks. The agglomeration's crowded neighbourhoods do not have enough space for refuse containers, and certainly not for composting. Because the infrastructure is poor, solid waste collection is difficult and disposal services remain insufficient.

The urban public shows little interest in garbage matters. It is not a common practice to separate

Part of a system

Avoiding and recycling garbage must be the main priority of waste management. Landfills should only serve to dispose of garbage waste that cannot be used anymore.

Proper landfills are safer and cleaner than ocean dumping or open-air burning. They are about more than simply dumping waste in a pit. Landfills are the most economic form for handling solid waste – but only, if that waste really cannot be made use of anymore.

It is estimated that about 95 % of humanity's solid waste is disposed in the landfills. The landfills have numerous environmental and social impacts. Therefore, competent management must be ensured.

Microbes transform organic waste and generate greenhouse gases such as carbon dioxide and methane. It is estimated that landfills thus contribute up to four percent of global greenhouse-gas emissions. Methane, moreover, is a highly toxic and flammable gas. There are numerous incidents of fires and explosions reported from the landfills around the world.

Another problem is the leakage of toxic substances (gases and leachates). Air, soils and aquifers are contaminated this way. Not only the immediate environment, but also surrounding areas are affected. The bad smell is one reason why people oppose plans for landfills. Those who live in the vicinity of a landfill often feel ostracised due to the odours. Gases and leachates must therefore be kept in check.

Landfills must be insulated from soil and groundwater. Moreover, they must be organised in a way to prevent gas building up in the wrong places. Some gases have economical value and can be used to generate energy for example. It is a fundamental issue that waste needs to be sorted into different categories to make the most of gases, liquids and solids that can still be used or recycled. Accordingly, a proper landfill is always just one component of an entire waste-management system. It does not exist in isolation.

Policymakers in developing countries often shy away from tackling all implications. They would prefer to set up a major landfill to solve all waste problems once and for all. That is what their counterparts in the rich world used to do.

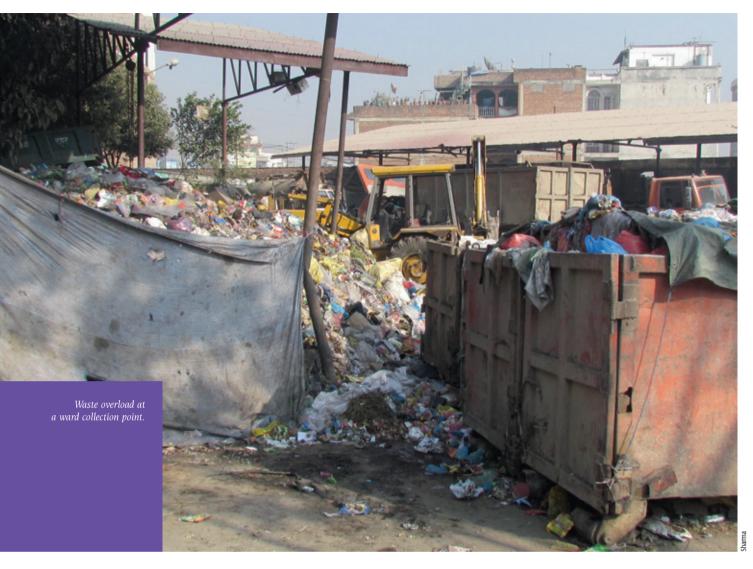
But it turned out to be impossible. Accordingly, densely populated advanced nations have taken more holistic approaches.

Landfills are not as awful as traditional pit dumps are. However, they are not pleasant either, and people generally prefer not to have one in their neighbourhood. The core challenge of waste management is to avoid and recycle

Plastic bottles sorted for recycling in Essen, Germany.

garbage. Only what cannot serve any purpose at all anymore should be disposed of in landfills.







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degradable from non-degradable household waste. It seems easier to simply dump waste somewhere – or to burn it.

Caste plays a role too. Municipal garbage collectors traditionally belonged to marginalised Dalit communities. In the informal sector, street children and kabbadis (scavengers) are busy collecting and sorting waste items. Most Nepalis believe that managing garbage cannot be honourable work. The bitter irony of this attitude is that inadequate waste management means that everyone in the city lives amidst filth. All summed up, it is no surprise that Nepal's Solid Waste Management Act of 2011 is not stringently enforced.

The way forward

To improve matters, Kathmandu urgently needs proper and formal landfills. Local policymakers must negotiate with local communities and ensure that the people who live near future landfills are well compensated and the landfill itself is well managed. For instance, schools or health facilities could be priori-

tised in the neighbourhoods concerned. The government could rely on various environmental and climate funds or aid agencies in general for investing in landfill management.

Moreover, Kathmandu needs a paradigm shift to a holistic approach of Integrated Solid Waste Management (ISWM). Environmental effectiveness and social acceptance matter as much as economic feasibility. Apart from waste disposal, relevant issues include the prevention, reduction and recycling of garbage. Behaviour change is needed both at the level of households and industries. Organic, plastic and paper waste needs to be separated so the best use can be made of it. People must learn to see waste as a resource rather than a nuisance.

The challenges are considerable, but policymakers can make a difference. It would also help if they used incentives. In Germany, for example, consumers get a refund when they return plastic bottles and aluminium cans to retailers. Moreover, a system to separate waste and recycle its components was set up in the 1990s.

Systematic approach

Economic growth and rising consumption sharply increase the amount of waste that newly industrialising countries generate. That is especially so in India, where the economy is growing fast and the population of currently more than 1.2 billion people keeps growing. In Mumbai, the plastics industry is taking an approach that involves local people in waste recycling.

By Oliver Möllenstädt

Household waste in India and other newly industrialising countries is increasingly made up of packaging and other plastic products that are not naturally degradable. There is a lack of proper waste collection and recycling systems, so people often litter their environment, thoughtlessly dropping garbage on streets. The problem is particularly pronounced in India's densely-populated cities.

Plastic waste is a major cause of marine pollution. Plastic bags and PET bottles make their way into the ocean from rivers or settled coastlines. The United Nations Environment Programme (UNEP), the European Commission and Germany's Federal Government are paying increasing attention to this issue.

The plastics industry is facing the problem world-wide and has started to respond. National associations of the industry are cooperating ever more closely with their counterparts at the global level, expanding plastic-waste collection schemes and introducing professional recycling programmes.

On behalf of Germany's Röchling Stiftung, the German Association of Plastics Converters (GKV) and the Organisation of Plastics Processors of India (OPPI) conducted an analysis to assess the conditions for plastics recycling in the Indian state of Maharashtra in 2013. Mumbai is the capital of Maharashtra. The analysis was based on structured interviews with key

stakeholders. The investigation found that there was much scope for improvement, especially in regard to recycling used consumer goods and household waste.

In Mumbai, as in other Indian cities, rubbish is mostly collected by informal waste pickers. They are normally women. They make their living collecting plastic waste and selling it to intermediaries. The problem is that they collect and trade very small amounts on a scale that is inadequate for up-to-date recycling.

To improve matters, the waste pickers need to be involved in a well-structured waste-management system. That will not be possible unless the solution proves beneficial to the waste pickers themselves. Furthermore, housing societies, schools, hotels and other waste producers have to agree to the strategy and contribute to its implementation. The infrastructure and technology of waste collection and sorting must improve too.

This kind of approach is now being taken in Mumbai. The Stree Mukti Sanghatana (SMS), an non-governmental organisation, represents waste pickers and supports women's rights. It plans to set up seven collecting and sorting stations throughout the city. Each will initially have a waste recovery capacity of 25 tonnes per month, of which plastic waste is expected to make up seven to eight tonnes.

Local waste pickers collect plastic waste in Mumbai, which will then be recycled.





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Since 2014, the Röchling Stiftung has been funding SMS' efforts to establish the local collecting and sorting stations and to provide financial support for involving waste pickers in the new system in Chembur-West and Mulund, two districts of Mumbai. The local government is contributing garbage trucks, drivers, land and storage sheds.

The following activities are underway in order to improve conditions for waste recovery in both districts:

- 1. raising people's awareness for the need for properly designed waste management;
- 2. encouraging local waste pickers to participate, and providing them with training on how to sort waste;
- 3. purchasing waste from local pickers at fair prices according to accurate weighing;

- 4. collecting waste using city waste transporters and transferring it to one of the collection and storage sheds provided by the city; and
- 5. documenting waste collection and sales as soon as there is an adequate amount for recycling.

As part of the project, the planned waste-storage sites have been modernised. For instance, safety and ventilation technology was installed, and shredders and balers were acquired. Accordingly, working conditions and economic prospects have improved for more than 70 waste pickers in both districts. The women's income has increased by about 20%. The improved infrastructure allows for larger volumes of plastic to be collected and stored, so it is now possible to sell the waste directly to recycling companies. SMS expects that the project will soon become economically self-sufficient thanks to its increased productivity.

The new plastics economy

Plastic waste is polluting the oceans. At current trends, the total weight of plastics in the ocean will equal the total weight of fish by 2050. By 2025, there will be one tonne of plastic for every three tonnes of fish.

These figures are from a study published by the World Economic Forum (2016). It points out other environmental damages as well, including the generation of greenhouse gases when plastic is produced and when it is burned. The carbon footprint alone is estimated to amount to \$ 23 billion a year. Another issue is tiny particles of waste plastic poisoning the food chain.

The authors acknowledge that plastic is very useful but warn that global plastic production will probably double in the next 20 years, after having increased from virtually zero to 311 million tonnes in the past 60 years. The environmental impact is thus set to get worse.

The study's title is "The new plastics economy". It points out that 95 % of plastic packaging material is only used once. It ends up in landfills, incinerators or leaks from collection systems, so material worth up to \$ 120 billion is wasted every year. The authors acknowledge that Europe and North America are better at collecting garbage than Asia, which accounts for about the same amount of plastics. They make it very clear, however, that good collection systems do not make the plastic economy sustainable.

