Sustainable Management of Mega Growth in Megacities

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SUMMARY

World-wide, around 2.8 billion people currently live in cities. By 2015, this number will have risen to 3.9 billion. By 2007, more people will live in cities than in rural areas. The 21st century is the century of cities and urbanisation.

The majority of this urban growth will take place in developing countries. For example, Dar es Salaam in Tanzania has a growth rate of 6% per annum, which leads to a doubling of the population every 13 years. The number of megacities will rise from 39 today to 59 in 2015, involving around 604 million (Kötter, 2004).

This incredibly rapid growth of megacities causes severe social, economical ecological and problems. How can this growth be nurtured in a sustainable way when over 70% of the growth currently happens outside of the planning process ? Our challenge is to provide the megacity 'managers', both political and professional, with appropriate, up-to-date, city wide information in a very timely manner to support more proactive decision making that encourages more effective sustainable development.

Information to support the management of cities is traditionally channelled and aggregated up the vertical information highway from a local, operational level to a policy level. In developed countries, urban growth can be measured through information derived from the land registration process, for example. However, in megacities within developing countries, where informal settlements are the norm, growth is rampant and administrative structures limited, this traditional source of change information is not readily available.

New tools, techniques and policies are required to baseline and integrate the social, economic and environmental factors associated with megacities, to monitor growth and change across the megacity and to forecast areas of risk – all within shorter timeframes than previously accepted. Moreover, they must be flexible enough to meet traditional needs but be optimised to operate within the spatial data infrastructures as they are evolving today. This will lead to more proactive urban planning and land management.

Rather than megacities being 'overrun' by out of control growth, these new information sources and tools would help megacities to create spatial, development frameworks and to prioritise their scarce resources to tackle the most sensitive and risk prone areas within a megacity.

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