Trunk Infrastructure and Urban Growth - Managing Rapid Urbanization in Poverty in Dar es Salaam, Tanzania

Megacities - Dar es Salaam is a R&D project dealing with a focus on trunk infrastructure and urban growth, the management of rapid urbanisation under poverty. It is one out of 16 projects within the new research programme “Research for Sustainable Development of the Megacities of Tomorrow” of the Federal Ministry of Education and Research.

Research Objectives

The availability of infrastructure services is a major factor determining urban expansion into the periphery. Therefore, sustainable peripheral growth requires the coordination of trunk infrastructure provision and land-use planning. The aim of the project is within the first two years phase to analyse the impact of trunk infrastructure on urban growth and to assess its potential as a tool to guide urban development. The main hypothesis is that statutory planning is not able to cope with rapid urban growth while infrastructure planning has a potential to direct peripheral expansion.

In analysing the links between infrastructure and urban growth the project will focus the following research objectives:

- Determine how infrastructure is supporting, moulding and influencing urban growth and development.
- Identify favour and taboo areas for future urban expansion.
- Investigate how the strategic provision of trunk infrastructure can be used as a tool to guide and control urban development.
- Develop and implement technical, legal and financial solutions of infrastructure supply.
- Develop and implement management measures on the citywide level to secure better intersectoral cooperation between public and private actors and stakeholders.

Dar es Salaam

Dar es Salaam is located on the coast of the Indian Ocean in Tanzania. The city, which has been one of the fastest growing in sub-Saharan Africa during the last decade, is featuring most of the phenomena and problems of rapid urban growth under poverty.

The city covers an area of 1,350 sq km. After reaching the mark of 100,000 inhabitants in 1952 the population exceeded the number of 1 million in the 1980s. Growing by about 100,000 new inhabitants per year in the last decade, according to the 2002 National Population Census, the city today has 2.5 million inhabitants, constituting one third of the country’s urban population.

Workshop

An important event for the project was the kick-off workshop held at the Courtyard Hotel in Dar es Salaam on February 22nd and 23rd 2006. The workshop was targeted on institutions and organisations from the Ministry of Infrastructure to local NGOs dealing with infrastructure and urban development in Dar es Salaam. At the same time, the workshop provided space for the different stakeholders to present their work and to discuss their plans for the future. For the research project team, the workshop gave the opportunity to present the proposal and to invite for participation. The workshop was officially opened by the Minister of Regional Administration and Local Government, Mr. Mizengo Pinda, the German Ambassador to Tanzania, Mr. Wolfgang Ringe, Mrs. Esnath Chaggu on behalf of the Principal of the University College of Lands and Architectural Studies (UCLAS).

The first day focused on official institutions and organisations responsible for infrastructure and urban planning like ministries as well and utility and service companies dealing with power supply, water, sewage and roads. They presented their work, gave an overview of the existing projects in the field of guiding urban growth and
infrastructure development and discussed the challenges they are facing. Participants included namely representatives of the Ministry of Energy and the Ministry of Water, the Dar es Salaam City Council and the three municipalities of Dar es Salaam, the utility companies DAWASCO for water, TANESCO for power and TANROAD for roads, the Dar es Salaam Rapid Transit (DART), the EPM-Unit/SDP and the GTZ.

On the second day - conducted in Swahili - NGOs like Water Aid and Plan International, CBOs from Dar es Salaam, local ward leaders and technicians from utility companies presented their work and discussed their different projects. This gave a good impression of the ongoing activities at the local level and showed that local actors are able to find solutions.

Both days were structured by guiding questions dealing with topics like sectoral decision-making, intersectoral collaboration, urban growth challenges and sectoral investment and its impacts. These topics provided a detailed and structured overview of the challenges of urban growth and service supply in Dar es Salaam.

The workshop discussion showed that urban planning and infrastructure provision in Dar es Salaam is rather demand than supply driven.

Furthermore, there is a lack of cooperation between the institutions because their fields are clearly divided by sectoral approaches. Taking this into account, the research project will focus on the guidance of urban growth by including all relevant planning issues. The workshop was a first step in this direction as it brought all stakeholders together and started a process of communication.

**Next Working Steps**

After the workshop in Dar es Salaam with all stakeholders, in April 2006 in-depth interviews with experts from different organisations will be conducted.

From July until September 2006 detailed fieldwork in selected case study settlements will be carried out.

The aim is to obtain in-depth information from settlers on infrastructure supply and urban growth. The results of the fieldwork will be presented and discussed at the end of September in another workshop with all stakeholders.

In parallel a simulation model on urban development of Dar es Salaam will be developed and presented in January 2007 in a workshop.

Furthermore, best practice examples on infrastructure supply and guidance of urban development from other cities will be evaluated. Finally, all results will be combined in order to develop draft strategies to guide urban growth in Sub-Saharan Africa by trunk infrastructure provision, which will be presented and discussed in spring 2007 in a workshop providing the basis for the second phase of the project.

---

**Team**

**SPRING**

Universität Dortmund,
Spatial Planning for Regions in Growing Economies

Universität Dortmund,
Institute of Spatial Planning

Universität Dortmund,
Department of Utility Systems

University College of Lands and Architectural Studies (UCLAS),
Dar es Salaam, Tanzania

Fichtner Consulting,
Stuttgart, Germany

---

**CONTACT**

**Universität Dortmund:**

Prof. Dr.-Ing. Hans-Peter Tietz
Department of Utility Systems (VES)
Tel. +49(0)231-755-2250, Fax -4758
hans-peter.tietz@uni-dortmund.de

Dipl.-Ing. Timo Basteck
Department of Utility Systems (VES)
Tel. +49(0)231-755-2279, Fax -4755
timo.basteck@uni-dortmund.de

Dipl.-Ing. Wolfgang Scholz
SPRING - Spatial Planning for Regions in Growing Economies
Tel. +49(0)231-755-4820, Fax -4398
wolfgang.scholz@uni-dortmund.de

Dipl.-Ing. Christian Lindner
IRPUD - Institute of Spatial Planning
Tel. +49(0)231-755-2475, Fax -4788
christian.lindner@uni-dortmund.de

---

**University College of Lands and Architectural Studies (UCLAS):**

P.O. Box 35176
Tel. 255-22-275004
Fax 255-22-277275479
Dar es Salaam
http://www.uclas.ac.tz

Prof. Dr. Wilbard Kombe
kombe@uclas.ac.tz

Dr. John Lupala
lupalaj@uclas.ac.tz

---

**www.raumplanung.uni-dortmund.de**