To solve all of these problems systematically, the study proposes a three-pronged approach with global reach:

improving further use of plastic material after first use,

- drastically reducing leakage of waste from collection systems and
- decoupling plastics production from fossil raw materials.

To achieve these goals, plastic products need to become more standardised. So far, the diversity is so great that reusing plastic waste in chemical industries is very difficult, so plastic waste cannot really substitute oil as feedstock. That would be different if the most important kinds of plastic like PVC or PET were produced in a more homogenous way that would result in more homogenous qualities.

Accordingly, the authors want the international community to pass a Global Plastics Protocol. Such a protocol would facilitate industry-wide coordination and provide incentives for improving garbage collection systems. Most important of all, it would allow producers to decouple from fossil feedstock.

The study calls for the engagement of policymakers, public awareness raising as well as more, better coordinated and more ambitious research. It argues that the public sector, government agencies, civil society, international organisations and academia must be involved.

The publication makes sense. Its weakest spot, however, is that it calls for an "independent coordinating vehicle" to manage the transition, but fails to spell out who should set up such a vehicle and how it might be governed.

Hans Dembowski

Link

World Economic Forum: The new plastics economy. http://www3.weforum.org/docs/WEF_The_New_Plastics_Economy.pdf

The cleanest city in Sierra Leone

In the past, most of Bo's rubbish ended up on informal dump sites, courtyards and sewers — or it was simply burned. Today, the municipal waste-management authority and private collectors bring 45% of all the waste generated by Sierra Leone's second-largest city to a disposal site for more proper disposal and recycling.

By Jochen Moninger and Raphael Thurn-Valsassina

In Sierra Leone's rapidly-growing mid-sized cities, each resident generates about 450 grammes of waste per day and 250 grammes of human faeces. The lack of sewers and waste transport systems results in unregulated disposal, which in turn increases the risk of infections from preventable diseases.

Since 2013, Welthungerhilfe has been helping Bo's city council to improve waste management. The German-based non-governmental organisation trains independent waste collectors, latrine emptiers,

recyclers and traders and links them to government authorities. A new municipal waste management authority has been established, and transport and disposal capacities have improved.

In cooperation with traditional leaders and representatives of civil society, local ordinances have been passed. Rules of conduct have been made binding. An integrated waste-management system is emerging, and it has been quite successful so far. Bo is now considered the country's cleanest city, and other midsized cities are starting to follow its example.



Informal dump sites

In 2013, the city of Bo, which is home to 200,000 people, generated almost 25,000 tonnes of household waste and 8,000 tonnes of commercial waste. That is not much compared with other countries, but the public waste management system was overwhelmed nevertheless. At the time, the city's waste collectors could only provide basic services to 30% of households at most. Even though residents were willing to pay for waste disposal, there were at least 127 informal dumping sites in Bo in 2014. Rubbish also ended up in courtyards, in vacant lots, in storm drains along the main streets, or it was burned.

Especially in view of fast population growth, poor sanitary conditions present a serious health risk to the city's residents. More than 18,000 tonnes of human faeces were generated in Bo in 2014. The city has no sewer system. Sixty-seven percent of residents rely on latrines, 48% share toilets with other households and 18% of the households surveyed reported overflowing pit toilets. Open defecation is widespread, as are so-called "flying toilets": people relieve themselves in plastic bags and throw them on unregulated dumps or in the storm drains.

Integrated waste management

An integrated waste-management system consists of waste prevention, efficient waste removal, better rates of recycling and proper disposal of rubbish and faecal sludge in a sanitary and environmentally-friendly way. The precondition for such a system is a func-

tioning administrative structure. Until 2014, waste transport was the only public service offered in Bo. Since 2015, an independently-operating waste management authority has assumed responsibility for all aspects of integrated waste management, including waste collection in cooperation with youth groups, waste transport, which continues to be offered as a public service, systematic support for small businesses in the recycling sector and the construction of a controlled disposal site, which should be operational by the end of 2016.

Parts of the waste industry were outsourced to the local private sector. For instance, waste collection has been taken on by the youth network Klin Bo Services, and recycling is being handled by waste-to-wealth entrepreneurs. Thanks to support to small and microenterprises, a formal market for waste has emerged which involves collectors, traders and recyclers of reusable material. Local laws were passed in cooperation with civil society and traditional leaders, so unregulated dumping is now prohibited throughout the entire city.

In order to award private contractors licensed monopolies for waste collection in specific neighbourhoods and to provide effective support to recyclers, the municipal government first had to define the goals clearly and identify performance indicators. Public monitoring has served the system's efficiency by reducing corruption and allowing innovative and cost-effective solutions to take hold.

The city council's approach is innovative in Sierra Leone. The "Bo model" has been discussed by various

Plastic bottles are turned into paving stones: these stones are a mixture of PET plastic and sand.



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Promoting the recycling economy

The city of Bo is promoting the creation of new products from recyclable materials such as glass, metal, plastic and paper. Particular emphasis is placed on composting because organic waste makes up the lion's share of rubbish generated in Sierra Leone. The idea is to create jobs all along the value chain. In addition, important resources can be recovered by local businesses, and the cost of dumping as well as environmental damage will be reduced.

Many materials that are discarded can be reused in economically sensible ways if value chains are created. Over 20 small businesses have been registered in Bo since 2013 and have joined forces in a "waste-to-wealth" interest group. The local recycling sector is becoming an attractive and dynamic field:

- pots, figurines and fashion trinkets are made from aluminium;
- paving stones are made from plastic and sand;



national bodies as well as at the ministerial level. The sense of local ownership has benefited from this positive public image as well as from receiving the "Best City Council Award" in 2015.

Waste collection door-to-door

The city council originally maintained 12 collection sites where residents could drop off their household waste free of charge. The city would then take care of the costly transport to the dump site. However, less than a third of the people used this system. Moreover, waste removal was not reliable, so rubbish containers would frequently overflow. People who lived near the collection sites would often set fire to the containers to stop them from attracting flies and to get relief from the smell.

A survey conducted by Welthungerhilfe showed that a large share of the residents were prepared to pay for waste collection services if rubbish was picked up reliably door-to-door.

In 2013, the city council introduced a waste removal system, supplementing the collection sites. The city was divided into 10 zones, and youth groups were given a monopoly to collect waste there. The groups also assumed responsibility for building a customer base. The waste removers have organised themselves in a network called Klin Bo Services in order to be able to represent their interests in interaction with the city council. The number of waste collection sites was reduced to seven as it proved easier to serve customers this way.

- ropes are made from plastic bottles;
- discarded plastic bags provide material for new handbags;
- new clothes and tote bags are made from fabric remnants:
- organic waste is turned into valuable compost fertiliser or formed into biochar briquettes, which are a substitute for charcoal; and
- old tyres are made into sandals, fan belts or scoops.

The promotion of recycling has resulted in strong local demand for reusable materials, making waste collection and separation economically attractive. Waste producers – including private households, businesses or restaurants – appreciate the opportunity to sell sorted waste to recyclers. Prices are rising. People who recycle plastic and soda cans have even started to buy recyclables from neighbouring cities. The market is taking on the form of an auction. There are currently 26 specialised waste traders operating in Bo.

Operating costs were lowered by organising the groups into four units. This step was made in 2015 with support from the waste-management authority. It soon became clear that the motorised three-wheeled scooters which were being used were not the best vehicles for the job. Their capacity is a mere 350 kilogrammes. The constant back-and-forth between residents' homes and the containers overburdened the youth groups. The purchase of small trucks with a transport capacity of two tonnes provided relief. They can now take waste directly to the dump site, rather than relying on urban collection sites. The city council is subsidising this more costly means of transport.

By enlisting youth groups to remove waste, the city of Bo managed to raise the share of households that benefit from collection services to more than 41 % in 2015. The entire system has become significantly more reliable, as customer surveys prove.

Using pumps to empty latrines

Many of Bo's streets are narrow and latrines tend to be poorly build and inaccessible. Therefore, it is often impossible to empty them mechanically and use tank trucks. Emptiers who do the job manually are called "night soil men". The tradition is that they climb into the narrow cesspools without protection and expose themselves to injury from broken glass, needles and other dangerous objects. They then empty the faeces into shallow pits in clients' gardens or courtyards. This practice poses serious health risks to all people involved.

The introduction of hand pumps has revolutionised the work of the latrine emptiers. The pumps are easy to use and can be assembled on site. They serve to pump the faecal sludge out of the pits into a tank that is attached to a simple vehicle – for instance a motorised three-wheeler. Faecal sludge can thus be taken away from the city for proper treatment and disposal without any ground-water contamination. It is no longer necessary to dig local pits, which is time-consuming and costly.

Generally speaking, Bo's waste-management system has improved considerably. In the second half of 2015, the waste-management authority's staff and private waste removers brought a total amount of 280 tonnes of rubbish to the dump site on average per week. That figure was about 45% of the city's waste. The collection rate has thus doubled in three years.

The dump site that is currently in use is located outside the city limits. It is currently being transformed into a licensed dump that will conform to the minimum standards. In addition to the landfill, a composting plant is in the works.



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Learning from one another

Cape Town and Aachen are working together to promote sustainable urban development. Waste management is a core issue. The two cities face rather different challenges, but also have things in common. Cooperation helps to develop ideas and learn from one another.

By Regina Brück, Hermann-Josef Ostlender, Mona Plate and Gabriele Schütz-Lembach

The project "Learning From One Another – For a Sustainable City!" was launched at the beginning of 2015 and is funded by Engagement Global. After a preparatory meeting in Cape Town, the project leaders agreed to reciprocal visits. The idea is to compare working practices, sustainability strategies and the statutory frameworks in which the two cities fulfil their duties.

