



Progress on Project and Future Prospectives for Egypt

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Ministry of Water Resources and Irrigation, EGYPT

National EMWIS Workshop

10 February, 2007 - Cairo, Egypt

Overview of the Presentation

- Progress so far:

- Institution - MWRI
- Documentations
- Research and Development
- Training and HD
- Legislations
- Monitoring and Evaluation

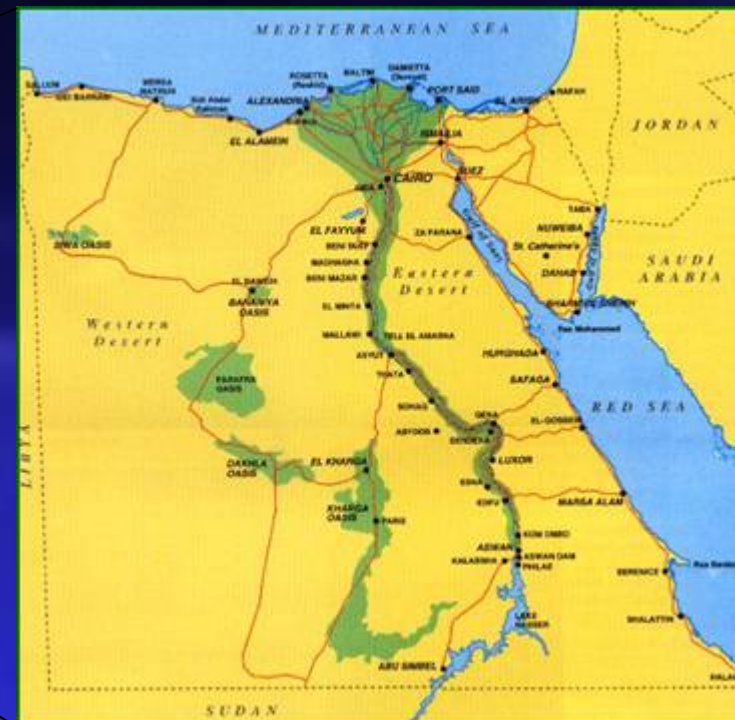


- Future Prospectives

- Composition of the National WebSite (DRAFT)
- Preliminary Design of the National EMWIS WebSite

- Way Forward

Egypt in A Glance



Key Macro-economic Indicators	2001/02	2002/03	2003/04	2004/05
Real GDP growth (%)	3.2	3.1	4.2	4.9
Inflation CPI year-end (%)	2.4	3.2	4.9	11.4
Current Account (% of GDP)	0.7	2.4	4.3	3.3
Exports (US\$ bn)	7.1	8.2	10.5	13.8
Imports (US\$ bn)	14.6	14.8	18.3	24.2
International reserves (US\$ bn)	12.9	13.6	13.6	19.9
Primary balance (% of GDP)	N/A	0.0	0.6	1.1
Avg. Exchange rate LE: US\$	4.449	5.195	6.163	6.006*

Source: Ministry of Finance, EGYPT – Monthly Bulletin March 2006

* Avg. ex. Ra. as of Nov. 2006 → 1 USD = 5.75 LE

The Institution - MWRI

The Ministry of Water Resources and Irrigation (MWRI) is the National Focal Point. It plays a key role in the development and management of the water system in the country. Others MALR, MHUCD, MHP, MSEA, and MLD

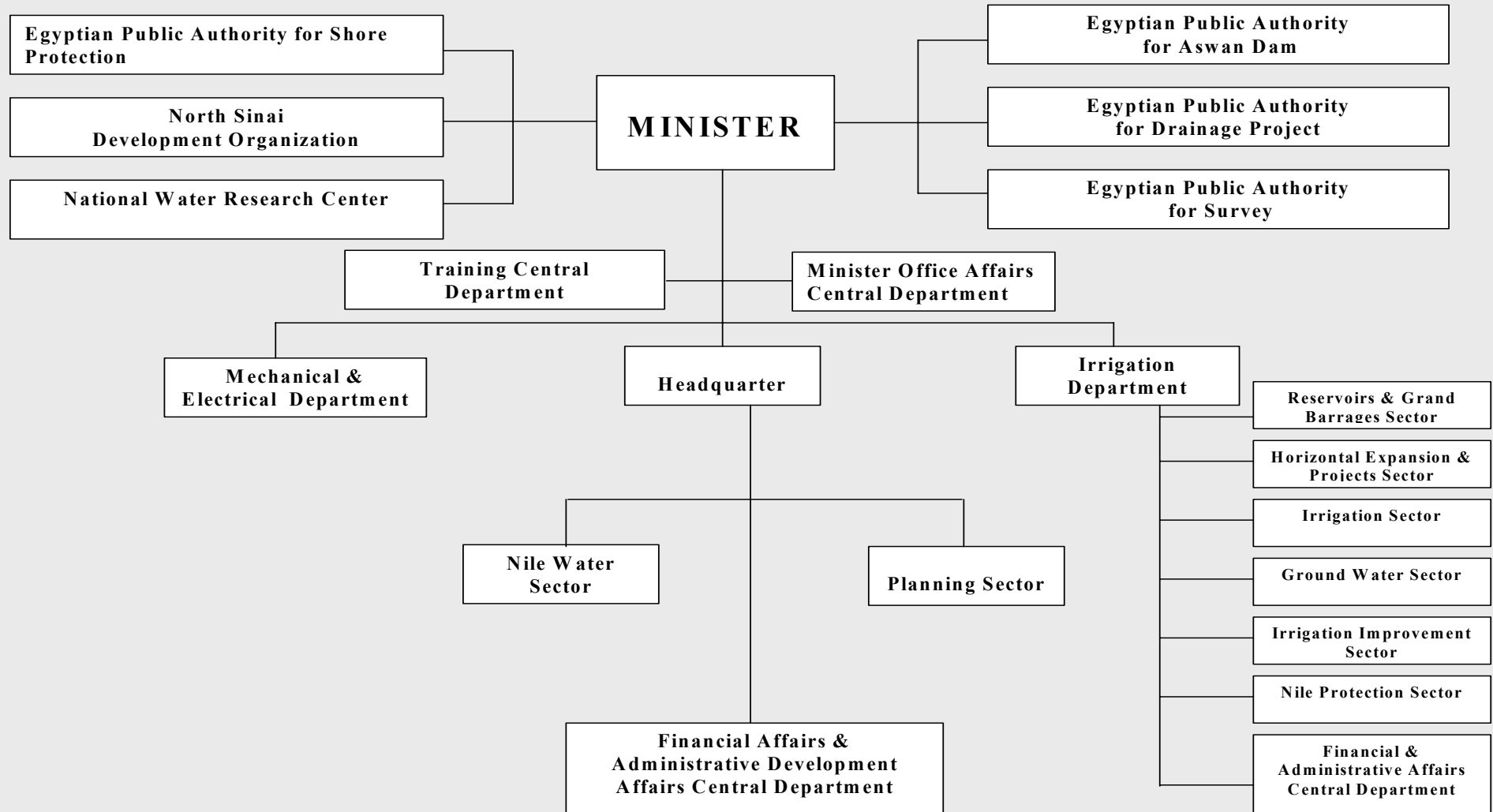
The Organizational Structure of the MWRI:

- Two major departments: Irrigation Department and Mechanical and Electrical Department.
- Four main authorities: Egyptian Public Authority for Drainage Projects, Egyptian Survey Authority, the Coastal Protection Authority, and the High Aswan Dam Authority.
- The National Water Research Center (12 research institutes, a Central Laboratory for Environment Quality Monitoring and the Strategic Research Unit).



