

The GIZ Magazine

akzente

Soil – a vital resource

A basic necessity for a growing global population

OTHER TOPICS:

Made in Africa: Cotton for the global market

Change of perspective: GIZ's Global Leadership Academy

giz Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH



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COVER PICTURE: NORMANN SZKOP

Patchwork tapestry: this field of flowers was photographed near the village of Anna Paulowna in the northern Netherlands.

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giz COMPANY PROFILE



The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH offers sustainable and effective solutions for political, economic and social change processes. GIZ is a federal enterprise that employs more than 17,000 staff members and operates in over 130 countries worldwide.

www.giz.de/en

PHOTOS: GIZ/DIRK OSTERMEIER (2 BOTTOM); SHENG LI/REUTERS (2 TOP LEFT); AID BY TRADE FOUNDATION (2 TOP RIGHT); ROBERT B. FISHMAN/ECOMEDIA (3 LEFT); GIZ/KARSTEN THORMAEHLER (3 RIGHT)



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DEAR READERS,

While we often talk about ‘feeling the ground disappear from under us’ in a metaphorical sense, the phrase is rarely used literally. And yet the uppermost surface of our planet, the ground on which we stand, is literally vanishing. In addition to losing agricultural land and forests through desertification, meadows are being covered over with asphalt and concrete on a daily basis as a result of progressive urbanisation and industrialisation. The farming industry is also experimenting with soil makeup, and the extractive industry continues to dig worldwide for mineral resources. Often several interested parties and industrial sectors compete for the rights to use the few available areas. It is becoming increasingly obvious that soil itself – just like crude oil, minerals and precious metals – could be a finite resource and not a renewable raw material. ‘The forgotten resource’, this issue’s feature article, shows what is really happening to the ground beneath our feet.



The European Union has internal uniform regulatory standards for food safety. The EU is currently training large numbers of food inspectors in EU member states to ensure proper harmonisation across national boundaries. akzente reports on one such training course in Milan.

We also highlight the interaction between development policy and foreign trade policy in an article about the German Government’s Renewable Energies Export Initiative. This initiative contributes to climate change mitigation and at the same time opens up access to international markets for medium-sized companies. We also showcase migrants as entrepreneurs and report on small farmers in Africa whose training in farming cotton in line with sustainability standards is paid from licence fees revenues raised through the ‘Cotton made in Africa’ label.

Dorothee Hutter
Director of Corporate Communications

Leadership with social responsibility

CONFERENCE For one participant at the Global CSR Retreat, held in Geneva from 12-14 March 2013, commitment to Corporate Social Responsibility was inspired by an interest in Chinese philosophy. Financed by the German Federal Ministry for Economic Cooperation and Development (BMZ) and organised by GIZ and the United Nations Conference on Trade and Development (UNCTAD), the event gave 27 senior CSR managers from 19 different countries a platform to exchange ideas, share experience and develop joint solutions for sustainable business activities. The idea was based on the fact that multinational corporations are key strategic partners when it comes to promoting sustainable development in disadvantaged regions. And when meetings such as these bring together so many companies from emerging economies and industrialised countries, each stands to benefit from the experience of the other – whether the topic is innovative business models in developing countries, sustainability standards or Chinese philosophy.

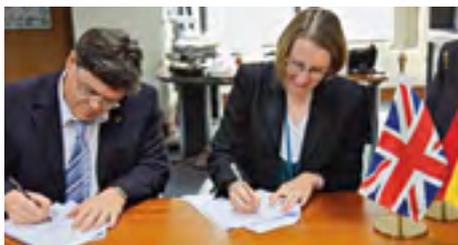
www.unctad-csr.org



27 CSR managers from 19 countries exchanged ideas on sustainable corporate management.

A second chance for prisoners

COFINANCING The Programme for Judicial and Prison Reform in Bangladesh, which is implemented by GIZ on behalf of the German Federal Ministry for Economic Cooperation and De-



Olaf Handloegten, GIZ country director, Bangladesh, and Sarah Cooke, DFID representative in Bangladesh, sign the agreement in Dhaka.

velopment (BMZ), recently also received funding worth around €23 million from the British Government. This support will be used to improve access to legal aid for prisoners awaiting trial, many of whom face a lengthy period in detention. The funding will also support reintegration measures for prisoners. There are currently 18 paralegals working in the cities of Dhaka, Madaripur and Bogra, with further appointments planned over the next six years. Since the programme was launched in 2009, paralegals have secured the release of 2,400 prisoners on parole. The new funding will also be used to employ additional paralegals.

3,500

IN FIGURES In 2011, around 3,500 teachers completed their studies in the five northern provinces of Afghanistan. As a result, around 1.5 million pupils in over 2,400 schools were taught by qualified teachers in 2012.

Since 2005, GIZ has been helping the Afghan Government improve teacher training on behalf of the Federal Ministry for Economic Cooperation and Development (BMZ).

European energy managers

FURTHER EDUCATION A growing number of experts in South America and Africa have completed their training as European energy managers. In February, no fewer than 21 employees from public and private companies in Uruguay were awarded the internationally recognised completion certificate.

The further education courses were organised by an integrated expert placed in the Uruguayan-German Chamber of Commerce and Industry in Montevideo by the Centre for International Migration and Development (CIM). The training was also supported by the Renewable Energies Export Initiative of the German Federal Ministry of Economics and Tech-

nology (BMWi) (see the report on page 34 for more details). The participants developed projects designed to increase the profitability of their companies. Practical implementation of these projects could save Uruguay US\$2 million a year in energy costs and reduce CO₂ emissions by 11,000 tonnes.

In addition to Uruguay, European energy manager training is offered in Argentina, Chile, Brazil, Morocco and Egypt, and will soon be rolled out by India.

👉 www.eurem.net

👉 www.bmz.de/wirtschaft



Uruguay's Energy Minister Dr Ramón Méndez presents certificates at the Presidential Palace.

Lifestyle, art and youth gangs



The current issue also looks at sports programmes for young people in South Africa.

WEB MAGAZINE The Digital Development Debates, an online magazine which covers issues ranging from politics, the economy and media to science, the environment and lifestyle, is read in 130 countries. Published by GIZ's Development Policy Forum, the magazine has the Deutsche Welle Global Media Forum and the Web 2.0 conference re:publica as media partners. The latest issue deals with topics affecting the world's youth – from their ways of life and lifestyles to art, youth gangs and child soldiers.

👉 www.digital-development-debates.org

> DEVELOPMENT PARTNERSHIPS WITH THE PRIVATE SECTOR

Certificating coconut oil

SUSTAINABILITY GIZ is partnering the chemical giant BASF and food company Cargill to boost coconut oil production and improve the livelihoods of 2,500 small farmers on the island of Mindanao in the Philippines. The German Federal Ministry for Economic Cooperation and Development (BMZ) supports the venture through develoPPP.de, the programme for development partnerships with the private sector. The objectives are to increase productivity, improve oil quality and achieve certification in line with Sustainable Agriculture Network standards.

Help for consumers

FISHERIES Seventeen of the world's leading companies in the seafood industry have worked with GIZ to establish the Global Sustainable Seafood Initiative. Supported by the German Federal Ministry for Economic Cooperation and Development (BMZ) through its develoPPP.de programme, the initiative aims to improve the comparability of certificates awarded worldwide for sustainable fisheries, so that customers and consumers can make more informed choices.

Approved cocoa

CERTIFICATION Companies that process and trade in cocoa, including Mars and Kraft, have been working with environmental organisations for three years to help cocoa farmers in Ghana, Côte d'Ivoire and Nigeria attain certification for their product. Thanks to improved production methods and access to new markets, the project, which is supported by GIZ on behalf of the German Government, supports sustainable cocoa farming and poverty reduction.

On foot across the peaks of the Balkans



Waymarked paths guide hikers along the trail.

SUSTAINABLE TOURISM With a share of around 16%, developing countries command a considerable slice of the global travel market. But although tourism provides employment for millions of people, it also brings with it prob-

lems such as the destruction of the natural environment and high consumption of resources at the cost of the local population. On behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), GIZ

is involved in 59 projects geared to ensuring that tourism benefits both nature conservation and local inhabitants.

One such project is a new 190-kilometre path which spans the border region of Kosovo, Albania and Montenegro. In April, the 'Peaks of the Balkans Trail', which rises to 2,300 metres, was presented with the 2013 Tourism for Tomorrow Award, bestowed by the World Travel & Tourism Council. Around 230 hikers completed the trail in 2012. In addition to providing a unique walking experience for visitors, the trail also generates business opportunities for local people. GIZ for example, advised small municipalities along the route on how to develop a tourism infrastructure and negotiated simplified arrangements for crossing borders with the authorities of the participating countries. This also supports reconciliation in the region, which is an additional objective of the 'Peaks of the Balkans Trail'.

GIZ is a member of the worldwide Global Partnership for Sustainable Tourism. In late March, Germany hosted the Annual General Meeting of 83 members, including states, municipalities, tourism enterprises, international and non governmental organisations.

Radios powered by solar energy

STAND-ALONE POWER The radio is a key source of information in Africa. But without power there can be no broadcasting. In the past, frequent power outages not only made life difficult for Tanzania's five radio broadcasters, they also caused the lights to out in the library at Saint Augustine University in Mwanza. Now a stand-alone solar-powered electricity supply promises to guarantee smooth operations for the university library and for radio broadcasters. The idea was developed by GIZ staff in Germany and Tanzania



Lights back on for reading: solar panels installed on the roof at Saint Augustine University in Mwanza in 2010 generate enough electricity to illuminate the university library.

together with the Lower Saxony State Chancellery. Implementation involved teaming up with the Hanover Chamber of Industry and Commerce and the German energy company

Inensus GmbH. The solar power facility was financed by the German Federal Ministry for Economic Cooperation and Development (BMZ) and the state of Lower Saxony.

Readings and talks

EVENTS Since early 2013, Bonn has been playing host to a series of readings of international literature organised by GIZ in conjunction with litprom, the Society for the Promotion of African, Asian and Latin American Literature. In late January, for example, the Nigerian writer Helon Habila was invited to read from his most recent book *Oil on Water*, which deals with the impact of oil extraction in the Niger Delta (an interview with Helon Habila appears on page 26).

Another new addition is the series of talks on development issues entitled 'Bonn and the World', which GIZ launched in cooperation with the Bonn-based newspaper *General-Anzeiger*. Bonn is a centre of German international cooperation and home to one of GIZ's two registered offices.



Recommended reading from litprom can be found on page 45.

👉 www.litprom.de

Energy markets

KNOWLEDGE EXCHANGE The Desertec Industrial Initiative and GIZ are seeking to exchange experience, particularly on cooperation with decision-makers in the areas of administration and politics. Desertec promotes the development of solar and wind energy and aims to unite electricity markets north and south of the Mediterranean. It compiles energy market studies in many countries in which GIZ provides advisory services to the energy sector.

👉 www.dii-eumena.com



SUSTAINABILITY

Project results

OPEN SOURCE IT SYSTEMS

Widespread exposure to developer and user knowledge

- **Projekt:** it@foss – open source information and communication systems for Asia
- **Commissioned by:** German Federal Ministry for Economic Cooperation and Development (BMZ)
- **Overall term:** 2005 to 2009
- **Countries:** The Philippines, Indonesia, Cambodia, Laos and Viet Nam

THEN FOSS, which stands for Free and Open Source Software, allows IT entrepreneurs to develop low-cost software products. Between 2005 and 2009, BMZ promoted the distribution of open source software in the ASEAN states of Indonesia, Cambodia, Laos, the Philippines and Viet Nam, with the aim of facilitating the development of innovative business models for the local IT industry.

NOW By 2009, GIZ had trained several hundred IT experts and others to function as multipliers, passing on IT expertise through networks. Subsequent studies show that this group of people has passed on knowledge to over 13,000 people, thereby ensuring that developers' and users' knowledge of open source IT systems has gained widespread exposure. Hundreds of experts in South-East Asia are now receiving certification for open source IT systems in line with a standardised and internationally recognised system, enabling them to prove their credentials to employers – a key condition for the continued sustainable development of the local IT industry. IT experts and trainers are able to exchange knowledge and experience across national boundaries through virtual 'communities of practice' and alumni networks. This success, including the work of individual project partners, has received worldwide recognition: the Cambodian organisation KhmerOS/Open Schools Program Initiative received an international award for outstanding development projects in information and communications technology from the Stockholm Challenge and the Global Knowledge Partnership Foundation.

OUR FOOD: EU-WIDE SAFETY

It is important that directives on food and feed safety be applied uniformly within the EU. To help improve harmonisation, the EU has already trained more than 30,000 experts.

Text Klaus Sieg

Milan, Italy: The cathedral's bells are just audible above the noise of the traffic. But for the 30 men and women gathered in the conference room there is little time to appreciate the soundscape of Lombardy's capital city. They are too busy studying the diagrams and texts of a PowerPoint presentation on risk analyses for genetically modified organisms, possible toxicological and allergenic reactions, testing procedures, environmental consequences and, in particular, the legislation in force across EU member states and comparable World Health Organization (WHO) and OECD regulations.

