



Gender and Groundwater: CIWA's Experience with the Sahel Groundwater Initiative

Ellen Hagerman, Senior Gender and Social Inclusion
Expert, CIWA

Presentation Structure



I. Introduction

- A. Background
- B. Context

II. The Sahel Groundwater Initiative

- A. Background
- B. Findings
 - 1. Identifying Strategies to Improve Women's Access to Irrigation
 - 2. Developing a Cadre of Female Hydrogeologists
 - 3. Ensuring that gender is mainstreamed throughout the project

Background: Setting the Stage

Cooperation In International Waters in Africa (CIWA)



- A World Bank Multi-Donor Trust Fund with support from the Netherlands, Sweden, the UK and the European Union
- CIWA's objective: to strengthen cooperative water resources management and development to enable sustainable, climate-resilient economic growth in the region.
- Brings together national governments, regional organizations, international organizations, and civil society to ensure that stakeholders' concerns are addressed and resulting benefits are equitably distributed.

Let's be clear what "gender" is and is not



- "Gender" is

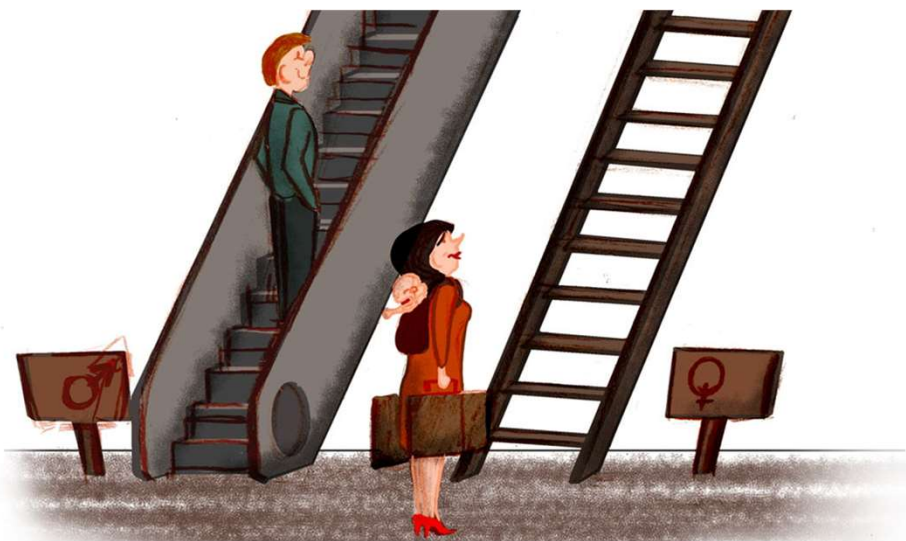
About both women, girls, men and boys – the different things that women and men think and do, and the relationships between them



- "Gender" is not

- Only about women and girls
- Only women's responsibility
- A Western or foreign concept
- An attempt to take away the rights of men and boys
- Only an issue for gender specialists
- About men and women as being homogeneous

CIWA is aiming for Gender Transformation



Adopting a Transformative Approach



- Requires a holistic and systemic approach
- Must address and reverse the deep-rooted patriarchal norms and attitudes around gender
- Must occur at multiple levels, across multiple sectors, multiple times
- Should ensure sustainability of interventions
- Empowers women and men in multiple roles: reproductive, productive, community/political engagement

Enabling Environments

- Leadership
- Resources and Services
- Policies and Regulations
- Guidance and Protocols
- Religious and Cultural Values
- Gender Norms
- Media and Technology
- Income Equality

