

COUNT AND BE COUNTED, BE EMPOWERED



GENDER DISAGGREGATED DATA REVIEW IN WATER AND SANITATION MANAGEMENT WITH A FOCUS ON AFRICA

**GENDER AND WATER ALLIANCE
and
UN-HABITAT Water and Sanitation Infrastructure Branch**

June 2012

FOREWORD

For a sociologist qualitative information on power relations at the micro level are leading to understanding of causes of access to water and sanitation facilities or the lack of it. Details of empowerment of diversity of people are different depending on the contexts. Politicians and decision makers in the water and sanitation sectors are too busy to learn about all these details and apply them in their work. For them more generalised information is needed, preferably to be grasped in a couple of numbers on a few indicators.

At the lower level the information gathered is rather precise and all numbers can be checked. When accumulating such numbers from different places, they become less exact, but because of the scale more useful for politicians and others. The higher the level, with as peak the global level, the more chance that the collected information is not quite as accurate anymore, whilst the different steps of accumulation are harder to check. The larger the scale of data, the fewer is the number of indicators that can be given information about. Nevertheless, these few global numbers are vital for the importance that worldwide is been given to the sector and the decisions made.

With water getting scarcer and sanitation still considered a luxury for many people in this world, it is important that data are as correct as possible and made available for decision makers. Both water and sanitation are of different vitality for women than for men, each having their own responsibilities. It is therefore crucial that the information is disaggregated by gender. When training water professionals or water users, for example, the number of women and the number of men, as well as their different interests and forms of participation should be reported on.

In this report which is based on available literature and the opinion of professionals working in the sector, such as colleagues from UN-Habitat, GWA develops a methodology to gather, process and use gender-disaggregated data, lists indicators with different priorities, and writes a Policy Brief, for politicians and decision-makers in the water and sanitation sectors. We hope that this new material will lead to more gender information and more applicable decisions leading to empowerment of poor and vulnerable women and men, as well as to more efficient, effective and sustainable water management.

Joke Muylwijk
Executive Director Gender and Water Alliance

TABLE OF CONTENTS

FOREWORD.....	2
TABLE OF CONTENTS	3
ACKNOWLEDGEMENTS.....	4
ACRONYMS & ABBREVIATIONS.....	5
EXECUTIVE SUMMARY	6
1 BACKGROUND.....	12
2 INVENTORY OF GDD IN WATSAN OF SELECTED ORGANIZATIONS	16
3 FRAMEWORK OF PARAMETERS AND INDICATORS TO ORGANISE GDD IN WATSAN.....	18
4 OVERVIEW OF DIFFERENT METHODOLOGIES IN USE FOR COLLECTING GDD IN WATSAN.....	23
5 CASE STUDIES	27
6 METHODOLOGY TO DEVELOP, UPDATE AND MAINTAIN THE DATABASE OF GDD IN WATSAN	39
7 POLICY BRIEF: WHY GENDER AND GDD COUNT IN WATSAN POLICIES	45
8 CONCLUSION	52
9 REFERENCES	54
LIST OF ANNEXES	56

ACKNOWLEDGEMENTS

This Gender Disaggregated Data (GDD) in WATSAN Review focussing on Africa was made possible by UN-HABITAT Water Sanitation and Infrastructure Branch (WSIB), and the Gender and Water Alliance (GWA).

For their guidance and support in conducting and writing this review we would especially like to thank Dr. Graham Alabaster (Chief, UN-HABITAT - WSIB) and Joke Muylwijk (Executive Director GWA).

Thanks to Angela Hakizimana, UN-HABITAT – WSIB Gender Focal Point and Human Settlements Officer, for her specific help in collecting data for this Review from UN-HABITAT. Thanks to all the staff from UN-HABITAT who gave their valuable time to the interviews and shared useful insights on GDD in WATSAN: Daniel Adom, Harrison Kwach, Julie Perkins, Lars Stordal, Tekalign Tsige , Eric Moukoro, Ann Malebo, as well as Alex Diouf (Consultant).

Thanks also to the various Representatives of the implementing partners: Anastacia Wahome – Maji Data, Loise Kinyanjui (Ministry of Housing: KENSUP Secretariat), and to our other Resource Persons : Rosemary Magambo (NALEP), Charity Kabutha (Gender and Agriculture Consultant), Omotto and the Umande Trust team, and Caroline DSW – all of whom spared valuable time and shared useful insights that have greatly contributed to this report.

Thanks also to some of the GWA members for their information and to Anamika Amani – GWA member, for helping to edit and give this report its shape.

The authors:

Egline Tauya, GWA Zimbabwe

Mary Muthungu, GWA Kenya

ACRONYMS & ABBREVIATIONS

CDC	Community Development Committee
CHH	Children Headed Households
CIDA	Canadian International Development Agency
DAC	Daily Activity Calendar
DDWSSA	Dire Dawa Water Supply and Sewerage Authority
DHS	Demographic Health Surveys
DWSS	Department of Water Supply and Sewerage
FAO	Food and Agricultural Organization
GDD	Gender Disaggregated Data
GEAP	Gender Equality Action Plan
GEM	Gender Empowerment Measure
GFP	Gender Focal Point
GMSF	Gender Mainstreaming Strategy Framework
GWA	Gender and Water Alliance
GWCL	Ghana Water Company Limited
HDR	Human Development Report
HVBWSHE	Human Values Based Water Sanitation and Hygiene Education
IRWSSP	Integrated Rural Water Supply and Sanitation Programme
IWRM	Integrated Water Resources Management
IWSD	Institute of Water and Sanitation Development
JMP	Joint Monitoring Programme
LVWATSAN	Lake Victoria Water and Sanitation
MDGs	Millennium Development Goals
MICS	Multiple Indicator Cluster Surveys
MTSIP	Mid-Term Strategic and Institutional Plan
O&M	Operation and Maintenance
ECOSOC	Economic and Social Council
OECD	Organization for Economic Cooperation and Development
PCW	Project Clean Water
PGN	Practical Gender Needs
PHAST	Participatory Hygiene and Sanitation Transformation
RGA	Rapid Gender Assessment
RMC	Regional Member Countries
SGN	Strategic Gender Needs
SHEP	Sanitation Hygiene Education Programme
SIDA	Swedish International Development Cooperation Agency
SNA	Systems of National Accounts
TUSs	Time Use Surveys
UNECE	United Nations Economic Commission for Europe
WAC	Water for African Cities
WASH	Water, Sanitation, and Hygiene
WATSAN	Water and Sanitation
WEDC	Water Engineering and Development Centre
WSSCC	Water Supply Sanitation and Collaborative Council
WSS	Water Supply and Sewerage
WSIB	Water, Sanitation, and Infrastructure Branch

EXECUTIVE SUMMARY

Background and scope

This report asserts that mainstreaming gender issues in national and global monitoring processes for social and economic development ensures that the different needs of men and women are better understood, and that the specific needs and concerns of women are taken into account. This is essential in sectors like Water and Sanitation because in most societies, women are still primarily responsible for accessing and using water for domestic consumption, subsistence agriculture, health, and sanitation. Therefore, lack of access to water and sanitation directly affects women's and their families' health, education, income, and empowerment. Furthermore, despite the existence of a significant amount of GDD in WATSAN¹ worldwide, most of this information is scattered, often not easily accessible, and not adequately processed or analysed. This limits its use in other interventions and policies at regional, national, and global levels, and continues to pose a major setback to the further research, monitoring, and evaluation of WATSAN interventions, and to equitable and gender-sensitive policy making in this sector. Without the collection of GDD, it is not possible to fully monitor and measure actual progress towards the realization of the water and sanitation global commitments, in particular the MDGs. GDD is essential to assess and make more visible the differential effects of policy measures on women and men, and to evaluate and track the role of women in water and sanitation issues more effectively.

The main goal of this review is to contribute to the achievement of Millennium Development Goals on water, sanitation, and gender equality by collecting relevant, viable data in WATSAN from several countries in Africa and collating it under one user-friendly database so that progress in WATSAN interventions can be monitored and measured more effectively, which will ultimately lead to more equitable and gender-sensitive decision making.

The specific objectives were to inventarise and collate existing GDD in WATSAN showing their strengths and weaknesses for effective monitoring of gender and equity goals, and for informing appropriate policy; to design a methodology to access, update, and maintain a global database of GDD in WATSAN, easily accessed by all, especially policy makers; and

¹ GDD in WATSAN means: gender disaggregated data in water and sanitation. For all activities, tasks, beneficiaries, stakeholders, etc., men and women are separately counted and mentioned in monitoring and reporting. GDD are mostly quantitative, but could be qualitative as well. In this report the abbreviation is used.

finally to demonstrate how information about women's and men's needs, concerns, responsibilities, access and control, knowledge and different status, if documented properly, will support the planning and decision making process in WATSAN related interventions and policy-making.

The 7 main outputs expected from this review of GDD in WATSAN are a global inventory of GDD in WATSAN; a framework of key parameters and indicators to organise GDD in WATSAN; an overview of different methodologies in use for collecting GDD; four case studies on GDD in WATSAN that demonstrate how GDD supports a more effective and equitable planning and decision making process; a proposed methodology to develop, update and maintain the database of GDD; a policy brief explaining gender aspects of WATSAN and highlighting the crucial need for GDD information in this sector for effective and equitable policy-making; and finally, the review concludes with Recommendations for follow-up of this study.

Methodology used in the Review of GDD in WATSAN

Different methods of data collection were used in the review to gather both primary and secondary data on GDD in WATSAN. Primary data collection methods included semi-structured interviews with key informants mainly from UN-HABITAT, and a questionnaire sent by email to GWA members worldwide. Secondary data on existing GDD in WATSAN was collected through the Internet using specific search engines, use of online and public academic and research libraries.

In addition to these methods, four case studies from different African countries were identified to provide a more detailed demonstration of how GDD improved the planning, implementation, and decision making processes in WATSAN interventions.

The review also sought to determine the accessibility and location of the GDD data (whether it was in hard copy, in electronic format, and how it could be accessed).

Main findings from the Review of GDD in WATSAN

- While there is growing awareness about the importance of collecting GDD in WATSAN, the review noted that there is still a lot of work required in collection, analysis, interpretation and dissemination of GDD in WATSAN. Many documents reviewed talk about the gender aspects but the actual data is hardly available. Even the current Joint Monitoring Programme (JMP) does not really capture the GDD

aspects apart from the usual indicators. This makes this data unusable in other interventions, reduces replicating of good practices, and limits appropriate and equitable policy making - thereby undermining progress in MDGs. The review noted that while actual GDD is largely absent in most WATSAN documents, some of them do point out key gender and equity issues in WATSAN which need focusing on, thus providing a framework within which to produce the GDD.

- There is a lot of gender and water data in different organizations, especially within the UN organisations such as UNDESA, UN-HABITAT, UNDP, UNICEF and WHO among others. However, the quality and type of GDD data is not adequate to support gender MGD goals in water and sanitation, often due to inappropriate units of analysis used, and use of methodologies and interviewers that are not gender-sensitive. The review found that in most global surveys, the unit of analysis used is the household, farm, and community, none of which distinguish the individual members, resulting in gender-blind analysis which ignores the differences in WATSAN between women and men of different ages, and different socio-economic background.
- There is much evidence of improved availability of safe and clean drinking water and sanitation services in UN-HABITAT projects and in other organisations. However, most global WATSAN databases do not disaggregate data according to gender. In cases where it is disaggregated, it is mainly quantitative i.e. the parameters and indicators are limited to the number of women with access to safe water supply and to improved sanitation, and to which member has the primary responsibility for water collection. Qualitative indicators which analyse the water and sanitation gender dynamics such as who is responsible for excreta collection and disposal, personal safety in access to sanitation facilities, and gendered intra-household differences in access, control, and use of facilities are seldom addressed and almost never done at a policy level. This kind of information was more easily available from databases found through the internet search, and the GWA website.
- This review concludes that there is much qualitative micro-level GDD which does not find its way to the main global databases. This is a waste of resources as the quality and quantity of data gathered at grassroots level is much better than at global level. Therefore, there is need to consider micro-level qualitative and quantitative GDD in WATSAN which gives the necessary detailed analysis of gender issues. It often provides the best information about problems which might then be followed up with

large-scale inquiry.