Ministry of Water Resources and Irrigation, Egypt

Organizational Structure of the MWRI



Documentations

- The MWRI has very active documentary pool
- The publications of the NWRC in 2005/2006 exceeded:
 - 174 specialized reports
 - 164 technical manuscripts
 - 22 academic degrees (M.Sc. and Ph.D).
- In addition, within the scope of every department and sector in the MWRI, there is a research and development unit. Those units produce another sets of specialized documentations.
- The Central Library of the MWRI: more than 40,000 documentations
- A sample of the publications can be found on the websites:
<http://192.168.4.1/acls/maine.htm>
[http://62.240.116.66 /](http://62.240.116.66/)



CENTRAL LIBRARY COLLECTION

About 40,000 documents of different types:

- Books, Periodicals, Technical Reports
- Dissertations, Encyclopedias
- Atlases
- Audio-visuals equip.
- Self-training courses on CD
- Historical albums (*Description of Egypt*) and others

MWRI Center Library
Imbaba, Giza



NWRC Library
Delta Barrages



The E-Library

Concept of Development

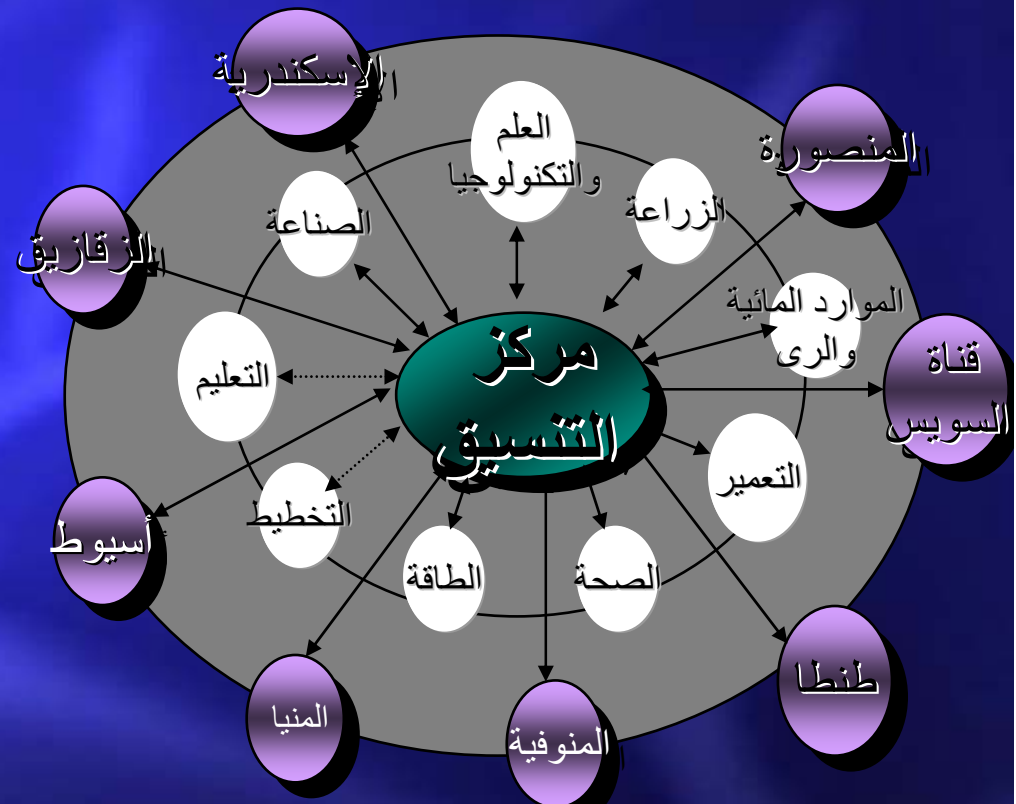
The VIRTUAL Library

Using New Communication

Technologies:

- LAN / WAN networking
- End-user online Q&A services
- Online international databases
- E-resources (e-books, e-journals, ...)

ENSTINET TOPOLOGY





Book Exhibits



Research and Development

- NWRC has been established in 1975 as a research arm for the Ministry.
- It includes mainly 12 research institutes
- Research concerning water resources management:
 - Academic research
 - Applied research
- Academic research explores, for example, the physical processes of water movement and its associated subsystems.
- Applied research is more oriented toward problem solving of existing water schemes.

Composition of the National Water Research Center



Research and Development... *continued*

Main goal of the NWRC is to implement a comprehensive research plan serving on-going water projects and national development programs.

- Major area of research of the NWRC are as follows :
 - Ensuring optimal allocation of scarce water resources among different users.
 - Encouraging appropriate measures to combat water pollution and water deficits and minimizing the associated risks.
 - Encouraging water conservation through the implementation of reuse, recycling and saving measures and technologies.
 - Improving water productivity in irrigated areas.
 - Expanding irrigated agriculture lands.

Research and Development ... *continued*

- New research advances approach in the area of environmental economics, socio-economics, financial sustainability, institutional effectiveness, and participatory management.
- Furthermore, the Ministry is encouraging and supporting needed research concerning water governance, IWRM, efficient use of irrigation water, low-cost technology for treatment and desalination, groundwater dynamics, and reuse practices.
- Lateral/joint academic programs (local and international).



Training and Human Development

- The MWRI established the Regional Center for Training and Water Studies in the Six-of-October City in 1992 with the support of UNESCO. In addition, MWRI encouraged also the establishment of a number of local training centers and inside different institutions.
- In which, a large number of short training courses, specialized programs, long-term courses (diploma), workshops, and conferences are being conducted.
- Average number of trainees is 4000-5000 per year. Services given by the RTCWS exceeds the political borders of Egypt to cover the whole Middle East Region, Africa, and part of south Europe.



Training and Human Development... *continued*

The development of overall strategy of training in the MWRI considers some aspects, among them:

- The actual needs for training in the water field.
- A system with high quality and quality-assured training and Applied Studies products.
- The region feels ownership by sharing in selecting and designing the academic programs in a bottom-up approach.
- Assuring sustainability by keeping good technical, financial, institutional, staffing facilities



Legislations

- The MWRI applies a number of laws and legislations associated with the irrigation practices and in-stream water allocation and pollution.
- Several laws and decrees have been approved by the Egyptian Parliament, the Cabinet of Ministers and the President to enforce the application of law, organize the work of the MWRI, organize the distribution of water among different users, and recently to protect the environment and water system from pollution.
- The main laws of relevance to the water sector legislative framework are: Law 12 for the year 1984 for the Irrigation and Drainage, Law 213 for the year 1994 for farmer participation and cost sharing, Law 93 for the year 1962 for the discharge to open streams and its modifications for the years 1982 and 1989.