Service Delivery

- Access
- Quality
- Client volume
- Client satisfaction

Community

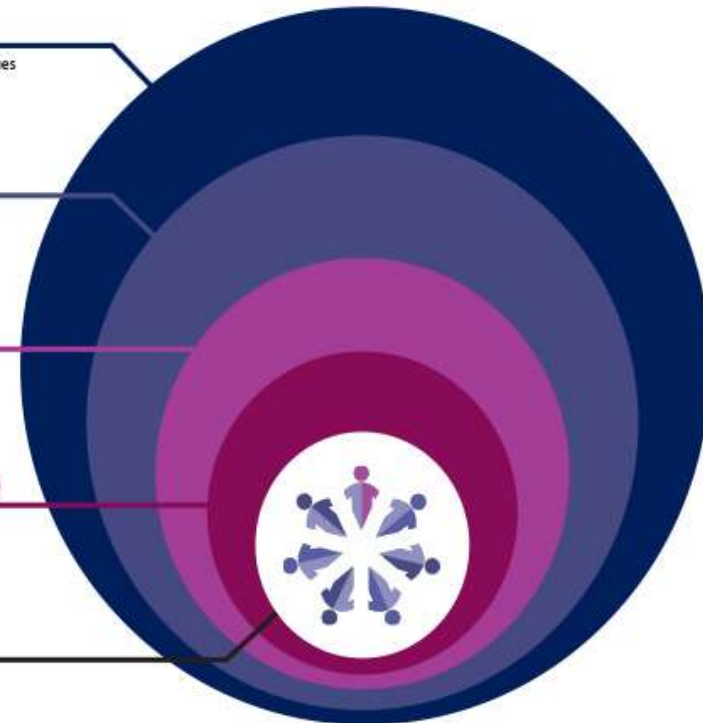
- Leadership
- Access to Information
- Social Capital
- Collective Efficacy

Family and Peer Networks

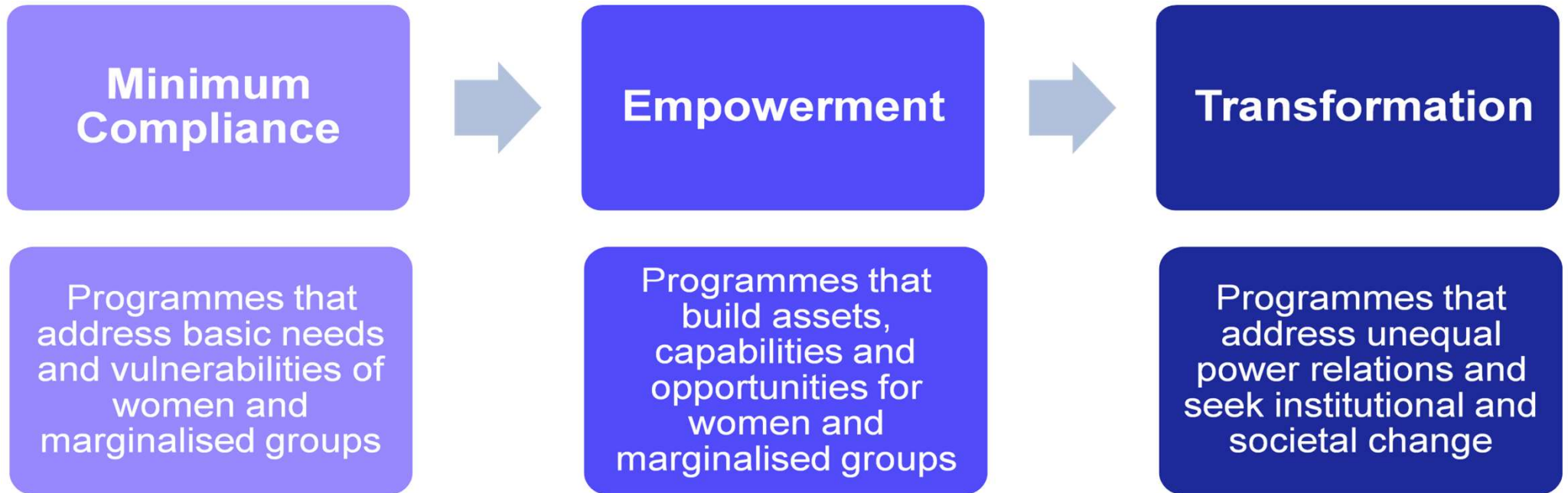
- Peer Influence
- Spousal Communication
- Partner and Family Influence
- Social Support

