




FAYOUM DRINKING WATER AND SANITATION PROJECT

Phase I
1990-1994





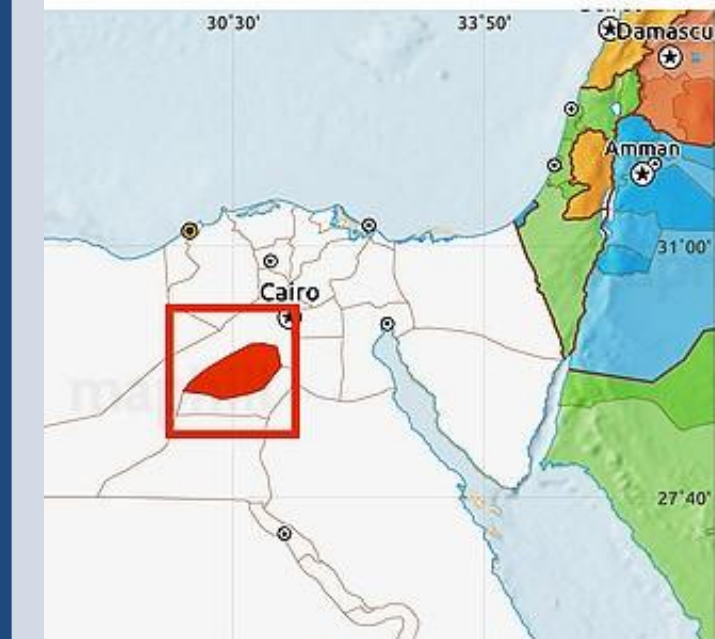
Data

- Country/ Region: Egypt, Fayoum Governorate
- Period: 1990-1994
- Project: Fayoum Drinking Water and Sanitation Project (FADWASP)
- Topic: Water Utility Management
- Sub topics: Planning, Performance Improvement
- Financing Institution: DGIS
- Author: Ad Sannen



Content

- Project location (maps)
- Project context
- Project objectives and scope
- Key results
- Lessons learned
- Personal reflection



FAYOUM GOVERNORATE



institutional strengthening of Al Azab waterworks, the Authority responsible for water supply throughout the governorate except in Fayoum City



Enable El Azab to upgrade its technical and financial performance



preparation of a water supply master plan for the rural areas of the governorate up to 2020



preparation of a wastewater master plan for the entire governorate, excluding Fayoum City up to 2020



Enhanced maintenance, planning and implementation procedures for the water supply network



Read the entire FADWASP story in the IOB Impact Evaluation, No 327, May 2010

FADWASP Project summary

Water Supply in Fayoum (1990)



Fayoum Drinking Water and Sanitation Project, Phase 1 (1990-1994)

- In 1990 there were two water authorities in the Governorate:
 - *Fayoum City water authority, serving about 235,000 inhabitants*
 - *El Azab waterworks serving about 1.5 million people in the rural area*
 - *Sanitation was the responsibility of Fayoum Governorate*
- Water production of El Azab was about 40 million m³/year, serving about 83,000 house connections and an estimated 1000 public taps
- El Azab produced water by one central plant with capacity of about 1500 l/sec and 17 compact units at the fringes of the network with some 500 l/sec capacity
- The company had about 750 employees. There was one head quarters and five maintenance centers
- Unaccounted for water was 78%; only 21% of operational costs were covered from revenues

Phase 1(1990-1994)