Improving consumer protection

The training course, which runs over five days, is designed for food experts from European Union member states, candidate countries and countries which export to Europe. For seven years, the Directorate-General Health and Consumers of the European Commission has been providing comprehensive training for food experts and staff from national authorities across Europe as part of its Better Training for Safer Food programme. The objective is for participants to reach the same level of understanding of food and feed law, animal health and welfare and plant health, thereby improving consumer protection and creating a harmonised framework for food producers. Despite the unified EU-wide legal framework in place, standards and methods of risk assessment, analysis and food control can vary widely from state to state. Even the regulatory frameworks »

PHOTOS: LEE ROGERS (8 BOTTOM), JOAN VICENT CANTÓ RUIG (8 TOP), JIM JURICA (9 TOP), ESOLLA (8/9 BOTTOM), ALL ISTOCKPHOTO

**FERTILISERS,
ANIMAL FEED,
MEDICINES**

Which medicines may be used on animals? How long before harvesting can pesticides be used?

SHELF LIFE

The 'best before' date must be clearly displayed on food packaging and on eggs. Standards apply for fresh products sold by bakeries and for butchers.



» INTERVIEW

Implementing legislation uniformly



Salvatore Magazzu, Head of Consumers and Food Safety (CFS) Unit within the European Commission Executive Agency for Health and Consumers

Why is the European Union training so many food experts?

The purpose of the EU Commission's Better Training for Safer Food (BTSF) initiative is to harmonise the application of the comprehensive legislation across EU member states and design efficient processes for all aspects of food and feed safety and the associated production chain. Other key reasons for the initiative were the desire to prevent food emergencies, to heighten consumer awareness, and to regulate internal markets and the globalisation of food production and trade.

What have the training courses achieved?

After a few initial difficulties, the programme – now in its eighth year – is showing tangible results: there is now a more unified approach to implementing EU food legislation, food has become safer and the programme has expanded its activities to cover an ever wider range of topics – from pure safety considerations to, most recently, quality issues and synergy development. The number of training courses has increased, resulting from factors such as new legislation, new safety challenges or technical advances.

Why is it important for course participants to meet in person?

When people get to know each other face-to-face they build networks – and networking is a very efficient and cost-effective approach to solving day-to-day difficulties. Experience gained by EU national authorities is shared among colleagues working in different member states. That is the spirit of the European Union. Beyond essential theory, courses also include practical elements such as field visits, discussion groups and activities based on case studies. And we are constantly developing the range of approaches. One of the most promising of these is e-learning, which enables us to reach a broad target group at low cost, particularly for basic training. Seminars and workshops can then focus on advanced training.

Who chooses the tutors and what are the selection criteria?

The tutors are chosen according to their experience and expertise in their field. The application procedure is open and transparent. Most applicants are national officials, experts or colleagues whose work is closely related to that of the national authority. This way we are confident of covering all the available areas of knowledge, and the training programme benefits from the experience of the tutors and training coordinators.

Interview: Klaus Sieg

FRESH PRODUCE

Compliance with cold chain principles and journey times are vital when it comes to fresh produce and perishable foods.



PHOTO INTERVIEW: EAHC

for the work carried out by food experts differ greatly. In smaller EU states, staff at regulatory authorities are generally all-rounders with little or no specialisation. Countries like France or Poland, on the other hand, have large authorities, and a clear division of labour. In addition, the technical equipment available to food inspectors varies from one EU country to another. Given this context, the challenge is clear: how can we establish the transnational cooperation desired by politicians and at the same time harmonise regulatory legislation that is often very general in nature? Clarification is also required on a number of details, including whether all EU food producers, regardless of their size, are required to provide the same number of test samples as part of their commitment to self-regulation. Participants attending the course in Milan exchange ideas and personal experience on such issues. For example, participants learn how in Germany, food safety inspectors worked closely with medical practitioners during the outbreak of a novel strain of E. coli in 2011, a practice that was unheard of in other countries and could benefit colleagues in similar situations.

The participants in the Milan course are currently working in groups, discussing how best to prepare and analyse the findings of a 90-day study on animals. In particular, they will look at the risks involved in using genetically modified potatoes with increased vitamin A content as animal feed. Trainees are then asked to outline what preliminary studies should be carried out and why. A lively debate ensues. Genetically modified organisms (GMO) is a controversial topic, and one that is handled very differently in individual EU member states, despite the fact that a standard European directive on assessing the risks of GMOs has been in place since 2011. 'The European directive pretty much covers the same ground as a guideline we introduced in Denmark a long time ago,' says instructor Ilona Kryspin Sørensen of the National

Food Institute in Denmark. 'For experts in other countries, however, the issue is completely new and many have little experience dealing with it.'

The training courses organised by the EU's Executive Agency for Health and Consumers not only bring food experts across EU member states to the same level of knowledge regarding relevant issues, they also promote an exchange of opinions. 'With a common level of understanding we can then discuss policy on

an equal footing,' says Markus Johannes Wögerbauer from the Austrian Agency for Health and Food Safety.

Expanding the network

The statistics give some idea of the importance the European Commission attaches to the Better Training for Safer Food initiative: in the past few years it has arranged training for no fewer than 30,000 experts, and the volume of courses continues unabated. The Executive Agency awards contracts for implementing the training courses to service providers with appropriate experience. GIZ International Services has so far been responsible for the content, organisation and logistical aspects of seminars involving over 4,000 experts – including the invitation and selection of participants and tutors.

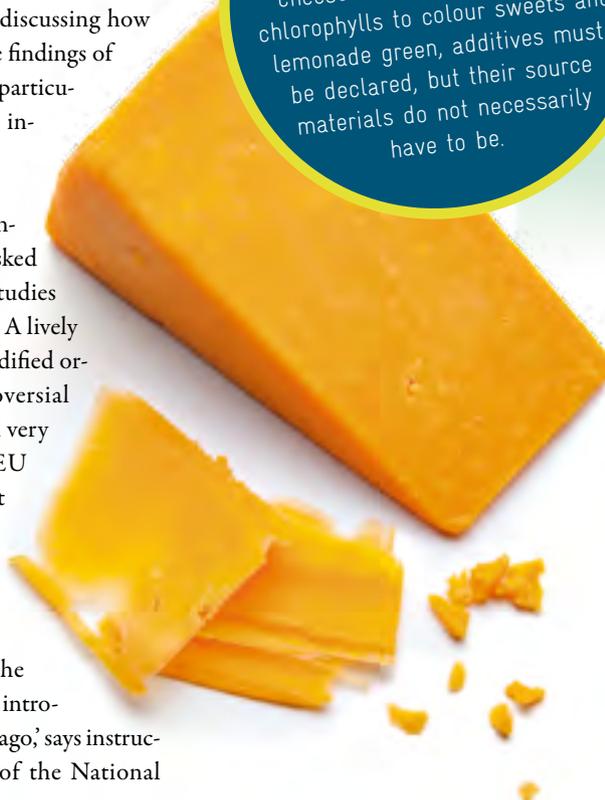
The Milan course provided training for participants of 25 nationalities by ten tutors from five different countries. 'The variety of backgrounds and areas of responsibility is what makes the training so attractive,' says Remy Cailliatte from France. 'I've made lots of new contacts in a short space of time and expanded my network way beyond French borders.' The agronomist and biologist from the Ministry of Agriculture in Paris has therefore achieved one of the key objectives of the event. Back at his desk in Paris he will be able to pass on his newly acquired knowledge. Almost all course participants write reports for their colleagues or give presentations on their return.

'The experience I have gained from the course group work will be very useful for the seminars I give on risk assessment for genetically modified organisms at university back home,' explains Leontina Gurgu, a scientist at the National Sanitary, Veterinary and Food



ADDITIVES

From natamycin to prevent cheese from going mouldy, to chlorophylls to colour sweets and lemonade green, additives must be declared, but their source materials do not necessarily have to be.





Markus Johannes Wögerbauer from Austria values the opportunity to discuss policy with colleagues on an equal footing.



The training course brings food experts from 25 countries up to speed.



Ilona Kryspin Sørensen of the National Food Institute in Denmark presented the course in Milan.

Safety Authority in Romania. Her work focuses mainly on risk assessment in biotechnology. ‘I need to know more about the scientific basis of risk assessment. We were taught little about this during my studies at university,’ agrees Nikos Elia, an agronomist at the Ministry of Agriculture, Natural Resources and Environment in Cyprus, who is involved in feed authorisation. Genetically modified organisms also come within his remit.

Concentrated silence returns for the afternoon lecture at the Milan course. When it is over, the speaker dismisses his audience with a grin: ‘I hope I’ve left you with something to think about – and perhaps even discuss over dinner.’ The participants laugh and shake their heads. But later it is exactly what they do. The dialogue is up and running. ■

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› EU STATES AND SELECTED THIRD COUNTRIES

Inspectors fit for purpose

Project: Better Training for Safer Food and Consumer Protection

Client: Executive Agency for Health and Consumers and Directorate-General for Health and Consumers of the European Commission

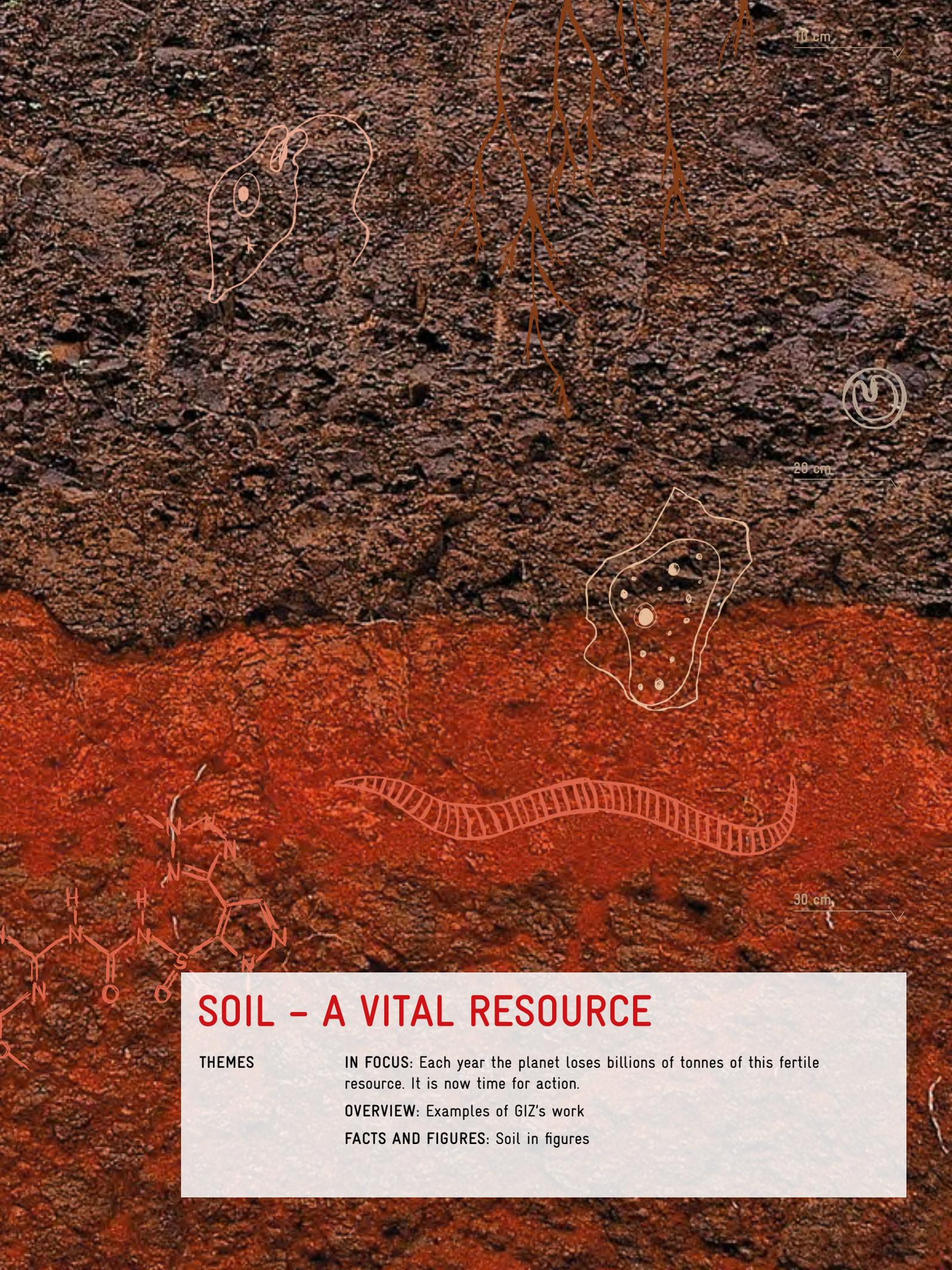
Overall term: 2006 to 2013

In the areas of food and feed law, animal health and welfare and plant health, the European Union’s internal market must ensure step-by-step harmonisation of the design and application of legislation to protect consumers. In particular, agency staff responsible for monitoring official compliance need broad knowledge of the standards in force. Training and transnational exchanges of experience help guarantee uniform standards of analysis and evaluation and improved consumer protection. The training courses deal with all aspects of cultivation, processing and sales, such as genetic modification, crop protection, biotechnology, preservation and packaging. Each year, GIZ International Services designs and organises many such training courses on behalf of the European Union in various European cities. To date, GIZ has staged over 130 workshops involving around 4,000 participants. In selecting instructors for the courses, GIZ collaborates closely with the national authorities for food safety in the EU member states. Experts from third countries, in particular developing countries, also learn about specific EU practices, import regulations and the legislative framework.

