



International
Hydrological
Programme



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Agency for Development
and Cooperation SDC



United Nations
Educational, Scientific and
Cultural Organization



World Water
Assessment
Programme



SEX-DISAGGREGATED WATER DATA

a critical management tool for water resources and ecosystems

The application of the WWAP Gender Toolkit
in intra-household surveys in Botswana

Dr. Bothepha Mosetlhi

Lecturer, University of Botswana

World Water Week, Stockholm

26th of August 2018

WHY IT IS IMPORTANT TO COLLECT SEX-DISAGGREGATED DATA IN WATER RESOURCES & ECOSYSTEM MANAGEMENT?

The lack of sex-disaggregated water data is still a major obstacle to the production of scientific evidence for revealing gender inequalities in water management (and policies) **and to the achievement of relevant SDGs**

Sex-disaggregated water data **make:**

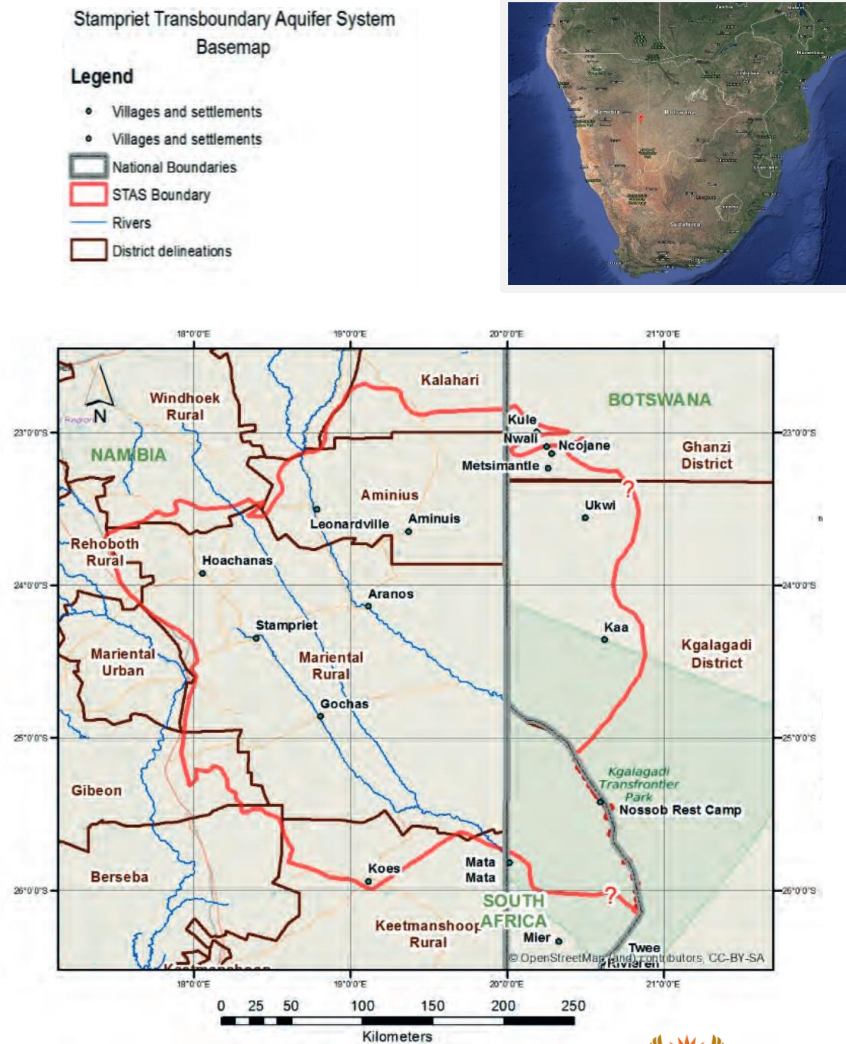
THE DIFFERENCES BETWEEN WOMEN AND MEN EXPLICIT

And help:

- understand women's and men's different needs and strengths
- assess who has access to - and control over - water resources and identify **opportunities** to empower women.
- inform water policies and laws, and support government decisions to enable **gender transformative actions**



INTRA-HOUSEHOLD GENDER SURVEY IN THE STAMPRIET TRANSBOUNDARY AQUIFER SYSTEM (STAS) AREA: A FOCUS ON THE BOTSWANA CASE-STUDY



SDC-UNESCO GGRETA Project – Groundwater Governance In Transboundary Aquifers

The Stampriet Transboundary Aquifer System (STAS) is shared by Botswana, Namibia and South Africa. GGRETA project assesses the hydro-geological, legal and socio-economic aspects of the transboundary area with a gender –responsive approach.