An employee of Cape Town Municipal Authority first spent a week with AWA Entsorgung, the municipal company in charge of waste management for the Aachen region. She got to know every aspect of AWA operations. She inspected facilities, including a waste incinerator, a bio-waste fermentation plant, recycling centres and landfills. She was told about various waste collection systems and fees. She also gained an

Waste workers in Doornbach.



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understanding of the legal framework. Especially relevant for Cape Town was the work of Aachen's waste advice service, which uses various methods and channels to inform citizens about avoiding, separating and recycling waste.

In Cape Town, on the other hand, two AWA employees similarly inspected facilities and collection points. The tour programme included lectures and discussions on waste management in the metropolis of 4 million people.

Due to considerable structural and social differences, the German and South African waste manag-

ers face rather different challenges. Unlike Aachen, for example, Cape Town cannot pass a bylaw to make reliance on municipal waste-disposal services compulsory. Accordingly, waste management is difficult to finance. Cape Town is still developing recycling systems with stable fee structures as are in place in Germany. Waste producers and collectors bring recyclable material to recycling points, where they are paid.

Another major difference is that waste management is highly mechanised in Germany. In Cape Town, in contrast, waste management is intentionally organised as a labour-intensive industry. Employment and

Innovative projects

A number of innovative private-sector recycling projects are underway in Cape Town. The city has a recycling plant for construction waste, and its private operator is crushing road construction waste and concrete to make gravel, which is sold. Moreover, secondary resources are used for making concrete blocks and plant rings.

A major shopping mall is running its own bio-waste fermentation plant. All of the mall's bio-waste – around 600 kilogrammes a day – is manually sorted, mechanically pulped and fermented. The energy it yields is used for lighting and air-conditioning.

A worm farm has been set up near a wholesale vegetable market. It turns bio-waste from the market into compost, which serves as fertiliser on adjacent fields. The project has scientific support from the University of Cape Town. An assessment study has shown that, where the compost is used, crops are less susceptible to disease and do not require artificial fertiliser.

The city's top hotel also has a worm-based composting facility. All of the hotel's organic waste goes into worm bins in a separate building. The compost is used on the hotel grounds.



A visit at the worm



Hermann-Josef Ostlender manages the customer service at AWA Entsorgung GmbH.

social inclusion are priorities. The sorting facilities allow unskilled workers to acquire some basic skills. Sorting centres in the South African city actually do more intensive sorting than the German ones, and they pass on useable materials to recycling companies.

Landfills and recycling

Urban waste in Cape Town is landfilled; waste incineration is prohibited by law. The Visserhok landfill is one of the city's major disposal facilities. It has a multi-barrier system with subdivided storage areas, entry control and documentation of stored waste. In these regards, it meets the same standards as German landfills. However, it does not collect and recycle gas. Moreover, there are land disputes because settlements are quickly rising up in the area.

As landfill space is becoming scarce, Cape Town is taking measures to reduce the volume of residual waste. The most important options are waste reduction and avoidance programmes, higher recycling rates for paper, glass, metal and plastics as well as the composting of green waste (for examples of innovative projects see box p. 23).

Cape Town has 20 recycling centres. Most of them are run by private-sector companies on behalf of the municipality. At the centres, citizens can hand in separated waste free of charge. In some cases, recycling firms do the separating. The standard and degree of sorting are remarkable. Plastic bottles, for example, are sorted by colour. The better the sorting process is, the higher the value of the recovered material.

Waste separation projects are also in place in some informal settlements. Due to high building density,

vehicles can often not be used, so individual residents are paid to collect waste and recyclable material.

Swop shops have been quite successful. Private individuals collect plastics (bottles, sheeting, buckets, garden chairs et cetera). When they hand them in at a swop shop, they get tokens that they can exchange for food and everyday items. The swop shops sort and package the plastic waste and sell it on to recycling firms. The income generated is used to purchase the goods for which the tokens are exchanged.

These initiatives ensure that waste is duly collected even in difficult areas. Sorting reduces the volume of waste that needs to be landfilled. At the same time, it creates income opportunities.

Awareness raising also matters in Cape Town. The goal is to educate people about appropriate waste avoidance, separation and disposal. A team of employees is developing and implementing programmes for schools, universities and other target groups.

Both sides find the exchange programme useful in terms of ideas for their own work, and many projects that were considered could serve both cities. The Cape Towners, for example, plan to pay more attention to recycled goods in municipal procurement. Moreover, they will check whether Aachen's temporary collection systems, which include green waste containers and mobile collection services for hazardous waste, can be copied. Aachen, for its part, plans to adopt waste education initiatives and ideas such as papermaking and upcycling projects. Joint workshops are planned. Cape Town, moreover, is interested in adapting Aachen's mobile advice service. The municipal exchange programme will therefore continue in a second phase.



Mona Plate
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From One Another – For a
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Gabriele Schütz-Lembach is responsible for the project at the city of Aachen.

Pioneers Cape Town and Aachen

Cape Town and Aachen have been cooperating closely in an Agenda 21 Partnership since the late 1990s. There have been various initiatives, including school and student exchange as well as art and educational projects concerning the environment and cross-cutting issues of sustainability.

The basis of cooperation is the memorandum of agreement of 2007. In it, representatives of both cities as well as civil society defined the objectives and areas of cooperation. The memorandum is reviewed every three to five years and adjusted if necessary. The Aachen-Cape Town partnership is a model for other development partnerships in the context of the Agenda 21 goals. Agenda 21 is a voluntary UN action plan that was launched at the Earth Summit in Rio de Janeiro in 1992.

As proposed by Aachen's Environment Department, both city administrations agreed to involve municipal staff in cooperation on sustainability issues in order to boost the Agenda 21. One result was the project "Learning From One Another – For a Sustainable City!" (see main article). The topic is waste management.

Waste management has a crucial impact on sustainability. Wasteful patterns of consumption negatively affect the climate and deplete essential resources. These issues need to be addressed at a practical level and understood by a wide range of target groups. As regulatory authorities, municipal governments monitor the enterprises that work on their behalf, and they have ample scope to improve the status of the environment.

"Incentives for behaviour change"

It is estimated that only about 40 % of garbage is formally collected in Lagos, Nigeria's largest city and most important business centre. Recycling makes economic sense, however, and a local start-up called Wecyclers is beginning to make a difference. Cofounder Bilikiss Adebiyi-Abiola told Eva-Maria Verfürth about her approach.

Interview with Bilikiss Adebiyi-Abiola

How did you get the idea to found Wecyclers?

The idea for Wecyclers developed while I was studying at the Massachusetts Institute of Technology's Sloan School of Management in the USA. Before, I had worked as a corporate software engineer at IBM for five years. I was assigned to do a study project to help people at the bottom of the pyramid – people who live on less than two dollars a day. I decided to work on waste and focus on its uses, collection and processing. Our project team saw that there was a huge potential in the waste-recycling sector in Nigeria. The reason is that manufacturing businesses need cheaper and easier access to raw materials. There is demand for their goods in Nigeria and abroad. I decided to move the idea forward; and that is how Wecyclers was born.

Don't people from low-income communities have more urgent problems than recycling?

Well, urban waste management systems tend to be overburdened in the developing world. Garbage clogs waterways and makes living conditions unsanitary for millions of people. The health hazards are serious. Moreover, the blight of unmanaged urban trash undermines the pride that people normally have in their communities. At Wecyclers, we solve both problems by collecting recyclable waste and providing sanitary services.

Why do you use bicycles for collecting the garbage?

We call our cargo bicycles wecycles. They are designed and manufactured locally and are operated by youths from local communities. We decided to use wecycles because they were a low-cost solution; they also provide us with the flexibility to navigate densely populated neighbourhoods.

How do you make money?

We make money by selling processed recyclables to recycling companies, sponsorships and contracts.

What incentives do you offer clients?

Households that recycle with Wecyclers get points for each kilo of waste. Over time, the households accumulate points, and the amount depends on their level of participation. They can exchange the points for specific rewards, including basic household items, mobile phone minutes and various sponsored prizes. This way, the benefits of recycling become tangible. We use incentives to encourage people to take up the recycling initiative willingly.

What do your clients say about your approach?

They absolutely love it and they are glad that they are part of an initiative that is helping to improve the current state of the environment. Since inception we

have registered over 10,000 households to our service and created over 100 jobs.

You cooperate with the Lagos Waste Management Authority (LAWMA). How did you establish this cooperation?

As a waste management company that is focused on recycling, we have to collaborate with LAWMA. For instance, we had to get an authorisation for collecting recyclable wastes. LAWMA, moreover, has facilitated our work by providing us with spaces that serve as our waste collection centres as well as with tactical support and advice. They have been an invaluable partner and support system.

Bilikiss Adebiyi-Abiola



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Bonding through waste separation

Lebanon's many Syrian refugees are putting an additional strain on the country's already overtaxed infrastructure and administrative bodies. Waste management and disposal are a matter of concern. The largest share of refugees has settled in the Bekaa Valley, and in one of its towns people are now taking matters into their own hands.

By Mona Naggar

The town of Bar Elias is located about 12 kilometres from the Syrian border. A recycling task force recently started to work here. It includes refugees who live in a camp as well as Lebanese residents from one of the town's neighbourhoods.

In this context, 53 families from both communities have begun to sort their domestic plastic and metal waste. They sell the recyclables, and the proceeds will be used to fund an investment for the benefit of both Syrians and Lebanese. Proposals include repainting the school and repairing the public water tap.

Approximately 15 families who fled from the Aleppo area in northern Syria live in what is officially called an "informal tented settlement". The gravel paths between the huts are well maintained, and there is no rubbish lying about.

