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添付資料 - 1 主要面談者リスト

関係機関	氏名
住宅公共施設省	
Ministry of Housing, Utilities and Urban Communities	
First Undersecretary, Head of International Cooperation Sector	Mr. Helmy Zein El Deen
General Manager of International Cooperation & Loans	Mrs. Reda Saleh
Executive Director, Central Department for Private Sector Projects	Dr. Beyaly Hosney El Beyaly
全国上下水道庁	
National Organization for Potable Water and Sanitary Drainage (NOPWASD)	
[本部]	
Chairman	Dr. El Shafhie El Dakroury
Chairman Assistant	Mr. Sayed Saad
Head of Central Department for Research & Study	Mrs. Samira Necola
Manager Research Dept.	Mr. Saeed El Goharny
Research Dept.	Mrs. Howida Anani
[ダマンフル訓練センター(Damanhur Training Center of NOPWASD)]	
General Manager of Training Center	Mr. Romil Naseem Saad
General Manager of Training Course	Mr. Mostafa Abdalla Oda
Trainer for Mechanical Engineering	Mr. Ossama Elghazali
シャルキーヤ県上下水道公団	
Sharqiya Economic Organization for Water Supply and Sanitary Drainage (SHEGAWASD)	
[本部]	
Chairman	Mr. Mohamed Hammad
Vice Chairman	Mr. Osama Abdel El Ghani
General Manager of Water Affiars	Mr. Abd El Hakeem El Kamahawy
General Manager of Sanitary Drainage Affiars	Mr. Sayed Nasar
General Manager of Sanitary Drainage Affiars	Mrs. Berlanty M. Bayoumi
Secretary of Chairman and Manager of Training Section	Mr. Alaa El Deen Mohamed Ali Taleb
Engineer of Water Affairs Department	Mr. Amir Rizq Yosef
Engineer of Water Affairs Department	Mr. Roshdy Mohamed Ali Al Nagar
Manager of Financial & Administration Department	Mr. Abd El Monem Rashad
Manager of Information Center	Mr. Mahmoud Abd El Raouf
Chemist of Water Affairs Department	Mrs. Magda Galal Abd El Hameed
Manager of Budgetary Department	Mr. Abd El Azeem Abd El Ghani
[ザガジグ市支局]	
Manager of SHEGAWASD Zagazig City Branch	Mr. Adib Shawky
Manager of Customer Department	Mrs. Madiha Suela Aziz
[ファクース支局]	
Manager of SHEGAWASD Faqous Branch	Mr. Salah Salem
Manager of Water Department	Mr. Mohmoud Saafan
[ヒヒヤ支局]	
Manager of SHEGAWASD Hihya Branch	Mr. Medhat
[ミニアルカマ支局]	
Manager of SHEGAWASD Minyet El Qamh Branch	Mr. Fathi Amin
アバッサ浄水場	
Abassa Water Treatment Plant	
Plant Manager	Mr. Samir Gharib
Head of Water Section	Mr. Mostafa Ghanaim
Head of Mechanical Section	Mr. Farouk El Baz

関係機関	氏名
ザガジグ浄水場 Zagazig Water Treatment Plant Plant Manager Manager of Water Department Chemist of Laboratory	Mr. Mohamed Farid Mr. Helmy El Shmer Mr. Saber Hassan Hosni
カフル・サクル浄水場 Kafr Saqr Water Treatment Plant Plant Manager (SHEGAWASD) Chemist (SHEGAWASD)	Mr. Mohammed El Sayed Mr. Mohammed Emara
ファクス浄水場 Faquos Water Treatment Plant Plant Manager (SHEGAWASD) Mechanical Engineer (SHEGAWASD)	Mr. Ahmed Mohmoud Mr. Aly Nofal
エル・フセニア浄水場 El Huseinia Water Treatment Plant Plant Manager	Mr. Ibrahim Nofal
サウス・フセニアバレー浄水場（建設中） South Huseinia Valley Water Treatment Plant Leader of Supervision Team of SHEGAWSD Supervisor of SHEGAWASD Supervisor of SHEGAWASD Engineer of Darwish Consulting Engineers	Mr. Abd El Hakeem Mr. Zakaria Abd El Saad Mr. Mohamed Abd El Alim Mr. Khalid Ismail Ibrahim
大カイロ圏上水道庁 General Organization for Greater Cairo Water Supply (GOGCWS) Chairman Director of Training Center	Mr. Amr Wahsh Mr. Mahmoud Abu Khalaf
大カイロ圏上水道庁 モストロッド訓練センター Mostrod Central Training Center of GOGCWS Training Project Manager Trainer for Electrical and Electronic Engineering	Ms. Reda Kamel Mr. Amgad Fathy
ファイユーム県上下水道公団 Fayoum Economical General Authority for Water and Sanitary Drainage (FEGAWS) Chairman Co-team Leader (Engineering Consultants Group S.A.)	Mr. Mahmoud Masaad Mr. Alaa El Din Saad Soliman
ダカリヤ県上下水道公団 Daqahilya Economical General Authority for Water and Sanitary Drainage (DEGAWASD) Chairman Vice Chairman Manager of Chairman's Office Manager of Information Center Manager of Technical Office Manager of Commercial Affairs Department Managar of New Water Treatment Plant	Mr. Ahmed Amin Abdeen Mrs. Boshra Ibrahim Mr. Anwar El Basta Wesy Mrs. Naheed Kamel Safan Mr. Mohamed Ragab El Zoghby Mr. Abdel Ramadan Kiwan Mr. Gamal Salama
アレキサンドリア県上水道庁 Alexandria Water General Authority (AWGA) Chairperson Manager of AWGA Training Center	Mrs. Nadi Abdu Dr. Mrs. Ola Yousef

関係機関	氏名
米国援助庁 U.S. Agency for International Development (USAID) Project Officer of Environment and Infrastructure Section	Mr. Mamdouh Raslan
ドイツ援助公社 German Development Cooperation (GTZ) Director of GTZ Office Cairo	Ms. Marlis Weissenborn
ドイツ復興金融金庫 Kreditanstalt für Wiederaufbau (KfW) Director of KfW Cairo Office Senior Expert of KfW Cairo Office	Mr. Jan Blum Mr. Walid Abdel Rehim
フランス大使館 Embassy of France Chief of Economical Mission Commercial Attache Sectorial Attache	Mr. Herve Piquet Mr. Richard Fostier Mr. Ahmed El Beltagui
スペイン大使館 Embassy of Spain Economical & Commercial Councillor Commercial Attache	Mr. Enrique Feas Ms. Carmen Cabrero
デンマーク大使館 Embassy of Denmark Senior Technical Advisor	Mr. Aly Kerdany
フィンランド大使館 Embassy of Finland Counselor	Ms. Ulla Maija Nevalainen
在エジプト日本国大使館 Embassy of Japan in Egypt 一等書記官	藪中 克一 氏
JICAエジプト事務所 JICA Egypt Office 次長 (Deputy Resident Representative) 所長補佐 (Assistant to Resident Representative) Project Officer	岩間 敏之 氏 和田 康彦 氏 Mr. Wael Yehya

SHEGAWASD
Chairman Office

Proposals and Vision for the Upgrading
Within the Coming Five Years
2002/03 - 2006/07

1- General

Water supply and sanitary services are directly and continuously related to the citizen's comfort. The citizens feel any shortage of such services. The citizen's satisfaction is the measure of the service.

