

Conference on Future Megacities in Balance

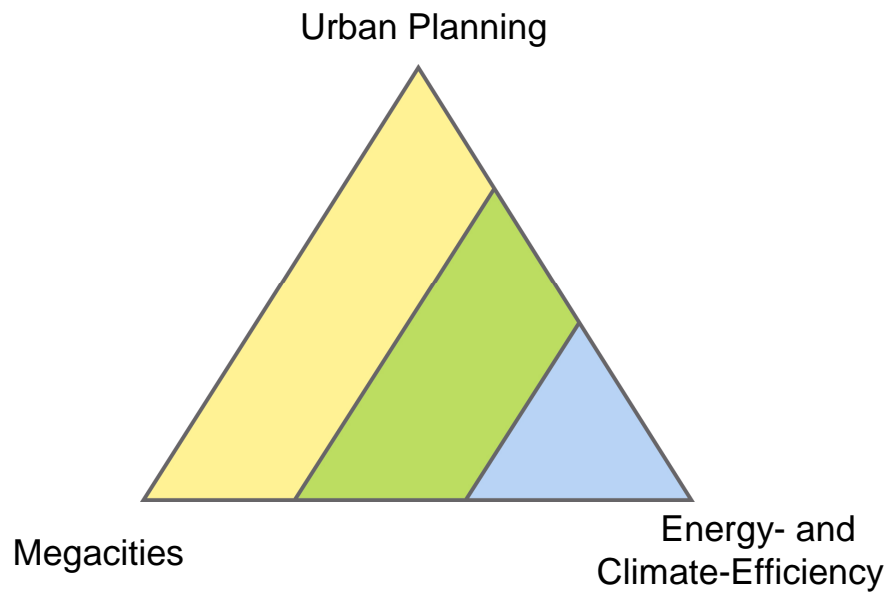
PANEL 1: Challenging Areas for Megacity Development – Energy, Resources, Planning, Mobility, Governance and Finance

Director of the The Federal Institute for Research on Building, Urban Affairs and
Spatial Development

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Challenges and Research Products/Potentials



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Megacities



Demographic Challenge: Continuing population growth, Youth bulge, Aging population.

Environmental Challenge: Air and water pollution, Landscape consumption, Climate change impacts.

Economic and Social Challenges: Social segregation, Lack of housing and infrastructures, Unemployment and informality .



(Analytical) Products of Megacities Research, e.g.:

- Analytical instruments and tools on complex urban relations,
- Monitoring tools and benchmarks.



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Energy- and Climate-Efficiency



Challenge of Mitigation: Need to reduce Emissions up to 50% by 2050; Cities emit 40-80% of global CO2 emissions depending on the chosen system boundaries and indicators.

Challenge Adaption to Climate Change: Sea Level Rise, Droughts, Cyclones, Urban Heat Island Effect.



(Applied) Products of Megacities Research, e.g.:

- Concepts on low carbon and risk-sensitive land use and land management,
- Concepts for adapted and low carbon urban form and landscapes,
- Concepts on efficient transport systems,
- Concepts on water management systems.



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Urban Perspective



Challenge of Urban Planning: Lack of governance, Sectoral organized administration, Technical approaches, Lack of de-central structures and private involvement, Lack of political and societal support.



(Process-oriented) Products of Megacities Research, e.g.:

- Political consultancy and advice based on scientific processes,
- Process design for integrated and interdisciplinary urban planning,
- Concepts for capacity development of urban actors,
- Concepts for awareness raising of actors and participants,
- Development and implementation of laws, standards, codes,
- Concepts for project management.



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Approaches in the Future Megacities Programm

Upscaling

Tehran
Casablanca

Guidelines on national, regional, neighbourhood level

Capacity Development

Integrated Planning

Interdisciplinary Approaches

Participation

Pilot Projects
Prototypes

Results

Scientific-based Political Advice
Realized Pilot Schemes
Process Design and Management

Downscaling

HCMC
Shanghai

Guidelines on national, regional, neighbourhood level

Pilot Projects
Prototypes



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