👉 www.trainsaferfood.eu

👉 <http://ec.europa.eu/eahc/food>





10 cm

20 cm

30 cm

SOIL – A VITAL RESOURCE

THEMES

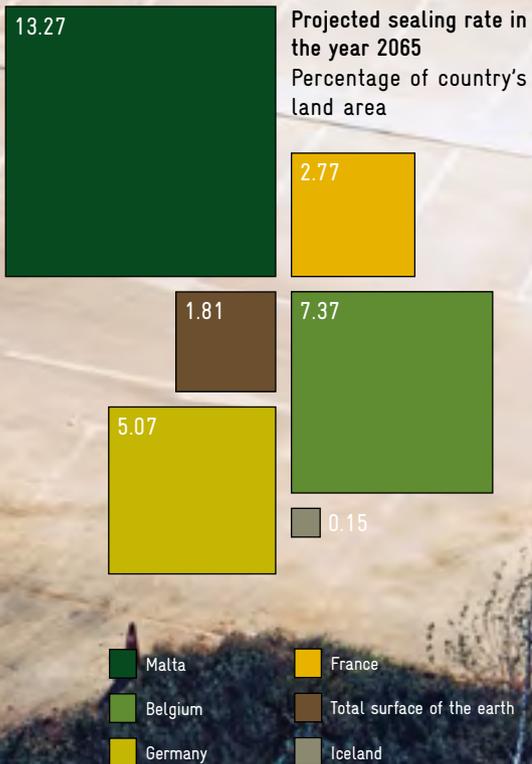
IN FOCUS: Each year the planet loses billions of tonnes of this fertile resource. It is now time for action.

OVERVIEW: Examples of GIZ's work

FACTS AND FIGURES: Soil in figures

SEALED LAND

Whether constructed above or below ground, buildings prevent rainfall from entering the soil. Sealing land in this way severely inhibits – and even prevents – the occurrence of natural soil processes.



The forgotten resource

After water and air, life on earth depends on a third factor: soil. This natural resource provides the growing global population with food, raw materials and living space. But each year the planet loses billions of tonnes of this fertile basic resource. It is now time for action.

Text Petra Hannen **Illustration** Denise Graetz

The global population is literally losing ground: every minute, 5.5 hectares of soil disappear beneath roads and housing developments, 10 hectares are degraded and 23 hectares are at risk of desertification. According to estimates by the UN's Food and Agriculture Organization (FAO), more than 24 billion tonnes of topsoil are lost each year – and the loss is permanent, since it takes at least 100 years for nature to create just one centimetre of new topsoil. At the same time, the continuously growing global population is expected to reach around nine billion people by 2050. Consequently, there will be less and less land available to meet the needs of more and more people for food, raw materials in the energy and consumption sectors, for space to live and for work.

Klaus Töpfer describes this process – as yet underestimated and insufficiently studied in his opinion – as a ticking time bomb waiting. 'Compared to resources such as water and environmental problems like climate change, soils have never commanded the same political and public attention,' says the Executive Director of the Potsdam-based Institute for Advanced Sustainability Studies (IASS). But now attitudes must change. In November 2012, the institute organised the first Global Soil Week in Berlin, bringing together actors from the fields of politics, science and civil society from over 60 countries to discuss the threat to soils and develop an 'agenda for action' for sustainable soil and land management. At the same time, Global Soil Week served as one of

the promotional events of the Global Soil Partnership. As part of the Millennium Development Goals, this FAO initiative has been working towards a global soil partnership for food security and climate change mitigation since 2010, the aim being to sustainably manage soil resources. And last year the United Nations Environment Programme identified the loss of fertile soil as one of our most pressing problems, on a par with the as yet unresolved issue of how to safely dispose of nuclear waste in the long term.

A miscalculated risk

But not even that gave soil its first real debut on the political stage. Appearances to date have merely been brief guest performances. The topic first attracted public attention, for example, following the devastating dust storms of the 1930s that hit the Great Plains of the United States. There, farmers had dug up large areas of prairie grass in order to plant wheat. A subsequent period of insufficient rainfall caused erosion of such severity that many farmers were forced to abandon their land. These events gave rise among other things to a dedicated US agency for resource protection and to legislation such as the Soil Conservation and Domestic Allotment Act, which was drafted to protect soil. In his statement on signing the act, US President Franklin D. Roosevelt said: 'The history of every Nation is eventually written in the way in which it cares for its soil.' In the »

1970s, the issue of soil loss attracted attention in a different part of the world. Following a period of severe drought, the governments of the Sahel states encouraged farmers to return to their fields and with the aid of stone walls, trees and modern irrigation methods protect them from further erosion and improve soil fertility. These activities were also supported over decades by German development cooperation that in this region at least helped to minimise soil loss and

'We can only achieve a world without hunger and poverty if we succeed in halting dramatic soil loss, learn to use our soil sustainably and start distributing it equitably.'

Professor Klaus Töpfer, Executive Director of the Institute for Advanced Sustainability Studies (IASS)

increase agricultural production. But until now the topic of soil has never been a focus of worldwide attention. 'In conjunction with the debate on food security and climate change, this seems to be changing,' says Alexander Schöning, planning officer for agricultural production and resource use at GIZ. 'But the issue is complex, since soil is not just at risk from natural events or inappropriate agricultural use.' Schöning feels that the dramatic impact of growing competition for land use has been misjudged. With roughly half the world's population now living in towns and cities, for example, a great deal of land disappears each year under concrete and asphalt – and the trend is growing. The pace of sealing-in fertile soil is even growing independently of population development, as can be seen in the case of Germany. In its sustainability strategy published in late 2012, the German Government merely defined its objective as being to reduce the area used for housing developments and road building from currently 77 hectares per day to a maximum of 30 hectares per day by the year 2020 – no plans are yet in place for further subsequent reductions. The rate of land use is even more dramatic in other countries with continued population growth or rapid economic and social development.

Away from cities and traffic infrastructure, competition for the use of unsealed land continues. As Schöning explains: 'A hectare of land can only be used once, for example as woodland, for grazing or for crops. And each use involves an economic interest, which has an impact on the soil, its function in the ecosystem and its quality.' The impact on biodiversity when an area of rainforest is turned into a field of soya, for example, is just the most visible aspect. According to Schöning, the significance of the role played by soil in climate change is frequently overlooked. 'After the oceans, soil is the planet's largest carbon sink, amounting to 1,500 gigatonnes. With appropriate land use, this sink could be developed further. But that would mean creating suitable incentive mechanisms.' And the topic of water must not be viewed in isolation. 'We all know that soil cannot be fertile without water. But soil also takes on vital filtration and storage functions for water. Without soil there can be no properly functioning water cycle.'

Whereas the United Nations has elevated clean water to a human right, a UN convention on transnational management of water resources is awaiting international implementation and the first Framework Convention on Climate Change was signed over 20 years ago, there is still no comprehensive convention on soil. While a Convention to Combat Desertification (UNCCD) has been adopted, 'desertification is often seen as a problem that only affects certain desert states. And yet degradation threatens fertile soils all over the world,' explains Schöning. But whatever the cause, one thing is certain: the loss of soil is a costly process for humankind. The Economics of Land Degradation initiative puts the figure at US\$70 per capita per year. In the international network – which is coordinated by GIZ and was set up by the European Commission, BMZ and the UNCCD Secretariat – scientists, politicians and entrepreneurs work together to calculate the cost of soil loss. They base their work on the Stern Review produced by former World Bank chief economist Nicholas Stern, in which he calculated the economic consequences of climate change and in so doing put the topic on the international agenda. The initiative aims to do the same for soil.

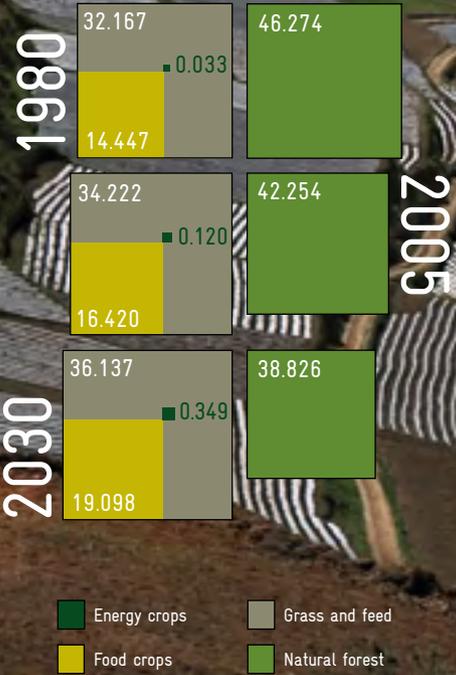
Soil overworked by agricultural use

Paradoxically, it may be agriculture – an industry so closely tied to the land – that is harming the soil and contributing in various ways to soil degradation. Intensive farming destroys the accumulated natural structure: very loose topsoils without protective plant residues are quickly eroded by rain and wind; further down in the subsoil, microorganisms which break »

A VITAL RESOURCE UNDER STRESS

As the global population increases, ever more land is needed for crop cultivation, which comes at the expense of nature. Approaches to field use are also changing: the area on which energy crops are grown will probably have risen more than tenfold worldwide by 2030, compared with 1980.

Agricultural land use in millions of km²



Energy crops Grass and feed
 Food crops Natural forest



SENSITIVE CARBON SINK

Soils store varying quantities of carbon, depending on the soil and vegetation type. Should conditions change, for example on account of deforestation or a permafrost thaw, CO₂ will leak, reducing the soil's storage capability.

Comparison of carbon content in soil across different regions

Rainforests

Permafrost regions

Deserts

Boreal forests

Savannahs

down organic substances are able to multiply. But the resulting emission of greenhouse gases is not the only problem: if the humus in the soil is not replaced by plant residues, compost or fertiliser, the soil structure degrades, reducing water storage capacity. Harvesting crops removes nutrients from the soil which must be replaced, more often than not in the form of mineral fertilisers. However, inappropriate use of mineral fertilisers can in turn lead to greenhouse gas emissions, soil acidification and pollution of drinking water. The use of heavy machinery may also compact the subsoil; plough compaction impedes both water circulation and root growth. And artificial irrigation

brings the risk of salination, if more water evaporates than penetrates the soil, leaving dissolved salts on the surface.

Mining is another industry that both exploits and degrades soil at the same time. In global terms, extracting raw materials does not pose a serious threat to soil. But the consequences can be serious in the immediate environment of the extraction site – due to exploitation of the mine site itself, pollution caused by chemicals used in extraction and ore processing, and changes to groundwater levels. In order to limit the ecological footprint left by raw materials extraction, the German Government explicitly states in its Raw Materials »

EXAMPLES OF GIZ'S WORK > SOIL – A VITAL RESOURCE

Securing land rights



Project: Contribution to Securing Land Rights

Commissioned by: German Federal Ministry for Economic Cooperation and Development (BMZ)

Partner: Ministry of Land Management, Urban Planning and Construction, Cambodia

Overall term: 2011 to 2016

CAMBODIA Political stability, economic growth and social development depend on access to land being socially balanced and land management being regulated by the government. In Cambodia, land rights often remain unresolved, with landless people settling on government land; this in turn leads to conflicts and forced displacement. GIZ advises on drafting basic and legal texts to establish a framework for land reform. It also trains experts and advises on technologies for land surveying. And it places particular emphasis on the development of grass-roots institutions and public consultations. The project's main objective is to secure land rights and human rights for the landless population, women, indigenous groups and informal settlers. About 1,000 surveyors are already working on initial land registration and two million land property titles have so far been issued. Three indigenous communities have received collective land titles.

Conserving and protecting soil

Project: Sustainable Land Management

Commissioned by: German Federal Ministry for Economic Cooperation and Development (BMZ)

Partner: Ministry of Agriculture, Ethiopia

Overall term: 2005 to 2014

ETHIOPIA In parts of Ethiopia, people are at risk of food insecurity. Deforestation, soil degradation and erosion result in poor harvests, with climate change and population growth exacerbating an already difficult situation. Ethiopia's Sustainable Land Management Program is supported by the World Bank, the EU and the Governments of Finland and Germany. GIZ provides advisory services to develop the institutional capacities and technical know-how required to implement the programme. Erosion control and improved soil fertility have already enhanced the potential of 142,000 hectares of degraded land. As a result, the soil is now richer in organic matter. In upland regions, this provides direct benefits for 70,000 households. Soil degradation resulting from overuse and climate and environmental influences is declining, groundwater levels are rising, and there is more water available at the surface for micro irrigation. Small-scale farming is now more productive and better equipped for climate change. From 2010 to 2014, the German Federal Ministry of Food, Agriculture and Consumer Protection (BMELV) is also supporting a German-Ethiopian advanced training centre for agriculture, which will provide instruction for experts in modern and sustainable agricultural production methods.

