Managing Urbanisation – Towards Sustainable Cities
The 21st Century can be said to be the century of cities. More than half the global population already lives in cities – in 2050 it will most likely be more than two thirds. Cities and metropolitan areas have meanwhile become the main habitat of the human race. Cities are the dynamic growth centers of our time, places where the opportunities and challenges of global sustainable development all come together.

Cities are places of change and innovation, bringing together different actors and effectively shaping sustainable development. At the same time, it is becoming more and more difficult to make cities a good environment to live in. High air pollution, deficiencies in water and energy supply, and in the disposal of waste and wastewater, chronically congested roads and lack of public transport, growing social inequality – the list of challenges that cities face just goes on and on.

It is obvious that here we must pin our hopes above all on self-help and ownership, in order to realize sustainable solutions. The central concern of German development policy in the field of urban development is, therefore, to mobilize all actors and to set in motion processes which will lead to the sustainable and inclusive development of cities and urban areas.

On the one hand this is about finding intelligent solutions for the problems of increasing urbanization and making cities into attractive, productive and innovative working and living spaces for all their residents. That means, in particular, addressing urban poverty and social inequality, and it means making sustainable use of technological knowledge and of available resources in the water, energy and food sectors, and facilitating environmentally and climate-friendly urban development.

On the other hand, it is important to make use of the social, economic and ecological interactions between urban and rural areas for the sake of sustainable development. The consequences of urbanization are not only evident in the city – urban development also influences the development of rural areas to a large extent and vice versa.

Gerd Müller
Federal Minister for Economic Cooperation and Development
10 reasons for urban development

1. Urbanisation: the world has become a city
More than 50% of the world’s population now lives in cities and that figure is set to rise to 75% by 2050.¹ High urbanisation rates in Asia and Africa² reflect the fact that the focus of global urbanisation has long since shifted to developing countries and emerging economies. Twice as many people – 2.3 billion – live in urban agglomerations in those countries as live in cities in industrialised nations. In 2030 that number will rise to four times as many – 3.9 billion; approximately 60% of those will be below the age of 18.³
And so the future of developing countries is increasingly being determined by urbanisation and a population structure that has a disproportionate number of young people.

Established mega regions like Sao Paulo or Mumbai, as well as small and medium-sized cities will become the key living and economic spaces in this urban millennium.

2. Prosperity: productive cities lay the foundation for economic development
Up to 80% of gross domestic product is generated in cities.⁴ Since cities provide access to labour and information, private initiatives and available infrastructure, mobility and institutions, they create a macroeconomic enabling environment for sustainable economic growth. In a globalised economy, cities represent hubs where products, services and information can be transferred and made available. Because cities are the engines driving economic growth, they provide key impetus for the national and global economy.

3. Successful poverty reduction: international commitments are implemented with cities
Cities hold great potential for contributing in key ways to implementing international agreements such as the Millennium Development Goals (MDGs). It is in cities that the relevant strategies are developed and where great efficiency and impact is achieved through the coordinated use of limited financial resources. In view of, for example, the MDG Target 7.D (“a significant improvement in the lives of at least 100 million slum dwellers”), it is in cities, more than anywhere else, that people have the potential to get out of poverty. Urban poverty and slums are, however, a growing problem in developing countries that needs to be addressed by means of integrated approaches at local level. Pro-poor programmes in cities provide better and legally protected living conditions, education and training, jobs and access to social services.

4. Partners: cities are strong international actors
Reforms such as state modernisation and decentralisation strengthen the autonomy and performance of urban administrations. Because scopes for action are broadening and powers are expanding at municipal level, cities are increasingly being regarded by international development agencies, banks and private enterprise as autonomous, equal actors. Cities are seizing these opportunities to engage in direct partnerships – including among themselves – to drive forward their development. Hence, they are gaining more and more weight in international politics. It is rapidly developing medium-sized cities in particular that need to build capacities and infrastructure in this context in order to be able to meet the new challenges they are facing and the new roles they have taken on.

5. Climate change and biodiversity: cities are involved in decisions on global climate targets and have a significant impact on ecosystems
Cities are currently responsible for producing 70% of greenhouse gases⁵ and share the burden of responsibility for global climate change. They are thus important partners and actors in international climate policy and are increasingly leading the way when it comes to energy-efficient infrastructure planning, for instance. At the same time, on account of their population density, building stock and infrastructure, cities are directly exposed to the risks associated with climate change, for example typhoons in coastal regions, heat waves and landslides. Extreme weather events and environmental problems in particular impact on the poor population on account of their often precarious housing situation. Cities have a key, sometimes negative, impact on ecosystems even beyond their city boundaries. At the same time they are dependent on ecosystem services and functions, for instance safe drinking water. Where ecosystems are intact it is easier to adapt to climate change; they

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also represent important recreational areas. Urban development thus increasingly needs to take the preservation of biodiversity into account in order that important ecosystem services and functions can be guaranteed in the long term.

6. Equal opportunities: promoting a socially inclusive city
Urban environments foster personal development in a way that for many is linked to the hope of better living conditions and social mobility. Cities are places where social change takes place, where the young and women are more easily able to develop their full potential, given that their political and social participation and individual scope for decision-making are often limited on account of traditional decision-making mechanisms. Cities come to the fore because they provide new models of what constitutes a socially inclusive city and have special programmes for women and youth. Marginal groups in particular are generally excluded from formal economic, social and political networks and have only limited chances of benefitting from the development opportunities that open up on account of economic growth in cities. Participation and political empowerment are thus key factors in an urban society when it comes to enhancing equality of opportunities and social inclusion. At the same time, citizen-friendly infrastructure development that improves mobility in urban transportation, for instance, facilitates interaction between different social groups and fosters social cohesion.

7. Safety: a safe city promotes development and democracy
Measures for the prevention of urban violence and crime promote social and economic stability. This is especially evident in those districts in which significant social and economic imbalances, lack of prospects, and violence and crime have become firmly entrenched. Private and public investments in particular steer clear of those districts in which public safety cannot be guaranteed. Safety in cities is a key concern of development policy when it comes to underpinning the successes of ongoing development efforts to create socially inclusive cities worth living in and establishing democratic structures and processes.

8. Governance: good governance becomes tangible in cities
Municipal governments take decisions that have a direct impact on the lives of city dwellers, ranging from land rights to choosing where to build schools and health stations. It is in cities that the state meets its citizens face to face, calling on civil society and private enterprise to actively have a say in political matters, to participate in decision-making processes and monitor services provided by municipal authorities. Civil society, private enterprise and politics therefore contribute to joint responsibility and create an environment in which cities take on more responsibility for democratic consensus.

9. Urbanity: cities are innovative catalysts for development
Cities provide a creative environment for social, economic, green and political innovations. They enable close and rapid exchange between all those involved – the precondition for developing viable strategies. This is where the application of local knowledge can be combined with concrete implementation to meet current challenges, for instance resource consumption. Cities use these synergies to benefit development, they formulate integrated and economically viable solutions, and at the same time take steps to overcome the most diverse challenges. Cities are thus often forerunners of developments that later take root at national and international level.