Individuals

- Knowledge
- Skills
- Beliefs and Values
- Self-Efficacy
- Perceived Norms
- Emotions



The Gender and Inclusion Continuum Framework



Source: Framework developed by DFID-funded *Infrastructure and Cities for Economic Development (ICED) Facility*

From Equality to Transformation

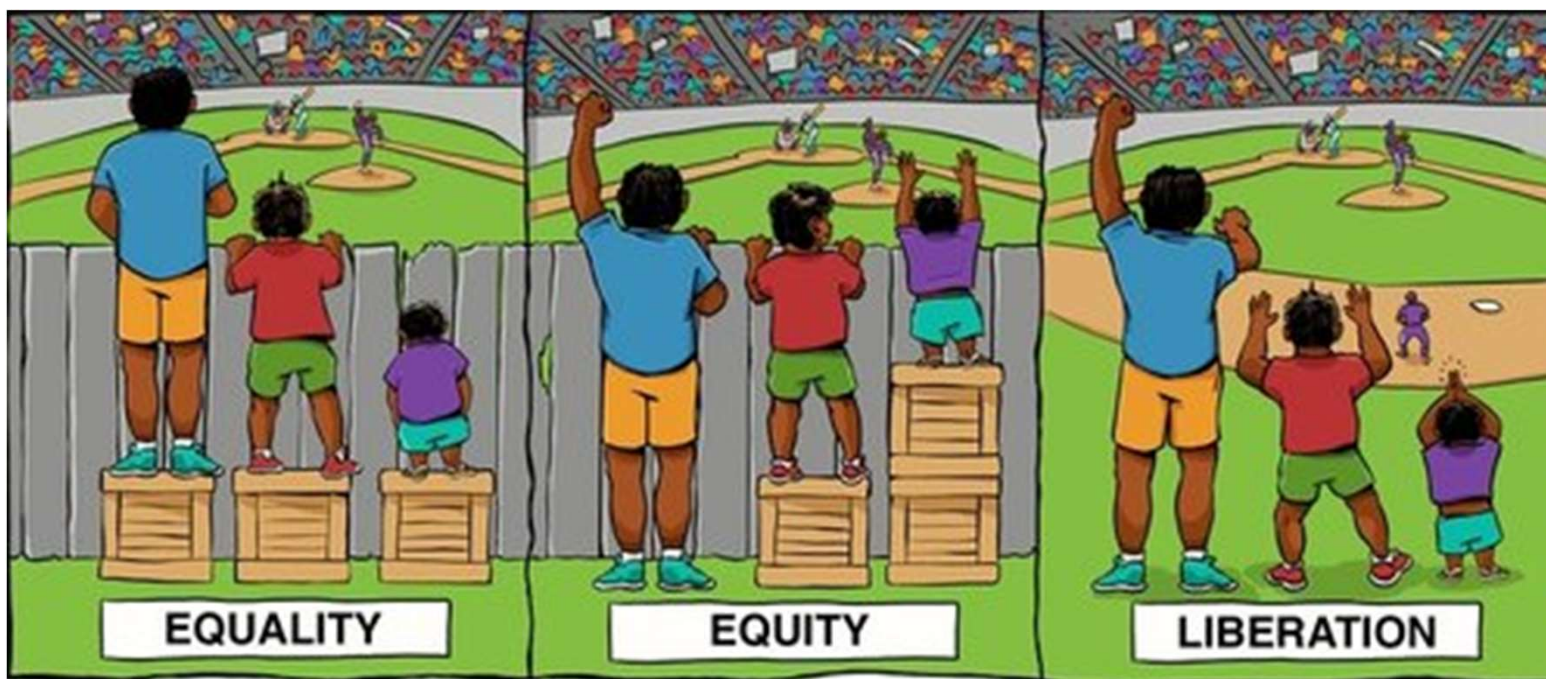


Image source: Center for Story-based Strategy

Ensuring women and girls can access the mainstream




Transformation is about reversing the socio-cultural norms and attitudes that prevent women and girls from having access, voice and agency