Amina Hussaini lives here. The young woman says that separating waste has become a family routine. She admits that her children at first tended to keep the plastic and sell it, in order to earn money for ice cream and sweets. But she says that everything is now working smoothly.

Along the road from Syria, a sign at the entrance of Bar Elias reads: "Population 50,000". It only refers to the town's Lebanese residents. In recent years, many Syrians have joined them. The mayor's office puts their number at approximately 70,000. According to the UN Refugee Agency (UNHCR), about 35 % of the over one million Syrian refugees registered in Lebanon are staying in the Bekaa area.

The region was always considered poor and underdeveloped. The local people make their living primarily from agriculture and the cross-border trade with Syria. Rapid population growth has exacerbated competition for resources.

Fayez Okasha, a native of Bar Elias who is taking part in the recycling project, says that job prospects and infrastructure have not kept up with the influx of people: "As a result, many Lebanese now consider the Syrians a burden."

Medyan Al-Ahmad, who has lived in a camp near Bar Elias for four years, explains how problems arise between Lebanese residents and refugees: "Rubbish from a refugee camp will end up on neighbouring Lebanese property, or Lebanese people complain about the smell from the sewer of a nearby camp."

The recycling project emerged incrementally. Alaa Alzaibak and Medyan al-Ahmad are both active in the Syrian organisation Basmeh and Zeitooneh. This NGO provides humanitarian aid and is assisting refugees and host communities in regard to education, social services and culture. One of its partners is the German peace organisation forumZFD, which is supporting the project (also see D+C/E+Z 2014/05, p. 158).

"Our goal is to ease tensions between Syrians and Lebanese in Bar Elias and to bring the two groups closer together," Alaa says. An undertaking that is inspired by the needs of both communities and allows both to benefit.

In the project's planning stage, activists from Basmeh and Zeitooneh did surveys to find out what Syrians and Lebanese worried about most. Both groups indicated jobs and better infrastructure the top priorities. Several proposals were made, including repairing pavements, creating more green spaces in the town, planting a garden and starting a recycling project, which was ultimately done.

The NGO activists want to slowly withdraw from the project and let the task force take full control. According to Alaa, the project is proving successful: "The Lebanese and Syrian residents of the neighbour-



hood are talking to each other and trying to solve problems together."

Waste disposal is a hot-button issue in Lebanon. Indeed, mountains of rubbish in the streets of Beirut made international headlines last summer. The waste crisis, however, has nothing to do with Syrian refugees. The real reason is that there is no national plan for waste disposal. Since Lebanon's civil war ended in 1989, no national government has seriously tackled the issue.

In the Bekaa Valley, the refugee crisis means that overburdened municipal authorities must rise to additional challenges. In Bar Elias, the landfill outside of town has been receiving ever more rubbish. The waste is not sorted and dumped in the open on untreated soil.

Yahya Faris managed to get the municipal administration to put a large waste container in front of the camp where he lives in Bar Elias. However, he reports that the waste is not collected reliably. Sometimes it is picked up every 10 days, sometimes as infrequently as every two weeks. Occasionally, there is more rubbish than fits into the container, causing the Lebanese neighbours to complain.

Moreover, Faris objects to trash burning, which keeps occurring at the landfill. He says that very unpleasant smoke blows into the camp. He worries about his children's health.

In 2015, an investigation by the UN Office for the Coordination of Humanitarian Affairs (OCHA) showed that Bar Elias was among the Lebanese towns that were most at risk of environmental and ecosystem damage. The lack of proper waste disposal and waste water treatment is compounding matters, and so is the extensive use of land for settlement purposes. Soil, groundwater, nature and people's health are being strained.

Lebanon's Ministry of Environment is promoting far-reaching projects to help the towns in question. International donors too are increasingly responding to the needs of host communities, whereas they had initially only focused on the plight of refugees when the Syrian crisis began. In Bar Elias, the EU is financing the up-grading of the landfill, including the establishment of recycling and composting plants.

According to the mayor's office, 70 % of the town's waste will be recovered in the near future, and the rest will be properly disposed of. The new facilities will start operating by the end of 2016. Both Lebanese and Syrian people in the region hope that they will not only improve the waste situation, but also create new jobs.

Environmental assessment of the Syrian conflict EASC & priority interven-

http://www.undp.org/content/dam/lebanon/docs/Energy%20and%20 Environment/Publications/EASC-WEB.pdf

Updated factsheet:

Sources

http://www.moe.gov.lb/getattachment/dd4e6574-a959-47c1-b2ed-1fc1847b7515/Updated-Fact-Sheet-December-2015-Environmental-Ass.aspx Lebanon cannot bring its rubbish problem under control: a street in a Beirut suburb.



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"22 kilogrammes per person and year"

Waste from electric and electronic goods — e-waste for short — contains many valuable substances that are needed to make new products in the future. To recycle these resources properly, considerable industrial efforts are needed. Ruediger Kuehr works for the UN University (UNU) and runs the international initiative Solving the E-Waste Problem (StEP). He explained the problem's international dimensions to Hans Dembowski.

Interview with Ruediger Kuehr

Why can't we simply throw e-waste away?

This kind of waste contains many different substances. A normal mobile phone contains about half of the elements of the periodic table, including gold, silver, palladium as well as cadmium and others. Some of them are quite valuable, and we'll lose them if they end up in household garbage. We'll need them to keep production cycles going. By using state-of-the-art methods, we can reclaim them, and if we do not, these essential resources will become scarce in the long run. We are actually throwing gold and other precious metals away.

Do health hazards result from inadequate handling of e-waste?

Yes, and the reason is that waste recycling is done often in the informal sector in developing countries and emerging markets. A typical issue is that people want to get the copper from inside cables, and they burn the plastic covers in open fires. That results in furans and dioxins, potent toxins, contaminating the smoke. The people concerned are aware of these problems. Their eyes get sore, they have breathing difficulties and kidney problems. Reduced fertility and other health problems also occur. However, the people concerned depend on waste recycling. It is their livelihood. Another issue is that people use acids to sluice gold from circuit boards. Health impacts include cauterisation and skin disorders. Moreover, the acids are often not disposed of properly, so the environment suffers too.

Is there a kind of global trade in which rich nations get rid of their e-waste to the detriment of developing countries? I recently read on the website of the UN Environmental Programme (UNEP) that 70 % ends up in unknown and unreported destinations.

The 1st Global E-Waste Monitor of UNU with data from 2014 shows that from an annually generated

41.8 million tonnes of e-waste only approximately 6.5 million are collected by official take-back schemes. These are only 15 % of the total generated. But this does not mean that 85 % are shipped to developing countries or economies in transition. There are several scenarios where e-waste ends up in addition to official collection. Much goes into waste bins and is ultimately incinerated or land-filled. A certain portion is collected outside official collection schemes, for instance by metal recyclers. And a smaller amount goes into informal collection and recycling in developing countries or economies in transition. Interpol, UNU and other partners recently estimated these exports from the EU to amount to 10 to 15 %. Exports of e-waste from OECD nations to any developing countries or emerging markets are illegal because the latter normally lack the infrastructure for appropriate, multi-phase recycling. Exporting second-hand goods for further use is legal however. It is very hard for the authorities including governmental agencies to tell the difference. Many European consumers think that Africans would like to have their old Pentium-3 computers, for example, or old tube TV sets. Even if those gadgets still work, however, Africans too are of the opinion they are outdated, so there is no market for them. If they are declared to be second-hand goods and exported to Africa, they end up in the hands of rag pickers. This is how the idea has emerged that exporting is a disposal strategy. It may sometimes happen that a small company intentionally misdeclares container shipments as secondhand, but that really does not work out as a long lasting business model. The logistical challenges, and accordingly the costs, are substantial.

Do you know what share of Germany's e-waste is exported to developing countries and emerging markets?

About 10 %, plus/minus five percent. That is what UNU found out in cooperation with Inter-

pol and other agencies in an EU funded project. It is important to understand, however, that there is an environmentally valid reason to keep using second-hand electric and electronic goods in developing countries and emerging markets: the gadgets are becoming ever more complex, and their production requires huge quantities of resources. In an environmental perspective, it makes sense to extend the life cycle also in developing countries, even when the first owners already want yet more recent technologies. Many people in Africa or Asia have an interest in used second-hand items.

What becomes of broken gadgets?

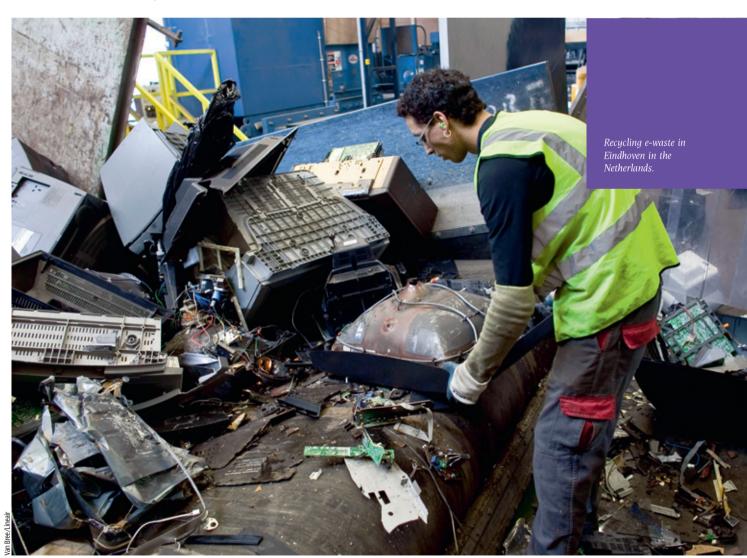
That is the challenge. All too often, they are not recycled according to the state of the art. As I said earlier, waste management is normally done in the informal sector in developing countries and emerging markets. The ones to suffer are the poor – the people who depend on this kind of work. In most cases, however, the scenario is politically accepted. It is very difficult to formalise waste management. Many people are involved, and there are many links in the chain. As

a matter of principle, this kind of waste should be sent back to industrialised nations, but that is not done normally. The industrial capacities needed for up-to-date recycling exceed the capacities of developing countries.