10. Economic cooperation: demand is growing in cities
There is great demand for the private sector to support cities in meeting the challenges arising in regard to modernising the infrastructure and administration. Supplying the growing population and adapting to national and international standards calls for technical and management solutions ranging from new information and communication technologies (ICTs) to the energy-efficient modernisation of existing buildings. The private sector in Germany and its institutions, chambers of commerce, and industrial and professional associations are available as partners for cities in emerging economies and developing countries and can provide investments and know-how.
Green Urban Economy

1. Relevance

The green economy model is geared toward making economic growth sustainable and demonstrating new consumption patterns. This is relevant for industrialised and developing/emerging economies alike. The green economy is about linking – in an action-oriented manner – economic, social and environmental aspects with a focus on environmentally sound and resource-efficient growth. This model is of special importance for cities and their surrounding areas, as almost 55 per cent of the global population now lives in cities. Two decades from now, there will be about twice as many city dwellers as today. Currently, some 70 per cent of all resources are consumed in cities, and cities account for more than 75 per cent of all CO₂ emissions. But cities are also the backbones of national economies. 80 per cent of global value added, expressed in monetary terms, is generated in cities. As urbanisation advances, cities are becoming an important lever for socially equitable and sustainable growth based on a green economy.

Cities and local governments offer opportunities for resource efficiency and synergies. Municipalities with their policymakers and administrators are just one player among several when it comes to giving shape to economic and sociocultural arrangements and networks. It is in cities that cooperation between citizens, government and enterprises is translated into practical action. This makes cities the platform for innovation and new answers, and it makes them initiators of new partnerships.

Efforts for sustainable cities are one priority area in the green economy debate with regard to the United Nations Conference on Sustainable Development (UNCSD, Rio+20 summit) and are being discussed in the context of the Sustainable Development Goals (SDGs) as input to the international Post-2015 Agenda. It is in cities where local concepts demonstrate the importance of active urban stakeholders for effective implementation of a green economy and how much can be contributed to the realisation of human rights and the provision of public services by e.g. the establishment of effective services and transparent institutions. If a municipality acts as a model in terms of sustainable procurement, it can influence private investment and behaviours. Municipal incentive mechanisms can encourage local enterprises to base their production and operations on a green economy model.

Cities can act as important catalysts on the road toward a green and socially inclusive economy. Accordingly, the UNEP report Towards a Green Economy states that “cities can and should play a leading role in greening economies – in both developed and developing countries”. So the key elements of a Green Urban Economy are the following:

Inclusive economic growth. Future growth strategies must no longer focus on quantitative goals alone. Rather, there must be qualitative growth that benefits broad sections of the population. In cities in particular, there is a growing gap between rich and poor, and there are growing groups that do not enjoy adequate social and economic participation.

Ecological compatibility. It is essential that economic growth be decoupled from resource consumption and greenhouse gas emissions. This can be done, for example, by encouraging innovation and environmentally sound technologies. Thanks to their high population density, cities offer opportunities for the establishment of efficient infrastructure networks.

Poverty reduction. Inclusive, ecologically sound growth must be geared toward reducing poverty and giving people opportunities in life. This needs to result in more income opportunities, especially in the low-income sector and in the urban informal sector, and improve access to basic municipal services for the poor and in informal settlements.
2. The approach adopted by German development cooperation

The transformation of an economy requires action by public and private entities at various levels. National and local governments can facilitate the transition to a green economy by changing the regulatory environment, acting as models, providing incentives, and motivating citizens as well as institutions and enterprises to act in ecologically sound ways.

Social inclusion and poverty reduction are fundamental elements of a green urban economy. As part of its development cooperation, Germany supports its partners in providing the right legal environment in terms of good governance as well as in formulating and financing answers to key ecological challenges. The purpose of a green urban economy based on cooperation with the private sector, academia and civil society is to avert negative effects of climate change, to prevent misinvestment, and to mitigate environmental damage that has already occurred. Relevant activities include efforts to foster energy efficiency, investment in green technologies and employment, the creation of incentive systems for sustainable production, operation and consumption patterns, and the establishment of standards. An inclusive and green economy is geared toward reducing both poverty and inequality.

Key areas addressed by German development cooperation in relation to sustainable municipal and urban development include good governance, local economic development and urban environmental management. Working on these issues in an integrated manner facilitates the transition to a green urban economy from local to global level:

- making the green economy concept part of international legal instruments
- enhancing the profile of the green urban economy concept in international networks
- putting in place the right environment, creating incentive systems and financing models as well as promoting the development of policy instruments and capacity at national and local level
- developing action-oriented strategies for cities
  • greening municipal budgets
  • giving poor people income opportunities while simultaneously enhancing environmental and climate protection
  • developing innovative strategies for environmentally sound transport, sanitation, waste management and services that are responsive to people’s needs
  • fostering urban environmental and resource management
- providing finance for climate- and environment-related urban infrastructure
- making the green economy concept part of international legal instruments
- enhancing the profile of the green urban economy concept in international networks

3. Practical examples

India: Indo-German Environment Partnership Programme (IGEPP)

India’s rapid industrialisation and urbanisation is accompanied by heavy industrial pollution, high emissions and increasing use of natural resources. To manage economic and demographic change towards sustainable development, India requires appropriate technical solutions in the industrial and urban sectors, developed management capacities at different government levels as well as innovative inter-institutional schemes that incorporate especially the private sector. German development cooperation supports policymakers at national, state and local level with institutional consulting services and network dialogues to promote innovative solutions for efficient industrial and urban environmental management. This strengthens the capability to develop and implement environmental and climate change policy solutions. Therefore the project supports overall sustainable growth and enhances the Green Urban Economy approach.

Indonesia: Emission Reduction in Cities – Solid Waste Management Programme

As a result of increasing urbanisation and economic development in Indonesia, greenhouse gas emissions are concentrating in densely populated urban areas. According to Indonesian government estimates, the waste sector accounted for about 7.4 per cent of total emissions in 2005, mainly due to improper waste disposal. In order to help Indonesia to implement its climate change strategy, the Solid Waste Management Programme finances emission reduction measures in the waste sector in selected Indonesian cities. Under the Programme, waste management investment measures are being prepared and implemented, such as the construction of landfill cells based on modern standards and the establishment of sorting and composting facilities. In addition, advice is being provided to the cities to help them improve their entire municipal waste management systems and building the technical, financial and institutional capacity of municipal waste authorities.

Further information

→ BMZ (2011): Green Economy
→ ICLEI (2011) Briefing Sheet – Green Urban Economy
→ OECD (2011): Green Growth Strategy
Cities and climate change

1. Relevance

It is in cities that the causes and effects of climate change and the actors responsible for effective climate policy and innovative solutions converge. Particular attention is focused on municipalities, since they are an important partner of German development cooperation when it comes to providing and adapting public services and infrastructures at local level and representing local interests at international level. Given their ability to respond to the needs of citizens, companies and political decision-makers, cities are in a position to establish the effective political and organisational structures needed to adapt to climate change.

The consequences of climate change will impact broadly on urban ways of life. Cities in coastal regions will be most severely affected by flooding. Fifteen of the world’s 20 megacities\textsuperscript{1} are situated in low-lying coastal regions; approximately 600 million people currently live in these regions. In future, adapting to climate change will be a key task in coastal regions in Africa and Asia.

The rise in greenhouse gas emissions is regarded as one of the key causes of global warming. Most emissions originate in those areas in which production and resource consumption are concentrated. Cities are accelerating climate change on account of the high density of greenhouse gases emitted in the industrial, transportation, housing and waste sectors. Although cities cover only 0.4% of the world’s surface area, they are currently emitting some 70% of greenhouse gas emissions.\textsuperscript{2} As a result of urban growth, cities will be responsible for 76% of emissions by 2030.\textsuperscript{3}

The consequences of climate change are particularly evident in cities in developing countries: While cities in the OECD countries are contributing significantly to climate change due to their overall emissions, it is poor settlements in developing countries in particular that are feeling the effects of that climate change. The majority of the world’s poor live in risk areas, on landslide-prone slopes or in river basin regions, which are most likely to be affected by extreme weather events. Precarious housing and living conditions, low incomes, often inadequate public services, social protection systems and infrastructure, and a high population density increase the population’s vulnerability. At the same time, public administrations in developing countries, especially at the local and municipal levels, are frequently unable to cope effectively with the negative consequences of climate change. This is due to weak administrative structures and the lack of practical experience as well as tight local authority budgets. The loss of biodiversity as a result of climate change and overexploitation also has far-reaching consequences for people living in cities, because it leads to the disappearance of important ecosystem services and functions, such as climate regulation.