Egypt realized big steps in upgrading the potable water and sanitary drainage services where the service ration of the drinking water was increased from 60% to 95% in urban areas and from 10% to 70% in rural areas.

Big investments are spent for these services. These services have to continue doing its role properly so that the citizens can feel comfort. At the same time we have to conserve the capital of these investments (such as water and wastewater treatment plants, networks...etc.). Also we have to strength the skills of the staff of SHEGAWASD to increase their affiliation to the Authority.

2- Based on the above, I show the SHEGAWASD strategy to develop the Authority through seven main axes.

(A) First Axis:

Establish main database for the information in the whole fields

- Treatment Plants and Network.
- Served Areas, Semi Served and deprived areas.

The above can be realized by constructing information center connected to the information center of the Governorate and the under construction infra structure information center in the Governorate.

(B) Second Axis:

- To prepare annual maintenance, repair, rehabilitation and renewal plan based on the above database information.
- To prepare a plan to serve the deprived areas.

(C) Third Axis:

Quick response, day and night, to solve the citizen's problems has so that the citizen can know how the State pays attention for his needs.

(D) Fourth Axis:

Reduce the loss to reach to 15% instead of the current 35%.

(E) Fifth Axis:

Reduce the expenditure by controlling the number of staff, number of small stations and construction of raw water network to feed the public gardens, fire hydrants and fuel and car washing stations.

(F) Sixth Axis:

Glorify the incomes.

(G) Seventh Axis:

To protect the environment.

3- The above mentioned axes will be implemented in the seventh five year plan (2002/2007) and the following will explain how to implement the improvement.

A- First Axis:

To prepare database for the whole activities related to water and wastewater treatment plants and the procedures to implement this axis are going on for implementation within 12 months.

(1) Water and Wastewater Treatment Plants

Location-Area- Construction date- Plant's components- Production Capacity- Service Area.

(2) Networks

Lengths- Diameters- Type- Depths- Valves and its type- Construction date- Capacity- Put these data on maps. These data will be completed within one year.

(3) To determine the served areas with enough pressure and quantity, the semi served areas and the deprived areas.

The percentage of coverage, deprived areas and population density will be stored in the information center.

B- Second Axis:

To prepare yearly maintenance, repair, rehabilitation and renewal plan

(1) Determine and evaluate the technical capacity of the plant and the requests to increase the efficiency.

The following is the priorities:

- First Priority: Rehabilitation and renewal of wells and pump stations.
 - Second Priority: Buildings of the above facilities.
 - Third Priority: Water tanks and fences for the sites.
- (2) Rehabilitation and Renewal of the Networks
- Urgent Priority: Control valves- Wash valves.
 - First Priority: Main Trunk and Carriers Lines.
 - Second Priority: Installation of water meters in districts and areas.
 - Third Priority: Rehabilitation and renewal of branch lines particularly the deep ones to avoid difficulty of maintenance. Also, increase the diameter of these pipes to be 150 mm and 200 mm instead of 30 and 40 mm.
- (3) To serve the deprived areas particularly these ones that include 50 house holds (250) persons) so that to cover the whole Governorate within 3 years to increase the coverage ratio to be 100% instead of the current 93%.

C- Third Axis:

The quick response to solve the citizen's problems especially in the villages.

The current response to make the repair is 3-5 days for villages and 3-4 hours in the city.

It is planned to response in 2 hours for villages and 30 minutes in the city.

The above can be realizes by finding will trained staff equipped with the proper communication system, spare parts, tools and equipment. The team should have fast transportation means to arrive the problem's site very soon in the day and night and under any conditions. This will be implemented within the five year plan.

D- Fourth axis:

Reduce the loss to reach to 15% instead of 30% within the five- year plan.

- (1) Provide the leakage detection and flow measure apparatus.
- (2) Install flow meters at the production facilities.
- (3) Install water meter for the whole connections.
- (4) Study to use electronic water meters as the pre paid card system that used in the telephones.
- (5) Remove the public taps. In emergency cases such taps can be installed under the responsibility of citizen,

local municipality or the social development society. The consumption cost will be covered by the responsible person/locality.

- (6) The necessity to install control valve for each street. The valve will be installed inside chamber and will be maintained regularly.
- (7) By applying the above procedures the loss will be decreased from 35% to 15%. That means adding extra production of amount 20% (equal to two big water treatment plants) and also reduces the load on sewage treatment plants.

E- Fifth Axis:

To conserve the expenditures to achieve the balance and some surplus that can be used in the up grading.

- (1) Reduce the number of staff through:
 - a- Use the computer in issue bills administration, stores, accounting and salaries and staff affairs of the Authority.
 - b- Cancel small well pump stations that serve one village only and increase the capability of the well pump station that serve many villages. This action will reduce the labors need to operate small pump stations. On going study to to up grade the big stations and determine the ones that will be stopped within the first 6 months of the five-year plan. It is recommended to use water treatment plants and stop the compact units.
 - c- Uniform the used equipment and tools for maintenance of the networks to save the time and effort.
- (2) Reduce the consumption of the electric power.
 - Install electric meters.
 - Stop the small station will reduce the electric consumption.
- (3) Reduce the consumption of the spare parts.
- (4) Control the production sources.
- (5) Use the potable water for domestic purposes and install raw water network to irrigate gardens, fuel stations and fire hydrants. It is necessary to consider this matter as a first priority and to be implemented in the cities in the 2002/2007 plan.
- (6) Study the possibility to manufacture spare parts through the Authority's workshop.

F- Sixth Axis:

Glorify the incomes and resources through:

- (1) Study and revise the prices for the installation and repair works.
- (2) Study and review the water tariff and classify the consumption into different categories (investment, commercial, house holds and governmental)
- (3) Revise the collection system and encourage the collectors by increase the incentives.
- (4) Study to collect fees of the review of feasibility studies and inspection works because such services needs

effort and time.

G- Seventh Axis:

To protect the environment.

- (1) To issue environmental advertising pamphlet to protect the sanitary system to avoid the finding of the big and solid objects in the sewer networks.
- (2) Study to reduce the cost of the traditional sewer projects by finding new system suitable for the satellite villagers and staggered small communities and also to avoid the problem of narrow streets in most of the villages.
- (3) The coverage ration of sewer system in the Governorate is less than 10% and it is necessary to increase this ration to be 60 % through the five-year plan 2002/2007. It is necessary to prepare a regional study to select one sewer project to cover about 10 mother villages and its satellites to reduce the cost of land acquisition. Also, such system will reduce the operation and maintenance cost for the sewage treatment plants and will facilitate to connect the networks together.

SHEGAWASD Chairman

Gen. Engineer

Mohamed Hammad.