Legislations ... *continued*

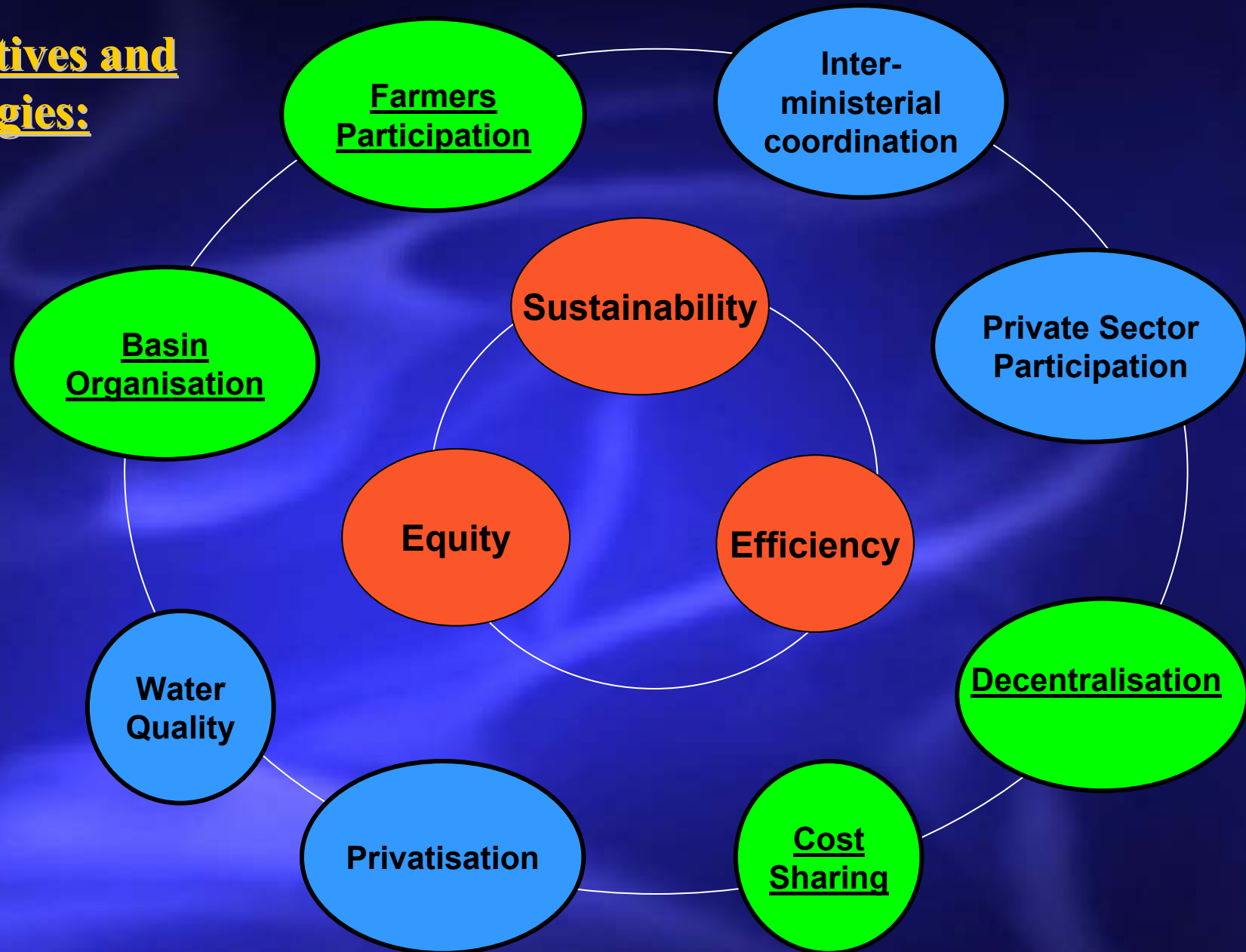
- Law 27 for the year 1978 for regulating water resources and treatment of wastewater.
- Law 48 for the year 1982 regarding the protection of the Nile River and waterways from pollution hazards.
- Decree 380 for the year 1982 for the industrial water pollution control.
- Law 43 of Local Administration of 1979, and Law 4 for the year 1994 for the Environment protection
- Growing Political Will

Monitoring and Evaluation

- This M&E is one of those important responsibilities of the MWRI.
- M&E is a beneficial tool that mobilizes commitment and fosters improvement (e.g. irrigation practices and reuse).
- Approaches towards implementation of specific policies and plans, such as IWRM (within intervention and actions).
- Performance evaluation of implementation process (goal and objective of the relevant intervention).
- Within the organizational structure of the MWRI lies the central M&E unit under the Irrigation Department (and others).
- Through M&E, progress towards goals and objectives can be tracked and lessons captured and shared to improve performance.

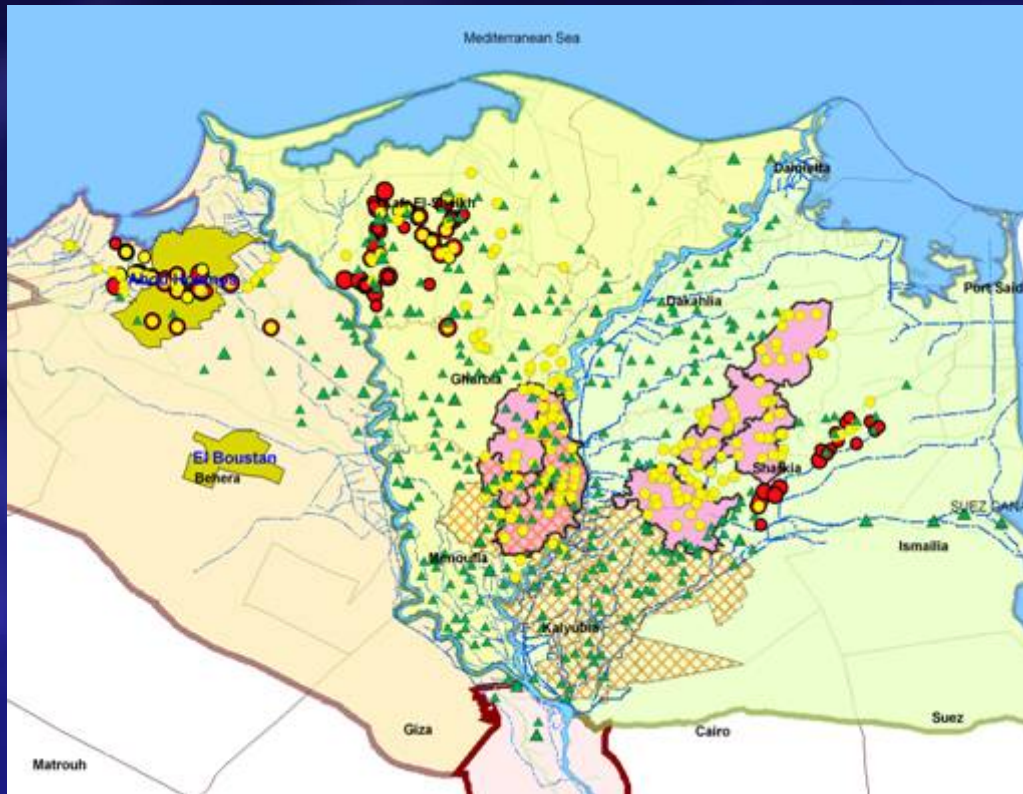
New Vision of the MWRI

Objectives and Strategies:



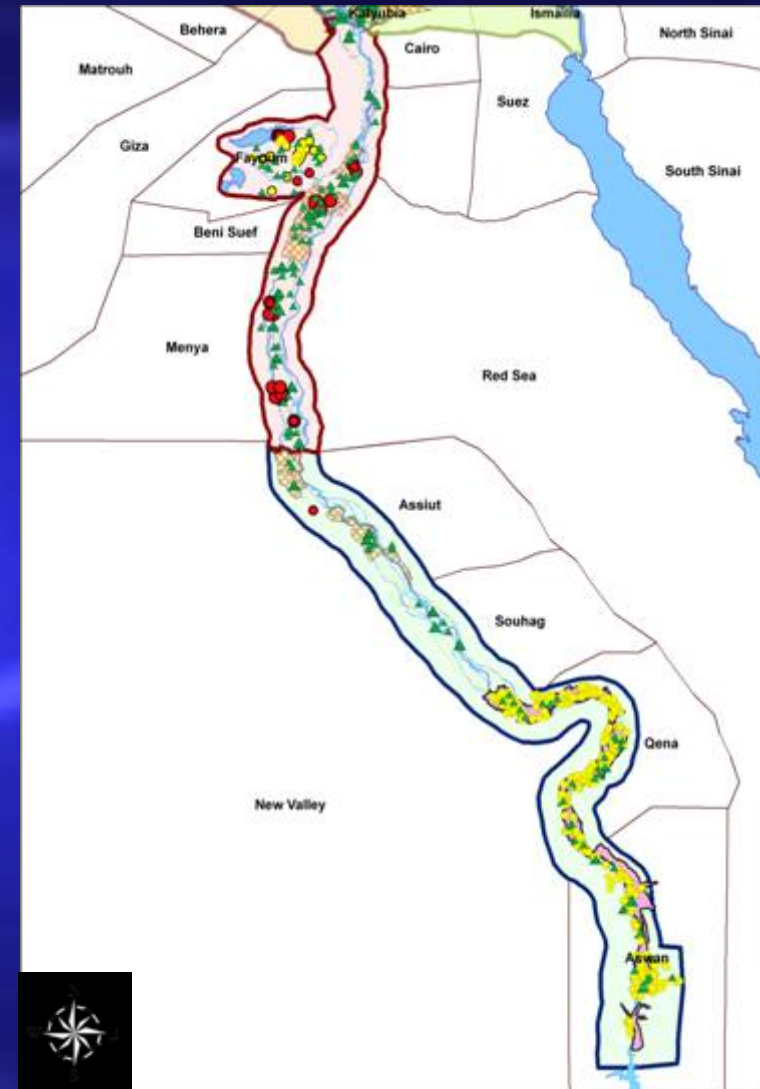
New Vision of the MWRI - Decentralization. *continued*