2. The approach adopted by German development cooperation

Creating synergies between urban sectors and boosting performance of urban actors: Sustainable urban development combines an efficient resource policy with strengthening the resilience of the urban population, urban infrastructure and local economic cycles. Municipal administrations play a key role in the development and implementation of effective climate adaptation measures. Therefore, Germany, through its development cooperation programme, supports efforts to strengthen the management and steering capacities of local administrations. An integrated approach makes use of synergies between the sectors and supports both governmental and civil society actors in their coordination and cooperation. That includes climate protection strategies, qualification measures for the staff of municipal administra-

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tions, institutional development and providing reduced-interest loans that enable adapted urban planning, building and infrastructure planning, as well as sustainable environmental management in the water and wastewater, energy, transport and waste removal sectors. Compared to technical adaptation, ecosystem-based adaptation often provides more affordable and efficient means of reducing the impact of climate change. In addition, intact ecosystems provide functions such as water, food, protection against climate extremes and recreation, which in turn benefit the local population.

Supporting pro-poor climate adaptation at the local level: With its development cooperation, Germany aims to support local authorities and citizens in the development and local implementation of measures that strengthen resilience, especially that of the poor urban population. It is mainly in developing countries that the majority of urban residents lives in informal settlements which exist outside the scope of the planning and services provided by public institutions. Risk and vulnerability assessments as well as early warning systems are therefore designed to pay attention to this circumstance and sufficiently take into account the living conditions of the urban poor. The effective involvement in particular of the poor and marginalised helps to ensure that adaptation measures can meet the particular challenges they face, and that the tight budget resources are utilised in accordance with requirements.

Involving all political and administrative levels: Through its development cooperation, Germany supports green municipal and urban development policies at international, national and local level. Standards regarding the implementation of municipal climate protection policies are developed together with international partners such as the Cities Alliance, the World Bank, UN-HABITAT, UNEP and ICLEI. At national level partner countries receive support in formulating and implementing integrated adaptation and emissions-reduction strategies that are coordinated at national, regional and local levels and become effective at international level. Establishing municipal climate partnerships has an important role to play in that, thus ensuring that internationally agreed climate protection targets can be achieved.

3. Practical examples

The Cities Development Initiative for Asia (CDIA) was founded in 2007, since when it has been addressing the special infrastructural and ecological challenges faced by rapidly expanding medium-sized cities in Asia. This regional multi-donor initiative was established by the German government (BMZ) and the Asian Development Bank. The governments of Sweden, Austria and Shanghai Municipal Government are also contributing to the CDIA. This regional programme supports sustainable and pro-poor urban development and improved environmental and living conditions for the population by developing resource-efficient and socially responsible infrastructure measures and preparing them for future financing. Among other things, the projects prepared by the CDIA address the expansion of local public transport systems, waste disposal (with potential for methane storage), improved energy efficiency in buildings, and adaptation measures in the field of flood protection and drainage. As well as preparing urban investment projects, the initiative supports the improvement of local institutional frameworks through capacity development.

→ www.cdia.asia

Saving energy and costs, securing an adequate energy supply and establishing effective climate protection measures in the building sector are the main goals of Ukraine's national energy policy. The Ukrainian-German project “Effective climate protection measures in the building sector” focuses on urgently needed improvements to the legal, institutional and financial framework for an effective national energy saving policy in the building sector. The project advises the Ministry for Housing and Communal Services and the Ministry for Regional Development and Building in elaborating draft legislation and in developing funding programmes and incentive mechanisms. At municipal level the focus is on introducing an energy management system in four pilot cities. Energy managers have already undergone training, energy plans for existing buildings have been developed, data and monitoring systems established, and preparations have been made for the exemplary energy-efficient modernisation of buildings.

→ www.eeib.org.ua

Further information

Cities and safety

1. Relevance

As a result of the worldwide urbanisation process cities are developing into centres of social and technological innovation. They are becoming the engine driving national and global economic development. At the same time, social inequalities, a lack of economic prospects, the exclusion of disadvantaged population groups, threats and risks also clearly manifest themselves in cities. Such inequalities can engender violence and crime, which in turn has consequences for individual, social and overall urban development.

Private and public investments steer clear of high-risk districts in which public safety cannot be guaranteed. This has a direct, negative impact on the population's quality of life and on socioeconomic stability within the community. Ultimately, the success of ongoing development efforts in cities is jeopardised due to a perceived lack of security and the actual danger of encountering violence and crime.

Violence and crime have a considerable negative impact on urban areas. According to UN estimates, 60% of the total urban population in developing countries have been victims of crime at least once within the space of five years. In Latin America and Africa, that number rises to 70% of all urban dwellers, especially in poor areas. It is the weakest in society who are remorselessly affected by material loss. Young people between the ages of 15 and 24 are the most frequent victims of violence. Armed violence is most prevalent in sub-Saharan Africa and Central and Southern America.

Preventing urban violence and crime promotes economic integration: Incorporating measures to prevent violence and crime is a key element of German development cooperation when it comes to the sustainability of urban and municipal development projects. One particular focus of these projects is on protecting especially weak and marginalised social groups, such as women, children and youth, against assault, including sexualised violence, on giving them room to develop and prospects for the future, thus enabling them to benefit from the economic development potentials inherent in urban society.

Preventing violence and crime strengthens local democracy and the legitimacy of the state: The more poor population groups are exposed to the risk of violence and crime, the more political violence can become entrenched at the expense of democratic negotiation processes and the legitimacy of the state. It is especially in fragile environments in which there are only weak governmental institutions that preventative consultancy approaches are both necessary at local level and contribute to social and political stability and municipal and national level.

2. The approach adopted by German development cooperation

An integrated preventative strategy: The BMZ supports partner institutions in the conflict-sensitive negotiation and implementation of joint solutions to creating socially inclusive and safe cities. German development cooperation pursues an integrated preventative approach that focuses on spatial, institutional and target group-specific aspects. A safe living environment can only be created if the social, institutional and spatial dimensions are incorporated into urban development and these become mainstreamed in national policies and local thinking.

The approach to spatial intervention aims to take account of standards for shaping a safe physical environment in the

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planning and modernisation of settlement, community and commercial areas. Measures such as street lighting or planning open public spaces have a concrete impact on the risk of violence and crime. “Violence-free spaces” are thus created, enabling the population to go about their everyday business without fear.

At the same time, German development cooperation works in the social dimension to promote social cohesion and the ability of citizens, especially women and youth, to work together to overcome the problems of violence and crime. Project approaches that address youth violence and crime among other things develop participative and job-promoting measures as well as cultural and sports incentives in cooperation with actors from municipal administration, the police, civil society, providers of social services and neighbourhood organisations. In addition, trust in formal and informal institutions is strengthened, measures are taken to stop youth being stigmatised and alternatives found to criminal offences and careers. Information campaigns and advisory services that are planned with the involvement of civil society initiatives and are implemented through community policy, for example, are to be used to stem violence against women and girls.

Expanding access to municipal services: At-risk groups such as slum dwellers must be able to better articulate and call in their rights. For that to happen it is essential that they have better access to public services, basic social services, political participation and jobs on the formal labour market. Their personal safety increases as a result. Measures to prevent urban violence and crime prove to be effective where they reduce extreme social differences and strengthen cohesion among urban societies. This reduces the causes of conflict, eliminates long-established tension between population groups and supports governance at local level and beyond.

