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# **MAINSTREAMING GENDER DIMENSIONS INTO WATER RESOURCES MANAGEMENT WITHIN THE MWRI AND ROLE OF SRU/NWRC WITHIN GEWAMED PROJECT**

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**ABSTRACT** – The integrated management of the different water resources is considered of a vital importance for achieving an overall development in the water sector within the South East Mediterranean Region (SEMR). However, human resources development has to proceed in parallel with the engineering conceptual efforts of the Integrated Water Resources Management (IWRM). The role of each individual within the society can be considered the promoting factor for achieving real development. This global perspective should include both rural and urban areas. Gender equity, equality, and women participation issues are recognized as key elements for improving the human resources development within the water resources management. The current paper illustrates the ongoing gender activities within the Ministry of Water Resources and Irrigation (MWRI) in Egypt, in an effort to address the past experiences and the reached achievements. Moreover, a full description of the launching process for mainstreaming gender dimensions into water resources development and management in cooperation with SEMR countries and the proposed new communication and networking actions for that purpose are presented. The Strategic Research Unit (SRU) within the National Water Research Center (NWRC) in full cooperation with the different MWRI Gender Focal Points is the implementing agency for the newly presented initiative.

## **1. BACKGROUND**

The implementation of the IWRM approach within the Egyptian water system has been given high priority from the Egyptian Government represented by the MWRI. However, the successful implementation of this concept requires full understanding of the various available resources and their potentialities.

### **Egypt Resources**

Generally speaking, the overall resources of any country are classified into three major components and Egypt is no exception from this fact:

- Natural Resources (non-human) which include water and land.
- Financial Resources which are required to provide the latest technologies to reach maximum productivity without overexploiting the available natural resources.
- Human resources: this is a basic pillar for the advancement and prosperity of any country. It requires capacity building and training for the enhancement of the technical and performance skills of the labour factor. It is worth mentioning here that the gender equity and equality issues play a major role that needs to be considered to achieve national development.

### **Water Resources Management in Egypt**

The main water resources in Egypt can be listed as follows:

- Nile River is the main fresh water source to the whole country which represents around 95% of the total available fresh water.
- Groundwater including deep aquifers (non-renewable) and shallow ones which are renewable from the Nile.
- Seasonal rain water especially within the coastal areas.

Figure 1 shows the map of Egypt around the main fresh water source (Nile River).



Fig. 1. Egypt's map

Management of these various resources requires full understanding of their potentialities and their cross inter-actions. In addition, the development of the human resources is considered a must to achieve IWRM within the Egyptian water sector. Comprehensive high quality data and information collection for these issues is considered a pre-requisite to achieve IWRM and Human Resources Development. One of the main issues for human resources development is the gender perspective. Therefore, mainstreaming the gender dimension in managing the available water resources ensures the successful implementation of the IWRM concept. Following this conceptual strategy, data and information collection and dissemination of gender sensitive issues is considered a very supportive process towards human resources development and consequently full success of applying IWRM approach.

#### **The Institutional Setup of the Strategic Research Unit (SRU) Within the Ministry of Water Resources and Irrigation of Egypt**

The Strategic Research Unit (SRU) (Figure 2) is an integral entity of the National Water Research Center (NWRC) organization (Figure 3), which is the applied research arm of the Ministry of Water Resources and Irrigation (MWRI) of Egypt (Figure 4).