- Furthermore, there are reports which indicate impact of increased safe water nearer to people's homes saving time for women and girls. However, the actual statistics that show how many minutes (or hours) saved is lacking. In view of the gaps identified above, the review noted that in order to establish effective GDD collection and analysis there is need to include new specific indicators which are currently not being recognised such as percentage of women and men sensitized in protecting surface and groundwater; existence and quality of sanitation facilities with specific needs for girls, and ratio of male/female open defecation.
- There is need of a central database for GDD which allows everyone interested to upload GDD upon approval by the database administrator. A proposed methodology for development, updating and maintaining such a central database forms part of this report. The methodology includes parameters and indicators which are usually excluded in global databases, with a user-friendly online tutorial on how to upload data, retrieve, convert data to graphics, interpret data, and how to make use of the data.
- There is a crucial need to involve policy makers in the promotion of the collection, analysis and utilization of GDD in WATSAN. First and foremost, organizations need to garner enough political will to support gender mainstreaming in policy planning, dialogue, and formulation, and in the collection, analysis and utilization of GDD in particular. At policy making level, there is still need for political will and a change of mindset regarding gender issues in WATSAN. Technical project staff must appreciate the place of gender mainstreaming in the planning, implementation, monitoring, and evaluation in project interventions to be equitable, responsive, efficient, effective, replicable and sustainable.

Recommendations:

1. Close the Gap between Theory and Practice

There is still a huge gap between actual gender mainstreaming in WATSAN policies and the theoretical perspective. The key challenge is the lack of sufficient understanding among policy makers of gender issues, and why it is crucial to mainstream them especially in WATSAN.

2. Collection of GDD as a matter of Policy

In order to meet the water demands of poor women, UN agencies and host governments must collect sex-disaggregated data and develop gender-sensitive indicators in all sectors, including water, sanitation, agriculture and irrigation as a matter of policy.

3. Gender-sensitive Budgeting/Financing for Gender Mainstreaming

Commitment to gender mainstreaming can only be realized with adequate budgetary allocations. Budgets are one of the most influential tools for organizations because without funds, neither can qualified gender staff be recruited, nor gender-sensitive policies or programmes be implemented.

4. Gender Analysis should be done from micro- to macro- levels for data collection

Researchers should work together with technical WATSAN staff and Gender Experts to ensure that effective gender analysis is done at every level (from project data level, to regional, country, and global statistic databases) as a basis for monitoring progress in gender and equity goals in WATSAN, and for sound policy formulation.

5. Support Research on GDD Collection

Governments and multilateral donors should support further initiatives to improve, adapt, collate, and extend gender-disaggregated data collection and analysis in the WATSAN sector. This support should also extend to the design and adaptation of specific frameworks and methodologies for GDD collection, taking into account the needs and obstacles identified through several evaluations and gender assessments. For example, UNHABITAT could benefit from the many studies and evaluations that have been done to date if they were processed and analysed using a gender-sensitive framework.

6. Ensuring the use of IWRM in WATSAN

IWRM strategies and plans present unique opportunities for enhancing the equal participation, representation, and rights of women in the water sector, and thus for improving the effectiveness and sustainability of those strategies. The policy brief which is a part of this report proposes that the adoption of IWRM by governments, service providers and donors in WATSAN should be a national level policy for African countries.

7. Capacity Building at Organisational and Individual level

Gender experts should be supported to assist in mainstreaming gender at organizational

level by creating an enabling environment for training technical and other staff in gender issues in WATSAN, including a gender expert in WATSAN project teams, and by allocating sufficient time and budget for this.

8. Stricter Accountability and Enforcement of Gender sensitivity in WATSAN Interventions

There should be a binding policy and legal framework to halt projects/initiatives which do not recognize gender parity and the full participation of women as demonstrated by GDD. A responsibility and accountability mechanism for reporting on improved gender equity using GDD could be embedded in senior manager job descriptions.

9. Adopting a Rights Based Approach to WATSAN Programmes

Integrating human rights in WATSAN has proved useful in mobilising the requisite resources - both financial and non-financial- to inform the country laws and policies which have a direct influence on municipal and local levels.

1 BACKGROUND

Origin of the Review

The importance of involving both women and men in the management of water and sanitation has been recognized at the global level, since the 1977 United Nations Water Conference at Mar del Plata, and during the International Drinking Water Supply and Sanitation Decade, 1981-1990. The key role played by women in the provision, management and safeguarding of water was specifically recognized by The Dublin Principles, endorsed at the International Conference on Water and the Environment in 1992. At the Millennium Summit in 2000, 189 member states of the UN made a commitment to achieve 8 goals - now referred to as MDGs – goal 3 of which is to promote Gender Equality and Empower Women. In many societies, women are often the primary users of water in domestic consumption, subsistence agriculture, health and sanitation. Therefore lack of access to water and sanitation directly affects women's and their families' health, education, income, and empowerment. This means that without the collection of GDD it is not possible to fully measure actual progress towards the MDGs.

Pushed on by this increasing recognition of gender issues in WATSAN, more sex- and gender disaggregated data has been collected in the last two decades by international, government and civil organisations worldwide. The Gender and Water Alliance (GWA) has access to various reports from around the world with gender-disaggregated WATSAN data, and UN-HABITAT has collected gender-disaggregated data in various WATSAN projects in Africa. The problem however remains that despite the existence of a significant amount of GDD in WATSAN worldwide, most of this information is scattered, often not easily accessible, and not adequately processed or analysed. This limits its use in other interventions and policies at regional, national, and global levels, and continues to pose a major setback to the further research, monitoring, and evaluation of WATSAN interventions, and to equitable and gender-sensitive policy making in this sector. Consequently this proves an obstacle to mainstreaming gender in national and global monitoring processes (like the MDGs) for social and economic development.

Moreover, available WATSAN data are mainly used by Ministries of Water of national governments, however when this data is gender disaggregated it is also important for Ministries of Planning, Ministries of Education, and Ministries of Women's Affairs, to name a

few. GDD is within this context considered a prerequisite for gender mainstreaming to promote responsive, efficient, effective, and sustainable development.

So major questions that need answering are:

- How can GDD in WATSAN be made more easily accessible and useful?
- How should GDD be processed, analysed, and interpreted to be useful for use by other interventions and in policymaking in WATSAN?
- How could this specific data add to and improve the global body of gender-disaggregated data that is currently available?

These were the main questions which prompted the need to carry out this review. It is against this background that UN-HABITAT and GWA established a partnership to develop and implement the Gender-disaggregated data (GDD) review in water and sanitation (WATSAN) management for the Water for African Cities Programme (WAC II). The partnership takes place under the framework of the implementation of the 6th Cooperative Agreement and this report has been prepared in the context of this agreement.

The main goal of this review is to contribute to the achievement of Millennium Development Goals on water, sanitation, and gender equality by collecting relevant, viable data and large scale information that can make interventions in WATSAN more effective and sustainable, which will ultimately lead to more equitable and gender-sensitive decision making.

The specific objectives were to:

- Develop a database of Africa-focused gender-disaggregated information related to WATSAN, and promote its use in the formulation and implementation of evidence-based policies.
- Demonstrate that information about women's and men's needs, concerns, responsibilities, access and control, knowledge and different status, if documented properly, will support the planning and decision making process in WATSAN related interventions and policy-making.
- Design a methodology to update and maintain the database of gender-disaggregated data related to water and sanitation management, available to all, especially policy makers.

The main outputs expected from this review of GDD in WATSAN were a global inventory of GDD in WATSAN; a framework of key parameters and indicators to organise GDD in WATSAN; an overview of different methodologies in use for collecting GDD; four case studies on GDD in WATSAN that demonstrate how GDD supports a more effective and equitable planning and decision making process; a methodology to develop, update and maintain the database of GDD; a policy brief explaining gender aspects of WATSAN and highlighting the crucial need for GDD information in this sector for effective and equitable policy-making with recommendations; and finally, a conclusion and some recommendations for follow-up of the project.

Methodology used in the Review of GDD in WATSAN

The review was conducted from November 2011 to March 2012. In carrying out this review of GDD in WATSAN, various methods were used to come up with the seven outputs listed in the preceding section.

Firstly, in-depth interviews were held with key informants, which included mostly technical staff from UN Habitat Office in Nairobi, some visiting staff, and a few selected partners in Kenya who were willing to share available GDD. These key informants were selected on the basis of their direct involvement in programmes/projects that had generated GDD in the course of implementation. It was believed that they were in the best position to provide crucial perspectives on the GDD in WATSAN needed on the themes highlighted earlier. (See Annex 2- List of interviewees). To facilitate brief and focussed interviews, a user friendly Interview Guide Document was prepared by GWA. It was then shared in advance with the interviewees through email as a preparation for the actual interviews (See Annex 3).

The second method of data collection was through an email letter (See Annex 4) sent to the GWA members worldwide. This was meant to elicit information on as many sources of GDD as possible in various organisations from all around the world.

The interviews and email questionnaires helped to get information from UN-HABITAT staff and GWA members on the kind of projects that they had in WATSAN, their experiences in project implementation, successes and challenges they faced, lessons learnt, and best practices. They also revealed whether GDD was available, and if so, whether the data was fully or partially analysed, or whether it was still raw.

Thirdly, Internet research was conducted in key gender and water related websites and institutions. The purpose was to get relevant documents. Key websites visited included UN-

HABITAT, GWA, UNICEF, UNESCO, UNDP, CapNet, SADC Gender Unity, CIDA, SIDA, PCW, IWSD Gender Links, World Bank, UNDESA, as well as a variety of websites of Women's Organisations, Universities, and other institutions such as Institute of Water and Sanitation Development (IWSD).

Fourthly, visits to key libraries of relevant organisations, and universities were made to gather literature on GDD in WATSAN. This provided insights into some sources of gender disaggregated data.

Finally, from the information gathered through the above methodologies, four case studies from different African countries were chosen for a more detailed demonstration of how GDD improved the planning, implementation, and decision making processes in WATSAN interventions.

Organisation of the Report

Following this first chapter on the Origin of this review, this report is organized into the following seven chapters:

Chapter 2 presents an Inventory of GDD in WATSAN in selected organizations which include UN-HABITAT, GWA, and UN Sister Organizations.

Chapter 3 provides a Framework that highlights the indicators and parameters most commonly used in Africa in the collection, analysis, utilization, monitoring and review of GDD in WATSAN.

Chapter 4 presents an Overview of different Methodologies in use for Collecting GDD in WATSAN, of gender analytical tools, and other conventional data collection tools, highlighting their strengths and limitations in the collection of GDD.

Chapter 5 presents four Case Studies from different African countries that demonstrate the collection, analysis and utilization of GDD in WATSAN.

Chapter 6 proposes a Methodology of how to develop, update, and maintain the database of GDD in WATSAN in Africa.