Status of registered Water Users' Organizations up to Year 2006



Organization	Symbol	Number
Water Users' Association-Mesqa Level	● 1 - 30	5,459
	● 31 - 64	
	● 65 - 140	
Collectors Users' Association-Mesqa Level	▲ 1 - 30	4,465
	▲ 31 - 64	
Branch Canal Water Users' Association	●	718
Total		10,642

	Private Sector Participation (PSP)
	Integrated Water Management District (IWMD)
	District Water Board (DWB)



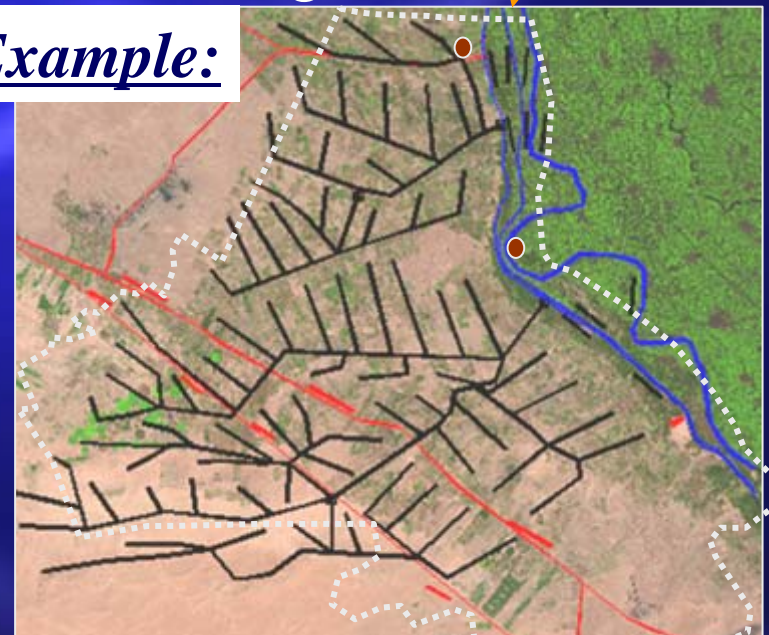
New Vision of the MWRI - PPP ... *continued*

West Delta Project PPP in Irrigation Water :

- A new concept that is being practiced for the first time in the irrigation sector all over the world is participation of private sector in water project financing and operation.
- This experience was applied in Morocco but on a very small scale compared with the scale of this project in Egypt which reaches 255,000 acres in West Delta Region.
- In which, the private sector is responsible for financing, designing, constructing, operating, maintaining, and recovering cost of large piped irrigation system for 20 years.



Example:



FUTURE PROSPECTIVES

****National EMWIS Website****

- **Selecting components of the national website**
- **Identifying appropriate information and data to be posted**
- **Developing the beta-version of the website (off-line)**
- **Getting feedback (questionnaire and national workshops)**
- **Testing & uploading the preliminary version of the website**
- **Monitoring & evaluation stage**
- **Updating & finalization stage**
- **Receiving feedback & comments (on-line)**

Inventory of National EMWIS Websites

Inventory of various national (35) websites (up to 21 of October 2006). The Preliminary elements of comparisons among the member countries included:

- Language(s) used
- Organization structure of the responsible institution
- Useful links
- Available training in related subjects (past, current, and future)
- Highlight of current and future conferences (info and reports)
- Maps availability (for overviewing and downloading)
- Important water initiative planned or implemented by the member country groups/institutions (current and future)
- Available reports and documentations
- Weather information
- Accomplished research and development in the water sector
- Update of water community news and water events
- Contact information
- Date of last update of the website

Inventory of National EMWIS Websites ... *continued*

(up to 21 of October 2006):

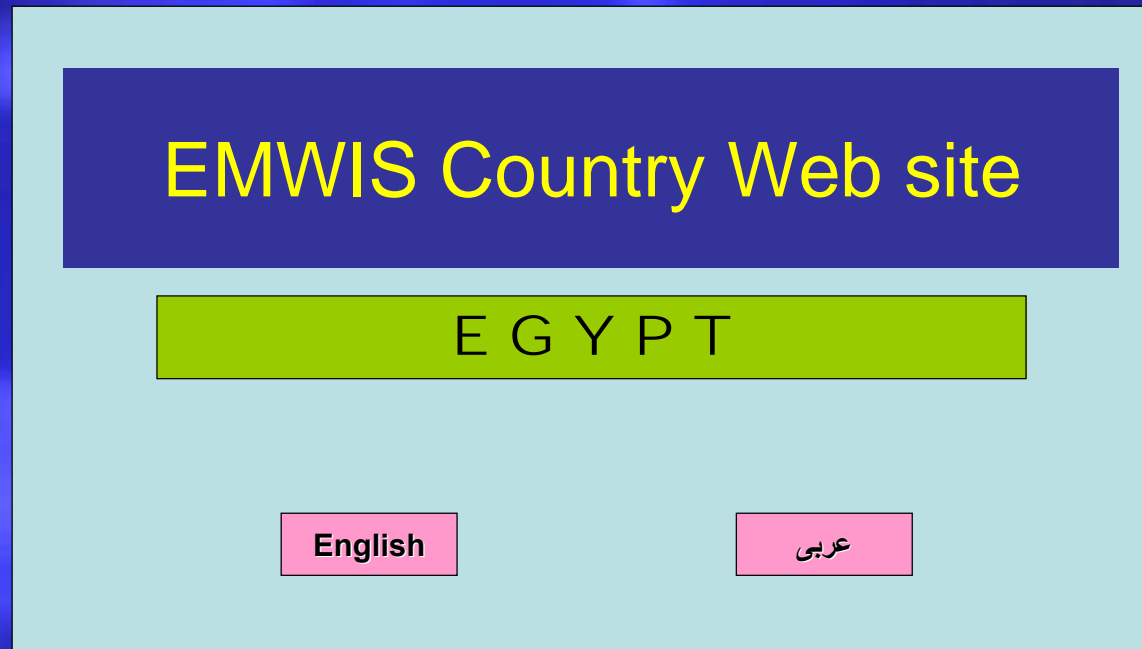
- 19 member countries out of the 35 Euro-Mediterranean countries have not developed their own sites yet or their sites still under construction off-line
- A number of member countries developed comprehensive websites with large sets of data (e.g., Italy, France, Malta, Portugal, Spain, Cyprus)
- Some member countries put restriction for users to obtain the data (permission, direct contact, charge, ...)



