

# Logframe-Matrix

Sewerage Project Al Bireh  
Project

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BENZ-Nr.

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# Annex 1/1

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Objectives, Results, Measures	Indicators (source)	Assumptions	Indicators (source)	Risk assessment
<p><b>Overall objective</b></p> <ul style="list-style-type: none"> <li>Protection of regional water resources</li> <li>Reduction of health risks of the population in the Project Region</li> </ul> <p><b>Project Goal</b></p> <p>Wastewater disposal in Al Bireh environmentally sound and safe for people's health</p>	<ul style="list-style-type: none"> <li>Treatment plant effluent with less than 20 mg BOD5, 30 mg SS7 and 1000 FC/100 ml (Operational logbook)</li> <li>On average more than 7,500 m<sup>3</sup> wastewater are treated and conveyed from the natural catchment area Wadi El Em to the neighbouring Wadi Abu el Feed (Operational logbook)</li> <li>85 % collection rate 2 years after start of operation (Supervision of eng. department)</li> </ul>	<p><b>Assumptions for achievement of goals</b></p> <ol style="list-style-type: none"> <li>Wastewater treatment capacity is properly used, treatment plant is properly operated</li> <li>Wastewater quantities develop according to prediction</li> <li>Extension of the sewer network by the municipality of Al Bireh according to demand</li> <li>Operation personnel trained and qualified</li> <li>Coverage of at least operation cost</li> <li>Regulations for inflow are observed</li> <li>Emptying of cess pits is carried out on schedule and according to demand, sludge is transported to the treatment plant</li> <li>Wastewater and sludge regulations are observed</li> </ol>	<ol style="list-style-type: none"> <li>No switch-offs due to money shortage or operating errors (operation logbook)</li> <li>Population growth rate &lt; 3.5% p.a., domestic water consumption &lt; 102 l/cd, infiltration &lt; 0.05 l/cd/a (eng. department, JWU)</li> <li>Areas with &gt; 1.50 l/cd/a in Al Bireh are connected to the central sewerage system (eng. department)</li> <li>Personnel meets qualification requirements (GITZ)</li> <li>Tariff system and collection ratio ensure solvency (accounting, GITZ, JWU)</li> <li>No discharges of harmful substances to the sewer network (effluent monitoring)</li> <li>No uncontrolled discharges of sludge tankers (operation logbook)</li> <li>No migration of restricted crops, no uncontrolled disposal of sludges (operation logbook)</li> </ol>	<p>medium</p> <p>medium</p> <p>low</p> <p>medium</p> <p>medium</p> <p>low</p> <p>medium</p> <p>low</p>
<p><b>Project measures</b></p> <p>a) Construction of a central wastewater treatment plant (for approx. 50,000 inh. capacity 7,500 m<sup>3</sup>/d); according to the present conception two-stage biological plant with sludge digesting, sludge dewatering and biogas utilization;</p> <p>b) Construction of a system for the conveyance of treated wastewater to the neighbouring Wadi Abu el Feed (pumping station, Q = 100 l/s, pressure pipe DN 250, length 4.5 km, seasonal reservoir with a volume of approx. 100 000 m<sup>3</sup>);</p>		<p><b>Assumptions for achievement of results</b></p> <ol style="list-style-type: none"> <li>Civil Administration adheres to planning and supplying premises</li> <li>Exemption from import duties according to Israeli-Palestinian agreements are realized</li> <li>Support of the municipality's role as implementation agency takes place as agreed upon with GITZ</li> <li>Qualification of the economic operation skills takes place as agreed upon with GITZ</li> <li>Qualification of the technical operation skills takes place as agreed upon with GITZ</li> </ol>	<ol style="list-style-type: none"> <li>Handing-over of final design and supply of pipes (eng. department, consultant)</li> <li>Imports are exempted from import duties and carried out on schedule (consult)</li> <li>Implementation according to time schedule (consult, GITZ)</li> <li>A tariff system depending on individual water consumption is enforced, collection is carried out via JWU (eng. department, GITZ, JWU)</li> <li>Personnel qualified, sewerage regulation is enforced and Inflow Control System developed (GITZ)</li> </ol>	<p>medium</p> <p>medium</p> <p>medium</p> <p>medium</p> <p>medium</p>