Chapter 7 presents a Policy brief on GDD in WATSAN with key recommendations,

Chapter 8 concludes this review, giving some recommendations for follow up to this study.

2 INVENTORY OF GDD IN WATSAN OF SELECTED ORGANIZATIONS

Purpose of the Inventory

The purpose of the inventory is to provide a relevant, easily accessible, reasonably comprehensive, and user-friendly reference of sources of GDD in WATSAN required for assessing the differential effects of policy measures on women and men. In addition to collecting GDD from a variety of worldwide sources and tabulating it in a concise format, the inventory also reviews the data and outlines how this data can be used effectively for policy and decision making. It adds to the global body of GDD and serves as a guide for mainstreaming gender in water and sanitation providing contacts and sources of best practices. Ultimately, it lays the groundwork for identifying gaps in the generation and use of GDD in WATSAN. In this way the inventory helps in tracking the pivotal role of women in development and to apprehend the specific contributions of women as a 'Major Group' in society (as outlined in Agenda 21), thus contributing to achieving the MDGs on water, sanitation, and gender equality.

Methodology Used and Findings

In producing the inventory on key sources of Gender Disaggregated Data in WATSAN various methods were used. These were conducted within three months from the start of the review. Interviews with key informants from UN Habitat, GWA and other related organisations were conducted. New data and information was obtained in hard copies and electronic formats. Some informants admitted that whilst there is a lot of GDD in their office documents they do not know what to do with it and how to make it accessible to all. Some of the data accumulated was in raw form, some semi processed, and some fully processed. Visits to key libraries also provided insight into many local project-level sources of GDD which are lying idle and not being used, and visits to gender and water institutions such as IWSD in Zimbabwe revealed a wealth of information on GDD from across the African continent. Internet research was another key method for obtaining sources of GDD. Key websites were visited and researched including UNHABITAT, GWA, UNICEF, UNESCO, UNDP, CapNet, SADC, CIDA, SIDA, Gender Unity, websites of Women's Organisations and Universities - all of which provided good sources of GDD. Emails sent to GWA members asking them for information on sources of GDD in WATSAN also helped to access of GDD collection from national, regional and global levels.

The inventory review noted that most of the sources had either guidelines for collecting GDD data or examples of indicators for in-depth analysis of GDD, but not the actual GDD. The main indicators which featured in most sources included:

- Reduction of time spent to fetch water
- Access to appropriate sanitation in private and public places (including in schools)
- Equitable access to water rights for productive uses
- Percentage of women trained in water projects
- Proportion of women and men trained in use and maintenance of WATSAN facilities
- Percentage of girls learning WASH education
- Participation and equity in decision making e.g. WATSAN committees
- Number of women participating in income generating activities as caretakers of WATSAN facilities (toilets and water taps), water sellers managing water kiosks, and as waste collectors
- Positions of women in WATSAN utilities decision making
- Proportion of women and men participating in municipal management and local governance in WATSAN
- Proportion of women and men trained in use and maintenance of facilities
- Proportion of women and men sensitized in protecting surface and ground water
- Ratio of girls to boys enrolment in primary schools
- Additional income generated from improved access to water and sanitation
- Size of poor households benefiting from subsidized connections
- Number of women heads of household who pay their water regularly
- Level of savings of beneficiary women and youths

Please see Annex 5 for the Inventory of Key Sources of GDD in WATSAN.

3 FRAMEWORK OF PARAMETERS AND INDICATORS TO ORGANISE GDD IN WATSAN

Purpose of the Framework

The purpose of the framework is to provide guidance on how to analyze GDD and make this available for use by planners, policy and decision makers. The framework will firstly help to identify gaps in depicting the actual situation of men and women's access to WATSAN which are often masked by gender-blind assumptions of surveys and other methods of quantitative data collection. The Framework will then help to answer the questions such as: How can we make use of GDD? How should GDD be interpreted?

GDD Parameters and Indicators which are Absent or Under-represented in most common data collection methods²

For data to be useful at the lower levels it is important to show a realistic picture, which means that for a variety of different indicators information needs to be collected and the trends monitored. The higher the level, the fewer the different details can be taken into account. The Expert Group Meeting that came together for this purpose in New York tried to cut down the number of indicators to as few as possible for the global level, which was 6. It was even suggested to include just two gender indicators in the JMP reporting. However, this suggestion has still not been taken over by the programme in their recent report of 2012.

In this framework we divide the gender subjects into 10 themes, each with their own number of indicators. The lower the level and the smaller the scale of collecting information, the more details are possible and required.

Within each theme the indicators in bold type are the most important ones to include in the monitoring protocols of WATSAN programmes.

² Most parameters adapted from the EGM Report 2009, and UN-HABITAT 2006 Framework for Gender Mainstreaming, Water and Sanitation for Cities and from the Inventory List in Annex 5.

Issue/Theme	Checklist/Parameters	Indicator
Gender and water/ sanitation use	Use of water within households (productive or reproductive uses)	<ul style="list-style-type: none"> • Percentage of water being used for reproductive tasks like cleaning, cooking, hygiene, and drinking • Percentage of water being used productively: for agriculture, vegetable gardens, and other economic activities • Access to water rights for productive use e.g. irrigation
	Gender and mode of transport in water collection	<ul style="list-style-type: none"> • Ratio of men to women collecting water • Modes of transport used by men and by women to collect water (mechanized vs. not mechanized)
	Gender differences in access to safe and clean water	<ul style="list-style-type: none"> • Percentage and geographical coverage of the population using <i>improved/ treated</i> water for consumption and sanitation services by gender
Safety in using facilities	Gendered views of safety of access to water supplies or sanitation facilities	<ul style="list-style-type: none"> • Percentage of men vs. women who access WATSAN facilities safely • Level of satisfaction of men vs. women with the safety of their water and sanitation services
	Violence against women/girls in the context of water collecting or using sanitary facilities	<ul style="list-style-type: none"> • Percentage of cases of violence against women/girls reported during collecting water or using sanitary facilities
	The disposal of faecal wastes at Household (HH) level and in public sectors	<ul style="list-style-type: none"> • The number of men vs. women involved in disposing faecal wastes at HH level and Public Sector level
Time use	Are WSS services within easy reach?	<ul style="list-style-type: none"> • Percentage of women and men within 500 metres to improved water source and sanitation facility
	Total time spent by men, women, boys and girls in collecting water to meet daily needs including waiting time at public supply points	<ul style="list-style-type: none"> • Time spent by women, men, girls, boys to collect water, and time spent waiting at public taps
	Indicators to monitor not only the existence of facilities and services, but also who benefits and how much from these	<ul style="list-style-type: none"> • Time saved by women, men, girls, boys using improved water and sanitation services.
Decision and policy making	Roles played and efforts expended by women and men in safeguarding the WATSAN access	<ul style="list-style-type: none"> • Distribution of gender roles in safeguarding WATSAN facilities • Tasks of women and men in maintenance and cleaning of WATSAN facilities and time spent in them
	Ratio of men to women participating in formal settings	<ul style="list-style-type: none"> • Positions of women in WATSAN utilities decision making (Water User Groups, Water User Alliances)
	Are sector meetings at community level organized to overcome cultural barriers to women's participation, (cultural norms,	<ul style="list-style-type: none"> • Ratio of contributions in decision making meetings by women and men (actual participation in meetings).

Issue/Theme	Checklist/Parameters	Indicator
	seating arrangements, language, and meeting times)?	<ul style="list-style-type: none"> • Attendance of men and women in formal WATSAN meetings
	Do agencies allow citizens to influence their plans, budgets and strategies, based on the voices of both women and men?	<ul style="list-style-type: none"> • Percentage of decisions adopted from women's contributions in WATSAN committee meetings
	Is there equal participation of men and women at all stages: initiation, design, site location, implementation, price setting, O&M and management? Are there equal economic benefits from WSS interventions?	<ul style="list-style-type: none"> • Percentage of men and women engaged in initiating, siting, implementing, using, and O&M of WSS. • Percentage of women participating in water committees,, municipal management, and local governance • Percentage of men and women involved in voluntary and compensated labour in WSS interventions
	Do policy makers and regulatory bodies make use of feedback mechanisms for complaints and challenges faced by citizens from their providers, including those on lower levels of service, such as for those relying on stand pipes and kiosks?	<ul style="list-style-type: none"> • Number of policies and strategies published with inputs from non-state actors and marginalized groups.
	Decision-making power and processes on WATSAN within household (HH)	<ul style="list-style-type: none"> • Percentage of women who make decisions about WATSAN in male headed HH
National Policies	Are specific gender objectives articulated within national water and sanitation policies and strategies?	<ul style="list-style-type: none"> • The existence of gender policies within agencies involved in sector development • Use of gender experts/staff in public WATSAN departments
Training/ education	Do men and women have equal opportunities in WATSAN trainings? Are women encouraged to attend training?	<ul style="list-style-type: none"> • Percentage of women and men trained in scheme management. • Percentage of women and men trained in water projects • Proportion of women and men trained in O&M of facilities • Ratio of girls to boys enrolment in primary schools • Percentage of girls learning WASH education • Proportion of women and men sensitized in protecting surface and groundwater
	Do women have managerial positions in WSS management	<ul style="list-style-type: none"> • Percentage of women and men represented in the management bodies of water institutions at policy and operational levels. • Proportion of women and men participating in municipal management and local governance in

Issue/Theme	Checklist/Parameters	Indicator
		WATSAN
Costs and benefits	Gendered economic benefits from improved access to water	<ul style="list-style-type: none"> • Percentage increase in income for women and men from productive uses of water • Number of poor households (HH) benefiting from subsidized connections • Number of women heads of HH who pay their water regularly • Level of savings of beneficiary women and youths
	Gendered dimensions of costs and benefits from privatization of WATSAN	<ul style="list-style-type: none"> • Number of women who own privatized WATSAN facilities • Number of women participating in income generating activities as caretakers of WATSAN facilities (toilets and water taps), water sellers managing water kiosks, and as waste collectors.
	Female/male-headed household expenditures on WATSAN	<ul style="list-style-type: none"> • Percentage of income spent by women and men in accessing WATSAN services in different geographic zones in the country
Public and school based WATSAN	State of public sanitation provision Is there a national strategy for sanitation in schools, with emphasis on safe, separate, well-maintained facilities for girls and boys?	<ul style="list-style-type: none"> • Public toilets with separate facilities for women and men • Toilet ratios per girl and boy in primary schools.
	Extent of public/private provision for women's/girls' menstrual needs	<ul style="list-style-type: none"> • Existence and quality of sanitation facilities with specific needs of for girls –toilet designs
	Prevalence of open defecation on water land by male/female, girls/boys	<ul style="list-style-type: none"> • Ratio of men/women open defecation
Health and Sanitation	Prevalence of water borne diseases, e.g. cholera	<ul style="list-style-type: none"> • Percentage of women, men, girls, and boys affected by outbreaks of water-borne diseases
Survey /Research Methodology	Sex of interviewers/ respondents in WATSAN surveys	<ul style="list-style-type: none"> • Number of women interviewers • Number of women as respondents during household surveys

Source: Adapted from UNDESA and UNW-DPC 2009 Gender-Disaggregated Data on Water and Sanitation Expert Group Meeting; and UN-HABITAT 2006 Framework for Gender Mainstreaming, Water and sanitation for Cities, and selected sources from the inventory list in this report.

How can we make use of GDD in WATSAN and how should GDD in WATSAN be interpreted?

The formulation, assessment, and review of policies, projects and programmes and documents in WATSAN needs use of a 'gender lens' which reveals differences and inequities

that exist between men, women, girls, and boys, and other marginalized and disadvantaged groups.