The National EMWIS Website (Preliminary Design)

- Language (Arabic and English)
- It is planned to have reciprocal Arabic and English languages
- Full synchronization, so that data update will occur simultaneously for both languages.

Example:



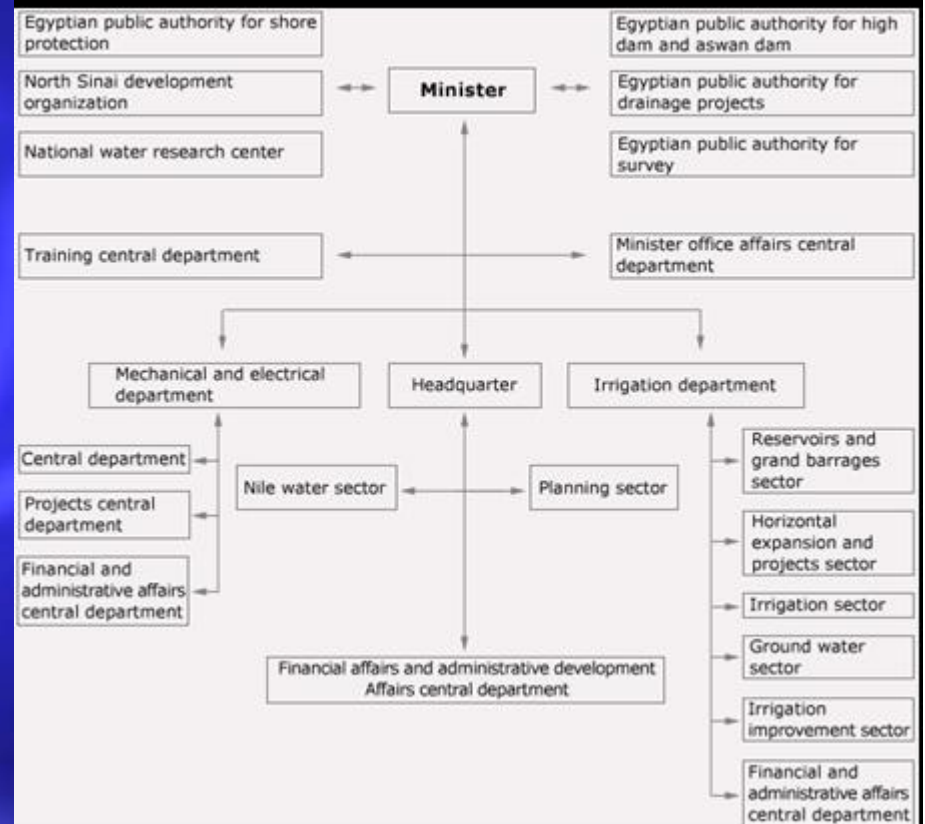
The National Website (Preliminary Design) ... *continued*

Ministry's Organization Structure:

- MWRI is currently exploring the decentralization policy so that full authority will be given to the modernized irrigation and drainage directorates.
- Water users and farmers will assist in operation and maintaining the irrigation and drainage system.
- The Organization Structure will be posted on the site with briefs of all departments' job descriptions.

Example:

Ministry Organization Hierarchy



The National Website (Preliminary Design) ... *continued*

Institutions have business with the Ministry:

- Inter-sectoral cooperation
- Development Partners (WB, Dutch, GTZ, EU,)
- Works: technical, Research, planning, design, construction, operation, maintenance, and conveyance ...
- Under this page, there can be a full information list of current firms and contractors doing works for the Ministry.



Example:



The National Website (Preliminary Design) ... *continued*

Training in Water Sector:

- The Ministry established several training centers covering the geographical layout of irrigation and drainage schemes in Egypt.
- joint programs with our development partners such as UNESCO, FAO, and Dutch Government established regional and international training centers.
- The RCTWS
- Dynamic links showing training curricula and courses time tables.

Example:



The screenshot shows a website interface for the Ministry of Water Resources and Irrigation. At the top left is the ministry's logo, which features a stylized pyramid and a water drop, with the text 'وزارة الموارد المائية والري' and 'Ministry of Water Resources and Irrigation' below it. To the right of the logo is a teal header bar with the text 'Training in water sector'. Below the header, there is a list of six training programs, each in a light blue box with a black border:

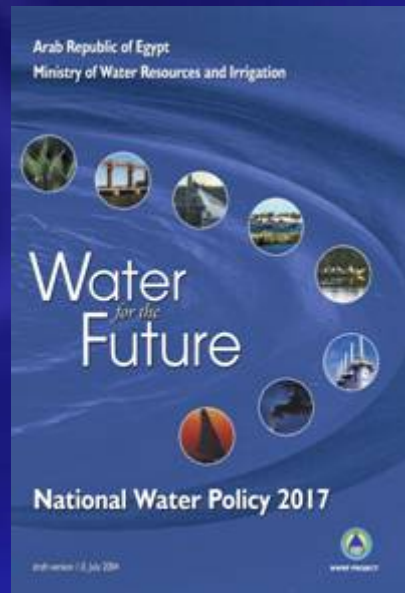
- Regional Training Center and Water Studies
- Hydraulics Research Institute
- Regional Drainage Training Centers
- Tailor Made Training
- Training Abroad
- Other Training

The National Website (Preliminary Design) ... *continued*

Technical Reports and Documents:

The essential technical reports and documents can be uploaded on the website for further overview and download such as (National Water Resources Plan, Code for Water Ethics, Water Laws, National Water Reports, Projects Reports, ... etc)

Examples:



The National Website (Preliminary Design) ... *continued*

Maps & GIS info:

- Up to date basic maps (water status, irrigation scheme, agricultural expansion, ...) – what format: jpg, pdf, shp, ...??
- Other GIS types of maps might be requested from the MWRI

Example:



The National Website (Preliminary Design) ... *continued*

Current Initiatives:

- Detailed info of the current and planned initiatives (concepts and approached) that are adopted in MWRI, such as the Integrated Water Resources Management (IWRM), Institutional Reform (IR), Public Private Partnership (PPP), and Water Governance (WG).
- Contacts info of authorized person will be posted for further contacts.

Example:

IWRM themes and need for practical implementation plan

IWRM key themes

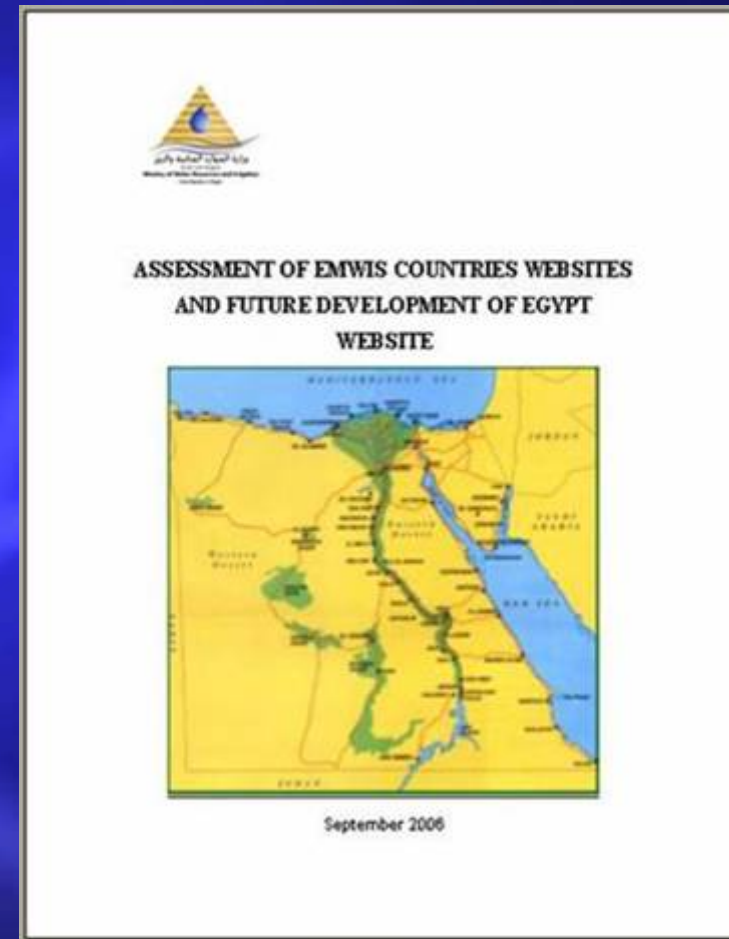
1. **Treating water as a holistic resource – intersectoral coordination in planning, allocation, and management;**
2. **Creating enabling environment for IWRM through policy and institutional reforms and legal framework.**
3. **Managing water at the lowest appropriate level - decentralized management;**
4. **Ensuring stakeholder participation – NGOs, think tanks, and women's groups; and**