3. Practical examples

The project “Violence Prevention through Urban Upgrading” in Khayelitsha (Cape Town), South Africa is one example of how various preventative approaches can be successfully integrated. German development cooperation, Cape Town City Council, the South African Ministry of Finance and the Khayelitsha Development Fund (KDF) are funding the project. Creating what are known as safe node areas plus a bundle of measures such as street lighting, voluntary neighbourhood watch patrols and courses on conflict resolution strategies have noticeably reduced the crime rate in the township. Initiatives organised by the local population that the project is supporting have helped boost ownership. The relationship between the population and municipal administration has improved significantly. In May 2010 Khayelitsha won the Impumelelo Award, the country’s sustainability prize, in honour of that success. → www.vpuuu.org.za

Establishing trust in a well-functioning state based on the rule of law and in peaceful conflict-resolution strategies is a huge challenge in Colombia. A broad partnership for conflict-prevention measures at local, regional and national level are needed to meet that challenge. The project “Peace-Building by Promoting Cooperation between Government and Civil Society” (CERCAPAZ) that is being implemented in Colombia on behalf of the BMZ provides the recipe for that to succeed. Peace, women’s and youth organisations, local authorities, private enterprise and ministries organise training measures on non-violent conflict transformation. They launch initiatives to promote reconciliation, equal opportunities and integration among those population groups that are at risk of and affected by conflict. The Initiative for Peace Football, El GOLOMBIAO, illustrates how sport can build bridges. This variation on the game of football has its very own rules: The first goal has to be scored by a girl and extra points are awarded for fair play. Some 60,000 boys and girls in 85 communities now play football according to the GOLOMBIAO rules. Where GOLOMBIAO has become established, the influence of violent youth gangs has receded. → www.cercapaz.org

Further information

→ www.bmz.de/en/what_we_do/issues/Peace/index.html
Cities and good governance

1. Relevance

Cities represent the lowest political-administrative tier of government and are therefore very important when it comes to guaranteeing public services. They bundle local, national and global challenges because it is in cities that the answers to overarching questions such as climate change, social equality, respecting and safeguarding human rights, and political and economic stability need to be found.

But municipal authorities in developing countries are frequently under-funded and under-staffed and are thus unable adequately to fulfil the tasks required of them, such as providing public services. Reliable and continuous water and electricity supplies, wastewater and waste disposal systems, the maintenance and modernisation of buildings and infrastructure are often not a given. It is especially poor and socially disadvantaged urban dwellers that suffer, because slums and informal settlements are cut off from many municipal services. Equal access to those services, especially for poor population groups, women, migrants or people with disabilities, is thus a core concern when it comes to reducing the spatial, social and economic gap in cities.

Cities also offer people the chance to experience good governance: Numerous actors influence a city’s development. New forms of monitoring need to be found in order to promote cooperation between these different actors in the urban space and to put the focus on the role of citizens both as owners in innovation and decision-making processes, and as users of municipal services. In practice, that means dialogue and cooperation between political and administrative decision-makers, private sector representatives and civil society. Special attention must be paid in this process to incorporating representatives of poor and marginalised urban population groups in particular. This cooperation in a spirit of partnership is to be used to create an environment in which cities take on their responsibility for democracy, integration, sustainability and a broad range of inclusive municipal services. The goal is to improve the urban living conditions of all city dwellers and to expand their opportunities for development.

The decisions taken by local governments are made more transparent and more binding when, among other things, they adopt a participative approach that responds to citizens’ needs. As a result, the living conditions of the poor urban population can be improved in a targeted and effective manner. Democratic good governance is thereby strengthened and public administration can more effectively provide its services to citizens. Government action thus gains credibility and legitimacy in the eyes of the population.

2. The approach adopted by German development cooperation

From the point of view of German development cooperation, promoting good governance means supporting partner countries in creating a reliable enabling environment for social and ecological development based on a market economy and strengthening governments in the responsible exercise of political power and public resources so as actively to prevent and combat corruption. Governmental actors and institutions are to be put in a position where they can shape their policies based on pro-poor and sustainable principles.

In terms of urban development that means promoting structural municipal reforms towards decentralisation and local self-government, i.e. advising partners on urban organisation development, on reforming local politics and administration, or in regard to municipal financial management.
Germany has extensive experience of supporting local and national governments in regard to political and fiscal decentralisation. Good governance skills are trained at municipal level; the focus at national level is on elaborating a joint decentralisation strategy and urban policy. This multi-level approach means that experience at national level can be adapted to local needs. Germany supports good governance in cities by providing technical advisory services and financial support to improve municipal administration and empower citizens, as well as to expand public and civic commitment to strengthen civil society. Funding urban infrastructure that is adapted to local needs enables cities to provide better services to their citizens based on transparent terms and conditions and tariffs. Targeted measures promote better physical and financial access for poor population groups.

New challenges result from these ongoing urbanisation processes; research is being carried out into the emergence of mega regions and urban corridors. The results are analysed so that they can be incorporated into good governance strategies for these new urban areas.

3. Practical examples

Dhaka, the capital of Bangladesh, is the world’s most rapidly expanding city. In 1950 it had a population of 500,000; today it is home to some 12 million people.1 However, the urbanisation process in this metropolis continues to be disproportionate. Strengthening the regions and evenly distributing the population pressure across cities is becoming an increasingly urgent issue. There are enormous tasks to be overcome. Slums are also growing in all cities across the county due to the constant out-migration of, in particular, poor population groups from rural regions. In the context of a centralistic government structure the city administrations are often not in a position to provide even the most basic of services. Mismanagement, often on account of inadequately qualified staff, has serious consequences, especially for the poorest urban dwellers. There is a lack of sanitary facilities, waste management and sufficient housing.

Through its project “Good Governance in the Urban Region” German development cooperation is supporting advisory and training measures for competent local and national administrations in small and medium-sized cities. The aim is to provide the urban population in Bangladesh with a demand-based range of services and to improve the living conditions of the poor urban population.

Approaches include holding a public debate on municipal strategies and making sure, through suitable measures, that municipal administrations are held accountable for their actions. Together with our partners we are developing a range of training courses for municipal administrations that will continue to be used by local decision-makers even after the project has come to an end.


Further information
→ www.kfw-entwicklungsbank.de/International-financing/KfW-Entwicklungsbank/Sectors/Governance/
→ www.giz.de/en/ourservices/governance_and_democracy.html
Municipal financing and urban development

1. Relevance

Around the world cities are facing increasing pressure to invest due to population growth and urbanisation. A growing number of urban dwellers need water, energy and transport facilities. Wastewater, solid waste and greenhouse gases need to be reduced or disposed of in a way that does not impact negatively on the environment. Without investment in the necessary infrastructure and the development of appropriate management capacities, cities will become unmanageable and will no longer be competitive. At the same time businesses are increasingly making investment decisions based on whether a location can offer reliable infrastructure and services, a decent living environment and functioning administration.

The financial power of cities is a driver for national development: Cities are generally municipal entities and thus part of the state system under which the task of providing needs-based services is spread out over various levels of administration, with public funds being allocated accordingly. Cities must use their revenues to carry out communal tasks (apart from basic services, also economic promotion, health care, schools and cultural facilities), to cover recurrent costs (personnel, operation and maintenance of municipal assets) and to plan and finance investments. A city’s financial power always has an impact on the services and infrastructure the city can offer for the surrounding area and on national development.

Cities in Germany’s development cooperation partner countries face a range of challenges in this connection:

− Cities have an income base that is in principle too low, with urban budgets being too small measured against the tasks to be fulfilled and compared with the income available at higher levels of government (central government, provincial or state governments).