Ncojane and Kole villages, Botswana: 3628 inhabitants (2011 national census).

SAMPLE POPULATION: 142 observations collected through household and intra-household interviews (questionnaires), 75% females and 25% males.

Age-range (females): 27- 35 years old - Age-range (males): 36 – 53 years old.
70% of the sample population does not owe the land.

The main activity is livestock rearing, done some 20-30 km away from the village. Livestock is the main activity and it is considered a family property.

The GGRETA Project is funded by the Swiss Agency for Development and Cooperation (SDC), and led by UNESCO International Hydrological Programme (IHP). The gender component is developed by UNESCO-WWAP in partnership with:
Dept. of Water Affairs (MMEWR), Botswana
Dept. of Agriculture, Water and Forestry (DAWF), Namibia
University of Botswana Dept. of Environmental Sciences



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Agency for Development
and Cooperation SDC



United Nations
Educational, Scientific and
Cultural Organization



World Water
Assessment
Programme

APPLIED WWAP INDICATORS: WASH, DECISION MAKING, AGRICULTURE & INCOME GENERATION

2b Unpaid time spent by individual household members in supplying water, making it safe for use, and managing it

2c Perceptions of the adequacy of current water supply/availability in both quality and quantity in the household

2e Intra-household use of/ access to improved sanitation facilities.

2f Prioritization of gaining access to improved sanitation facilities; willingness to allocate household budget for such access.

3e Household member primarily responsible for managing the household water; perceptions of the nature of their household decision-making process of water priorities and use; perceptions of the primary decision-maker on water issues within the household; perceptions of how intra-household conflicts related to water are solved.

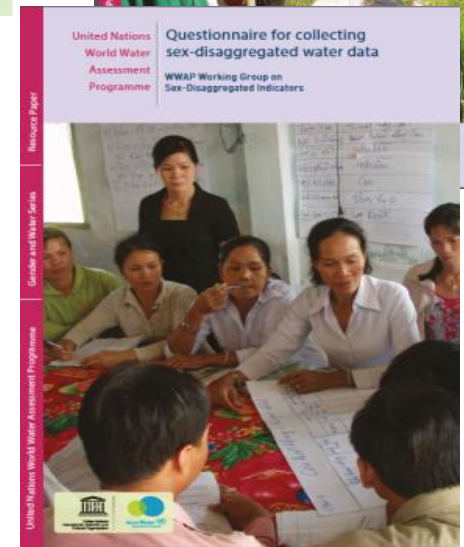
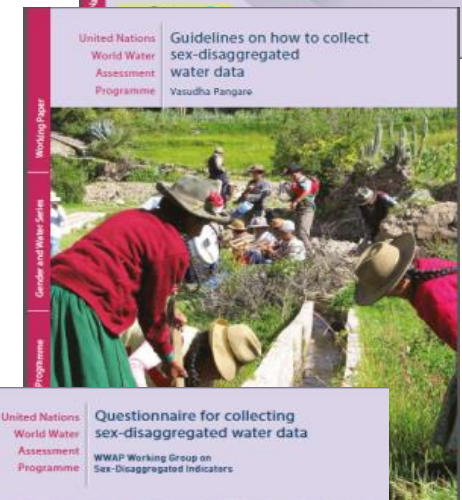
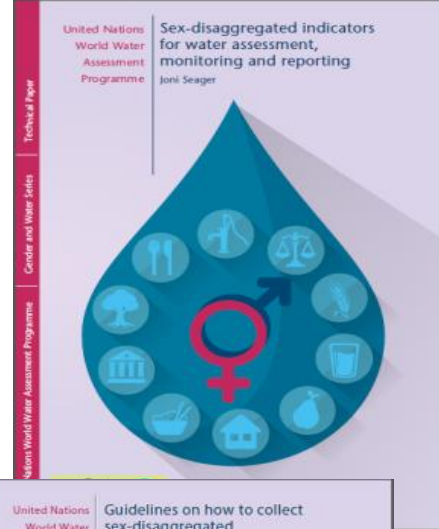
3g Perceptions of household gender equality in water decisions

5b Average size of irrigated farms run by/owned by women/men

5c Gendered division of labor related to irrigated-farming: gender-specific tasks related to irrigated crops, by nature of tasks; gender differentiated daily time-use of household members involved in irrigated farming work.

