Reflections on the Ripple Effects of integrating Gender in Water Management Interventions
the case of Egypt

Presented by: Soumaya Ibrahim Huber (PhD)
• Introduction
• Methodology
• Ripple Effect on Macro, Meso and Micro levels
• Remaining Gender Gaps on all levels
• Successful Models and Lessons learned
• Concluding Reflections
” A small change at one point in a complex system can have large effects everywhere”

Albert Einstein.
Introduction

• This paper documents **the reflections on the ripple effects of water management interventions that were carried out in the governorate of Fayoum** over the last twenty years.

• **Ripple effects are defined as**
  “the repercussions of an event or situation experienced far beyond its immediate location”

(Collins English Dictionary. Copyright © HarperCollins Publishers)
water management is often the space for the play of gender politics

- Water management is an arena where gender relations play out in ways that often mirror inequalities between the sexes.
- The idea of space as both a real and symbolic, occupies not only a physical space, but also the intangible aspects of cultural, social, political, and religious significance.
- Within the many spaces that water management occupies, the roles of women and men differ greatly, throughout a strong history of strategies that they have devised to be able to claim and retain space, either consciously or unconsciously.
- Water management is therefore often also a platform for reinforcing gender inequalities through norms, practices, taboos, and stigmas.

1. IBRD / the World Bank (2017) the Rising Tide; A New Look at Water and Gender by Maitreyi Bordia Das & Gaia Hatzfeldt.
Importance of the concept “space”

• It is important for the design, implementation and evaluation of policies and programs to look at the noneconomic, religious, social, cultural and political significance of water management, because local communities always attach an emotional or spiritual value, even if not overt, to a natural resource.
Methodology

This paper adopted the **qualitative approach**. The information collected focused entirely on the **ripples resulting on the instant** or individual level and **latent** on the community and national levels.

**Four tools** for data collection were selected:

- **Review of literature and secondary sources**: primary part of the data (publications & reports written by the author, reports from similar initiatives & recent online material.
- **Key informant Interview**: with an elder male farmer from Fayoum
- **Focus group discussions**: with 2 groups; 1 female group with 2 female farmers of the farmers field schools & a mixed group (2 female and 2 males) of the Water User associations to allow for a collective discussion of problems, knowledge consolidation and opinion sharing.
- **Individual Interviews**: Semi structured interviews were conducted with two (1 male and 1 female) program managers of different initiatives and 1 female retired governmental director in the water resource sector in Fayoum.
Selection of sample location:

To subsidize the desk review with updated information, the site visit of Fayoum governorate was selected because:

• Previous experience of the author in the governorate in the sector of water management and agriculture;

• the governorate is considered as one of the richest governorates in the sector of water resources management.
Levels of Ripple Effects

Macro level
National

Meso level
Institutions
Community

Micro level
Household
Level
Individual
Levels & Issues of Ripple effects

Macro level
National
Policy------(Gender Foal
Point
Gender Equity Unit

Meso level
Institutions: ----Power
structure
Community ----Social
Relations

Micro level
Household & Individual
Attitudes
Ability
Behaviour change
Opportunity
Dignity
The **Gender Focal Point** established in November 2001 by Ministerial Decree and situated at the **Central Department of Irrigation Advisory Services (IAS)**.

The mandate of the Gender Focal Point is to coordinate with all IAS activities, the training centres of MWRI and projects and activities related to participation in irrigation and drainage management through promoting the exchange of information and experiences, as well as coordinating the gender mainstreaming process in all the different activities of the ministry, capacity building of Ministry Field workers to support the participation of women in water user organizations.