For a Checklist of questions that can form the basis for the Framework Analysis of GDD in WATSAN please see Annex 6. (Source: *Gender Links 2000 Mainstreaming Gender in Water and Sanitation: Literature Review for the South African Department of Water and Sanitation, Johannesburg*)

A Minimum Agenda for Gender Mainstreaming in Water Management

In addition to the framework given above, a Minimum Agenda developed by GWA and Both Ends (2006) provides useful guidelines. It proposes that GDD in WATSAN can only be considered to be effective if all the different actors in Gender and WATSAN are involved in policy making and implementation at their various levels, within their various capacities, and armed with the right tools in an enabling environment. The different actors in WATSAN include the policy makers and funding agencies, trainers and researchers, the practitioners in the field (technical and non-technical staff), and gender experts. Their minimum required tasks, and the tools and the enabling environment they need within which to carry out these tasks are concisely outlined in the Table in Annex 7.

4 OVERVIEW OF DIFFERENT METHODOLOGIES IN USE FOR COLLECTING GDD IN WATSAN

All the organizations studied in this review have used common tools of data collection to complement the gender analytical tools while collecting GDD in WATSAN. This section gives an overview of the conventional data collection tools and the gender analytical tools in use, specifying the advantages and disadvantages they have for collecting GDD .

Secondary/Literature Review

This entails the use of existing records from both internet and libraries of key institution, including published and unpublished work in the areas of specific interest to the researcher.

As Kritsonis (2009) puts across “literature review involves the systematic identification, location and analysis of documents containing information related to the research problem being investigated. It helps to ensure that no important variable is ignored that has in the past been found to have impact on the problem i.e. ensures that all relevant variables in the research project are included. In addition, it provides the foundation for developing a comprehensive theoretical framework from which hypotheses can be developed.”

The main advantages of this methodology are that it is cheaper and faster to obtain than Primary data, it is already processed, and can provide information which is not always easily accessible to a typical researcher. The disadvantages are that the data may be outdated, there may be faulty assumptions that the study is based on which are hidden from the reader, and that it is difficult to verify the accuracy of the data and the conclusions reached.

For GDD it is important to know what, if any, assumptions about gender relations lie at the basis of the research/study. As gender relations and variables differ in different cultural, social, economic, and political contexts it may be difficult to generalise the conclusions of a study to our own particular context.

Questionnaires

Questionnaires are data collection tools involving a structured, pre-selected list of questions which can be administered by physically distributing/taking the questionnaires or distributing them through (e-)mail. This tool is very useful in collecting GDD in WATSAN.

The main advantages of using questionnaires are that they allow collection of large amounts of data in a cost effective way within limited time. They are good in collection of statistical data and data gathered through this tool are easy to analyse and compare. This is a reason why they are often used to collect GDD. According to Saunders and others (2009)

“questionnaires allow the respondent to provide honest answers due to anonymity thereby reducing the bias that would arise in face to face interviews.” Moreover, questionnaires allow the respondent time to think about the answers and have no geographical limitations.

The main disadvantages of using questionnaires relate to their close-ended structure and requirement of yes/no type of answers which precludes generation of in-depth data, and limits the opportunity for researchers to probe for additional information or to clarify answers. Also, there is no control over who fills out the questionnaire. Experience has shown that usually there is low response rate which may not give a true reflection of the final results. Questionnaires also take longer to complete than personal interviews and at times respondents are illiterate and require an interpreter. For all these reasons questionnaires are not good for eliciting qualitative gendered data, and tend to exclude the most marginal groups like for e.g. illiterate women, and the elderly in rural societies.

In-depth Interviews through Telephone or Face to Face

Interviews are also being used in gender and WATSAN collection of data. According to Creswel, (2007) an in-depth interview is “A technique used to elicit a vivid picture of the participant’s perspective on the research topic.” The main aim of in-depth interviews is to obtain detailed information, delve deeper into the reasons behind the answers, opinions or emotions of the respondent.

Again, as noted by Creswel “Researchers engage with participants by posing questions in a neutral manner, listening attentively to participants’ responses, and asking follow-up questions and probes based on those responses. They do not lead participants according to any preconceived notions, nor do they encourage participants to provide particular answers by expressing approval or disapproval of what they say.”

The main advantage of in-depth interviews is that they are appropriate for addressing sensitive topics that people might be reluctant to discuss in a focus group setting (Kumar, 1989). This makes them a good tool to use to get qualitative GDD. This type of interview is more flexible as the interviewer can explain questions not understood by the respondent. In addition, depending on the respondent’s answer, the interviewer can skip some questions and probe more on others, thus adapting to the immediate respondent and/or environment. This again makes it more suitable for acquiring qualitative data that reveals the variable gender dynamics more accurately.

In-depth interviews however also have some disadvantages. As noted by Ritchie and Lewis (2003) “ In-depth interviews may not produce good results if the interviewer is not skilled, and lack of structure makes results susceptible to interviewer interpretation.” A specific problem for collecting GDD is when “factors such as tone of voice, the way a question may be rephrased, voicing an opinion, inadequate note taking, even the gender and appearance of the interviewer may lead to errors and bias” (Minter 2003). Especially when the interviewer is male, women will in some settings not be comfortable to discuss personal

questions with him. In case of phone interviews, most disadvantaged groups (those without a telephone) are automatically excluded from the research. Finally, the process for analysing the data is time consuming compared to closed ended questionnaires, and is less efficient in terms of cost than in focus group discussions.

Focus Group Discussions

From the survey of literature conducted Focus Group Discussions (FGD) are used quite often to collect GDD in WATSAN especially at community level. The group usually consists of six to ten people with a moderator focusing the discussion, hence the name FGD. Kumar (2005) notes that, FGD are normally held in a pleasant place, with refreshments to create a relaxed environment and to motivate the group. The moderator initiates discussion by posing questions while someone will be taking notes of the discussions. At times video tapes are used to ensure all discussions are captured. The notes are processed through identifying major themes and coding them. From the analysis of documents in this survey, most note that separating women from men usually yields good results.

FGD is preferred to personal interview because it is a cost effective way of collecting in-depth data, and obtaining group consensus on gender issues in WATSAN. An additional advantage of FGD is the insight it gives into the (gendered) decision structures within the focus group, such as, who has the power to make decisions? Who merely listens and only speaks when directly asked? (Hedon, 2010:4)

Disadvantages

However a FGD's success or failure depends on the skills and experience of the Moderator. As Mugo (2011) notes "If the moderator is not experienced enough to control and direct the discussion, it is very easy for the whole discussion to be dominated by a few people. This happens when groups consist of both men and women as culturally women have constraints in public speaking in the presence of men." Also FGD are not suitable for discussing sensitive topics that fall into the sphere of 'taboos' for e.g. AIDS, menstrual hygiene etc. Finally, FGD is limited to a local and smaller group unlike telephone and email discussions which do not have limitations of time and location. (Mugo, 2011)

Daily Activity Calendar

Mugo (2011) asserts that the Daily Activity Calendar (DAC) was mostly utilized by the Sanitation Hygiene Education Programme (SHEP) project to understand variances between activities of men and women in the target districts. This emerged as a powerful tool in understanding power relations, indicated by how women and men spent their time every day. This in turn formed the basis for gender mainstreaming training.

Case Studies

Case studies have been used in gender and water to collect detailed information of a particular issue at a particular place and time. The case study approach is not a method for collecting data, but rather a research strategy or design whereby a variety of research methods such as interviews, observation, and questionnaires can be used. Case studies when conducted thoroughly can be an excellent source of accumulating qualitative and quantitative GDD on WATSAN in a region and/or country. These can then be used for analysis and cross-comparison purposes.

Time Use surveys, Labour Force surveys

Labour Force Surveys tabulate economic activities divided into productive and non-productive activities, where productive activities are associated with work while non-productive mainly comprise personal activities. According to the System of National Accounts (SNA), “production excludes all household activities that produce domestic or personal services for own final consumption.” Since women are predominantly involved in “unvalued and invisible activities” their contribution to the economy is not captured in the framework of the standard SNA, and it is not a gender-sensitive data gathering tool.

In order to overcome this problem, statisticians are trying to capture unpaid work and household production through specific surveys. Time-Use Survey (TUS) is an example of this, where paid and unpaid work is analysed allowing the capture and evaluation of the entire economy. Despite the consensus of the importance of TUS less than 10% of countries on the African continent have undertaken this kind of surveys. (OECD 2009)

5 CASE STUDIES

This section provides a snap shot of organizations that have generated GDD in their WATSAN projects and programmes. It was intended to select case studies that would illustrate the added value of the collection of GDD where it is properly generated, analyzed and utilized for various uses including policy advocacy in WATSAN.

Two of the case studies were to be drawn from UN-HABITAT supported programmes in Ethiopia and Ghana, as an impression was given from talks with programme staff that a gender framework had been integrated in the data collection methods. The other two case studies are drawn from different programmes in Zimbabwe UNICEF, and South Africa (obtained through Internet search and GWA referral). Later it appeared that the two UN-HABITAT projects chosen did not have much actual GDD, and data was not collected separately for women and men from the start of the WATSAN interventions. However when project evaluation revealed the gender and equity gap this had created, a more gender-sensitive approach began to be taken in these projects which demonstrated that that once GDD is available, it makes WATSAN activities more effective and equitable. Hence rather than ‘good practices’, the first two case studies can be seen as ‘practices that learnt from their own mistakes’.

Whilst searching case studies from various sources, it became evident that the collection of gender disaggregated data is not a common practice, as it should be in water and sanitation programmes.

CASE STUDY 1: Small-scale Community-based Water Supply and Sanitation Project in Dire Dawa city, Ethiopia

Case Study Summary

Goro-Sabian and Gende Gerada are poor communities in Dire Dawa city in Ethiopia. Under the UN-HABITAT WAC II Water and Trust Fund, a small scale community based project has been implemented by Dire Dawa Water Supply and Sewerage Authority (DDWSSA). Here, mobile toilets have been installed. The daily running of the facility has been outsourced to youth members of the area through their association. Public water points have been installed. These informal settlements were suffering from poor water supplies prior to interventions. Solid waste was not collected, and people here paid more for provision of water than in other areas. Typically, about 4,000 people live in an informal settlement like this, but there is no official record of the actual population. Achievements have been the provision of 4 mobile toilets (benefiting up to 200 people per day), 4 solid waste collection bins and the construction of a community toilets complex including shower facilities. Further the construction of 8 public water supply points is stated as benefiting over 5,000 people. The project included the training of 25 public tap operators.

Background and Problem

Before the intervention the urban water supply and sanitation sector had serious problems. The sanitation situation in Goro Sabian and Gende Gerada, shanty towns in Dire Dawa was such that the streets were full of garbage, toilets non-existent, and even if they existed were not properly managed to give proper services. Garbage was not collected, and people here paid more for provision of water than in other areas. In a settlement like this, about 4,000 people would live, yet, numbers remain unofficial.

Objective of Programme

The goal of the Dire Dawa WAC II programme is to contribute towards the improvement of the living conditions of the urban poor by providing a foundation to address some of the critical areas of the urban WATSAN challenges through direct impact demonstration activities, in parallel with focused capacity building interventions.

The specific objective for the small scale community based water supply and sanitation project for Goro-Sabian and Gende Gerada Communities was to construct public toilets and a shower service complex near by the old railway station with a total member of beneficiaries stated as up to 30,000.