What can be done to improve matters?

We need more awareness rising. In Germany, the distorted idea of e-waste being a problem of developing countries is quite common. People think of black children on garbage dumps. They neither know that we generate 22 kilogrammes of e-waste per person and year in Germany, nor that future production cycles are at risk because precious resources are thrown away. In any case, it is absurd that public agencies meticulously collect waste paper in Germany, while we do not have a good system to collect e-waste. The easiest way to get rid of it is the garbage bin, though waste of electrical or electronic equipment needs to be taken to recycling centres. Some e-waste items, but not all, can be returned to retail shops, moreover.

Is this situation typical of advanced nations?



No, it is not, and Germany could learn from others. In Switzerland, for example, the share of properly collected e-waste is much higher. The situation in Germany is not satisfying. We do not even have good data. We know some basic figures, such as the 22 kilogrammes I just mentioned, but in regard to the complex patterns of what chemicals ultimately end up where, we know much less than our neighbours in France, Belgium or the Netherlands do.

Why is that so?

The reason is the waste management system that German legislators have designed. Its emphasis is on competition, so we now have too many small recycling systems competing with one another. In contrast, some of our neighbouring countries emphasise compliance, with manufacturers paying for state-of-the-art recycling of their goods. The German system is not appreciated much internationally, even though most Germans think we are world champions in sorting garbage.

Is the international institutional order adequate for getting a grip on the issue?

We have the necessary regulations, but implementation is weak. Because resources are in demand, however, there is pressure to improve matters. However, different nations are taking different approaches, and there is a lack of coherence. Accordingly, our programme at the UN University is working on getting all UN agencies on board.

Why statistics are not enough

In the first decade of the new millennium, the international community lacked solid data concerning waste from electronic and electric appliances. Basically, policymakers had to rely on anecdotal evidence. Better information was obviously needed.

The initiative Solving the E-Waste Problem (StEP) was officially launched in 2007. It resulted from a sense of frustration with insufficient statistics. The UN University (UNU) and the computer manufacturer Hewlett Packard were among the founding partners. UNU's mandate is to provide solid science-based information to policy-makers.

The StEP team, however, felt that merely compiling statistics would not be enough. It would make more sense to work on solutions at the same time, involving as many parties concerned as possible. After all, the institutions that could supply data were also the ones that needed solutions. Bearing this in mind, StEP reached out to manufacturers, recycling business and other relevant stakeholders and interest groups.

StEP is running projects in five focus areas:

- policy and legislation,
- redesigning of goods,



- reuse of goods,
- recycling of waste and
- capacity building.

StEP now has several dozen members from around the globe. They include international organisations such as the UN Environment Programme and the UN Industrial Development Organization, government agencies such as Japan's ministry of environment or Ger-

many's GIZ, multinational corporations such as Dell and Microsoft and academic institutions such as Massachusetts Institute of Technology and the Technical University of Braunschweig. Each member contributes to at least one of the topical areas.

Link

Solving the E-Waste Problem (StEP): http://www.step-initiative.orq/



Ruediger Kuehr heads the Sustainable Cycles (SCYCLE) programme at the UN University's Bonn campus as well as the international intiative StEP (Solving the E-Waste Problem). kuehr@unu.edu

Turning wastewater into drinking water

Inappropriate wastewater disposal is a problem with serious health implications in many developing countries. Compact decentralised systems for treating wastewater with organic residues can lead to better hygiene and also deliver drinking water, electricity and fertiliser. TÜV SÜD is currently working on an international standard that will define safety, reliability and efficiency requirements for this technology.

By Andreas Hauser

In 2010, the United Nations declared sanitation a human right. Even so, more than a third of humanity still has no access to fully operational sanitary facilities and wastewater disposal infrastructure. In unsanitary conditions, viruses, bacteria and other pathogens spread fast. Around 80% of illnesses in developing countries result from contaminated water and poor sanitary conditions. Annually, infectious diarrhoea kills 1.4 million children under six – more than malaria, measles and AIDS combined.

Basic facilities such as latrines and septic tanks solve only part of the problem. In many cases, they do not add up to a safe disposal system. There are often serious gaps in the infrastructure needed to maintain – or merely empty – sanitation facilities. Leaks occur, polluting the environment and contaminating drinking water. Far too often, wastewater and faecal sludge are not treated as they should be.

Due to gaps in the emptying and transport infrastructure along with a lack of centralised, operational facilities, a considerable portion of wastewater still flows unregulated and untreated into rivers, lakes and seas. Decentralised treatment would have many advantages – not only from an organisational and logistical viewpoint, but also for reasons of local hygiene and health.

West is no model

Western-style sanitation is often unsuitable for developing countries. One reason is that sewerage systems are simply too expensive. Moreover, flush toilets are too wasteful for places where water is a scarce resource. Alternatives are needed, and they must take local conditions into account. Decentralised approaches are appropriate and promising.

Disposal of wastewater and organic residues is however not the only goal. So called omniprocessortreatment systems can do a lot more, turning waste into energy, biogas, fertiliser, biochar (a soil conditioner) and even drinking water. These valuable resources can significantly help improve people's lives and create a self-sustaining business model, for instance involving the sale of omniprocessor's products

Omniprocessor technology treats wastewater and organic residues with high temperatures so that the water evaporates, leaving solid material behind. The water vapour is captured while the solids are incinerated. The heat from the incineration process is used to produce steam that drives turbines to generate electricity, ultimately powering the entire system. Any excess electricity can be fed into the local power grid. When it cools off, the condensed and purified water vapour can become clean drinking water. Alternative technological solutions are currently being developed.

Lack of standards

The multitude of options is a problem, however. Developers take different approaches and adopt various strategies, not all of which are fully developed. TÜV SÜD is a German company that specialises in testing and certifying the reliability of technological applications. It is currently working on the first international standard for decentralised wastewater treatment. Internationally recognised, such a standard will make the merits of various approaches transparent and allow for comparison. Moreover, it will guide developers in designing and optimising future systems and processes.

Normally, standards are developed long after a new kind of product has been introduced. In this case, however, it makes sense to do so earlier. The reason is that the standard will contribute to accelerating the development and market introduction of decentralised treatment systems.

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Nearly one out of three people worldwide lacks access to functioning sanitary facilities: mobile toilets in Dhaka, Bangladesh.



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No matter how promising an approach to decentralised wastewater treatment is, it must not be rolled out on a large scale unless it is clear that it is safe for operators, communities and the environment. Treatment systems must work reliably and efficiently, and they must meet clearly defined requirements concerning quality and efficiency.

First and foremost, there must be a guarantee that the treatment process eliminates all pathogens so no health risks remain when using the drinking water or any of the other products delivered. The fertiliser too must be free of pathogens, and it has to meet all relevant requirements on nutrient content. Power generation must also be reliable and safe. If these requirements are achieved, they will drive market acceptance.

Omniprocessors can also present a business case under certain circumstances. Drinking water, electric power and fertiliser are resources that are in strong demand in developing countries. Unless the technology works reliably, however, it is not an attractive investment proposition. Manufacturers, government agencies and non-governmental organisations still need to do quite a bit to make that happen.

Technological solutions are not everything. Operational and maintenance issues need to be addressed too. Guidelines concerning health and safety, as well as emission levels and quality management are essential. Moreover, local government agencies, operators and inspection companies must be put in a position to audit and certify the complex systems and their impacts on human health and the environment.

For these reasons, introducing standards is a core requirement for marketing omniprocessor technology.

Other relevant questions that need to be addressed include what business models are most suitable and how the employment and resources generated by omniprocessor applications are best used to the benefit of regional economies.

Practical approaches

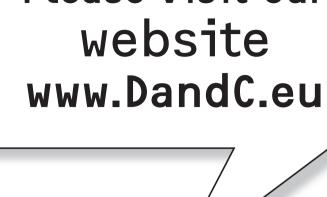
In a first project phase, TÜV SÜD is currently assessing the existing international and national standards that pertain to decentralised wastewater-treatment systems. The company is involving specialists from various fields, including water technologies, systems engineering, environmental technology, electrical engineering, building services and materials engineering. In the second phase, TÜV SÜD will analyse the principles according to which facilities are currently being designed, built and operated. The information gathered will help to explore what kind of standardisation will be helpful in what areas.

In the medium term, TÜV SÜD plans to develop a standard that will be published as an International Workshop Agreement under the umbrella of the International Organization for Standardization (ISO). TÜV SÜD emphasises continuous exchange with system developers and operators as well as market participants in developing countries. Its approach will result in a practical and effective standard, help to propel reliable technologies at an international level and ultimately boost market acceptance.

Link

TÜV SÜD: Sanitation. Foster sustainable solutions. http://www.tuv-sud.com/industry/water-services/sanitation





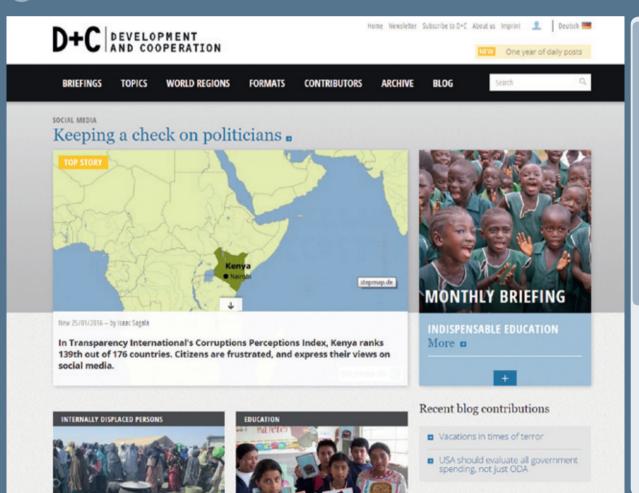








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Digitalisation

Providing and limiting freedom

Digital technologies have become relevant for accessing services as well as exercising one's human rights. The interests of many different groups are involved. Unfortunately, digital technology can also contribute to violating human rights.