Fig. 2. SRU organizational structure

## National Water Research Center (NWRC)

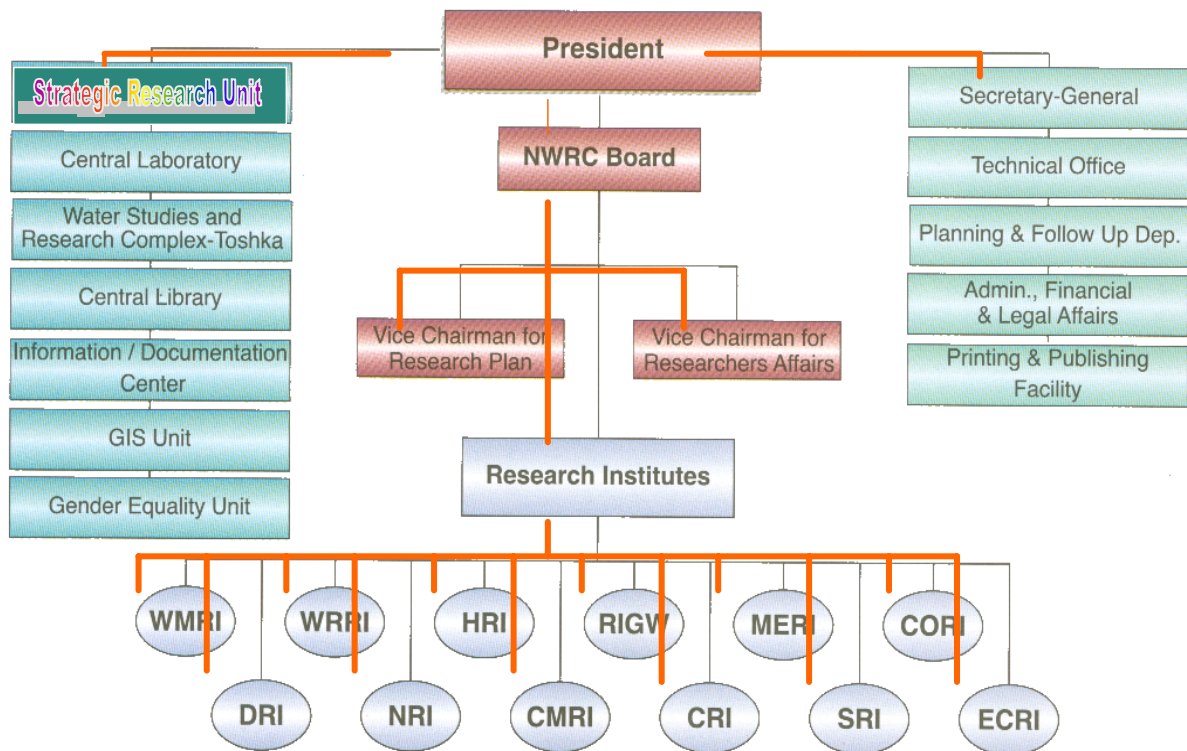


Fig. 3. NWRC organization structure

# Ministry of Water Resources & Irrigation

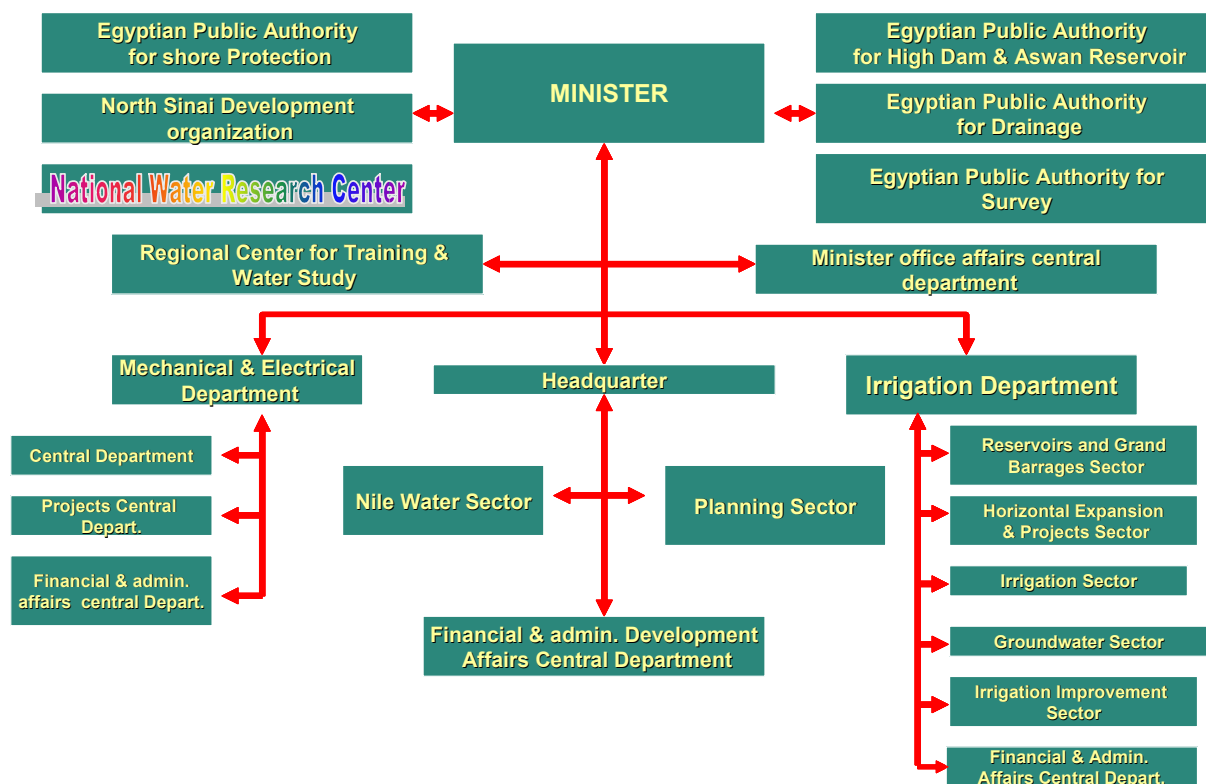


Fig. 4. MWRI organizational structure

## SRU Mission Statement

The precise mission of the SRU is to study, support and recommend strategic policies and plans for water resources and related strategic issues to act as a Decision Support System at the national management level. SRU works on developing strategies that can be implemented into plans and policies through learning and benefiting from past experiences and practices in the field. Over its long years of experience, SRU has been able to achieve full capabilities in developing databases and GIS systems regarding the various water related issues. It has been involved in many projects in the area of decision support systems for water resources planning, strategic plans for food security, assessment of water user associations, and water quality management for Mashreq and Maghreb countries.

## SRU Ultimate Role

One of the major roles of the SRU is to optimize the use of water resources in agriculture (which comprise 85% of total demand) towards an increase in land and water productivity and to make use of the unexploited human resources in an effort to decrease unemployment levels.

## 2. RECENT AND CURRENT GENDER ACTIVITIES CARRIED OUT AT MWRI

The MWRI through its entities has successfully carried out several programmes to promote the role of women participation in the water resources development process. Many activities were performed through different projects' actions and their achievements in that regard have been well recognized. Some examples of these programmes are addressed as follows:

## **2.1. Advisory Panel Project on Water Management**

The Advisory Panel Project (APP) on Water Management has performed various activities to support gender mainstreaming into policies, strategies, and programmes of MWRI. Lots of efforts have been exerted throughout the execution phase, and the results identified many critical issues related to the roles and responsibilities of men and women in water resources management in general and the irrigation water one in particular such as:

- Defining the specific responsibilities of women in the field of water quality and quantity.
- Allowing female water users to voice their views regarding water use issues on equal terms with male water users.
- Specifying channels of communication to reach female water users about water resources and water use issues and their financial consequences.
- Providing space to female water users to discuss and solve together with male water users problems related to water quantity (blockage of the system) and quality (pollution of water).
- Finding opportunities for female water users to play an active role in problem solving of water use and management issues in a way to give them the responsibility in decision-making about water related issues.