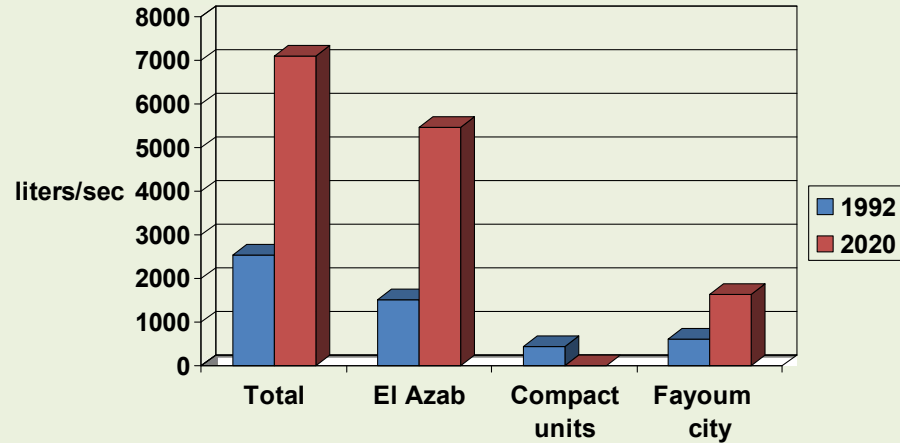
- The project was executed by a consortium of IWACO, DHV and ECG Egypt
- Activities started in August 1990 with a first phase planned for 3 years
- the team consisted of
 - *2 long termers: Ad Sannen (IWACO) and Jaap Butter (DHV)*
 - *2 long term Egyptian consultants (ECG Cairo)*
 - *Specialized inputs were provided by short term experts*
- Ad en Jaap were living with their families in Cairo, but spent most of the week in Fayoum. Their kids attended international school in Cairo.

Situation encountered

- Limited understanding in el azab about the project. They expected pipes but got technical assistance and institutional support. The management was disappointed but they accepted us with a *wait and see* attitude.
- The company had very little autonomy; everything had to be approved by the governorate
- There were hardly any data, no computers, most information was manually written. Water network system drawings were from British time
- We had a hard time in winning the trust and attention of the management, who were actually continuously overloaded. Most of the staff had to run to second jobs after 3 PM.
- Instead of working with the management we agreed to establish task forces of young engineers who were trained in key technical and operational aspects of water supply.

