15th Evaluation Report 2017–2018

For greater impact in smaller towns and cities

Bank aus Verantwortung

KFW

2017/2018 evaluations at a glance

The distribution of the FC projects evaluated ex post in 2017 and 2018 by sector reflects the priorities of FC work in previous years. The average ratings vary by sector. The health sector leads the way and the energy sector ranks last.

Total

181 projects

EUR 2.8 billion

Total funds

2.8

Average rating

Health

36 projects

EUR 573 million

Total funds

2.2

Average rating

Water, sanitation and waste

33 projects

EUR 445 million

Total funds

2.8

Average rating

Other

26 projects

EUR 382 million

Total funds

3.1

Average rating

Agriculture & environment

23 projects

EUR 142 million

Total funds

2.8

Average rating

Education

17 projects

EUR 277 million

Total funds

2.9

Average rating

Financial system

17 projects

EUR 369 million

Total funds

2.7

Average rating

State and civil society

16 projects

EUR 255 million

Total funds

2.9

Average rating

Energy

8 projects

EUR 292 million Total funds

3.5 Average rating

Transport and storage

5 projects

EUR 81 million Total funds

3.2 Average rating

Distribution of grades for the projects

0% 100%

Grades: 1 2 3 4 5 6

We finance development

KfW Development Bank's commitment

Activities, partners and projects

KfW has been supporting the German Federal Government in implementing its development policy goals within the framework of Financial Cooperation (FC) since 1960. We combine financing know-how with development policy expertise. On behalf of the German Federal Government, and primarily the German Federal Ministry for Economic Cooperation and Development (BMZ), we promote and support programmes and projects that mainly involve public sector players in developing countries and emerging economies.

We support our partner countries starting from the design of the development project to its financing, all the way to the implementation on our partners' responsibility.

Our goal is to create better living conditions in developing countries and emerging economies while protecting the climate and the environment at the same time. There is a wide range of promoted FC measures, including support for Syrian refugees in the Middle East, municipal development in Western Africa, environmental and resource conservation in Latin America as well as vocational training programmes in Southeast Asia.

Financing

KfW Development Bank committed EUR 8.69 billion for new projects in 2018 of which EUR 2.94 billion came from the German federal budget, EUR 0.48 billion from other sponsors and EUR 5.27 billion from KfW's own funds, which KfW raises on the capital market.

The Evaluation Unit: internal yet independent

This report was written by KfW Development Bank's Evaluation Unit (German acronym: FZ-E) and provides an overview of its work in 2017/2018. KfW's Evaluation Unit reports directly to the Executive Board of KfW Group. It is headed by an externally recruited expert from academia and works independently of the operational regional divisions of KfW Development Bank, which are responsible for supporting, planning, and implementing the projects in the partner countries. For its evaluations, the Evaluation Unit relies on its own staff and commissions independent experts. These experts may be employees from KfW Development Bank's operational departments or independent specialists, but must never be individuals who have been previously involved in the project themselves. Since 1990, the evaluations' findings have been published and are summarised in an overall success rate.

Transparency is our priority.

In the KfW transparency portal for development financing, we provide up-to-date information on the origin, use and impact of our promotional funds by country, sector and project:
http://transparenz.kfw-entwicklungsbank.de

German and English summaries of all evaluation reports published since 2002, categorised by country, can be found online at:
https://www.kfw-entwicklungsbank.de/International-financing/KfW-Development-Bank/Evaluations/Results/

Foreword

Prof. Dr Joachim Nagel
Member of KfW Group's Executive Board

Dear Readers,

Not so long ago I was in India again and experienced first-hand how tough life in the big cities can be. In New Delhi there are not only slums right next to modern office architecture, this city of 16 million people is also suffocating from traffic and air pollution. Living and breathing there is said to be like smoking 50 cigarettes a day – completely unacceptable. The situation is similarly depressing in many other megacities around the world, from Mexico City to Beijing, from Cairo to Lagos. Cities everywhere are growing at an unprecedented rate, most quickly in Asia and Africa.

However, looking at these and other vibrant global cities glosses over the fact that urbanisation in developing countries is taking place even more rapidly in smaller cities and regional centres, so-called intermediary cities. Large metropolises like Lima, Addis Ababa and Jakarta are not the only cities undergoing swift growth – the Trujillos (Peru), Hawassas (Ethiopia) and Bandungs (Indonesia) of this world are also experiencing a particularly rapid influx of people. Yet the former have become much more deeply entrenched in public awareness, while the challenges of medium-sized cities are often forgotten. And this is despite the fact that, in absolute terms, half of the world's urban population lives there.

Neglecting this type of city would be a mistake, not just because they are often the first port of call for people from rural areas who want to migrate and who move on if they do not find what they need to live. So starting in smaller cities pays off for many reasons, also with regard to development cooperation. The latest Evaluation Report highlights the achievements Financial Cooperation (FC) has already made.

But as is customary in the evaluation reports, it also points towards further needs for action: our projects in medium-sized towns and cities often tackle infrastructure or social services, including efficient water supply as well as health centres or local transport. Yet despite numerous individual successes, the development of the city as a whole is frequently neglected. This refers to the interplay between different aspects that make a city worth living in for all its residents – from security and governance to infrastructure and jobs to opportunities for leisure and recreation. These are certainly some of the key findings of this year's report.

In order to better understand the exact challenges facing "intermediary cities", the FC Evaluation Unit initiated a research collaboration with the Technical University of Darmstadt. Seven medium-sized cities in five countries on three continents were examined in detail, highlighting the factors that are decisive for sustainable urban development. Cooperating with universities in this way is particularly valuable for FC because it complements FC's own evaluations and provides additional insights.

This year's report on urban development goes beyond individual cases to shed light on issues that are of general relevance. Given the ongoing trend towards urbanisation, it is clear that cities are engines of growth and progress. That said, they also consume a large proportion of all resources and emit 75 per cent of greenhouse gases. The processes and developments taking place within cities in the next 15 to 20 years will influence us all. Therefore it is even more important to deal with them at all levels, not just with the megacities. This report contributes in its own way to this effort.

Finally, it includes the ever interesting results section on FC projects and the the chapter "Thematic workshop" which particularly highlights how digitalisation can enrich the evaluations.

Joachim Nagel

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Prof. Dr Nagel at a refugee camp in Jordan. Commitment in a fragile context, a key pillar of the work at KfW Development Bank.

Interview

Independent, but not detached

Evaluation as an important learning tool, especially in a turbulent world

It's not always flattering when development projects are rated, but it's always valuable – because evaluating helps to avoid mistakes in the future. In a lively discussion, the head of the Evaluation Unit, Professor Dr Eva Terberger, and member of the KfW Executive Board Professor Dr Joachim Nagel analyse the benefits of evaluations, their significance for Financial Cooperation (FC) and the world of tomorrow.

How important are evaluations for FC, and what in particular do you appreciate about them?

Nagel: Evaluations are at the core of what we do at the development bank because, with regard to FC interventions or FC projects, it is ultimately all about what effects they have. We use the evaluations to check whether what we imagined at the beginning of a project was actually achieved. In so doing we measure ourselves against our own claims and goals – and of course, against those of the Federal Government who commissions our work. At the same time, we document for the public how we work and how we use the funds entrusted to us. In this respect, the evaluations are very important.

Evaluations always sound good for reasons of transparency, objectivity and integrity. Are you not just paying lip service?

Terberger: No. Our evaluation results are taken seriously. They are reflected upon and used for ongoing work at the development bank. Sometimes the operational departments even ask if we could take a look at a project, and we're particularly proud of that. From the outside though we receive far fewer reactions to or inquiries about our reports. I regret that.

Critics consider evaluations of this kind to be tokenism. What would you say to them?

Nagel: Such criticism annoys me because it shows their ignorance. The evaluation reports are not courtesy reports. They have substance and can sometimes be painful to read. By no means do the results always turn out as desired; but evaluations are about the willingness to be self-critical and continue developing. We are ready to do that.

Terberger: Evaluations are a very effective learning tool. We give feedback to the bank, and time and time again we see evaluation impact: the designs of follow-up projects have been adapted and made more incisive.

Can you give some examples?

Terberger: In my early years here, the evaluations of sewage treatment plants often bemoaned the lack of concepts for the disposal of sewage sludge, because sewage sludge stored under unprofessional conditions can be a risk. Today, the planning of every sewage treatment plant is accompanied by a concept for sewage sludge disposal. Evaluation results have also helped to tailor "green finance" projects: small, standardised energy-efficiency measures require different promotional schemes than larger investments in renewable energies. And I could go on.

Prof. Dr Eva Terberger
Head of the FC Evaluation Unit since 2006.

Mr Nagel, you have now been a member of the KfW Executive Board for around one and a half years. What have you learnt yourself from the evaluations?

Nagel: First and foremost I have learnt that development cooperation is a process and that you need a lot of patience. This is demonstrated quite clearly by the reports. Projects often run well initially, but then occasionally drift in the wrong direction: this can be due to the local partners, but circumstances can change as well. Achieving the intended effects is always a new challenge.

Terberger: Especially since KfW often works in fragile contexts. There you have to take higher risks and you achieve your objectives less often, but it is still extremely important to remain committed.

Nagel: I would go even further: failure is part of our work, especially in fragile states. That obviously doesn't mean burning through taxpayers' money, but not every measure ends successfully. Yet if we draw the right conclusions from a poor evaluation, we have learnt something for the future. We know that almost one in every four people lives in a fragile environment today, and that this proportion will increase in the coming years. In terms of what awaits us, evaluations play a very important role. Findings that we make today about our work, our strengths and our weaknesses can make our projects of tomorrow more stable and effective, especially in a turbulent world.

Prof. Dr Joachim Nagel
Member of KfW Group's Executive Board, responsible for KfW's international business.

"Yet if we draw the right conclusions from a poor evaluation result, we have learnt something for the future." »»

Prof. Dr Joachim Nagel

Under such circumstances, how important is it to show results quickly?

Nagel: It's extremely important. Speed is a key factor in stabilising the situation. People have to see and feel that they are supported and that their living conditions are improving. We have to be even faster in such contexts and avoid the delays that we see again and again, even with projects in troubled regions. Such delays are sometimes caused by external factors, other times we are responsible, it's our own processes. We're working on this.

Terberger: I can only agree. This is why results quickly being visible is an important evaluation indicator for assessing the effectiveness of interventions in fragile contexts.

The world is unsettled and it is becoming more complex and diverse. Nevertheless, the FC Evaluation Unit continues to work with simple yardsticks such as ratings and a general success rate. Does this help you, Mr Nagel?

Nagel: A kind of rating scale, a label, always helps. The first thing I look at is how a project is rated. You read more intensively if a project has received a very good or a very bad rating.

Terberger: A distinction must be made between the classifications of individual projects, which are based on differentiated data and observations. And then you have the success rate, which we estimate using statistical standards based on the evaluated random sample of projects. I don't like to focus on the success rate because

“I would want the evaluations and their ‘lessons learnt’ to be more visible to the outside world.” »»

Prof. Dr Eva Terberger

– “Absolutely.” »»

Prof. Dr Joachim Nagel

it is easily misunderstood. As I said, risk and sometimes failure are part and parcel of development cooperation (DC). Nevertheless, a success rate of 77 per cent is often interpreted as meaning that we “made a mess” of 23 per cent of all projects, as a headline in the press once read. Anyone who writes something like this overlooks the risks that FC has to take in order to remain innovative and successful.

Nagel: Development cooperation can be compared to venture capital, except our success rates are better.

The evaluations usually take place quite a long time after the end of a project. Might it not be necessary to start earlier, possibly with interim evaluations, to increase the effectiveness of projects?

Nagel: I’m a big fan of this because you can make adjustments and adapt projects in time. It is not possible on a large scale with the existing capacities, but we should try to do this more often than before.

Terberger: However, we must be careful that the evaluations do not monitor construction progress or even become “high-level enforcers” of controls. We need the confidence of our colleagues so we can work. We need to be independent, but not detached. An evaluation unit of know-it-alls is incompatible with our approach of learning together.

How do you guarantee the independence of the evaluation unit if you are also part of the organisation?

Terberger: Independent evaluation for us means never having had responsibility for the project being evaluated. As a special feature of FC we have put a peer evaluation system in place: someone who has operative responsibility for the electricity sector in Asia for example evaluates an energy project in Africa. We call this internal delegation to the evaluation unit. This means we have independent experts with a great deal of knowledge about FC, and the great thing is that the evaluation experience flows back into their operative work. They are essentially able to refocus on impacts as the core objective of FC.

Nagel: For me, the evaluations being independent is a great asset. I would never consider interfering. The evaluations and the results are sacrosanct for me. I take note of them, but I would never insist on changing a rating, turning a four into a three.

Terberger: I’ve never experienced this in all these years, not once.

How could the evaluation work be made more attractive?

Terberger: I would want the evaluations and their “lessons learnt” to be even more visible to the outside world. We could do better here.

Nagel: Absolutely. The issues are global, they are important, they affect us all. We should reconsider our formats and forms of communication. Perhaps we should become more visual, make even greater use of digitalisation potential – for the evaluations themselves, but also for their publication.

Ms Terberger, you will be retiring in the summer of 2019. What else would you like to hand on to your successor?

Terberger: A plea to maintain and further develop evaluations as a learning tool, and the hope that the new head of evaluation will experience the task as enriching as I do.

The interview was conducted by Friederike Bauer.

In a troubled region of the world, the evaluation attaches importance to making results visible quickly, for example in supporting Syrian refugees in Jordan.

On evaluation mission

Going local
Visiting project areas and talking to beneficiaries is an integral part of our evaluations, like here to a family in Malawi.

Evaluations around the world

From the Brazilian rainforest through the conflict-ridden Eastern territory of the Democratic Republic of the Congo to poor areas in Qinghai in rural China – the evaluated Financial Cooperation (FC) projects are distributed almost everywhere around the world. To encourage learning from evaluations for current and future FC projects, employees at KfW Development Bank carry out evaluations on behalf of the independent evaluation unit – but only if they had no prior involvement with the evaluated project to ensure their independent perspective. Six employees report on their evaluation experience below:

Lamia Boufaied
Armenia – renewable energies

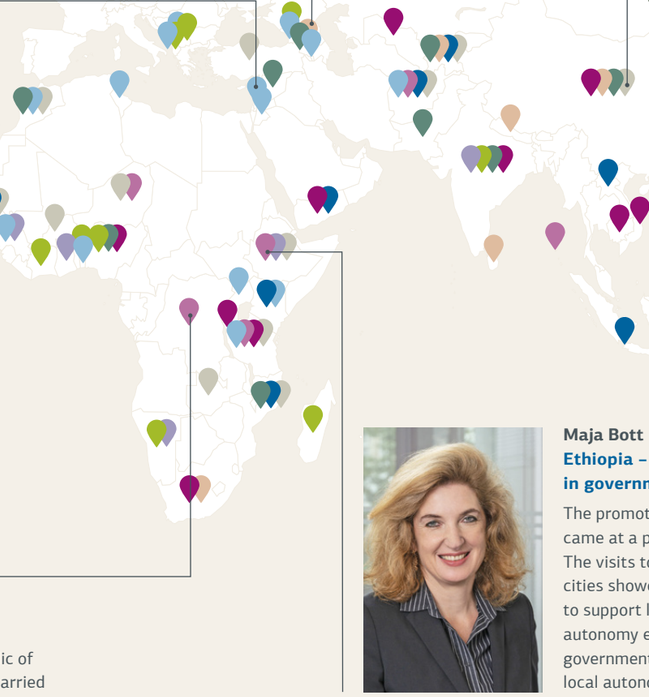
The ex post evaluation I conducted as a local expert in 2017 offered me a great opportunity to learn about new FC contexts. During the evaluation of FC-financed small hydropower plants we encountered a professional and performance-focused executing agency that was also perceived very well in the partner country. Unfortunately, however, we also identified some negative environmental impacts because there were no fish ladders and the residual water discharge at some locations was too low. The evaluation helped me make some important further development on my way to assuming more responsibility in FC projects as a project manager today.

Dr Anja Hanisch
Palestinian territories – water supply

Water shortages severely limit the development of the Palestinian territories. There is a fundamental conflict between Israel and the Palestinian territories over the distribution of the scarce water resources in the region. The project in Tulkarem integrated the conflict potential in a sensitive manner as it focused on rehabilitating existing well components, and did not explicitly target a higher yield. Result of local analyses: the water supply has improved, but the reasons for the distribution conflict cannot be solved in this way.

Dr Ralf Orlik
China – rural development

This was one of the last projects financed using budget funds in fast-developing China: deep into the far west of the country, livestock farming and water supply were promoted in particularly poor districts in Qinghai. I was amazed at the contribution the project was able to make, even though the importance of wage work is increasing as a result of migration to the cities. Credible anecdotal evidence was given and indications revealed how the project has improved the situation of family members who stayed at home, particularly since seasonal fluctuations in income or loss of wages due to illness can now be compensated for.



Dr Martin Lux
Brazil – ecological corridors

I took part in a mission in Brazil to evaluate several projects protecting biodiversity and nature in the tropical rainforest. We were able to get first-hand experience of how crucial it is for the project's success that the local population are involved and support the protection of nature. If this is successful, the rate of deforestation in protected areas can be significantly reduced. To ensure the support of the local population it is important to respect their existing rights. Additionally, the population must not lose out; instead, livelihoods should improve together with forest protection.

Stefan Kliesch
DR Congo – Peace Fund

In the conflict-ridden Eastern territory of the Democratic Republic of the Congo, FC financed social and economic infrastructure. We carried out a "remote evaluation" based on an existing econometric impact assessment since large parts of the project area were not accessible for security reasons. The evaluation showed me how difficult it is to implement projects to bring about stability, reduce conflicts in a fragile context and also to verify the impact. At the time of the evaluation I was an FC trainee. Now, in my day-to-day operational work, I greatly benefit from this learning experience.

Maja Bott
Ethiopia – building capacity in government administration

The promotion of Ethiopian municipalities came at a politically difficult time.
The visits to five of the eleven project cities showed that it is not very promising to support local governments in their autonomy endeavours if the central government's commitment to increased local autonomy is lacking. This was not the only sobering experience. The developed infrastructure is used a lot and the cities are cleaner than before, but the operation of wastewater treatment plants and landfills revealed environmental and health risks, some of them severe. In this respect, the will to reform was unfortunately lacking as well.

2017/2018 Evaluation

- Health
- Water supply and sanitation/waste management
- Agriculture and environment
- Education
- Financial system
- State and civil society
- Energy generation, distribution and efficiency
- Transport and storage
- Other

Young people in rural Laos have a long road ahead of them: the vocational schools are trying to create future prospects for the Laotian youth.

Evaluation in Laos

A (vocational) training journey of a special kind

German FC has supported vocational training schools in Laos with infrastructure and equipment since 2006. An initial evaluation in 2014 shed light on some rather disappointing results of the support. The next evaluation took place in 2018: could the initial difficulties in vocational training in the centrally planned economy of Laos be overcome? Are the vocational schools now sufficiently attended and do graduates find a suitable job? In search of the answers, our education expert embarked on a long journey across Laos.

“Willkommen in Laos!” (Welcome to Laos!) 8,400 km away from her workplace in Germany, our evaluation expert is greeted in German, a genuine surprise at the Ministry of Education in the capital city of Vientiane, her first port of call. She finds out from her hosts that it is not at all uncommon for senior civil servants in Laos to speak German. In the 1980s about 2,000 Laotians were trained in the German Democratic Republic (GDR). Studying in Germany was considered a privilege. In return for this, one thing was very clear: the knowledge was to be put to good use once home from Germany. During their studies abroad, the ministerial staff also familiarised themselves with the dual vocational training system in Germany. For many years they have been working in their home country to implement this model of complementary theoretical and practical knowledge, adapted to the Laotian setting.

This is not an easy task, as illustrated by the KfW Evaluation Report from 2014. The first vocational training projects in Laos performed rather poorly as fewer pupils visited the schools than originally expected. Some of the supplied equipment, such as tools and machines, had not been unpacked, even years after their delivery. The needs of the labour market were clearly overlooked in the

Journey to vocational schools in remote parts of Laos.

design of the individual training courses. The 2014 evaluation report nourished the fear that vocational training in Laos would not become a German export success story but instead turn into more of a shelf-warmer. Fortunately though, in 2018, our evaluation expert has some new and more optimistic information in her bag. Weeks before leaving for Laos, an online survey was conducted from Frankfurt. Laotian students, graduates and employers were interviewed anonymously online about their perceptions and experiences with vocational training. And just like the greeting in German, the results of the survey were a pleasant surprise. The vast majority of the respondents were very positive. Receiving an education at one of the still rather new schools in Laos seems to have helped many young people become (self-)employed: repairing cars, cultivating mushrooms or working in restaurants, for example. The employers seemed satisfied as well.

Thus the KfW expert and the Laotian project partners were really keen to start their tour of the vocational schools. Would the positive impressions of the online survey be confirmed, or has little changed compared to the rather disappointing situation in 2014?

The mission was ready to go at Vientiane airport for the 70-minute flight to Sam Neua in the north of the country (see figure 2.1). The sky is blue, which is a good sign because here they still fly by sight; there is no air traffic control from the ground. Nevertheless, the flight is cancelled, safety first. The mission has to change its plans. It is not possible to drive by car from Vientiane to Sam Neua in one day. With the calm and serenity customary of the Lao people, the carefully prepared schedule is turned upside down: a journey of eight hours through the mountainous Laotian landscape will now take the mission to the vocational school in Phonsavan in the province of Xiengkhouang. From there they can drive on to Houaphan to visit the school in Sam Neua. The journey is long and arduous. The occasional village rushes by between forests and plantations. Yet the long time on the road is also an opportunity for our evaluation expert. There is a lot of time to get to know the project partners better and get answers to all her questions. Why is there a vocational school in every remote province? Why are the curricula always the same? Can vocational training be organised in a centrally planned economy?