Outcomes

The UN-HABITAT project has addressed WATSAN problems of the urban poor in Goro-Sabian and Gende Gerada communities in partnership with the local government agencies and NGOs (UN-HABITAT 2011). Achievements include:

- Improved water supply in Goro-Sabian and Gende Gerada communities: The improved water supply mainly benefits women users, as distance and their time to fetch water has been significantly reduced. In Dire Dawa, eight Water Points (public taps) have been constructed in both targeted communities and over 5,000 people now have access to safe drinking water from public taps (one public Water Point was also constructed in the outskirts of Gende Gerada).
- Guidelines to manage the water points were developed. These include a provision that at least 90 per cent of water supply operators employed in public water taps should be women or girls. This promoted pro poor governance in the city.
- The project included the training of 25 Public Tap Operators which included women, though no specific number was given.
- The construction of 15 rainwater harvesting tanks with the capacity of 25 to 50 m³ has been completed. These schemes are located in pilot schools, community centres and prisons. The total number of beneficiaries is estimated to be 9,820 - both men and women.
- Under the capacity building component of the project, training manuals, technical guide lines, O&M manuals have been developed and are in use by the authorities for further rainwater harvesting initiatives (report Nordic Consulting Group, 2011)
- Women now manage the new WATSAN infrastructure and have been able to raise some income from four mobile toilets constructed and seven 'use and pay' toilets.
- The initiatives have been influenced by the Government to finance the construction of more mobile toilets, beyond its original commitment stated in the CA, and women have been trained as care takers of public toilets providing a source of income.

- Under the HWWSHE component, the project improved the sanitation conditions in four selected model schools serving female students and staff.
- Solid Waste Management has been introduced through training and provision of equipment, and is undertaken by youth groups (mainly women who collect wastes from household charging fees).
- There were now fewer girls who dropped out of school.
- The Sanitation Complex has been given to operators who are unemployed (mainly women), who form an association which is able to generate profits from the running of facilities.

Key factors for Success



School Rainwater Harvesting Dire Dawa city, Ethiopia (Source: UN-HABITAT)

UN-HABITAT has clearly understood that community participation in the water sector is essential and that women in particular, who have special responsibilities in the field of water supply and sanitation, are important agents for change. This understanding led to some effective planning and implementation of WATSAN activities in Dire Dawa WAC II Programme.

Key Challenges

The collection of GDD was not adequate and so reports lack adequate gender information, such as

who uses the model toilet complexes, how many women are Public Tap Operators.

- Gender initially was misunderstood requiring much campaigning.
- In Dire Dawa, a change in the city administration in June 2008, which led to the replacement of three of the four implementing partners and Bureau Heads, posed great challenges to the project, disrupted coordination and delayed progress. However, implementation was resumed in November 2009, and is almost completed.
- Concern has been expressed regarding lack of funds for O&M, and effects of high staff turnover in the government, both jeopardising provision of services to the communities and long term sustainability.
- Overall gender mainstreaming in WATSAN policies for Ethiopia was not found.

Lessons learnt

- More attention is still needed to collect GDD data to ensure gender quality of benefits of projects.
- Insecurity of land tenure in these informal, urban settings is a major problem for women.

- Awareness raising and consulting community members about their needs and priorities in WATSAN is crucial
- Using community development approaches allows the poor to have a voice and participate in the project implementation and collective decision making, and facilitates their ownership in the project.
- Without adequate GDD in planning instruments, operational plans and progress reporting, impact analysis of gender mainstreaming can at best only be estimates.

Looking Ahead - Sustainability and Transferability

UN-HABITAT has put in place its programme normative models for community and stakeholder participation. The Gender Awareness Package and gender strategies are all part of the normative model, quite successfully replicated throughout most countries. Other examples of replication are community and women groups managing WATSAN facilities, and sanitation awareness campaigns in schools and communities (UN HABITAT 2011).

Sources of Information: -

- UN-HABITAT website <http://www.unhabitat.org/content.asp?typeid=19&catid=499&cid=3210>

-Wubishet Y. 2008 Sanitation and Beautification Agency Of The municipality of Dire Dawa City Base line information on Sanitation & Hygiene in Dire Dawa City, UNHABITAT Water for African Cities/WAC/ Program II

CASE STUDY 2: Integrated WATSAN Interventions in the Sabon Zongo High Density Area, Accra - Ghana

Case Study Summary

Sabon Zongo³, is a poor slum settlement of 22,000 people, most of whom are foreigners. It has also attracted a number of disabled settlers. A comprehensive study was carried out on the existing socio-economic situation of poor people, especially women. It involved identifying women's involvement in various income generating activities, need for skills development and training for men and women, and willingness to pay for WATSAN improvements and services. The survey was followed by a gender training workshop.

Background and Problem

Before the UN-HABITAT WAC Programme the slum settlement's toilets were encrusted, overflowing pits surrounded by crumpled scraps of waste papers and they were the only facilities depended upon by the entire population of 18616 in 2000. Male and female formed 50.1 and 49.9 per cent of the

³ Zongo is the Hausa word for "stranger squatter", used throughout West Africa especially by Muslim migrants. Sabon Zongo means "new stranger squatter".

population respectively. High population density is a key component of the WATSAN issue in Sabon Zongo. While the average population density of Accra is 140 persons per hectare (ha), it was about 650 persons per ha in Sabon Zongo in 2000 (Owusu and Afutu-Kotey, 2010). Constructed and natural drainage systems get choked with human and solid waste. The massive use of plastic bags has further exacerbated the situation.

The neglect of basic infrastructure particularly sanitation, waste disposal and drainage in the migrant community clearly distinguished Sabon Zongo from the other neighbourhoods.

Objective of Programme

The objective was to improve health and productivity by increasing access to safe drinking water and proper sanitation facilities on a sustainable basis, and trigger investment in the sector to meet the WATSAN related Ghana Poverty Reduction Strategy, and MDGs.

Outcomes

Pro-Poor Governance for Water Supply and Sanitation Services

Community Development Committee (CDC) made up of five women and six men was established to govern water and sanitation services. The Committee which represent various groups in the community including the youth and the disabled is headed by a female assembly member. Members have also received training on how to mainstream gender concerns in the project activities. The committee meets regularly twice a month to monitor the implementation of the project. The committee has participated in poverty mapping, infrastructure audit and needs assessment to determine the baseline situation and preferences for WATSAN facilities and services (UN-HABITAT 2008 Review).

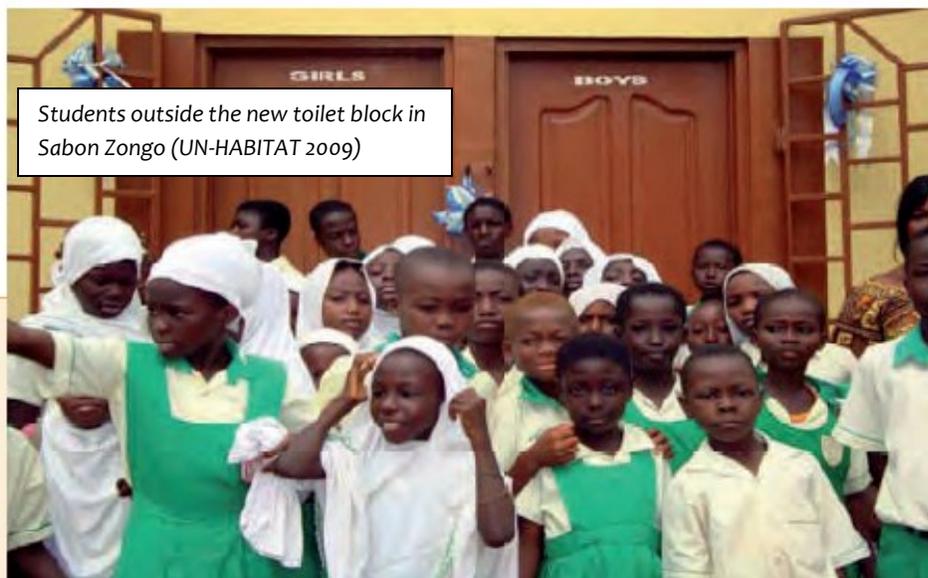
Table 5.1 Beneficiaries of Training

Intervention areas	Training	
	Men	Women
UN-HABITAT and Ghana Water Company Limited Increase In Access to Drinking water at Lifeline Tariff in Sabon Zongo	60	81
UN-HABITAT and Ghana Education Service to Carry Out Human Values Based Water, Sanitation and Hygiene Education with a Focus on Sabon Zongo School Pupils and Community	134	135

Source: UN-HABITAT WACII 2010 Review Technical Report

Access to Sanitation Facilities and Services for the Sabon Zongo Community

Designs to improve existing toilets, construct waste water and flood water drains and improve garbage collection were delivered under the WAC II project through cooperation with WaterAid. The designs were reviewed by the CDC, group leaders, and disadvantaged groups like cripples in the community. As a result of these reviews, the designs were amended to incorporate the concerns expressed by the CDC and members of the community.



A 20-Seater Toilet constructed is easing pressure on the public toilets in the area. Some 25 per cent of the population is benefiting. A Toll Booth managed by women enables them to earn some income. The Pilot Household Water Closet (WC) Toilets have been appreciated by the selected households in the communities in which they have been provided. The neat, well

ventilated building is divided into sections for women and for men, each with six sitting toilets, three squatting toilets (as is traditional here), and a wider one with a wheelchair ramp and handles for disabled people. There is even a sentry post at the entrance - no one gets past the attendant without using soap.

In addition to the 20-seater toilet, a total of 1100 school children from Laterbiokoshie two and three and DaAwatul Primary Schools are benefitting from the two 8-seater WC Toilet. This is saving them time that they spend in accessing facilities in town and also gives them more time for studies. Sanitation improvements in schools are said to have decreased the incidence of school drop-outs among the young girls. But no figures have been available to show that this was a result of the UN-HABITAT initiatives (UN-HABITAT 2011).

In www.Solutionsforwater.org, UN-HABITAT and Ghana Water Company Ltd report that the project helped 3858 men and 3842 women to get access to household water connections, and 5183 families to access an improved public water source.

Table 5.2 Gender Sensitivity of Projects in Ghana

Project	Gender Sensitive	Explanations Given by Beneficiary Group
Co-operation with Ghana Water Company Limited to increase access to water supply at reduced costs and to manage water demand while creating awareness about the project.	Yes	Accuracy in the billing system ensured that women used more water to improve their health and reduce time spent in long distance water fetching.
Co-operation with WaterAid for pro-poor water sanitation governance to increase access to sanitation facilities	Yes	Women were involved in planning and implementation of the project since they are the most affected by poor water and sanitation services.
Co-operation with Ghana Education	Yes	School girls were the most targeted in the

Service on HVBWSHE		HVBWSHE
--------------------	--	---------

According to the survey of the WAC II projects in Ghana, UN-HABITAT consultant notes that about 86 per cent of the beneficiary groups said that women in the project area were involved in the project preparatory phase whilst 14 per cent mentioned that women in the project area were not involved (UN-HABITAT 2011).

Key factors for Success

The frontline role played by the Community Development Committee involving women in the absence of Town Council/Unit Committee was very useful. They have a good appreciation of the challenges facing the community, and a better understanding of the community dynamics, and therefore play their facilitating role effectively.

Key Challenges

A major challenge confronting the implementation of the project has been the question of unclear ownership of the project, leading to conflicts between the Ablekuma Central Sub-Metropolitan Council and the CDC. Given that the CDC has played a very important role in sustaining interest of community members and serving as an important vehicle for community-entry its role is yet unclear without official endorsement of the Memorandum of Understanding (MOU) given the mandates of the CDC. In future project designs the signing of the MOU should be linked to specific stages of the project, preferably prior to commencement of actual physical works.