- The presence of area-specific strategies to overcome obstacles for female water users' in getting involved in decision making in water resources management.
- Men in communities have preconceived ideas about women's responsibilities in water resources and irrigation management, their influence on the irrigation system and the value of their concerns and suggestions.
- MWRI staff have preconceived ideas about the existing and potential role and responsibilities of women in water resources and irrigation management.

Based on the above mentioned points, the APP project has listed down various recommendations for addressing the above mentioned critical issues to achieve the MWRI gender policy objectives. Generally speaking these recommendations were developed to incorporate equal roles of men and women in the water resources and irrigation management and to fulfil the above mentioned issues. Other activities were carried out by the APP team throughout its gender component execution such as public awareness seminars, different workshops, printing materials, applied scientific documentations, ... etc. However, one of the main solid and sustainable outputs of the APP action project's gender component was the establishment of the MWRI Gender Focal point.

## **2.2. NAWQAM Project**

National Availability and Water Quality Management Project (NAWQAM) within the NWRC has performed several gender equality activities through the establishment of a gender component within the Project. The overall goal of this component was to activate the equal participation of both male and female employees at all levels of the project by advancing women's equal participation with men as decision-makers in shaping the sustainable development of the society; to support women in the realization of their full human rights and reduce gender inequalities. Incorporating gender aspects at the planning, management and implementation levels was a priority for the NAWQAM. The intention was to eliminate marginalized groups in the community.

As a result of the NAWQAM gender activities, a Gender Focal Point was established within the NWRC. This focal point considers gender mainstreaming in water resources management as a continuous process. Several field training sessions were performed by this focal point as well as the development of various public awareness materials and applied scientific documentations. Training of trainers regarding gender issues in water resources management was also performed for sustainability purposes. The following points list the operational principles that underline the adopted strategy to integrate a gender perspective into the NAWQAM project:

- Introduce the gender concepts, ideas and objectives to the working groups.
- Create a participatory and collaborative approach, with the active involvement of all project planners, implementers, stakeholders, civil society and other donors working on specific gender issues of relevance to CIDA's programming.
- Integrate gender considerations into planned project activities, and in a responsive manner to the changing needs of project implementers and other stakeholders.