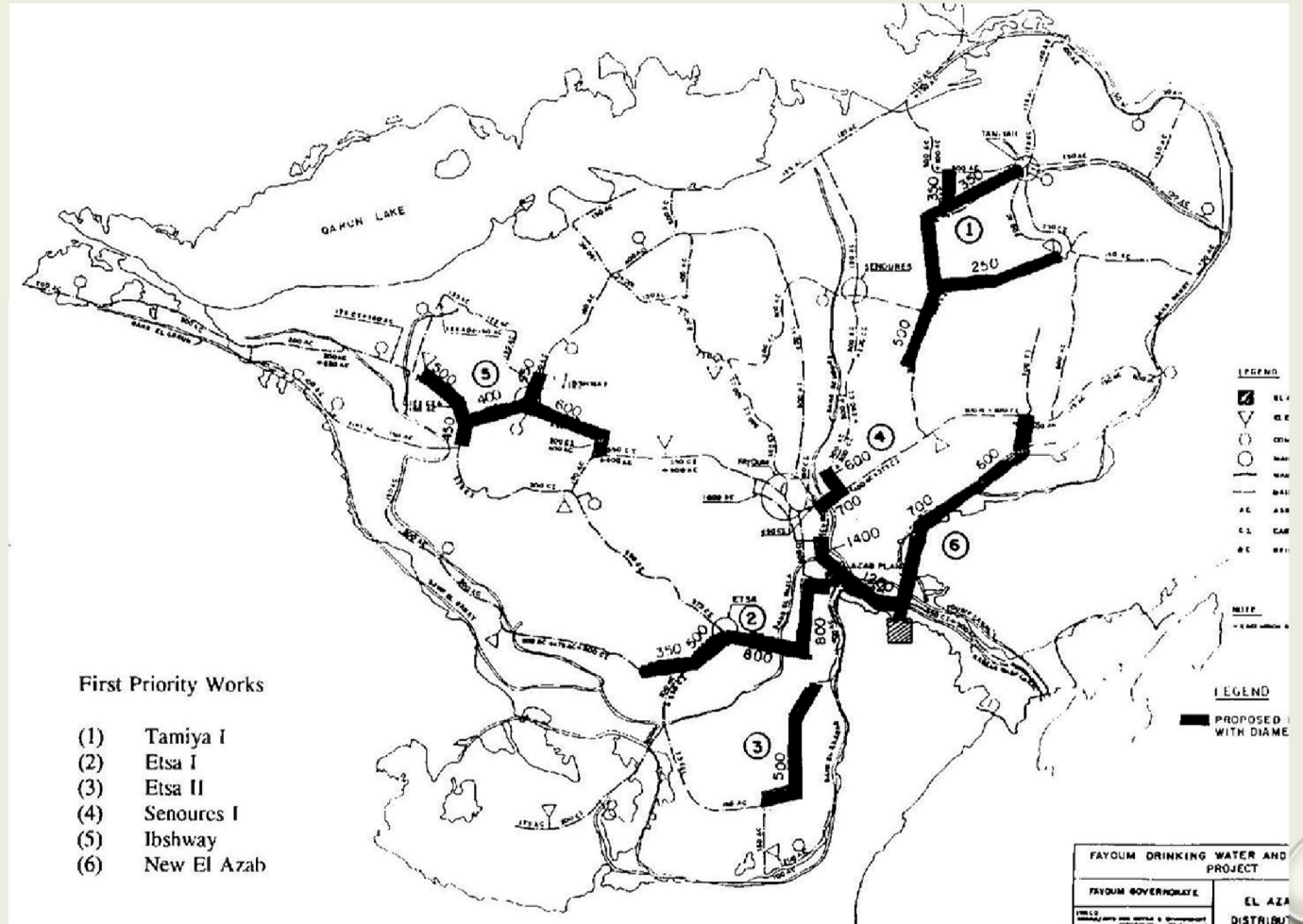


Water supply Master Plan 2020

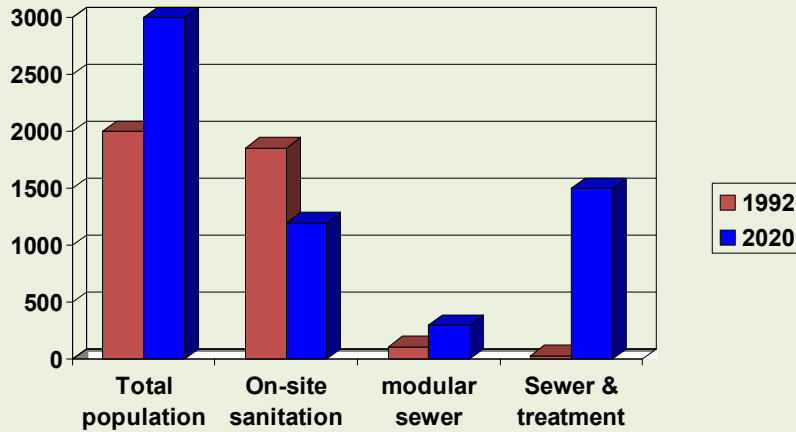


Key elements:

- Choice for central water treatment (new El Azab)
- Expansion of trunk mains
- Phasing out of compact units
- Revenue improvement
- Capacity Building