− In most developing countries, cities’ revenues mainly consist of allocations from the central government. These allocations are often unreliable, lacking in transparency and inadequate; the systems for the provision of public funds do not work efficiently or the scarce public resources are inadequate to meet the needs at all levels of government and administration. This poses a problem for municipal planning security and hampers the readiness to invest. In many partner countries, following in the wake of decentralisation efforts, the task of providing public services is being transferred to the local level, yet frequently without the necessary financial basis being created (asymmetrical decentralisation or lack of connectivity).

− Cities’ financial autonomy is often limited. On the one hand, a large percentage of central government allocations are tied to a specific purpose. On the other hand, decision-making powers pertaining to the tax base and tax rates lie with a higher level of government or even at the central government level, so that cities do not have the autonomy to adjust revenues as costs grow.

− Tariffs and fees for municipal services are often not high enough to cover operating costs. On the one hand because decisions about legislation (degree of cost covering) are made at a higher level. On the other hand because establishing charges at levels which cover costs is either not socially acceptable or not politically or socially enforceable.

− Many cities do not have the staff or institutional capacities to collect taxes and fees (low collection efficiency) or to make efficient, responsive use of the revenues collected. Budgets are generally planned without popular participation, in many cases in ways that are not transparent, or disregarding the needs of the people totally.

− Effective monitoring, sanction and incentive mechanisms so as to guarantee that local authorities use the funds available responsibly have often yet to be established. In many places the reality is lack of transparency, corruption and low levels of accountability.

− In many countries the economic and legislative prerequisites for alternative financing options (loans, access to the capital markets via bonds) are not in place, or the lack of legal and planning security makes such procedures very difficult. This also holds true for PPPs (Public-Private Partnerships), which are, moreover, not always a suitable or politically acceptable option.
2. The approach adopted by German development cooperation

Taking fiscal decentralisation as a starting point, German development cooperation supports change in the way financing is handled between the different levels of government. The objective is to improve the institutional, technical and staffing situation in cities, to strengthen their capacity for self-government and to optimise the interaction between the institutions concerned. Advice and support for transparent and effective financial relations between the state, cities and citizens are provided in parallel at the various levels:

At the national level German development cooperation promotes the shaping of the institutional and legal framework for a balanced system of fiscal relations across levels of government. This includes developing predictable, sufficient and needs-oriented transfer mechanisms, allowing sub-national entities to make fiscal decisions and raise their own revenue, developing national procedures and standards for municipal financial management, and introducing monitoring systems.

At the regional level development cooperation is used, for example, to promote and strengthen the supervisory and support functions of regional governments, and the cooperation between regional and municipal governments, with a view to better coordination of spending planning and funding. In future, support through development cooperation will also be provided with regard to joint investment planning by neighbouring cities and their surrounding areas (in so-called metropolitan regions).

At the local level development cooperation supports the efforts of cities to improve their financial management, and to raise funds effectively, efficiently and transparently, and use them in accordance with local needs. Better budget planning, modern accounting systems and the introduction of citizen participation and accountability mechanisms are made possible through advice and training. Moreover, development cooperation is used to help cities strengthen their role within the fiscal relations across levels of government and have a stronger say in negotiations for elevated funds at the local level. In addition to that, development cooperation provides funds to finance municipal infrastructure (e.g. water and energy supplies, wastewater and solid waste disposal, health and education facilities), and offers training for the organisation and operation of new facilities. A variety of financing instruments are available for this. The most frequently used is project or programme financing via loans and grants to the central government. Where effective fiscal transfer systems are in place, funding can be provided via central budgets or municipal investment funds. Performance criteria are then used to determine the allocation of resources. In countries with a strong finance sector, credit lines can be provided for municipal projects via local banks or financial institutions. Care is taken to ensure that the local authorities are actually able to repay the loans they receive.

3. Practical examples

The municipal authorities in Nepal practise single-entry bookkeeping. With this system it is not possible to draw up a final balance or to determine a town's assets and liabilities. In Nepal the GIZ is supporting the development and introduction of a modern, double-entry system of bookkeeping in line with international standards, but at the same time taking account of local needs and practices. The system is improving the management of accounts, allowing the cities to make reliable statements about their financial situation and undertake realistic financial planning. This increases planning security and fosters transparency for local citizens.

Furthermore, with the GIZ’s support, a system has been introduced for performance-based financial allocations for cities, advice has been provided for adapting the system of internal financial transfers to the future federal system, and revenues at the local level have been strengthened.

In addition, KfW is financing, via an urban development fund, loans for income-generating projects (bus stations, markets) and grants for social projects (e.g. health stations).

Further information

- The World Bank (2005): Local Financing for Sub-Sovereign Infrastructure in Developing Countries
- UN-Habitat (2008): Municipal Financing and Urban Development
- Liebig, Klaus/Mandana BahriNpour/Laura Fuesers/Benjamin Knödler/Christian Schönhofen/Mareike Stein (2008): Municipal borrowing for infrastructure service delivery in South Africa – a critical review, Deutsches Institut für Entwicklungspolitik, Studies 34
Cities and poverty

1. Relevance

The rapid growth of cities means that not only will the majority of the world’s population in the future be living in cities, but poverty will also increasingly be focused in urban areas. The Agenda 21, a guidance paper on sustainable development adopted at international level in 1992, identified cities as important localities and actors when it comes to achieving the Millennium Development Goals (MDGs). Cities have a special role to play as actors in inclusive development processes. In addition, cities are attracting more and more people because they offer the prospect of better living conditions. The high population density in cities means that education initiatives, employment promotion and access to infrastructure, basic services and accommodation can be targeted at the urban poor. The coordinated use of funding efficiently and effectively contributes to achieving the MDGs, in particular MDG 7(D) (on achieving a significant improvement in the lives of at least 100 million slum dwellers). Although this global development goal lays a key foundation when it comes to combating urban poverty, it does not go far enough. It is true that the lives of more than 200 million slum dwellers had been improved by 2010, but globally the number of people living in slums rose to 863 million. In absolute numbers, the slum population is likely to reach two billion by 2030. In some regions and cities the share of poor people in the urban population will also increase. And so there is an urgent need for further action, despite successes having already been achieved.

Poverty is multidimensional: Poverty not only means having little income, but also marginalisation and social exclusion, which manifest in fewer prospects and a lack of opportunities to participate in political, economic and socio-cultural life. Poor population groups are particularly vulnerable to risks, disregard for their human dignity and rights, and lack of access to resources. Since decision-makers in municipal authorities and public utilities are often inadequately equipped to face the challenges posed by increasing urban poverty, urban growth frequently leads to a growth in informal settlements and slums. Although cities will not alone be able to eliminate urban poverty, local self-government has a key role to play when it comes to elaborating local strategies for action because they are closer to citizens. Municipal authorities have the potentials needed to combat urban poverty. Climate change poses an additional challenge: Poor population groups are at particular economic and social risk because they often live in vulnerable areas and cannot protect themselves sufficiently against short- and long-term environmental changes.

Qualitative poverty leads to social conflicts: The qualitative extent of urban poverty is often underestimated. The commonly applied definition of poverty primarily focuses on the traditional income level of 1.25 US dollars a day and thus frequently ignores the fact that the cost of living in cities is significantly higher than in rural regions: Urban populations need to purchase food and water, and have to pay for accommodation and transportation to their place of work, which can be quite some distance from home. Poor urban households usually not only have lower, but also irregular incomes; they lack access to clean water and sanitation. In addition, they are exposed to other social and political uncertainties: Municipal authorities often do not regard slum dwellers as citizens with rights, and they are often labelled “squatters” or “illegal persons” and passed over or are evicted. They are generally excluded from political decision-making and planning processes.