There was also the issue of squatters who encroached on lands earmarked for the project, and it has been very difficult to negotiate with them to relocate. Some areas meant for the construction of drains are mostly occupied by petty traders operating from kiosks. These challenges affected the progress of the project as it took several meetings to come to a consensus on various issues.

Lessons learnt

1. It is always important to collect GDD to see who is benefiting and who bears the costs of the project.
2. The CDC should be constituted early to enable them to participate in the project right from the beginning. Every effort should be made to ensure that there is gender balance on the committees.
3. The roles of the local administration e.g. Sub-Metro, water supply agency, sanitation agency and the CDC should be set out in a MOU and signed before field installations start.
4. The issue of availability and ownership of land should be resolved from the beginning. Any piece of land to be used must be thoroughly investigated and proper acquisition made.

Looking Ahead - Sustainability and Transferability

The model of the project which involves community stakeholder participation for pro-poor governance ensures sustainability. In response to the impact of the project, Ghana Government is undertaking Gender budgeting and a Monitoring Unit has been established in 2010. The gender strategies used have been replicated elsewhere with success.

Sources of Information:-

- UN-HABITAT 2011. Water in African Cities II (WACII) 2010 Review Technical Report
- www.Solutionsforwater.org
- Water Aid 2009 report

CASE STUDY 3: Gender Mainstreaming in WATSAN in Manzvire Village in Zimbabwe⁴

Case Study Summary

Water supply systems and sanitation facilities were rehabilitated in Manzvire village in Chipinge District in Zimbabwe by UNICEF in 2003. Before the project, women and girls used to walk long distances to fetch water, and as a result girls dropped out of school. The women were involved in selection of the project sites and technology to be used. They also established savings to service the equipment. The financial resources provided by UNICEF were targeted to repair and operate 15 boreholes, but with active women's participation in operation and maintenance, 60 boreholes were repaired and back in use. Women had more time for productive activities including market gardening, and girls' school attendance improved.

Background and Problem

Water supply systems installed soon after Zimbabwe gained independence in 1980 were often based on a supply-driven approach and not sustainable. Women lost much of their productive time travelling long distances to fetch water for their families. This also adversely affected girls' school enrolment – a trend further exacerbated by high dropout rates at puberty due to the lack of sanitary facilities at most schools.

In recognition of the imbalances which existed in the water sector and the question of sustainability of facilities, Zimbabwe embarked on a water sector reform in 1993. Women's participation in project activities was encouraged in line with global trends given the critical links between gender, water and sanitation. Four years later, the Chipinge district adopted a Community-based Management approach to water resource management and introduced it into some of its wards, including the village of Manzvire.

Manzvire village has a population of just over 5,500, with 514 households. About 290 households have access to individual 'Blair' toilets (Ventilated Improved Pit latrines) and 180 have access to pit latrines. At least 45 households were said to have no access to any form of decent sanitation but were allowed temporary access to their neighbours' facilities. There is no surface water in this village, with the closest source the Save River, approximately 15 kilometres away. People use

⁴ Adapted from <http://www.genderandwater.org/page/5685>

boreholes and shallow wells as water supply sources. The village has 10 bore-holes with at least eight reported to be functional. HIV/AIDS and rural/urban migration contribute to at least 80 per cent of the households being female or orphan-headed.

Objective of Programme

In 2003, UNICEF contributed approximately US\$ 4,000 to the Chipinge Rural District Council (RDC) for rehabilitation of water supply systems, mainly bore-holes. Given high external contracting costs, the RDC adopted a community-based approach and targeted funds for community mobilization and training workshops for local well sinkers and latrine builders.

Planning and selecting appropriate technology and sites for new water points, as well as upgrading and rehabilitating existing systems, are jobs that are increasingly based on both men's and women's participation. In Manzvire, the women selected the technology to be used as well as the site locations. An elder remarked, "It is the women who spend much of the time with this resource and we saw it fit for them to have a bigger share when it comes to decisions."

The women also established savings and credit with revolving funds to purchase the locally available spare parts and greasing materials. In Manzvire, women established a cooperative garden. Their male counterparts and husbands were asked to make contributions to the fund when required. The women opened a Post Office Savings Bank account to deposit these community funds.

Outcomes

- Women are actively involved in decision-making and now feel strongly that they are equally effective agents of change with men;
- Since the women's maintenance work is done on a voluntary basis, the work costs significantly less;
- The financial resources provided by UNICEF were targeted to rehabilitate 15 boreholes, but with active women's participation in operation and maintenance, 60 boreholes were rehabilitated;
- Women have more time for productive activities such as market gardening, which apart from giving them some cash, improves their nutritional base;
- Women are using interest charged from the savings and credit clubs to maintain bore-holes;
- Girls stay at school longer since they do not have to spend so much time collecting water;
- Better hygiene behaviour is practiced, including use of rubbish pits in local households;
- The health of the village has improved, including a significant decrease in diarrhoea cases; and
- The village of Manzvire will act as a role model for other communities in UNICEF's documentary.

Key Factors for Success

Health educators:

- The Ministry of Health was instrumental in training Village Health Workers, who took up the daunting task of educating and information dissemination to the general public on health and hygiene good practices.
- As a result, in Manzvire, health clubs and other community-led initiatives have been initiated.

Role of elected and traditional leaders:

- Much of the project's success can be attributed to the effective leadership of their dedicated councillor, Mrs. Chirimambowa, and to traditional leaders who were called upon to resolve disputes.

Key Challenges

Males felt their roles were threatened:

- Initially, in the male-headed households, the husbands felt threatened and disapproved their wives' involvement in project meetings. A UNICEF workshop raised awareness of the benefits of training both men and women, which helped the men accept that their wives were equally important agents of change. The men demonstrated their acceptance by assisting with other household tasks while their wives were attending related community meetings and training.

Traditional dress:

- The long traditional dress worn by Zimbabwean women inhibited work for the latrine builders, and initially overalls and work-suits were considered inappropriate.
- Women can now freely wear work-suits and overalls during latrine construction and repairing of bore-holes.

Looking Ahead - Sustainability and Transferability

For future projects, it is important to remember that:

- Gender mainstreaming in itself is not a panacea for solving water and sanitation problems;
- Poverty carries with it limited access to safe water and sanitation and poverty needs to be addressed if true empowerment is to be achieved;
- Labour involved in community-based management must be divided equitably between men and women so that the women do not wind up with even heavier workloads that offset the benefits of the improved water and sanitation facilities; and
- There is a need to invest heavily in capacity building at village, district and national levels. There is also need for institutional set-up to spearhead and assist with the research, documentation and distribution of findings on gender mainstreaming for implementation.

Sources of Information:-

- Office of the Special Advisor on Gender Issues and Advancement of Women, *Gender, Water and Sanitation; Case Studies on Best Practices*. New York, United Nations (in press).
- Contact the researcher: Luckson Katsi: luckson_katsi@yahoo.com
- To read about the country and UNICEF's involvement in Zimbabwe: <http://www.unicef.org/infobycountry/zimbabwe.html>

CASE STUDY 4: Women in Sanitation and Brick-making project in Mabule Village, South Africa

Case Study Summary

The Sanitation and Brick-making Project in Mabule Village with 8 women in its Committee of 10 members, has transformed lives in the village. Before this project the Department of Health (DoH) had been carrying out health-related activities in the Mabule Village area, educating people on issues such as preventive healthcare for children, without significant change in behaviour. Among the outcomes of the project were improved hygiene, improved toilets (with more privacy for men and women), women empowerment through more equitable division of labour, and six women and four men employed in brick making.

Background and Problem

Mabule village in South Africa encompasses 450 households. Mabule's men are generally migrant workers. Their absence leaves women with the full responsibility for children, care of the elderly, feeding the family, as well as time-consuming tasks such as firewood and water collection. In this village, the high prevalence of diseases such as cholera was due to an unhygienic environment and lack of suitable sanitation facilities. Little attention was paid to personal sanitation. The nearest water source was 10 kilometres away. For many women and girls, visiting the sanitation facilities had become very difficult because of the poor construction and hygiene. Boys and men often relieved themselves in nearby bushes. The lack of hygiene-awareness, scarcity of basic building materials such as bricks, and the villagers' low skill level made it difficult to change this situation.

Objective of Programme

The Mabule Sanitation Project was developed to respond to these problems through a joint initiative of the Department of Water Affairs and Forestry (DWAF), the community and the Mvula Trust. The latter is an NGO implementing WATSAN projects in South Africa, focusing on women's empowerment. The strategy chosen was aimed at ensuring that women participate fully in service development, since it is women who generally ensure that the services developed meet everyone's needs.

The Department of Health (DoH) had been carrying out health-related activities in the Mabule Village area, educating people on issues such as preventative healthcare for children, but the programmes had not been effective in changing the community's behaviour towards good hygiene. A group of women in the village had brought up grievances about the village's deteriorating health and hygiene situation and expressed a wish to change this situation.

Impressed with the Mabule women's commitment to developmental change, the Mvula Trust and the DWAF provided project resources and material support for the sanitation project. At the government level, the DWAF made a decision to fund sanitation projects only where there was gender balance in terms of decision-making. The project was run by a committee that was elected by the community, which established clear criteria for membership eligibility. Due to the educational criteria, women who had benefited from the DoH's previous education programmes were elected to fill eight of the 10 seats. Moreover, a brick-making project was established to obtain materials for

latrine construction and generate cash. Both the sanitation and brick-making projects faced challenges that were gender-based. An analysis of the gender division of labour was made as part of the project to help the community members understand the importance of women's contributions to the community and to the project in particular. Committee members raised awareness of the benefits of good hygiene.

Outcomes

Health and sanitation

- The community now has safe, hygienic and attractive toilets
- The community is experiencing improved health and hygiene, including more dignity and privacy for both women and men with regard to solid waste management.

Women's empowerment

- There is increased acceptance of women's leadership roles by community members, local government and NGOs, as well as an increased collaboration between women and men
- The Committee's women members have learned to manage the entire life cycle of a project.

Community development

- The brick-making project has employed up to 10 people, four of whom are men and six of whom are women, and the community has access to affordable bricks
- Other related income-generating activities have been established, and now there is more money being retained in the community by both women and men.

Key Factors for Success

Assessment and Mobilization of the entire Community

- People were sensitized to gender issues in the context of their community;
- The interests and welfare of women and men were built into project design and management;
- Diverse approaches were used to draw wide participation to promote changes in hygiene behaviour; and
- The entire community, including city councillors and leaders, were involved in order to illustrate to community members that they are in control of the process.

Gender analysis and Mainstreaming

- Time constraints that women and men face related to water and sanitation were assessed;
- Gender roles and responsibilities were explored in a sensitive and unthreatening manner to see how and if they could be altered;

- An enabling environment was created so that women could participate, e.g., meetings scheduled when women could attend and support provided at all stages of the project for women participants; and
- Opportunities were created for men and women to work together in diverse roles.

Key Challenges

- The community did not initially support the idea of women leading the development project. The municipality did not want to let the women open bank accounts, because it was felt that the project committee did not have enough skills to manage funds.
- Some husbands did not approve of their wives participating, especially in a sanitation activity, as in this part of South Africa it is still taboo to talk about sanitation issues.

Looking Ahead – Sustainability and Transferability

Some committee members continued their health and hygiene promotion and training activities in the community after the latrines had been installed. Based on sound strategic project planning, training and capacity-building, and the support of experienced institutions, the Mabule women continue to initiate other community development projects, in continuous dialogue with their male partners.