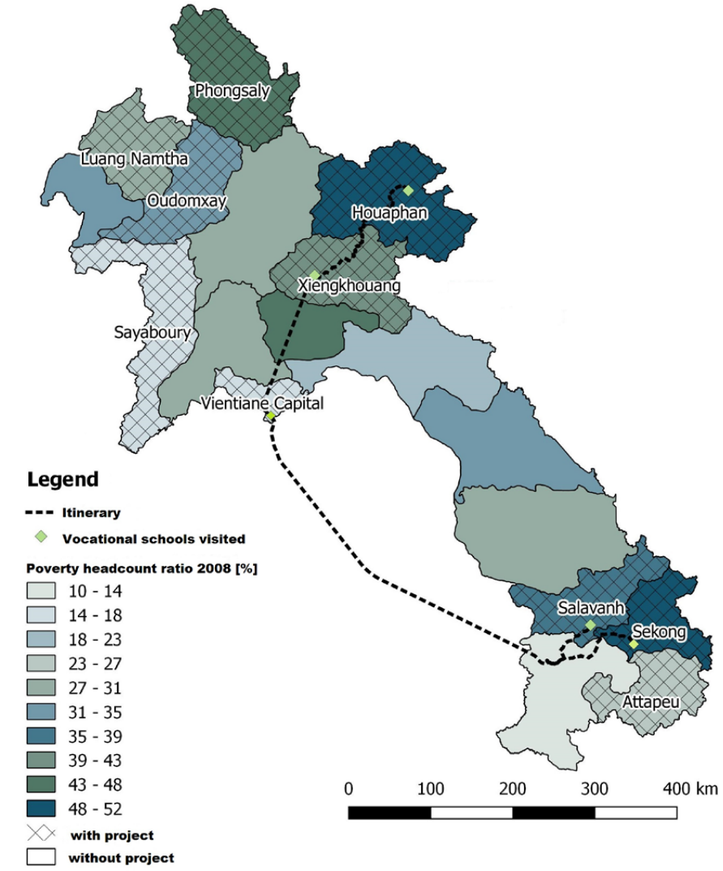
The past must be cleared before the future can begin

The school constructed in Phonsavan using FC funds makes a good impression and is well attended. It's cleaning day and the pupils are helping; a roof is repaired, the garden is maintained. The curriculum includes carpentry, the hotel trade and tailoring. The pupils cook a tasty meal for the mission participants. An unusual pond on the school grounds attracts the interest of the visitors. The school's headmaster, dressed in uniform on Wednesdays and Fridays like all public officials, explains that it is a bomb crater. Over Laotian coffee in his office he reveals that 150 mines and unexploded bombs had to be cleared on the school grounds before construction could begin. This was expensive and time-consuming, and is still common in Laos. Between 1964 and 1973, American planes bombed Laos to block Vietcong supply routes. Per capita, Laos is the most bombed country in the world. It is estimated that 30 per cent of the bombs did not explode. Since then, hundreds of people have died of dud bombs exploding. "The past must be cleared before the future can begin." With these words, the headmaster in Phonsavan bids farewell to the visitors.

The journey continues through remote areas to Sam Neua. It is remarkable that

Far from the capital of Vientiane, vocational training students seek to connect to the modern world.

2.1. Journey to the poorest regions of Laos



the ministry can manage this vocational school from far away Vientiane. The headmaster and a representative of the provincial government talk about their training successes. Over dinner in the restaurant, a focus group discussion is conducted. Using translators, eight graduates talk about their careers. Laap, the Laotian national dish made with minced meat and local herbs, is on the table. Petanque, a variant of boules, is being played outside, one of the marks of the French colonial influence. The graduates in the round of discussions at the table are convinced of the value of their education at the local vocational school; they all found jobs, for example, in the local gastronomy sector. The training courses offered were suitable for them. Of course, our evaluation expert is aware there may also be other, less positive opinions.

Before the long journey back to the capital, a spiritual ceremony called Basi is held. This is intended to implore the guardian spirits of the evaluation mission to look after the travellers. Together with all the teachers in the school, the members of the mission sit in a circle. In the middle there is a floral arrangement, decorated with eggs, chicken and plastic water bottles. All of the participants are connected with a cotton thread. The master of ceremonies, a village elder, says the blessing. Colourful bracelets bind the guardian spirits to the participants, including the KfW evaluation expert.

There is a shortage of skilled workers in Laos. Laos needs well-educated citizens for its future.

Back in Vientiane, where all the authorities and donors are gathered, it is time to learn more about the background of vocational training. There is a shortage of skilled workers in Laos. Thais dominate the timber industry, the Vietnamese control the construction industry, and the Chinese are omnipresent. In order to secure the future of Laos, it is important that the country improves its own citizens' training.

Vientiane is also home to the flagship of Laotian-German cooperation, the renowned Lao-German Technical College. Following the German model of vocational training, this includes direct cooperation with companies. Modern training courses are on offer, such as mining and hydropower technology, and the demand for places exceeds the supply. Yet there are some negative aspects here too. Waste disposal does not live up to expectations at all. Rapid improvements are promised before the mission leaves.

The journey continues, this time to the south. This time the flight is not cancelled. Behind the high plateau in southern Laos, where the coffee of the headmaster in Phonsavan was grown and harvested, the delegation visits some more vocational schools. Again, the impressions are positive. The centrally planned system of vocational training in Laos is not perfect in every respect, but compared to the impressions in 2014 the progress has been quite remarkable. To achieve an impact it seems that time and patience are needed, and sometimes adaptations of the approach. The Laotian generation influenced by vocational training in the GDR has little time left to promote vocational training in Laos – the generation in charge now will soon be retiring. It is then up to the graduates of the vocational schools to preserve and enhance what was achieved up to date: a reformed system and an improved image of vocational training in Laos.

Good wishes for the evaluation: Basi ceremony.

The Lao-German Technical College offers good job prospects for the students.

Laos
Vocational training – results need time

Economic integration is growing in Southeast Asia, and this translates into increasing competition for Laotian workers. Companies with their own skilled workers from the neighbouring states of Thailand, Vietnam and China are gaining a foothold in the Laotian economy. The authorities in Laos estimate that several hundred thousand additional skilled workers would be needed to meet the demand of the Laotian economy with local labour. So far, the education system in Laos has not been able to meet the qualitative and quantitative demands of the labour market. There used to be a lack of practical and forward-looking vocational training, in particular.

Opportunities for men and women through vocational training in Laos.

For more than ten years, German-Laotian cooperation has supported the establishment of a vocational training system. Phases III and IV of the FC projects evaluated in 2018 financed school buildings, workshops and residential homes as well as equipment, machines and teaching materials at ten locations in the north and south of the country. Parallel to this, Technical Cooperation (TC) worked on training curricula that focused on the labour market. In the capital city of Vientiane the Lao-German Technical College (LGTC) was established as a vocational school that is now known beyond the country's borders and offers flexible training courses geared to the needs of the economy.

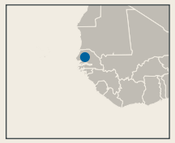
While the ex post evaluation in 2014 (rating 4) remarked on the low utilisation levels of schools, supplied equipment and machines, in recent years the programme schools have seen an increase in enrolments and diplomas – an indication of the improved image of vocational training. At the flagship institution LGTC there are many more applications than places. The training courses in hotel management and electrical engineering are particularly popular. Many of the pupils want to open their own businesses in the future, so even more courses with training content tailored to this goal could be offered. However, the vocational schools are still organised too centrally: one vocational school per province with identical curricula and equipment, regardless of the local needs. Most likely it will still take some time before this relic from the centrally planned economy of the past is picked up by the Laotian reform policy, which was introduced in 1986 to promote openness and a gradual transition to a market economy.

A non-representative survey shows that roughly 55 per cent of the graduates surveyed from schools outside Vientiane found employment within three months of completing vocational school. The figures for the LGTC are considerably better: thanks to close cooperation with the private sector, graduates here are almost guaranteed a job. Mining and hydropower technology are taught here too, qualifications that are in great demand in the economy. With a view to establishing dual vocational training even more broadly, the private sector must be involved more closely in designing curricula. As trained professionals, graduates learn about the difficulties of the private sector from a different angle: administrative hurdles for business start-ups, lack of access to electricity and financing make it hard to work productively and start their own businesses, as so many want.

A positive trend emerged between the evaluations of 2014 and 2018. However, the future success of the vocational schools depends on many factors: will it be possible to increase the number of teachers and their level of qualification? Will the schools be able to maintain their buildings and finance spare parts for equipment and machinery? Will the graduates prove themselves on the labour market, thereby adding to the prestige of vocational training? The LGTC points the way forward; its success was the decisive factor for the "good" rating of Phase IV.

Result:
Phase III "satisfactory" – rating 3

Result:
Phase IV "good" – rating 2



Senegal
Promoting peace in Casamance

In Casamance, a region in southern Senegal, peace is fragile. FC projects initiated pioneering work related to the Casamance conflict and supported the reconstruction of social and economic infrastructure. The project was very well received by the population.

Joy over new, peaceful prospects in Casamance.

Casamance lies in the south of the country, cut off from the rest of Senegal. For many years, the central government in Dakar neglected the region. Poverty rates reached almost 80 per cent. This is one of the reasons why rebels had been fighting for Casamance's independence for 35 years. The conflict was complicated by the rebels getting involved with neighbouring Gambia and Guinea-Bissau. The region's infrastructure increasingly fell into disrepair and investors stayed away – a negative spiral that only increased the willingness to engage in further violent confrontation. Tens of thousands fled the region.

The last few years have brought new hope. Senegal is purposefully trying to promote the region and has been conducting peace talks with at least some of the rebel groups since 2012. Weapons have been laid down. A programme for the reconstruction and revival of economic and social activities was launched with the participation of international donors. The aim is to develop a "peace economy". According to the programme's theory of change, motivation for solving conflicts in a violent manner diminishes if people are better off. At the same time, enhanced public services should make the value of peace visible. An ambitious yet highly relevant concept.

FC financed large-scale projects, such as roads and irrigation systems, as well as "basic services" proposed by the local communities, such as schools, health stations, water supply, social centres, markets and bus stops. More than 100 individual projects were purposefully implemented in those parts of Casamance which, up to that point, had been ignored by both the central government and international donors because of the delicate security situation. Some pioneering work was carried out. To avoid stirring up the conflict unintentionally, the "do-no-harm" principle was always followed: projects opposed by any of the conflict parties were not implemented; everyone had to benefit as equally as possible. For example, an envisaged gravel road was not built when local rebel groups spoke out against it. It did take a few years for all the measures to be implemented, but it was worth the effort.

During the ex post evaluation carried out five to eight years after the work was completed, the locals repeatedly stressed how much the infrastructure was appreciated by all and how much it was used. One mayor spontaneously demanded the programme be continued. The evaluation mission found only two investments not in use: two farming irrigation systems damaged by heavy rainfall, possibly a consequence of climate change. The FC measures have visibly improved living conditions in Casamance, albeit only in certain areas.

When asked about the impact the projects had on peace, several interviewees stated that the investments reduce the feeling of exclusion and neglect, which was one of the roots of the conflict. Things are moving again in Casamance alongside the FC commitment. Flight and ferry connections to Dakar are on the rise. School enrolment rates have even exceeded the national average.

Peace in Casamance remains fragile though. Even if weapons were silenced and the conflict has come to a standstill, the desire for independence has never been completely extinguished. FC is continuing its engagement for peace in Casamance. The mayor, whose wish is thus fulfilled, will be pleased – and he is certainly not alone.

Result:
"good" – rating 2

Bolivia
Environmental protection losing out to economic interests

Bolivia is home to biodiversity hotspots of global significance – areas rich in unique animal and plant species. An FC project supported Bolivia's nature reserves with the aim of combining conservation with the goal of alleviating poverty for the local population. Economic interests and declining political support for nature conservation are jeopardising the impact.

Demanding task for park rangers: protecting the environment and enabling sustainable production.

Madidi National Park stretches from the snow-capped Andes to the tropical Amazon River Basin. It is home to the world's greatest biodiversity with endangered pumas and jaguars. Tipnis National Park between the Andes highlands and the tropical lowlands with its unique, humid and hot landscape is inhabited and managed by indigenous groups. When Bolivia established its protected areas, they found themselves as "park dwellers" from one day to the next: the use of their habitat was suddenly limited to sustainable production methods in order to conserve nature. To ensure the people were not left alone with this challenge, the Bolivian government, supported by international donors, wanted to both protect nature and improve the living conditions of the local people.

This challenge was taken up by an FC project, which promoted nine protected areas in cooperation with TC. Buildings and equipment for the park administrations and park rangers were intended to facilitate management and monitoring. The authorities received help with marking out park boundaries, which was also aimed at avoiding land conflicts. Last but not least, the mostly poor inhabitants and residents of the park were supported too: new management concepts were introduced. Environmentally friendly tourism and coffee production were supposed to open up new sources of income in harmony with the clear rules for protecting forests and animals.

The evaluation mission observed that progress has been made. The protected areas are marked out. The administration and monitoring of the parks work, not least thanks to the motorcycles, boats and radios financed by FC. Sustainable economic activities, such as an Ecolodge for tourists and the marketing of local coffee, have increased the incomes of some of the villagers working collectively within the community.

However, the start of the project in 2006 was followed by political upheavals, which in recent years have increasingly given priority to economic development over nature conservation efforts. In 2015, for example, the extraction of oil and gas in protected areas was approved. The El-Bala hydropower plant is to be built in Madidi National Park; a project that is highly controversial – ecologically, socially but also economically. In addition, Tipnis National Park is to be intersected by a 300-km-long highway. In 2018, in a speech in Trinidad addressing supporters of a business-friendly policy, President Morales accused Western industrial nations of "ecological neo-colonialism", which mirrored their one-sided interest in protecting nature.

The lack of political support for resource conservation is already having an impact. The evaluation mission reported that the number of pumas in Madidi Park had declined, which is a sign of a deteriorating ecosystem. Deforestation has also increased recently in many protected areas, a finding which the evaluation was able to corroborate using satellite data. And then there is the issue of poaching: the park rangers can do little against those hunting for jaguar teeth, even though the director of Madidi Park takes legal action against poachers and generates international attention through media coverage.

The project's approach of striking a balance between conservation and alleviating poverty relies on political support. Without this support, there cannot be any sustained effects. Thus the evaluation declared the developmental impacts unsatisfactory.

Result:
"unsatisfactory" – rating 4

Intermediary cities: between the metropolis and the hinterland

Well connected
As a link between big cities and rural areas, intermediary cities – like the one here in Vietnam – are an important factor for economic and social development.

Traffic jam in an Egyptian city. To what extent can urban development in smaller cities avoid repeating the problems found in today's megacities?

Urbanisation in developing countries: it's not all about the capital city

Cities in developing countries are growing at an incredible rate – especially in Asia and Africa. Is this a welcome sign of the convergence process when compared to rich industrialized countries? After all, their journey to prosperity was inextricably linked to urbanisation. Or is the world we live in today different, and the path to the city is leading to a new form of misery? The question is quite justified because new evidence suggests: the fight against poverty is either won or lost in cities. Regional centres, in other words small and medium-sized intermediary cities, play a prominent role in this process.

An end to urban growth seems a long way off for the time being. Over half of the world's 7.6 billion people already lived in cities in 2018; however, urbanisation is not equally pronounced across the continents. North and Latin America have an urbanisation rate of over 80%; almost 76% of Europeans live in cities, while 68% of Oceania's population is urban. In contrast, Asia – the most populous of all the continents – has an urbanisation rate of just under 50%. And in Africa – the fastest growing continent in terms of population – this figure is just 43%. According to the latest forecasts, the urban population is set to rise by 2.5 billion people by 2050. 90% of this growth is expected to take place in Asia and Africa.[1]

Urban growth cannot be stopped, nobody is denying that. However, the question as to whether this is good or bad for developing countries is where opinions start to diverge.

[1] All figures taken from United Nations: World Urbanization Prospects: The 2018 Revision. [key facts]. https://esa.un.org/unpd/wup/Publications/Files/WUP2018-KeyFacts.pdf

Growing cities – growing prosperity or growing misery?

For advocates of urbanisation, the path to more prosperity always leads to cities. These people refer to the history of Europe, the pioneer of industrialization and urbanisation. In its 2009 World Development Report, the World Bank was a strong proponent of this belief:

"No country has grown to middle income without industrializing and urbanizing. None has grown to high income without vibrant cities. The rush to cities in developing countries seems chaotic, but it is necessary." (WDR 2009, p. 24)

Consequently, the World Bank calls for the promotion of urban concentration. The approach is to create urban centres full of new ideas, businesses and jobs, even if this temporarily widens the disparities between rural and urban areas, or within the different cities. As the report explains, it is not unusual for some 30% of an urban population in cities with high growth rates to initially live in slums (WDR 2009, p. 11). Starting from a basis of effective institutions that are standardised on a national level, the priority should be to invest in infrastructure in evolving hubs. This is supposed to be the way to reduce transport times and promote agglomeration. According to the report, only once urbanisation has reached a very advanced stage, some limited public resources should be spent in order to reduce inequalities in a geographically targeted manner, e.g. by slum rehabilitations. (cf. WDR 2009, p. 25/26)

In 2009, this notion was almost revolutionary in the world of development policy. After all, the alleviation of poverty was a central concept, particularly in light of the UN's Millennium Development Goals. The majority of poor people lived and still live in rural areas even though poverty is increasingly spreading its way to the ever-growing slums in cities. Instead of concentration, the priority was to curtail urban growth, reduce the urban-rural divide, and slow the rural exodus to cities – and many development policy experts still adopt this stance today. For example, this position is reflected in a speech given by the German Federal Minister for Economic Cooperation and Development, Gerd Müller, on 22 June 2017:

"Rural areas must have a future! African governments should focus on more than just their capital cities. Most people live in rural areas. They need prospects for their future. Urban and rural development must go hand-in-hand."[2]

This quote illustrates that the positive view of urbanisation put forward by the World Bank 10 years ago was unable to gain unanimous approval in the world of development policy. And for good reason. In recent years it has become increasingly clear that the comparison of today's urbanisation with the development path of 19th-century Europe does not stand up. There are two obvious differences in the current process of urbanisation in developing countries, particularly in sub-Saharan Africa: firstly, the speed and secondly, the process of industrialization.

The growth of urban areas in Asia and Africa – unprecedented

The urbanisation process in Asia and Africa is still moving at top speed – and is significantly faster than the rate in olden-day Europe. Rural depopulation is not the primary reason for this. Migration rates from rural areas to cities are reasonably comparable to those of the 19th-century European migration process, at around 1.7% – though the absolute population figures are considerably higher in Asia and Africa. The driving force behind the unprecedented speed of urbanisation is actually population growth in the cities themselves, a process known as natural growth.[3]

In the industrial era, cities were tragically nicknamed "killer cities" due to their high mortality rates. To begin with, their natural growth rates during the 18th and 19th centuries were in fact negative and never exceeded 1% per annum. In contrast, the natural population growth rate for cities in the developing world over the past few decades has been an average of 2.3%. High above average were the natural growth rates for cities in Africa. The authors Jedwab, Christiaensen and Gindelsky calculated that an African family of five, who left a rural setting for the city in the 1960s, had grown to 43 people by 2010, while an Asian family of a similar size had grown to 24 members. The authors describe this high natural growth rate as a new phenomenon of the 20th century, calling these urban areas "mushroom cities"[4] – a city that shoots out of the ground like a mushroom with a thin stalk and wide cap.

This unprecedented urban growth rate is a result of the accomplishments of the modern world – success in the fight against epidemics and access to clean water and health services, meaning that life for huge numbers of people living in a very crowded area is now less dangerous, even in poorer countries. Development cooperation has contributed its part. However, one of the key challenges resulting from fast-paced urban growth is to maintain the achieved level of public services. An FC evaluation report for a water supply project in Kenya in 2017 provides an illustrative example:

"The urban population is growing by 4.3% p.a., faster than overall population growth of 1.9% p.a. This high level of population growth and increasing rate of urbanisation are a major challenge to guaranteeing a suitable water supply and waste water disposal services. It is estimated that 50% of the population do not have secure access […]. The situation in poor urban and suburban areas is particularly drastic."
(FC Evaluation 2017, Kenya)

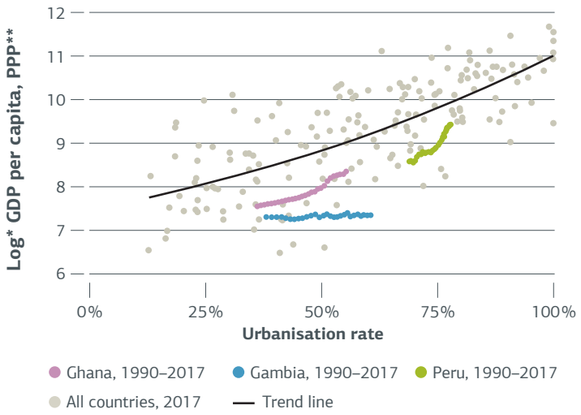
In some cities, the proportion of city-dwellers forced to live in poor areas far exceeds the 30% indicated in the 2009 World Bank Report. Nigeria exhibits the third-highest population growth rate in cities worldwide. In its capital Lagos, two-thirds of the inhabitants are slum dwellers. According to the UN, an eighth of the world's population lived in slums in 2016. More pessimistic estimates predicted at the turn of the millennium that this figure could increase to 30% by 2050. Since then, investments in the rehabilitation of slums have skyrocketed and yet the absolute number of people living in these areas is still on the rise (UN-Habitat, Slum Almanac, 2015–2016). Many cities are without doubt experiencing a process of impoverishment that has very little in common with the World Bank's image of urban concentration and an increase in prosperity, accompanied by a continuous reduction of inequality over time.

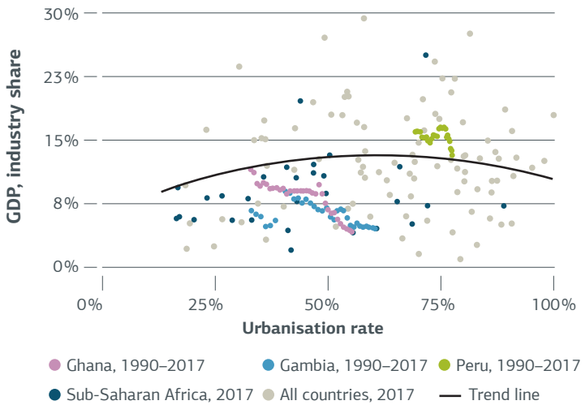
A high level of inequality has become a hallmark of many cities in developing countries, such as Ahmedabad in India.

In fact, in many places, not even basic social and public infrastructure is able to keep pace with urban growth; the main problem being that these cities lack the funds needed for the huge investments in energy and transport to unlock their economic potential. Instead, the poorer neighbourhoods of these urban hubs are spreading over ever-larger areas and the poor inhabitants in the outskirts of the city are not even able to reach the city centre in a reasonable amount of time or at a reasonable cost. The reality in many cities and megacities of the Global South is characterised less by concentration and more by "urban sprawl", a fast and unregulated expansion of cities with chaotic forms of personal transport, traffic jams and air pollution – far from the ideal conditions needed for their economically, socially and ecologically sustainable development.[5]

[2] https://www.bmz.de/de/presse/reden/minister_mueller/2017/juni/170622_rede_world_food_convention.html
[3] Cf. here and the following Jedwab, R.; Christiaensen, L.; Gindelsky, M. (2017): Demography, Urbanization and Development, Journal of Urban Economics 98, pp. 6–16.
[4] Jedwab et al. (2017).
[5] Cf. Bhatta, B. (2010): Causes and consequences of urban growth and sprawl. In Analysis of urban growth and sprawl from remote sensing data (pp. 17–36).