The National Website (Preliminary Design) ... *continued*

Country Reports:

Recent Water Country Report (status, quality, drainage, assessment, ...) can be uploaded on the site for interested persons.

Example:



The National Website (Preliminary Design) ... *continued*

Sustainable Development, IWRM and MDGs Fulfillment

Efforts and achievements carried out by the GOE in order to comply with international community calls (e.g., MDGs and SD) will be posted under this page.

Egypt is considered one of those few countries that finished their National Water Resources Plan by 2005 as specified by the MDG.

Egypt is proving capacity to achieve the international goal of halving the population who are lacking clean water and sanitation services by year 2015.

Progress has been made under the IWRM so far can be also posted .

Example:



The infographic is titled "International Commitments and Targets" and features a row of eight small images representing different MDG goals. Below the images is the UN logo and the text "UN Millennium Development Goals". To the right, it says "Keep the promise Millennium Development Goals 2015". A red banner below that states "By the year 2015, all 191 United Nations Member States have pledged to meet these goals". At the bottom, a list of eight goals is provided, each with a numbered icon in a colored box.

International Commitments and Targets

UN Millennium Development Goals

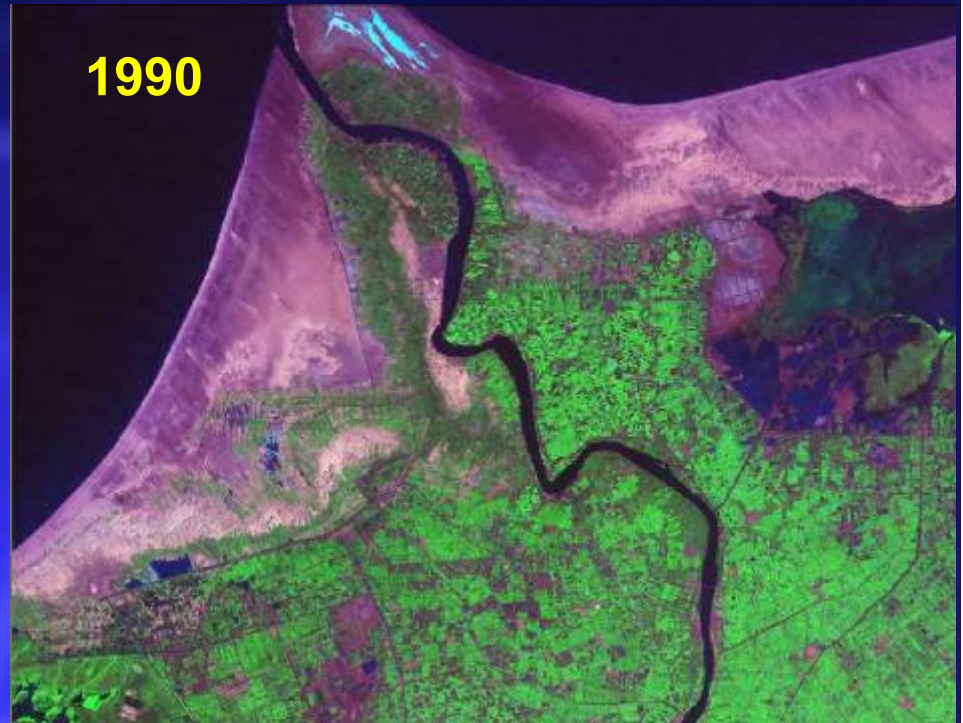
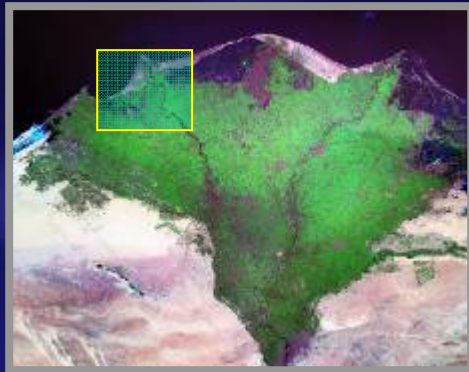
Keep the promise Millennium Development Goals 2015

By the year 2015, all 191 United Nations Member States have pledged to meet these goals

- 1 Eradicate extreme poverty and hunger.
- 2 Achieve universal primary education.
- 3 Promote gender equality and empower women.
- 4 Reduce child mortality.
- 5 Improve maternal health.
- 6 Combat HIV/AIDS, malaria and other diseases.
- 7 Ensure environmental sustainability.
- 8 Develop a global partnership for development.

The National Website (Preliminary Design) ... *continued*

West Delta Project PPP in Irrigation Water:



Up to date info about this promising PPP project can be posted under the website.

The National Website (Preliminary Design) ... *continued*



Research:

New research areas that are still subject to investigation, feasibility studies, and research in Egypt are many among them are tillage drainage technologies, biosaline agriculture, virtual water viability, water pricing, full cost recovery, and full participation of the private sector in irrigation water projects. The recent research papers and articles in this regard can be posted .

Example:

Agricultural Land Drainage

- *Egypt invested heavily in agricultural land Drainage during the past 35 years. The net annual farm income increased by 25 -40 %. Gross production values improved by US\$500-\$550 per hectare. The annual GDP contribution is about 1.3 percent.*
- *Syria and Iraq also invested in land drainage though at a smaller scale.*