5e Decision-makers and participants in community-based decision-making process regarding decisions reallocation of time and financial resources; crops to be irrigated

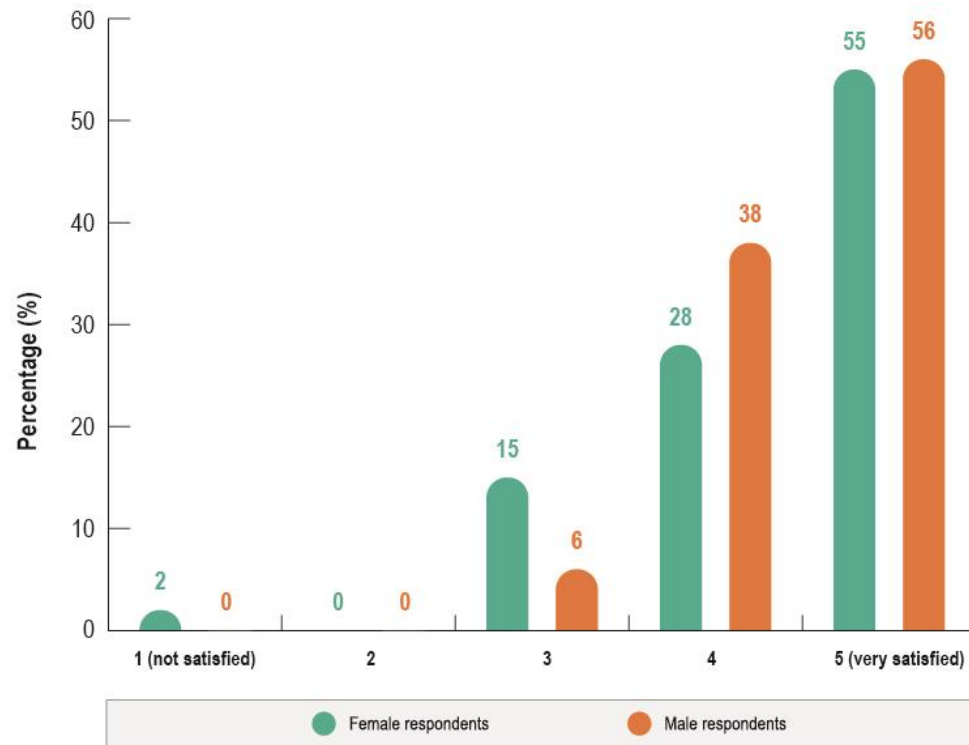
5g Access to support services for irrigation; participation in technical training; access to bank loans/ credit; and incentives for the development of irrigated agriculture.