Schedule for Implementing the Proposals

No	Item	Schedule					
		Priority	02/03	03/04	04/05	05/06	06/07
1	First Axis						
	Data base						
	Plants & Networks						
	Served and Semi Served Areas	First					
	Deprived Areas						
2	Second Axis						
	Prepare maintenance, repair, renewal and rehabilitation Plan	plan					
	Renew and rehabilitate the wells and pump stations	First					
	Pump Houses	Second					
	Buildings, reservoirs and fences	Third					
	Rehabilitate and renew networks						
	Valves	Urgent					
	Water Lines	First					
	Fixing water meters on production sources	Second					
	Rehabilitate and renew the branch lines	plan					
Covering the deprived areas							
3	Third Axis						
	Quick response to solve the citizen's problems to reach to 2 hours in villages.	plan					
	Quick response to solve the citizen's problems to reach to 30 minutes in cities.						
4	Fourth Axis						
	Reduce the loss to reach to 15%	plan					
	Providing discharge measuring and leak detection apparatus.	First					
	Fix water meters at each connection.	plan					
	Remove the public taps	plan					
Fixing control valve at each street	plan						
5	Fifth Axis						
	Conserve the expenditures	plan					
	Reduce the number of staff – Number of small plants						
	Reduce Electricity Consumption						
6	Sixth Axis						
	Glory the income and resources	plan					
	Review the service prices – Review collection system.	First					
	Study to collect fees for feasibility studies.	First					
7	Seventh Axis						
	Conserve the Environment	Plan					
	Prepare advertising pamphlets.	First					
	Study to reduce the cost of sanitary drainage projects.	First					
	Proceed the sectional studies	plan					

Five Year Plan 2002/2007 for Water Projects

Item	Capacity	Situation of Project
Hihya Water Treatment Plant	800 L/s (65,000 m ³ /day)	Under Study
Minia El Kamh Water Treatment Plant	800 L/s (65,000 m ³ /day)	Under Study
First Extension of Kafr Saqr to increase the capacity to 102,000m ³ /day.	51,000 m ³ /day	December, 2004
Second Extension of Abassa	42,000 m ³ /day	March,2004
New Zagazig	34,000 m ³ /day	Preliminary Handing Over
Stop operating the Compact Units (34 units) because of its old age.		
Total production Capacity	800,000 m ³ /day	
Construct control and washing valves of total number 1250	250 valve/year	
Average consumption/capita/day	180 LCD	
Total Investment	1 billion LE	

Five Year Plan 2002/2007 for Sanitary Drainage Projects

Completion of the third and fourth five year-plans to start the service and in addition to the following sanitary drainage projects:

Item		Capacity (m ³ /day)
Harbeet	Abu Kabeer	2,000
Snhawa	Minia El Kamh	10,000
Kafr Shalshlmon	Minia El Kamh	10,000
Tlerak El Sofia	Kafr Saqr	500
Natora	Kafr saqr	500
Dhmsha	Mashtoul	500
El Tiba	Zagazig markaz	10,000
Tatotr	Zagazig markaz	2,500
El Azizia	Minia El Kamh	4,000
Beni Helal	Minia El Kamh	10,000

Total Number of Population = 4.7 million capita.

Total Capacity of the above projects = 46,000 cub. m/day

Average capita/day = 100 lit.cap./day.

Total of investment = 1.5 billion L.E.

Five Year Plan 2007/2012 for Water Projects

Item	Capacity	Situation of Project
First Extension of Hihya Water Treatment Plant to increase the capacity from 75,000 to 150,000 m ³ /day	75,000 m ³ /day	
First Extension of Minia El Kamh Water Treatment Plant	75,000 m ³ /day	
Second Extension of Zagazig	34,000 m ³ /day	
First Extension of Hussinia	34,000 m ³ /day	
First Extension of Faqous	151,000 m ³ /day	
Extend networks of about 300 km./year	1,500 km	
Construct control and washing valves of total number 1250	250 valve/year	
Stop the operation of the whole compact unit and 50% of wells		
Total production Capacity	1,200,000 m ³ /day	
Total population	5.2 million	
Average consumption/capita/day	220 LCD	
Total Investment	1.5 billion L.E.	

Five Year Plan 2007/2012 for Sanitary Drainage Projects

Complete the five year-plan projects.

Start the extension of the Sewage Treatment plants in the Cities to serve the surrounding villages.

Total added capacity = 390,000 cubic meter/day.

Population = 5.2 million.

Average capita/day = 170 LCD

Total Investment = 2.5 billion LE

**PRESIDENTIAL DECREE - 上下水道公団用大統領令
(Translation by the Study Team)**

Number 281 for the Year 1995

To Establish Economical General Authority
For Drinking Water and Sanitary Drainage

The President

Based on the Constitution

Law No. 308 for the year 1995 regarding the administration restrain

Law No. 93 for the year 1962 regarding the sanitary drainage

Law No. 61 for the year 1963 regarding the general authorities

Law No. 44 for the year 1965 regarding the financial inspection of the general authorities, organizations, entities, companies and the related cooperation.

Law No. 52 for the year 1973 regarding the state central budget

Law No. 47 for the year 1978 regarding the employees of the state

Law No. 43 for the year 1978 regarding the local administrations

Law No. 48 for the year 1982 regarding the protection of the river Nile and water canals from pollution

Law No. 9 for the year 1983 regarding the public auctions and tenders

Law No. 5 for the year 1991 regarding the high-ranking employment in the state and public sector

Law No. 4 for the year 1994 regarding environment protection

And the Presidential Decree No. 4723 for the year 1966 regarding the unified accounting system

And the Presidential Decree No. 2420 for the year 1971 regarding the governmental system

And after the approval of the Cabinet

And as decided by the state council

Decided

(Article -1)

Establish an economical general authority in Aswan, El Menia, Beni Sewaif, El Fayoum, El Daqahlia, El Gharbia and El Sharqya Governorates. Each of these authorities will follow the Governor. The authority will have its main office in the Capital City of the Governorate. Each authority will have its legal personality. These authorities will follow the laws of the public authorities.

(Article - 2)

Each of the above mentioned authorities in the above item will be the responsible authority for the works and projects of the potable water and sanitary drainage in the Governorate. The authority will operate and maintain the water and sewer systems. The existing constructions and facilities owned by the water and sanitary drainage departments will be transferred to the above mentioned authorities. The authorities have the right to utilize these facilities and constructions and for this will have the following rights:

- 1- Preparation of the general and detailed plans for the works and projects of the water supply systems and sanitary drainage in the whole Governorate.
- 2- Operate and maintain the water and sanitary drainage facilities including the extension works, upgrading works and providing the necessary local equipment and materials for operation and maintenance.
- 3- To proceed the studies, applied researches and economical and financial studies for the water and sanitary drainage projects.

- 4- To design the authority projects and supervise the implementation in accordance with the implementation schedules. Also the authority has the right to make the related contracting procedures.
- 5- To invite for bids and auctions of the projects, proceed the negotiation local and foreign tenders, awarding the contractors, contacting and supervising the works.
- 6- To participate with the related authorities to set up the standards for water and sanitary drainage.

(Article - 3)

The board of directors will be formulated as follow:

- The Chairman.
- The Vice Chairman for Technical Affairs.
- Head of Water Affairs Department.
- Head of Sanitary Affairs Department.
- Head of Financial and Administration Affairs Department.
- Head of Legal Affairs.
- Director of the Housing and Utilities in the Governorate.
- Director of the Financial Affairs Directorate of the Governorate.
- Director of the Health Affairs Directorate of the Governorate.
- Representative for the General Authority of Regional Planning and to be selected by the responsible Minister.
- Representative for the Ministry of Public Works and Water Resources and to be selected by the responsible Minister.
- Representative for the Governor and to be selected by the Governor.
- Representative for the National Organization for Potable Water and Sanitary Drainage and to be selected by the responsible Minister.
- Two experts for water and sanitary drainage and to be selected by the Governor and appointed for two years subject for extension based on the request of the Chairman.