3.1. Urbanisation and development





* Logarithmic value
** Constant purchasing power parity 2011 USD

Urbanisation and industrialization – not always hand-in-hand

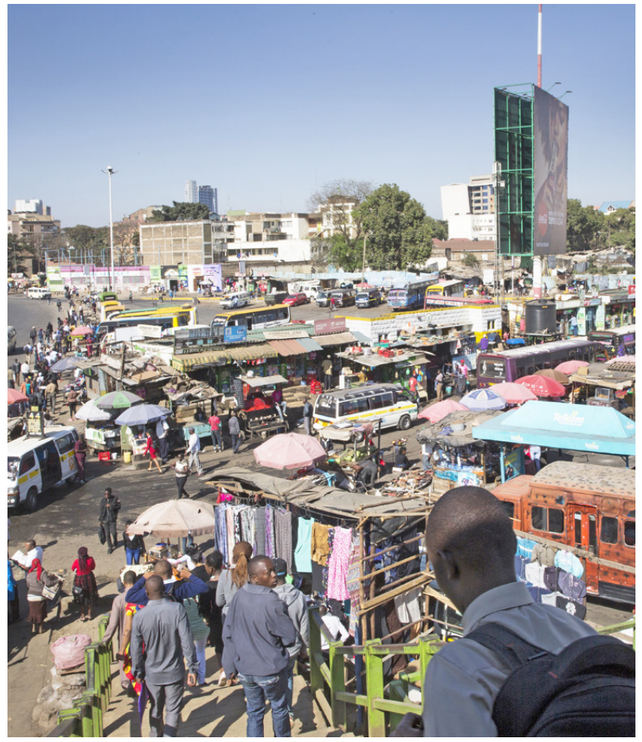
Urbanisation and economic development are closely linked. Looking at the global average, there is no doubt about it. Over 80% of the global gross domestic product is now generated in cities (World Bank 2018, Urban Development Overview). And cities' disproportionate contribution to economic output also applies to sub-Saharan Africa. A 2015 review of 35 sub-Saharan countries and their 69 cities with over 500,000 inhabitants revealed that they generate 36% of gross domestic product but are home to just 16% of the population.[6] Nevertheless, the economic development of the cities in sub-Saharan Africa differs substantially from that of their European counterparts – and from cities in most other countries around the world, too.

Europe's urbanisation and its process of industrialization are often seen to be synonymous; many countries in the developing world are now following a similar pattern of transformation, particularly China. Within the last 35 years, it has massively increased its industrial output; industrial growth rates were much higher than those of China's cities. And per capita income rose, too. At the start of the Chinese industrial revolution, per capita income was just a third of that of sub-Saharan Africa but now it is around seven times higher.[7] To begin with, this development was linked to a rise in inequality between urban and rural areas as well as within urban areas themselves. Damage to the environment and emissions harming climate and health were additional unwelcome side effects. Now, the country has introduced extensive government programmes to tackle inequality, climate change and environmental degradation. Emerging economies like India and Brazil are following a similar trajectory of economic development as China – albeit with less impressive success – while the same cannot be said for economic development and urbanisation in sub-Saharan Africa.

In stark contrast to the development of "old" industrial countries, sub-Saharan Africa appears to have skipped the phase of urban industrialization. New jobs, increases in productivity and a rise in value creation as typical byproducts of industrialization remain absent. Instead, the economy in African cities is driven by trade and the service sector, made up of just a few large companies and numerous microenterprises, many of which are informal in nature. One explanation for the dominance of trade and services is the wealth that is generated by natural resource extraction and then spent in cities. Cities in sub-Saharan Africa are the epitome of "consumption cities"[8] – itself a term coined to describe a phenomenon that did not exist in the 19th century. This lack of industrialization – paired with a high rate of population growth – has led to just a moderate rise in the average per capita income in sub-Saharan Africa. As a result, there is less scope for poverty alleviation as urbanisation progresses.

The development trajectory of "old" industrial countries – not always the ideal guide

The more recent history of urban development – as experienced by developing countries and emerging economies – reveals that the development trajectory followed by "old" industrial countries is now barely suitable as a role model for the future of today's cities. Even those countries that successfully followed in the footsteps of Europe and North America, prospering through industrialization, did so at a high price. Their cities are not particularly liveable for large groups of their populations. The cityscape is shaped by extreme inequality and poverty unless the state has massively intervened, as it has in China. The air is often so polluted that life in the city poses a huge health risk – no matter how good the health care is. sub-Saharan Africa is clearly the most challenging region of urban development since urban growth here is not accompanied by a chance for a general rise in prosperity.



Trade and services drive development in many African cities, like here in Kenya. This creates "consumption cities".

Our preliminary conclusion

The battle against poverty and the strive for global sustainability in the sense of the UN's Sustainable Development Goals and their economic, social and ecological dimensions will be won or lost in the cities of the developing world.[9] As the latest research shows, small and medium-sized cities could play an important role in this battle.

[6] Cf. N. Godfrey and X. Zhao (2015): Technical Note. The Contribution of African Cities to the Economy and Climate.
[7] Cf. Y. Wen (2016): China's Rapid Rise: From Backward Agrarian Society to Industrial Powerhouse in Just 35 Years, Federal Reserve Bank of St. Louis.
[8] Cf. Jedwab, R. (2013): Urbanization without structural transformation: Evidence from consumption cities in Africa. George Washington University, Washington, DC. Processed.
[9] Based on a quote by the former Secretary-General of the United Nations, Ban Ki-moon (UN 2012): "Our struggle for global sustainability will be won or lost in cities."

A bus in Côte d'Ivoire: the nearest city promises the prospect of a better life.

Small and medium-sized cities as the foundation of urban development

The headlines surrounding urban development are dominated by megacities, i.e. cities with 10 million residents or more. Be it Lagos in Nigeria and its floating slums, Beijing in China and Delhi in India with their unbelievably high air pollution, or Mexico City and its increasingly scarce water resources; a problem that comes on top of all the other challenges of megacities that Mexico City has to deal with anyway, like chaotic traffic, smog and slums. Far less spectacular and, therefore often neglected, is the development of small and medium-sized cities, even though they deserve more attention for a number of reasons.

Already today, almost 50% of the world's urban population live in cities with less than 500,000 inhabitants, while well over half live in cities with less than one million residents. It is unknown how many cities of a small or medium size exist around the world. An approximation estimates the number of cities with more than 100,000 and less than 750,000 inhabitants to be over 2,400. Two thirds of these cities are in Asia and Africa, the two continents where urbanisation is certain to continue.

Small and medium-sized cities – an approximate definition

Small city, medium-sized city, local hub, regional centre, secondary or tertiary city – there are countless terms used to describe cities that are not a country's main or primary cities, which are easy to define in comparison. Some definitions rest heavily on the number of inhabitants and the city's role and function within the national system. According to this approach, a city is a secondary city, for instance, if its population or economic output corresponds to 10% to 50% of that of the population or economic output of the country's largest city. This definition means that cities with a population of over five million inhabitants, in countries like China, as well as cities with fewer than 200,000 residents, in places such as Ethiopia, are considered intermediary cities. The distinction between these cities and the lower-level tertiary cities is even less clear and there is a large area of cross-over. A definition that is based on absolute population figures makes even less sense, not least due to fast-paced population growth. United Cities and Local Governments (UCLG), an umbrella organisation for local governments, uses the term "intermediary city" more or less as a synonym for the terms listed above. This term was coined by urban planner Thomas Sievert back in 1997, albeit in a slightly different context. This term ideally incorporates the link that these lower-level cities provide between rural areas and metropolitan regions (a role that we, too, have emphasised). However, UCLG does not forego a population-linked definition either, declaring that intermediary cities have between 50,000 and one million inhabitants. We believe that both the upper and lower limits should be pervious and dependent on the local context at hand.

As such, they are also the continents where the number of medium-sized cities is expected to grow the most. These cities – which act as regional centres – are the fastest growing type of city (UN The World's Cities in 2016). So, what is it about these cities that is so appealing?

Small and medium-sized cities – a link between rural areas and national hubs

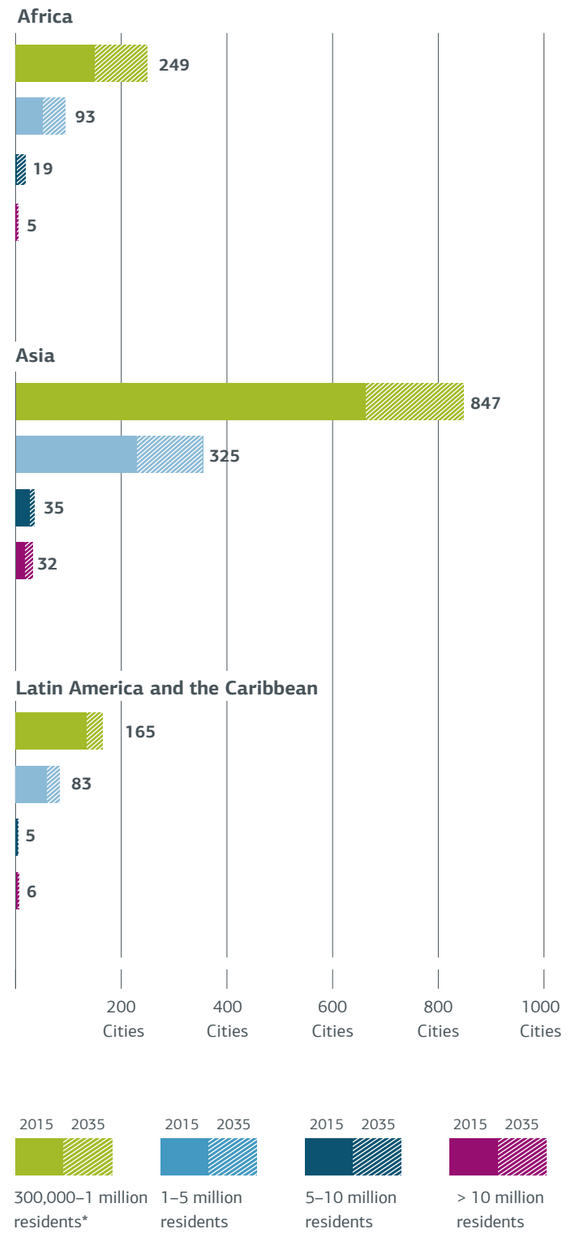
The question as to why medium-sized cities attract such large numbers of the urban population is a puzzling one. Their economic power and the wage level are normally lower than in the country's primary cities. And the infrastructure is worse – be it water supply, waste water disposal, access to hospitals and education, or economic infrastructure such as transport and telecommunications. The most convincing explanation for the appeal of small and medium-sized cities is their status as geographic, economic and socio-cultural links between rural regions and the capital or primary city.

People who decide to leave their village seeking a better life often start by moving to their nearest town or city. The distance is easier to manage as transport links to the capital tend to be limited and expensive. It is also easier to maintain social contacts and a cultural link to home. Once people have settled and integrated in their nearest city, hurdles are high for another move to the next biggest city, which is further away. From this point onwards, these migrant families contribute to the city's natural growth.[10]

Regional centres function as a link not only for people, but also economically. Transport routes and the flow of goods run from there to the country's primary cities. The survival of primary cities depends on supplies from the surrounding area. As such, every country is covered – figuratively speaking – with an urban network, linking primary cities to intermediary cities all the way to local

[10] Cf. Ingelaere, B., Christiaensen, L., De Weerdt, J., Kanbur, R. (2018): Why Secondary Towns Can Be Important for Poverty Reduction: A Migrant's Perspective.

3.2. Anticipated change in the number of cities between 2015 and 2035, by size class of urban settlement and region



* The cities considered in this section also include smaller cities, in other words a larger number and, as a result, bigger anticipated changes.
Source: World Urbanization Prospects: The 2018 Revision, *File 17b: Number of Cities Classified by Size Class of Urban Settlement, Region, Subregion, Country and Area, 1950–2035.*

hubs. It is only when we look at the latest research that we get an idea of how important small and medium-sized cities are as sub-primary-city hubs in the urban network.

Small and medium-sized cities as the backbone of sustainable development

A country's economic power builds up in its primary cities. The world's 600 largest cities contribute around 60% of the global gross domestic product (cf. cities alliance 2014). However, the national hubs of developing countries in particular would probably be unable to contribute so much to the economy without the support of lower-level urban centres. Recent research results show that the concentration of urban populations in the capital city has a negative impact on economic growth in developing countries, particularly in sub-Saharan Africa. This effect is reversed in advanced countries, in other words it is positive. Different levels of infrastructure expansion explain why the effect of urban concentration is reversed as the level of development rises. Developing countries with weak infrastructure are more reliant on intermediary cities' role as a link between rural areas and primary cities.[11]

Regional and local centres not only perform well as an economic intermediary. The way in which they contribute to the economy also gives them an advantage over primary cities. Research from 2014 predicted that, by 2030, smaller urban centres' contribution to economic growth in the developing world will involve significantly lower increases in CO_2 emissions than that of rural areas or emerging large and megacities.[12] In part, this finding is likely due to intermediary cities' high share of the population and a simultaneously lower level of socio-economic development associated with a lower emission intensity. Furthermore, these cities suffer from less congestion than large and megacities, where people travel long distances in motorized private transport that generates a lot of emissions. Therefore, local and regional centres also deserve more attention in view of ecologically sustainable development.

To complete our comments on small and medium-sized cities with regard to the three dimensions of sustainable development, some light shall be shed on their role in social development. Recent research also provides some remarkable insights in this respect. For the first time ever, research has been conducted into the growth of big cities compared to the growth of smaller regional centres with regard to their impact on poverty. The study uses the latest methods, estimating the economic development of large and medium-sized cities based on light intensity recorded in night light data from satellite images and combining this with poverty-related data from household surveys. At the moment, this research has been limited to India but the title of the publication alone clearly explains why the results open up new perspectives into the development policy discussion over the pros and cons of urban and rural living: "For India's Rural Poor, Growing Towns Matter More Than Growing Cities" (Gibson et al. 2017). While small and medium-sized cities may contribute less to economic development than growing larger cities, these regional centres still do more to release people from poverty. Why? The majority of the poor live in rural areas, and, figuratively spoken, secondary centres radiate more on the life in the rural hinterland than far-off major cities. If these findings are confirmed for other emerging and developing countries, this may give a further boost to the developmental promotion of regional centres.

Sparsely illuminated night market scene in India: academics use light intensity as an indicator for a city's economic development.

Conclusion based on existing knowledge

So far, the potential of regional and local centres as foundations for economically, ecologically and socially sustainable development has been underestimated. Promotion of sustainable urban development should therefore cast a stronger focus on them than in the past.[13]

[11] Cf. Castells-Quintana, D. (2017): Malthus living in a slum: Urban concentration, infrastructure and economic growth. Journal of Urban Economics, 98, pp. 158–173.
[12] Cf. Floater, G., Rode, P., Robert, A., Kennedy, C., Hoornweg, D., Slavcheva, R., & Godfrey, N. (2014): Cities and the New Climate Economy: the transformative role of global urban growth, particularly p. 25.
[13] In the academic world, this approach is also referred to as polycentric urban and regional planning.

Liveable cities and prospects for young people are important principles in urban development, both in Brazil and elsewhere.

Intermediary cities: between the metropolis and the hinterland

Promoting regional and local centres – but how?

"Intermediary cities" are growing at the fastest rate and seem to offer previously untapped potential to support the achievement of the United Nations' eleventh Sustainable Development Goal: the development of sustainable cities and communities. FC promotion has long been concentrating on these sub centres. While there may be a lack of reliable role models for the sustainable development of small and medium-sized cities, past achievements and failures help to determine the direction we should be moving in.

The destination of this journey is relatively clear-cut. The goal is a sustainable city, a city that offers adequate living conditions for everyone, regardless of their gender, origin, income or religion, regardless of whether they are old, at the mid-point of their lives, have been recently born, or haven't even entered the world yet. There have been countless attempts to paint a clearer picture of what a sustainable city should look like, such as the FC-specific concept of a PERL city, which is productive, efficient, resilient and liveable. The most well-known concept is that of the "Cities Prosperity Initiative" from UN-HABITAT, which defines the quality of a city using six dimensions. According to this concept, a city should be productive first of all, i.e. it should contribute to economic development and offer sufficient income for all from decent work. Secondly, a city should provide suitable social and economic infrastructure and, thirdly, it should offer its residents a good quality of life. Fourthly, a city should allow for social integration, giving all people an equal opportunity to participate in social, economic, political and cultural life. Fifthly, a city should be environmentally sustainable and, sixthly, it should exhibit good urban governance, in order to steer the city's development onto an economically, ecologically and socially sustainable path and maintain it there.

This outline of the ideal sustainable city may not be perfect. However, it does make the goal of good urban development seem more tangible and – thanks to the six-dimensional City Prosperity Index – it even allows us to estimate how a city compares to the ideal status.

A township in South Africa. The expansion of basic urban infrastructure is a focus of the evaluated urban FC project.

Sustainable urban development – how are we doing?

In 2015, the Cities Prosperity Initiative published a survey in which 60 major cities (almost all of them capital or primary cities) spread across all continents were rated according to the City Prosperity Index. The results were not surprising: 85% of the top-rated cities were in Europe, with the Scandinavian capitals of Oslo, Copenhagen and Stockholm coming out on the top three ranks. The cities at the bottom of the rankings were all in sub-Saharan Africa without exception; ranks 58, 59 and 60 were filled by Addis Ababa in Ethiopia, Lusaka in Zambia and Harare in Zimbabwe.[14]

In general, there are no ratings for small and medium-sized cities as there is very little data available. However, Latin America is an exceptional case. Using the same methods as the City Prosperity Index, an extensive study was conducted into regional centres, almost all of which ranked below their capital-city counterparts, though they did not do dramatically worse either. While small and medium-sized cities fell behind primary cities in terms of the average for wage levels, infrastructure and prosperity, they were also less affected by the drawbacks of urbanisation. There was a smaller gap between rich and poor, the cost of living was lower, and the air cleaner; these cities are simply under much less strain than a country's metropolises for the time being. The job now is to protect the advantages offered by smaller cities and put them to use for the future. Particularly in small and medium-sized cities, it is not yet too late to set the precedent for sustainable growth.

Small and medium-sized cities at the focus of FC promotion

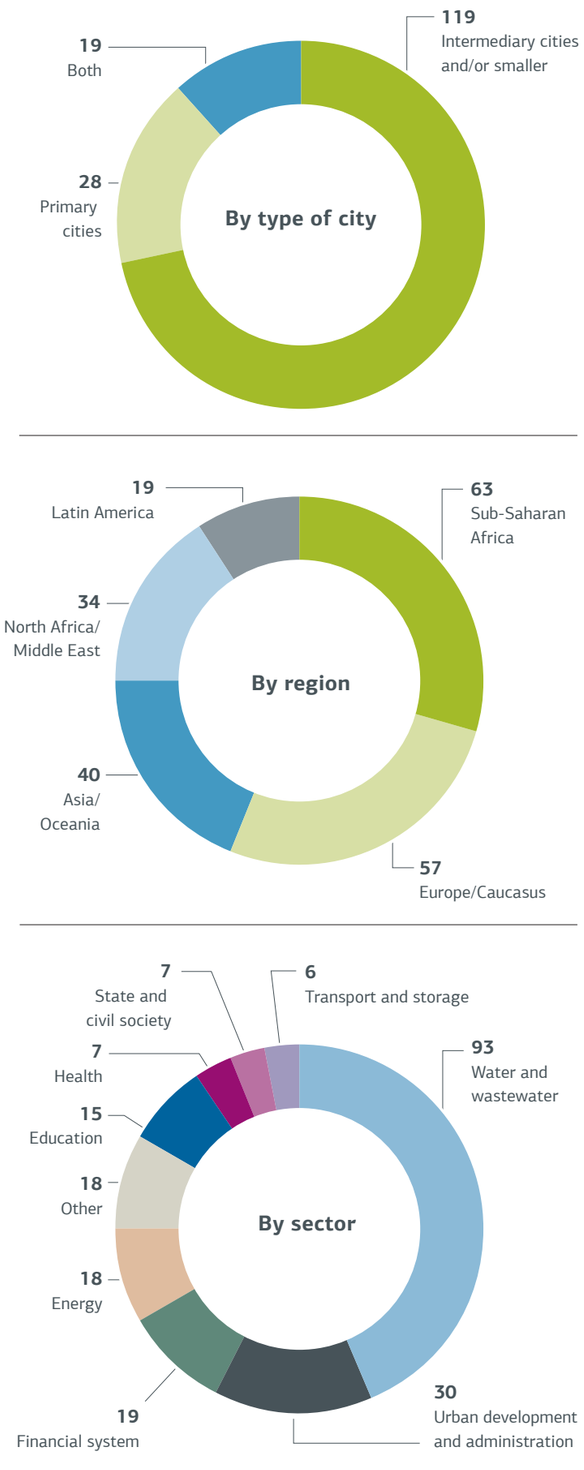
Financial Cooperation appears to have already grasped the significance of small and medium-sized cities for the future of developing countries. The FC portfolio in the field of urban development clearly does not focus on primary cities, although no explicit explanation for this can be found in sectoral policy documents or project documentation. The portfolio's focus on small and medium-sized cities is reflected in the urban-related projects evaluated since 2007 (see graph 3.3.).

Africa is the regional focus. In sectoral terms, emphasis is on support for public infrastructure, particularly in the waste and waste water sector, while economic infrastructure plays a much smaller role, even when projects in the financial sector are included. Bearing in mind the Millennium Development Goal to halve extreme poverty by 2015, FC concentrated more on expanding basic infrastructure to combat the health risks that arise when lots of people live together in a small area instead of focusing on infrastructure that benefits urban productivity and job creation more directly. Last place in terms of quantity is held by projects and programmes that are most deserving of the title of urban development because they reflect the multidimensional character of the need for support, expressed in the ideal image of a sustainable city.

Unfortunately it is precisely these multi-sectoral projects that fare the worst on average in the evaluation of their success in achieving the desired development results. The rating awarded to the urban portfolio when compared to the rest of the evaluated portfolio remains lower than average, even after filtering out regional effects and those related to the level of development. An unusually high number of unsatisfactory results in attempts to strengthen municipalities and district cities as part of decentralisation programmes are particularly striking. What can we learn from these failures as well as from examples of successful FC support?