Further, extremely cramped housing, which is often only makeshift and offers only insufficient protection, has a particularly significant impact on all life circumstances.

Extreme social and economic differences compared to the living standards of other city dwellers are jointly responsible for
social tensions and urban violence. Nevertheless, cities also offer opportunities for an effective social dialogue, the chance to shape economic growth in a more socially responsible way, and thus to effectively mitigate social conflicts.

2. The approach adopted by German development cooperation

German development cooperation aims, in cooperation with its partners, to promote and implement sustainable and inclusive urban development strategies and measures, which lay the foundations for inclusive economic growth and improving the living standards of the urban population. German development cooperation applies a multidimensional definition of poverty that comprises economic, political, socioeconomic, cultural and safety-relevant aspects.

German development cooperation works with state and non-state actors at all levels and with the relevant target groups to contribute to effectively reducing urban poverty. The capacities and capabilities of urban administrations are strengthened. In addition, civil society groups receive support in planning and implementing urban development measures that appropriately articulate the interests of the poor population. The focus here is on broad-based access to public goods and services. Measures aimed at poor population groups include promoting self-help and organisation in order to empower them and to achieve social justice, and democratic and economic participation.

Germany is making concrete contributions to combating urban poverty by promoting participative urban development planning and social housing, the legalisation and redevelopment of poor settlements, and improving city-wide, demand-oriented infrastructure services (e.g. in the fields of sanitation, water, waste and transport). This is coordinated with socio-political measures such as promoting youth and employment (e.g. providing microcredits, advising small businesses and urban employment programmes) and, where necessary, also by means of conflict prevention measures. Further, local government development funds receive financial support and advice in various partner countries when it comes to establishing and expanding a socially inclusive and income-generating infrastructure.

The German Federal Ministry for Economic Cooperation and Development (BMZ) is involved in two international initiatives to combat urban poverty. The global Cities Alliance initiative was established in 1999 with the aim of improving the living conditions of the urban poor by developing and implementing urban development and slum upgrading strategies. The Cities Development Initiative for Asia (CDIA) was founded in 2007 in cooperation with the Asian Development Bank and supports municipal authorities in implementing urban development strategies in concrete infrastructure projects that also benefit the urban poor.

3. Practical examples

Germany contributes to improving living conditions in various cities in Ethiopia. Since 2005, the “Urban Governance and Decentralisation Programme” (UGDP) has been carried out in close cooperation with the Ethiopian Ministry of Urban Development and Construction to advise various regional and urban administrations.

The programme is making a significant contribution to efficient local administrative and planning procedures that are responsive to citizens’ needs, to the demand-oriented supply of services and to poverty alleviation. Germany’s commitment in this area has meant that citizens’ access to and satisfaction with local government services, health care, education and income opportunities have improved. Municipal authorities are now able to design local, labour-intensive infrastructure projects and have thus created more than 100,000 jobs mainly for the urban poor. UGDP has strengthened the development of the cobblestone sector, which is of high importance for employment creation, enhanced mobility, increasing land value, and investments in small and medium-sized enterprises along cobblestone paved roads. Furthermore, methods adapted to local conditions for the effective participation of all urban citizens in infrastructure and financial planning processes and the prioritisation of urban development measures are tested and institutionalised by municipal authorities and citizens. UGDP moreover has facilitated the establishment of save-and-credit groups in eight cities, offered technical support for drafting and applying a pro-poor performance measurement system and facilitated the formation of umbrella groups at city, regional and federal level to allow easier access to the financial market for low income groups.

Further information

- www.cdia.asia (Cities Development Initiative for Asia)
- www.citiesalliance.org (Cities Alliance)
- www.sdinet.org (Slum Dwellers International)
- www.achr.net (Asian Coalition for Housing Rights)
- www.habitants.org (International Alliance of Inhabitants)
- www.kfw-entwicklungsbank.de/International-financing/KfW-Entwicklungsbank/Sectors/Stadtentwicklung/
1. Relevance

Human rights establish an individual's claims vis-à-vis the state on all political and administrative levels. Access to basic services such as water, health care and education at municipal level, for instance, contribute to the concrete realisation of human rights. The municipal level, in the guise of local government, administration and public utilities, thus makes a contribution, within its mandate, to human rights being respected, protected and guaranteed.

Cities are sub-national governing bodies of the state, and as such are responsible, among other things, for ensuring that
- individuals are protected against state interference (duty to respect),
- human rights violations by third parties are prevented (duty to protect), and
- measures of a legislative, administrative or financial nature are taken to realise human rights in practice (duty to guarantee).

For human rights to be respected, protected and guaranteed in and by cities, the political and administrative spheres at local governmental level must be capable of appropriate action. Their structures, capacities and strategies must be able to guarantee citizens a decent life in cities that is based on the rule of law. At the same time they must ensure that civil society actors receive support so that their legitimate interests and their voices are heard.

A street in Cairo's City of the Dead

The right to housing in growing cities:
Sustainable urban development makes a concrete contribution to the human right to adequate housing as set out in Article 11 of the International Covenant on Economic, Social and Cultural Rights (ICESCR) that is binding on its States Parties. The core elements of this right include access to sufficiently large, affordable housing with qualitative minimum standards, basic infrastructure and legal certainty as to ownership. As a result, people have access to the private housing market, publicly-funded housing and decision-making processes regarding housing issues; no social group is forced to live in deprived areas without access to basic social services. The arbitrary demolition of and forced eviction from housing are ruled out on the basis of the duty to respect human rights at the municipal level.

It is usually disadvantaged social groups that are denied the right to adequate housing, which breaches the principle of non-discrimination. In many growing cities in developing countries those migrating to cities are unable to find adequate housing other than in informal settlements and precarious accommodation (“slums”). Informal settlements generally embody a human rights problem on account of the political, economic and social marginalisation of disadvantaged population groups. Protecting citizens against all forms of discrimination is part of the duty to protect human rights at the municipal level.

In view of rapid urbanisation, expanding urban poor settlements and social inequality in many of the world’s cities, the question of decent living conditions in urban agglomerations is an ever more pressing one. Rural-to-urban migration is itself based on the human right to liberty of movement (Article 12 of the International Covenant on Civil and Political Rights) that grants each person the right to move freely within their country and to exercise political, social, economic and cultural rights at their place of residence. The advisory services regarding urban development provided by German development cooperation focus on how, in this context, the municipal level can meet its duty to guarantee human rights given the scarcity of public funding and lack of local mandates and capacities.

Realising human rights in cities:
In order for human rights to develop to their full potential, the financial and institutional capacities of elected officials must be developed on the one hand and those officials must be called to account on the other hand. Human rights-based urban development strengthens citizens’ opportunities to voice their rights and concerns, to become involved in decision-making processes and to follow up their implementation. German development cooperation pays special atten-
tion to women and children, who need specific means of access and opportunities for participation on account of their social status, cultural roles and age-related dependency.

It is the political and administrative spheres at municipal level that are responsible for ensuring urban development is put on a human rights footing. The municipal level often faces huge challenges on account of conflicts of interests and goals, prioritisation and available capacities. Involving marginalised groups in urban development is of especial importance when it comes to ensuring that human rights are realised in cities as far as possible and in line with the prevailing conditions. At international level it is the General Comments of the UN Committee on Economic, Social and Cultural Rights, the UN Convention on the Elimination of All Forms of Discrimination against Women and the UN Convention on the Rights of the Child that form the framework for their involvement.