GESI Obstacles in the water sector



- Water is a male-dominated sector
- Governance structures do not accommodate women
- Socio-cultural barriers women face in WRM
- Stereotyping women as resource users
- Water ministries tend to be led by men
- Failure to move from commitment to implementation
- Lack of capacity and awareness at multiple levels
- Failure to allocate adequate resources to gender at the project and program level



There has been limited progress addressing GESI in the water context

Context

Context: The Sahel



- One of the poorest regions: violence, food insecurity & extremism
- A climate change hotspot: a sustainable water resource is key
- Groundwater is an untapped resource: potable water, irrigation
- Most of the groundwater resources are transboundary
- Groundwater research in the Sahel has been extremely limited, and much of this research has been driven by overseas organizations
- Lack of knowledge re: groundwater availability, issues regarding groundwater accessibility, lack of local groundwater expertise.

Gender in the Sahel



- World's most unequal regions with strong patriarchal values
- High illiteracy, high rates of child marriage, high fertility rates
- Discriminatory social institutions covering formal and informal laws, social norms and practices continue to exclude women
- The few regional groundwater experts are predominantly male
- The lack of female role models in STEM and Water Resource Management
- Women face barriers to accessing irrigation technology

BANK EXECUTED TECHNICAL COOPERATION

Sahel groundwater initiative

in Burkina Faso, Chad, Mali,
Mauritania, Niger & Senegal

Nov, 2021



The Sahel Groundwater Initiative



- Transboundary cooperation on groundwater management in the Western Sahel (Burkina Faso, Chad, Mali, Mauritania, Niger, Senegal)

Three Components:

1. Remove the constraints and limitations to the use of groundwater for small-scale irrigation
2. Assess Opportunities for Development of Groundwater Resources in the Sahel
3. Inform a Strengthened Sahelian Groundwater Expertise: Male and Female

Methodology: Integrating a Gender Lens



- Review of documents on gender in the Sahel, gender and agriculture/irrigation, on STEM programs,
- Semi-structured interviews with regional and local institutions as well as individuals involved in gender
- Identification of women to serve on an Advisory Committee
- Provided technical support and review of work by local consultants conducting research in two areas: 1) barriers and opportunities to engage local hydrogeologists; 2) barriers and opportunities to ensure women's access to irrigation technology in the Sahel

Sahel Groundwater Initiative: Understanding and Applying the Gender Dimensions

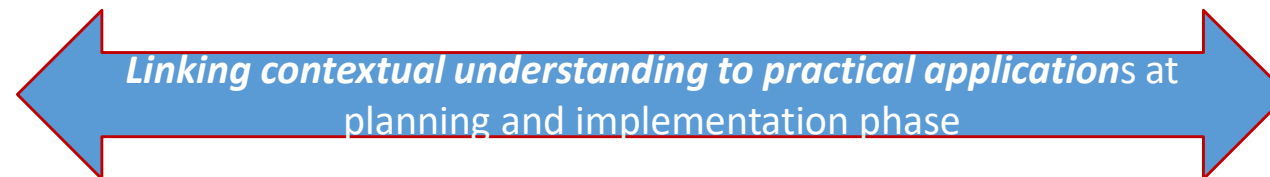


Understanding & Analysis: Concept Note (CN) Phase

- Understanding “gender” within the Sahel context: link to three areas
- Brainstorming with Project Team to identify opportunities
- Integration of gender and social inclusion references in Concept Note

Practice – planning & implementation

- Applying findings from secondary literature review and stakeholder engagement to Inception Note
- Identifying methodologies to increase # of local female hydrogeologists e.g. STEM
- Linking project with strategic gender goals and opportunities e.g. irrigation,



Findings:

Gender and Irrigation

Findings: Challenges & Recommendations



Gender and Access to Irrigation: Findings



- 60-80% of farm labor is female but often unpaid: high rates of poverty
- When crops become profitable, men take over
- Women rarely own land: a major obstacle to accessing irrigation
- Women choose basic technologies: lack of funds & technical expertise
- Lack of access to information and help to maintain the technology
- Limited access to credit and insurance: connected to land ownership
- Heavy work burden at the household level: difficult to earn funds
- Women are excluded from decision-making processes