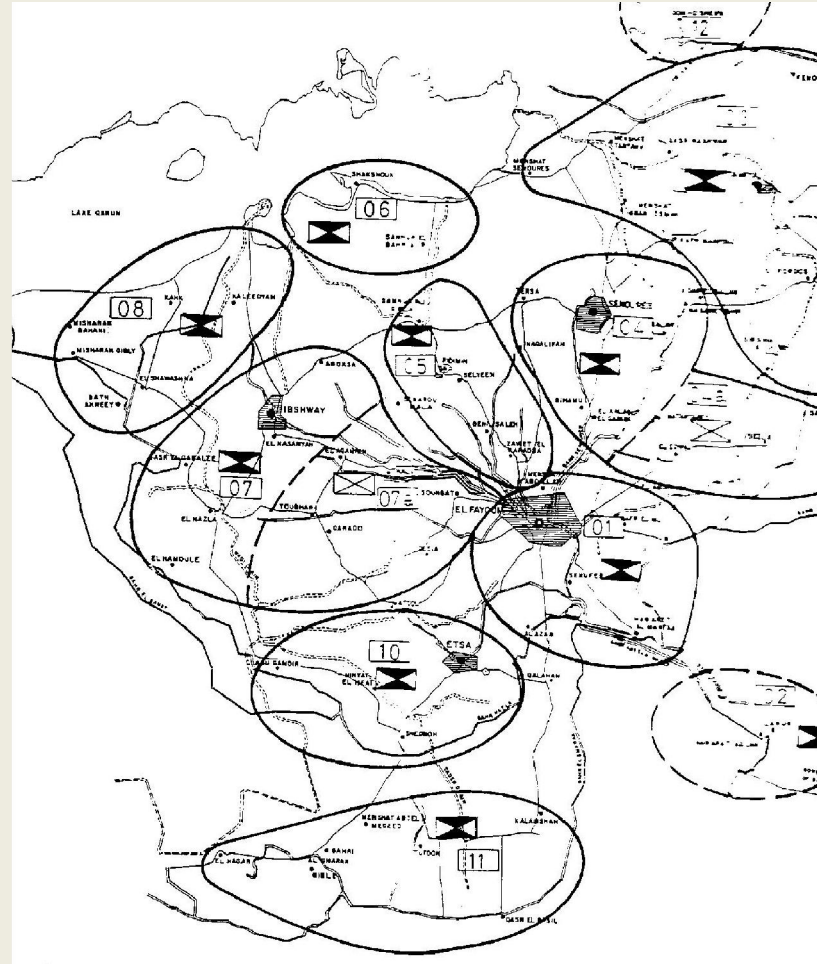


Wastewater Master plan 2020



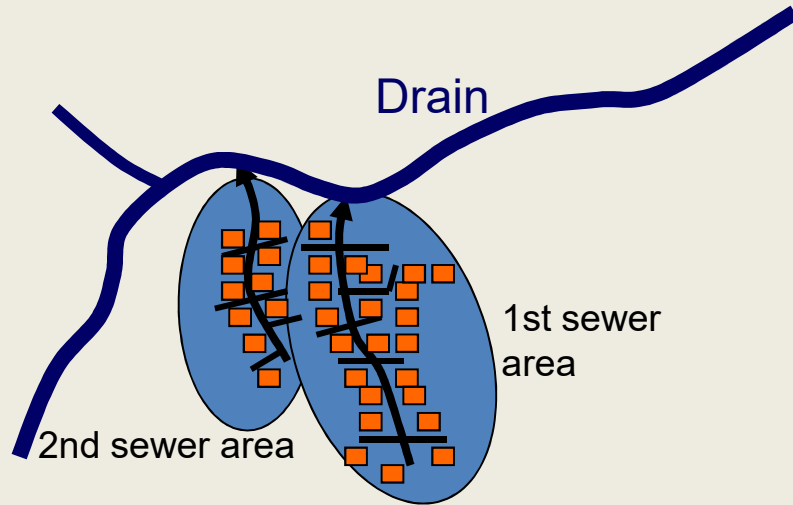
Key elements:

- Centralised treatment
- Modular sewerage
- Continued importance of on-site sanitation
- Organisation development