### 2.3. Water Boards Project

Water Boards and Water Users Association are formed within the Egyptian water system, at two different levels, to involve the grass root (farmers) in the decision-making process regarding the water distribution and environmental protection. Specifically the Water Boards involve farmers and MWRI's officers at the branch canal level, whereas, water users associations involve the full participation of farmers at the Mesqas levels without the interference with the MWRI's officers.

Through the establishment and activation of the water boards' project, a gender strategy was developed in 1999. During the project, three main strategies were developed:

1. Identify women leaders and train them to carry out specific tasks that may be socially accepted.
2. Gradually build-up a network of women leaders and train them to voice their concerns in the water boards meetings.
3. Propose and design information dissemination methods that can be easily delivered to women.

Throughout the gender analyses activities carried out within the water boards' project, important elements for involving women in the implementation process were highlighted as follows:

- Providing women with full information on the establishment, functions, and decisions of the water boards.
- Encouraging and training women to become leaders or representatives of their water boards.
- Discussing with women groups their interests and incorporating their needs in concrete action plans.
- Identifying and supporting mechanisms to channel women's interests to the water boards and hence to the government.
- Raising the awareness of government officials and extension engineers towards incorporating women's and small farmers' views into increasing the efficiency of the irrigation system.
- Evaluating the impact of women's involvement on the efficiency of the system.

Due to the vital importance of involving women in the water sector, a separate activity named **"Enable Women leaders to fully participate in Water Board activities"** was initiated; several indicators were developed along with it in a way to measure its impact on the results. Satisfactory levels of achievements are indicated by the numbers between the two parentheses [ ] as follows:

- Ratio of women to men in farming households at tail-end villages stating that water availability has improved [1:2].
- Percentage of female heads indicating that they have benefited equally from improved water availability [80%].
- Percentage of female farmers reporting higher yields [40%].
- Ratio of female to male farmers indicating that rehabilitation works are in accordance with their priorities [1:3].
- Percentage of men/women who can at least list 3 tasks of water boards [80%].
- Percentage of women participating in Water Boards general meetings [40%].
- Percentage of women actively involved in farming indicating that the District Irrigation and Drainage Engineers have discussed matters related to crop and irrigation management with them [60%].
- Percentage of households in a village indicating that there is less garbage thrown in the secondary canals [80%].
- Percent increase per area in female representatives in Water Boards throughout the project time span [+ 10%].
- Increase in number of women leaders per village/pilot area who received training by the end of every year.

### 2.4. Assessment of Water Users Associations in Egypt

SRU has successfully carried out an applied research project for the evaluation and assessment of the water users associations in Egypt. This was performed through different perspectives and various scientific approaches. One of the main issues considered in this project was the gender sensitive issues and the women roles and participation in the associations. The study revealed that once the women were given the opportunities to share in the water issues decisions along their mesqas, they

proved strong capabilities in carrying out their responsibilities in the implementation activities and in the mutual discussions.

## **2.5. Water and Stability**

SRU has just initiated another cooperative action with CARE Netherlands and CARE Egypt to tackle water and stability issues within the Egyptian water sector. The main goal of this action is to improve the capacity of MWRI and WUAs to promote equity and stability in the water resources system. Specifically, the strategic objective of this action is to engage local partners in mutually accountable resources management, advocacy and dissemination of best practices regarding managing the various water resources. Among the main issues that are considered in this action is the gender issues and the full participation of women with men in managing the water resources at different levels (institutional, decision-making, grass roots, NGOs, private sectors, and others) towards water sector development.

## **3. SRU/NWRC CONTRIBUTION WITHIN GEWAMED**

GEWAMED project addresses a very important issue for the development and implementation of the integrated water resources management approach through mainstreaming gender dimensions in all water resources levels (grass roots, institutions, field organizations, decision makers, and others). SRU, within the NWRC, can promote the role of women in the water resources field in the framework of GEWAMED project through:

- The incorporation of the information collected previously about all gender sensitive issues within the MWRI in a user friendly well structured Database.
- The participation with the Gender Focal points within the MWRI in developing the public awareness materials that will be disseminated.
- The participation in the majority of national and local workshops and seminars held for gender issues and public awareness.
- The development of a national gender web site associated with the comprehensive pre-mentioned Database.
- The development and maintenance of the access to the web site for the various gender focal points within the MWRI in order to achieve information sharing and dissemination.
- The continuous update of the web site with the most up-to-date gender information and events.
- The periodical production of informational reports to the MWRI decision makers regarding gender sensitive issues, information, events, women participation in water sector at various levels, women involvement limitations and constraints, and others.
- The development of a direct internet link between the pre-developed national gender web sites and the regional web site among the project's partners.
- The dissemination of the gained experiences to the local focal points for implementation possibilities.