[14] Cf. for this and the following data, the CPI database: http://cpi.unhabitat.org/download-raw-data

3.3. Evaluated FC projects for urban development, 2007–2018



Urban planners explore the Global South's regional centres

People's protests in Trujillo, Peru, reflect the dissatisfaction with local decision-makers.

A change of perspective thanks to a cooperative research project with TU Darmstadt

Knowledge concerning small and medium-sized cities in the Global South is (still) scant. To find out more about the role of secondary centres and their potential for sustainable development, the FC Evaluation Unit (FC E) worked with academics at TU Darmstadt. The Financial Cooperation Evaluation Unit hoped to uncover a new perspective differing from the primarily economic stance found in their own research into urban development. With precisely this in mind, a team of urban planners specialising in architecture and sociology selected seven medium-sized cities for an in-depth assessment, applying a stakeholder-centric method. They recorded extensive interviews with local stakeholders, coding them according to key terms in urban development and analysed the coding-results. The experts of TU Darmstadt discussed city life with people from politics and administration, universities and trade unions, non-governmental organisations and civil society from around the globe. The study focused on two cities in Ghana (**Techiman** and **Sunyani**) and two in Peru (**Trujillo** and **Arequipa**), while three smaller studies looked at **Bandung** in Indonesia, **Hawassa** in Ethiopia, and **Cartago** in Costa Rica.

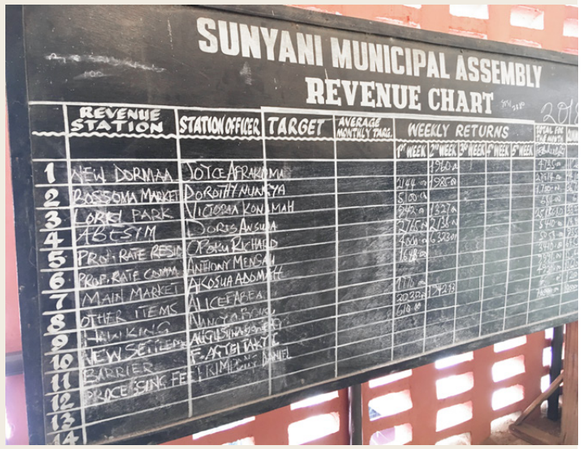
Seven cities in five countries across three continents – it is not particularly surprising to learn that the researchers came across a colourful array of urban development paths, which they put together like a jigsaw puzzle based on their interviewees' reports. However, a striking revelation is the consistent patterns related to the specific challenges described by the local stakeholders (independently of one another), challenges that connect all seven cities.

Urban diversity in every corner of the globe

Bandung, the capital of the Indonesian province of West-Java, has grown from 500,000 inhabitants in 1960 to around 2.5 million today. The population density is high (around 15,000 per km²) and the city is still growing (approx. 3.5% p.a.). Bandung has almost everything: good transport links, several universities, a thriving business scene and a relatively cool climate – however, it also suffers from huge traffic problems (particularly in the southern half) and a geographical split between rich and poor. The gap in prosperity between the north of the city with its villas, shopping boulevards and parks and the poorer area in the south dates back to the colonial period. Back then, the Europeans lived in the north of the city and a railway line separated them from the south, where the Indonesian population lived. This divide in the city was cemented after 1945, the year in which Indonesia won independence. The north expanded on its rich history and continued to attract investments, while the south of Bandung remained poor and became the main destination for migrants from the surrounding area.

Hawassa in Ethiopia is the capital of the Southern Nations, Nationalities, and Peoples' Region and has around 320,000 inhabitants, a figure which has grown from less than 70,000 just 20 years ago. The city is still growing at a fast pace of around 4% p.a., though the population density remains low at just under 3,000 per km². One of the unique characteristics about Hawassa is that it was developed according to a master plan. It did not take very long for Hawassa to turn from a mainly agricultural community into an industrial city with a large industrial park. It has also become a centre for politics, administration, the service sector and culture. Some of its positive characteristics include good road links, a wide range of educational and healthcare providers and its primarily clean environment (for now), though the latter is at risk due to poor waste and waste water disposal. A housing shortage is also having an adverse effect on the lives of many of the city's residents.

The city of **Sunyani,** capital of the Brong Ahafo region in Ghana, has seen its population increase over fivefold since 1970, growing from around 23,000 to approx. 125,000. It is still growing at a rate of 3.8% p.a. with an extremely low population density of just 122 per km². The city is a hub for transport and trade and is also home to a number of government institutions, including the country's highest court. Sunyani plays an important regional role in the supply of education and healthcare. Overall, the stakeholders interviewed consider Sunyani to be a well-planned, liveable city. "Nevertheless, the city often develops quicker than it can be planned" (TU Darmstadt). **Techiman**, also located in the Brong Ahafo region of Ghana, is only a district capital in terms of the national system of cities. However, there is hope in Techiman that it may become a regional capital like Sunyani if the district is upgraded. The population here has also increased considerably to a current level of around 150,000 people with a consistently high growth rate of 3.8% p.a. At 230 inhabitants per km², the population density is slightly higher than in Sunyani. Techiman is in a favourable strategic position at a crossroads for transport and trade routes. Techiman is home to one of the largest markets for agricultural products in West Africa, yielding substantial tax revenue for the city, though this is not published like local revenues in Sunyani.



Transparency of municipal finances in Sunyani, Ghana.

Cartago was the first Spanish settlement and, for a long time, the capital city of Costa Rica, until the city of San José (just 22 km away) took over the role in 1823. With a population of approximately 160,000 in 2018 (a third bigger than it was in 2000), Cartago is a provincial capital and is now seen more as a commuter city for San José. At a rate of 1.1% p.a., Cartago is growing rather slowly, though it faces challenges related to its spatial expansion as the city is narrow and stretching further and further down its valley. Informal settlements are contributing to this problem, as are new guarded residential areas. This is a result of the decreased appeal of Cartago's city centre, which is markedly on the decline and slowly dying out. The low population density (4,100 per km²) of this stretching city poses a challenge when it comes to supplying its citizens with grid-connected services.

Trujillo and **Arequipa** in Peru are both regional capitals with close to one million inhabitants each (as of 2018) and a growth rate of 1.8% and 2.3%, respectively. They are good examples of sprawling cities because they are expanding over a large area but with low population densities of around 500 and 1,500 per km², respectively. They act as economic and cultural centres for the north and south of the country, thus providing countless central supply functions. Both cities face a particular challenge in that they lack continuity at the political and administrative level. As a result, long-term urban planning is nearly impossible, making major infrastructure projects much harder to implement. Changing political priorities and an associated lack of

Unbalanced development in Arequipa, Peru: The German school in the foreground with informal settlements in the background.

commitment to existing plans facilitate corruption, which is seen to be a major problem in both cities. Arequipa's old town has been recognised as a World Heritage Site, giving it special status as a tourist destination. Trujillo has attempted to replicate this model, though so far its efforts have been in vain.

Common problems are a binding factor

Despite all the differences between the analysed cities, there are also lots of similarities in view of their current challenges – and none of the problems identified by TU Darmstadt from their analysis of the interviews based on a complex coding structure were entirely new to us. In fact, the problems identified in the seven analysed cities display strong parallels with the problems we identified with the help of our ex post evaluation reports and academic literature from the field of economics:

– All of the cities studied are growing (with those in Asia and Africa growing particularly rapidly) while lacking in concentration, apart from Bandung in Indonesia. This makes planning processes more difficult or, in some cases, impossible, as confirmed by a municipal town planning officer in Techiman: "*My challenge was always that development was one step ahead of us. People start building before you can plan. But really, it should be the other way round: you plan before development starts.*"

– In the areas of healthcare, education and also water, the expansion of infrastructure seems to keep pace with urban growth, though grid-connected supply services can be lacking, particularly in informal settlements. Almost all of the cities have problems with waste and waste water disposal. With regard to economic infrastructure, the main problems are transport links from new formal and informal suburban settlements to the centre and a lack of adequate housing, which is closely connected to the transport issue.

– Informal settlements are a huge problem in all of the cities studied. Even if official land-use plans exist, they are very rarely enforceable. A professor from USMP University in Arequipa explained the problem to the researchers from TU Darmstadt: *"[...] In reality, a huge number of people own a piece of land here and a piece of land there, and (illegally) occupy other properties here and other properties there. Once it is connected to the city's infrastructure, the land generates more money. [...] It's a business. [...] I believe that you cannot urbanise everything, you can't live everywhere. [...] You have to set a boundary, in other words, it cannot go on like this."*

– Due to poor transport options, empty space close to the city is also occupied, even if these areas are particularly exposed to natural catastrophes like landslides, as in Trujillo. In Latin America, informal occupation of undeveloped land is often legalised retroactively, increasing the incentives for informal settlements. In some settlements in Ghana, it is difficult to tell whether they are formal or informal because the city government's authority overlaps with that of the traditional chiefs. It is not clear who has the final say: "*Now chiefs manage [their own plans]. And by managing them, they also abuse them. Instead of asking state surveyors and the municipality's planning officers to draw up their land-use plans, they use their own draftsmen for projects, which then are not approved by the assembly.*" (Employee from land-use planning, Sunyani)

– To date, none of the cities surveyed have effective land registries. Many of the interviewed stakeholders see this as a problem, not only because it means that no land tax is collected, but primarily because it makes any sort of planning very difficult. However, they are also aware that setting up a register requires a lot of patience as recording this information is closely linked to land rights. In Peru, the right to land is embedded in the constitution. This makes it easier to legalise the status quo, thus providing a boost to illegal settlements. In Ghana, traditional and formal rights overlap – a problem that leads to years' (or even decades') worth of legal action to clarify ownership rights.

– Staff-related and financial shortages are a crucial issue in all cities when looking at why the municipalities in general and city planners in particular are unable to perform their duties. A planning researcher and former employee from Arequipa municipality said: *"[...] There are districts that are so poor that they legally receive guaranteed financial aid. However, they do not have the capacity to invest the money appropriately. Sometimes these funds remain untouched, meaning they then have to be returned."* In Sunyani in Ghana, the most necessary resources are lacking, such as a form of transport to even visit the more remote districts of the city.

– Insufficient and unreliable allocations from the central government are often named as a cause of financial shortages – with two exceptions. In Cartago, Costa Rica, the central government and local stakeholders worked together to develop a legislative package designed to increase the reliability of fiscal transfers. In Techiman, Ghana, the large market provides the municipality with a rich source of income. However, it was also emphasised that most likely not all fees due are actually collected. A researcher from KNUST University in Kumasi finds drastic words to describe the situation: "*The transactions that run through Techiman from one week at the market could be higher than the amount that Ecobank generates in the whole of Ghana in the same time. You wouldn't believe it. It is very difficult to pin down because more or less everything is informal.*"

– Most stakeholders are not happy with urban governance. The most commonly named issues are changing political guidelines due to changing power structures in Peru or dependence on the central government's regulations in Ghana. In one interview, the interviewee even mentioned the key topic of indirect recentralisation despite formal decentralisation (also see the box on decentralisation in the "Thematic workshop" section section on page 60). An employee from La Esperanza municipality in Trujillo complained about the lack of citizen involvement: "*Trujillo has never had a mayor who has sat down with the business owners, universities and social stakeholders and said: 'we're going to redesign this' or 'we're going to plan ahead for a city we want to live in, in 20 or 30 years in the future'.*"

– Last of all, interview partners in cities on all continents emphasised that poor people are not profiting enough from economic growth. Although it is booming, Bandung still has a divide between rich and poor; the labour force in Hawassa (mostly women) earn so little at under USD 1/day that they cannot even escape extreme poverty, despite the city's successful industrialization. In Ghana, people are pinning their hopes on the government's "one district – one factory" policy, although implementation of this policy has not taken off yet.

Similar results from other perspectives – a contribution to triangulation

In light of these parallels with our own analyses, the contribution by TU Darmstadt's researchers confirms our findings on intermediary cities. It therefore supports the triangulation required in evaluations, i.e. looking at the subject under review from a variety of perspectives and using a range of sources. It also confirms that there is no clear path to creating a sustainable city yet, even though interesting solutions have been identified, such as the agreement negotiated in Cartago in order to stabilise allocations from the central government or the boost to municipal income from the expansion of the market in Techiman. According to the researchers of TU Darmstadt there is also general appreciation for the involvement of international donors, as they are seen to be particularly important for the execution of plans. Additionally, their financial commitments are of a more binding nature, as noted by the town planning officer in Sunyani in reference to the donor-financed District Development Facility: *"[The money] arrives on a regular basis. If the Common Fund were to arrive just as regularly then we could grow in a number of areas. However, this is not the case."*

Though we may be moving slowly, we appear to be moving in the right direction when it comes to creating sustainable intermediary cities. Concerns remain regarding the fundamental unresolved problems in land usage planning and urban governance.

One of West Africa's largest markets in Techiman, Ghana, is an important source of local income.

In search of possible solutions – learning from experience

Finding a path to sustainable urban development while also contending with detours along the way not only presents a challenge for FC but for other donors as well. Research is still in its infancy and the gaps in knowledge are especially large when it comes to small and medium-sized cities playing a unique role as an intermediary between urban and rural areas. This is precisely why FC's experience – be it positive or negative – is so valuable, especially when it reveals repeating patterns.

Simultaneous improvement of local governance and infrastructure – often asking too much

A huge majority of multi-dimensional FC projects related to the development of sub-national cities and communities have been and continue to be carried out in the context of decentralisation. These projects and programmes are characterised by their dual objectives. They do not only aim to reinforce infrastructure, they are also intended to improve the administration of cities and communities under national decentralisation reforms. With regard to unsatisfactory results, this type of project unfortunately tops the list. Similar reasons for failure arise time and again: the capacity at sub-national governmental level is and remains weak, both in terms of staff and finances. The city lacks good governance, which would provide the public administrative bodies with a framework for living up to their responsibility for regulating urban development and providing and maintaining social and economic infrastructure. Still, the main thing missing are financial resources, particularly when the central government lacks the will to implement fiscal decentralisation. An example of this is shown in a quote from an evaluation report on the project "Promotion of district cities in Ghana": "The tasks and responsibilities of municipal services have been transferred to the districts without equipping them with the necessary funds [...]" (FC Evaluation Report Ghana, 2011). Most of the failed decentralisation projects can be found in the countries of the Sahel Zone, some of the world's poorest developing countries, with sub-national governance structures weakened by the overlap between formal and traditional structures of authority (see also box on page 60 in the "Thematic workshop" section).

The situation appears to be better in countries from other regions, such as Albania, Macedonia and Palestine, but also here, the results relating to governance objectives tend to be lower than expected. Macedonia is an exception to this rule, likely due to its alignment process with the EU, though a similarly positive effect has not been observed for the decentralisation programme supporting the EU candidate Albania. Another exception with satisfactory results is the FC promotion of decentralisation in Peru. The programme provided large concessional loans to support national reform processes and concentrated exclusively on reinforcing sub-national governance structures.

To summarise, the results suggest that aiming to reinforce both governance and infrastructure in sub-national centres at the same time might be too ambitious. This issue has already been critically pointed out in the 2009 evaluation report on a decentralisation project in Mauritania: "*In partner countries with a low level of commitment to decentralisation and a low level of municipal development, a development concept that implements selective improvements in rural centres seems quite suitable for reaching poor rural target groups. However, in this case, it should be refrained from formulating objectives related to the promotion of decentralisation.*"

Multi-sectoral approaches with sufficiently stable administration – a ray of hope

Despite a concentration of unsatisfactory results of projects in support for decentralisation, it should be kept in mind that sustainable urban development calls for multi-dimensional approaches – at least when local administrative bodies perform their basic functions effectively.

One pioneering project in this regard, initiated as far back as in the late 1980s, is a development cooperation project for the urban development of Babahoyo, the capital of the Los Ríos province in Ecuador. At the time of the project appraisal, Babahoyo had a population of about 56,000 and it was at risk of being regularly flooded from two joining rivers that bordered the city, a fact which had a major adverse effect on its development potential. The FC aimed to protect the city from floods, while simultaneously improving the drinking and waste water sector. An isolated promotion would not have made sense in Babahoyo as any effort to solve drinking and waste water problems could have been destroyed by the next major flood. The Technical Cooperation supported the municipality. According to the evaluation report from 2008, the successful support jointly from Technical Cooperation and FC created "the prerequisite for the city's further economic and social development." Even the flood in 2008 – the worst in 50 years – could be largely withheld by the flood protection barriers. Just very few areas of the city were penetrated by flood water – even though it almost reached the top of the barriers and unfortunately managed to get into some of the drinking water systems. Despite this damage, Babahoyo withstood the flood much better than other cities in the coastal region. Since then, the population of the provincial capital has almost tripled. Thanks to its industrial sector (which mainly processes agricultural produce from the surrounding area) and its transport links, it perfectly fulfils the function of a link between rural areas and primary cities.

The only other urban development promotion project that was evaluated

Multi-sectoral FC projects promote measures against flooding in Babahoyo, Ecuador, and sustainable urban development in Hebron in the Palestinian territories.

Restoring the suburbs in Bogotá, Columbia. An FC project creates liveable spaces for the young urban population, such as playgrounds and sports facilities.

and followed a similarly comprehensive approach as the one in Babahoyo is the FC support for the rehabilitation of Hebron, the capital of Hebron Governorate in the West Bank. Houses and flats were renovated, offering homes for Palestinian families in need. The city's basic infrastructure was also restored and the economy of the historic old town was revived. Similar to the case of Babahoyo in Ecuador, the evaluation report from 2013 verified positive development effects on the city of Hebron.

Other multi-sectoral urban projects in the evaluation portfolio tend to comprise a multitude of small-scale interventions. The project in Casamance, Senegal, described in the first section of this report represents this type. Another example is a project in Jordan supporting the public infrastructure in refugee camps and informal settlements. The evaluation report rated the project as successful, inter alia, because the supported infrastructure had been well integrated into the Jordanian authorities' administration upon completion. Furthermore, there are some projects supporting the improvement of living conditions in slums, though these tend to be located on the outskirts of larger cities (with one million plus inhabitants), such as the project in Manshiet Nasser on the outskirts of Cairo in Egypt, or the projects to refurbish the suburbs of Bogotá, Colombia.

Citizen participation – a key to successful planning

Despite their proximity to megacities, slum-improvement projects may teach important lessons that are informative for sustainable urban development. In these projects, the development of the areas was carefully planned, taking into account basic social services and economic infrastructure as well as leisure parks, sports facilities and playgrounds.

To make sure the planning process did not neglect residents' needs, the slums' inhabitants were consulted. While the wide range of needs faced the municipalities with major challenges that were not always easy to tackle, this was offset by the positive results of a generally high level of facilities' usage and the high level of resident satisfaction, at least in most cases.

The perception that citizen involvement could be a key factor in successful planning is also demonstrated in larger urban renovation and planning projects not included in the FC portfolio: cities built from scratch in Ethiopia that were only poorly accepted by the population and the restoration of a city in Chile whose citizens were involved in the planning process and have well settled in to their new home (see box, p. 41). This example also shows that citizen involvement should not be misinterpreted. It is not about

Two countries, two cities and the importance of participative urban planning

Chile: On 27 February 2010, the city of Constitución was almost completely destroyed by an earthquake and a subsequent tsunami. Its restoration is seen as a prime example of how cooperation between citizens, local businesses, planners and the city government can transform a nearly dead city into a thriving one. The Chilean architects' office Elemental, responsible for the restoration plan, describes the key to success: *"Participative design does not mean working with residents to find the answers but finding out what it's all about, in other words identifying the right questions."*

The city of Constitución, Chile, is a role model for participative urban planning.

Right at the start of the restoration process, a "Casa Abierta" (open house) was set up in the city centre, serving as a contact point for citizens' concerns. Citizens were not only able to have their voices heard during planning sessions, but they also had the opportunity to have a say: Do we need a bus station first? Or maybe a school or perhaps a fire station? The most important decision of them all for the future of Constitución: what is the best way to protect the city and its residents against tsunamis? Voters could choose from three options: the construction of a protective harbour wall, a strict ban on construction in the area surrounding the shoreline – very difficult to implement due to the widespread problem of informal settlements – or the creation of a waterside park with lots of trees to break the power of flood waves. The residents opted for the park because it also met other requirements: A park full of trees protects against tsunamis, but also from the annual floods. It provides easy access to the river for everyone and finally gives citizens a public leisure area.

In spite of positive experiences like this, many administrative bodies are critical of participative planning, mainly because it is time-consuming. The example of Constitución does not disprove this. Today, eight years after the tragedy, a mere three quarters of the projects from the restoration plan have been implemented so far. However, it remains an open question whether a less participative approach really would have been less time-consuming, and what's more, if the residents would be just as happy.

Ethiopia: In an attempt to get a grip on the problems of large-scale urbanisation, the Ethiopian government – following the Chinese example – has opted for central planning: targeted industrialization like in the city of Hawassa[1]; huge projects for the construction of social housing in and around the capital of Addis Ababa[2]; and probably the most ambitious plan of them all: the construction of new cities in rural areas. The idea is that people will stop heading to the city if the city is brought to them. A government plan from 2015 aims to build 8,000 of these rural cities by 2020.[3]

Back in 2010, Bura (a small village in the north of the country) became the model rural city Buranest[4], as a pilot for a New Ethiopian Sustainable Town. Construction started in 2013. Two-storey townhouses were built as models to be duplicated. The houses were equipped with running water, power and toilets in the backyard. Yet the farmers remained skeptical. The "urban lifestyle" was too different from the huts they were used to living in. They were also scared of losing their land to the new city. The model houses stood empty and expansion of the city stalled.

However, slowly but surely, things are starting to move in Buranest. Maybe the 2015 plan for 8,000 cities has given a new impetus. Poor farmers from the surrounding area were resettled in the model houses. Buranest is growing, though not quite in the way it was planned. The centre of the village, which was planned to be located at the riverbank, was not accepted by the residents. Instead, they built new settlements on the left- and right-hand side of the highway – informal and in accordance with the traditional style. A kiosk and a pub have also opened up – which the planners consider as a sign that people believe in the city of Buranest.[5] According to them, it doesn't really matter if urban development is moving exactly as planned. The most important thing is that "the population is making the project their own". However, for Buranest to become a thriving rural city, there is still a long way to go – maybe the way is even longer than the one to the nearest city.

[1] See box on the case studies by TU Darmstadt.
[2] Cf. UN-HABITAT (2010): The Ethiopia Case of Condominium Housing: The Integrated Housing Development Programme. United Nations Human Settlements Programme: Nairobi.
[3] Cf. Tom Gardner (22 November 2017): Does a struggling Ethiopian model town offer lessons for the future? Feature – Reuters Credit RSS.
[4] Planning occurred, inter alia, in cooperation with ETH Zurich, see NESTown.org.
[5] See http://www.spiegel.de/wirtschaft/soziales/aethiopien-baut-8000-neue-staedte-a-1188777.html

Sewage treatment plant in Albania: effective waste water disposal can create structure for an entire city.

involving residents in every single matter but more about finding out about their needs and preferences and consulting them if possible alternatives are available.