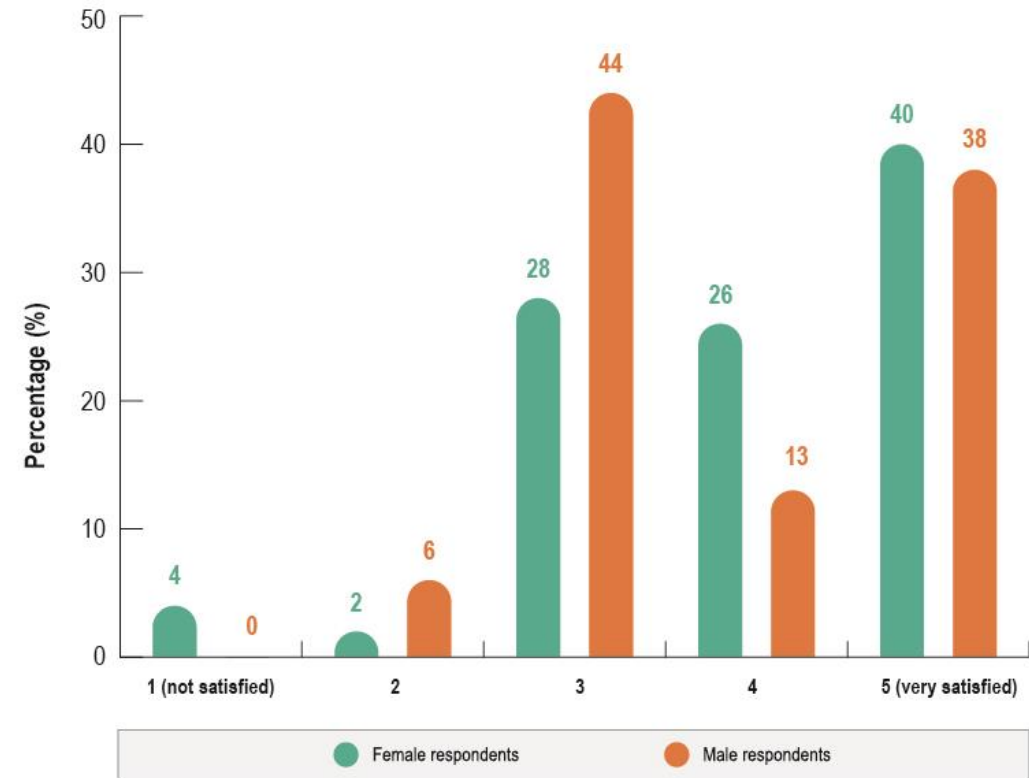
BOTSWANA - INDICATORS ON WATER AND SANITATION

2c Perceptions of the adequacy of current water supply/availability in both quality and quantity in the household - (*qualitative indicator*)

Satisfaction with water quality



Satisfaction with water quantity



The intra-HH survey shows high satisfaction from both women and men for water quality and quantity

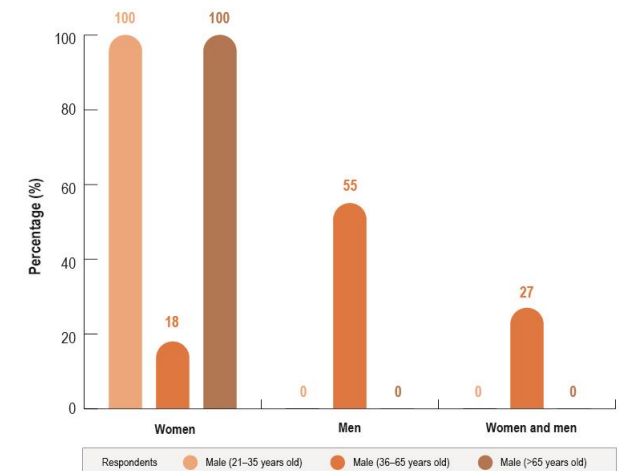
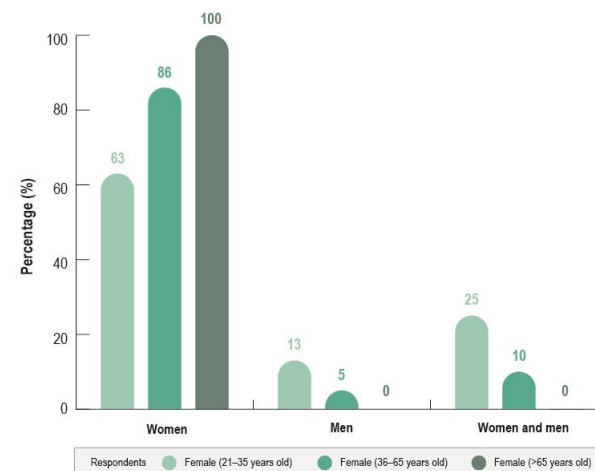
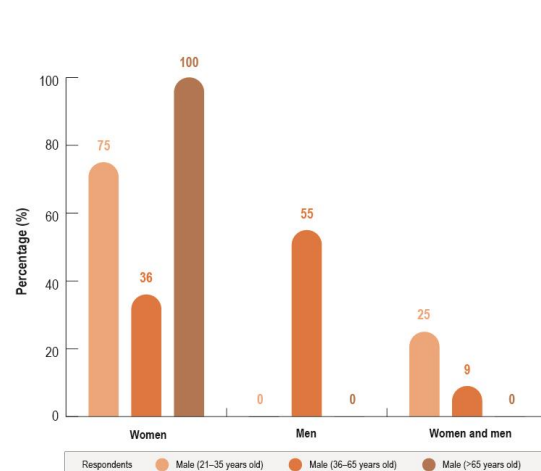
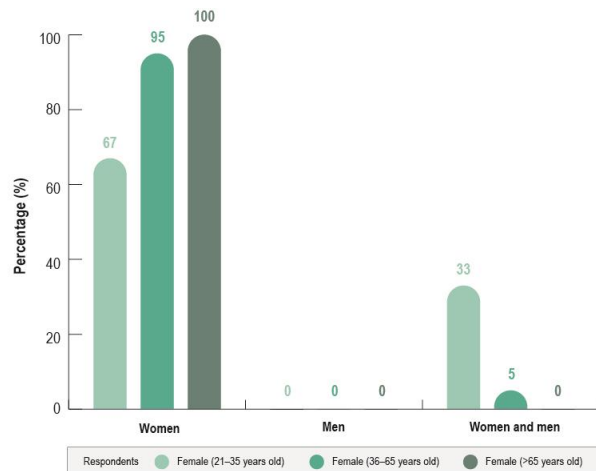
BOTSWANA - INDICATORS ON WATER DECISION-MAKING

