



Chances and limits of the concept of IWRM in projects for water supply and sanitation

Experiences of consulting in development cooperation

Facts & Figures

- about **60** Years of Experience
- about **1,600** Staff Members
- more than **60 %** Turnover Abroad
- more than **1,000** Domestic and Overseas Projects per Year
- above **50** Countries currently

Service Portfolio





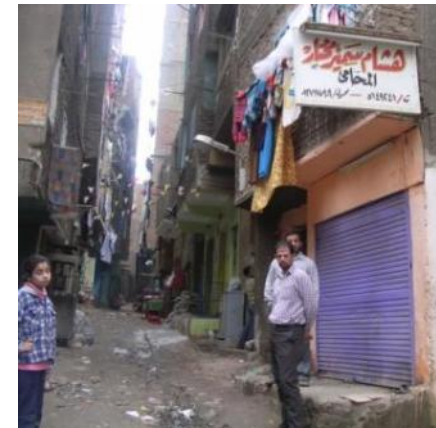
Case Insight 1

Manshiet Nasser – From an Informal Area to a Legalised District Cairo, Egypt

Manshiet Nasser – From an Informal Area to a Legalised District

Initial situation

- City population more than doubled since 1960's
- 1221 informal areas in Egypt, 67 in Greater Cairo
- Basic infrastructure partly constructed by the residents
- Very low water supply and sewerage standards
- Critical environmental and health conditions



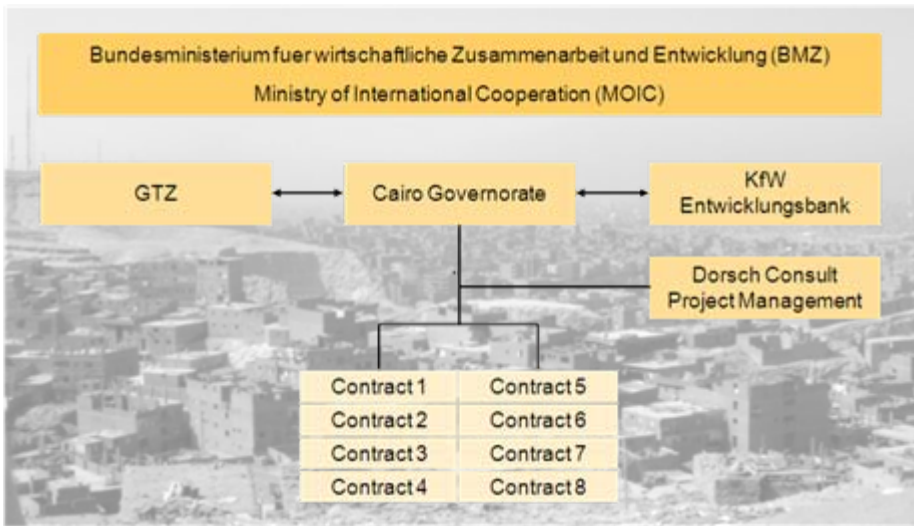
Manshiet Nasser – From an Informal Area to a Legalised District

Initial situation

- 1221 informal areas in Egypt, 67 in Greater Cairo
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Objective

- Improvement of the living standards through a participatory and empowering approach
- Increased coverage of water supply and sewer connections
- Improved accessibility (inner urban roads)
- Improvement of the security situation



Core Measures

Hard Engineering

- 19,7 km distribution network, 167 fire hydrants, 4,043 house connections, 12,3 km sewer lines
- 61,000m² new constructed and reinstated roads

Soft Engineering:

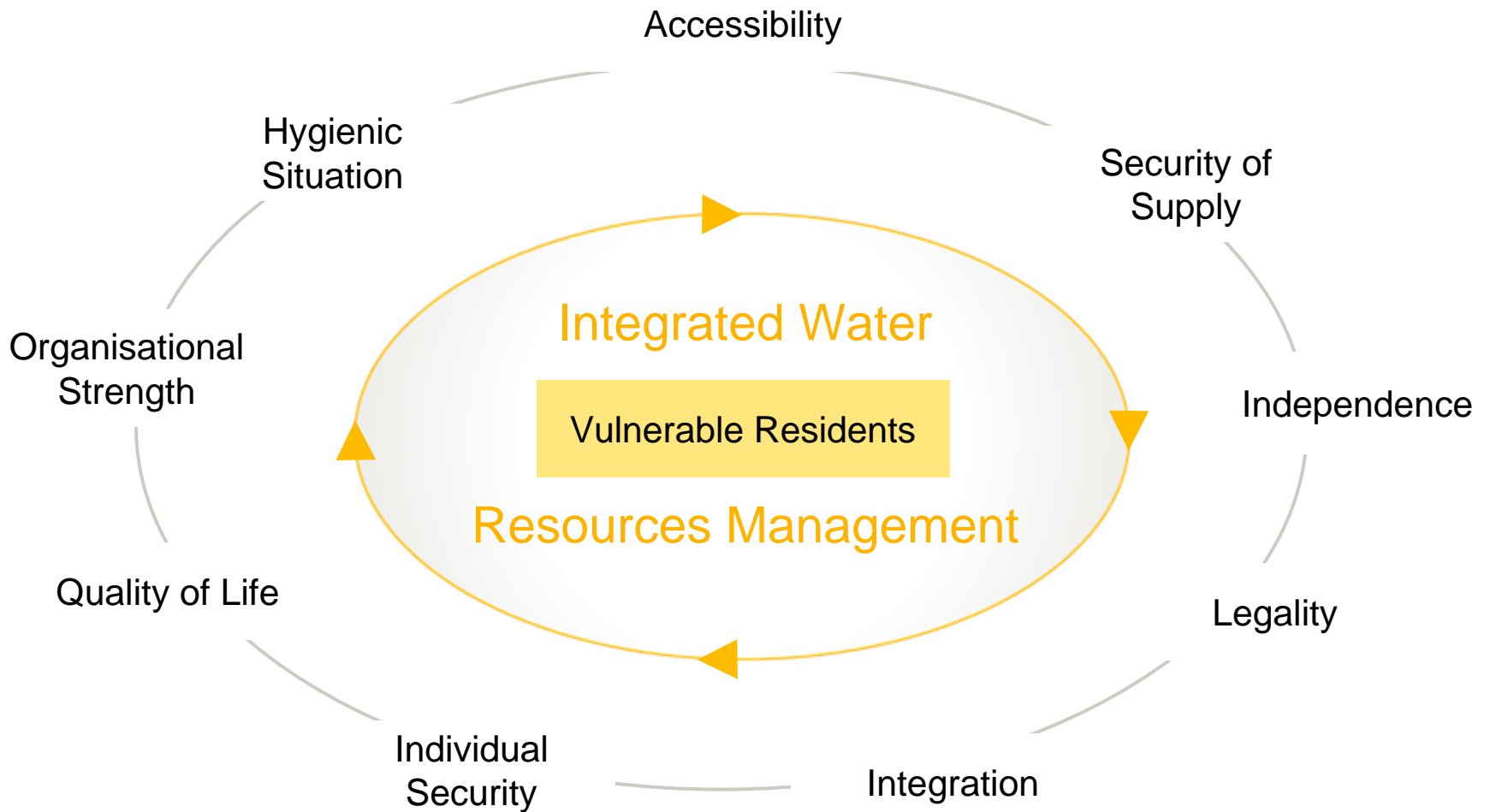
- Urban planning workshops,
- participatory implementation, etc.