👉 www.slmethiopia.info.et

Strategy that mining must 'follow the principle of sustainable development', and should therefore give equal weight to economic, environmental and social concerns. 'Environmental concerns include soil and water. So measures to protect these resources form part of current German partnerships with the raw materials sectors in Chile, Kazakhstan and Mongolia,' says Stefan Hoppe, who coordinates cooperation with the German Federal Ministry of Economics and Technology (BMWi) at GIZ's Berlin office. The Integrated Mineral Re-

'The loss of soil resources through urbanisation and the conversion of our landscape is one of the major environmental challenges Europe is facing. (...) We simply cannot pave over our chances for a sustainable future.'

Janez Potočnik, European Commissioner for the Environment

sources Initiative, implemented by GIZ in Mongolia on behalf of BMZ, also stipulates that consumption of natural resources should be minimised when extracting mineral resources. A key lever for resource protection is a sustainable and coherent legal framework for mining, which GIZ is helping to draft in Mongolia on behalf of BMWi. However, the focus here is not just on Mongolia's mining legislation, but also on relevant supplementary legislation dealing with oil, uranium, water and soil, since 'specific aspects such as water use have so far not received adequate attention within the framework of mining legislation,' says Hoppe. 'The objective is to develop a unified approach that pays equal attention to land management issues and to environmental, social and economic aspects.'

It is a sensible approach, since the growing global population not only needs an ever increasing supply of industrial minerals, metals and oil; they also need increasingly efficient agricultural practices on ever more productive soils. This constant growth in demand is being fed by the emerging middle classes in the booming BRICS region (Brazil, Russia, India, China and South Africa) and in other developing and emerging economies. People are not just interested in cars, mobile

phones and refrigerators, they are also consuming more meat and dairy products – foods which ultimately provide less in terms of calorific content than is actually required to produce them, when animal feed is taken into account. FAO studies show that meeting demand in global terms has functioned purely in arithmetic terms over the past 50 years. While agricultural land use has increased by 12%, yields have tripled thanks to more advanced production methods, and specifically as a result of increased yields in America, Europe and Asia. But by 2050, demand for food will have increased by another 60%, while available agricultural land per capita is on the decrease – from currently 0.22 hectares to less than 0.17 hectares, according to FAO forecasts. This will call for yet further increases in productivity if, for reasons of climate change mitigation, we are to prevent vital carbon sinks such as forests and moors from being turned into arable land.

Promoting sustainable forms of land management

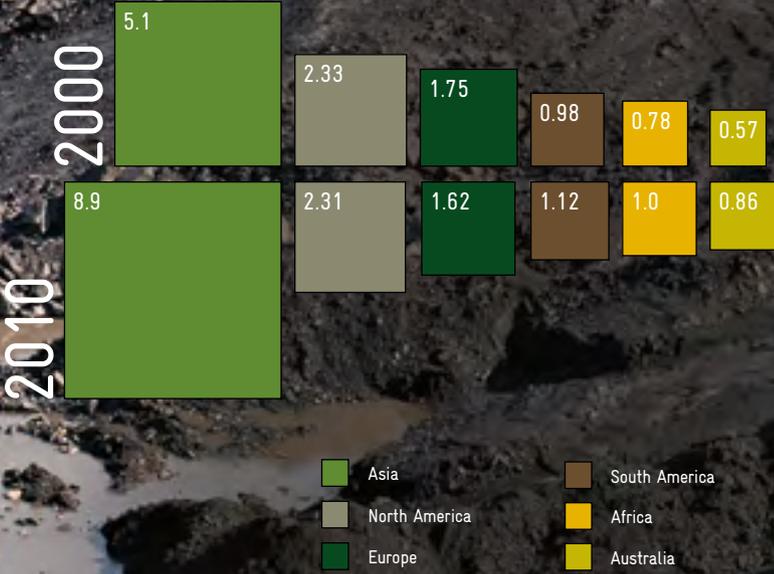
'Improved land management must be our number one priority,' says Alexander Schöning, clearly stating GIZ's position. 'This means conserving land available for agricultural use on the one hand, and increasing land productivity on the other.' Good agricultural practices are considered the method of choice and are supported by GIZ on behalf of BMZ in various regions of the world. These practices include appropriate cultivation techniques, water management, erosion protection, appropriate and professional use of fertilisers, and properly adapted use of machinery. A special focus is placed on improving the sustainability of agricultural production systems. These may include such varied systems as conventional or organic farming, as well as conservation agriculture – a form of land management that permits the use of pesticides and mineral fertilisers, but dispenses with ploughing so that disruption to the land is minimal and topsoil is constantly covered with organic material. But there is no 'one-size-fits-all' solution, as the issue of fertilisers alone demonstrates. According to Schöning, 'To some extent, the reason the green revolution has been successful in Asia is because fertilisation recommendations have worked over large areas. In Africa, the land is much more diverse. In order to come up with effective fertilisation recommendations and improve yields there, we have to carry out soil analyses and draw up detailed soil maps – groundwork that should have been done decades ago.' Speed is now of the essence, since it costs more to rehabilitate soils that have already been depleted or destroyed than to improve soil management. GIZ promotes such measures at various levels, for example by »



THE PLANET'S TREASURE STORE

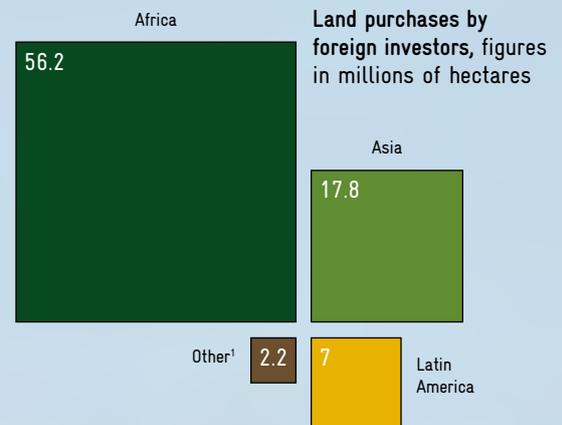
Global demand for metals and mineral resources from the ground is growing and extraction is steadily increasing. These extraction processes are permanently altering the soil structure and may give rise to waste products that pose a threat to the environment and to human health.

Worldwide mining production (not including diamonds) by continent, in billions of tonnes



INVESTMENT IN SOIL

Investors from industrialised countries and emerging economies are increasingly buying or leasing large areas of agricultural land in developing countries. The food and energy crops farmed there are mainly destined for export. Critics of this practice, known as land grabbing, complain that many small farmers will lose their livelihoods – because it either dispossesses them of traditional arable and grazing lands or inflates rents.



1) Mainly Eastern Europe and Oceania. Basis for all data: 1,217 published sales between 2000 and 2010.



advising partner governments on which sustainable land use strategies and support concepts make sense locally, by including manufacturers of seed or agricultural machinery into public private partnerships or by providing training for farmers.

‘We can only achieve a world without hunger and poverty if we succeed in halting dramatic soil loss, learn to use our soil sustainably and start distributing it equitably,’ stresses Klaus Töpfer. But land use is global, just as its current redistribution is global. Imports, which effectively involve virtual land use, are a rather less obvious form of this redistribution. The very fact that Europe has to import industrial raw materials for almost all manufacturing sectors because it cannot produce them – or not enough of them – is perhaps a characteristic feature of a global economy that is based on the division of labour. What should concern us more, however, is the fact that in order to meet its requirements for food, animal feed and other agricultural raw materials, Europe’s imports account for twice as much land outside the EU than they do within its borders. This land can no longer be used to provide for local populations. It could be claimed at least that agricul-

tural production generates a certain amount of value added through cultivation, processing and retail. However, the local population also loses out on this benefit if countries, enterprises and other investors choose to secure the land title to and process the soil itself rather than what it produces. And if disproportionately low prices are paid for the lease or sale of such land or the proceeds disappear into corrupt hands, then local people really are left with nothing.

Tricky balancing act

Any investment in land that lies outside one’s own economic area naturally involves walking a tightrope between necessary investment in agriculture on the one hand, and a form of neo-colonial land appropriation on the other. For this reason, the practice – which has been coined land grabbing – has made headlines in recent years. Although both the World Bank and FAO have issued guidelines on responsible investment in agricultural land, these guidelines are not binding. But the ‘Land Matrix’, which was presented at the World Bank’s Land and »

EXAMPLES OF GIZ’S WORK › SOIL – A VITAL RESOURCE

Raw materials, mining, training, legislation



Commissioned by: German Federal Ministry for Economic Cooperation and Development (BMZ) and German Federal Ministry of Economics and Technology (BMWi)

MONGOLIA The German Government has teamed up with Mongolia to support its raw materials sector. The partnership was planned following close consultation between BMZ, BMWi and the German Federal Foreign Office.

As part of the Integrated Mineral Resources Initiative Mongolia, in 2010 BMZ commissioned GIZ to advise the partnership on overarching issues such as economic development, economic policy, private sector development and good governance to enable it to successfully control cyclical economic fluctuations brought about by the resource boom. GIZ’s implementing partner in this programme is the Physikalisch-Technische Bundesanstalt (PTB), Germany’s national metrology institute. German

companies that wish to establish operations in the mineral resources sector in Mongolia, but would prefer not set up their own representations, can make use of the services provided by the programme’s German Centre of Excellence, which include the leasing of office and exhibition space, recruitment of local staff and investment advice. BMZ is also financing a project to support technical and vocational education and training in Mongolia, as well as a project to promote cooperation between German and Mongolian universities from 2014. Both projects focus on the raw materials sector.

BMWi awarded GIZ two further advisory contracts linked to the raw materials partnership between the German Government and Mongolia. These involve developing a sustainable and coherent legal framework and drafting an exemplary occupational safety strategy for mining. These contracts complement the approaches pursued by the BMZ programme Integrated Mineral Resources Initiative Mongolia. GIZ ensures that the policy objectives of each of the two German ministries are achieved. For the Mongolian partners, having a single partner to perform implementation ensures that the overall advisory approach is consistent and coherent.

Poverty Conference in Washington in 2012, shows that appropriate regulations are urgently required. Specifically, among the countries worst affected by land grabbing are seven of the poorest in Africa, where not even 1% of the yields from this land is sold on local markets. In developing the 'Land Matrix', GIZ and international research and development institutions systematically entered over 1,000 international land transactions for over 200 hectares into a database, and this work is still ongoing. The transactions evaluated to date cover around 83 million hectares of land, principally in Africa, where the

the region within ten years using climate-friendly production techniques and in so doing, help reduce rural poverty.

In response to the food crises and the dramatic increase in land grabbing since 2008, the United Nations last year officially endorsed the 'Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests'. Particular importance is attached in these guidelines to instruments which subject increasing investments in land and other natural resources to democratic regulation and scrutiny. After all, appropriate and secure access to these resources is one of the principal prerequisites for combating global poverty and hunger. For Arno Tomowski, Head of Portfolio Development Raw Materials at GIZ, it is a logical development: 'When it comes to dealing with land and with soil as a resource, it makes absolute sense to apply the same sort of standards that have proved reliable with extractive resources: good governance, transparency, and a properly functioning fiscal policy that leads to the reinvestment of state revenues in the infrastructure required for education and health. Only then will it be possible to enable investment in land – and consequently in soil – that is both legal and legitimate. And only then will we achieve fair and just land distribution and added value at the regional level.'

There are initial indications that the United Nations is keen to move not only land access but also soil conservation higher up the agenda. 'Without healthy soil, life on Earth is unsustainable,' said UN Secretary-General Ban Ki-moon on the eve of the 2012 UN Conference on Sustainable Development in Rio de Janeiro. If the FAO and its Global Soil Partnership achieve their objectives, World Soil Day, which has been celebrated on 5 December for the past ten years, will this year be added to the official list of UN days of action. And 2015, the International Year of Soils, will be dedicated exclusively to this vital natural resource. And perhaps by then, international agreements will have secured the ground beneath our feet – and in so doing the resource that gives our planet its name. ■

'Truly, it is the soil which makes the world a friendly environment for mankind. It is the soil which nourishes and provides for the whole of nature; the whole of creation depends on the soil, which is the ultimate foundation of our existence.'

Friedrich Albert Fallou (1794–1877), German geologist, soil scientist and lawyer

area concerned is now roughly the size of Kenya. Key investors come from India, China, Malaysia, South Korea, Indonesia and the United Arab Emirates and usually pursue government commissions or private commercial interests.