A more recent FC project – which appears similar to the Babahoyo project in Ecuador – in the coastal city of Barisal in Bangladesh is also aiming to involve not only the city government but also its citizens. The envisaged multi-sectoral investment programme aims to make Barisal more resilient. There is good reason to expect that this programme will be able to live up to the past FC success in Ecuador, which had been forgotten about for far too long. After all, the majority of FC projects – even more recent urban projects – focus only on one sector.

Projects in the city instead of urban development

The vast majority of urban projects offer sector-specific support. More precisely, these are projects based in cities but there are rarely projects related to urban development, although there are exceptions that prove this rule. According to an evaluation report from 2016, one such exception is the waste water project in the Albanian town of Korça. After its open waste water streams were replaced by a proper sewage system, the town began to thrive economically, not least due to its new appeal to tourists. A 2010 evaluation report perceives the tram project in the medium-sized Turkish city of Bursa to have similar structure-forming effects. This is because the project not only reduced congestion and air pollution, and improved access to jobs and social institutions: "*The tram system will also help […] to concentrate Bursa's very dynamic urban development along the central public transport corridor. […] As such, the tram system also contributes to energy-efficient and environmentally friendly urban planning and development in the city of Bursa […]*" Unfortunately, there have not been any follow-up public transport projects based on this successful project available for evaluation. The Transformative Urban Mobility Initiative (TUMI), launched at the 2016 UN Habitat III Conference by the German Federal Ministry for Economic Cooperation and Development and its international partners, has promised to change this. Ever since, the promotion of urban mobility as a key factor in sustainable urban development has been ranking high on the development policy agenda.

So far, the evaluation portfolio does not contain any further sector-specific projects that generate cross-sector impetus for urban development. Even though they are restricted to one sector, these urban projects are not a guaranteed success. They, too, are often confronted with the problem of weak administrative bodies, as illustrated by an example from Vietnam. In 2016, it was evaluated as unsuccessful because "the new treatment plants made no relevant contribution to the achievement of objectives as significant parts of the pollutant load of the sewage make their way into the environment through routes other than the sewage pipe system. The cause is the broad use of unconnected cesspits." The institution that was responsible for emptying the cesspits did not coordinate at all with the administrative body responsible for the waste water network and treatment plant. Similarly dysfunctional setups can be found in many other countries. To give another example: quite often, one finds split responsibilities for waste water on the one hand and the drainage of rain water on the other.

Almost all urban projects report certain sustainability weaknesses due to the utility company's and municipality's lack of service revenues or insufficient other financial resources. These problems tend to be more pronounced when the income status of the partner country is low and no revenues are generated by the supported sector. However, even the power sector, which tends to generate high levels of income from electricity tariffs, sometimes has to contend with financial problems even in middle income countries such as Mongolia: "*In view of the prevailing (mainly financial) challenges, the only option […] is to ultimately switch to crisis management […]. To guarantee the sustainability of the positive effects achieved by the project, the financial situation of the public utility corporations […] must be improved.*" (Ex post evaluation, 2014).

Sector-specific urban projects normally face smaller challenges than multi-sectoral programmes when dealing with the implementing agency's financial and staff-related weaknesses; e.g. a commercial operator is no option for administering a city, but it might be a viable alternative for professionally running a sewage treatment plant as in the recently evaluated project in Nicaragua. All in all, the performance of sector-specific urban projects is about average; 75% to 80% of them are rated as satisfactory or better. Nevertheless, the large number of evaluation reports that unanimously name financial constraints as a threat to sustainability also reveals that most cities and communities would be out of their depth with extensive investments in sustainable multi-sectoral urban development.

A guarantee and loan programme to promote municipal bonds is helping Tamil Nadu, India, to finance infrastructure.

Municipal financing – a cornerstone of sustainable urban development

The key phrase is "innovative municipal financing", a concept that could lend a hand to cities that lack funds to invest in their sustainable future. There are already some FC projects in this area, such as the evaluated loan programme for financing municipal investments in waste management in the Philippines (rated "satisfactory"), or the guarantee and loan programme for promoting municipal bonds for urban infrastructure financing in India (rated "good" due to its innovative structure). However, taking into account the investment needs cities are currently facing, these projects are little more than a drop in the ocean. Innovation is vital to master this challenge and tap into new sources of financing. The required funds for infrastructure investments in medium-sized and new emerging cities in Latin America alone are estimated to be USD 23.5 billion.[15] Specialist publications, such as the aforementioned report by e.g. the Inter-American Development Bank, as well as an FC-commissioned study[16] try to answer the question of how this demand can be covered. In the generation of new ideas, the focus is not on indirect financing modes via financial intermediaries (as was the case in the two projects listed above) but on a "sub-sovereign lending" approach. Here loans are issued directly to local or regional governments or city authorities through public or even private financiers. To open up this financing channel for more cities, the World Bank's City Creditworthiness Initiative aims to help cities improve their financial performance – a basic requirement for receiving loans and serving them.

However, all of these initiatives are still in their infancy and do not offer solutions tailored to small and medium-sized cities. So far, a mere three FC loans have been issued directly to cities using this approach, and they have all gone to capital or primary cities. For regional centres, there are huge hurdles in accessing finance. Their financial data and, as a result, their creditworthiness are usually weaker, resulting in a higher risk for the financier. Perhaps pooling municipal loans and having them refinanced by development-oriented investment funds or even the capital market could help – as proposed in the following interview with Parks Tau, the President of the United Cities and Local Governments organisation and former mayor of Johannesburg.

However, before a model like this can be promoted, certain basic prerequisites have to be established first as loans are generally unsuited to solve the basic problem of insufficient municipal income through taxes, duties or fiscal transfers. Loans could even exacerbate this problem as the cities would have to service their own debts, too, and could be driven to insolvency in a worst case scenario. For this reason, loan-financed solutions are particularly suitable when they facilitate specific investments that generate new income, which can then be used to serve the loan. In case such economically viable investment opportunities exist, a second prerequisite needs to be fulfilled before a loan can be granted: regulation must allow municipalities to incur debts on their own account. For the majority of cities in the developing world, this is not permitted at the moment or requires special permission from the central government.[17] For regional or even local hubs, this route will in all likelihood remain very restricted for the near future. So, it is all the more important that FC reinforces existing approaches to increasing municipal income and finance.

A long-serving standard approach in FC projects has been pushing cities to charge for municipal services such as power and water, applying tariff systems that are cost-covering and socially acceptable. There are also countless projects that counterbalance a lack of fiscal transfers with donor-backed decentralisation funds which simulate this type of transfer. However, this does not provide a permanent solution, especially if the central government is not willing to support fiscal decentralisation. One solution that is highly likely to offer more potential is increasing municipal income through taxes. An evaluation report from 2018 describes some inspiring impacts to this effect: a small city in Senegal was able to triple its tax revenue in a short period of time by pushing informal local entrepreneurs to formalise their businesses.

[15] Cf. Bonilla, M., Zapparoli, I. (2017): The challenge of financing urban infrastructure for sustainable cities.
[16] Cf. iCee (2016): Analyse des Standes und der Herausforderungen im Rahmen städtischer Finanzierung. (Analysis of the status quo and challenges of urban financing).
[17] Cf. iCee (2016).

Outlook: useful approaches but still no breakthrough

What conclusions can be drawn from this review of evaluated FC projects supporting urban development? Some positive notes to start with: FC is already focusing on regional centres and has achieved success in this area, particularly with projects that aim to improve a particular sector. These also include flagship projects, such as the promotion of public transport in Bursa, Turkey, that could serve as a role model for the sustainable development of medium-sized cities. It is worth noting that – despite a success like this – investments in social urban infrastructure dominate the portfolio, mainly in the water and waste water sector. This may be necessary given the problems in maintaining an adequate supply of basic public supply services in ever-growing cities. However, social infrastructure does little to nothing for the development of a city's economic potential. Cities, also small and medium-sized ones, need to improve their economic infrastructure in order to offer an enabling environment for citizens who want to act on their economic opportunities.

The majority of projects – even "one-dimensional" ones in intermediary cities – are adversely affected by weaknesses in the city's administration, unclear responsibilities, and a lack of staff-related and financial capacity. This is especially true of projects that do not generate sufficient additional income to maintain the new infrastructure, and where the infrastructure requires capacity building for its operation which cannot be delivered without improving the whole municipal administration at the same time. Multi-sectoral projects in particular suffer from a municipality's weaknesses.

When it comes to developing future projects, these weaknesses raise the question as to whether it is still too early for a multi-sectoral approach to urban development in the poorest developing or emerging countries.

The successful examples of the very few multi-dimensional urban development projects primarily relate to advanced developing or emerging countries. These cases are also far from being suitable as prototypes for the sustainable development of regional centres. However, these projects teach us some important lessons: firstly, basic resolvable problems – such as smelly waste water in Korça or regular floods in Babahoyo – that impair the development of the city as a whole must be addressed first. Secondly, urban planning for cities that cannot rely on a ban on migration or strict entry regulations (like in China, for example) should be based on the knowledge about residents' needs. This does not mean that citizens should be consulted in every single matter as this could even weaken the authority of (sub-national) governments. Thirdly, sustainable urban development calls for efficient and effective urban management. Last but not least: a city needs new sources of finance, even if it is "just" a regional centre. To find these, cities increasingly need to transform into autonomous bodies, as has primarily been the case in industrial countries to date. Improving a city's income through duties and taxes is an important step in this direction.

These indications are still a long way from being a clear guide to sustainable urban development, but more and more gaps in our understanding will be filled in future. There is, however, some doubt as to whether there will ever be a blueprint for sustainable urban development. Every city – and this applies to small and medium-sized cities as well – is unique in its own way, in terms of its location, its history and its residents. This is exactly what makes the subject of urban development so fascinating.

Unique cities, like the one here in Brazil, call for unique solutions.

Bouaké in Côte d'Ivoire: an intermediary city with an important regional trading centre.

Interview

Between basic needs and lofty visions – the state of intermediary cities

Today, already more than half the world's population live in urban areas. Projections see an increase to nearly 70% by 2050. But while the growth of megacities – cities of more than ten million inhabitants – is slowing down, it is the intermediary cities that are on the rise. These cities are variously defined in terms of population, one popular definition being that they have between 50,000 to one million inhabitants. Critically, they form a nexus between urban and rural areas, and often also between local and global spheres. What challenges do they face, particularly the cities in the global south? How can sustainable urbanisation be managed successfully? We asked two experts in the field: Mpho Parks Tau is the former mayor of the city of Johannesburg in South Africa and currently the president of United Cities and Local Governments (UCLG), the largest organisation worldwide of governments at the subnational level. He was joined by Nathalie Le Denmat who heads the evaluation department of AFD, the French development bank, and is a specialist in urban development and local finance.

Mr Parks Tau, as president of UCLG you are in a unique position to take the temperature of governments around the world on urban development. How high on their agendas are intermediary cities?

Mpho Parks Tau: Not high enough. Primary cities still tend to dominate the discussion. This is not least because what happens in the primary cities attracts the most attention – that's where the media companies are and thus where the news is generated, that's where the business people are. Fact is, however, that the intermediary cities

Mpho Parks Tau
President of United Cities and Local Governments (UCLG), former mayor of Johannesburg.

are the ones currently absorbing the highest numbers of people moving to urban centres. So there is a discrepancy between the priority given to them and the responsibility imposed by the evolution of urbanisation. Almost all of us in the local government sphere identify intermediary cities as a priority, and yet they tend to be bumped off the priority list. At least we are acknowledging their importance now, so that's a bit of progress. But I do think that we need a much greater push.

When we speak about priority lists and urban development, what's the benchmark? Is there such a thing as an ideal (intermediary) city? When you were mayor of the city of Johannesburg, did you think about cities in such terms at all?

Tau: As a vision, I've certainly reflected on the ideal city. This ideal is not necessarily encapsulated in architectural design but rather in what the city represents: its ability to absorb and provide for the people in the city and people newly moving into the city; it being a centre of opportunity for people and for enterprises to grow. The ideal city takes different forms, shapes and sizes but it is always a functioning ecosystem enabling people to take advantage of the agglomeration effect of urbanisation.

"Intermediary cities have an enormous set of challenges to confront." »»

Mpho Parks Tau

In such a complex organism, how do you find the right priorities of development?

Tau: Intermediary cities have an enormous set of challenges to confront, some spatial, some financial, some related to access to basic public services, and so on. My sense about prioritisation is that the mayor or the collective of the city leadership should decide what the key issues are. Particularly in cities in the global south some of the most basic services, like access to water, sanitation and electricity, are often not available. That means you need to ensure that while you are trying to build the city of the future, you are also meeting the basic needs of your citizens today.

Nathalie Le Denmat: An example of how a local government is trying to balance these different aspects in a post-conflict context might be the intermediary city of Bouaké in Ivory Coast, a city of about half a million. There, city leaders identified as a key issue the lack of a resilient infrastructure for a central trading place. With a loan from the French development bank, a covered market structure is being built that will eventually accommodate around 8,000 traders and include access roads, sanitary facilities and more. This will not only positively impact economic activity, but just as importantly, this clean and dependable environment will also contribute to an improvement of work conditions and the well-being of many people. In a country where more than 40% lack appropriate sanitation facilities, this is a pressing issue.

So the vision of the ideal city exists, but the reality is one of constantly balancing priorities. Can you think of an example of an intermediary city that has already achieved some measure of "ideal"?

Tau: Different stakeholders in a city have different expectations of what the city must provide to them, so this is a difficult question to answer. Let me mention Curitiba in Brazil. This city of around 2 million inhabitants has for decades championed sustainable urban development, including taking measures to safeguard its rich biodiversity. It is now adapting its mobility concepts in such a way that transport becomes more environmentally friendly and accessible to all despite a growing population.

Changing the mobility in a city is a huge undertaking. What type of governance structure best supports such urban development?

Tau: Evidence suggests that cities with greater political, administrative and fiscal decentralisation have greater prospects of success. Ideally you would want to have a dedicated mayor or equivalent, a solid administration and a democratic system of governance. A strong city needs an administrative system that has the ability to execute whatever the political mandate is. But what is also needed is the fiscal instruments to be able to do that. Those cities with less instruments struggle with becoming more competitive because they are unable to make a decision about something as basic as waste management in the city. For instance, if I am not able to impose a waste management levy which I can then collect, then I might not be able to build a landfill site which helps create a sustainable and environmentally friendly waste management service which eventually enables me to make decisions about waste-to-energy. The people who have the luxury of making those decisions are those with authority and those with the fiscal instruments at their disposal.

In many places, particularly in sub-Saharan Africa, we see the decentralisation of responsibilities for basic services, and maybe the decentralisation of local elections, but what the cities do not have is money. In your opinion, if this third instrument of decentralisation, the fiscal tool, does not come along with the others, is decentralisation worthwhile at all?

Tau: It would certainly be ideal if they arrived all at the same time. But in reality they might arrive one after the other, and sometimes that can work, too. For instance, I found that technology can sometimes be a real game changer so that when you have the political and administrative tools plus you have new and innovative technologies, these can enable mayors to make innovative decisions that might not even be defined in a fiscally decentralised system. Take energy for example, where you can now have decentralised energy solutions such as off-grid and micro-grid solutions. If you have the political authority, you can make decisions that are outside the realm of the past where you needed a big power plant, transmission lines and centralised distribution systems. Thus the new technologies can enable you to leapfrog into a different future, in some instances even when the fiscal tools are not at your disposal. But at the very least you need political authority to make decisions.

Le Denmat: In my experience also, this scenario of decentralisation is conceivable, to begin by making the best out of the political and fiscal tools. I would like to add that for the fiscal tools to be effective it's of the utmost importance to be well prepared: You can't speak about local finance if you don't speak about governance first. In other words, first there needs to be a political-

Nathalie Le Denmat
Head of the evaluation department at the French development bank Agence Française de Développement.

administrative framework that defines the social contract, i.e. that answers questions such as how do we share the wealth of the country between people but also between territories.

Let's go back for a moment to the harsh reality where intermediary cities often have clearly inadequate financial resources. What possible sources can additional money come from?

Tau: First you need to create the ability to generate own revenue through local taxes and trade in services. In the global south where there is a large informal economy this is a particularly difficult task but not an insurmountable one. You'll have to make different decisions about how to continuously shift the tax incidence in a manner that creates progressive taxation policies in a continuously evolving environment. You might find that property tax is not always ideal in certain cities because the land use management systems, the cadastres and therefore the revenue generating mechanisms are unable to mature in time. That means you need to shift the responsibility to a different set of tax incidence. This set must be easier for local authorities to collect or for the central agency to collect and then distribute to local authorities. So in my opinion, you start by identifying the most appropriate local revenue raising mechanisms.
Secondly, there should be effective fiscal transfers. That is to say, fiscal transfers from government to local authorities in a prescribed and defined way – what Nathalie called a framework earlier: if a particular percentage of national taxes is dedicated to local government, you then develop an objective policy on how to distribute that. It should not be subject to the whims of a minister of government, rather it should be a system designed to give local authorities certainty about their revenue. Finally, the donor community should focus on how to shift more of its resources to the local sphere of government. Up until now, a lot of the resources from the donors have either gone to non-governmental organisations or to central government. We need to shift a significant portion of the donor community investment into local authority spaces.

From your experience, what types of taxes work well for intermediary cities in Africa?

Tau: I think a form of business tax is important. Unfortunately, governments almost always resist that. Next, trade in

Curitiba in Brazil: a pioneer in sustainable urban development with an environmentally friendly mobility concept.

services: the provision of water, electricity, or waste management allow for those services that you can trade with communities and generate a surplus on those services. And ideally you want to get to the point where property tax works. That will take some time but it will solve many other problems in terms of what happens on land in a city.

Regarding fiscal transfers, what are the biggest challenges? How can they be overcome?

Tau: It is pivotal to have a framework, as Nathalie mentioned earlier, a formula that gives local governments certainty. A formula that spells out that local governments shall get a share in the national revenue, that that share shall be a particular percentage and that it will be distributed in an objective manner. Parameters can be the number of (poor) people a city has, the backlogs, the infrastructure, and so forth. Of course this formula is not usually arrived at by consensus between local government and central government, but rather, if there is a formula at all, it's the central government alone that generates it. How can we move forward? I believe that more empirical evidence would help. Many times in our city development community we talk about it anecdotally but I think that we need to put more energy into presenting case studies that show that decentralisation is an important part of the development process.

Le Denmat: I completely agree. With the evidence we have so far, it is difficult to say that where there is decentralisation, there is development – but we can say the inverse: every developed country is decentralised, and decentralised in such a way that local governments also have local financing. Of course, even the mayors in France say the financing is not enough. But the differences internationally are striking. UCLG and the OECD have set up an initiative called World Observatory on Subnational Government Finance and Investment collecting data on about 100 countries. The figures show that in developed countries 30% of the national budget is devoted to local government. By contrast, in the less developed countries it is only 6 or 7%. And in developed countries where 30% go to the local governments, local governments are responsible for an impressive 60% of public investment. But looking at only 6% of the national budget going to local government in Benin or Burkina Faso – it simply is not possible for these local governments to assume their responsibilities.

Within sub-Saharan Africa, only South Africa and Nigeria have fiscal transfers at a relatively high level. How do they do it?

Tau: First of all, if I were to wear my other hat as the president of the South African Local Government Association, I would argue that the 9% we have is not enough. We heard from Nathalie that in cities in the global north, the average is about 30%. But it's true, we are doing better than many of our peers in sub-Saharan Africa. It really is about a system that is predetermined. In South Africa, we have an advantage in this respect. Local government is recognised in the country's constitution as a distinct sphere of government with original powers and functions. That means local government is not a creature of national legislation, but of the constitution. This status imposes a responsibility on government to ensure that this creature of the constitution is adequately resourced.

AFD is doing a lot of sub-sovereign lending. Could you share any successful examples of this form of direct lending to a city?

Tau: Johannesburg is not an intermediary city but it's a practical example. The city worked with the AFD on addressing unaccounted and non-revenue water. It was an off-balance sheet transaction, a complex transaction but one that I think yielded a lot of lessons that have been beneficial both to the city and to the AFD. This is how the revenue to serve the loan was generated: water reticulation is a municipal function in South Africa, and Johannesburg had non-revenue water of 35%, a very high percentage. AFD helped us to recapitalise the infrastructure, install metering, improve revenue collection. You can structure the transaction off-balance sheet and pay the bank off the savings that you achieve. I believe that this is a model that at least in South Africa could be replicated many times over in different cities, in particular in intermediary cities that are facing similarly significant challenges.

Le Denmat: Another example is, again, the Senegalese city of Dakar. For a project in the city, we lent to Dakar directly and without a government guarantee. Beside the loan AFD carried out some activities in cooperation with the city that were aimed at strengthening the financial capacities of Dakar, for example with regard to reimbursement procedures. At one point the Bill and Melinda Gates Foundation joined in and used the same tools for even more capacity building. After two years Dakar received its first rating by international rating agencies. Another year later, and after yet more capacity building, the second rating followed. This is when Dakar was able to go to the financial market, not to intermediary financial institutions such as AFD or KfW, but to the capital market.

Your last example takes us seamlessly to the next topic: Without private money it will be very difficult to finance all the infrastructural needs in intermediary cities. Besides capacity building, how can donors or institutions such as AFD and KfW help cities to attract private money for urban development?

Tau: The Green Bond issued by the city of Johannesburg in 2014 is a good example. We worked together with the donor community to design the bond and to negotiate it with the stock exchange. It was actually the first green bond listed on the exchange which means it was also a pioneering initiative around climate.
Right now we are working on a project, particularly with the Global Fund for Cities Development (FMDV), around pool finance where we pool loans of different towns and cities, including intermediary cities. Donors and development finance institutions could help to refinance such a pool, e.g. by taking some of the risk, and thereby improve the risk-return profile for private investors. The ultimate aim of pooling is to be able to share common instruments that can then be listed.

Le Denmat: Pool financing really is a necessity for local governments. In France we have a bank for local governments. In Sweden they have a bank for the local government that is owned by local governments. You have something similar in Germany also with the savings banks that belong to the municipalities and counties. And it's necessary because many small and intermediary cities cannot go and borrow on the market because many commercial banks are afraid to lend to local governments. They lack familiarity with them, hence they fear the risk. Therefore, if we look into the future and ask ourselves how we can improve the financing situation, I think this is one concrete and effective way: to have a structure such as a bank that is dedicated specifically to financing intermediary cities.