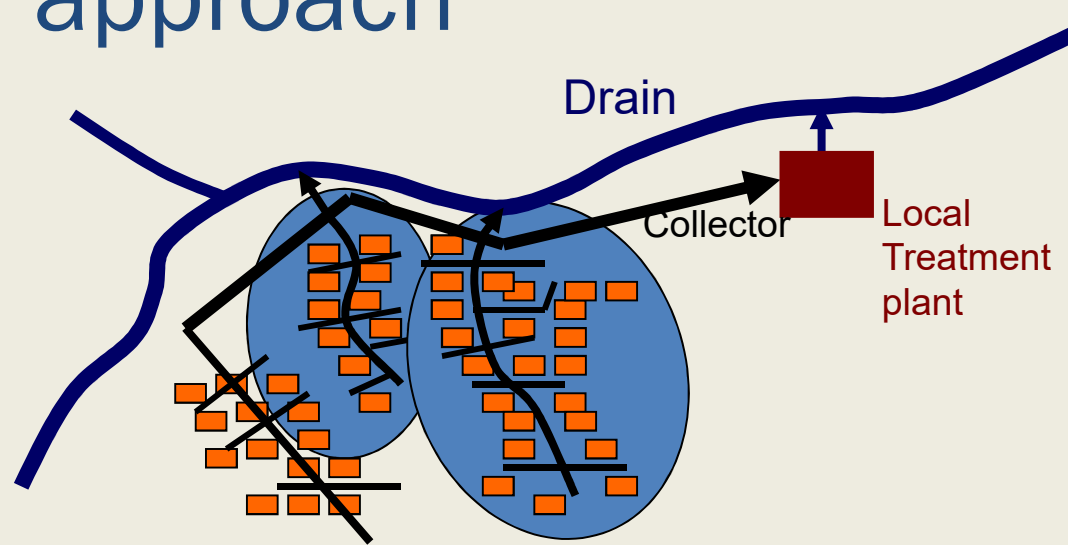


- 12 clusters with main treatment plant
- Including all towns and villages over 15,000 inhabitants (in 2020)

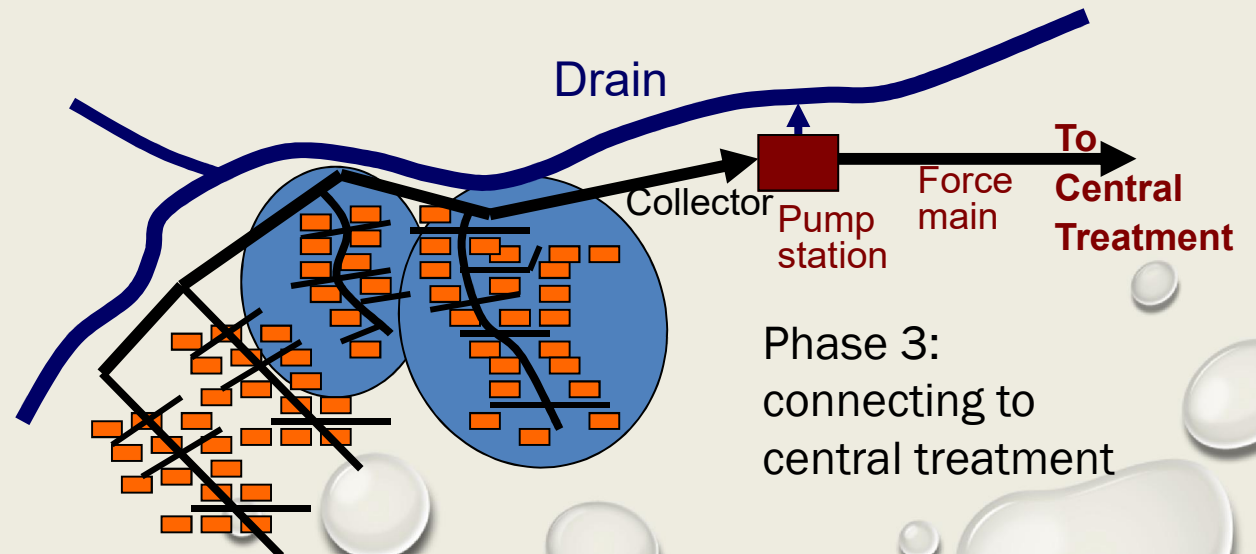
Modular sewer system approach



Phase 1: focus on discharge



Phase 2: simple primary treatment



Phase 3: connecting to central treatment

El Azab Planned Organisation development

- Transforming El Azab into Public Sector Company (1994)
- Implement new organisation structure (1995-96)
- Investigate merger with Fayoum city watersupply (1998)
- Establishing Fayoum Sanitation Department (1993-1997)
- Investigate integration of FSD in the watersupply company

What we didn't know

- How sustainable was this plan?
- Would it end up in the cupboard?
- Would the project support be continued?
- Would the organisation remain committed?
- How would sector reform proceed?

Persisting problems

- Network problems (bottlenecks, losses)
- Overloaded management
- Lack of management capacities
- Low tariffs
- Different financers with different requirements and conditions
- Sanitation investments lagging

Lessons learned

- The Master Plans 2020 for Drinking Water Supply and Waste Water (October 1993) continued to guide the development of water and sanitation in Fayoum until about 2010
- (Strategic) planning update is needed every 5 years
- The strategy needs strong roots in the organisation
- Performance management needs a strong link to the strategic plan.