A study published in parallel to the database suggests that the run on fertile land is not a short-term bubble but a long-term trend. The study claims that although interest is no longer as strong as directly after the height of the 2007/08 food crisis, the same driving factors are at work now as were then – global population growth and rising demand for food and energy. The problem is exacerbated by the fact that land grabbing and water grabbing are often two sides of the same coin. In other words, irrigation required for grabbed land leaves no water for the local population. Critics also complain that land grabbing often targets valuable, irrigable land with or without formal title which has good market access and is already used by small producers as arable or pastureland. Foreign direct investors in the country put these livelihoods at risk. Moreover, the World Agriculture Report published by the United Nations specifically highlights the potential of such small-scale farming structures. With appropriate support they could double food supplies in

SOIL IN FIGURES

An average soil sample contains:

45% MINERALS

25% WATER

25% AIR

5% ORGANIC MATTER

SOURCE: EUROPEAN COMMISSION, SOIL - A KEY RESOURCE FOR THE EU, SEPTEMBER 2010

Vaduz, Liechtenstein has the highest per capita rate for soil sealing in Europe at 250 m² for each inhabitant. The lowest rate, at around 40 m², is found in Tirana, Albania.

SOURCE: EUROPEAN ENVIRONMENT AGENCY, WWW.EEA.EUROPA.EU/ARTICLES/URBAN-SOIL-SEALING-IN-EUROPE

10,000

soil types have been identified by experts in Europe alone.

SOURCE: EUROPEAN COMMISSION, SOIL - A KEY RESOURCE FOR THE EU, SEPTEMBER 2010

Soil captures about 20% of the world's man-made CO₂ emissions.

SOURCE: EUROPEAN ENVIRONMENT AGENCY, WWW.EEA.EUROPA.EU/SIGNALS/SIGNALS-2010/SOIL >>> ENVIRONMENT FACT SHEET: SOIL PROTECTION

500

years is the length of time it can take for two centimetres of topsoil to form.

SOURCE: EUROPEAN COMMISSION, SOIL - A KEY RESOURCE FOR THE EU, SEPTEMBER 2010





» Outside view

HELON HABILA

Land is a Limited and Diminishing Resource

Every time I return to Nigeria and travel across country by road to my hometown in the North East, I am amazed at how much and how fast the landscape has changed. Last year I took my children home for the first time, and as we drove through this same landscape, I saw it afresh through their eyes: the denuded scrubland running for miles with hardly a single tree in view, broken only by a mountain range in the far distance. I felt robbed, as if something that belonged to me had been taken away irretrievably. I recalled traveling on this same road with my father over thirty years ago and seeing farmers standing by the roadside with quails and guinea fowl and deer that they had shot and wanted to sell. The memory of how this land used to be had shielded me from acknowledging the starkness and the extent of the change. But now everything lay bare, unmitigated by memory.

It wasn't always like this, I wanted to tell my children, there used to be deer and streams and rabbit and wild fowl in this barren place.

Years ago, the Kenyan environmental activist and Nobel Prize winner, Wangari Maathai, protesting the Kenyan government's decision to dig up a large portion of Uhuru Park in the centre of Nairobi to replace it with office buildings

and statues, said, 'When I see Uhuru Park and contemplate its meaning, I feel compelled to fight for it so that my grandchildren may share that joy and that freedom as they one day walk here.' Maathai led a protest and was thrown in prison, but eventually, with the help of international organizations and the media, she was able to win her fight.

A lack of idealism

Politicians don't care very much for environmental issues. They can talk about it, they can run on environmental platforms, but the truth is they'd rather build office buildings or erect giant statues or erect a Berlin wall than build parks – parks cost too much money, they have to be maintained and paid for, they don't always generate revenue.

In my second novel, *Measuring Time*, I try to illustrate this glaring pragmatism and lack of idealism with the anecdote of a politician who promises his constituents that, if voted into office, he would turn their drought stricken land green. He would do this by a process called reverse osmosis. He would sink pipes into the far-away Atlantic and pump water hundreds of miles back to the hinterland. The water would

» PROFILE

Helon Habila was born in Nigeria in 1967. He is a novelist, poet, and short story writer. He teaches creative writing in the USA. His current novel, *Oil on Water*, focuses on the environment and the violence that accompanies oil extraction in the Niger Delta. Here he talks about why we need to rethink how we use land.



be desalinated and used to form artificial rivers and lakes, and presto, everything would turn green. It is a dazzling prospect, one that reads well in the papers but one that, alas, the politician fails to deliver on. This anecdote sums up in many ways the situation of land use, or land misuse in Nigeria, and I am sure in many countries as well. We take land for granted. We take and take, and we never remember to put back, till one day the green and verdant landscape of our childhood has been replaced by this denuded moonscape, and it is never easy to turn back the clock.

Nigeria is the most populous African country, and currently the population stands at over 160 million people. In 1990, about 82 million hectares out of Nigeria's estimated 91 million hectares were arable. 42% was in use. About 20 million hectares were covered by forests and woodlands and 19 million covered by buildings. But all that has since changed, in 1990 the population was under 100 million, now it has almost doubled.

This population is urbanising rapidly, placing more stress on available land in the cities. In Lagos, the most populous Nigerian city with over 15 million people, and where it is estimated that over 30,000 souls come every day to begin a new life, land is even more of a premium. People sleep in car parks and under bridges and on the beaches, and side by side with these deadbeat souls are the super rich, living on acres of property, their houses covered by tall walls and barbed wire.

In the rural areas the land is becoming exhausted and useless. In the north of the country, which lies on the southern fringe of the Sahara, desertification is pushing the population more and more southward. As the land available to

sustain livelihood diminishes, the level of tension and violent conflict increases.

I wonder if anyone has made this simple connection: that the rise in violence in Nigeria, often blamed solely on religious fundamentalism in the north and on oil extraction activities in the Delta, may have links to the poor choices we make over land use? Last year I was in the Niger Delta on a journalism assignment. I visited the creeks and villages tucked away in the marshes and hidden by mangrove swamps. These places, before the discovery of oil in 1958, used to be famous for their abundance in palm oil and fishing and logging, but since the arrival of the oil companies, and the virtual take over of the land by these companies for oil prospecting, agriculture has been pushed to the margins, virgin forests have been laid waste to be replaced by drilling rigs and oil pipelines.

People wish to return to the past

When I asked the villagers if they considered oil a blessing or a curse, they said it was a curse, and they wished they could return to the bygone days when there were fishes in the sea, and they could plant their crops in peace.

The point here is that the government in its quest for more income has prioritized oil extraction over everything else, and the result is oil slicks, and gas flaring, and acid rain, and violence. But it is clear that what the affected communities need to do is what the people of Ogoni community did when they discovered many years ago that Shell was destroying their environment. They decided to kick Shell out of their community, and up to now, as far as I am aware, Shell does not operate in Ogoniland.

There are some things, like land use and land control, that are too important to leave in the hands of a government alone.

What further complicates the issue of land use in Nigeria are the many changes in land use law since independence. In the pre-colonial days land was managed communally, mostly for farming, under the immediate control of family groups, and passed on from generation to generation. Then came the colonial government, and control and distribution of land was taken away from the communities and family heads and transferred to the colonial administration. The main aim of this change was not to protect the land and maximize its potential, but mainly to generate revenue. In 1978 the current land use decree was enacted. Now an individual can buy land, and can develop it and have the use of it for a certain number of years, but he does so under the supervision of the State government. But this change has not really simplified things as one might hope. Whenever a natural resource is commoditized, the competition to own it gets fierce, and if that resource happens to be limited and nonreplicable, the competition can become deadly.

Land is a diminishing resource not only in Nigeria but everywhere. As the global population increases daily, and as the land available to all of us shrinks, it is unwise to leave the custodianship of it in the hands of politicians alone. We must all speak up so that alongside office buildings and statues and oil rigs, there will also be parks and rivers and lakes to pass on to our children. ■





MOVING FORWARD

ON THE OUTSKIRTS of Delhi, where only yesterday there was still grazing land for sheep, high-rise apartment blocks are going up overnight, dramatically altering the cityscape. India's social and economic transformation is abrupt, with no room for a slow transition. Some people's place in the future is unclear. The herders are unlikely to move into the new apartments, whose future occupants will have shrugged off much of India's traditional lifestyle. In India and other emerging and transitional countries, GIZ is working on behalf of the German Government to support comprehensive change processes. Photo: Murali Nair



Sustainable cotton growing offers new prospects for farmers in several African countries.

STABLE DEMAND

The 'Cotton made in Africa' (CmiA) quality label stands for sustainably produced cotton from African countries. With training from CmiA, smallholder farmers are learning how to grow cotton successfully – and how to protect themselves from world market price volatility at the same time.

Text Peter Seidel

It's five o'clock in the morning in Sinoya, a village in Katete District in eastern Zambia. Solobat Phiri leads two oxen out of their pen at the edge of his farmyard and yokes them up to a simple two-wheeled cart. His plough is already stowed in the back. Last night, it rained heavily, for the first time in a long time. The downpour only lasted half an hour but it was enough to allow 42-year-old Phiri and his two daughters Veronica (16) and Helen (14) to take the plough out to the field and start sowing cotton. It's a good 20-minute walk. The farmer sets to work. His two daughters guide the oxen up and down the field, one to the right, one to the left, keeping them on track.

Solobat Phiri is a successful cotton farmer. From 2010 to 2011, when he had one hectare of land under cotton, he was able to boost his yield by 350 kilos, to a total of 2,150 kilos. This success was due in no small part to the training he – and around other 180,000 Zambian cotton farmers – received from the Competitive African Cotton Initiative (COMPACI), which works with cotton growers in several African countries. At COMPACI's Cotton Schools, farmers learn how to apply modern and efficient growing methods, including the careful use of pesticides, based on the principle of damage thresholds. This means that certain pesticides are not used until a specific number of pests or infected plants are identified on a designated small area of the field. In other words, the pesticides may not be used preventively. The right way of applying fertilisers is also part of the curriculum: 'With cotton, you mustn't apply the fertiliser to the earth directly around the plant; it mustn't be too close. Otherwise, you do more harm than good,' Phiri explains.

2011 was also a successful year for Phiri's business because the price of cotton on the world market soared to unprecedented levels. The purchase price agreed with the cotton ginning companies for 2011 was 3,200 Zambian kwacha (approx. €0.46) per kilo. After deducting the costs of fertilisers, pesticides and additional workers to help in the fields, Solobat Phiri and his wife Tiku pocketed almost €710 in pure profit from the sale of their cotton to cotton ginning company Cargill Zambia Ltd.

Cotton

Cotton is arguably the world's most important natural fibre. 300 million people work in cotton growing worldwide. From cotton field to ginning, spinning, weaving, dyeing and designing to retail: as many as 850 million people all over the world are employed in the value-added chain in roles that have at least partial relevance to the processing and marketing of cotton.

Smallholder farmers in sub-Saharan Africa produce around 1.2 million tonnes of cotton, amounting to 12% of global output. The most important cotton growing countries are India, China, the USA and Pakistan, which produce three quarters of the seven to nine million tonnes of cotton traded globally each year.

However, only around 2.5% is produced in accordance with sustainability standards. The growing demand for sustainably grown cotton offers opportunities for African farmers, but there are problems: besides commodity price volatility, the value-added chain is based on a global division of labour, so making a clear and consistent distinction between sustainably and unsustainably grown cotton is only possible at considerable cost.



Spurred on by this success, Phiri expanded his cotton growing area to almost 1.3 hectares and was able to increase his yield per hectare yet again, this time to 2,776 kilos. Indeed, his total harvest in July 2012 was 3,610 kilos of cotton. But the world market price of cotton crashed, and Cargill paid just €0.23 per kilo. In autumn, Phiri was left with a profit of just €470. Even so, without the skills acquired at Cotton School, which enabled him to expand production and increase his yield, his 2012 profit would have fallen even further.