(Article - 4)

The Board of Directors has the higher power to manage the authority's affairs and in accordance with the general authorities law. The Board of Directors has the right to take the necessary decisions to achieve the goal of the authority and particularly the following:

- 1- Propose the general policy for the authority's facilities and in accordance with the general policy of the state.
- 2- Propose the development plans of the authority and its implementation schedule.
- 3- To set up the internal regulations and decrees for the financial and administration affairs of the authority and its staff without sticking to the governmental rules and systems.
- 4- To approve the annual budget, final account settlement, the general and investment budgets of the authority.
- 5- To establish the training centers to upgrade the production capacity for the management of operation and maintenance in water and sanitary drainage fields.
- 6- To contract loans and accept grants, contributions and donations in accordance with the laws
- 7- To follow the periodical reports regarding the work activity and financial situation of the Authority..
- 8- To study any issues raised by the Governor or the Chairman within the role of the authority and requested to be included in the Board of Directors meeting.
- 9- To propose the rules and price of selling water and sanitary drainage services in such a way to achieve the balance between the income and expenditures and in accordance the local programs that will be prepared the board of directors. Decree of the Ministers' Cabinet shall be issued for this tariff.

(Article - 5)

The Board of Directors has the right to transfer part of his obligations to committee of his members or to the Chairman or to one of the mangers in the authority. Also, it has the right to authorize of the mangers to do a specific mission.

(Article - 6)

The Chairman is the representative of the authority in its relation with the others and the judicial authorities.

(Article - 7)

The Board of Directors a meeting once every month at least and when necessary and requested by the Board of Directors. The Governor has the right to invite the Board of Directors for meetings. If the Governor attended the meeting he has the authority to chair the meeting.

The meeting will not be formal unless the attendance of the majority of the members. The decrees will not come into force unless the approval of the majority of the board of directors. In case of equal vote for decree, the Chairman of the meeting decision will prevail. The negotiations of the meeting should recorded in minutes of meeting including the decrees issued and signed by the Chairman.

(Article - 8)

The Chairman should notify the decrees to the Governor within seven days from the date of its issue. The decrees will not come into force unless the approval of the Governor will issue or after passing thirty days, from the receipt day of the Governor, without any objections. These are except the matters that required issuing decrees from other authorities.

(Article - 9)

The Chairman of the authority is authorized to manage the authority and its affairs in accordance with the laws of the general authorities in addition to this decree and the regulations that are issued by the Board of Directors. The Chairman is responsible for implementing the general policy to achieve the authority's target in addition to implement the issued decrees by the board of directors. The Chairman has the right to authorize one or more manger in some of his tasks.

(Article - 10)

The authority's sources consist of the following:

- 1- Income from the utilization of the authority's facilities and management.
- 2- The allocated funds from the State budget or the Governorate budget.
- 3- The signed loans in accordance with the regulations of the law.
- 4- The grants, contributions and donations that are accepted by the board of directors. The authority's funds (treasures) are considered as the State Funds.

(Article - 11)

The account auditing and revision of the authority is in accordance with the laws and the regulations for auditing and revisions of the General Authorities.

(Article - 12)

Each Authority will have its individual budget and annual final account. The regulations and laws for the General Economical Authorities should be followed when preparing the budget and the final account for the Authority. The beginning and end of the fiscal year of the authority has to follow the beginning and end of the State Fiscal Year. The authority's money has to kept in a bank account by the name of the authority. The authority has to prepare the account in accordance with the uniform accounting system.

The final accounts and budget of the authority for every fiscal year has to be submitted for the approval of the Board of Directors in the due date.

(Article - 13)

The whole staff of the Water Department and Sanitary Department in the Governorate will be transferred to the Authority keeping their employment grade and conditions since the starting date of applying this decree.

The rules and regulations of the civilian employment shall be applied for the employees of the authority.

The allocated budget for the transferred staff will be moved to the authority. The allocated budget for operation, maintenance and investment related to water and sanitary drainage works in the Governorate budget, Directorate of Housing and Utilities of the Governorate and the National Organization for Potable Water and sanitary Drainage will be moved to the Authority's budget.

(Article - 14)

The laws and regulations of the civilian employees in the State will be applied for the Authority's employees. The Board of Directors has to set up the suitable rules for the staff according to the nature of the authority's activities.

(Article - 15)

The water treatment plants and networks and the sewer treatment plants and networks including the related buildings and construction will be transferred to the each established Authority in the Governorate.

The whole assets, rights and responsibilities related to the above mentioned plants, constructions and networks will be transferred to the Authority until the evaluation of these assets decided by the Minister of Finance Decree.

(Article - 16)

To achieve the Authority's rights, the Authority should take the administrative seizure measures and the execution according to the provisions of the administrative seizure law.

(Article - 17)

Any regime disagree with this decree will be canceled.

(Article - 18)

This decree will be issued in the official newspaper and will be valid from its published date.

Issued in the Presidential Republic on 4 September 1995.

Hosny Moubark.

DECREE
PRESIDENT OF THE ARAB REPUBLIC OF EGYPT
(Translation by the Study Team)

Decree No.: 135 for the Year 2004
Regarding the Establishment of the Holding Company for Potable Water and
Sanitary Drainage and the Affiliated Companies

Item One

To establish a holding company named the Holding Company for Potable Water and Sanitary Drainage having its legal personality and main office in Cairo Governorate. It will follow the law of the public sector companies and its regulations and will be affiliated by the companies mentioned in item three of this decree.

Item Two

The purpose of the Holding Company for Water Supply and Sanitary Drainage will be, drinking and sewage water treatment and desalination, transfer and distribute the drinking water and the collection, treatment and the safe get rid of the sewage water.

Item Three

To transfer the general organizations and the economical general authorities and companies, in some governorates, to be affiliated companies to the above-mentioned holding company, in item one. These organizations, general authorities and companies are:

- The General Organization for Greater Cairo Water Supply.
- The Alexandria Water General Organization.
- The General Organization of Sanitary Drainage for Greater Cairo.
- The Alexandria General Organization for Sanitary Drainage.
- Aswan Economical General Organization for Potable Water and Sanitary Drainage.
- Menia Economical General Organization for Potable Water and Sanitary Drainage.
- Beni Sweif Economical General Organization for Potable Water and Sanitary Drainage.
- Fayoum Economical General Organization for Potable Water and Sanitary Drainage.
- Daqlhilia Economical General Organization for Potable Water and Sanitary Drainage.
- Gharbia Economical General Organization for Potable Water and Sanitary Drainage.
- Sharqyia Economical General Organization for Potable Water and Sanitary Drainage.

- El Behaira Water Company.
- Kafr El Sheikh Water Company.
- Domiatta Water Company.

Item Four

The Minister of Housing, Utilities and New Communities is the empowered Minister for applying the regulations of the Public Works Sector Companies Law and its regulations regarding the holding company and affiliated companies.

