Developing Smart Cities in India
Smart City Coimbatore

India:
- 1.34 billion inhabitants
- Economic growth rate: 6 - 8%
- Degree of urbanization: 33.1% (2016)
- Water consumption: 55 l/cap/d (only 37% connected to supply networks)
- Smart City Mission: national funds for the development of 100 selected cities
- Coimbatore (ca. 1.7 million inh.) one of three Smart Cities supported by Germany

Source: www.mapsofindia.com
Smart Water Future India

Funded by BMU: 10/2017 – 03/2019

Objectives:

• Analyse future demand in urban water sector in South India
• Develop concept for Integrated Water Management for Coimbatore
• Long term cooperation

Partner:

• ISOE
• Drees & Sommer
• trAIDe GmbH

Supported by:

Federal Ministry for the Environment, Nature Conservation and Nuclear Safety

based on a decision of the German Bundestag
Methodology based on Morgenstadt City Lab

- Interviews
- Workshops in Germany and India
- Analysis of Impact Factors
- Strategic measures

Methodology based on Morgenstadt City Lab

Drivers
- Key drivers of development beyond the project’s sphere of influence
  - Municipal, state, national policies
  - Good governance
  - Participation
  - Political instability
- Demographic development
- Entrepreneurship
- Education

Wastewater
- Semi-centralized solutions for sewage treatment
- Connecting households to sewage system
- Industrial wastewater treatment
- Water recycling for potable use

Capacity development
- Project proposals opening access to international lands
- Strengthening and extending monitoring and measurement capabilities

Buffers
- Potential supportive measures envisaged for this or other projects
- Cooperations for exchange of technologies and fair trade systems

Indicators
- Objectives of smart city development with respect to water addressed by indicators

Levers
- Potential provisioning* measures envisaged for this or other projects
  - Water supply security
- B47 water supply incl. Pillar 3 scheme
- Effective stormwater drains
- Improved irrigation techniques for increased water use efficiency
- Improved groundwater situation
- Reduced health risks

Methodology based on Morgenstadt City Lab
Water Innovation Hub

- Concept to be developed in project
- Coordinating body for long term cooperation in water sector
- Indian and German companies shall be involved (platform for exchange)
- Demo- and pilot applications
- Monitoring with sensors and labs
- Joint research activities
- Strategic advise for city administration

- Open for input/ ideas
Thank you for your attention!

Dr.-Ing. Marius Mohr
Fraunhofer-Institute for Interfacial Engineering and Biotechnology IGB
Nobelstraße 12, 70569 Stuttgart, Germany
Phone +49 711 970-4216
marius.mohr@igb.fraunhofer.de
www.igb.fraunhofer.de