World market price volatility: creating insecurity

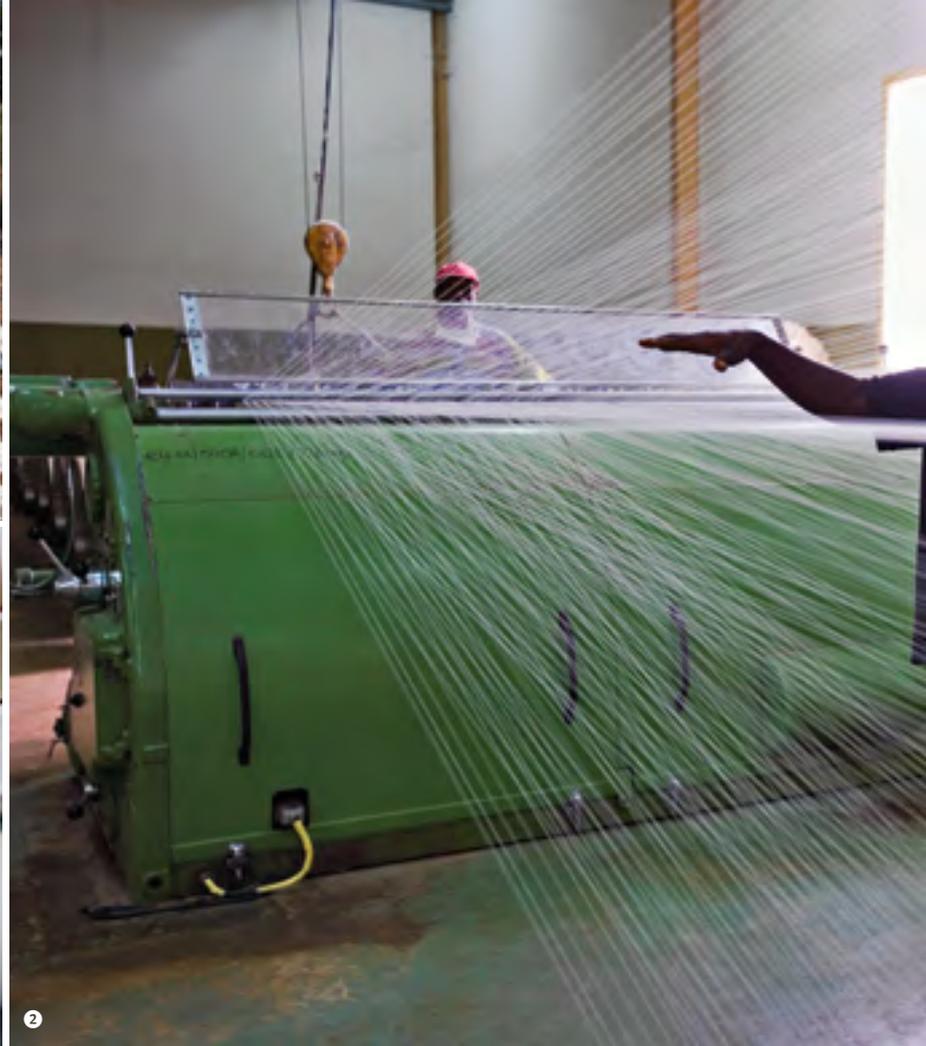
For Phiri – and thousands of other Zambian cotton farmers – the volatility of the world market price was disappointing. Since then, prices have started to rise again, but the ups and downs are always a talking point.

Nonetheless, Phiri is in a strong position compared with many other farmers. As well as having enough land, he has draught animals to help him till his fields, so that besides cotton,

he can produce enough maize and groundnuts to feed his nine-member family. In his vegetable garden, he also grows sugar cane, onions, squash and other produce which he can sell at the market.

According to Frans Grey, Cargill Zambia's country manager, Phiri is certainly on the right track. 'We tell the farmers that they need to diversify and not just rely on cotton and maize,' he says. Zambian farmers generally have around 1.2 hectares under cotton, amounting to around one third of their cropland. At Cotton School, they learn how to boost their yields, not only of cotton but also of maize, groundnuts, onions and squash. Cargill pays for the fertilisers and pesticides for cotton growing, and the farmers can now use them to grow other crops as well – for after the collapse in cotton prices in 2012, Frans Grey expects the Zambian cotton farmers to reduce the amount of cotton they sow by as much as 40%.

Roger Peltzer, Project Director for the Competitive African Cotton Initiative at the Deutsche Investitions- und Entwicklungsgesellschaft (DEG) in Cologne, is not »



❶ The cotton undergoes initial sorting in the fields. ❷ The mills spin the bales of cotton into yarn many metres long. The grade and quality of the cotton are constantly checked during spinning. ❸ The cotton is wound onto large bobbins and is now ready for the next stage of processing, namely weaving.

quite so pessimistic. Together with GIZ, DEG is responsible for managing the German Development Ministry's contribution to the initiative. But he too is predicting a decrease in cotton growing in Zambia.

Nevertheless, Cargill's country manager Frans Grey points out that despite the fluctuating commodity prices, the number of Cotton Schools has increased from 560 to more than 2,100 since 2009. And that's not all: since joining the Competitive African Cotton Initiative, Cargill has also been supporting a steadily growing number of Cotton Women's Clubs – groups of women who cultivate a jointly managed field and attend weekly meetings where, like the men, they undergo training in sustainable cotton growing methods. 'Women often feel intimidated when men are present. But women carry out four fifths of the work in the fields, so we think it is important to ensure that they are properly trained. And women make better farmers.' Frans Grey's comments are short and to the point.

And indeed, compared with their menfolk, women are often quicker to apply the sustainable growing methods that they have learned at Cotton School. Cargill advisors report, for example, that the women are adept at using the ripper, which produces a shallow depth of tillage and thus minimises soil disturbance compared with a traditional plough. Male farmers, by contrast, are proving slow to adopt this technology.

Sustainable growing methods

Kennedy Kanenga from the Zambia Agriculture Research Institute (ZARI) has also noticed that even after years of training, farmers are slow to adopt modern growing methods. Even so, he is convinced that they are on the right track. In his view, their traditional rain-fed agriculture and crop rotation already provide a sound basis for sustainable cotton growing.

At present, the training for the farmers is part-funded by the partners involved in the

Competitive African Cotton Initiative, including the German Aid by Trade Foundation (see box on next page). Over the long term, however, the Foundation will cover the costs of training from revenue from the licence fees paid by clothing companies to the Foundation in return for the right to produce garments labelled 'Cotton made in Africa'. In 2012, some 20 million garments were made from 'Cotton made in Africa' and sold in the market, and for 2013, the initiative expects this to increase to 24 million garments.

In order to further improve the marketing opportunities for sustainably grown cotton on a long-term basis, the Competitive African Cotton Initiative and 'Cotton made in Africa' entered into a partnership with the global Better Cotton Initiative in 2012. The Better Cotton Initiative pursues similar goals and is backed by global retailers such as IKEA, H&M and Levi Strauss. According to Roger Peltzer from DEG, this will greatly facilitate clothing companies' and retailers' access to sustainable cotton, and, as



> AFRICA

'Cotton made in Africa'



With the 'Cotton made in Africa' initiative, launched by Hamburg-based businessman Michael Otto in 2005, the Aid by Trade Foundation has successfully mobilised a steadily growing group of German and international clothing companies in support of sustainable cotton growing in sub-Saharan Africa. The clothing companies undertake to purchase the cotton, which is produced for the world market in compliance with sustainability and social standards, and pay a licence fee for the right to use the 'Cotton made in Africa' quality label. The revenue from the licence fees pays for agricultural training for African farmers, who learn how to apply effective and sustainable growing methods in accordance with the initiative's criteria; it also pays for verification of compliance with CmiA's cotton growing standards. In cooperation with corporate partners, cotton ginning companies and the public sector, the Aid by Trade Foundation is also investing in social projects, focusing, for example, on education and women's advancement. 'Cotton made in Africa' is supported by the international Demand Alliance and a large network of partners who, from the outset, have included not only the clothing companies but also the German Federal Ministry for Economic Cooperation and Development (BMZ), DEG and GIZ.

👉 www.cottonmadeinafrica.org/en

👉 www.giz.de/themen/en/23283.htm

a result, will permanently improve the living conditions and prospects of hundreds of thousands of smallholder farmers in sub-Saharan Africa.

While the two sustainable cotton initiatives focus on further increasing the demand for African cotton, Solobat Phiri from Sinoya in eastern Zambia will continue to work his cotton field, weeding, applying fertiliser and keeping an eye out for pests. 'Growing cotton is hard work,' he says, and laughs. If everything goes to plan and this summer's harvest is a good one, he intends to put most of the profit aside for his two older daughters, so that they can continue to attend high school. ■

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Competitive African Cotton Initiative



Building on the positive experience gained with 'Cotton made in Africa', the Bill & Melinda Gates Foundation and the German Federal Ministry for Economic Cooperation and Development (BMZ) launched the Competitive African Cotton Initiative (COMPACI) in 2008 and substantially increased the number of participating countries and farmers. GIZ and the Deutsche Investitions- und Entwicklungsgesellschaft (DEG) were commissioned to implement the programme. The Gates Foundation will provide total funding of almost US\$41 million to 2015, with a further US\$25 million coming from BMZ and US\$6.5 million from the Aid by Trade Foundation. Private companies operating in Africa are contributing a substantial share of the funding – more than US\$60 million. By early 2013, almost 490,000 farmers in Benin, Burkina Faso, Côte d'Ivoire, Malawi, Mozambique and Zambia were participating in the programme. Ghana, Cameroon and Tanzania also plan to join the initiative. The target is for 650,000 farmers to have increased their output of cotton and food crops by the end of 2015, thus boosting their income from agriculture. As well as providing training for the farmers in growing methods and business skills, the programme facilitates access to microcredits and supports women and cooperatives. At the end of 2015, all the various donors, with the exception of the Aid by Trade Foundation, will pull out of the programme. The Foundation will then be solely responsible for supporting the African partners with social projects, training and verification of cotton, paid for from the licence fees received from the use of the 'Cotton made in Africa' label.

👉 www.compaci.org



EXPORTING THE ENERGY REVOLUTION

Over the last few years, Asantys Systems GmbH has achieved a tenfold increase in its capitalisation from its sales of solar installations – almost entirely in Africa. The Project Development Programme launched by the German Federal Ministry of Economics and Technology (BMWi) has provided valuable support.

Text Gabriele Rzepka **Photos** Asantys Systems GmbH



Solar power: creating jobs in Africa



With solar energy systems, even remote areas can become energy self-sufficient.



Maintenance and repairs are carried out by local technicians.

The offices of Asantys Systems GmbH, located in a former factory building in Hausach, a small town in the Black Forest, are light and airy. Wooden masks from Africa, brightly painted and adorned with feathers, gaze down on the visitor from every corner. But one's attention instantly shifts to the tender documents piled high on the desk, where one of the Asantys team is busy assembling components for solar power systems – on- or off-grid, it's the client's choice. Columns of data flicker across the screens. Nicolas Rohrer, one of the young company's four managing directors, still has to check the final details before the documents go

in the post. This could be the prelude to another new contract in Africa.

A successful business model

The four young entrepreneurs have focused on Africa since setting up in business in 2009. Their small company sells solar installations to Africa – everything from individual modules and components to complete systems. In 2012, they supplied their products to 26 African countries and achieved sales of €6.5 million. The company has increased its start-up capital tenfold in just three years, but employs just 10 staff and keeps admin-

istrative costs for clients to a minimum. It's clear that when it comes to business, Asantys has both feet firmly on the ground.

Sometimes, Nicolas Rohrer himself is amazed by his company's success: 'When we set up our business, the four of us scraped together all our savings in order to fund the start-up. We had a good grasp of the solar energy business in Africa, but we had no idea how to be entrepreneurs.' The four MDs started out at a solar energy company which suffered financial setbacks and was forced to shed jobs in 2009. Nicolas Rohrer and Johannes Germ are the marketing professionals, while Manel Naceur and »

Thomas Angerer provide the technical know-how. From the outset, the Asantys team has focused on two specific fields of business: it acts as a middleman, supplying solar energy companies in Africa with components, mostly from German manufacturers, and it also offers a complete project management service, from initial consultation to turnkey delivery. ‘Of course we want to

here, selling solar installations to Africa was a logical step. Nicolas Rohrer learned one important lesson in these early years of his career: ‘Personal contacts are the only way to do business in Africa. I do my best business deals with partners in whom I have invested a great deal of time. These partnerships gradually turn into friendships.’

whichever manufacturer you choose. We need reliable products from companies which will still be trading in years to come. That’s the only way to safeguard the long-term business relationships between our suppliers in Germany and our customers in Africa.’

In addition to their role as suppliers, the solar experts are increasingly acting as project developers for solar power plants, buying the components and pre-configuring them in Germany. The real difficulty, however, is finding out about tenders for power plants and other interesting projects in the first place. Here, the support from the Project Development Programme (PDP), which was launched by the German Federal Ministry of Economics and Technology (BMWi) as part of its Renewable Energies Export Initiative and is coordinated by GIZ on the Ministry’s behalf, has been invaluable. Johannes Germ, who is responsible for Asantys’ sales in East Africa, took part in some of the Ministry’s fact-finding visits and very quickly made contact with the political institutions, companies and organisations in East Africa that had specific solar projects in mind. One of them was the SOS Children’s Village in Mombasa. Its governing body had a vision for the Village: a grid-connected solar energy system which provides enough electricity for its own needs and feeds the surplus into the public power network. Asantys submitted a bid and won the contract. The 60 kW system to supply the children with electricity came online in early 2011. Johannes Germ is clearly proud of this achievement: ‘It was a wonderful feeling to see the system up and running. It’s the first installation in Kenya to feed electricity into the grid, so its inauguration really was a special moment.’



Asantys MD Nicolas Rohrer works on a project at company headquarters in the Black Forest (left). Children are the beneficiaries of this Asantys solar installation in Africa (right).

earn money with our business. But it’s a good feeling to know that our work is bringing social and economic benefits as well,’ says Nicolas Rohrer with obvious pleasure.