Sources of Information:-

- Office of the Special Advisor on Gender Issues and Advancement of Women, *Gender, water and sanitation; case studies on best practices*. New York, United Nations (in press).
- Contact the researcher: Jabu Masondo: jabu@mvula.co.za
- For information about the Mvula Trust: <http://www.mvula.co.za>

6 METHODOLOGY TO DEVELOP, UPDATE AND MAINTAIN THE DATABASE OF GDD IN WATSAN

Introduction

In this age of information communication technology (ICT), a methodology for developing, updating and maintaining world-wide GDD in WATSAN in a user-friendly database would create an enabling platform for data entry and retrieval by users from diverse backgrounds i.e. policy makers, academics, development practitioners, UN agencies, multi-lateral organizations, bilateral organizations, statisticians, monitoring staff, government officials and civil society actors. The objective of the proposed methodology is to facilitate accessing up-to-date GDD spatial data and service providers in WATSAN. It will comply with international standards to be able to link up with national, regional and global databases. It will have a user friendly interface and will have all the necessary functions for handling data and metadata⁵ records.

Fields of the Central Database for GDD in WATSAN in Africa

The database fields which should appear on the main interface include the following:

- **Homepage:** This will give a brief summary of the project that led to the development of the database. It will also have a list of links to latest news/events, regarding GDD in WATSAN, and a link to how people can contribute to the updating of the database.
- **About Us:** This will have the names of all the project partners, details of their contribution to the project and to GDD in WATSAN generally, and their contact details and website links.
- **Search Engine:** This will allow users to search for specific data, and could be supplemented with a **Contacts Page** where a specific query can be made to the Data Manager/Administrator **Online Tutorial:** This will give users a simple demonstration of how to access data through the central database portal.
- **Data:** This will have links to different parameters and indicators (as outlined in Output 2 of the ToR in Annex 1). The data field will also be linked to levels of data e.g. Continental, Regional, National, Provincial, District, Slum level, or area level.
- **Inventory/References and Links to other Key Databases** (information in Output 1 of the ToR in Annex 1)
- **Methodology and Tools for collecting GDD in WATSAN:** This should provide an exhaustive list of data collection methods in socio-economic research, with their

⁵ Metadata is data about data. It is descriptive information about a particular data set, object, or resource, including how it is formatted, and when and by whom it was collected

advantages and disadvantages for getting gender-sensitive data. (a more detailed version of Output 3 as in the ToR in Annex 1)

- **Case studies of Gender in WATSAN:** This field should link to a list of case studies in. A click to a title of case study should lead to a PDF document or a relevant link.
- **Links to Key Global and Regional Gender and Water Databases**
- **Feedback Form:** this mechanism will enable feedback input from end users
- **Section on Data Entry Rules and Regulations**
- **Section on Protection and Abuse Guidelines**

Methodology for Uploading Data onto the Central Database for GDD in WATSAN in Africa

1. The Data Table should be organized in Excel sheets with Categories/Parameters accessed with a click.
2. A link to the Excel sheets is created from the Central Database. A click from the main database for a specific *indicator* under a specific *parameter* should lead to the Data Table. Data should be organized in such a way that tables can be extracted and graphics developed from the table automatically. The data should also be arranged in such a way that *area-* and *sector-specific* data will then be retrievable.
3. The Data Table should have a link to Metadata. Simply put, Metadata is data about data (detailed information about the data including sources of the data table, how the data was calculated) and is a vital component of spatial data. As Rajabifard et al (2009) states “Users of spatial data need to know who created it, who maintains it, its scale and accuracy, and more. It not only provides users of spatial data with information about the purpose, quality, actuality and accuracy of spatial data sets, but also performs vital functions that make spatial data capable of being shared between systems.” The same report notes that Metadata enables both professional and non-professional spatial users to find the most appropriate, applicable and accessible datasets for use.-
4. The data collected should include GDD in WATSAN from both *unplanned urban settlements* (e.g. urban slums, IDP camps) and *planned low income areas*, as well as from rural areas, and uploaded in separate categories.

Methodology for Storing Data on the Central Database for GDD in WATSAN in Africa

The methodology for storing data could be borrowed from related databases such as FAO. GDD will be stored in data tables using Excel or Access. These data sets can be updated and maintained by a database administrator. Data ought to be stored securely, but made easily available for analysis. As mentioned in FAO Guidelines (2011) the responsible authority needs to commit adequately both financial human resources for maintenance, and regular archiving to protect the data. There is also need to periodically re-evaluate the design to

ensure the system is meeting its objectives. As noted in the same FAO report, “access should be controlled to ensure database integrity and confidentiality, but interfere as little as possible with legitimate access. It is essential to hold all data as they were collected, in their primary form to allow flexibility in the way data can be processed (e.g. filtered, aggregated, and transformed). This also ensures all calculations are reproduced from source data incorporating all revisions.”⁶

Methods for storing data could also be borrowed from the improved systems such as the one explained below (source: www.google.com/patents/US5794229)

“A Client/Server Database System with improved methods for performing database queries, particularly DSS-type queries, is described. The system includes one or more Clients (e.g., Terminals or PCs) connected via a Network to a Server. In general operation, Clients store data in and retrieve data from one or more database tables resident on the Server by submitting SQL commands, some of which specify "queries"--criteria for selecting particular records of a table. The system implements methods for storing data vertically (i.e., by column), instead of horizontally (i.e., by row) as is traditionally done. Each column comprises a plurality of "cells" (i.e., column value for a record), which are arranged on a data page in a contiguous fashion. By storing data in a column-wise basis, the system can process a DSS query by bringing in only those columns of data which are of interest. Instead of retrieving row-based data pages consisting of information”

Methodology for retrieving Data from the Central Database for GDD in WATSAN in Africa (database with links leading to sets of data)

- Methodology for retrieving data could be organized in such a way that data can be retrieved in various levels as in the MAJI DATA of the Government of Kenya. <http://www.majidata.go.ke/>

a) **By Country-** a click to *country* field should list countries in Africa. A click to a particular country should lead to a list of GDD indicators in WATSAN for that country. A click to a particular indicator should lead to a table with GDD of that particular indicator in the specified country for several years, to facilitate a trend analysis.

b) **By Region-** (North Africa, East Africa, West Africa, Southern Africa)

A click to a *region* should lead to a list of GDD indicators in WATSAN. A click to the indicator should lead to a table with countries in that region and statistics of that indicator for several years, to facilitate a trend analysis

- A click to the *inventory* field should provide a list of sources with hyperlinks to the original databases or a link to a pdf download.
- The indicators will be categorized in parameters as per the indicator framework in Output 2. When one parameter is clicked a list of all indicators under that parameter

⁶ <http://www.fao.org/DOCREP/003/X2465E/x2465e0a.htm>

should appear. A user should have an option to choose one or more indicators to appear in the table.

How Data from the Central Database for GDD in WATSAN in Africa should be Processed and Analysed

This involves transforming the data into useful outputs. The goal of this processing of activities as according to White, (2001) “is to turn a vast collection of facts into meaningful nuggets of information that can then be used for informed decision making.” When a table with data is obtained this can be processed into a line graph, pie chart, or bar graphs depending on what is suitable for the kind of data in question. These illustrations are then copied to documents

How GDD in WATSAN in Africa is Conveyed to the End Users

- Marketing strategies aimed towards specific end-users should be explored with a concise and convincing advocacy document for each of them (for e.g. policy-makers, researchers, technical project staff, students etc.)
- The database should be mirrored to other key regional and global databases.
- As in the FAO database on Fisheries (www.fao.org/DOCREP/003/X2465E/x2465e0a.htm), an on-line help, documentation, tutorials and training are contributing factors to the sustainability of a database. Special consideration should be placed on the development of these components within the system. A link to an online audiovisual tutorial (using Jing software) explaining what indicators are in the database, how to access information and how to change to graphics should be available. The audiovisual tutorial should lead the mouse to how to access the database for regional particular indicators and how to get to a graphics for better presentation. This will be similar to the online tutorial on the OECD GID-DB⁷
- The Central Database Homepage can link to an attractive and arresting Power Point listing main characteristics about Gender issues in WATSAN and the need for GDD in this sector.

Methodology for Updating and Maintaining GDD on the Central Database for GDD in WATSAN in Africa

Updating is continuous as data becomes available. Data and documents added most recently will be on top. A link to a database, accessible to everyone to allow uploading, should be created. As illustrated in the Quackit Database Tutorial

⁷ <http://www.oecd.org> specific link <http://www.screencast.com/users/espen.oecd/folders/Jing/media/684d8873-7b2a-4697-be0a-311131e69be5>

(<http://www.quackit.com/database/tutorial/>) an online HTML form can be set so that non-technical users can enter data into the form. Once they submit the form, the data is automatically inserted into the table. The form could insert data into multiple tables too - saving time from having to open up each table to manually insert the data.

The uploaded data goes through a Database Administrator who verifies the uploaded data and allows uploading to take place. If data is not adequate the Database Administrator requests for the necessary information to approve uploading to take place. When updating is done incorrectly an RSS feed notifying the user on change in structure or value, and new data validation rules to capture incorrect data uploading should be created.

A tool that allows integration of the spatial data and the Metadata should be available. When any change occurs to the spatial data it should automatically change the Metadata to avoid redundancies in the Metadata.

In order to sustain the use of the database, there is the need for a long-term commitment to support the data management application. As in the FAO database guidelines (FAO 2011) adequate personnel should be available not only for routine operation, but also to modify the system as the need arises. Failure to provide such support is very likely to result in a gradual loss of system capabilities and ultimately may contribute to a collapse of the system

Feedback Mechanism for Input from the End Users

There is need to create a system to allow feedback from end users that would help improve the database and respond to users' needs. This again can be through the Contacts page with a standard form for queries and feedback where users can ask questions and leave the feedback. The Data Administrator (who receives these forms) needs to check them frequently so as to answer queries and deal with feedback effectively and punctually.

Finally, please refer to **Annex 8** for a concise ***Checklist on the Steps involved in Designing, Conceptualizing, and Logically Setting-up a Central Database on GDD in WATSAN***

(Source: McCaldin, D. 2010 Database Design Steps/How to develop a database)

7 POLICY BRIEF: WHY GENDER AND GENDER/DISAGGREGATED DATA COUNT IN WATER AND SANITATION POLICIES

Introduction

Access to safe drinking water and sanitation is a basic human right⁸ and essential for achieving gender equality, sustainable development and poverty alleviation. Yet, in 2010 still some 780 million people or 11% of the world population lacked access to safe drinking water, while 2.5 billion people or 27% of the world population lacked access to improved sanitation services (Source: Progress on Drinking Water and Sanitation: UNICEF and WHO update 2012). The global community in its bid to put measures in place that can track poverty reduction developed the Millennium Development Goals (MDGs). MDG 7, Target 10 aims to halve the proportion of the population without safe drinking water and basic sanitation facilities by 2015. While some international agencies claim that the drinking water target has now been achieved⁹, these claims are misleading as gross inequities exist between regions worldwide, there are big disparities between rural and urban areas, and there are still millions who do not access safe drinking water, most of who are the poorest of the poor. The realization of the sanitation goal is far behind that of drinking water, and it is widely understood to be unachievable within the next 3 years, keeping current trends in mind. So what are the reasons for this state of affairs?