2. The approach adopted by German development cooperation

At local level respect for and the protection and guarantee of human rights have the biggest direct influence on the lives of those living in cities. German development cooperation supports partners and civil society actors in developing countries in gradually implementing sustainable urban development. It actively contributes to creating decent living conditions based on the rule of law by:

- making demand-based improvements to precarious living conditions by involving citizens in planning and implementation procedures;
- integrating informal neighbourhoods in the "official" municipal area at social and economic level;
- better realising the concerns of weak population groups when it comes to political decision-making processes;
- institutionalising forward-looking urban development planning that is responsive to citizens’ needs and combines the right to liberty of movement with access to adequate housing.

When it comes to improving urban settlements, German development cooperation ensures that when a slum’s infrastructure is upgraded its inhabitants are neither directly nor indirectly forced out. In accordance with Article 11 of the ICESCR, German development cooperation contributes to protecting slum dwellers against forced evictions and to strengthening civil society by involving citizens – especially women, children and youth – in the planning and redesigning of urban neighbourhoods. Their voice is strengthened in dialogue with municipal representatives when it comes to calling in their right to adequate living space and transparent information regarding urban planning and development.

In addition, German development cooperation also promotes the ability of local government actors and municipal representatives to realise their human rights-based duties vis-à-vis citizens. To that end, city administrations receive advice on improving accountability vis-à-vis other state administrative levels and civil society. Dialogue forums and participatory budgeting ensure regular exchange between citizens and their government. That way, accountability, participation and equality of access is strengthened for all those living in cities in everyday local government practice.

3. Practical examples

Egypt's cities are growing rapidly, usually not on the basis of government or local government planning. Around 60 per cent of the population of Greater Cairo lives in informal neighbourhoods. These densely populated districts lack much of what defines decent living conditions: usable open spaces, social services, access to drinking water, sanitation and waste management.

The Participatory Urban Development Programme that the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH is implementing on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ) works at local, regional and national level to improve the living conditions of those living in informal neighbourhoods. In various informal neighbourhoods in Cairo and Giza citizens are able to discuss their needs with each other and to coordinate them with the authorities. Youth, women, civil society groups and businessmen and -women are involved in planning and implementing the measures. In that way their right to co-determination and decent living conditions with access to water, social services and education can be implemented step by step.

As this is a complex task, it is important that a relationship of trust based on transparency and accountability is established between the civil population, government and other relevant actors.

Further information

- Office of the United Nations High Commissioner for Human Rights/UN-HABITAT (2009): The Right to Adequate Housing, Fact Sheet No. 21
- UN Committee on Economic, Social and Cultural Rights (1997): The right to adequate housing: forced evictions (General Comment No. 7)
- UN Committee on Economic, Social and Cultural Rights (1991): The right to adequate housing, (General Comment No. 4)
- Practical example: http://egypt-urban.net
- UN Special Rapporteur on the Right to Adequate Housing: http://ohchr.org/EN/Issues/Housing/Pages/HousingIndex.aspx
Cities and resource efficiency – the urban NEXUS

1. Relevance

The 21st century is the century of cities. It is expected that five billion people will live in cities by 2030, the equivalent of the world’s total population in 1987. Their basic needs for water, energy and food will determine how resources are used in the future. Sustainable resource management is essential if we are to effectively meet the needs of a growing population and respond to changes in consumption patterns without exhausting our planet’s finite resources. The responsible use of public goods, such as air quality and groundwater, plays a key role in this regard.

Through the proliferation of urban lifestyles urban land use will triple by 2030 (World Bank). Metropolitan regions, characterised by an urban-rural continuum, are becoming a reality of urban life, as are increasing competition and conflict over the use of land and resources in these regions. Around 40 per cent of people will have insufficient access to water by as early as 2030. At the same time, global energy consumption and food supplies are both expected to see a 36 per cent increase by 2025. Even now, the supply needs of urban areas often exceed the production and provision capacity of surrounding regions.

Urban life has a significant impact extending far beyond city boundaries. The related overexploitation of resources, loss of biodiversity and increase in carbon emissions are reflected in the ecological footprint of urban areas. Urban and rural areas are highly dependent on each other, as illustrated by the example of food security. Rural areas depend on urban markets for income, while cities rely on agriculture for their food supply. Consequently, measures to ensure that ecosystems in the countryside surrounding cities remain unspoiled not only preserve those areas for recreational purposes but also generate natural capital for resilient and productive cities.

Efficient, cross-sectoral resource management is hence, a direct contribution to sustainable urban development processes, ensuring that unregulated urbanisation does not counteract the achievement of the Millennium Development Goals (MDGs). In this context, urban agglomerations act as catalysts for innovation in business, science and society, benefiting from a high concentration of specialised research institutions, companies and service providers that set new approaches and technology.

2. The approach adopted by German development cooperation

By hosting the Bonn 2011 Conference: The Water, Energy and Food Security Nexus – Solutions for the Green Economy in November 2011, jointly organised by the German Federal Ministry for Economic Cooperation and Development (BMZ) and the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU), Germany made a visible contribution to the preparation of the Rio+20 United Nations Conference on Sustainable Development. The discussion with an internationally recognised group of high-profile actors visualised the close interrelation between water, energy and food security as a key aspect of a green economy and resulted in targeted initiatives.
Reducing waste and resource loss along supply chains can be achieved through an integrated NEXUS perspective:

- **Increased policy coherence**: Synergies and trade-offs between sectors are identified, and incentives promote cooperation and coordination, multiple benefits and fewer adverse consequences. Relevant measures include the development of sustainable relationships between urban consumer markets and surrounding rural regions in the area of food production, and the curbing of unrestricted land development.

- **Accelerated access to resources**: A coordinated, human rights-based approach is taken to improving access to water, energy and food for the poor, with the aim of promoting productivity and development benefits. The approach is embedded in sectoral strategies. One example is the improvement of urban and social mobility, taking into account conflicts over limited resources such as land.

- **Creating more with less**: Aiming at an increased resource productivity, mechanisms are established to identify the optimal allocation of scarce production resources and to sustainably intensify their use, for example, by optimising the use of water and energy in food production in the urban hinterland.

- **An end to resource wastage and minimised resource loss**: Reducing waste and resource loss along supply chains generates economic and environmental gains and reduces consumption across sectors, as in the case of the provision of water on an energy-efficient and safe basis within the context of urbanisation and industrialisation.

- **Effective use of natural infrastructure**: Protecting ecosystems secures the supply of natural resources, promoting sustainable living. Activities in this field include targeted protection of areas of environmental value and the improvement of microclimates through management of green spaces in cities.

- **Mobilised consumer influence**: Intentionally chosen sustainable and resource-efficient consumption patterns reduce cities’ overall ecological footprint and help to improve the way business is done. This is achieved, for example, by promoting green buildings and neighbourhoods through innovative planning and financing approaches in cooperation with participatory bodies.

### 3. Practical examples

Against a backdrop of rapid urbanisation, the German Government is promoting the embedment of an integrated NEXUS perspective in metropolitan areas via baseline studies, case studies, pilot projects in selected Metropolitan Regions, and via technical and financial cooperation. Inherent to the urban transformation is the risk of growing urban supply gaps, particularly with regard to water, energy, and land use. The NEXUS approach, which seeks to manage key sectors in an integrated way, can make a key contribution to the sustainable development of rapidly expanding cities. Cities around the world generally conduct their planning and management activities on the basis of sectoral responsibilities; meaning they are often unable to take advantage of cross-sector relationships and the resulting synergies.

**Integrated Resource Management in Asian Cities: The Urban Nexus** is a regional advisory project promoting local cross-sectoral initiatives and pilot schemes in selected cities in six Asian countries (China, Indonesia, Mongolia, the Philippines, Thailand and Vietnam). The project supports the development of institutional and personnel capacity of key urban stakeholders, including city administrations and municipal service providers. It also works through sharing of knowledge between pilot cities and existing city networks on the integrated optimisation of urban water, energy and food security in the context of urbanisation, economic growth and increasing resource consumption.