The entrepreneur discovered his love of Africa early on. After completing a law degree, he went on to study for a German-French Master’s in international economic relations, which was followed by a one-year work placement in Senegal. It set the seal on his passion for Africa. He gained an inside knowledge of the solar energy industry while working as an assistant to the senior management of the German Solar Industry Association. From

From the outset, there was no shortage of contacts with African solar energy companies that were serving the local market. These companies quickly recognised the benefits that a German dealer offering replacement parts and components from many different manufacturers had to offer. Working with Asantys means that the African companies don’t have to negotiate separately with each supplier; instead, they have a single point of contact to supply them with high-quality and technologically sophisticated products. Nicolas Rohrer is a firm believer in the ‘Made in Germany’ brand. As he explains: ‘Good-quality solar modules are expensive,

Know-how transfer – all part of the service

It sounds so simple – but it involved a great deal of hard work and commitment. Besides project development, logistics and installation of the system, the German solar experts also provided training for the fitters and technicians from their Kenyan partner company, who will be responsible for maintenance and repairs in future.

In Kenya, Asantys immediately set to work establishing a company in Nairobi and has plans for further expansion in the Kenyan market. After the system for the SOS Children's Village, Asantys soon won another new contract: an 11 kW system for a hotel in a national park, which also supplies power to 20 local schools. The funding for the project came from the Norwegian development budget. Johannes Germ is very satisfied with the company's breakthrough in the Kenyan market: 'We were able to gain a foothold in East Africa very quickly. But without the BMWi's Project Development Programme, it certainly wouldn't have happened so fast. And the Programme's marketing activities are helping us to achieve more market visibility.'

Building trust

Rohrer and his colleagues have been on a steep learning curve over the last three years. They have learned a lot about the value of human relationships and how different cultures can interact successfully. In Mali, for example, a foundation from the Netherlands provided the funding for solar installations for six villages. Even while the coup was taking place, Asantys moved in with 14 40-foot containers and began to install the systems. Nicolas Rohrer recalls what happened next: 'At the first installation site, work progressed extremely slowly. The technicians from our partner company from Mali weren't at all motivated. They couldn't be bothered, and the training was clearly a chore for them.' So Nicolas Rohrer changed tack. The team leaders from the various sites and one of the technicians came and spent a week in Germany and undertook the training with Asantys. This forged a strong bond between the Germans and their colleagues from Mali and helped to build trust. After that, the work at all the sites was completed without a hitch. Follow-up training was provided on-site and the teams all took part with great enthusiasm and pulled together. 'We learned that we have to create a team spirit between the Germans and their African colleagues. That's the only way to ensure that they communicate with each other, while boosting motivation within the team,' says Nicolas Rohrer.

> PROJECT DEVELOPMENT PROGRAMME

International markets for SMEs



In 2002, the German Bundestag gave the go-ahead for the Renewable Energies Export Initiative, which is managed and funded by the German Federal Ministry of Economics and Technology (BMWi). The Initiative aims to promote state-of-the-art German technology in order to contribute to climate change mitigation while also helping to position German SMEs in international markets.

In 2007, GIZ – on behalf of the BMWi – launched the Project Development Programme (PDP) as part of the Export Initiative. The PDP aims to promote access to markets in developing countries and emerging economies and foster the linkage between foreign trade promotion and development cooperation in line with government policy. This creates a win-win situation: developing countries and emerging economies benefit from technological cooperation and knowledge transfer, and German businesses can access new markets with substantial growth potential.

GIZ provides various services for the BMWi and participating companies: it undertakes market analyses, organises information events in Germany and business visits to the target region where there is potential for cooperation, hosts visits by foreign business delegations to Germany, supports project and market development for the resulting partnerships, and provides advice to partner countries on creating an enabling environment for cooperation. The PDP's current regional priorities are Africa and South-East Asia. In regions where German foreign trade promotion structures are well-established, GIZ works closely with the global network of German Chambers of Commerce and the representatives of Germany Trade & Invest, but in some countries, GIZ itself delivers the full range of services.

👉 www.exportinitiative.bmw.de

👉 www.giz.de/projektentwicklungsprogramm

Now that the four solar experts have earned their stripes in Africa, is it time to seek pastures new? Nicolas Rohrer is already exploring the options. In February 2013, he visited Berlin, together with a delegation of business representatives from the Philippines. Again, the visit was organised by the BMWi's Project Development Programme – based on the positive experience in East Africa, the Ministry has now expanded the programme to South-East Asia as well. Its further expansion to other sub-Saharan African countries is also planned.

For Nicolas Rohrer, the days spent in Berlin were well worth the effort. He held in-depth discussions with a businesswoman from the Philippines and is hopeful that this con-

tact could facilitate Asantys' entry into the local market. He sums up Asantys' experience: 'Meetings are no substitute for a personal visit, which is essential to gain a sense of the local market. But the Project Development Programme opens doors and helps smaller German companies in particular to gain a foothold in markets where the general conditions are often quite challenging.' And after such positive experience in East Africa, he is hoping that South-East Asia will deliver more of the same. ■

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All clear: a state-of-the-art, environmentally friendly oil press in the Moroccan province of Ouazzane



MIGRANTS MEAN BUSINESS

Leaving one's native land takes courage, resourcefulness and flexibility – qualities which migrants in Germany have in abundance. Many of them are setting up in business in their home countries.

Text Rosie Füglein **Photos** Robert B. Fishman

The scene is a meeting room at International Green Week, the leading trade fair for the food and agriculture industry, in Berlin. Aziz Akhannouch, Morocco's Minister of Agriculture and Maritime Fisheries, is sitting on a white sofa alongside his fellow countryman Aziz Chiki, who has spent 22 years of his life in Germany. They are deep in conversation. Finally, the Minister gives Aziz Chiki his word that he will take steps to improve the access roads in Ouazzane province in the north of the country, where, two years ago, Aziz Chiki set up a state-of-the-art, environmentally friendly olive oil production facility. It cost €1.2 million, has capacity to process up to 70 tonnes of olives a day, and employs 30 staff during the harvest season.

Potential for developing countries

Morocco needs people like Aziz Chiki, for they bring investment and innovative ideas into the country, both of which Morocco urgently needs in order to press ahead with its modernisation policies. For the agricultural sector, this policy course is mapped out in the national strategy, known as the Green Morocco Plan (Plan Maroc Vert), which was launched in 2008. The plan is intended to increase value added in the agricultural supply chain, create new jobs and improve Morocco's food security.

But does Aziz Chiki need Morocco? Or, to put it another way, what could have prompted this 40-year-old telecoms engineer, who works as an independent IT consultant in Germany, to venture into Morocco's farm sector? 'I had

been mulling over the idea of breaking into olive oil production in Morocco for nearly 10 years,' Aziz Chiki explains. His father and grandfather were olive oil producers. But family tradition is not his only motivation. 'I want to make some positive changes in my home region, increase the olive farmers' incomes, create new jobs and introduce "greener" production techniques.'

Aziz Chiki's aim is to help the farmers with whom he cooperates increase their incomes from their labour and olive production by one third over the medium term – and he is convinced that this is feasible. Starting this year, the farmers no longer have to transport their olives to a processing facility 45 km away, as they did in the past. This improvement, combined with the fact that Aziz Chiki grew up in the area and speaks the local language, has helped him to gain acceptance as a young entrepreneur in Morocco. And he can't take that for granted, for by introducing new ideas from abroad, he is challenging some of the accepted ways of doing things in Morocco. He sums up his experiences to date: 'It's hard work. I'm short on sleep, but this new challenge here in Morocco is very satisfying and I'm proud of what I'm achieving.'

With its 'Migrants as Entrepreneurs' advisory programme, the Centre for International Migration and Development (CIM) is opening doors for people like Aziz Chiki – and Green Week in Berlin is just one example. CIM facilitates contacts with potential business partners or banks and, if required, provides advisors who can help migrants draw up a sound business or

financial plan, assist with market research and offer other useful tips. Kerstin Schaub from CIM, who has been responsible for promoting migrants' business start-ups for the past four years, explains why the Centre has broadened its scope and is no longer only supporting migrants who are looking for paid employment in their home country after living in Germany: 'Anyone who sets up in business in their home country ultimately facilitates a transfer of knowledge and creates new opportunities. And the demand for business start-up support »

THE CENTRE FOR INTERNATIONAL MIGRATION AND DEVELOPMENT (CIM)

The Centre for International Migration and Development (CIM) is the competence centre for global labour mobility in Germany's international cooperation activities. As its core service, it places technical experts and managers with employers worldwide. It also provides advice and support on migration issues. CIM taps the potential that global migration offers for sustainable development and supports international mobility. It is jointly run by GIZ and the German Federal Employment Agency, bringing together over 30 years of expertise in development and labour market policy.

from migrants has increased over recent years.' In countries such as Cameroon and Georgia, for example, the labour market situation is so difficult that self-employment is often the only viable option for returnees anyway.

Germany provided support for returning migrants' fledgling businesses in the 1980s and 1990s, but this mainly consisted of start-up funding. One of the German programmes, which subjected prospective entrepreneurs to intense scrutiny, resulted in a large number of successful start-ups, but required far too much administrative input. A second programme was less stringent in its assessment of applicants, but many of the resulting start-ups failed over the long term and companies' repayment record also left a lot to be desired. 'Experience has shown that it is not always a lack of money that stands in the way of a successful start-up,' says Kerstin Schaub. Aziz Chiki himself found three investors who helped him secure the €1.2 million in start-up capital that he needed. Like Aziz, all three are Moroccan engineers who trained in Germany. They take a long-term view, make quality a priority, and are convinced that this can only be achieved with technically sophisticated, 'green' production methods.

Suitability check for budding entrepreneurs

Before worrying how to secure the necessary start-up capital, the budding entrepreneurs would be well-advised to work out, first and foremost, whether they are cut out for the business world and whether their business strategy will make them stand out from their competitors. For migrants wishing to start companies in their home country, the main question is whether they are willing to pack their bags and leave Germany altogether – for in practice, the majority quickly abandon the idea of managing their business operations at a distance or commuting between Germany and their home country. 'These are sensitive issues, and this is where our advisory services come in,' says Kerstin Schaub.

Lahoussine Joumane is one of the entrepreneurs who have been sharing their experience of



Lahoussine Joumane (top left) was one of many Moroccan entrepreneurs who gathered information and forged new contacts at International Green Week in Berlin.

returning and doing business in Morocco at the start-up seminars organised by CIM. It's an important role, in his view: 'The advice and contacts – and sometimes, simply someone to encourage me – would have been very useful when I was setting up my business,' he says. Four years ago, the 37-year-old construction engineer, who trained in Germany, set up his company Joumaco in Casablanca. It offers engineering and construction services from one source and now employs 23 staff. Joumaco's specialist area and unique selling point in the Moroccan market is water- and damp-proofing for the construction industry.

For Lahoussine Joumane, the path to self-employment was the outcome of working for someone else: 'If I had set up the business as soon as I returned from Germany, it would very probably have failed,' he admits. The time spent working for another company was essential preparation, helping him to adjust mentally to living in Morocco after nine years in Germany. It also gave him the chance to famil-

iarise himself with the Moroccan market and gain experience and contacts. Learning all the technical terminology in French, after having studied in German, also took time.

Benefits for Germany too

Lahoussine Joumane appreciates the quality of German building materials, equipment and workmanship, and is keen to ensure that he keeps up with the latest technological developments. That's why he is currently engaged in a targeted search for business links in Germany. Ideally, he would like to work with some of the larger German engineering firms so that he can submit bids for major contracts in Morocco. So this year, he took part in one of the fact-finding visits to Germany, organised by CIM under the 'Migrants as Entrepreneurs' programme. He visited architecture, construction and energy technology trade fairs and held business-to-business (B2B) meetings at the chambers of commerce and industry, mainly with German companies that are keen to break into the Moroccan market but lack the crucial contacts, market knowledge and language skills. For these companies, people like Lahoussine Joumane are ideal partners.

'The opportunities for international trade relations that arise from cooperation with migrants like Lahoussine Joumane and Aziz Chiki are underutilised at present,' Kerstin Schaub concedes. One reason is that the image of migrants as kiosk owners or vegetable sellers is still deeply rooted in German minds, even though the reality is often very different: many migrants nowadays have not only a better education but also bigger ambitions. ■

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Lahoussine Joumane (right) and his business partner inspect a construction site at industrial premises in the Tanger-Med cargo and passenger port in Tangier.



CHANGING PERSPECTIVES

In view of the global challenges ahead, decision-makers need to 'think outside the box', look at issues from a different perspective and initiate the necessary change processes. The Global Leadership Academy can help.

Text Felix Sommer **Illustration** Denise Graetz

The international community faces massive challenges – climate change, global financial crises, threats to international security – and the key decision-makers tasked with finding solutions must weigh up their options very carefully, with a clear awareness of their responsibility. 'Nowadays, genuinely effective solutions must be increasingly based on outstanding innovation and leadership capacities. Decision-makers all over the world must be able to leave the mindsets of the past behind and create scope for new policy approaches. They must think globally and be willing to embrace and pioneer fundamental change within their own area of action and also in the wider arena,' explains Heiko Roehl, Director of GIZ's Global Leadership Academy.

Pioneering change

The global programme, which is funded by the German Federal Ministry for Economic Cooperation and Development (BMZ) and implemented by GIZ, offers practical interdisciplinary courses for key figures from politics, business, research and civil society, and aims to improve their innovation and leadership skills. At the Academy, the leaders come together in order to identify and overcome the limits to their own thinking on global issues. By shifting their perspective, they are better able to initiate the change processes that are necessary and move towards a different standpoint on the various dimensions of social and economic transformation.