Item Five

The above mentioned affiliated companies, in Item Three of this decree, will have the same rights and obligations that were for the general economical organizations and public companies, before transferring it. The affiliated companies will proceed the current valid regulations in such a way that no contradiction with the laws of public sector companies and its regulation. The current laws will be applied up to setting of the laws of the affiliated companies.

The Board of Directors will continue its jurisdictions, temporary, up to the formulation of the board of directors and the general assemblies for these companies.

The Minister of Housing, Utilities and New Communities will issue the basic system for each of the holding company and its affiliated companies in accordance to the basic system to the companies under the law of public sector companies and after the approval the general assembly for this companies.

Item Six

The capital of the company will be the sum of the capital of the affiliated companies and according to the capital amount of these companies in the second day of this decree to come into force.

It is necessary to confirm the estimated capital through the formulated committee by the related minister and according to the law (19) of the public sectors companies.

Item Seven

The board of directors and the general assembly of the holding company for water and sanitary drainage will be formulated in accordance with the law of public sector companies. Each of them will have one member representing the ministry of finance.

Item Eight

To transfer the employees of the economical general authorities and companies mentioned in the above Item Three, to the affiliated companies mentioned in this law. The employees will transfer keeping their same employment conditions. The current valid regulations for the employees affairs will kept the same until issue the regulations of the employment of the companies in accordance with the laws of public sector companies.

The employees will be transferred keeping the same salary and advantages even its more than he deserves in accordance to the laws.

Item Nine

Issue this decree in official newspaper and applied since the second day of its issue.

DECREE
PRESIDENT OF THE ARAB REPUBLIC OF EGYPT
(Translation by the Study Team)

Decree No.: 136 for the Year 2004
Regarding Forming the Regulatory Body for Potable water,
Sanitary Drainage and Customers Protection

Based on the Constitution.

Law No. 53 for the year 1973 regarding the State Budget.

Law No. 43 for the year 1978 regarding the local administrations

Law No. 59 for the year 1979 regarding the establishment of the new communities.

.....

And after the approval of the Ministers Cabinet

And as decided by the state council

Item One

Establish an organization named the regulatory body for potable water and sanitary drainage and protecting the consumers having its legal personality and follow the Minister of Housing, Utilities and New Communities. Its main office will be in Cairo City. The board of directors of the regulatory body can issue decree to establish offices or branch office in the Governorates.

Item Two

The regulatory body aims to organize, follow up and supervise the whole activities of potable water and sanitary drainage in the level of Egypt. It will be responsible for the governmental projects or the work privilege in this field as per law or water and sewage units established by the private sector. It will authorize and encourage the related facilities to achieve the highest level of performance and to assure the continuity of the service and to submit the services to the customers by the most suitable prices and most satisfaction methods.

Item Three

The regulatory body will act the whole necessary functions to realize his targets and particularly:

1- Confirm that the production, transfer, distribute and selling activities of the potable water and domestic

and industrial waste collection and safe get rid of it, whether governmental or right of privilege projects. Those projects should comply with the valid laws and regulations of the Arab Republic of Egypt particularly that related to environment protection.

- 2- Review periodically the consumption plans, produce, transfer and distribute the potable water and domestic and industrial wastes collection, treatment and safe get rid of it. Also, the required investments for the previous mentioned activities to confirm its availability for different uses in accordance with the State policy in this field.
- 3- Submit the technical cooperation for the governmental and right of privilege projects in preparing the studies based on which the requested technical, economical and financial performances can be realized.
- 4- Realize that the cost of the production, transfer and distribute of potable water and the cost of domestic and industrial wastes collection, treatment and safe get rid of it, whether governmental or right of privilege projects, are assuring the benefit of the whole-related parties of the activity. Confirm that the utilities is fulfilling the technical, financial, economical standards and applying the water tariff tables.
- 5- To study the requests of tariff amendment in such a way to guarantee the financial and economical balance of the mentioned projects taking into consideration the category and types of consumption and for the approval of the Ministers Cabinet
- 6- Review and approve the contract form and agreements that organize the relation between the mentioned project and the customers.
- 7- Follow-up the existence of the adequate administrative, technical, financial and economical capabilities for the utilities.
- 8- Guarantee the quality of the technical and administrative services offered by the utilities.
- 9- Publish the information, reports and recommendations that help the utilities and consumers to know their rights, obligations and the role of the utility within the complete transparency. Also, to submit the technical contribution for it.
- 10- Study the customers complains in such a way to protect their benefits and dispute the problems that may raise between the related parties of the activity.

Item Four

The revenue (income) of the regulatory body is consists of:

- The allocated budget from the state budget.
- Paid money by the potable water and sanitary utilities, weather governments or right of privilege protects, and based on the services offered to these projects by the regularity body.
- Income paid by the potable water and sanitary drainage utilities for the regulatory body due his services for the utilities.
- Contribution, grants and subsidies that have no conflict with the regulatory body goals.
- Profit from investment of own money.
- Any other sources as per law.

Item Five

The regulatory body will have its own budget within the State's Budget. The regulatory body will have its own account in one of the registered commercial banks to the central bank. The incomes of the regulatory body will be saved in such bank.

Item Six

The Minister of Housing, Utilities and New Communities will head the Board of Directors for the regulatory body. It will be formulated as follows:

- The executive director of the regulatory body.
- The Chairman of the National Organization for Potable Water and Sanitary Drainage (NOPWASD).
- Two members representing the water potable water and sanitary drainage sector, two members having the experience and one member represent the customers.
- A representative for each of the Ministry of Finance, Health and Environment.

The Prime Minister will issue a decree to nominate the board of directors based on the proposal of the Minister of Housing and New Communities.

Item Seven

The Board of Directors will be responsible for:

- 1- Form the organization chart of the regulatory body in such a way to achieve and realize its goals.
- 2- To realize that the governmental projects and the privilege projects that that work in the field of the potable water and sanitary drainage are fulfilling the technical and necessary performance measures before starting work.
- 3- Approve the technical, commercial and economical performance measures to realize better performance. To guaranty the safety of the above-mentioned project. To protect the customer's interests and the response to there complains.
- 4- To examine the submitted complains of the above-mentioned projects and to take the necessary actions to avoid the reasons.
- 5- Issue the internal regulations regarding the financial, technical and administrative matters of the regularity body without sticking to the governmental rules and regulations.
- 6- Decide the regulatory body staff affairs regarding their affairs, hiring, promoting, and fixing their salary, wages and incentives.
- 7- Decide the payment for the services made by the regulatory to the above mentioned projects.
- 8- Accept contributions, grants, subsidies and loans without any conflict with the regulatory body goals.
- 9- Approve the annual budget and financial statement for the regulatory body.
- 10- Any other subjects decided for discussions by the Chairman.

Item Eight

The board of directors will hold a meeting every month, at least, upon request of the Chairman and when it will be necessary. The meeting will be formal by the attendance of five members in addition to the Chairman. The decrees will be decided by the majority voting. In case of equal voting, the Chairman vote will be prevailed.

The board of directors has the right to use any other persons for his help without having the right to vote.

Item Nine

The regulatory body will have a technical committee formulated with a decree issued by the Minister of Housing, Utilities and New Communities. This decree will decide the committee responsibilities and will organize its work.

Item Ten

The Chairman of the regulatory body is the representative towards the judiciary and its relation with the others.