> "Look into the future and ask ourselves how we can improve the financing situation." »»
>
> Nathalie Le Denmat

Thank you for sharing your views!

The interview was conducted by Judith Reker.

Prof. Dr Eva Terberger, Head of the FC Evaluation Unit (right), in a conversation with Nathalie Le Denmat and Mpho Parks Tau in Madrid.

Thematic workshop

Evaluation of information and data
Digitalisation is changing the way FC projects work, such as using computer-based enrolment in a social cash transfer project in Malawi.

Water meters in Jordan – one of many data sources used in evaluation work.

Thematic workshop

“Rapid appraisal 2.0” – FC evaluation and new data sources

The availability of information and data is developing at a rapid pace. We want to provide insight into how this development influences our work in the area of FC project evaluation. Does improved data access help to make evaluation results more reliable, even if we stick to “rapid appraisals” as our standard method for project evaluations?

“Social Research Methods, though powerful, are not often used to meet the pressing information needs of decision-makers in development. This has sparked a growing interest in an array of less structured data collection methods called ‘rapid appraisal’, which aim to supply needed information in a timely and cost-effective manner.”
This quote from 1993 is attributed to Robert Picciotto, then Director-General of Evaluation at the World Bank. He aptly sums up the advantages of “rapid appraisals” – the method typically used in the standard evaluation of FC projects.[1]

Each year the FC Evaluation Unit assesses the developmental success of more than 60 FC financing tranches summarised in around 50 evaluation reports.
As might be expected, not all of these ex post evaluations allow conclusions to be drawn that go beyond the scope of the individual project. That is why a method is needed which strikes a balance between the potential knowledge gain and the evaluation effort required. “Rapid appraisals” tend to ensure this balance between costs and benefits – on average, albeit not in each individual case. Consequently, the method is specifically recommended for project evaluations.[2]

[1] Kumar, K. (1993): Rapid Appraisal Methods. In: World Bank – Regional and Sectoral Studies. Washington, D.C.
[2] Other donors also use rapid appraisal as an evaluation method: USAID (2010): Tips using Rapid Appraisal Methods, in: Performance Monitoring & Evaluation, 5 (2). See also http://wikieducator.org/Rapid_appraisal_Methods.

“Rapid appraisal”

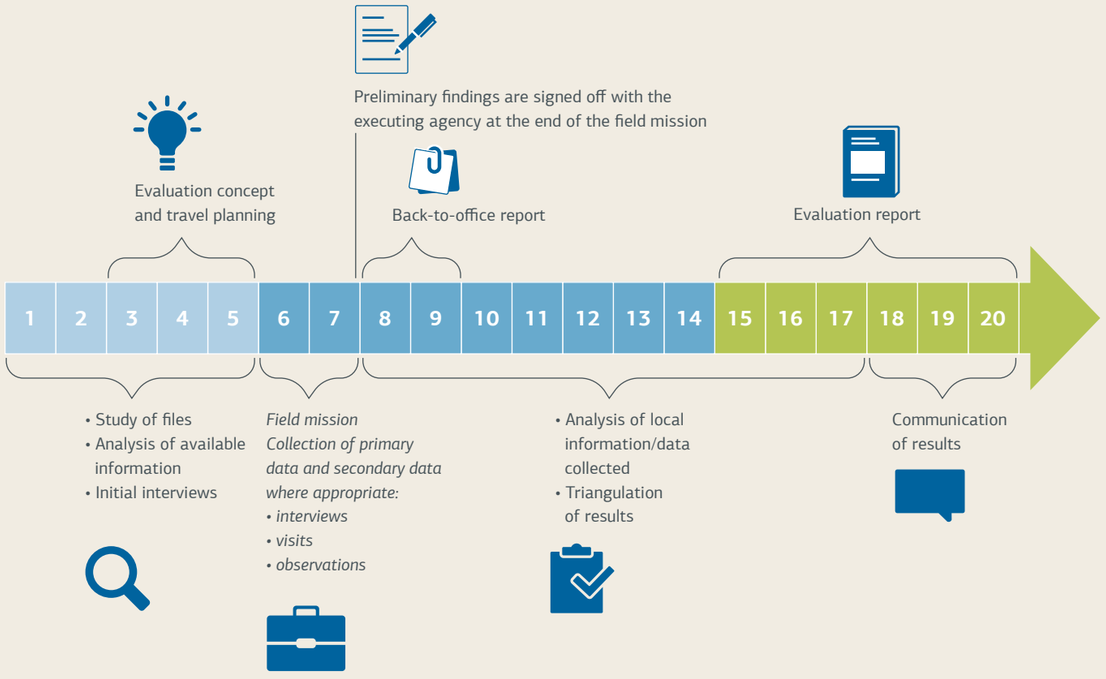
A “rapid appraisal” involves the rapid, systematic collection of essential information and its analysis. “Rapid appraisals” are characterised by fast execution, low-to-medium cost, and limited requirements in terms of methodology. The information, however, should be sufficiently accurate to enable third parties to assess the effects in a comprehensible manner and, in particular, to identify failed projects. The method is recommended for the evaluation of individual projects and programmes.

Key elements of a “rapid appraisal” (FC) project evaluation:

- preparation and design: review of the documentation and identification of key evaluation questions
- collection of additional information, also for the purpose of triangulation, e.g. of information in internal documents
- interviews with “key persons” and/or groups; focus group discussions
- direct observations and on-site impressions by means of short field visits (if possible), random sampling of visited project sites where necessary
- brief search of publicly accessible information and secondary data
- mini-survey whenever applicable
- use of the collected information to track the results chain: examination of impact relationships between the inputs, outputs, outcomes and impacts assumed during project appraisal/implementation
- summary of the results, including the appraisal of the project according to OECD-DAC evaluation criteria as part of a report limited to the key information

Result of applying the “rapid appraisal” method:
Generally a good balance between evaluation effort and knowledge gain across a large number of individual project evaluations.

4.1. Typical example of a “rapid appraisal” project evaluation *(in weeks)*

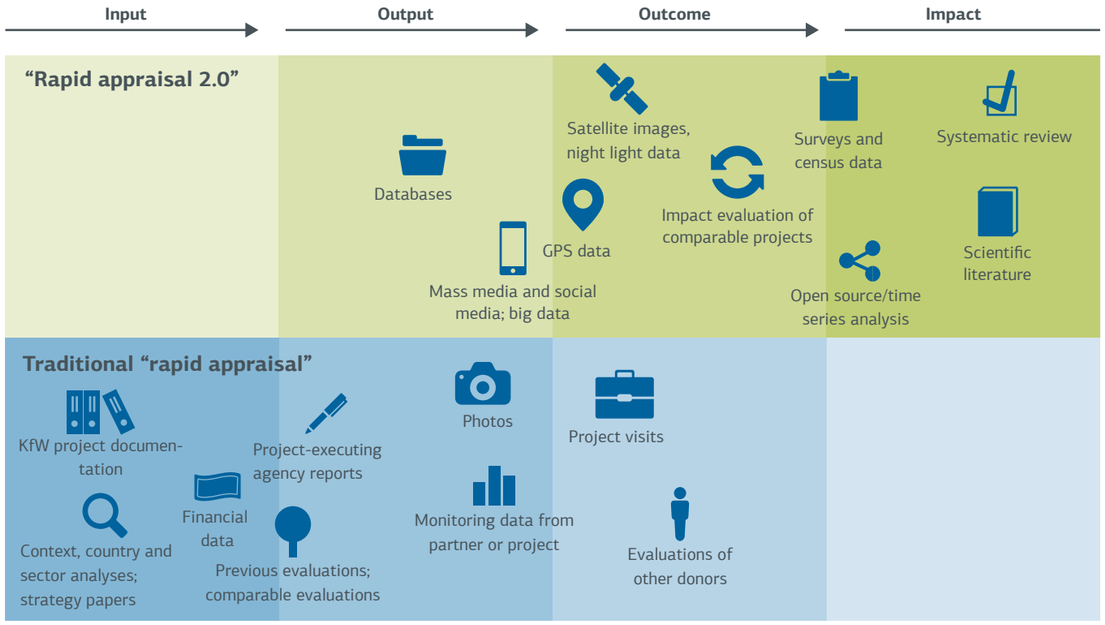


What can (always) be achieved with a “rapid appraisal” FC evaluation?

The structural framework for an ex post evaluation using a “rapid appraisal” is predefined by the intervention logic of an FC project, which is already recorded in the logical framework ex ante at the time of the project appraisal. It describes the intended results chain, starting from the project-specific inputs via the planned outputs through to the targeted outcomes and impacts. Using the “rapid appraisal” method, the ex post evaluation examines whether the results chain functioned as planned or was interrupted at some point, e.g. by foreseeable or unexpected risks. Studying the project documentation, i.e. initial appraisal reports, progress reviews and final reports, but above all collecting additional information – by means of a field mission if possible – are useful here. These immediate observations provide reliable information about the outputs, i.e. the infrastructure created, as well as its condition and operation. Semi-structured interviews with key stakeholders and target group members – focus group discussions are often advantageous for the latter – facilitate conclusions about the usage (outcome level). Another source of information is the data available from project-executing agencies: the quantity of drinking water produced and invoiced, the polluting load which arrives at a wastewater treatment plant, the bed occupancy rate of a hospital or the electricity produced and fed into the grid by a power plant. Such data – available from many executing agencies and of increasing quality – can be used to determine whether something has not gone according to plan, or whether the results chain has been interrupted. If baseline data is available, a before-and-after comparison provides an indication of the degree of change

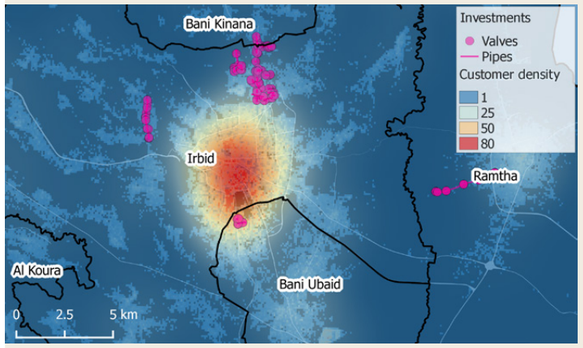
Traditional information gathering: reviewing project documentation.

4.2. Sources of information for a “rapid appraisal”: new methods complement traditional approaches



Jordan

Using executing agency data for impact analysis in the water sector



(Fig. 1) Consumer density in the greater Irbid area and infrastructure investments. Source: own illustration based on executing agency data.

The challenging water supply situation in Jordan, one of the most water-scarce countries in the world, has been exacerbated by the arrival of hundreds of thousands of refugees from Syria. The vast majority of these new arrivals do not live in refugee camps, but in private accommodation. Phases I and II of the FC project evaluated in 2018, "Drinking water supply of Syrian refugees in Jordan" (rating 3), were aimed at increasing water production in northern Jordan, including in the greater Irbid area near the Syrian border. The idea was to purposefully address local supply bottlenecks where the private accommodation of Syrian refugees was leading to an increased demand. The priority was to act rapidly – resulting in poorly defined and barely tracked performance indicators. Accordingly, the input data for the ex post evaluation appeared to be weak at first.

A happy surprise awaited the team on the ground though: the project-executing agency Yarkmouk Water Company granted the team permission to use its georeferenced database, which had been continuously recording the 333,347 registered water meters since 2012. This wealth of data enabled the evaluation team to carry out comprehensive analyses including pre-post comparisons of households' water consumption as well as the accurate identification (to a cubic metre) of geographical differences in households' water supply. Since the project data relating to the FC-financed additional wells and other infrastructure improvements was also geographically coded, it was possible to estimate to a high degree of accuracy whether and how the measures impact the target group.

The analyses confirm that, on an aggregated level, it was only possible to stabilise water consumption e.g. by compensating for dry wells, while the total consumption rose by just 0.56%.

A disaggregated analysis shows that private water consumption primarily increased in the households that consumed little water. This is positive news with regard to the goal of eliminating the shortage in underserved households. However, the analysis of the locations in which infrastructure measures were implemented shows that, for the most part, FC investments did not address the core areas with the highest consumer densities, but were primarily implemented in peripheral urban areas which tended to start from a situation of average supply quality, and, as a result, only a comparatively small segment of the actual target group could be reached (Figure 1).

The ex post evaluation in Jordan clearly shows how the collection of primary data and the use of external secondary data – and in particular the analysis of data collected by the project-executing agency – can make an important contribution to significantly improve the assessment of project impacts. The evaluation results and the analytical methodology used can provide important impulses for the planning and monitoring of water projects – including those outside of Jordan.

In the case of Jordan, these analyses are set to be continued and expanded. A robust indicator for assessing the security of supply for Jordanian households will be developed as part of evaluation cooperation with the French development bank AFD. Building on the executing agency's database, this indicator will also include high-resolution regional and temporal data on the refugee situation as well as secondary data relating to the socio-economic situation of households. This will enable an even more precise analysis and assessment of the supply situation in the future.

Objective of the evaluated FC projects: ensuring the water supply in Jordanian households and for Syrian refugees.

brought about by the project – but does not allow for a causal attribution. If facilities were not newly constructed, but rehabilitated, or if a development bottleneck is addressed by several interventions and/or donors at the same time, it becomes even more difficult to assign changes to the corresponding FC project.

The greatest challenge, however, tends to lie in measuring impacts, i.e. overarching effects, be it in relation to health and education, or even poverty, economic development or stability in a fragile region. The impact level requires answers to questions which go beyond the mere usage, such as "Who is actually taking up the beds in high-occupancy hospitals and what is the rate of treatment success?", "Who benefits from the additional drinking water or electricity?" or "How satisfied are the users?". In most cases, plausibility considerations have been and continue to be used to appraise impacts. By way of example, if a wastewater treatment plant complies with the permissible discharge values, then it is also plausible that the desired environmental and health impacts have been achieved; if the number of planned and unplanned power cuts decreases, then it is also plausible that improvements in the electricity supply will contribute to economic development. In individual cases, results at the impact level have been confirmed by "mini-surveys". For example, by asking the beneficiaries of reconstruction measures following a civil war how they assess stability in their region on a scale of one to ten. In a further example, a survey interviewed 366 internally displaced persons in Georgia who had benefited from the new construction or renovation of housing financed by FC. This survey asked homeowners to provide a subjective assessment of how their satisfaction with the housing situation and their integration into the new environment had developed. By means of the survey, it was possible to determine whether those still living in the flats were the intended beneficiaries of the project – a welcome opportunity to triangulate information from project documents and administrative data, but no proof of which changes had been brought about by the project.

At the very least though, specific information such as that provided by "mini-surveys" permits more than a simple plausibility check of impacts based on the achieved outcomes. In the future, new technologies and improved access to information and data may mean that this "harder" information will increasingly become the norm for ex post evaluations when using the "rapid appraisal" method.

How better access to information and data enhances the "rapid appraisal"

It seems appropriate to describe the changes that emerge in the "rapid appraisal" method thanks to new technologies and data as the transition to "rapid appraisal 2.0". "Rapid appraisal 2.0" builds on the evaluation practice described above and uses modern technology to take advantage of the quantity and variety of different data formats and sources available. This kind of information is made available quickly and often free of charge more and more through open source portals and due to digitalisation in general – for all sectors and themes. This corresponds exactly to the requirements of a "rapid appraisal". Evaluators can easily access various databases, survey results, georeferenced – i.e. spatial – information and satellite imagery. In particular, it is now possible to link socio-economic data sets with geographical information, opening up new perspectives and improving the reliability of evaluation results. Once again, this can be illustrated using some examples from our evaluation practice.

Thanks to low-cost online surveys, mini-surveys are much less time-consuming and can now also be conducted remotely. For example, an online survey of 111 vocational school graduates in Laos – whom it was never possible to visit as part of a brief mission – provided information about employment and income after leaving school. It was possible to estimate the extent to which training in vocational schools was geared towards the needs of the labour market and whether graduates earned more than less qualified workers.

To evaluate a project aimed at improving the drinking water supply in Jordan, information from the water supplier's database regarding water consumption across various customer groups was analysed with econometric methods and combined with analyses of aerial imagery of building density to estimate the extent to which the target group was reached, in this case Syrian refugees and host families (see box entitled "Jordan" on p. 56). The impact-objective of stability was also tracked using new data sources. A Google trend analysis, an analysis of Google searches for keywords and word combinations, e.g. "water and protest" or "refugees and water", provided information on whether the frequency of such searches decreased after project implementation.

The evaluation of a primary education project in Yemen had to be conducted remotely, owing to the volatile and critical security situation in the country. It was possible to gain insight – from a distance – into the effectiveness of the project by combining georeferenced data on the location of FC-financed school buildings with data from government household surveys, which showed the development of school enrolment rates. Although census data such as this is sometimes incomplete, there are normally many years of data available that can thus also be used to estimate what the situation at the project start was – i.e. to reconstruct a baseline. The evaluation showed that school enrolment rates were higher in the provinces with adequate school infrastructure – until the beginning of the civil war. The presumption was that schools had been destroyed by air raids. Analysing data from the Humanitarian Data Exchange portal, another open data platform, provided information relating to the extent of the destruction of school infrastructure. It was possible to verify this information by looking at the air attacks on the country, which were also documented online. It appeared likely

A discussion about methods and trends in evaluation

Dr Florent Bédécarrats of the Agence Française de Développement (AFD) worked for the Financial Cooperation Evaluation Unit (FC E) in Frankfurt for one year as part of a staff exchange programme. As a scientist and evaluator, Florent Bédécarrats is familiar with a variety of evaluation methods and works intensely on the topic of how to use data. We talked to him about trends in evaluation and about "rapid appraisals" as the methodological standard for FC evaluations.

"Rapid appraisal" for KfW in Benin: Dr Florent Bédécarrats from the French development bank Agence Française de Développement examines the impact of a resource conservation project.

FC E: How relevant are experimental and quasi-experimental impact measurement methods for your evaluation work?

I don't think it makes sense to use scientific methods of impact measurement for all evaluations. That would involve too much effort – it would be like trying to kill flies with a hammer. I find it much more appropriate to examine a project type – for example a new prototype – using such methods if there is a strategic interest in gaining knowledge and there is a clear lack of evidence. Of course, this is subject to having the ability to apply such methods, i.e. the target and control groups must be distinguishable.

FC E: During your time at KfW you applied the FC evaluation standard of "rapid appraisal". What did you think of this method?

I've conducted three "rapid appraisals" on projects in Benin, Suriname and Cameroon. The overall approach and effort are appropriate for a routine evaluation and well aligned with the intended use of the results. However, I find a "rapid appraisal" to be particularly beneficial if there are one or two sets of data providing information on impacts by means of quantitative analysis, and which can be used to confirm the results of the "rapid appraisal". Without such data, the gain in knowledge may ultimately be limited and the work a little frustrating.

FC E: While AFD evaluations are mainly carried out by external experts, you were able to carry out evaluations for KfW yourself. What were the biggest challenges here?

The challenges of a "rapid appraisal" lie in the fact that time on site is short, especially when the project locations are remote, as in Benin, and the project is extremely complex. In addition, the project was implemented over a period of more than 10 years – a lot had happened in this time. This first had to be explored before it was possible to really get to the heart of the matter.

FC E: And what can KfW still learn from AFD?

I'd first like to say what AFD has learned from KfW. The involvement of operational teams in FC evaluation work through delegating colleagues to conduct "rapid appraisals" is a great method to promote learning for future projects. We want to develop this system within AFD. Evaluations at both KfW and AFD need to make even better use of existing information and data in future.

FC E: Which trends can be seen in the availability and use of data for evaluations?

A revolution is underway here – and that's no exaggeration. More and more data sources are becoming accessible for us, and new ones are being added all the time. This opens up countless opportunities to give greater substance to "rapid appraisals" through the use of hard facts. Maintaining a clear overview and keeping pace with developments are challenges for evaluation work, but they are also a necessity. As evaluators we should also channel something back into the public good of the data records. Our projects deliver an enormous amount of data and information, which may in turn be of interest to others.

FC E: How will the cooperation between AFD and KfW be continued within the framework of evaluations?

In view of the increasing number of joint financing projects, we as evaluators will also be developing this cooperation. Topics that affect both organisations include policy-based lending, i.e. loans to support reforms in partner countries, and climate financing.

FC E: We have benefited greatly from your time at KfW and want to intensify our cooperation with AFD. The joint evaluation of a policy-based loan financed by FC and AFD is already planned. Mr Bédécarrats, thank you for the interview.

Including the target group's perspective is an important part of "rapid appraisal" evaluation; however, this is only possible if the project areas are accessible.

that FC-funded schools had also been affected. The evaluation of press and status reports from other donors further suggested that many schools are now used as shelters for internally displaced persons or by armed groups. As a result, school lessons rarely take place.
The evaluation concluded that the overarching impacts of the financing – the improvement of children's education – could not be achieved, and as such the project had to be classified as unsatisfactory.

As part of a rural electrification project in South Africa, open source information relating to the status of the power grid expansion was integrated into a map showing the project locations of FC-financed "solar home systems". It was therefore possible to estimate the distance of the state power grid from households which have not yet been electrified – an important indicator of the use of off-grid solar systems over time and of the viability of companies specialising in the sale of such systems. These analyses served as a solid base for the evaluation of the project's sustainability, in the sense of the longevity of its impacts.

There are many more examples like this one out there. The use of satellite data as well as literature research, both online

Decentralisation and basic public services in the Sahel – a systematic literature review

Business at a market in Mali: important impetus for local development and a source of revenue for local administrations.

The "Sahel Alliance" was initiated by France, Germany and the EU in 2017 and now enjoys broad support. The alliance aims to support five countries in the Sahel region: Burkina Faso, Mauritania, Mali, Niger and Chad. Each donor took over thematic responsibility for one of the envisioned areas of support, ranging from youth employment to climate protection. Germany chose "Improving basic public services, also through decentralisation". To gather existing knowledge concerning this topic, the FC Evaluation Unit carried out a systematic search for current (2013–2018) published literature, including evaluation reports. Literature databases and websites were searched for hits of keyword combinations containing at least one of the five Sahel countries and at least one basic service, i.e. water, education or health. The sources found were analysed with the aim of revealing whether decentralisation improves/improved access to and the quality of basic public services in the Sahel.

At first glance, our search results were disappointing. In spite of many hundreds of hits, the review ended with just a handful of sources which dealt, quantitatively or qualitatively, directly with our question – and in most cases these addressed only minor sub-aspects. Upon closer inspection, however, it became apparent that many sources were similar in terms of the general, sometimes anecdotal statements they made on decentralisation in Sahel countries; the same was true of the statements relating to public services, but no explicit link was established between the two. This allowed us to at least put forward some theses, which are outlined below.