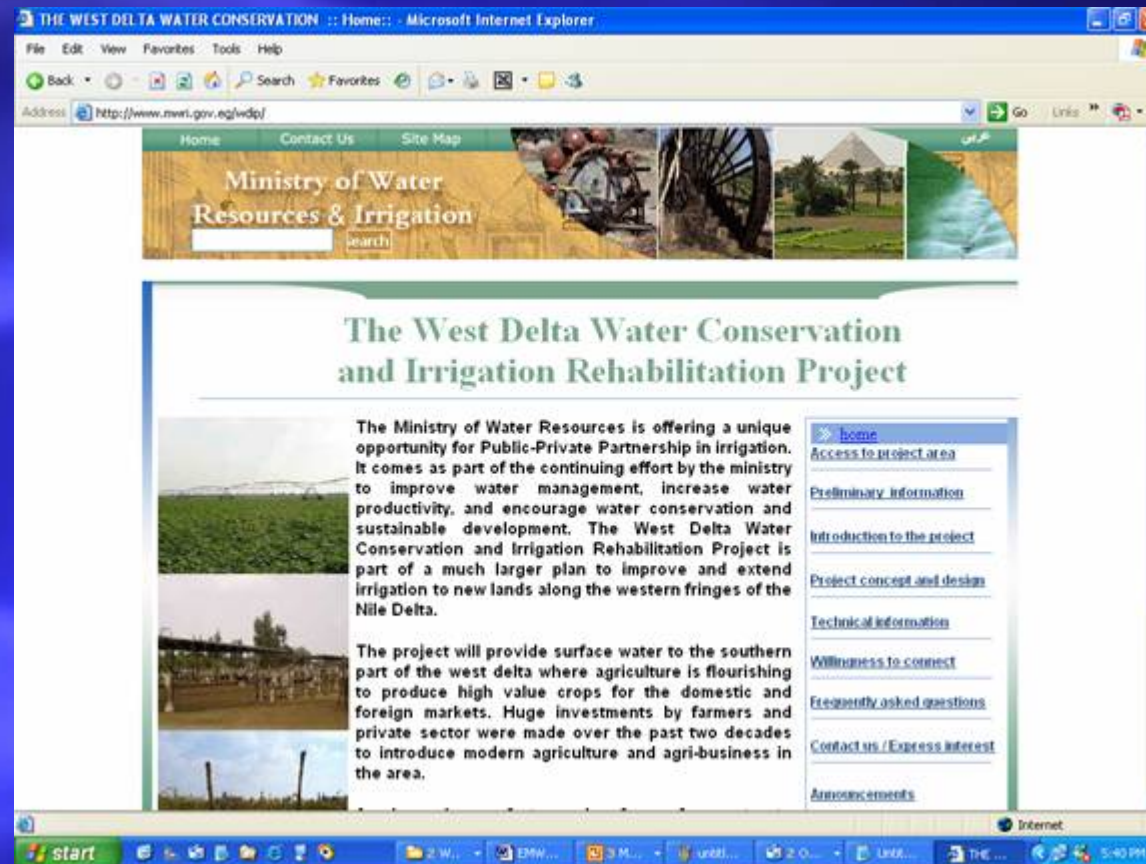


The National Website (Preliminary Design) ... *continued*

Announcements (West Delta Project seeks PO for PPP Project

Announcement for consultancy, firms and contractors for works can be posted on the website. Also, job vacancies in the Ministry and/or one of its associated entities inside and outside the country can be posted under the website .

Example:



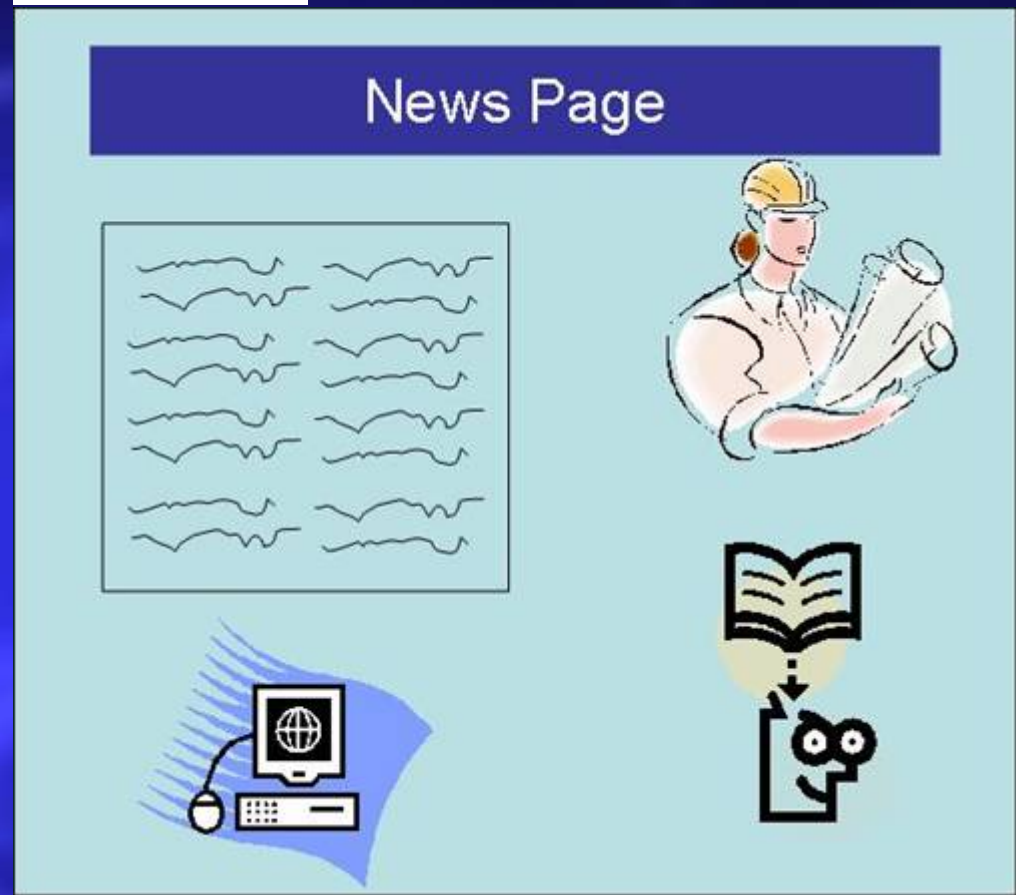
The National Website (Preliminary Design) ... *continued*

News:

Under the website, a full coverage of the important Ministry news including upcoming water meetings, seminars, and workshops can be posted.

The Ministry planned works, news and call for proposals, consultancies and contractors for works can also be posted.

Example:



The National Website (Preliminary Design) ... *continued*

Events related to water worldwide:

Under the website, links to water news of those famous international water institutions (World Water Councils, Global Water Partnership, Arab Water Council, etc) can also be announced.

Example:

EVENTS

Short Course on Tropical Limnology

Kenya ,Njoro ,2006 October 13 – September 25

IHE Institute for Water Education-UNESCO :Organizer

[shtml.1346/Detailed/water_events/water/org.unesco.www//:http](http://shtml.1346/Detailed/water_events/water/org.unesco.www/)

2005-09-24/30 - European in service training course "Water & Life", Etna, Sicily, Italy.

For more information, [click here](#).

2005-09-26 - Seminar on autonomous desalination units: Desalination Units powered by Renewable Energy Systems Opportunities and Challenges, Hammamet, Tunisia.

For more information, [click here](#).

2005-09-26/28 - International Workshop on Public Participation in Water Resources Management, Muscat, Oman.

For more information, [click here](#).

The National Website (Preliminary Design) ... *continued*

Links to important related websites:

The Ministry associates with a large number of related organizations, institutions, development partners, and non-governmental organizations. Under the website, updated dynamic links that connect the user directly to the home pages of those partners can be posted .

Example:



The National Website (Preliminary Design) ... *continued*

Upcoming Conferences in Egypt Related to water:

The related upcoming water meetings (conferences, workshops, seminars ...) that are organized by other associated institutions in Egypt (government, and non-government organizations) and/or worldwide will be posted.

Example:



The National Website (Preliminary Design) ... *continued*

Weather and other visitors guide info:

There will be a page that gives general information for visitors and guests including weather, links to hotels, transportation, visa requirements, and city maps.