**The Gender equity unit** established by Ministerial Decree in 2002 and concerned with women who are working within the ministry.
## MESO LEVEL

<table>
<thead>
<tr>
<th>Level</th>
<th>Issue</th>
<th>Ripple Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organisational Level</td>
<td>Power structure</td>
<td>The <strong>internal regulations</strong> of the Branch Canal Water user Associations require existence of a percentage of women in its Board of Directors &amp; Representative <strong>Assembly</strong>.</td>
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<td><strong>Interventions</strong> necessitated that in each water user association <strong>female membership should be 25 % of its members</strong> but the membership reached 15 %.</td>
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</table>
|                        |                      | Model 1; The female board member in each water user association started a **committee for water management & community development** responsible for **women literacy program & operation of medical** as well as **veterinary medicine caravans**. They earned the appreciation and trust of the villagers, **protocols were signed** between the water user associations and the **main hospitals** in the villages.
### MESO LEVEL

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<tr>
<td>Organisational</td>
<td>Power structure</td>
<td>Model 2) After the introduction of water associations a committee for conflict resolution was introduced through a resolution by the head of the Central Authority at the Ministry &amp; assigned to include female members, one of the female board members in the water user association became active in the conflict resolution between the water association and the irrigation department. Her participation in the board was of a strategical nature rather than implementer. After receiving training in soft skills &amp; was enabled to participate in the decision making process and the collective long term planning.</td>
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### Meso Level 2

<table>
<thead>
<tr>
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</table>
| Community  | Social relations   | **A break in the reiterating stereotype and formation of a female role model.** The reiterating stereotype that only male farmers contact official authorities was **broken** when one of the female board members acted as the official spokesperson between the water user association and the governmental bodies of Irrigation and Agriculture & acting as an **Ambassador to the donor** agencies& the **Advisor for small projects** and her voice and opinion are well heard. Women are increasingly accepted in agricultural tasks in an **active role** rather than a complimentary one.  

“**Farmers school have enlightened women**” (Female farmer)  
“**Change happened in the past it was a shame for women to work but now it is accepted for women to work in the field and at home** and this has a also **increased the revenues for the family**”. (Female farmer)  

“**Women’s ‘social mobility ‘and ‘freedom of interaction’ begun** allowing them to learn from their neighbors and other community members” (Female farmer). |
<table>
<thead>
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<tr>
<td>Household level</td>
<td>Attitudes</td>
<td>women awareness for saving water raised, they managed to inspire their husbands and her children</td>
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<tr>
<td></td>
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<td>*Farmer’s consciousness has increased, now they have understood that there is a sin and legal and illegal actions in their water usages (female respondent).</td>
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<td><strong>Nadias behavior has changed</strong> she no longer throws old garments in the ditch</td>
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<td>'Females have a more sensitive feeling for water: <strong>water is the soul of women in the home and in the field</strong> but for men <strong>water is their soul only in the field</strong>. When water gets scarce at home it is women who fetch water from the canal. When water gets scarce in the field, men simply operate a machine to get water to the field. The motor in the field is heavy for females to operate.' (female respondent)</td>
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<td><strong>Women are also keener in searching for information and knowledge compared to men.</strong></td>
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<tr>
<td>Women Individual</td>
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"Farmer’s consciousness has increased, now they have understood that there is a sin and legal and illegal actions in their water usages (female respondent)."
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<tr>
<td>Household level</td>
<td>Ability</td>
<td><em>Increase in knowledge (social &amp; technical)</em></td>
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| Women Individual |       | Water user associations and farmers schools are vehicles of information on water management issues. For male members water user associations are important for *maintenance supervision and in mobilizing farmers to pay for the maintenance cost of canal lining*. **Integrating females in the water user associations supported women to acquire facilitation skills, management, team work and group solving mechanisms.**  
|                  |       | The *harvest has improved and increased*, because women understand more about irrigation and saving water. |
## MICRO Level 3

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<thead>
<tr>
<th>LEVEL</th>
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<th>Ripple</th>
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</thead>
<tbody>
<tr>
<td>Household level</td>
<td>Opportunity</td>
<td>Many females who had <strong>successfully finished literacy classes</strong> organized through the farmers field schools, have <strong>applied to work in schools as workers or employees</strong> or some even <strong>continued their education</strong>. Female farmers received training on composting, garbage collection, and literacy classes, ID issuing.</td>
</tr>
<tr>
<td>Women Individual</td>
<td>Behaviour change</td>
<td><strong>“Women did not have any presence and the water association has narrowed the space between the local leaders and the community. We men did not let them go earlier but at present they go out and participate in meetings and go on journeys together with us and women also work in the industrial works “.</strong> (Male farmer)</td>
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Behavioral change in the community happened when women have evolved from their inside out and their voices became heard. Women’s **motivation to seek more information has increased** as they were able to receive information from primary sources such as female extension staff or **through their interaction with male farmers** or through media or through the Friday prayers they attend.
### MICRO Level 4