3e: Household member primarily responsible for managing the household water (domestic use)

2) Between female and male respondents, who is responsible for ensuring water quality in the household

3) Between female and male respondents, who is responsible for management of water quantities in the household

Age ranges: 21-35; 36-65; > 65 (from darkest colors to lighter)

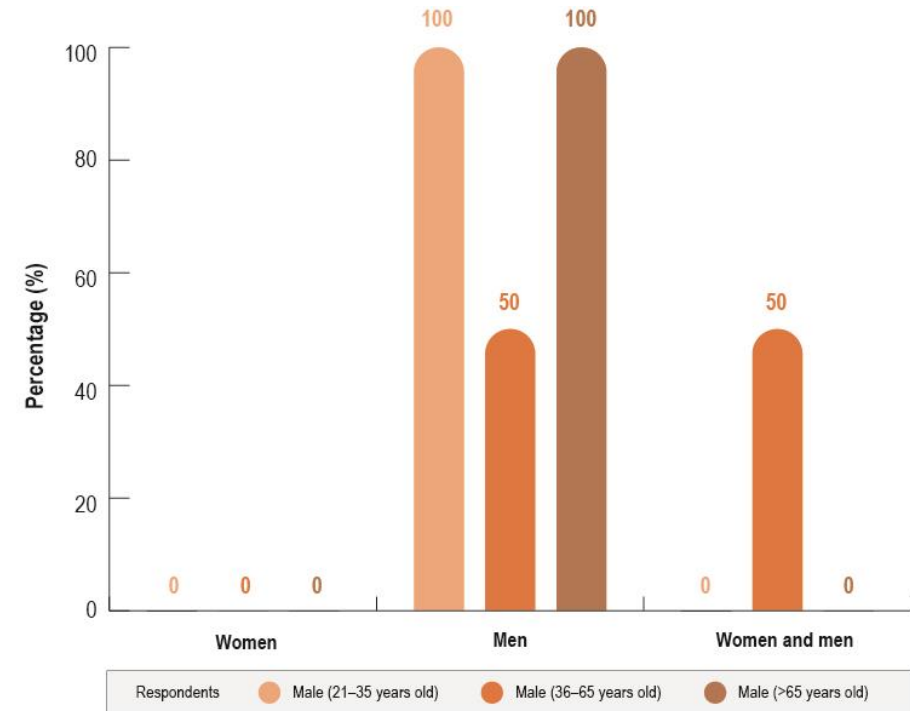
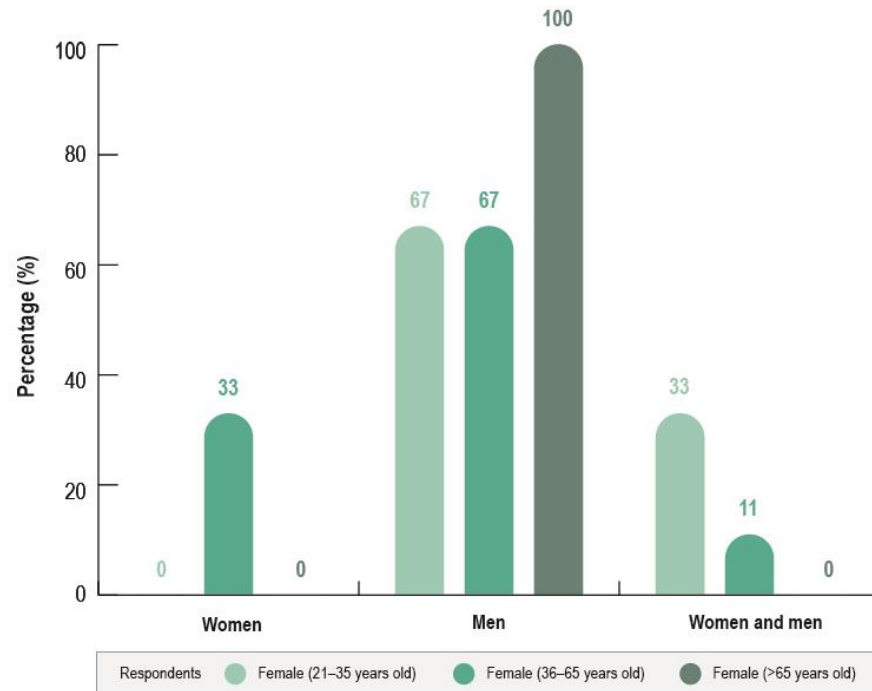