Decentralisation reforms were initiated in the 1990s with high expectations – though not substantiated with evidence of their impact – with regard to increased democracy and greater proximity to citizens in order to meet their needs and reduce poverty. As of 2018, none of the reforms had been completed in any of the Sahel countries. Looking at the three stages of decentralisation, i.e. administrative (responsibility for basic services), political (local elections) and fiscal (financial transfers and local financial autonomy), at the very least, the latter is absent. The result is known as mutated decentralisation, in which local governments or administrations bear a high degree of responsibility for basic public services, but have inadequate financial and human resources. In addition, local political authority is impaired due to the overlap with traditional authorities.

World Bank data show that access to basic services has improved considerably. The reviewed literature, however, criticises the quality of these services, highlighting the parallels and thus an obvious connection to the shortcomings of decentralisation: the poor financial and personnel resources of municipalities and the dysfunctional division of responsibility between the central and local levels. Furthermore, attention is drawn to the coexistence of local public, private non-profit, religious and even commercial providers – also encouraged by the inconsistent approaches of international donors. These results fit seamlessly with those of our evaluation reports about FC's promotion of decentralisation in Sahel countries, which were often classified as unsuccessful.

What does this teach us about the Sahel countries? Firstly, decentralisation does not guarantee better basic services. Secondly, central government seems to lack the political will to move towards "true" decentralisation, including fiscal decentralisation. Thirdly, reaching a conclusion such as calling for recentralisation would be premature because this fails to take the political dimension into account. Some researchers argue that tensions between autocratic regimes and local authorities have been reduced through decentralisation; others do not rule out that tensions have increased through the politicisation of local conflicts as a consequence of decentralisation. Future studies can therefore continue to make valuable contributions to understanding the complex effects of decentralisation.

and in databases, for additional information about projects undergoing an evaluation, are becoming the norm in many cases. These sources of information are also helpful in discovering whether there are studies using experimental or quasi-experimental methods to measure impacts in similar projects and contexts. 3ie, an organisation which specialises in such impacts studies and their meta-analysis by means of systematic reviews, makes a significant contribution to research with their publicly available evidence maps; these maps document existing impact studies and meta-analyses across a range of topics, highlighting gaps in the evidence – an example of how scientific research and "rapid appraisal" evaluations complement one another.

Digital methods are finding their way into evaluation work, such as the use of tablets to conduct household surveys in a project to set up health insurance in Pakistan.

Comparing "rapid appraisal" evaluations against measuring impacts

Evaluations using the "rapid appraisal" method are comparatively fast and inexpensive. But what are the disadvantages compared to more complex methods? Unlike methods which use experimental and quasi-experimental methods to measure impacts, it is important to emphasise that "rapid appraisals" do not offer any proof of causality. Did the school building project under evaluation trigger the improvement of learning success, or was the improvement caused by other external influences? To what degree is the impact attributable to the new school? Even if more rigorous impact measurements are complex and expensive, they can be worthwhile, provided that the type of project permits a comparison of control groups. Suitable applications might include innovative projects closely aligned with the needs of the target group or projects in which different project designs are weighed against each other in order to decide which is the more effective. When it comes to comparing methods, it should also be noted that it is not only "rapid appraisals" which benefit from the increased availability of secondary data – quasi-experimental impact measurements can also benefit. Baselines – for control groups too – can sometimes be reconstructed retrospectively, thus eliminating the cost involved in time-consuming primary data collection. It is at this point that impact measurement and "rapid appraisal 2.0" converge.

The informative value of both evaluation approaches suffers because they focus on a single project or programme, and as such the results are not easily transferable to new contexts. This lack of external validity can be counteracted for all types of evaluation by the use of meta-analyses which look at evaluations of the same types of projects. Systematic reviews of quantitative measurements can provide interesting insights, but overviews of all types of evidence can do this as well, even if their individual contributions cannot compete with the rigour of scientifically valid impact measurements. This is evidenced by the results of a systematic literature review into the influence of decentralisation on basic services in the Sahel zone – which also included our evaluation results obtained by means of "rapid appraisal" (see box on p. 60).

Conclusion

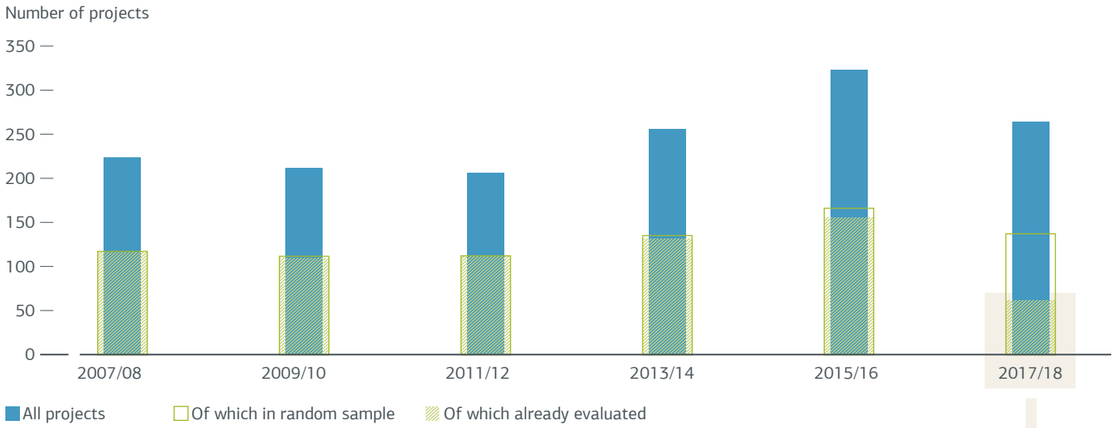
It is not without reason that "rapid appraisal" is recommended for project and programme evaluations. Nonetheless, even at this level, rigorous impact measurements could be very useful in special cases. It is not a question of classifying one or the other method as superior. Each method has its strengths and weaknesses – and it is for precisely this reason that they can complement one another. The use of both facilitates a mix of methods as well as triangulation: characteristics of a high-quality evaluation.

Results 2017/2018

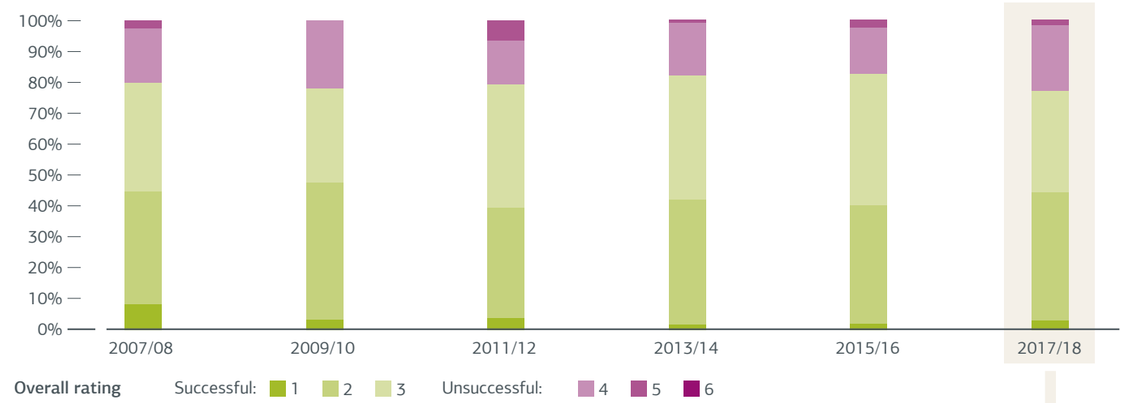
Rich harvest in India
A project promoting disadvantaged groups in rural India received the rare rating of 1.

5.1. Success rates and rating distribution

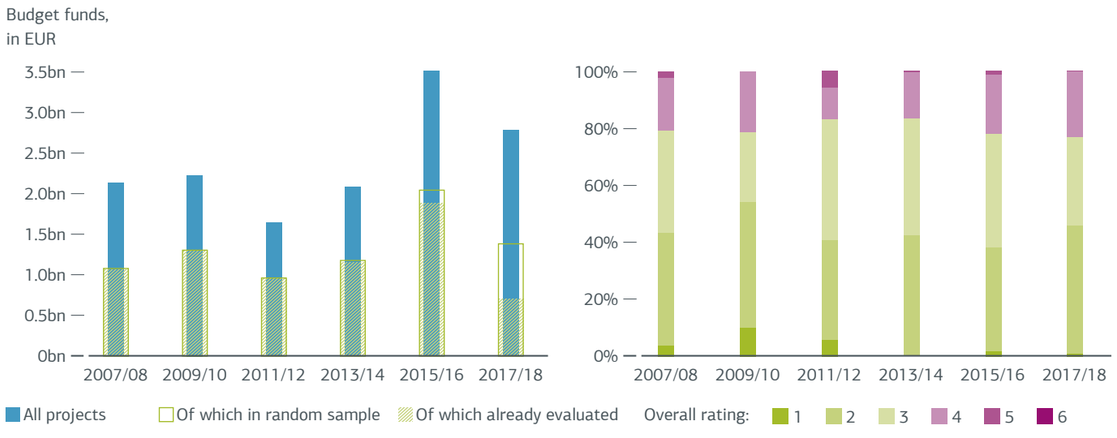
Total number of projects, projects in random sample, and projects already evaluated



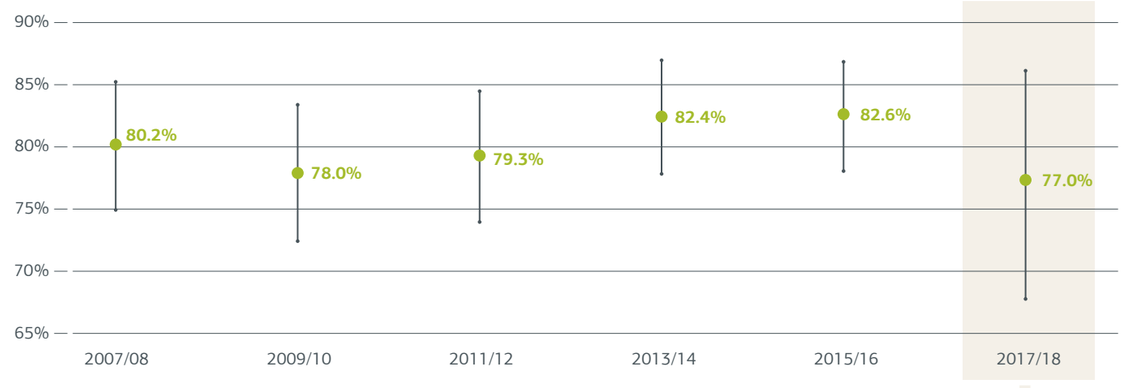
Distribution of evaluated projects' ratings



All projects, random sample, evaluated projects and distribution of their ratings by funding volume (government budget funds)



Estimated success rates (by number) for two-year periods with a 95% confidence interval



Success rate remains stable: almost four out of five projects are successful.

- The modest downward trend in the estimated success rate is not significant; the confidence intervals of the estimates overlap (see graph on page 65; see pages 66/67 for the random sampling method and how the success rates are estimated).
- The distribution of the ratings is also stable over the years: almost two out of five projects fulfil or exceed the original expectations (ratings 1 and 2). Another two out of five only partially reach their objectives, but are still successful overall (rating 3).
- The success rates and rating distribution weighted by funding volume (government budget funds) exhibit a similar trend, even if somewhat more volatile.

Many evaluations were carried out in the calendar years 2017 and 2018.

- A total of 181 projects were evaluated in 2017 and 2018 with a funding volume of EUR 2.82 billion. 143 of these projects were included in the estimation of the success rates (only projects from the random samples).
- In the 2017/2018 reporting period, many still pending projects from the particularly large total number of projects and thus the large random sample in 2016 were evaluated. Consequently, the current estimate for 2015/2016 was more accurate compared to the previous, 14th Evaluation Report (the range of the confidence interval decreased by eight percentage points).
- There are still pending evaluations from the 2017/2018 random samples; the uncertainty of the estimated success rate for 2017/2018 is thus relatively high (broad confidence interval).

From all the projects ...

Project implementation and operation in partner country

Annual reporting of completed projects

All projects (ready for evaluation)

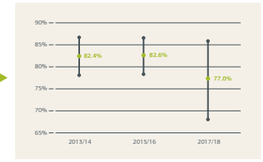
Random sample drawn by sector (50% of all projects per sector)

... to success rates

Independent ex post evaluation

Project database with all results

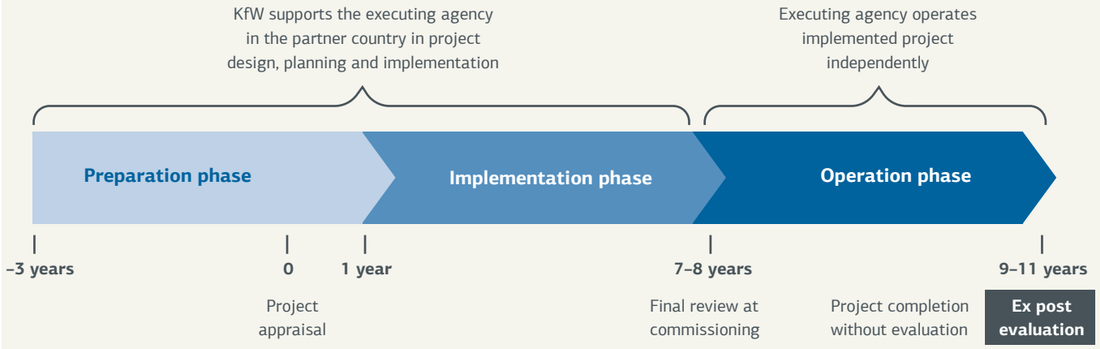
Success rate estimate



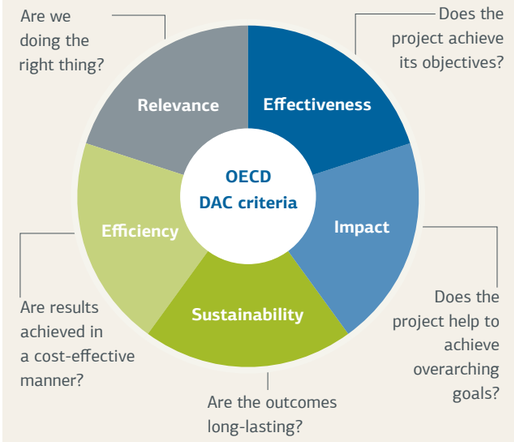
Success rate and 95% confidence interval

Learning

Project cycle



Evaluation criteria



Aggregation of sub-ratings

Rating scale

The random sample facilitates the estimation of the success rate for all completed projects.

- Projects are included in the random sample by chance: all completed projects are sorted by sector once a year. Half of the projects from each sector basket are randomly selected for evaluation (unbiased selection of evaluation portfolio).
- Further projects can be evaluated, for example because they are located close by or similar regarding their content to projects from the random sample, or if so requested by operational departments.
- Only projects that are part of the random sample are used to estimate the success rate (unbiased estimate).
- Success rates are estimates and therefore always subject to uncertainty. → The confidence interval provides information about the accuracy of the estimate.

How is the overall rating calculated from the ratings of the individual OECD-DAC criteria?

- To take into account the fact that individual evaluation findings differ in their significance, the overall rating of a project is not a simple average of the ratings for the individual OECD-DAC criteria (1–6 or 1–4 for sustainability). Particularly serious deficiencies in individual sub-criteria should not be offset by positive results in others.
- Hence, poor results in the OECD-DAC criteria of effectiveness, impact and sustainability generally prevent a project from being classified as successful overall. The underlying idea is that projects which do not achieve their objectives, or whose impacts are not sustainable (in the sense of being long-lasting), do not deserve to be evaluated as successful. → The impact of these knock-out criteria are examined in more detail on the next two pages.

Between success and failure: focus on knock-out criteria

Knock-out criteria

Poor results (ratings 4, 5 and 6) for the criteria of effectiveness, impact or sustainability generally mean that a project cannot be rated as successful overall.

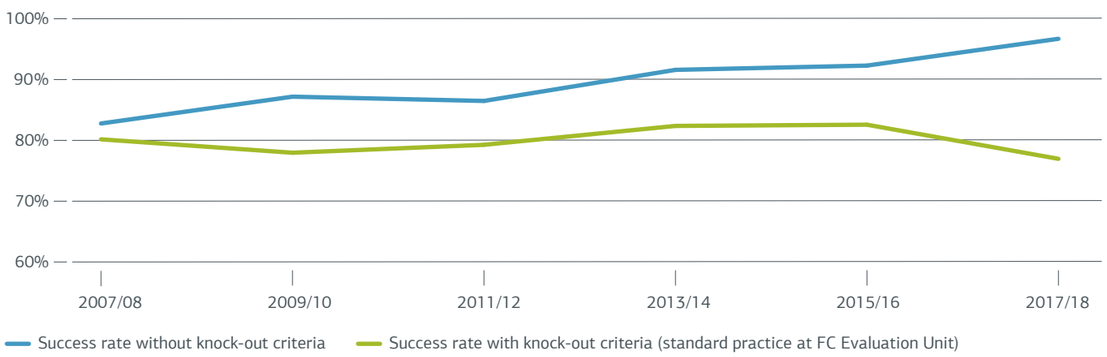
– A good project design that addresses a relevant bottleneck in development will rightly receive a good rating in terms of relevance. Yet if the project does not produce any satisfactory effects – even if this is due to a completely unexpected event like a natural disaster – it should not be possible to balance this out with a good project design.

– High efficiency in producing outputs, i.e. high economic efficiency, cannot compensate for a lack of use (poor effectiveness), adverse effects on the environment (poor impact) or a rapid deterioration of the infrastructure provided (lack of sustainability).

Using knock-out criteria lowers the success rate:

In comparison to a success rate calculated from the average of the ratings for the individual criteria, defining every project with an average of 3.5 and better as successful, the knock-out criteria we use in practice lead to a success rate for the 2017/18 projects that is almost 20 percentage points lower.

5.3. Comparison of success rates with and without knock-out criteria



Failures due to application of knock-out criteria: project examples

Cambodia

Social security in event of illness

Establishing a voucher system to provide women in need with basic reproductive health services.

Sustainability problem

The project had a positive impact on the target group as health services were increasingly used in the project regions.

However, the project was not sustainable because the voucher system was not integrated into the national health system. An alternative approach was pursued instead.

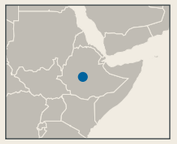
Senegal

Rehabilitation of residential areas – Pikine

FC project financing the construction of roads, drinking water supply and educational institutions in the largest unofficial settlement area in Senegal.

Unused infrastructure is unsuccessful infrastructure

The drinking water component produced the desired effect. However, the new roads were destroyed by heavy rainfall and flooding, while schools and sports facilities were barely used. The effectiveness was rated unsatisfactory, and the project was classified as unsuccessful overall because the outcomes were not achieved.



Ethiopia

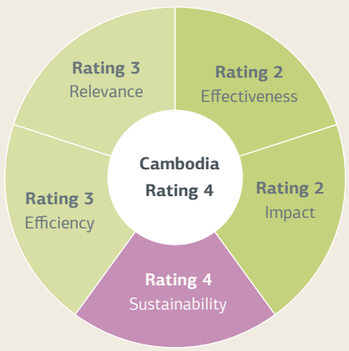
Urban Development Fund

Financing of infrastructure projects in medium-sized cities (e.g. road construction, wastewater projects) and strengthening the capacities of local authorities.

Downgrading because of negative environmental effects

The infrastructure is well used and is being operated properly at least to some extent, thus it contributes to alleviating poverty in the cities.

Particularly with regard to wastewater and waste projects, however, significant negative effects on the environment and health hazards for the population as well as the employees of operators were identified, which rule out a positive overall assessment.



Further details can be found in the summaries of the evaluation reports published on the KfW website:
https://www.kfw-entwicklungsbank.de/International-financing/KfW-Development-Bank/Evaluations/Results/

A stroll through sectors and regions

What special features and general messages can we take away from the 2017/18 evaluations? The following pages try to shed light on the wealth of individual evaluation results from a sectoral and regional perspective. In addition to the "highlights" and overview tables presented here, the Annex contains a list of all evaluations carried out in 2017/18. All evaluation reports are available as summaries online.

Water sector dominates again – not only for social infrastructure

Just like in the previous two-year period, the water sector accounted for most of the evaluations. The projects in the sector achieved average results and were concentrated in sub-Saharan Africa as well as in Southeastern Europe. The evaluation of rural water supply measures in Tanzania provided some interesting general insights beyond the project itself: the FC project in the Moshi Rural District is considered a lighthouse project (rating 2). The project's success in establishing independent municipal water companies in rural areas in line with the decentralisation structure in Tanzania eventually led to the integration of the concept into the national water strategy. However, the evaluation found there is a fundamental problem with this approach, which is the same or similar in other countries. In contrast to centralised national water utilities, decentralised rural utilities are not able to cross-subsidise via the more "profitable" supply of urban consumers. A self-sufficient, cost-covering water supply in rural areas is not only difficult, or even impossible to achieve, but also socially problematic. This is because a relatively small, sparsely populated supply area generates comparatively high operating costs per inhabitant; at the same time, the majority of the poor live in rural areas, so average incomes are usually lower than in the cities. In this situation, only a solution at the national level is viable, even in a context of decentralisation.

Results in the health sector are driven by two multi-phase programmes to combat polio. The programmes funded the Global Polio Eradication Initiative (GPEI) immunisation campaigns in Nigeria and India, with consistently good results. The goal of eradicating polio worldwide has almost been achieved. Only in the fragile areas of Afghanistan, Pakistan and Nigeria do isolated cases of the disease still occur. For this reason, the evaluation in Nigeria particularly commended the innovative vaccination campaigns embracing crisis areas, such as a vaccination belt at bus stations and along main roads covering everyone on their way to or from areas that are inaccessible for safety reasons. In China, the evaluation of a comprehensive HIV/AIDS prevention programme marked the end of traditional FC with China in the health sector. Future investments in Chinese health infrastructure will therefore only be financed without the use of government budget funds.

Highs and lows in the promotion of agriculture and economic infrastructure

The success rate of the evaluated measures in the agricultural sector is approximately the same as for all projects. Two projects stood out, however, receiving the very rare rating of 1: the two projects enabled a severely disadvantaged ethnic group living in western India – dependent on subsistence farming and seasonal migrant labour – to live as "full-time farmers". New orchards (wadis), and measures to facilitate the water supply, training, health and marketing of agricultural products, sustainably improved the socio-economic and health situation of the target group. Decisive for the top rating was the fact that the "wadi model" is now being replicated in many parts of India with public funds.