<table>
<thead>
<tr>
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<th>Issue</th>
<th>Effect</th>
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<tbody>
<tr>
<td>Individual</td>
<td>Dignity</td>
<td>Women gained a pride in sharing knowledge and prestigious status as they were attending their weekly collective class organized in the village. Women now demand their rights and are ready for confrontations, they began to realize their values but they still need guidance. Women’s active role in collective decision making processes has begun. “Women have always been an active agent, the difference is that they earlier were unseen or hidden unrevealed because most men discuss issues with their wives privately. Due to these initiatives farmers’ school and water user associations, women were admitted to the public space and their voices were acknowledged. From Household to community level it is now publicly known and recognized that women are active agents of change”. (male Farmer) Being more informed through farmer’s schools, increased women’s status and dignity because their husbands resort to them more often in their decision making. (female respondent) “I have gained confidence in myself in making decisions and have acquired knowledge” (female farmer).</td>
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Remaining Gender Gaps

Macro level

Gender Neutral Policies and Regulations:

• At the policy level, gender concerns lag far behind or are even missing in water resources. The Egyptian Ministry of Water Resources and Irrigation (MWRI) is implementing a nationwide policy where every category of water users is called upon to play a role in water user Associations. In the Improvement Irrigation Program of the Water Resources Ministry, the executive regulations for mesqa Water user Associations do not stipulate female membership. Thus in the command areas that include female landowners, the water user Associations are dominated by men.

• According to a study by the Agricultural Policy Reform Project women have always played a critical role in Egyptian agriculture, yet their contribution is not accounted for in national statistics (Nagat El Sanabary, 1999).

• Though introduced by a Ministerial decree, the structure of the gender focal point did not remain effective because it is an isolated unit, and not mandated to mainstream gender nor impose gender onto other activities, did not have assigned staff, no funds and was not monitored. All these problems and more impeded the sustainability of the gender focal point.
Gaps at the Meso Level

In Institutions

Gender division of labour in water User Associations

• **Women’s participation** here is **underpinned by social norms** and sanctions that prescribe the types of occupations in which women can and cannot engage. All these norms contribute to **occupational sex segregation** within the industry,
  
  — As expressed by a male farmer: “*The Bahar (machine operator) is a job that can never be performed by females, because water is used for 24 hours and women cannot do so in the night. Men did not vanish from here.*”

• **Male’s domain** is water management and **female’s domain is water quality and solid waste management**. Female’s main domain is perceived to be the responsibility to care for the health of their families, while men’s responsibility is the land.

• **Exclusion of females in conflict resolution committees as active members**: The traditional committees (El Magales el Orfeya) were activated to help solve water conflicts among farmers but **women were not fully active here as they only deal indirectly through their male relatives**. Fights can get very fierce among men and hence it is perceived that no females should be allowed here.
Gaps existing at the Meso level

On community level

Cultural understandings of gender roles promote the reiteration of stereotypes, thus placing further restrictions on women and men alike. In rural society, irrigation and all topics on water management has always been the concern of men and not women and men do not always accept that women take part in decisions that the men will have to abide by through the Water user Associations (IIIMP 2007).

At present cultural tradition still impede women's work in the night.

Females resort sometimes to using tears or crying and incitement of pity as effective coping mechanism to solve their water management problems in a society where females are perceived as the weaker sex that must be protected and not violated. These prevailing customs and traditions stipulate that assaulting a woman incurs fines and penalties on the assaulting man as result.