Recommendations: Inclusive technologies for irrigation

- Build gender capacity of relevant stakeholders
- Undertake studies on the gender context
- Introduce technologies and processes that link to women's capacity to access technologies
- Consider locally-available and affordable alternatives that are accessible to women
- Ensure allocation of land and resources that enables women to generate sufficient profit
- Facilitate women's participation and leadership in irrigation processes



Gender Mainstreaming In Groundwater Projects



Leveraging regional and international commitments



Child marriage



**CAMPAIGN TO END
CHILD MARRIAGE
IN AFRICA**

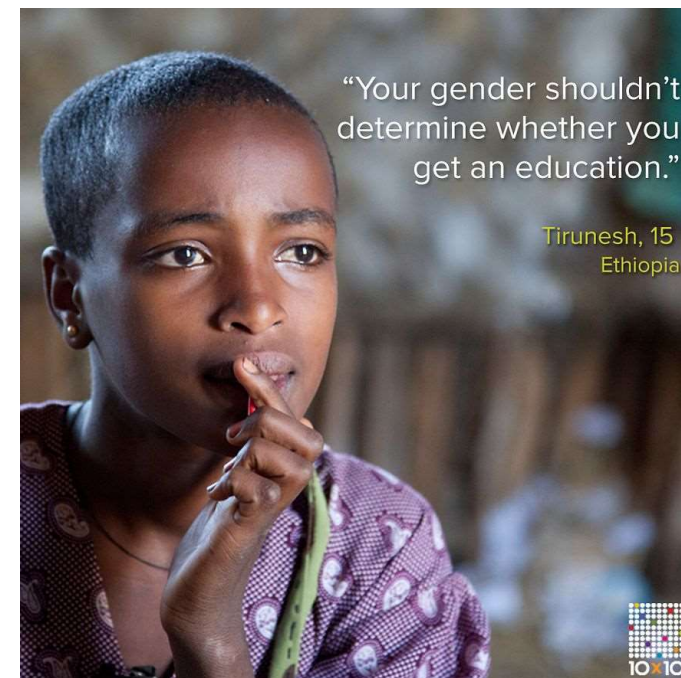
**CONTINENTAL
LAUNCH**
29 MAY 2014

AFRICAN UNION

**FOURTH SESSION OF THE AFRICAN UNION
CONFERENCE OF MINISTERS OF SOCIAL DEVELOPMENT
26-30 MAY 2014, ADDIS ABABA, ETHIOPIA**

The poster features a young girl's portrait on the right side, set against a yellow background with a decorative border. It includes logos for the African Union and the Campaign to End Child Marriage in Africa.

Girl's Education



"Your gender shouldn't determine whether you get an education."

Tirunesh, 15
Ethiopia

10 10

The image shows a young girl looking thoughtfully at the camera. A quote is overlaid on the right side of the image, and the SDG 10 logo is in the bottom right corner.

Building upon African GESI Campaigns and Programs



Female Genital cutting



THE GIRL GENERATION
GLOBAL YOUTH NETWORK
TOGETHER TO END FGM

**I WILL SPEAK UP.
WILL YOU?**

I WILL END FGM!


Silence allows FGM to continue. We must speak up and let our voices be heard. We can lead the change so that everyone walks with us.

FGM ends with us #ihavespoken #endFGM

GO TO WWW.IWILLENDFGM.ORG TO SPEAK UP!