Item Eleven

The regulatory body will have an executive manager. He will be nominated and decided its payment based on a decree from the Chairman and proposed by the Minister of Housing, Utilities and New Communities. He will be responsible for the management of the regulatory body and the general supervision of its different departments within the regulatory body scope.

Item Twelve

The whole related authorities in the potable water and sanitary drainage fields have to provide the regulatory body with any requested reports, data, statistics and information related to his activity.

Item Thirteen

The Minister of Housing, Utilities and New Communities will present the Ministers Cabinet any recommendations and proposals requested to be approved by higher authority to take the necessary actions in its regard.

Item Fourteen

Issue this decree in official newspaper and applied since the second day of its issue.

**添付資料 - 6 ドイツ - エジプト政府間の Sector Strategy Paper
(地方上下水道分野における水セクター戦略文書)**

Sector Strategy Paper

in the field of

**Communal Water Supply and Waste Water
Treatment**

Agreed upon between the Governments of

the Federal Republic of Germany

and

The Arab Republic of Egypt

June 2000

Introduction

The framework for German-Egyptian development cooperation is determined by the Medium Term Concept for Development Cooperation (MTC) mutually agreed upon in 1994. The areas of cooperation defined in the MTC continue to be valid. This paper is meant to be a sector-specific continuation of the MTC and will serve as the basis for a systematic sector policy dialogue. The present paper is a follow-up paper taking into account the results of the June 1999 discussions with competent Egyptian authorities (Ministry of Housing and NOPWASD) and the latest sectoral developments.

During the consultations in Mai 2000, agreement is to be achieved with the Egyptian partners above all on the elements of the proposed medium-term strategy. Given the social importance of adequate access to safe drinking water, and the limited availability of water, which calls for economically responsible water consumption, Germany is willing to continue its previous commitment in this sector.

1. Current Situation

1.01 Egypt's water resources are almost exclusively supplied from the Nile. Under the terms of an agreement with Sudan, Egypt receives about 55 billion m³/a of water, of which approx. 70-80% is used for irrigation, ca. 10% for industry, and only about 3% for drinking water (including tourism). Levels of water pollution are increasing; particularly problematic are industrial effluents from the areas of Helwan, Cairo and Alexandria, containing toxic substances which flow untreated into the Nile and other receiving waters. Due to intensive farming, agricultural drainage water is heavily contaminated with fertilizer and pesticides. Periods of drought have revealed that the guaranteed water supply from Lake Nasser can be subject to restrictions. The supply of irrigation water for the "New Valley" development and the agricultural development of North Sinai will create considerable additional demand. In 2002 the water distribution agreement will be renegotiated with Sudan, and a decrease in the Egyptian share may well appear on the agenda. Water is becoming a scarce commodity in Egypt. The small share of communal water supply from general water consumption suggests that the scarcity of water in Egypt is largely irrigation-related and that the area of communal water supply can only provide a minor contribution to resource protection. Irrigation and agricultural drainage is also the topic of another sector strategy paper under preparation.

1.02 According to an USAID-financed study¹, about 70% of Egyptians have access to safe drinking water. Whereas in towns and cities (Cairo, Alexandria, Suez Canal zone) almost 90% of households are supplied with house connections, the coverage rate in rural regions, where almost 60% of the population live, is 56% (1976: 10%); in Upper Egypt it is only 40%. Thus, 45% or 15 million inhabitants of rural regions do not have any access to public water

supply systems and have to use water of generally poor quality from canals and rivers or of sometimes doubtful quality from shallow wells. Still much worse is the sanitation situation, with a rate of connection to sewerage systems of 50% in towns and cities and 5% in rural areas. Drains from houses connected to the water supply system and overflows of rural cesspools mostly drain into irrigation and drainage channels; the same applies during the regular emptying of cesspools. Wastewater treatment in settling basins is infrequent; biological treatment has hardly ever been undertaken up until now. Egypt is planning to achieve a coverage rate of 86% for rural water supply and of 97% for urban water supply by 2002 – given the existing supply deficits these target figures need revising.

1.03 In the last 25 years massive investments have been made in the area of the development of drinking water supply and sanitation. The quantitative improvements in the initially very poor supply situation proved possible only because more than half of the investments were financed by foreign donors (especially USAID). The main emphasis was on the development and rehabilitation of supply and sanitation facilities in Cairo, Alexandria and the Suez Canal cities, which received 70% of the investments. Funding needs remain high. According to World Bank estimates (1993), at least US\$ 300 million a year will be needed to develop the water supply infrastructure and set up wastewater treatment facilities which effectively protect public health and the environment. It was only in recent years that improvements were realized beyond the main targets of investment, i.e. in provincial and rural towns.

1.04 The health situation in Egypt has improved substantially; for example, child mortality (under 5 years) fell from 210 (1961) to 66 (1996) per 1,000 births. Directly water-related diseases (diarrhoea, typhus, dysentery etc.) have also decreased significantly. It would seem plausible to conclude that this is a result of improved water supply and sanitation facilities, even though the degree to which this is the case cannot be quantified. However, according to the WHO, more than half of pre-school and school children are affected by parasites.

1.05 The sectoral conditions are, on the whole, unsatisfactory and in need of far-reaching reform. Since mid-1998 the Egyptian Government is preparing a major reform programme for the sector; the corresponding decree is due to be issued in 2000. Until now the sector has been largely dependent on donor support. Water supply and sanitary services in cities are relatively good, thanks to extensions of the systems and massive donor support for their operation, but this is likely to remain so only for as long as the facilities are still relatively new and external support continues to be provided for their operation. Even at this stage both technical and non-technical losses, particularly in Cairo with an estimated level of 50%, are very high. The low tariffs lead to exaggerated daily levels of consumption of 300 l per capita. At the 6th session of the Commission for Sustainable Development (New York, 1998), Egypt

¹ Proposed Framework for Water/Wastewater Sector Reform in Egypt, December 1998

expressed its willingness to structure water tariffs in such a way as to ensure a sustainable operation of water supply and sanitation facilities.

The level of effectiveness of centralized systems in rural areas is still unsatisfactory: interruptions of services are frequent, the distribution networks are defective, allowing unclean groundwater to get into the system and at the same time leading to high losses, water purification does not meet the prescribed standards. Since sewerage and sanitation services are not sufficiently developed, the quantitative improvement of water supply sometimes leads to an overburdening of traditional wastewater systems (latrines, cesspools etc.). All water supply and wastewater authorities (except for AWGA, Alexandria) depend on public subsidies to cover operating costs. Although the effective budget allocations in recent years seem to cover day-to-day operation, they are not sufficient to finance appropriate maintenance and repairs, thus jeopardizing the sustainability of the systems.

2. Previous Sector Involvement of German Development Cooperation and other Donors

2.01 Since the mid-1960s projects of Financial Cooperation (FC) of a volume of DM 381 million have been implemented or committed at government level. Recent FC projects include the Amriya/Alexandria sewerage project with DM 65 million and an environmental and sanitation project of DM 13 million within the framework of the Naga Hammadi project complex. An FC project in the Governorate of Qena is being examined; any further preparatory steps will depend, however, on concrete reforms being undertaken. Finally, a project is supported in Manshiet Nasser (DM 8 million under FC and DM 4.8 million under Technical Cooperation (TC)).

