Chapter 1

URBAN DEVELOPMENT IN SOUTHERN AFRICA AND LATIN AMERICA

The scope of the project “Designing, Implementing and Measuring Sustainable Urban Development” (DIMSUD)

Marco Keiner¹, Diego Salmerón¹, Willy A. Schmid¹, Iván Poduje²
¹ETH Zurich, ²Pontificia Universidad Católica de Chile

Abstract: This initial chapter gives a brief summary of the scope and goals of the DIMSUD project. The starting point is the urbanization process in the developing world. The world’s population is growing tremendously. Particularly affected are developing countries in Africa and Latin America where strong migration fluxes lead to unprecedented urban growth. City sprawl engenders a series of environmental, ecological, and social problems for its inhabitants. Authorities are often unable to steer the development, most of all in so-called “mega cities.” But are there also opportunities to help turn rapid urbanization into sustainable urban development? Cities that are rapidly growing and yet relatively small in comparison to mega cities have to act before their problems become unsolvable. Based on case studies in Johannesburg, Gaborone, and Santiago de Chile, the DIMSUD project analyzed the challenges and potentials for action in order to achieve more sustainable urban development.

Key words: Global urbanization, sustainable urban development, mega cities, rapidly growing medium-sized cities, project DIMSUD

1. INTRODUCTION

The overall goal of the DIMSUD project was to make a relevant contribution to the development of new solutions for enhancing sustainable urban development in medium-sized cities in Africa and Latin America by offering both a scientific forum and an urban laboratory for joint learning. DIMSUD aimed to make urban sustainability operational, meaning that workable responses were to be produced to meet the case study cities’ challenges as well

as give general recommendations to other cities striving for sustainable development.

However, it was not intended to develop a new definition of "urban sustainability." Instead of just varying existing definitions and approaches, for example, from McGranahan and Satterthwaite 2003, Perlman et al 1998, FARN (quoted in The Regional Environmental Center 2004) and the conferences URBAN21, Sustainable Cities (2000; see Section 6.5 of this chapter) and others, the project focused on the process of achieving sustainability rather than the goals.

The phenomenon and core challenges of global urbanization are shown in this introductory chapter. Chapter 1 also discusses the different understandings and the specific contexts of urban sustainability. It emphasizes medium-sized cities with governance problems. Chapter 2 illustrates the background, the research framework for the project and highlights the innovative methodology of research collaboration focused on practical problem solving by introducing a model of multi and transdisciplinary international academic collaboration. The case study cities of Gaborone, Johannesburg and Santiago de Chile are presented in Chapter 3, while Chapter 4 highlights the challenges for sustainable urban development in these cities. Opportunities and strategies for sustainable urban development, especially for participation, health care and environmental and resource management as well as backcasting approaches for visions of future development are discussed in Chapter 5, followed by a closer look on how sustainability indicators can be used for steering urban development (Chapter 6). The concluding Chapter 7 gives a generalized summary of existing or realizable strategies and recommends further measures, such as monitoring, controlling and good governance. The strategies and tools, as proposed in Chapters 5 to 7, if applied, are meant to improve the cities’ capacity to successfully manage urban growth by promoting social equity, preserving the environment, ensuring economic progress and, thus, improve the living conditions for city inhabitants. In addition, the strategies and tools provide other cites with the opportunity to use these new working examples in order to adapt and adopt appropriate approaches for their specific contexts. In other words, the project’s outputs offer practical lessons for other cities on how to steer urban development towards a more sustainable path.

2. GLOBAL URBAN GROWTH

The world is currently undergoing an urban demographic revolution: Between 1950 and 2000, the world’s population grew from 2.5 billion to 6 billion. The UN Population Division (2001) estimates that in 2050, between