SRU, within the NWRC and MWRI as a GEWAMED project's partner, is planning to carry out and participate in various technical and administrative activities during the first 18 months of the project's span. According to the work plan described in the project's document, the following activities are foreseen to be executed within the first 18 months:

1. Building of a National Knowledge Base for Coordination, Communication, and Dissemination (WP1):
  - A. Participate in the regional kick-off meeting planned to be held in IAM- BARI; this activity includes certain sub-activities as follows:
    - Preparation of a brief country paper.
    - Preparation of a presentation for the meeting.
    - Exchange knowledge, experiences and new ideas.
  - B. Participate in the preparation of the kick-off meeting's proceedings.
  - C. Establishment of the Egypt's national Gender Web Site; this activity includes certain sub-activities as follows:
    - Identification of gender information availability at different levels (grass root, institutional, focal points, decision makers, NGOs, others).



- Identification of the National gender database characteristics.
  - Development and design of the National gender web site.
  - Take appropriate actions to host the web site on the Internet.
  - Announcing any relevant activities to gender in Egypt (workshops, seminars, short courses, ...etc.).
- D. Periodical update of the National gender web site; this activity is considered as on going process throughout the project's time span.
- E. Development of a user friendly well structured database; this data base will be linked to the National gender web site.
- F. Collection, processing, and dissemination of gender water related information; this activity is considered as an on going process and includes certain sub-activities as follows:
- Development of criteria for information to be fed into the Database.
  - Perform national links with several gender focal points and other gender related authorities, i.e., communication system networking.
  - Comprehensive gender data collection via field studies and questionnaires.
  - Data categorization and classification according to their levels and relevancy.
  - Data entry within the pre-developed Database.
  - Initiate training programmes for gender training of trainers.
- G. Develop and produce gender sensitive indicators for the Egypt's case and present a report of these indicators.
2. Building a Regional Knowledge Base for Coordination, Communication, and Dissemination via Internet (WP2):
- A. Participate in the establishment of a gender regional internet web site.
- B. Participate in the periodical update of the gender regional internet web site; this activity is considered as on going process throughout the project's span.
- C. Simulate communication via web sites (National and Regional); this activity is considered as on going process and includes certain sub-activities as follows:
- Perform various communications and interactions with the different isolated national gender activities and entities.
  - Develop national access to the pre-developed National gender web site through National Networks with the Focal Points.
  - Develop an internet access between the National web site and the Regional one.
- D. Participate in the preparation of the quarterly newsletters.; this activity is considered as an ongoing process.
3. Mainstreaming Gender Dimensions in Water Management for Food Security and Safety (WP3):
- A. Participate in the organization and implementation of a regional workshop on Mainstreaming Gender Dimensions in Water Management for Food Security and Food Safety; this activity includes certain sub-activities as follows:
- Communication with the different stakeholders and partners.
  - Preparation of a country paper regarding the various national and regional gender issues.
  - Preparation of a Power Point presentation to be presented during the meeting.
  - Devise measuring indicators procedure for self evaluation.
- B. Review and coordination of the knowledge base at the country level.
- C. Participate in the preparation of the proceedings of the regional workshop for food security and safety.
- D. Provide synergy between gender findings and national water management policy.
4. Political and Institutional Gender Dimension in Water Resources (WP5):
- A. Establishment of a National Central Gender Focal Point in Egypt.
- B. Produce periodical minutes/reports of the National Central Gender Focal Point.
- C. Initiate the development of a final plan for using and disseminating knowledge and exchanging of information, i.e., awareness programmes.
5. Project's management (WP7):
- A. Participate in the establishment of the whole project management and coordination structure.

- B. Participate in the management, coordination, and monitoring of the various project activities; this activity is an ongoing process throughout the project's time span.
- C. Carry out all administrative and financial control for the planned activities.
- D. Development of a monitoring and evaluation system for the national and regional project activities.
- E. Participate in the steering committee meetings.
- F. Preparation of annual progress documentations.
- G. Involve the civil societies in the gender affairs to improve communities productivity.