In addition to four successful projects, there was one FC measure in the transport sector in Guinea which was given the equally rare rating of 5. Although the port of Conakry is developing positively overall due to private-sector investment and efficient transshipment operations, the FC project's contribution to this was marginal at best. The FC-financed investments in the port infrastructure are almost completely non-functional or incomplete. The project was cancelled after massive delays and the insolvency of the construction company.

Securing a sustainable water supply in rural areas: an evaluation in Tanzania provided interesting general insights.

Financial sector: environmental protection programmes – policy framework is crucial

In the financial sector, the evaluation results of two environmental protection programmes allow for some general conclusions to be drawn. In Morocco, the developmental effectiveness of an industrial environmental fund that subsidised the environmental investments of companies had to be classified as unsuccessful due to its inadequate sustainability (rating 4). Only about half of the supported companies had survived by the time of the evaluation. Moreover, the grants awarded were often not decisive for the investment decisions. Windfall profits thus had a negative impact on the efficiency of the project. The environmental credit line evaluated in Costa Rica, on the other hand, showed better results. The project was rated as having good sustainability due to the higher survival rate of the companies and the continuing impact on the financial sector. However, there was a trade-off between the environmental impacts, rapid loan processing and the project implementation. Loans that are linked to the fulfilment of particularly ambitious environmental requirements often lead to weak demand and slow processing. In general we can say that investment incentives via environmental protection programmes cannot substitute strict environmental laws, but they can supplement them by providing assistance in meeting regulatory requirements. Enforcing such laws is crucial for success. In 2018 the Financial Cooperation Evaluation Unit (FC E) published a report on evaluation-based experiences with green credit lines and the resulting issues for designing new projects.

FC increasingly significant in fragile contexts

Commitment in fragile contexts and the associated challenges remain very relevant, also for evaluation. Due to the limitations of field missions it is necessary to adapt methodological approaches to these circumstances, such as using satellite images and other secondary data as well as deploying local experts. The evaluation results in Afghanistan are

positive. Measures to rebuild economic infrastructure achieved mostly good to satisfactory results. By means of numerous interviews, the local expert was even able to demonstrate the impressive effects of road construction at the micro level, i.e. for local companies and residents. The project example from Casamance in Senegal, which was presented in detail in the "Travel Report" chapter, also illustrates how FC can do pioneering work in a post-conflict environment to the great satisfaction of the population. However, an evaluation in the Democratic Republic of the Congo confirmed just how difficult it can be to achieve effects that alleviate conflicts: as a result of scientific cooperation between the operational department and the German Institute of Global and Area Studies in Hamburg (GIGA), the FC Peace Fund, which financed a large number of basic labour-intensive infrastructure measures, was able to alleviate poverty in certain areas, but it barely had an effect on promoting peace. In principle, development policy measures can improve social cohesion and relations between society and the state by creating jobs and future prospects in a fragile context, thereby alleviating conflicts. However, numerous factors influencing economic, social and political stability make such a targeted contribution difficult to achieve. One example is the basic education programme in Yemen that was evaluated in 2017. Although school enrolment rates – especially for girls – increased until the outbreak of war in 2015, the armed conflicts ultimately led to the destruction or misappropriation of the financed infrastructure.

5.4. Rating of all FC projects evaluated in 2017/2018 by sector*

Sector	Number	Government budget funds	Total funds*	Rating							
				1	2	3	1–3	4	5	6	4–6
Social infrastructure	**106**	**1,406.33**	**1,570.11**	**2**	**50**	**38**	**90**	**16**	**0**	**0**	**16**
Education	17	277.27	277.27	0	5	9	14	3	0	0	3
Health	24	319.63	425.10	2	19	3	24	0	0	0	0
Population policy and reproductive health	12	106.22	147.54	0	8	3	11	1	0	0	1
Water supply and sanitation/waste management	33	427.86	444.86	0	12	16	28	5	0	0	5
State and civil society	16	254.56	254.56	0	5	7	12	4	0	0	4
Other social infrastructure and services	4	20.78	20.78	0	1	0	1	3	0	0	3
Economy and infrastructure	**13**	**317.58**	**372.99**	**0**	**2**	**5**	**7**	**5**	**1**	**0**	**6**
Transportation	5	81.42	81.42	0	1	3	4	0	1	0	1
Energy	8	236.16	291.57	0	1	2	3	5	0	0	5
Financial sector	**17**	**102.94**	**369.08**	**0**	**9**	**5**	**14**	**3**	**0**	**0**	**3**
Financial system	17	102.94	369.08	0	9	5	14	3	0	0	3
Production sector	**12**	**74.59**	**85.03**	**2**	**1**	**6**	**9**	**3**	**0**	**0**	**3**
Industry/natural resources and mining/construction	2	11.32	21.76	0	0	1	1	1	0	0	1
Agriculture, forestry and fisheries	10	63.27	63.27	2	1	5	8	2	0	0	2
Cross-sectoral/structural assistance	**33**	**368.96**	**418.06**	**0**	**9**	**17**	**26**	**6**	**1**	**0**	**7**
Other multi-sectoral measures	8	164.32	164.32	0	1	4	5	2	1	0	3
General environmental protection	13	64.06	79.06	0	4	6	10	3	0	0	3
Reconstruction relief	4	39.00	39.00	0	4	0	4	0	0	0	0
General budget support	8	101.58	135.68	0	0	7	7	1	0	0	1
Total	**181**	**2,270.40**	**2,815.27**	**4**	**71**	**71**	**146**	**33**	**2**	**0**	**35**

* Figures in EUR million

Policy-based lending – initial evaluation experience

Policy-based lending (PBL) or reform financing, which specifically promotes the reform efforts of progressive partner countries by linking disbursements to individual reform steps – so-called triggers – is playing an increasing role in the portfolio of the development bank. The evaluation department's initial experience with PBL was positive. For example, the co-financing of a World Bank programme in Peru helped to improve the legal and institutional framework in the environmental sector. Peru was able to achieve its reform goals and thus make a contribution to the sustainable management of natural resources. The importance of embedding supported reforms into national strategies is clearly evident for all projects. PBL decouples financing from precisely defined investment measures. In terms of the evaluations this creates methodological challenges since no specific output can be assigned to the financing. In the coming years we expect to see additional evaluations of reform financing, so the first lessons learnt for this relatively new type of FC project can be expected in the near future.

FC in sub-Saharan Africa – also dominant in evaluation

The growing focus of development cooperation on Africa over the years is also increasingly reflected in the FC evaluation portfolio, while the regions of Europe, the Caucasus and Latin America account for only a small proportion of the portfolio of evaluated projects. The results in sub-Saharan Africa mirror the average rating for all projects. Somewhat more than three quarters of all projects are successful there. However, it should be added that the average rating is exactly 3, so the results are satisfactory, not good. Just like in many of the previous reporting periods, the projects in Asia were particularly successful. We should not read too much into the other regional results given the comparatively small number of evaluated projects, since a single project can have a large influence on the average here. Going forward, one open question is whether the violent conflicts in the Middle East/North Africa region and the increasing number of projects there will have a negative impact on the overall success rate in future.

Sub-Saharan Africa remains a focal point of our work, for example, with energy supply projects.

5.5. Evaluation results by region*

Region	Evaluated projects	Share in total	Of which successful: Absolute	Of which successful: Relative	Evaluated budget funds	Share in total	Of which successful budget funds: Absolute*	Of which successful budget funds: Relative	Average grade
Sub-Saharan Africa	74	41%	56	76%	823.15	36%	676.85	82%	3.00
Asia/Oceania	57	31%	52	91%	960.18	42%	736.83	77%	2.33
Europe and Caucasus	18	10%	13	72%	147.07	6%	104.37	71%	3.00
Latin America and the Caribbean	17	9%	15	88%	127.05	6%	108.08	85%	2.65
North Africa and Middle East	15	8%	10	67%	212.95	9%	148.64	70%	3.13
Total	**181**	**100%**	**146**	**81%**	**2,270.40**	**100%**	**1,774.78**	**78%**	**2.77**

* Figures in EUR million

Annex

Neatly sorted
A textile tradesman in Pakistan sorts his wares by product and colour – we list our evaluations by sector and country.

Ex post evaluations 2017 and 2018

Country	Project title	Rating	Budget funds (EUR million)	KfW's own funds (EUR million)
Social infrastructure – education				
Afghanistan	Primary education programme I	3	7.5	-
	Primary education programme II	4	8.5	-
	EQUIP II – Contribution to Second Education Quality Improvement Programme (ARTF) – Tranche 4	3	20.0	-
	EQUIP II – Contribution to Second Education Quality Improvement Programme (ARTF) – Tranche 5	3	20.0	-
	EQUIP II – Contribution to Second Education Quality Improvement Programme (ARTF) – Tranche 6	3	20.0	-
	EQUIP II – Contribution to Second Education Quality Improvement Programme (ARTF) – Tranche 7	3	20.0	-
Indonesia	Seafarer training	2	20.2	-
Kenya	Primary education for the children in Kenyan refugee camps	3	1.0	-
Laos	Economic and Employment Promotion Programme in the PDR of Laos, vocational training module, Phase III	3	5.0	-
	Economic and Employment Promotion Programme in the PDR of Laos, vocational training module, Phase IV	2	5.0	-
Mozambique	Education Swap ESSP-FASE 3	2	46.0	-
	Education Swap ESSP-FASE 4	2	47.0	-
	Education Swap ESSP-FASE 5	3	13.0	-
	Education Swap ESSP-FASE 6	3	15.0	-
Senegal	Primary education component in residential area rehabilitation project – Pikine (PIS II)	4	1.8	-
Tajikistan	Community funds to promote primary education and rebuilding of community infrastructure – Phase II	2	11.0	-
Yemen	Basic Education Development Programme, BEDP	4	16.3	-
Social infrastructure – health				
China	Health programme HIV prevention I A	2	24.5	24.5
	Health programme HIV prevention I B	1	5.0	-
	Modernisation of health care in the western provinces A	2	9.9	9.9
	Modernisation of health care in the western provinces B	1	12.8	-
India	Polio vaccination programme VIII	2	30.0	-
	Polio vaccination programme IX	2	45.6	-
	Polio vaccination programme X	2	RIL[1]	31.0
	Polio vaccination programme XI	2	13.6	-
	Polio vaccination programme XIV	2	10.0	-
	Polio vaccination programme XV	2	RIL[1]	40.0
	Polio vaccination programme XVI	2	2.0	-
Nigeria	Programme to control polio IV	2	15.0	-
	Programme to control polio V	2	31.5	-
	Programme to control polio VI	2	10.0	-
	Support for security plan within the scope of the fight against polio	2	5.0	-

Random sample in blue
1 = reduced-interest loan

Country	Project title	Rating	Budget funds (EUR million)	KfW's own funds (EUR million)
Philippines	Improved provision of basic medication – Health Plus	2	3.0	-
Tanzania	District health care in the Mtwara region, Phase II	3	2.5	-
	Promotion of national vaccination programme in cooperation with GAVI Alliance (Global Alliance for Vaccination and Immunization)	2	14.0	-
	Promotion of national vaccination programme in cooperation with GAVI Alliance, Phase II	2	20.0	-
Uzbekistan	National tuberculosis control programme IV	2	2.5	-
Vietnam	Cooperative programme to strengthen decentralised health care systems	2	10.0	-
	Decentralised healthcare programme 2008	2	7.7	-
Yemen	Basic nutrition, mother and child health	3	25.0	-
	Basic nutrition, mother and child health II	3	10.0	-
Social infrastructure – population policy and reproductive health				
Burundi	Health sector programme, Phase III	3	3.0	-
	Health sector programme, Phase IV	3	3.0	-
China	Health programme for the western provinces	2	45.6	41.3
	HIV/AIDS prevention in border regions	2	5.0	-
	Rural HIV prevention	2	1.2	-
Cambodia	Social security in event of illness	4	2.5	-
Caribbean Community (CARICOM)	HIV/AIDS prevention and promotion of reproductive health in the Caribbean II	2	8.0	-
	HIV/AIDS prevention and promotion of reproductive health in the Caribbean III	2	5.0	-
	HIV/AIDS prevention and promotion of reproductive health in the Caribbean IV	2	8.0	-
South Africa	HIV prevention through voluntary counselling and testing I	2	9.0	-
Tanzania	Social security for poor people to improve maternal health and HIV prevention	3	11.5	-
Yemen	Cooperative programme for reproductive health (social marketing)	2	4.5	-
Social infrastructure – water supply and wastewater/waste management				
Albania	Sectoral programme – water (rural regions)	3	7.5	-
	Sectoral programme – water investment programme, rural water supply II	3	1.5	-
	Master plan in the water sector	2	2.0	-
Armenia	Municipal infrastructure (KIP) I	4	12.8	-
Benin	PGF water programme	3	6.5	-
	PGF water programme II	3	5.7	-
	Water supply and sanitation (PEP) II	3	4.5	-
Georgia	Rehabilitation of municipal infrastructure facilities in Batumi	2	17.1	-
	Municipal infrastructure II Batumi	2	28.0	17.0

Random sample in blue

Country	Project title	Rating	Budget funds (EUR million)	KfW's own funds (EUR million)
Guinea	Rural water supply, Fouta Djallon III	2	7.5	-
	Rural water supply, Fouta Djallon IV	2	5.0	-
Jordan	Waste water disposal Greater Irbid II	3	63.0	-
	Karak water loss reduction	4	15.8	-
	Immediate measures to increase the water supply for Syrian refugees	3	8.5	-
	Immediate measures to increase the water supply for Syrian refugees II	3	10.0	-
Kenya	Joint programme for the development of the water sector II, Level 1	4	8.7	-
	Joint programme for the development of the water sector II, Level 2	4	26.1	-
Kosovo	Drinking water and sewage rehabilitation V	3	4.0	-
	Regional water supply and sewage disposal VI	3	6.8	-
Morocco	Rural centres water supply II	3	13.5	-
Nicaragua	Rehabilitation of Lake Managua, sewage treatment plant	2	25.5	-
Palestinian territories	Water supply, Tulkarem	3	9.6	-
Peru	Cajamarca drinking water supply/waste water disposal cooperative programme	3	8.3	-
	Huancavelica water supply/sewage disposal cooperative programme	3	6.6	-
Tanzania	Rural water supply, Moshi Rural District	2	7.1	-
	Water sector development programme	3	17.3	-
	Rural water supply, Hai District IV-2	2	3.0	-
	Water sector development programme, Phase II	3	40.0	-
Tunisia	Sewage disposal in 4 towns (Mateur, El Alia, Ras Jebel, Raf Raf)	4	17.4	-
Uganda	Kampala network rehabilitation programme	2	3.3	-
	Water sector development, Phase I (water supply and sanitation programme, Kampala)	2	12.6	-
	Water supply and sanitation programme, Kampala, Phase Ia	2	16.8	-
	Protection of Lake Victoria cooperative programme I	2	6.0	-
Social infrastructure – state and civil society				
Afghanistan	Afghanistan Reconstruction Trust Fund IX (ARTF IX)	2	40.0	-
	Afghanistan Reconstruction Trust Fund XII (ARTF XII)	2	40.0	-
	Afghanistan Reconstruction Trust Fund XIII (ARTF XIII)	2	20.0	-
	Expansion of economic infrastructure in the north	2	10.0	-
Ethiopia	Cooperative programme for building capacity in government administration	4	12.0	-
	Cooperative programme for building capacity in government administration, Phase II	4	3.0	
DR Congo	Peace Fund I	3	7.0	-
	Peace Fund II	3	3.0	-
	Peace Fund III	3	20.0	-
	Peace Fund IV	3	20.0	-
	Peace Fund V	3	20.0	-
Nicaragua	Support of local development and good governance (FISE VI)	3	8.6	-
Niger	Investment fund for decentralised institutions (FICOD I)	4	10.0	-
	Decentralisation programme (transitional phase FICOD III)	4	5.0	-
Senegal	Promoting peace in Casamance I	2	6.0	-
Tanzania	General budget support in Tanzania (PRBS) I	3	30.0	-

Random sample in blue

Country	Project title	Rating	Budget funds (EUR million)	KfW's own funds (EUR million)
Social infrastructure – social infrastructure and services				
Niger	Public works and employment creation, NIGETIP IV	4	7.7	-
Senegal	Pikine residential area rehabilitation (PIS I)	4	5.1	-
	Pikine residential area rehabilitation (PIS III)	4	2.0	-
Tajikistan	Community funds to promote primary education and rebuilding of community infrastructure	2	6.0	-
Economic infrastructure – transportation				
Ethiopia	Addis Ababa-Gedo road, Phase III	3	17.0	-
Ghana	Poverty focussed rural transport programme (agricultural bridges and roads)	3	7.0	-
Guinea	Port of Conakry, Phase III	5	6.0	-
India	Modernisation of signalling system, Delhi-Kanpur	2	44.4	-
Namibia	Sectoral budget financing in the transport sector	3	7.0	-
Economic infrastructure – energy generation, distribution and efficiency				
Armenia	Programme to promote renewable energies	4	6.0	-
	Programme to promote renewable energies II	4	RIL[1]	18.0
China	Wind energy programme	3	7.0	7.0
Nepal	Middle Marsyangdi hydro-electric power plant	4	173.0	-
Sri Lanka	Electricity distribution in Greater Colombo	2	10.5	30.4
South Africa	Rural electrification (photovoltaics)	4	10.8	-
	Rural electrification via renewable energies (photovoltaics) II	4	2.0	-
Tajikistan	Replacement of 220–500kV switchgear equipment at Nurek Hydropower Plant	3	25.0	-
Financial sector				
Armenia	Agricultural sector support programme	2	RIL[1]	15.0
	Agricultural sector support programme II	2	RIL[1]	15.0
China	CO_2 reduction programme	3	RIL[1]	51.7
Costa Rica	SME – environmental credit line	2	RIL[1]	19.5
India	NABARD XI – reform of rural lending	4	RIL[1]	100.0
	NABARD XI – reform of rural lending (Tranche 2)	4	30.0	-
	Tamil Nadu urban infrastructure development (TNUDF)	2	RIL[1]	65.0
	Tamil Nadu urban infrastructure development – guarantee fund for municipal bonds	2	10.0	-
Morocco	Industrial environmental fund III (FODEP III)	4	5.1	-
Mozambique	Access to finance challenge fund II	3	1.0	-
Nigeria	Establishment of a microfinance bank	3	2.0	-
Pakistan	Microfinancing programme (fiduciary holding – subordinated loan)	2	6.0	-
	Microfinancing programme, fiduciary holding	2	2.0	-
Syria	First microfinance bank	2	2.5	-
Syria	First microfinance bank – trust funds	2	2.0	-
Tajikistan	Supporting rural financial services	3	4.5	-
	Supporting rural financial services, Phase II	3	12.0	-
Production sector – manufacturing, mining, construction				
Costa Rica	SME – environmental credit line via BNCR II	3	RIL[1]	10.4
Morocco	Industrial environmental fund II	4	9.7	-
Production sector – agriculture, forestry, fishery				
Benin	Cooperative programme agriculture investment fund, phase I	4	4.0	-
	Cooperative programme agriculture investment fund, phase II	4	3.0	-
Cape Verde	Natural resource protection Fogo	3	4.5	-
Côte d'Ivoire	Rice cultivation in the north	3	0.5	-
India	Maharashtra III erosion control programme	3	18.8	-
	Rehabilitation of water catchment areas in Andhra Pradesh	2	8.7	-
	NABARD V: Adivasi programme, Gujarat	1	13.3	-
	Promotion of Adivasi (NABARD)	1	1.5	-
Madagascar	Erosion control programme	3	5.0	-
	Erosion control programme II	3	4.0	-
Cross-sectoral/structural assistance				
Afghanistan	Afghanistan Reconstruction Trust Fund (ARTF) XI	2	40.0	-
	Expansion of economic infrastructure in the north, Phase II	2	10.0	-
	Expansion of economic infrastructure in the north, Phase III	2	7.0	-
	Expansion of economic infrastructure in the north, Phase IV	2	17.0	-
Albania	Prespa Transboundary Biosphere Reserve	3	2.6	-
	Prespa Transboundary Biosphere Reserve	3	1.0	-
Bolivia	Sectoral programme for biodiversity and protected areas II	4	3.9	-
Brazil	Ecological corridors	4	15.0	-
Burkina Faso	Support for poverty alleviation strategy II	3	15.0	-
	Joint financing to support Burkinabe poverty alleviation strategy III	3	12.0	-
Caucasus	Transboundary Joint Secretariat, Phase II – Eco-regional programme	3	3.5	-
China	Sustainable development in disadvantaged rural regions of Qinghai	3	5.0	-
Ethiopia	Securing basic social services III	3	35.0	-
	Securing basic social services IV	3	15.0	-
Macedonia	Prespa Transboundary Biosphere Reserve	4	1.5	-
Madagascar	Environmental Action Plan III (Ankarafantsika reserve protection)	3	4.9	-
	Environmental Action Plan IIIa (Ankarafantsika reserve protection)	3	2.7	-

Random sample in blue
1 = reduced-interest loan

Country	Project title	Rating	Budget funds (EUR million)	KfW's own funds (EUR million)
Madagascar	Madagascar National Park Investment Fund	2	7.0	-
Mozambique	Regional centres for science and technology	5	0.7	-
Namibia	Bwabwata Mudumu Mamili National Parks (BMMP) II	2	3.5	-
Nicaragua	FISE VII reconstruction programme	2	5.0	-
Niger	Municipal investment fund (FICOD II)	4	20.0	-
Nigeria	Oban Hills tropical forest conservation	3	0.5	-
Peru	Sector reform programme: environment (PGF)	2	RIL[1]	15.0
	Programme to support the Peruvian decentralisation process (DECSAL)	3	RIL[1]	12.1
	Programme to support the Peruvian decentralisation process II	3	RIL[1]	12.0
	Programme to support the Peruvian decentralisation process III	3	5.0	10.0
Tanzania	General budget support (PRBS) II	3	18.0	-
Trinational Commission for the Trifinio Plan (CTPT)	Conservation of tropical forests and watershed management in the Trifinio region	2	12.0	-
Turkey	Municipal infrastructure programme II	4	20.5	-
	Municipal infrastructure programme III	3	28.1	-
Zambia	Joint support for Zambian poverty reduction strategy II	3	27.5	-
	Joint support for Zambian poverty reduction strategy III	4	18.5	-

1 = reduced-interest loan

Ex post evaluated projects of the random sample.

Pooled projects: projects evaluated ex post in 2017/2018 in addition to the projects of the random sample due to a close linkage to the impacts of a project of the random sample or a specific thematic interest.

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