By Nanjira Sambuli

The situation is particularly complex in developing countries like Kenya. Digital technologies enable people to leapfrog from conventional methods of accessing information and services to up-to-date ones. Options that were previously limited to only a small part of Kenya's population are available to many more people. The mobile phone has been the frontrunner of this development; it has helped people to overcome infrastructure gaps.

Kenya's digitalisation is appreciated internationally. According to the Communications Authority of Kenya, there are almost 38 million mobile telephony subscriptions, with a mobile penetration of 88.1 %. An estimated 22 million internet subscriptions reach out to 32 million users, of whom 99 % rely on mobile devices.

Mobile phones have given millions of Ken-

Tribune

yans access to financial services. Only 29% of adults have a bank account, but 68% use mobile money services. Women benefit in particular.

Democracy and technology

In many developing countries, the advancement of democracy is closely tied to the advancement of digital technologies. In Kenya, the awareness of our new constitution's bill of rights has improved due to digital communication, and so has its enforcement.

Mobile technology provides opportunities to exercise rights such as the freedom of expression. Citizens connect and interact online, share grievances and political opinions, express dissent and mobilise for action. The audience that engages in public discourse has grown bigger and more diverse.

This matters in a country like Kenya, where free expression is sometimes punished in spite of constitutional guarantees. Digital communication gives many people a sense of security and anonymity that motivates them to express themselves freely. It is worrying, however, that intimidation and arbitrary arrests of bloggers are becoming more frequent.

The new media is particularly significant in times when state agencies disrupt

try, and anyone with internet access could check it out.

Double-edged sword

However, the very platforms that foster the exercise of human rights can also be used to repress fundamental rights. Government agencies, private-sector companies, terrorists and criminal organisations increasingly threaten the security, openness and freedom of digital exchange. The privacy and security of users are under attack. Growing online extremism and terrorism recruitment are compounding problems.

Some argue that "offline security" is more important than digital privacy. Such reasoning, however, is often exaggerated. It resonates with many people however.



Kenya's digitalisation is internationally appreciated: iHub Nairobi.

conventional media coverage, for instance because of elections or political unrest. This is a recurring issue in Kenya – from the post-election violence in 2007/08 to recent terror attacks. Digital technology allows people to stay connected and informed nonetheless.

One positive example is the Ushahidi crisis-mapping platform. It emerged after the 2007 elections, when mainstream media neither informed Kenyans properly about results nor the violent aftermath that swept the country. A network of peer-to-peer information sharing was set up, relying on text messages, e-mail and other forms of digital communication. Verified information was put on a map of the coun-

In Kenya, it is widely believed that more digital surveillance, biometric IDs and closed-circuit television (CCTV) systems are needed to ensure national security. In a recent survey, 75 % of respondents agreed that law enforcement agencies should have the right to access citizens' online communication for national security reasons.

Against this backdrop, it is no wonder that recent state investment in CCTV equipment was widely accepted as progress. In fact, concerns by legislators and citizens alike only focused on the process through which the government contract was issued, without mentioning the risks of the new equipment being used to violate human rights.

Furthermore, Kenyan laws were amended, explicitly limiting the constitutionally guaranteed right to privacy. Government agencies are now allowed to intercept communications "directly relevant in the detecting, deterring and disrupting of terrorism".

Kenya's High Court ruled that some clauses that limited the publication of terrorism-related information were unconstitutional, but the clauses that expanded the state's surveillance powers were left intact. Even the digitally connected and informed did not protest.

Today, Kenya is one of only two African countries that enjoy "internet freedom", according to the US-based watchdog organisation Freedom House (2015). The other one is South Africa. However, Kenya has only few laws to protect its internet freedom. A data protection bill, for instance, has been ready for adoption for over two years, yet is caught up in red tape. Moreover, Kenya must do more to protect the freedom of speech.

Unequal access

In an increasingly digital world, access to communication devices and to the internet is crucial. Efforts to widen access in developing countries are known as "connecting the next billion". The issue has attracted the attention of private companies. They want to complement or supplement government action. An important issue is whether the technologies and strategies they employ will really ensure that the unconnected get the right to access free, open and secure technologies. As the purchasing power of the people concerned is low, profit-driven businesses are not normally interested in them.

Indeed, some private-sector initiatives have run into criticism because they do not provide full services to everyone. One example is Facebook's Free Basics programme, which provides poor people only with a pre-selected range of internet options (see box below).

Some governments of developing countries make laudable efforts to improve affordable access to digital technologies. In Kenya, the Universal Service Fund is administered and managed by the government. Levies on telecom providers, licence payments, government appropriations, grants and donations serve to finance it. The Fund's purpose is to finance national projects in order to improve availability of – and access to – information and communication technologies in remote rural areas as well as poor urban quarters. The Fund focuses on special target groups such as women and persons with dis-

abilities. The emphasis is on groups who, so far, remain offline. They should get the same benefits and rights as those who are able to go online.

The scenarios presented above are not unique to Kenya. They play a role in developing and developed nations alike. Proposed laws on cyber security across the globe are a cause for concern, as they often mean weaker protection of human rights. A recurring theme is that one should cede rights for the sake of security. And while human rights are increasingly recognised in national and international laws, it remains an uphill battle to make all state agencies respect and uphold them. This is especially true in developing countries.

Links

Freedom House: Freedom on the net 2015. https://freedomhouse.org/report/freedom-net/ freedom-net-2015 Ushahidi:

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Free of charge, but limited in scope

Facebook is running its Free Basics programme in Kenya and other developing countries. The goal is to provide poor people with some, though not full internet access.

"Some" access is obviously limited access. The implicit messages of this kind of programme are that poor people do not need all internet options and that affordability requires them to forgo some rights and ideals. The irony of the matter is that technological solutions of this sort do not truly empower the poor because their options remain restricted.

In Kenya, the policy debate now revolves around what "free" internet should mean. The Facebook approach is free of monetised costs – but it does include an important trade-off. It limits users' freedom of choice. What services are available via Free Basics is predetermined by Facebook.

An important downside is that the platform restricts users' freedom to create because the services on offer are mostly for content consumption, not production. Accordingly, people's freedom to compete online is limited too.

In the eyes of internet activists, this kind of "free internet" is insufficient and no substitute for real empowerment. The political implication is that Facebook's Free Basics do not let government authorities off the hook as far as universality of internet access is concerned. In India, the regulator has banned differential pricing of internet services. Accordingly, Free Basics has been banned too.

Link

Facebook Free Basics:

https://developers.facebook.com/docs/internet-org



Prime Minister Narendra Modi embraced Facebook founder Mark Zuckerberg in California, but India does not appreciate the corporation's Free Basics.

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Primary schools

India is facing huge challenges

Enrolment rates have improved in India, but especially in rural areas, the quality of primary education remains too poor. Our assessment was written by a member of the Santal community, one of India's many Adivasi tribes.

By Boro Baski

India has made substantial progress in primary education since a UN conference in Dakar in 2000 set the goal of Education for All (EFA) by 2015. According to India's national EFA review of 2014, 14.6 million new children had joined elementary schools in the past five years, so almost all children in the age group six to ten go to school. Moreover, there is at least one primary school within a one-kilometre radius of 98 % of every Indian settlement.

Free school meals have contributed to boosting enrolment. The main government programme that provides them is called Sarva Sikha Abhiyan (SSA). On school days, it feeds 108 million children. Another important step was the enactment of the Free and Compulsory Education (RTE) Act 2009. Nonetheless, much more needs to be done.

The ground reality

For the age group six to ten, enrolment has improved, and drop-out rates have declined. The challenge is now to keep up the same pace of improvement for the age groups 11 to 15 as well as for secondary schools. The drop-out rate was 9.1% in 2009/10 for classes one to four in India, according to official data, but 15.9% for class five.

Experience tells us that the mid-day meals and other schemes that serve retention at the lower level do not address the problems of more advanced kids. They worry about their future after school, and they are under pressure to earn money, not least because they want to buy mobile phones and trendy clothes.

Thousands of youth from West Bengal migrate to other states to work as contractual labourers before completing their school education. The state government has taken some measures to keep them in school. For instance, it gives them reference books but also cash, silver bangles or bicycles as gifts.

These alluring schemes are good in the short term, but the drop-out rate has more serious reasons. It is linked to families' overall socio-economic situation. All too often, teenagers must contribute to livelihoods

An alarming trend is that ever more children are shifting from government schools to private-sector schools. According to the Annual Status of Education Report (ASER) of 2014, almost one third of those six to 14 year old went to private schools in 2013. In 2006, their share had been not quite a quarter. In Haryana and Uttar Pradesh, two states in northern India, the share of private schools was even more than half. This trend proves that parents do not trust government schools and are willing to pay tuition, which poor people can hardly afford.

It is deeply irritating that even poor families now spend substantial amounts on sending their children to private schools. Bimol Baski, father of two daughters from our village Bishnubati in West Bengal, sends his children to a private school where classes are held in English. In his eyes, the midday meals in governments schools are a problem because teachers are now busy distributing lunch instead of focusing properly on classes.

Bimol hopes his daughters will learn good English. It is, however, a serious problem that the vast majority of children who belong to linguistic minorities cannot get education in their mother tongue. Apart from us Santals, that applies to all other Adivasi tribes as well. Adivasis constitute about eight percent of the country's population. Many regard formal education as a threat to their language and culture.