Gaps on the Micro Level

Individual

Female’s false consciousness:
Females accept and submit willingly to their disadvantaged status they are socialized into. Female farmers underestimate their role in irrigation. Women undervalue their own work and their contributions to agriculture because they regard it as “no work” or helping out. Female Farmers also have no inclination to assume a formal role as members in the water user associations because of their firm conviction that participation is a male domain. “To avoid alienation from the community, female farmers accept this and prefer the option of representation through men” (IIIP 2010; 75).

Female suffer from lack of confidence and doubt their own capacities as they are brought up to believe. For example in the GTZ study female farmers are described as limiting their roles in conflict resolution to an indirect role between farmers over water use, by settling disputes through contacts with third parties.

Married wives or relatives assume control if they are alone in the field. However they prefer to delegate farming and water management responsibilities to their male relatives (GTZ 2010).

“Women also believe that they are agents of change, they can either ignite or solve problems”
Successful models

- **Farmers Field schools are effective models in solving all urgent problems of male and female related to water use and agriculture and in promoting social integration.**

- **Integration of female members in water user associations:** the associations were introduced in old and new agricultural lands and aimed at collective managing and maintaining the water sources in collaboration with the governmental authorities.

- At the beginning a **quota system was introduced** to insure the participation of female farmers in the associations. The integration of female farmers began to be successful only after **female committees were introduced** and **two female representatives were nominated**, one representing the **rural area** and the other representing the **residential urban areas**.

- The adoption of the **“conditional incentive approach”** was very successful in motivating the female audience of the water user associations. This approach was used to motivate villagers to help reach the objectives of the program such as; literacy programs and micro enterprise projects for female headed households/

- **Integrating female members in the conflict resolution committees in NGOs.** This model is found to be more effective as compared to integration in the water user associations because the latter are informal bodies and not registered. Because rural traditions do not allow female judges to be involved in their customary council’s, **women were allowed to attend with the male juries after the decisions were taken so as to inform them and equip them to become the mediator** between the customary councils and the female community members and convey the provisions.
Successful Models (2)

• Effective approaches are also the ones that adopt the principle “from farmer to farmer” as farmers are the best in conveying the information and knowledge among each other.

• Also the approach that adopts the “Win – Win between partners” philosophy is best used to clean the water canals. Because the governmental authorities are responsible for cleaning the canal, they can collaborate with the farmers by raising their awareness about the importance of women and men being responsible for keeping the canal clean, through the provision of motivating competitions for example providing them with trees for the cleanest canals.

On this way the governmental partners will be relieved from the work and the cost of cleaning the canal and farmers will enjoy the clean and healthy can
Lessons Learned

Lessons learned in Introduction of Farmers school:

• Start in villages that are less fanatic in their traditions in order to ensure the success of the initiative. The first schools can then be used as a model to be spread in other villages.

• Encourage members of the famers’ field school to remain as one group together for one year to ensure rapport among the members.

• Design the program curriculum to be composed of lessons that build on each other.

• The school should last for one year in order to cover all the information and knowledge of the entire 3 seasons of the year.

• Water is a marker for religious space with a complex ritual and spiritual significance and communities attach an emotional value to water as a natural resource (World Bank 2017). Because water has an overt spiritual value, approaches using religious teachings are very useful because they are easily understood by all classes and types of people either educated or uneducated.
Lessons learned 2

• **Sustainability if very important**, therefore *regular and continuous awareness is needed* and repetition to ensure continuity. As one of the female member’s states: “*During the school days there were stricter adherences to the teachings and once they terminated everything returned again*”. (Female Respondent)

• When combating a bad habit, always provide alternatives during the awareness raising: for example if female farmers have to stop dumping garbage in the canals then give them alternatives where else to dump it.

• **Information coming from outside sources is the best.** “The local musician does not entertain” meaning the informants who come from abroad is more listened to. According to a male farmer; “*Experience has shown that even if the information was known, yet outsiders reminded us and presented the information in a more structured and organized mode*”. “We always depend on outside forces”.

• The best informants are the ones who **make farmers feel close to him or her** and do practical exercises and show them demonstrations.
Recommendations for mainstreaming gender in policy planning and implementation of water policies at the community level.