Gender Based Violence



VIOLENCE AGAINST WOMEN

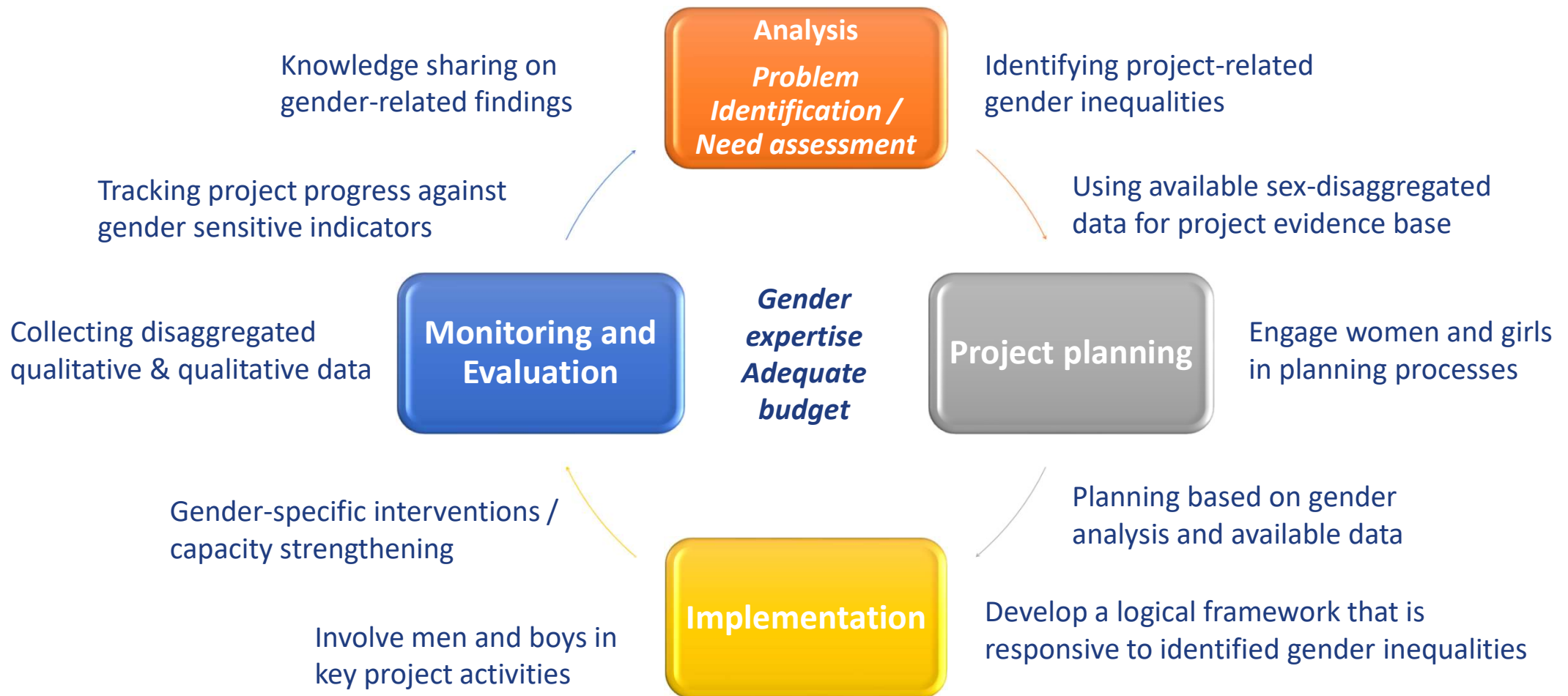
THE SILENT EPIDEMIC

IS YOUR VOICE BEING HEARD?