Manshiet Nasser – From an Informal Area to a Legalised District

Findings and Lessons Learned

- House connections have a high impact on water quality and water losses
- Regular collection routines and transparent cost statements
- Lower cost for residents through change from septic tank to sewer system
- Better sanitation increases water consumption
- Improved street lighting increases perceived security of residents
- A functioning water supply system is a precondition for effective fire fighting

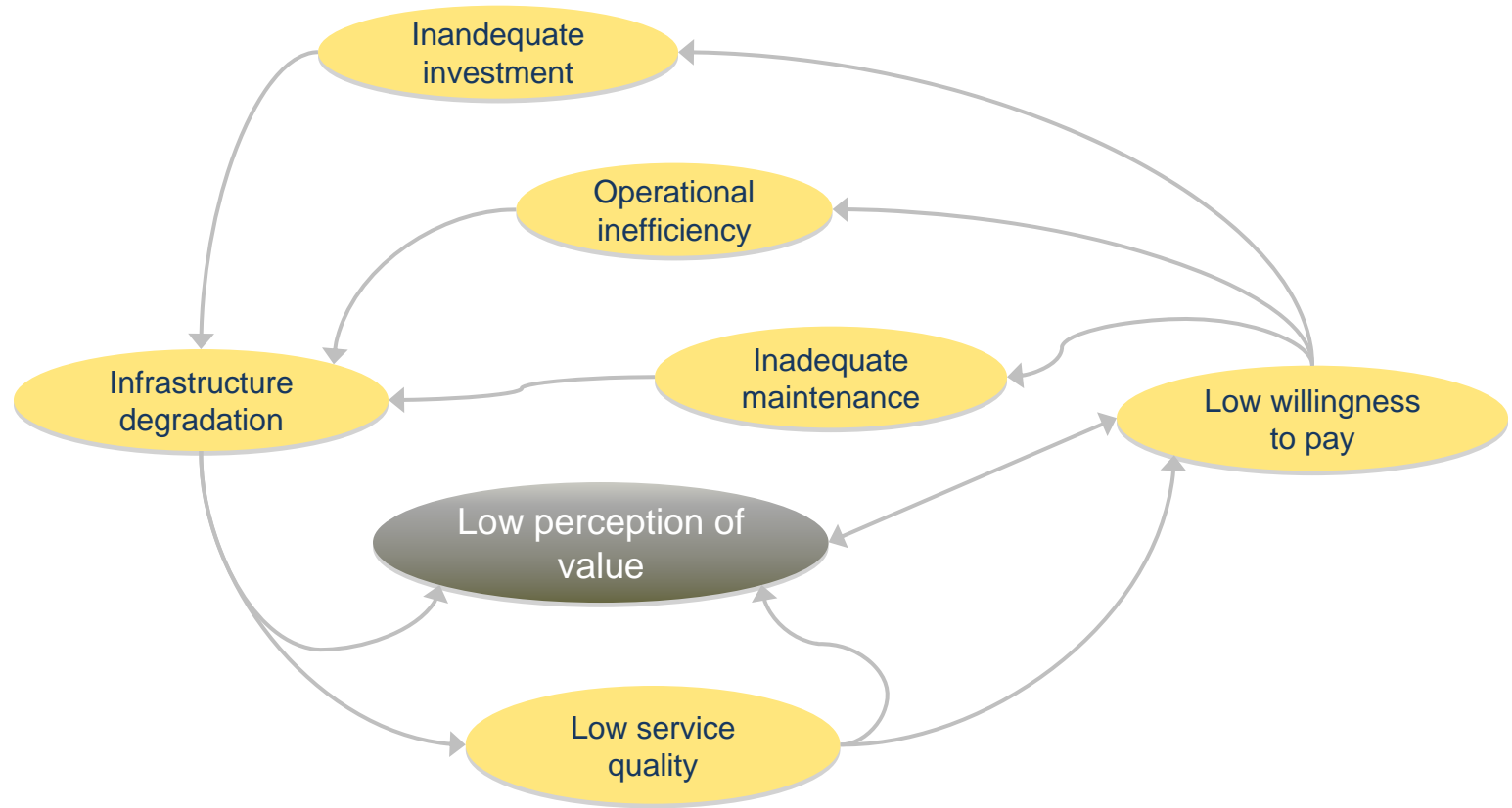
The social development within a settlement is closely linked to infrastructure development