**Training:**

- Provide training for **water board members about ‘group-life cycle’**. Members of water boards should be trained throughout the experience of group formation namely: forming, storming, norming and performing. It is vital to mainstream gender concerns throughout the training content.

Provide training on **‘gender budgeting’** to male and female members from boards, representative committees and platforms as well as ministerial staff. Women's involvement in finances should be linked to a rights-based approach.

Provide training to **ministerial middle management on gender and importance of gender in water management**.

Train local **communities on participatory planning and monitoring of intervention which ensures sustainability and saving of water**.

Provide training on **collecting baseline data through gender analysis and monitoring** to be linked to the project or programme logframe.

Provide a training program on **water management that covers basic facts on the primary and secondary canal level and their rotation cycle**, irrigation drainage systems, maintenance of infrastructure. Ensure also the inclusion of female headed farmers in those training programs.

- **Intensive Awareness Raising**

  Raise awareness to combat **gender-biased stereotypes** that impede the full participation of female members (such as accounting is a male domain). This can be done by **highlighting success stories** of female members who got involved in the accounting of their boards and illustrating success stories about females working as accountants etc.
Recommendations 2

- Strengthen groups and Associations to become Vehicles for Participation
- Encourage both male and female farmers to participate actively in **collective decision making on water use of water sources and conflict resolutions** and ensure that female **users play an active role in all water usages and maintenances and costing** and not be limited only to the water sources in the residential areas.

- **Introduce women committees** to encourage female participation and development of new ideas since they will enjoy more freedom to express their opinions.

- **Document Successful water management associations** to strengthen their role as models and assess the strengths and weaknesses as case studies.
Recommendations 3

• **SUPPORT FOR ROLE OF FEMALE MEMBERS in Boards**

Conduct participatory needs assessments for the female members of the water user associations and how they envision their role in water management and train them in the project life cycle approach.

Convince women of the added value through their role in water management and the vitality of their expressed opinions and needs.

Enhance role of women by entrusting them with essential duties to perform like collection of funds from female inhabitants.

Arrange for more convenient meeting times and places that accommodate women's schedules and needs.

Encourage more female candidates and support them to become role models in their communities.
Recommendations 4

• **Design Programs that aim for Social Transformation**
  Integrate gender, diversity and human rights considerations into the interventions design and implementation.

  Ensure that the processes and activities implemented during the intervention focus on promoting changes in social relations and power structures.

• **Encourage political will through supporting the high-level political** commitment to the gender equality by:

  **Lobbying for a national campaign** to be run by the ministry,

  **Introduce a policy to mainstream gender** in the Ministry’s works and plans

  **Institutionalize a gender unit** in the Ministerial structure and assign staff.

  **Provide timely and ongoing budgetary support.** A continued budget line that goes beyond the planning stages of the programs is essential to ensure implementation and sustainability.

  **Ensure the sustainability through designing monitoring and evaluation plans** with gender sensitive indicators and provide capacity building in monitoring and evaluation and assign a responsible staff.
Concluding Reflections

• Every intervention, especially the farmer’s field schools and the water user associations, affected the life of male and female farmers and their reactions in turn affected the actions of other people. Thus the impact of any intervention had far reaching consequences.

• The ripple of one intervention combined with the ripple of other interventions and their ripples together grew and as revealed, women on the Micro level reported change in their ability, increase of knowledge, opportunities and attitudes. Also the ripple effect of one intervention as demonstrated was seen as being a connection between those in need and those who help. For example when farmers explained that they enjoyed receiving information from an outsider, because they felt he was one of them, simply because he had established genuine rapport and engagement with them so people felt a connection to him.

• The combination effect of several interventions created a growing ripple that evoked changes in space and time and hence created a positive difference in the Meso level of the communities and cultures. Here the ripple became a wave and began to resonate thus touching the lives of everybody they came in contact with, and change began to be felt in behaviour, the social interaction as well as the power structure of the water user associations.

• And so on, all the ripples from more interventions are soon likely to grow until they create tides that are about to raise the level of consciousness on the macro level.
Thank You for listening