Within the scope of TC, two further projects are under implementation and have been supported with more than DM 27 million so far. The most important one has been the promotion of drinking water services in Alexandria begun in 1991. With only a slight increase in the quantity of water produced, technical and management assistance have helped to reduce water losses from 57% to 38% and to increase the earnings of the Alexandria Water General Authority from LE 47 million to LE 155 million. Last year a project was begun in the context of the FC involvement in Kafr El Sheikh to encourage the economical and hygienic use of drinking water.

2.02 The preparation, implementation and operation of the FC projects in Kafr El Sheikh face considerable problems due to the technical, financial and administrative weaknesses of the executing agencies, the unclear distribution of competences between sector organizations, but also the weaknesses of the past contractors. There have been delays and cost overruns; the sustainable achievement of the project goals is at risk.

2.03 The continuation of FC projects in the sector will be dependent on tangible improvements in the sector conditions: the disbursement of funds for the Amriya sanitation project is conditional on the recovery of operating cost and adequate maintenance through fees; in Kafr El Sheikh gradual improvements in cost recovery and institutional autonomy are demanded.

2.04 By far the largest donor in the sector is USAID, which has made available about US\$ 2.5 billion since the mid-1970s. ODA of Britain was also significantly involved in the development of water supply and sewerage infrastructure in Cairo. In the last few years France, Italy and the EIB have supported sewerage services in Cairo and Alexandria, the latter with appr. € 175 million. The EIB is appropriately incorporating sector reform elements in its cooperation in Alexandria and Cairo. Other bilateral donors (Denmark, Sweden, Netherlands, Italy) are supporting projects in small towns and villages. The World Bank is not promoting any projects in the sector because of unsatisfactory sector conditions. In Cairo a well-functioning donor coordination group is active in the water sector. USAID has assumed the leading role on the donor side due to the weight of its financial commitment, but cooperation with the two sector authorities in Cairo has been suspended as water and sewerage tariffs are still considered too low. Some donors, however, out of their countries' supply interests, are implementing projects without any regard for the need for sector reform.

3. Description of the Sectoral and Institutional Framework

3.01 Given the all-year availability of water from the Nile, Egypt has a relatively favourable natural starting position. However, the treatment of river water is relatively expensive. As settlement areas are densely populated, centralized systems are generally the appropriate option. Urban planning frequently does not take into account infrastructure development requirements, which makes pipe laying difficult. The neglect of maintenance increases the need for rehabilitation.

3.02 The institutional structure of the sector comprises the following authorities:

- Ministry of Housing, New Communities and Public Utilities (MHNCPU), responsible for setting and monitoring the political framework;
- National Organization for Potable Water and Sanitary Drainage (NOPWASD), responsible for implementing sector policy measures in the whole country; concretizing the sector policy for overall national planning; national donor coordination; advice to governorates; training, and implementation of investment projects with the exception of Cairo, Alexandria, Suez Canal zone²); not responsible for operation;

² NOPWASD is also not in charge of the implementation of water projects in the New Urban Communities which are implemented by the New Urban Communities Organization.

- in Cairo, Alexandria and the Canal zone there are technically relatively well-performing water and wastewater authorities, which carry out even large-scale investment projects without the interposition of NOPWASD and are responsible for operation. They have emerged from private water companies and have limited business autonomy;
- governorates and city councils, in charge of the operation of services; there are already 10 autonomous water and/or wastewater authorities (PEA – Public Economic Authorities) or companies at governorate level. In the other 14 governorates, operation falls within the responsibility of specialized departments (housing) within the governorate administration or departments of city councils.

3.03 The Government of Egypt has, in the past 25 years, given priority to the physical development of water supply and sanitation facilities over the creation of a sustainable sectoral and institutional framework. Particularly problematic is the predominance of weak institutional structures with unclear distributions of responsibilities and insufficient recovery of cost from fees. There have been several minor reforms, such as the creation of 10 independent sector authorities with greater autonomy in 1981/83 and 1995 and the adoption of a national tariff framework³ in 1993, which provided for substantial nominal tariff increases of altogether more than 100% (from a very low initial level of 0.10 LE/m³ to 0.23 LE/m³ for the first slice of 0 – 30 m³ of domestic water consumption) in 3 stages until 1995. The application of these tariff increases was, however, at the discretion of the governorates, and they were being put into practice to varying degrees rather often applying a lump sum tariff scheme, that does not take into account the quantities actually consumed⁴. Due to the lump sum tariff scheme the unit prices to be borne by households with high water consumption are lower compared to small consumers belonging to low income groups. Social considerations cannot have been the reason for the low tariff increases, given the small burden of less than 3% of expenses for drinking water and sanitation on household incomes.

3.04 Given the multitude of tasks assigned to it, NOPWASD is not able to meet its steering and pacemaking role in sector development convincingly. There has been no ^{17, 21, 22}visibly coherent sector policy so far. NOPWASD's staffing, equipment and decision-making procedures need improvement.

3.05 The water/wastewater authorities in the governorates generally have the following institutional weaknesses:

- an excess of staff with often inadequate qualifications, sometimes even at the management level;

³ The surcharge on the water bill for sewage disposal is 35%; it would have to be a lot higher to cover the actual cost of wastewater treatment.

- salary structures not giving enough incentive to improve staff motivation;
- inadequate tariff collecting system;
- tariff revenues insufficient to cover operating costs, let alone proper maintenance and repair or even extension investments;
- the technical design of investments is done centrally (NOPWASD) without sufficient consideration for local conditions.

Even the relatively independent water/wastewater authorities in the two big cities are prevented by their close dependency on the administration from exercising their statutory financial and business responsibilities. The main constraint is the absence of financial independence. Although the autonomous authorities are by decree obliged to cover at least the cost of operation from their own revenues, the tariff increases so far approved by Cabinet have been far too low to make the water authorities independent of public subsidies. Even the existing scope for improvement within the national tariff framework was often not exploited. Conducting an independent business policy is made impossible.

3.06 It is largely due to these institutional problems that the water/wastewater authorities provide services of inadequate quality, with the following consequences:

- customer orientation is underdeveloped;
- facilities are used inefficiently and wear out faster than necessary;
- technical and non-technical water losses are high;
- water wastage is common;
- system breakdowns are frequent;
- treatment and distribution standards are inadequately monitored;
- the selection of extension investments is only partly governed by technical priorities.

3.07 In July 1998 the Cabinet commissioned a study on fundamental sector reforms. The study on aspects of institutional reform elaborated with USAID support (cf. 1.02) contains the basic elements that have been introduced into the draft presidential decree to be decided upon soon. Major elements are:

- Creation of an independent Egyptian water/wastewater regulatory agency (EWRA). This agency is to monitor the tariff structure of the respective authorities and their adherence to health regulations and operating standards.
- Creation of a suitable legal and economic environment enabling private capital/private operators to become involved in the sector.

⁴ In Kafr El Sheik the range was fully used but mainly by means of a lump sum tariff; in Cairo the water rate was raised only to 0.13 LE/m³.

Creation and strengthening of local water/wastewater authorities at governorate level over a transitional period with the aim to gradually develop managerial and financial autonomy of the enterprises working at the regional/local level - PEAs. These newly established local sector authorities are intended to have full responsibility for the water/wastewater service in their regional area after a transition period benefiting from a delegation of all relevant competencies.