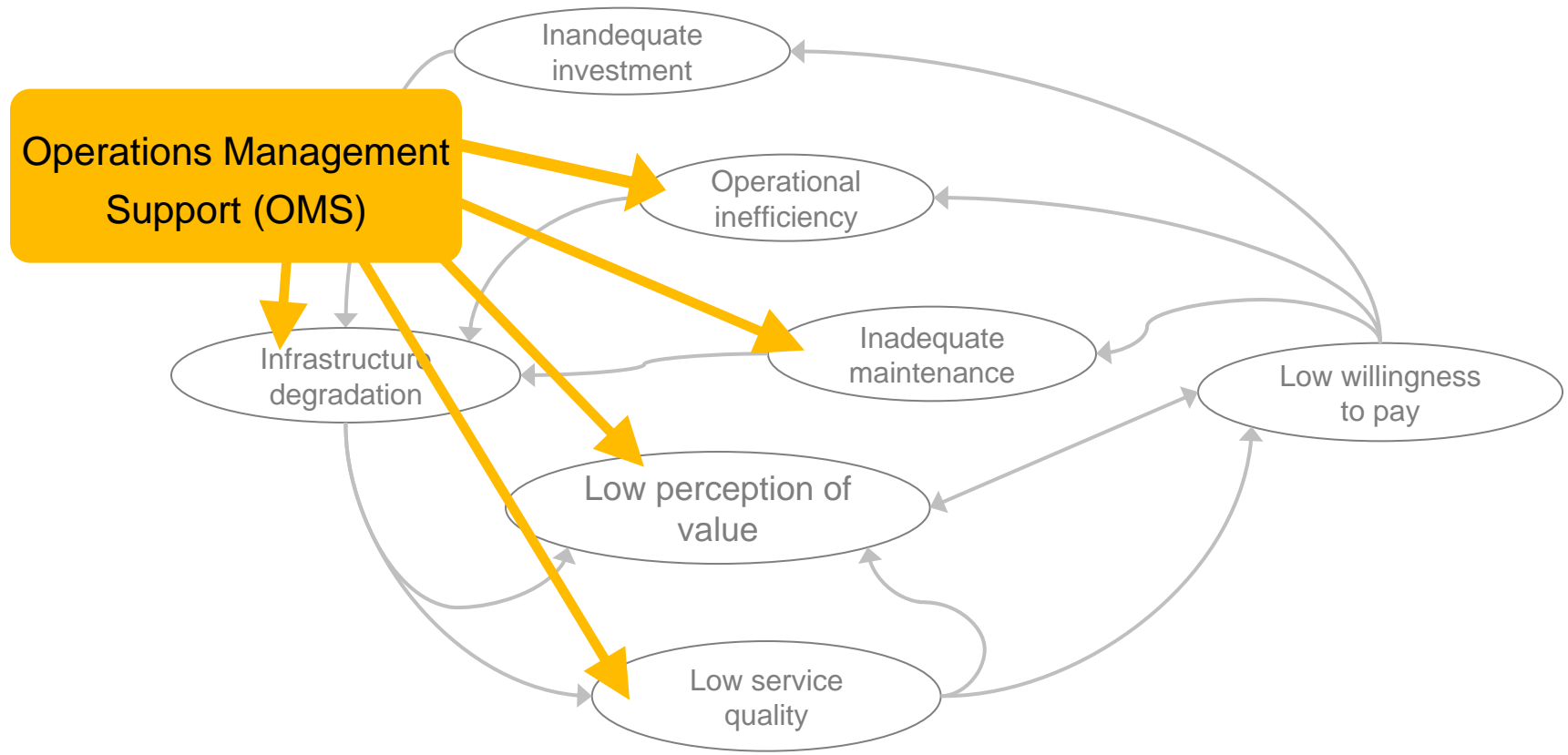
Case Insight 2 Operations Management Support (OMS), Jordan

Cause and effect in water and wastewater utility management



Source: based on WWDR 2009

Cause and effect in water and wastewater utility management



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Operations Management Support (OMS)

Initial situation

- Inefficient utility operation
- Lack of effective administration of technical, customer and financial data
- Cost allocation often impossible
- High NRW percentage
- High energy inefficiency