Example:

The screenshot shows the weather page for Cairo, Egypt, on weather.com. The page title is "Cairo Weather" with a "Change Location" button. The breadcrumb trail is "Weather > Africa > Egypt > Cairo". The current conditions are "Partly Cloudy" with a temperature of 84°F. The forecast for the next six days is as follows:

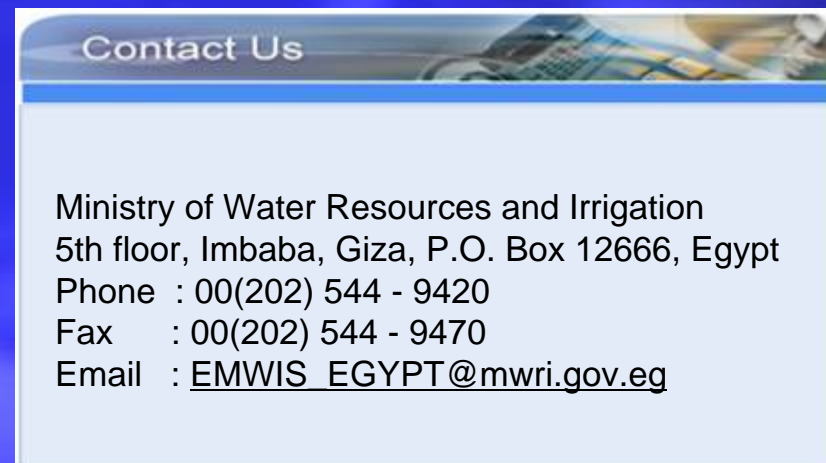
TONIGHT	TOMORROW	WED	THU	FRI	6-10 DAY
					Extended Forecast
Clear	Sunny	Sunny	Sunny	Sunny	
High: 87° Low: 70°	High: 88° Low: 70°	High: 88° Low: 70°	High: 88° Low: 69°	High: 88° Low: 68°	

The National Website (Preliminary Design) ... *continued*

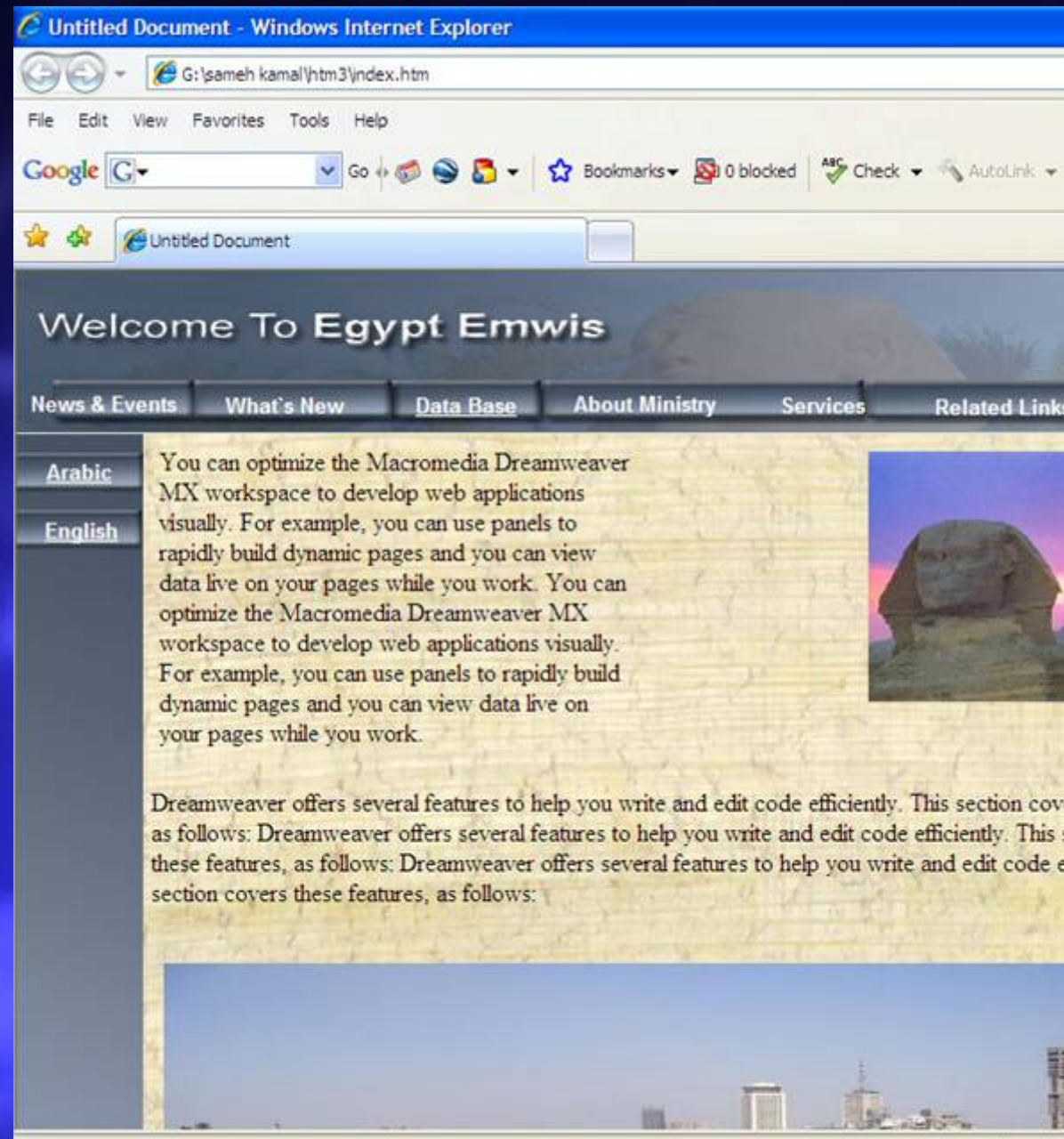
Contact Us:

The full contact information and coordinates of in-charge persons at the Ministry concerning the EMWIS program will be posted under the website .

Example:



First Draft of the National EMWIS Website



First Draft of the National EMWIS Website.. *continued*

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Google G Go Bookmarks 0 blocked Check AutoLink AutoFill Send to Settings

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Home

WELCOME TO EGYPT EMWIS



SEMIDE EMWIS

Institutions Documentation Training Research and Development Data administration



Egypt map

Welcom To Egyp

Priority main lines :

EMWIS deals with five priority main lines regarding know-how in the water sector. Other topics are added upon decision of the Steering Committee, such as: the use of non-conventional water resources, the EU Water Framework Directive, the irrigation water management and the integrated management of local drinking water supply, sanitation and sewage.

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First Draft of the National EMWIS Website.. *continued*

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Egypt Emwis
www.emwis.net

Services Related Links News & Events What's New

The ministry looking forward to saving an adequate and good quality of water for every varied requirement of the varied requirements. Besides the ministry is looking forward to managing the Nile water and the surface and deeping water resources. The ministry is planning , designing , constructing , manging , maintaining the irrigation and drainage system in Egypt.

In 1836, the Public Works Department was established as a part of the Schools Headquarter at Mohamed Aly Pasha's reign. In 1857, the Nizarah of Public Works was established and it comprised many departments like the Railway and Telegraphs Department, the Survey Department, the Building Construction Department, the Agriculture Department, Alexandria Harbor, the Antiques Department, the Opera House, the Zoo

Invitation for the per-Qualification Of private companies and firms to bid for Design-Build-Operate a closed conduit (piped) surface water irrigation System in the West Delta

The ministry is developing the water resources in order to satisfy the increasing requirements and immrovin the water usane

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First Draft of the National EMWIS Website.. *continued*

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WELCOME TO EGYPT EMWIS

SEMIDE EMWIS


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[Institutions](#) [Documentation](#) [Training](#)

[Research and Development](#) [Data administration](#)

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EMWIS deals with five priority main lines regarding know-how in the water sector. Other topics are added upon decision of the Steering Committee, such as: the use of non-conventional water resources, the EU Water Framework Directive, the irrigation water management and the integrated management of local drinking water supply, sanitation and sewage.



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Way Forward

- The most important components to be posted on the national website are going to be identified.
- Level of details for the posted information and data will be studied and determined.
- A questionnaire will help obtaining ideas and comments from all stakeholders (participatory approach)
- A beta-version of the national EMWIS website will be posted on the web in the last quarter of this year.
- Lessons learnt and experiences from all EMWIS groups are welcomed.

Thank You



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