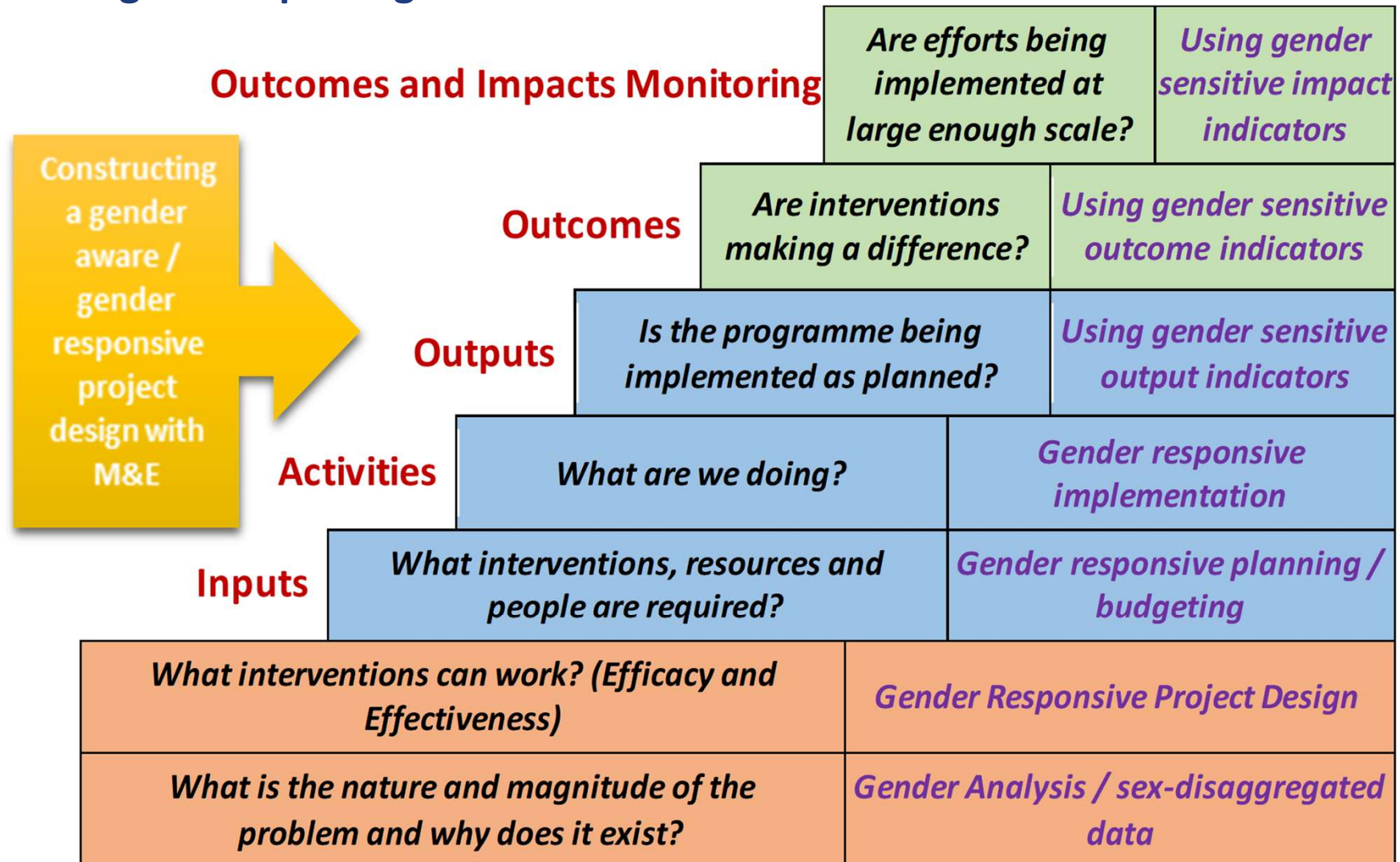


Support in kind provided by various organizations. For more information, visit www.preventglobalviolence.org.

Integrating Gender throughout the Project Life Cycle



Incorporating and Reporting Gender into M & E



Female Hydrogeologists

Challenges to women's educational pathway in groundwater science

- Education challenges: poor indicators in women's education, high drop-out rates, low literacy rates for women
- STEM studies: Girls are discouraged from studying STEM subjects: gender stereotypes, no role models, male teachers, parent bias
- Workforce challenges: discrimination, sexual harassment, lower pay and promotions



Gender equality in groundwater science

- Target the education system
- Extracurricular STEM activities
- Role models and mentors
- Identify Male & Female Champions
- Awareness-raising of men & girls
- Scholarships and partnerships



© Seyllou/AFP

Thank-you! Merci!

ehagerman@worldbank.org