Objective

- Improving the technical and operational functions
- Improving data administration and data processing
>> enabling qualified decision-making
- Creating cost transparency
- Increasing the service quality



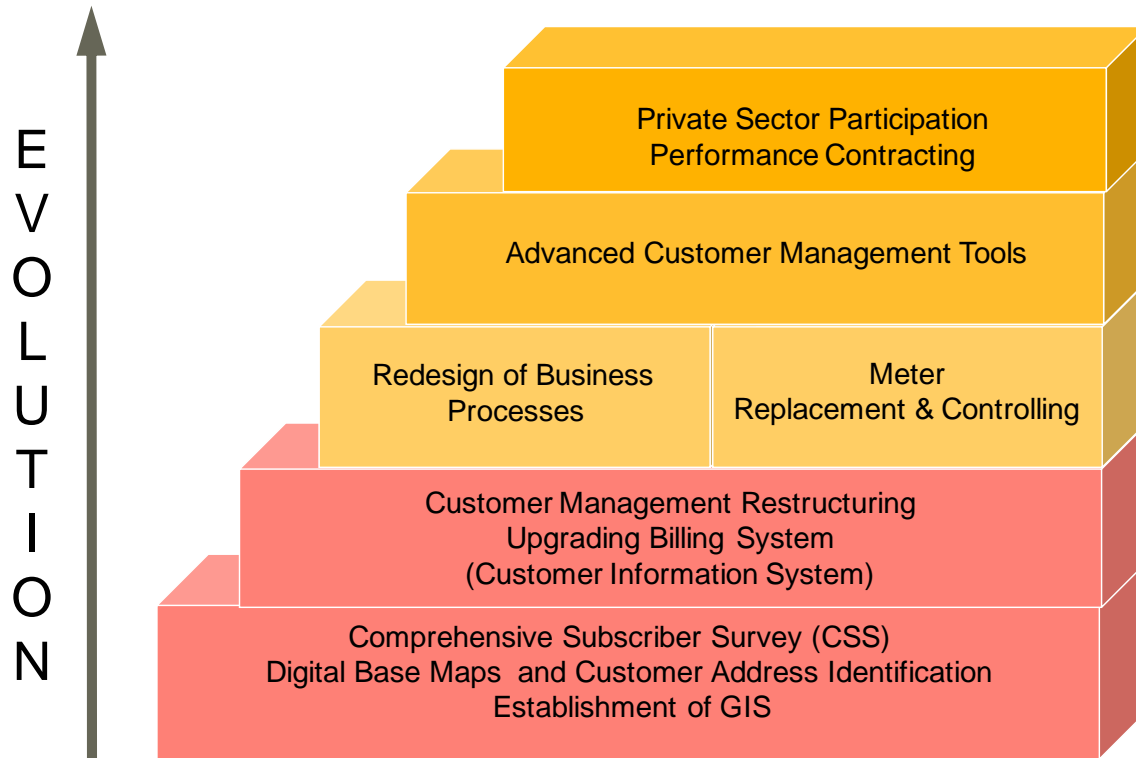
Operations Management Support (OMS)



Core Measures

- Implementation of GIS-based Information Management System (MIS)
- Implementation of accrual-based accounting according to international standards (IAS)
- Technical, administrative and financial capacity building
- Preparation of PSP measures (Micro-PSP)

Operations Management Support (OMS) – the approach in a nutshell



Operations Management Support (OMS)

Findings and Lessons Learned

- Combining measures on all levels (policy development, technical functions, administrative functions, customer relationship)
- Combining top-down and bottom-up approach >> GIZ, Consultant, Utility Operator
- Mobilizing internal capabilities with interdisciplinary approach
- Steering improvement systematically (gradual change)
- Base data information matters (effective data management)
- Ensuring process continuity (simple but stable)
- Using simple IT-solutions to back-up business processes (e.g. open source)
- Intregrating external expertise (when feasible and accountable)

Integrated Urban Water Management



Integrated >> considering interlinked parameters
Interdisciplinary >> across boundaries of traditional disciplines
Iterative >> integrating learning mechanisms

» Thank you for your attention!