Reorganization of NOPWASD: the organization is to participate in sector planning at the national level and support and monitor regional operators with regard to operation and maintenance. On the subject of physical investments – at present NOPWASD's main function – it is stated in the study that it is for the regional authorities to decide whether to use NOPWASD's services. The draft decree version of 25.01.2000, however, confirms NOPWASD's responsibility for the implementation of large governorate-level projects incorporated in its plan under Bab III, given the weaknesses of the local sector authorities.

3.08 In the Explanatory Memorandum on the draft reform decree dated 25.01.2000 (appendix) the Ministry of Housing, Public Utilities, and Urban Communities resumes the following objectives of the reform (quotation):

- "enable and encourage utilities to achieve new service and performance standards;
- enable and encourage utilities to achieve operating cost recovery and cost effective operation;
- encourage the private sector to finance, manage and operate projects in the sector.
- create conditions fostering self-financing of governorate water and wastewater projects in the future".

Furthermore, it is envisaged that all local sector authorities and companies assume responsibility for the planning, design, contracting and management of projects listed in their plans as well as for the enhancement of technical efficiency and rehabilitation projects to reduce losses and enhance performance.

This reform approach tackles major existing sectoral shortcomings and is pursuing satisfactory objectives. Especially the introduction of a central regulatory agency and the transformation of the local sector authorities/PEAs into organisations with managerial and financial autonomy have the potential to increase the sectoral efficiency.

But the sector reforms are not yet put into practise leaving room for modifications and implemental arrangements. Major aspects not defined as clearly as would have been expected are the regional delegation of competencies to the local sector authorities and the cooperation between NOPWASD and the local sector authorities. Furthermore, the draft decree does not

clearly specify the duration of the transition period for achieving full autonomy of the local sector authorities (PEAs).

4. Proposed Medium-Term Strategy for the Bilateral Cooperation

4.01 The strategic considerations regarding communal water and sanitation services are based on the position of the donors active in the water sector and draw on the lessons learnt from ongoing projects. Germany will continue to participate actively in the sector reform discussion within the framework of donor coordination.

4.02 The medium-term objectives of bilateral cooperation are to promote the structural impacts of the sector reform, namely

- 1) to reinforce the autonomy of local sector authorities by establishing PEAs;
- 2) to strengthen the capacities of the newly established local sector authorities during the transition period and to establish a feasible cooperation mechanism between the local sector authority and NOPWASD for the implementation of specific Egyptian-German cooperation projects. The cooperation mechanism should limit the project implementation function of NOPWASD to a minimum in order to strengthen the local sector authorities' capacities and to adapt the project design to the specific regional situation, but it should also take into account the administrative and technical weaknesses of the newly established local sector authorities;
- 3) to draw up and implement a binding medium term adjustment schedule to achieve operating cost recovery in the short term, partial recovery of reinvestment costs in the medium term, and full cost recovery in the long term. To reach these objectives the time schedule will prescribe tariff adjustments, reductions in technical losses and general expenses and improvements in collection. Moreover, a regulation on debt service should be adopted which is in line with the financial capacities of the local sector authorities.

4.03 New projects will focus on improving institutional capacities of the local sector authorities at the governorate level. This could be achieved by means of advisory services under Technical Cooperation projects preparing the ground for Financial Cooperation-financed investment projects. These TC projects may include small investments to increase the efficiency of the local sector authorities.

The following minimum conditions should be met for the TC component:

- 1) readiness of the governorate to fully use the scope for improving the cost recovery rate;
- 2) the creation of an autonomous water and wastewater local authority (PEA in force or under preparation) and

- 3) the local sector authority- PEA or company - should be the contractual partner for TC projects. If the PEA is in force or under preparation, the Governorate will be the contractual partner.

The overall objective for new FC projects in the sector will not only cover investment aspects but will be equally linked to the support of the new sector policy. New FC projects will therefore be undertaken only if the reform decree has been issued and necessary steps have been taken by the authorities concerned, in particular:

- 1) the local sector authority – PEA or company - does exist or has been legally established and the transition period with regard to its autonomy has already started
- 2) the local sector authority has to be contractual partner in the financing and project agreements with KfW stipulating furthermore that it is formally in charge of project planning, implementation and operation even in cases where the transition period has not yet expired; in those specific projects where the local water/wastewater authority has not yet acquired the necessary technical or administrative skills the local water/wastewater authority and NOPWASD establish a satisfactory cooperation agreement concerning the scope of support by NOPWASD for the project planning and implementation; in addition to the local water/wastewater authority NOPWASD, in these cases, shall be contractual partner in the financing and project agreements with KfW;
- 3) a 100 % operating cost recovery from tariffs has been achieved for the local sector authority in full, at least, at the start of the investment phase of the project and tariff revenues remain with it and
- 4) a binding time schedule for further increases in the cost recovery rate has been adopted.

4.04 Significantly positive sector developments in accordance with the above institutional reforms should give rise to an accelerated implementation of new investment projects. Apart from the Qena project presently under preparation, new FC projects should be planned only in one more governorate, preferably with a very low service coverage. Upon proposal by the Egyptian side a feasibility study for a project in Gharbeia is under consideration. It is important that the relevant local water/wastewater authority shows a relatively high degree of institutional capacity.

Concerning the Qena project the above conditions 1) - 2) shall be applied concordantly but the cost recovery criteria 3) and 4) shall exceptionally be based on a 80 % operating cost recovery minimum requirement. The initial cost recovery ratio should be complemented by the adoption of a Financial and Institutional Action Plan for the institutional set-up process of a Qena Water and Wastewater Authority including a binding time schedule for tariff adjustments and the medium term cost coverage ratio development. Furthermore, the set-up proc-

ess of a Qena Water and Wastewater Authority has to be supported by an institutional assistance project.

However, in order to support the local water/wastewater authority in the improvement of its performance in particular in the improvement of its cost coverage ratio, small measures such as urgent repair and rehabilitation measures and improvement of maintenance can be financed through FC under the following conditions:

- a Financial and Institutional Action Plan for the institutional set-up process has been adopted including a binding time schedule for tariff adjustments and the medium term cost coverage development
- an institutional assistance project has started
- the local sector authority – PEA or company - does exist or has been legally established and the transition period with regard to its autonomy has already started and the measures will be implemented by the local water/wastewater authority.

A component as important as drinking water services is the adequate disposal and treatment of wastewater in line with the particular local sanitation requirements. Aspects of ecological sustainability and integrated resource management with regard to the agricultural use of sewage and sludge are to be considered.

4.05 The local sector authorities will not be sufficiently qualified in the medium term to act as fully responsible project-executing agencies for new-projects. Investments should thus be complemented by the available instruments of technical assistance in the preparatory stage and for a limited time during operation. If the autonomy of local sector authorities is reinforced in a durable way and if cost recovery, improved staff regulations and independent personnel policy are achieved, there will, in fact, be sufficient qualified or qualifiable staff available in Egypt.

4.06 A sustainable Egyptian private-sector strategy in the sector is part of the proposed reform concept. Possibilities of involving and promoting private-sector components under German development cooperation will be thoroughly examined, and any promising initiatives will be pursued.