In view of such daunting challenges, there are doubts that India's EFA efforts have really succeeded. High enrolment rates are simply not enough. The trends discussed above indicate that there is a lack of balance and clarity in the policy. Moreover, the governmental primary schools are being degraded.

For the success of village schools, the local community is very important. Family and school managing committees are essential for monitoring the performance of teachers. Unfortunately, however, many people believe that schools are the government's responsibility, so they do not get involved. Moreover, the school managing committees are often dominated by



Non-formal school in Ghosaldanga.

leaders who are affiliated to political parties and prioritise other policy issues than education. Especially in rural areas, the governmental school sector would benefit from better coordination among teachers, parents and committee members.

UNESCO, the UN Educational, Scientific and Cultural Organization, published a Global Monitoring Report in 2015 to evaluate the EFA achievements. Its assessment is that India has made tremendous progress, but still has a long way to go. The report highlights persisting inequality. Some Indians are rich, but masses are very poor. Various population groups are marginalised due to caste, race, faith or other reasons. They normally struggle to get quality education.

Non-formal schools

Apart from governmental schools and private-sector schools, India also has a great number of innovative schools that are managed by non-governmental organisations, trusts or philanthropic individuals. They are neither mainstream schools nor religious institutions. Many are based in the villages and reach out to the people who are least likely to get a good education.

One of them is the Rolf Schoembs Vidyashram, the school in our village that I have previously described in D+C/E+Z (print edition 2012/09, p. 333 f.). We teach in Santali and have produced our own

primers for that purpose. Santal music and myths, dance, folklore and history are part of the curriculum. In our eyes, heritage is important, especially in a fast-changing world (see my essay in D+C/E+Z e-Paper, 2015/07, p. 21 f.). Our work is supported by charitable German donors.

I personally know several other NGO schools all over India, since I have visited them in the past few years (see box below). Typically, they have been operating for more than two decades, so they are time tested. They are all "non-formal". In India, this term means that a school does not make its pupils memorise the government syllabus by rote. Rather, non-formal schools take into account children's needs and interests, and they apply a broad range of didactical methods and resemble government schools in rich nations in this respect. Experience shows that India's non-formal schools deliver better results. even in formal terms, than the government schools do. This is especially true among disadvantaged communities.

It is profoundly irritating that many non-formal schools are now being put under pressure to conform with formal rules of the Right to Education Act of 2009, though regulations concerning the size of windows, appropriate clothing or teachers' salaries do not make much sense in the context of non-formal rural schools. Some NGOs are plainly overburdened. There is some opposition to an overly strict enforcement of the law, but working under the threat of legal action does

certainly not make teachers' demanding work any easier.

Conclusion

At the primary level, formal education must be treated as an isolated issue. Rural communities certainly need education, but their life is interwoven with many social and cultural issues that must all be taken into account. UNESCO is right to argue that an integrated approach with a holistic view is appropriate.

India is still facing huge challenges. Non-formal approaches should not be repressed. They are appropriate for the multi-language and multi-cultural fabric of the nation. The experience of nongovernmental schools should serve as the basis for drafting future education policies.

Money is not the problem, by the way. In the financial year of 2011/12, the SSA only spent 43% of the funds it was allocated. More than 50% remained unspent. Such sums should be used prudently. What India really needs is well-trained, motivated and sensitive teachers who have the passion and zeal to serve the people.

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Setting the right example

The Sita School in Silvapura village is near Bangalore. It was founded and is run by Jane Sahi. The school teaches children to get competent in language, practical mathematic, clay work, tailoring, printing, first aid, home remedies, kitchen gardening, theatre and art. It inculcates positive human values and emphasises personal experience over textbook learning. It nurtures a spirit of excellence in the broad sense. The pupils come from the villages nearby, and most are first-generation learners whose parents are illiterate.

There is also a school for the children of the Wynard tribals in Kerala, founded by K J Babby and Shirly George. The school



Khelaghar choir in 1996.

has its own fields and rubber-tree estate where children learn to tap latex. They visit the forest regularly with their teachers and learn by doing. They are also involved in vegetable and rice farming. The Vidyodaya School is situated in the Nilgiri hills in Tamil Nadu. The pupils are mainly tribals and children with learning disabilities. It is a government-recognised school with a curriculum of its own. Beside regular education, emphasis is given to handicrafts. Typically, a teacher supervises small working groups.

Khelaghar is an non-governmental orphanage near Kolkata. The word literally means "play house". It provides free shelter, food and education to children in need and distress. Classes are held in the open, under majestic trees, without the confines of walls.

International sports

Glow time

Cycling is slowly recovering from doping scandals, while Russian athletics is now stuck in a mire. The World Anti-Doping Agency (WADA) has been forced to tighten its rules.

By Theresa Krinninger

There are three rules to avoid getting caught: wear a watch, always have your mobile phone at hand and know your "glowing" time. That is what Tyler Hamilton, formerly a professional cyclist, states in the 2012 book he co-authored on the cycling mafia and its dirty business. "Glowing" in his language means that performance-enhancing substances can be detected in the body. He elaborates in great detail how his team avoided controls for years.

Hamilton assesses the full extent of systematic doping in professional cycling from the 1990s until 2000. The US citizen writes about a network of corrupt doctors, unscrupulous team bosses and corrupt laboratory staff. He recalls red testosterone pills, hormone erythropoietin (EPO) being kept in refrigerators and blood transfusions in hotel rooms.

EPO, which stimulates red blood cell production, is still relevant in endurance

sports. An athlete's stamina depends on how much oxygen the body absorbs, and the more red blood cells there are, the better the oxygen flows in the body. Until he blew the whistle, Hamilton was a member in the "brotherhood", using illegal substances to enhance his sporting performance. A year after his Olympic victory in 2004, the International Cycling Union (UCI) grounded him for two years. He had been tested positive for blood doping. Being accepted into a professional team proved difficult afterwards.

Hamilton's report includes the key role played by professional cyclist Lance Armstrong. A longtime training partner and second cycler in Armstrong's team, Hamilton witnessed systematic doping first hand. He was later called to give testimony in investigations against Armstrong. In 2012, the UCI striped Armstrong of his seven Tour de France victories as well as other titles attained since 1998.

Culture of deceit

Doping has similarly tainted other sports. In a TV documentary broadcast by the German ARD network in late 2014, Hajo Seppelt, a journalist, depicted Russia's sophisticated doping system. Based on this programme, WADA ordered an Independent Commission to investigate. The result was a 300-page report which was published in November 2015.

The offenses listed in the report were so serious that the International Association of Athletics Federations (IAAF) decided to suspend the All-Russian Athletics Federation (ARAF) for the time being. The Commission also suggested to ban five athletes, four coaches and one medical doctor for life. When this essay was finalised in May, it was unlikely that any Russian track-and-field athlete would be allowed to compete in the Rio Olympics in August.

The Commission noted a deeply rooted culture of deceit, which to some extent was criminal. The leaders were Valentin Balaknichev, the former ARAF leader, Sergey Portugalov, ARAF's chief physician, and Grigory Rodchenkov, the head oft he WADA-approved laboratory in Moscow.



In 2012, the UCI stripped Lance Armstrong of his seven Tour de France victories as well as other titles attained since 1998.



Ekaterina Koneva of Russia, the reigning world indoor triple jump champion, has been suspended for doping before. Now, the whole track and field team is excluded from international competitions.

Rodchenkov, Portugalov and coaches were said to have taken bribes from athletes in exchange for ensuring they would not test positive. Portugalov, according to the Commission, was the link to the national doping programme, but other physicians as well as lab staff supported doping too.

The IC proved that the Russian Anti-Doping Agency (RUSADA) was guilty of more malpractice. For instance, RUSADA staff announced tests early on to coaches and athletes. WADA rules demand that an agency always knows the whereabouts of athletes, but RUSADA was not strict about it. The Commission found that staff accepted wrong IDs and permitted suspended athletes to compete in relevant sports events.

The second part of the Independent Commission's report was published in January 2016. Its findings weighed heavily against former IAAF President Lamine Diack, who had resigned in August 2015 after the French judiciary had started investigations. The authors argued that Diack and his "closed inner circle" had actively supported corruption, nepotism and the concealment of doping. He was succeeded by Sebastian Coe from Britain.

According to the IC, Diack was so influential that there was no opposition to his

sons becoming IAAF advisers. Moreover, Diack is said to have asked his lawyer, Habib Cissé, to personally check all athlete passports of Russian athletes. WADA introduced these passports in 2009, and they serve to document blood and urine tests long term. According to the report, Cissé did not only cover up several positive tests, but also took bribes from athletes.

According to the Commission, corruption was facilitated by Valentin Balakhnichev among others. Balakhnichev was accused of taking advantage of being president of the ARAF and treasurer of the IAAF at the same time. He and Cissé kept each other briefed on what was going on and cooperated to keep things secret. He had resigned from both posts soon after the broadcast of the TV documentary.

All in all, the broadcast did not make much of a difference in Russia however, says Seppelt, the journalist. Shortly after the revelations, Russian Sports Minister Vitaly Mutko stated that all parties involved had been fired. In a second ARD report of mid-2015, however, Seppelt showed that suspended coaches were still active and still promoting the use of performance enhancing substances. The TV documentary also pointed out that Anna Antseliovich, the newly appointed RUSADA executive, had cooperated with athletes to define dates for doping tests. WADA

responded by withdrawing the Moscow lab's license and revising its Anti-Doping Code with which all sports federations and anti-doping agencies must comply.