The technical and financial cooperation project in Brazil entitled *Promoting climate-friendly biogas technology* is designed to promote the use of such know-how in waste-water treatment and to broadly initiate the generation of electricity from other biogas sources. Pilot projects for energetically exploiting agricultural waste, specific investments in waste-water-treatment plants and equipment for water provision are foreseen. Greenhouse gas emissions related to sewerage and waste treatment shall be utilised in the future. Existing systems shall be optimised in the course of technology transfer with the aim of cutting greenhouse gas emissions, of developing alternative approaches to electricity generation and of orienting waste-water-treatment along required environmental standards.

The project provides technical support to the consolidation of biogas on the national energy market (set up of norms, alliances with academia and private sector) and the conceptual outlay of investment measures. The financial cooperation focuses in partnership with two Brazilian water providers on the construction of new waste-water-treatment plants as well as the expansion of existing ones, including advisory services.

### Further information

- Stockholm Environment Institute, [www.sei-international.org/rio20/water-land-energy-nexus](http://www.sei-international.org/rio20/water-land-energy-nexus)
- World Economic Forum, [www.weforum.org/videos/risks-focus-3-water-food-energy-nexus](http://www.weforum.org/videos/risks-focus-3-water-food-energy-nexus)
Sustainable development of metropolitan regions

1. Relevance

As urbanisation progresses at a rapid pace right up to the middle of our century, it is bringing about significant economic, political and socio-economic transformation all over the world. Looking ahead, the sprawling cities of developing countries will generate 95 per cent of all urban growth, driven above all by a dynamic expansion in Asia and Africa. Urbanisation and globalisation intensify the linkage between cities and their surrounding areas and between individual cities. Rapid urban growth is accompanied by a dramatic rise in the exploitation of land and resources, as can be seen in many developing and emerging countries. Neighbouring towns and settlements of various sizes, with different economic structures and socio-cultural characteristics, gradually transform into one discrete unit. Cities evolve into metropolitan regions and exert an increasing influence on surrounding rural areas. According to the United Nations Department of Economic and Social Affairs (UNDESA), in 2011 there were 426 metropolitan areas around the world with populations of between 1 and 10 million; 314 of these were in less developed countries. By 2025, the number is expected to reach 631, including 530 in less developed countries.

By their nature and functions extending beyond their geographical boundaries, metropolitan regions stand out at a national and even an international level. They enjoy a privileged status as centres of political, administrative and economic power, both in terms of decision-making and control. They harness the concentration and proximity of social and institutional capital to drive innovation and competition. They act as gateways with their transport hubs, markets and knowledge centres. They also fulfil a symbolic cultural and socio-economic role in the national context and sometimes on the world stage. As such, they offer tremendous potential for economic and social development, both within their own territory and as part of the broader regional and national development agenda. The role of metropolitan regions as important players in global networks is increasing.

Demographic growth, migration, inadequate public services and mandates, a lack of transparency in the market for land and limited access to labour markets favour socio-economic segregation within metropolitan regions, especially in peri-urban areas. Sprawling informal settlements inhabited by the city’s poor indicate a lack of economic, social and political participation and governance in urban regions. Increasingly urban lifestyles reinforce unsustainable patterns of consumption that stretch the capacity of urban agglomerations to preserve biodiversity and ecosystem services and place an excessive burden on surrounding rural areas.

2. The approach adopted by German development cooperation

As a result of demographic trends over the next few decades, urban living will become the increasingly dominant model in developing countries. As national, and in some cases global, economic hubs and as drivers of technological, social and cultural innovation, cities make a vital contribution to progress and change. German development cooperation believes that the main challenges will lie in managing relations between cities and the surrounding areas and between the individual cities that make up large conurbations. It continues to update its advisory services, funding programmes and toolboxes to respond to the needs of urban agglomerations and metropolitan regions in its partner countries. Existing governance structures are often unable to cope with ensuring efficient coordination and cooperation between governments, public administration in a multi-level governance system and the private sector.
To address the diverse social, economic and ecological challenges German development cooperation focuses on interventions in four priority multi-sectoral areas:

a) **Metropolitan regions as innovative business regions:** Metropolitan regions provide a venue for the exchange of goods and information between local, national and global businesses. They attract knowledge-based companies, and they promote and implement new ideas that facilitate sustainable economic activity. For this to happen, however, it is essential to create an appropriate framework.

b) **Metropolitan regions as inclusive labour markets and residential centers:** By virtue of their economic growth, metropolitan regions provide a wide range of services and jobs from which poor people can also benefit. To date, unclear responsibilities, a lack of capacity and the inadequate funding of local/regional government have hampered attempts to develop effective strategies for spatial development and for improved access to markets and services for poorer groups, especially those living in marginal settlements.

c) **Metropolitan regions as dense “nexus” networks:** With so many people and so much production and consumption concentrated in one area, metropolitan regions devour tremendous amounts of energy and natural resources. However, given the tightly woven geographical and sectoral links that exist in metropolitan regions, there are good opportunities for improving the efficiency of their material and energy cycles, for example by designing the right infrastructure for the local context. This requires considerable investment, regional control systems and cross-sectoral “nexus” approaches.

d) **Metropolitan regions as governance systems:** New governance structures are needed for urban agglomerations in order to organize and control the multi-sectoral challenges they face. Political and administrative responsibilities in metropolitan regions are often characterised by their sheer number and complexity and by structures and processes that are either simply not in place or otherwise poorly organized and/or without democratic legitimacy.

### 3. Practical examples

On behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), the sector project entitled Sustainable Development in Metropolitan Regions is currently devising a conceptual and methodical strategy that aims to provide solutions, based on analyses and expert dialogues, that work for, with and in metropolitan regions.

This network-based approach is designed to promote an exchange and transfer of knowledge within and between individual institutions and at both regional and national level. The priority is to devise empirically sound concepts and strategies that will provide guidelines for action and thus encourage sustainable, pro-poor forms of development in metropolitan regions within the four priority areas specified above.

The list of areas targeted for the development of appropriate instruments and the piloting of strategies includes:

- baseline studies in the selected four priority fields
- an analysis of stakeholders within metropolitan regions;
- a toolkit of organisational and governance structures in metropolitan regions;
- instruments to support the application of cross-sectoral development strategies (NEXUS);
- green economy advisory services (Green Urban Economy);
- knowledge transfer, learning networks and partnerships (e.g. between actors at municipal level).

The project will draw on the experience gained in ongoing German Development Cooperation projects on different continents.

Increasingly, as a result of urbanisation, current partner cities are growing into large urban centres or find themselves part of new urban corridors and expanding agglomerations. Accordingly, the measures we take to promote sustainable urban development will need to look beyond each town's geographical and administrative limits. In this context, the key questions are:

- How can we handle measures that extend beyond a city's political and geographical boundaries?
- How can cities work together to tackle planning and investment issues?
- As regional development units, how can metropolitan regions contribute to a prosperous national development?

Next to partners from the political and administrative realm, new stakeholders from civil society, business and academia are entering the stage, whose interests and dynamic involvement will be decisive in helping to determine the future prospects of metropolitan regions. Further, analyses of international and European models of successful regional management in densely populated conurbations will feed into BMZ’s guideline framework for cooperation with metropolitan regions.

### Further information

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- Ludwig, Mandel, Schwieger, Terizakis (publ.), 2009: Metropolegien in Deutschland (German only)
- GIZ URBANET, Thematic Focus Metropolitan Regions, www.urbanet.info
- Metropolis, global City-Network: www.metropolis.org/initiatives