BOTSWANA'S INDICATORS ON WATER FOR AGRICULTURE AND INCOME GENERATION

Gendered division of labor related to water - farming

4) Between female and male respondents, who is responsible for managing farm water (agriculture, livestock) in the household

Age ranges:
21-35; 36-65;
> 65 (from
darkest colors
to lighter)



(A few selected)

BOTSWANA NATIONAL POLICIES IN RELATION TO THE SURVEY TOPICS

HH Survey Subject Matter	Related Government Policy	Relevance of Policy to Subject Matter (Level of Enforcement according to the situation on ground)
WASH	Botswana National Water Master Plan Review (NWMPR) of 2006	The NWMPR is the driving force behind the country's water resource management framework and clearly identifies the need to adopt IWRM (DWA, 2013 – i.e. IWRM-WE Plan & SMEC and EHES, 2006 – i.e. NWMPR).
DECISION-MAKING	Community Based Natural Resources Management (CBNRM) of 2005	Addresses common pool resources/goods (e.g. wildlife, veld products, water) in general – not focusing on one
DECISION-MAKING	National Policy on Gender and Development (NPGD) of 2008	The National Policy on Gender and Development identifies a range of issues, systems, and institutions in which the same opportunities should be available to women and men to maximize their potential as human beings and valuable citizens of Botswana. These opportunities may be in terms of water management decisions

To a large degree Botswana has formulated relevant water policy, particularly in relation to WASH and water for income generation. However, the policy lacks explicit coverage for gender. Also, while the water supply ground situation shows great correspondence with policy, there are some inconsistencies regarding the sanitation and water for income generation realities. Again, the policy that relates to grassroots involvement in resource governance (Community Based Natural Resources Management – CBNRM policy) is not specific to water and it applies at community level not intra-household.

FINDINGS AND METHODOLOGICAL CONCLUSIONS

How sex-disaggregated water data from the field informed country policies on gender roles and monitor their effectiveness in water management and sustainable development :

- Field data identified socially-determined differences in gender roles, and confirmed the prevalent role women play in water quality and supply within the household boundaries.
- Decision-making for water allocation and use for agriculture and livestock purposes, is broadly a men's responsibility, with the exception of backyard gardens and fields for crop cultivation.
- The survey revealed a shortcoming in the water policy goal to empower and fully include women in decision making processes related to sustainable development and integrated water resources management.

On WWAP – Toolkit methodology and indicators :

- The pilot-surveys proved the effectiveness of the UNESCO-WWAP Gender Toolkit & Indicators in (i) unravelling gender inequalities in management of water resources, and (ii) revealing the extent of gender mainstreaming in national water policies.
- However, the Toolkit Questionnaire should always be carefully calibrated to local conditions, possibly through a preliminary test. Questions should be tailored to suit the local setting, and translated in vernacular language if need be.





Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

**Swiss Agency for Development
and Cooperation SDC**



United Nations
Educational, Scientific and
Cultural Organization



World Water
Assessment
Programme



THANK YOU

Seminar: Tapping into collective wisdom:
Gender sensitive development and water ecosystems
World Water Week, Stockholm, 26th of August, 2018