Sometimes, parties concerned are not timely informed of important rule changes. For example, WADA put the heart medicine Meldonium on the prohibited list in

January 2016, but several athletes, including Russian tennis star Maria Sharapova, claim they did not know. WADA is considering a pardon for

Tribune

anyone who was tested with less than one microgramme of Meldonium in their body prior to March 2016. Critics, however, say that WADA is not doing anyone a favour by granting pardons. Even the top anti-doping agency is thus facing controversy.

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"Do not close the camps"

Kenya's government has announced it will close the two refugee camps of Dadaab and Kakuma. The residents of Dadaab have been told to return to their home countries or move to a third country by the end of May 2017. The refugees are devastated, and non-governmental organisations warn of a "humanitarian catastrophe".

By Peter Okello

According to Karanja Kibicho, Kenya's principal secretary for interior affairs, the camps have a negative impact on security in the country. He argues that the Somali terror organisation Al Shabaab and related outfits get support from people in the camps. Moreover, the government speaks of economic constraints. Kenya has suffered terror attacks in recent years, and the government is struggling to get a grip on Al Shabaab (see D+C/E+Z e-Paper 2015/09, p. 28 ff.).

Kenya is currently hosting about 600,000 refugees in Dadaab and Kakuma. Dadaab is believed to be the world's largest refugee camp. It was first established in 1992. The government wants to see it closed by the end of May next year. A deadline for Kakuma (see D+C/E+Z e-Paper 2016/02, p. 23 ff. and D+C/E+Z e-Paper 2016/03, p. 36 f.) has not been set so far.

The people in the camps are devastated. Deng Malual is from South Sudan

Debate

and only arrived in Kakuma with his family of eight a few weeks ago. "We are in a safe place here," he says, adding that violence and need

haunt his home country. "My children were almost starving; there was no food,

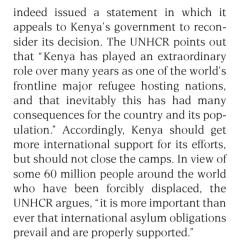
nothing." He does not know where to take his family if they cannot stay in the camp.

The vast majority of the refugees feel similar despair, and they are offended by the implication that they support terrorism. According to Anne Cham, who is originally from Ethiopia and now lives in Dadaab, "refugees are not terrorists." She says: "It is peaceful here - no violence, no killing, no forced landgrabs and no harassment." She left her country due to conflict and emphasises: "We don't kill people." She appreciates that her child can go to school in Dadaab and that there is free food. She says that Kenya's government should look for terrorists in other places. Her message to the government is: "Do not close the camps."

Some camp residents say that the Kenyan government has the right to dismantle the camps, but most of the refugees simply do not know where to go. They fear they will be killed if they try to return home, and getting there would be very difficult anyway. Moreover, the refugees do not have access to other countries.

Some camp residents say they feel forgotten by the UN Refugee Agency (UNHCR). However, the UNHCR has

Children go to school in Dadaab camp.



Non-governmental aid agencies support this stance. In a joint declaration, 11 organisations, including World Vision, Oxfam and the Refugee Consortium of Kenya, warn of a "humanitarian catastrophe in the region" should the two camps be shut down abruptly. They state that refugee laws and asylum regimes are under attack, especially in Europe, and that Kenya should not "follow that path". Like the UNHCR, the NGOs want the international community to do more on behalf of refugees in general and in support of refugees in Kenya in particular.

Statements like these make sense to the people in Dadaab and Kakuma, but many of them are not informed. Unfortunately, moreover, one may have doubts whether the international community or the Kenyan government will actually heed the advice, though more international support would probably make a difference to the Kenyan government.

Links

Statement issued by 11 non-governmental organisations: http://www.rescue.org/press-releases/media-advisorygovernment-kenya-reconsider-intended-closure-refugeecamps-30899

Statement issued by the UN Refugee Agency (UNHCR): http://www.unhcr.org/57308e616.html

Peter Okello



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Curiosity wins

Populist leaders' slogans often do not add up. That is why open and critical debate is so important. People with authoritarian leanings resent independent thinking.

By Hans Dembowski

Donald Trump's foreign policy proposals obviously do not make sense. For example, the presidential candidate of the Republican party promises to build a wall along the USA's southern border and "make Mexico pay". Though the idea is clearly absurd, some xenophobic US citizens appreciate it.

Depressingly, many of Trump's other proposals are no better, and growing right-wing agitation in Europe tends to be just as incoherent. Germany's AfD, for example, wants the country to leave the euro zone, but does not assess what a fast appreciating new Deutsche Mark would mean for exports. The economy would suffer due to the higher exchange rate. The AfD proposal is self-destructive.

Flawed reasoning is typical of authoritarian politics. The fewer people understand the underlying issues, the more dangerous populist rhetoric becomes. That is why authoritarian leaders tend to limit the freedom of expression when and where they can, as many people in developing countries know all too well.

Stanley Feldman, a social scientist from the USA, has found a way to find out who appreciates authoritarian leaders and who does not. The four questions he uses are not about politics, but about parenting. What is more important for a child to have: respect for elders or independence? Obedience or self-reliance? Good manners or curiosity? Do they want children to be well-behaved or considerate?

Those who opt for the former terms have authoritarian leanings. They appreciate hierarchy, conformity and order. It is worth pointing out, moreover, that Feldman's questions do not imply in any way that good behaviour or respect are not desirable. The point is that being considerate and independent matters even more.

Feldman's approach suggests that rich democracies are probably a bit better insulated against authoritarianism than developing countries, where respect for elders and hierarchies tend to be emphasised more. According to management consultants, young employees in Germany increasingly want to be treated as autonomous, intelligent individuals and will

them anyway. Hierarchy and conformity gives them a comforting sense of order. That is why authoritarian politicians sometimes gain more than just a foothold even in advanced economies. It is scary, for example, that Norbert Hofer, the candidate of the right-wing FPÖ, came so close to being elected Austria's president in May.

Experience tells us, on the other hand, that authoritarians sometimes fail in developing countries. Sri Lankans recently elected Maithripala Sirisena instead of confirming Mahinda Rajapaksa as president, who had become ever more dictatorlike in office. In the Philippines, where pop-



Trump supporters in Florida.

leave if they feel they are mere underlings. Similar trends have been noticed in other advanced economies. Of course, people who do not show much regard for formal hierarchy at work are unlikely to obey authoritarian demands anywhere else. It is worth pointing out that the young people are neither lazily shying away from challenges nor rudely upsetting bosses. They want to be taken seriously.

It is worrisome, on the other hand, that some people know perfectly well that populist slogans are nonsense, but accept ulist leader Rodrigo Duterte has just been elected president, people's power movements twice swept strongmen from office. In Burkina Faso, a popular uprising toppled despotic Blaise Compaoré. The movement was driven by young people who were tired of being told what to think.

Hans Dembowski



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Troubled legacy

Shortly after the Winter Olympic and Paralympic Games in the Russian town of Sochi, Thomas Bach, the president of the International Olympic Committee (IOC), spoke of the events' "many lasting legacies". He was probably referring to the sports and other infrastructure that cost an estimated \$ 51 billion. An honest assessment, however, must include the track record on human rights. The IOC wants host governments to perform better in the future.

By Jane Buchanan

There were many human-rights abuses in the context of the Sochi Olympics. They included the exploitation of migrant workers, forced evictions as well as harassment and arrest of activists and journalists who were critical of the government's Olympic preparations.

Human Rights Watch documented the abuse and exploitation of migrant workers employed on all major Olympic sites. Employers failed to pay wages and provide employment contracts, they withheld passports, forcing workers to remain in exploitative situations, and they required excessive working hours.

Ample evidence of these abuses was published by Human Rights Watch and other human-rights organisations, but for years the Russian authorities failed to hold employers accountable. The IOC stood by, reluctant to put pressure on the Russian authorities.

Only a month before Sochi's opening ceremonies, there finally was some reckoning for the workers. Dmitri Kozak, the Russian deputy prime minister who was responsible for the Games, announced that labour inspections in late 2013 had uncovered that several companies had failed to pay employees a total sum equivalent of more than \$ 8 million. Kozak promised the money would be paid.

Thanks to these inspections, many workers were paid who otherwise would not have been. But it was far too little and much too late for thousands of workers who had toiled for years. Most had already left Sochi, and many had been deported by the Russian authorities before the Games.

Another aspect that must not be forgotten is the harassment of environmen-



Success will obviously depend on how serious the IOC is about implement-

Steps remain to be taken to compensate for the damage done in Sochi.

It is essential - and feasible - to avoid

such abuses in the future in the context

of Olympic Games. Even the IOC seems

to be waking up to this fact. Less than a year after Sochi, IOC President Bach put

in place potentially meaningful reforms.

Starting with the 2022 Olympics, host city

contracts will include more protections for the environment, labour rights and non-

discrimination.

Labour migrants on their way to the building site of the Olympic stadium in 2012.

tal activists and other critics of the Games, including the imprisonment of Evgeny Vitishko, who was especially vocal. Moreover, there were multiple incidents of interference with journalists who reported on social concerns and other issues related to the Games. Most blatantly, the police pursued two Norwegian TV journalists and detained them several times in November 2013.

Sochi's painful legacy also includes the forced eviction of dozens of residents who had to make way for Olympic venues and infrastructure. Moreover, devastation caused by Olympic construction work in the sleepy mountain village of Akhshtyr must be mentioned. Drinking water wells were destroyed, and key road links were severed. Many villagers could not get to work and school anymore. The IOC made some efforts to mitigate the damage, but ultimately passed things on to local officials who proved reluctant to act.

ing its commitments. It must assume full

responsibility for ensuring human-rights protections in relation to Olympic Games and respond to violations, including ahead of the Summer

Debate

Games in Rio a few months away. FIFA would also do well to learn lessons, not least because Russia will host the next World Cup in 2018. Only when major sporting organisations take their responsibility for human rights seriously may there be a silver lining to Sochi's troubled legacy.

Jane Buchanan



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