The dialogue processes facilitated by the Leadership Academy take the participants to many different countries of the world, including Morocco, Tunisia, Brazil and Bhutan. One of the highlights of the programme is the Passion and Politics Lab, held in conjunction with leading methodology experts from the US-based Deep Democracy Institute over an 18-month period. The Lab asks questions such as these: how can leaders in politics and society adjust to the fact that change processes are sometimes very tentative or conflicted, and that in some cases, their personal commitment, passion and ideals may be compromised? What strategies can be adopted to guard against frustration? What are the factors which make restructuring and transformation so problematic, especially in traditional societies? These are highly topical issues, especially in view of the current dramatic upheavals taking place in the Arab world, which is why all 25 participants in the Passion and Politics Lab come from this region.

In the wake of the Arab Spring, many people who have recently moved into leadership roles and those who see themselves as 'change agents' within their sphere of responsibility are keen to engage in an exchange of experience and are seeking opportunities to learn and benefit from other countries' know-how.



PHOTOS: NARVIKK, JCARILLET, ALL ISTOCKPHOTO

The Global Leadership Academy programme structures its dialogues and learning processes in a way which builds leaders' skills in a targeted way, based on an individualised approach. Besides the focus on values, great importance is attached to methodology and process management skills and the ability to support and facilitate complex systemic change. Developing a broader understanding of change processes in social groups, larger organisations or, indeed, in entire social systems is also essential.



As a key element of the Passion and Politics Lab, and in order to underscore the practical relevance of the learning experience, participants devise a model project that specifically relates to their own organisation and which they implement and further develop between Lab meetings. They then exchange ideas and

experience in dedicated online dialogue forums before meeting again at various locations in the region, such as Rabat and Tunis.

Measuring quality of life differently?

Another offer from the Global Leadership Academy – the Global Wellbeing and GNH Lab, run in conjunction with the Presencing Institute founded by Otto Scharmer at Massachusetts Institute of Technology – focuses on a very different context. There are various views on how to measure a society's living standards and wellbeing. The metric generally applied is gross domestic product (GDP). However, a number of countries are now applying a mix of complementary material, social, cultural and, indeed, environmental parameters to measure national wellbeing and progress. These concepts are explored at the Wellbeing Lab. The associated dialogue lasts more than a year and is conducted by a group of decision-makers and leaders – hand-picked in a complex selection process – at regular meetings, learning journeys, discussion events, individual consultations and online exchange. In the Lab, 25 leaders from international politics, business, civil society and academia focus intensively on issues relating to global wellbeing and sustainability.

The Wellbeing Lab started with a learning journey to Brazil in January 2013. The visit was intended to progressively encourage the group members to move out of their comfort zone – their habits, routines and entrenched ways of thinking – and to develop a fresh and open perspective on various problems and potential solutions. Whether in a discussion with slum dwellers in Rio or with members of the Atodí community deep in the Amazon, the participants investigated which models, other than the growth-centred metrics customarily applied, can better reflect people's specific realities and quality of life, and what leaders and change agents can do to increase human wellbeing.

The aim is to encourage participants to develop new ideas – whether it is the Programme Director of the Gross National Happiness Centre in Bhutan, a manager at Oxfam India, the founder of a fashion company in the USA, or an advisor to Brazil's Environment Ministry, in other words, people for whom the issue of 'wellbeing', in all its dimensions, is a familiar topic. The Lab also encourages the formation of support networks which are intended to ensure that the 'prototyping' ideas and solutions developed by participants during the Lab experience are not undermined by potentially constraining institutional realities back in the workplace. After all, a broad impact can only be achieved if the organisations and systems behind the people also change.

The Global Leadership Academy is an important element of GIZ's portfolio of international human resource development services. Besides the partners already mentioned, the Academy is also contributing to other programmes, for example in cooperation with the Nelson Mandela Foundation, based in Johannesburg. Consistent networking between participating individuals and organisations increases their scope to exert influence in the long term and their opportunities to contribute to positive change – and helps them to develop a fresh perspective on solutions to major global issues. ■

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👉 www.giz.de/leadership-academy



> BONN INTERNATIONAL SUMMER SCHOOL

Responsible business

Sustainability is an important success factor for businesses that compete on the global stage. The second Bonn International Summer School on Responsible Business (BISS), to be held from 20 to 23 August 2013, will address the challenge of developing appropriate market-oriented solutions. Organised in conjunction with leading business services provider Ernst & Young, this summer school offers an opportunity for around 100 business leaders and young professionals from the private sector in industrialised and emerging countries to come to Bonn and, together, to define effective and practical solutions, based on their own experience. The programme will also feature talks and discussion sessions with guests such as Peter Bakker, President of the World Business Council for Sustainable Development, and John G. Ruggie, Professor in Human Rights and International Affairs at Harvard University and,

since 2005, Special Representative of the UN Secretary-General on Human Rights and Transnational Corporations and Other Business Enterprises.

More and more business leaders are recognising the crucial importance of sustainability along value chains and the role of new, sustainable business models in safeguarding the competitiveness and future viability of their organisations.

Information and registration at:
www.bonn-summer-school.com



> RECOMMENDED FILM

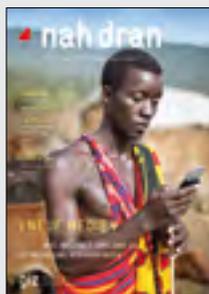
Chimpanzee

A young chimp named Oscar is the star of *Chimpanzee*, a DisneyNature production on general release from early May. This feature film from nature film producers Alastair Fothergill and Mark Linfield tells the story of wild chimpanzee families in their natural environment. The film was shot mainly in Taï National Park in western Côte d'Ivoire, the last remaining area of extensive primary rainforest in West Africa. The National Park's existence is one of the successes achieved by German development cooperation. On behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), GIZ was actively engaged in the founding of the National Park, working closely with KfW and the Wild Chimpanzee Foundation established by primatologist Christophe Boesch.

www.disney.co.uk/disneynature/films/chimpanzee/

GIZ PUBLICATIONS

These publications can be downloaded or ordered free of charge from www.giz.de/publications.



nah dran – profiling the work of GIZ's Development Service
 Available in German.

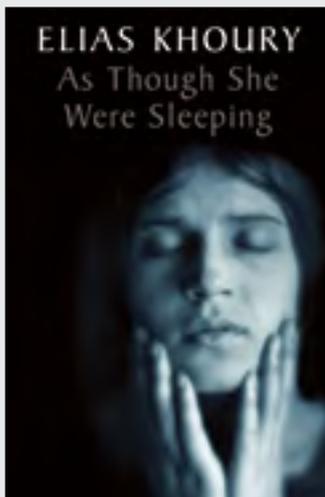
April saw the publication of the first issue of GIZ's magazine *nah dran*, the successor to GIZ-Brief. With a new format and content, the magazine is aimed at a general readership with an interest in development issues, and at prospective development staff.

As the magazine's unique selling point, the articles – some serious, some humorous, but always informative – are written by development advisors themselves from all over the world. The first issue focuses on new media.



Informal service providers in Tanzania
 Dr Dirk Pauschert, Katrin Gronemeier and David Jebens
 Available in English.

In many cities and urban areas in Tanzania, the water supply is crucially dependent on small-scale informal service providers (ISPs). This report examines the importance of these providers in Tanzania, provides an overview of the various types of ISPs in the water sector and their structures, and analyses their role in the context of general service provision in Tanzania.



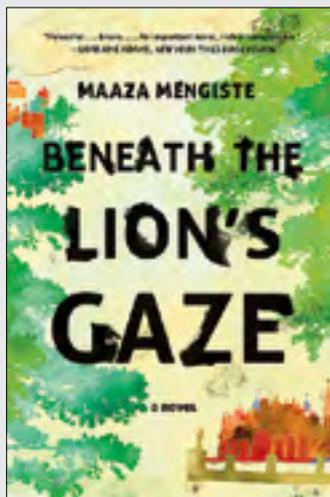
> RECOMMENDED READING*

As Though She Were Sleeping

Elias Khoury, Lebanon
Novel.

1946: A young Lebanese woman marries the Palestinian Mansour – shortly before the creation of the state of Israel. She seeks safety by retreating into her world of dreams, but her life ultimately becomes tangled in politics all the same. Or is that also just a dream? A highly poetic novel, highlighting the power of literature in the face of political trauma.

Claudia Kramatschek, literature critic and arts journalist



> RECOMMENDED READING*

Beneath the Lion's Gaze

Maaza Mengiste, Ethiopia
Novel.

Ethiopia, 1974: When the monarchy is toppled, a communist regime comes to power. Families fall apart at the ideological divide. When the son of the famous doctor Hailu joins the communists, Hailu suddenly finds himself an enemy of the state and is imprisoned and tortured. The novel sheds sensitive, artistic and differentiated light on Ethiopian history.

Claudia Kramatschek, literature critic and arts journalist



> RECOMMENDED READING*

Eles eram muitos cavalos (not available in English)

Luiz Ruffato, Brazil
Novel.

Ruffato's staccato rhythms lend vibrancy to his city, São Paulo. The novel presents an account of what he observes there in a single day: a pampered son, the jobless, the thieves, the working class, a desperate mother, the decay – and the cacophony of the big city.

Ruthard Stäblein, arts editor

* litprom – the Society for the Promotion of African, Asian and Latin American Literature – provided the reviews for akzente. The titles were selected from litprom's list of best new novels. www.litprom.de



Urban agriculture – 1950 to 2050

Beate Wörner
Available in German.

The symposium 'Urban agriculture – 1950 to 2050: from allotments to sky farming' explored different models of urban farming. This report provides an overview of the stage reached in the debate and describes the opportunities and challenges

associated with urban agriculture as a method of food production.



Green Economy in Sub-Saharan Africa

Johanna Klein, Philippe Jochaud, Harald Richter, Ronny Bechmann and Stephanie Hartmann
Available in English.

This study focuses on five African countries and their potential for a Green Economy and provides an overview of the status quo of green economic approaches. The countries selected –

Benin, Ethiopia, Ghana, Namibia and Nigeria – are highly disparate in terms of their geography, economy, size, population and overall development progress.



ANGELA OSTLENDER,
DEVELOPMENT ADVISOR

'A WELL-FUNCTIONING CIVIL SOCIETY depends on people valuing and making use of their rights to make their voices heard,' says Angela Ostlender. The 48-year-old has worked as a GIZ development advisor in Hanoi since November 2012. Thanks to the country's booming economy, the pressure of change in many areas is immense. 'We want to help ensure that citizens have a say and that government agencies take their concerns seriously,' she explains. Angela and her team provide advice to local organisations wishing to help build the capacities of the country's civil society. The work involves preparing funding applications, planning and monitoring activities, and checking on progress. With a wealth of professional experience, Angela, who is from Germany, is keen to share her expertise. Before GIZ, she worked for a political foundation in Brussels for 20 years. She has taken a two-year leave of absence to work as a development advisor in Viet Nam. 'I had a real desire to work at the grassroots level in another country.' Now she is at the heart of the action, racing through Hanoi's rush-hour traffic on her motor scooter. 'My heart was in my mouth at first, but now it's great fun. There's only one rule of the road – never stop!'

Text: Diana Laarz, Photo: Sascha Montag

👉 GIZ is always keen to recruit experienced and newly qualified professionals for its Development Service. Visit our 'job opportunities' pages: www.giz.de/en/html/jobs.html

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ANKE KLUSS is a photographer and graphic designer. She photographed Helon Habila at the Festival of African Literature in Frankfurt am Main (page 26).



SASCHA MONTAG is a freelance photographer. He took the photo of development advisor Angela Ostlender in Viet Nam (page 46). www.saschamontag.de



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PETRA HANNEN is an expert in resources, energy and consumption. She brings us down to earth with her article on soil (page 14). www.satzblei.de



DIANA LAARZ loves Eastern Europe and has lived in Moscow since 2009. Her profile of Angela Ostlender appears on page 46. www.zeitenspiegel.de



MURALI NAIR is a postgraduate from India, living in Germany. He took the photo of the herd of sheep on the outskirts of Delhi (page 28). www.nairshoots.de



PETER SEIDEL is the political editor of the *Kölner Stadt-Anzeiger*. His report on cotton farmers in eastern Zambia appears on page 30.



FELIX SOMMER works for GIZ's Global Leadership Academy, which he profiles for this issue of *akzente* (page 42).

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PREVIEW

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SECURITY GIZ is increasingly active in countries affected by conflict and violence. In these locations the environment is not always secure and the success of the activities depends in part on which of the many actors – who often have different interests – should

be included in the process and how. The next issue of *akzente* sheds light on the work of GIZ, which also carries out projects in fragile environments for its various commissioning parties.





The area of land used for agriculture worldwide has risen by 12% over the last 50 years, and with modern production methods, harvests have tripled, thanks largely to increased yields in America, Europe and Asia. By 2050, food requirements will have risen by a further 60% – but the available land per capita will decrease.