In December 2008, an Expert Group Meeting identified one of the key challenges to efficient, equitable and sustainable development within WATSAN and to the realization of MDG 7 target 10, and highlighted it thus:

Lack of progress is due in part to the stark absence of gender disaggregated WATSAN data. Without gender-disaggregated data, it is not possible to fully measure progress towards MDG or other goals. Without data, it is difficult to make effective analytical assessments of the comparative situation of women and men in different communities or parts of the world. Sound policy formulation is hampered by the lack of information about the gendered realities of water and sanitation access, need and use in private and public sectors. Gender-disaggregated data are essential to assess the effects of policy measures on women and men. Data are essential to be able to evaluate and track

⁸ On 28 July 2010, the UN General Assembly recognized that safe and clean drinking water and sanitation are human rights, essential to the full enjoyment of life and all other human rights of women and men

⁹ Progress on Drinking Water and Sanitation: UNICEF and WHO update 2012

the pivotal role of women in development and to appreciate the specific contributions of women as a “Major Group” in society (as detailed in Agenda 21).¹⁰

Moreover, there is still a lack of understanding why gender issues in WATSAN matter, and how they could contribute to more efficient, effective, and sustainable growth in many sectors of the economy if they are properly mainstreamed into policymaking, research, and data collection. Gender and Water Alliance did a number of Rapid Gender and Vulnerability Assessments for the UN-Habitat Water for African Cities II programme, and the Lake Victoria WATSAN Initiative during 2006 to 2010. These are institutional assessments which focused on institutions mandated with service delivery in WATSAN. In policy and legislation it was established that the national sector policies appreciated the role of women and the importance of gender and pro-poor approaches to water and sanitation development. However, there was need for specific gender mainstreaming efforts geared towards increasing participation of women and the vulnerable in Water Committees, which was not addressed in the overall institutional gender approach.¹¹

It is the stark absence of gender disaggregated WATSAN data which has motivated this policy brief. This Policy Brief will briefly highlight the current global trends in access to drinking water and sanitation, and then explain the gender gaps in these statistics and why policy makers need gender-disaggregated information to design sustainable policies that guide WATSAN projects and programmes that are more equitable, effective, and resource-efficient. The policy brief will conclude with recommendations of how these gaps can be addressed so that WATSAN services are more affordable, efficient, effective, replicable, sustainable, and responsive to the diverse needs of the end users, especially women and children. This can only be achieved when there is gender and vulnerability mainstreaming in policy planning, design, implementation, monitoring, and evaluation.

Facts and Figures: The Gender Gaps and Imbalances

As mentioned at the start of this brief, the UNICEF and WHO Update 2012 claims that part of the MDG 10 Target 7 to halve the proportion of the population without access to safe

¹⁰ Adapted from Gender Disaggregated Data on Water and Sanitation. Expert Group Meeting Report 2009 by United Nations Department for Economic and Social Affairs

¹¹ Adapted from the Executive Summary of Lake Victoria Water and Sanitation Initiative: Synthesis Report: Gender and Vulnerability in Water and Sanitation: Mapping the Issues in the 7 Secondary Towns of the Lake Victoria.

drinking water has already been achieved. However, as the update also mentions, these claims are misleading for three main reasons. Firstly huge differences exist between regions in the achievement of the target: access to improved water supplies is far better in Latin America and the Caribbean, and large parts of Asia (90% or more) than in Sub-Saharan Africa (only 61%), and even within these regions the rural areas are much worse off than urban areas. Secondly, complete information about drinking water safety is not available for global monitoring, and most rural areas in countries do not have access to safe drinking water. Finally, 11% of the world’s population still does not have access to safe drinking water- most of whom are extremely poor and vulnerable.

The goal of achieving clean, safe, and appropriate sanitation is far from realized for major regions of the world, especially Sub-Saharan Africa and Southern Asia. According to the UNICEF and WHO update 2012, worldwide, 63 per cent of the population use improved sanitation facilities, an increase of almost 1.8 billion people since 1990. At current rates of progress, we could reach 67% coverage in 2015, but this is still far from the 75 per cent needed to reach the target. Unless the pace of change in the sanitation sector can be accelerated, the MDG target may not be reached until 2026.

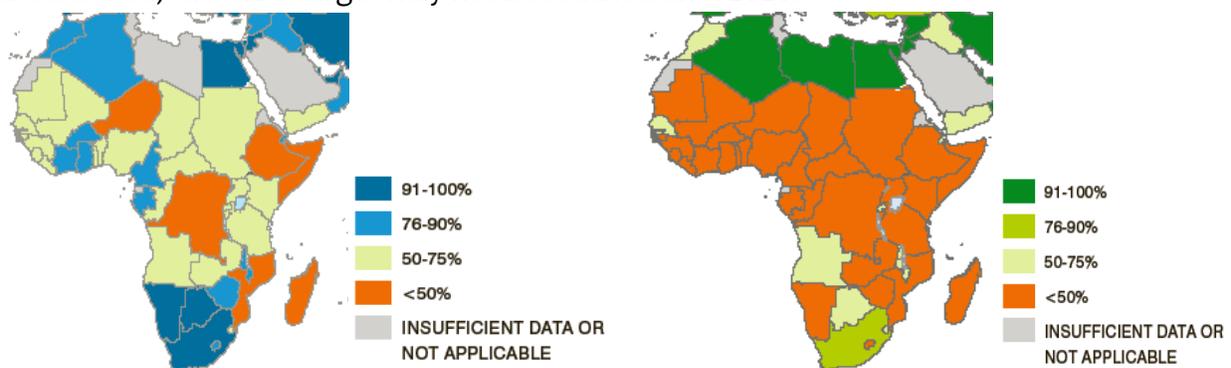


Figure 1: Access to water supply in Africa 2010 | **Figure 2: Access to Improved Sanitation in Africa 2010**

Source: UNICEF and WHO 2012 Update: Progress on Drinking Water and Sanitation

According to recent UNICEF and WHO data (see figures 1 and 2 below) many Sub-Saharan African countries are not on track to meeting the MDG drinking water or sanitation targets by 2015. The situation is especially dire for sanitation, as figure 2 shows that a majority of these countries do not have adequate sanitation facilities for more than half of their population.

None of these statistics are gender disaggregated, but it is certain that women, and vulnerable groups such as children, the elderly, and disabled people will suffer the most from this deprivation of a basic human right.

That women bear the chief burden in water collection has been widely documented. An analysis of the data from 25 countries in sub-Saharan Africa, representing 48 per cent of the region's population reveals that women and girls primarily bear the responsibility of water collection, at considerable costs in terms of their time and energy (UNICEF and WHO 2012). The time and energy devoted to water collection is considerable, and it is estimated that just in these 25 countries, women spend a combined total of at least 16 million hours each day collecting drinking water, whereas men spend 6 million hours, and children 4 million hours (UNICEF and WHO 2012). Most of these hours count towards unpaid work, which means this is an enormous drain of labour and resources, especially for countries with a low GDP. Thus, the gains from secure, sustainable, and modernized access to water could potentially transform the economies of most of these countries. Collecting water is also linked in women to spinal damage, complications during pregnancy and maternal mortality (Kramarae and Spenser 2000), leading to an irreversible impact on the future generations, and economy of a country. The demands on time can also have a high opportunity cost in forgone schooling (for girls) and less leisure time for children and labour market activity for adults. This means providing physically accessible clean water is essential for enabling women and girls to devote more time to the pursuit of education, income generation and even the construction and management of water and sanitation facilities.

Lack of basic, clean, and appropriate sanitation facilities also affects women and girls the hardest as they are most often the guardians of household hygiene. Each year, more than 2.2 million people in developing countries die from preventable diseases associated with lack of access to safe drinking water, inadequate sanitation and poor hygiene¹². The social and environmental health costs of ignoring the need to address sanitation (including hygiene and wastewater collection and treatment) are far too great. Awareness of gender concerns is of crucial importance in sanitation initiatives, and gender-balanced approaches should be encouraged in plans and structures for implementation. Simple measures, such as providing schools with separate latrines for boys and girls, and promoting hygiene education in the classroom, can educate boys and girls, especially when they reach puberty, and reduce menstrual health-related risks especially for girls. Moreover, the design and the location of latrines close to home may reduce violence against women, which may occur when women have to relieve themselves in the open after nightfall.

¹² UN-Water 'Gender Water and Sanitation' – Policy Brief, June 2006 ; developed by the Inter-agency Task Force on Gender and Water (GWTF) in support of the *International Decade for Action, 'Water for Life,' 2005–2015*

The ‘gender gap’ is painfully apparent in sanitation policies, where studies¹³ show that sanitation is given a low profile in national water and sanitation policies and not linked with poverty alleviation. Related to this is the observation that national policies treat sanitation and gender just as household or social issues but not as development problems. Furthermore, many national gender policies do not address sanitation and sanitation policies do not address gender at all. In instances where they do, the focus is on addressing practical gender needs (access to latrines) and not strategic needs (women professionals and women in decision making positions). Also, sanitation in urban informal settlements is not adequately addressed

In the context of the above information there is a very strong argument for mainstreaming gender in WATSAN policies for better efficiency, efficacy, and sustainability of interventions in this and other sectors. A study by the International Water and Sanitation Centre (IRC) of community water and sanitation projects in 88 communities in 15 countries¹⁴ found that projects designed and run with the full participation of women are more sustainable and effective than those that do not. This supports an earlier World Bank study that found that women’s participation was strongly associated with water and sanitation project effectiveness. Sustainable management of water resources and sanitation provides great benefits to a society and the economy as a whole. Thus, it is crucial, first, to involve both women and men in water resource management and sanitation policies and to ensure that the specific needs and concerns of women and men from all social groups are taken into account. Second, it is vitally important to determine what people (consumers of water and sanitation) want, what they can and will contribute and how they will participate in making decisions on the types and levels of service, location of facilities and operation and maintenance. For reaching this second goal, it is indispensable to analyse a given target group from a gender perspective. Only then can efforts be truly effective and sustainable (UN-Water ‘Gender Water and Sanitation’ – Policy Brief, June 2006). When governments see that water projects work better when women are involved they will be more willing to finance gender-biased projects than when they shown that access to water has an impact on gender equality.

Indeed, policy is the starting point for gender mainstreaming with GDD in WATSAN, as this is when the government or any other organization explicitly demonstrates its intention to redress inequality and adopts a gendered approach. In the next section of this brief follow some key recommendations to address the gender gaps in data collection, research, and

¹³ UNECA 2010

¹⁴ Van Wijk-Sijbesma, Christine, 1998. Gender in Water Resources Management, Water Supply and Sanitation: Roles and Realities Revisited. International Research Centre for Water and Sanitation. Delft, the Netherlands

polycymaking, so that WATSAN services are more affordable, efficient, effective, replicable, sustainable, and responsive to the diverse needs of the end users, especially women and children.

Key Recommendations

1 Going from Gender Rhetoric to Practice

There is a huge gap between rhetorical and written policy commitments to gender, and actual gender mainstreaming in WATSAN policies. The key challenge is the lack of sufficient understanding among policy makers of gender issues, and why it is crucial to mainstream them especially in WATSAN, for increased efficiency and sustainability.

2 Collection of GDD as a matter of Policy

This entails the commitment of politicians and others in power. In order to meet the water demands of poor women and men, but also to ensure effectiveness, efficiency and sustainability of water and sanitation interventions, UN agencies and host governments must collect sex-disaggregated data and develop gender-sensitive indicators in all sectors, including water, sanitation, agriculture, and irrigation as a matter of policy.

3 Enabling the Legal and Institutional Environment for Gender Equity

Securing women's rights to land and water encourages their participation and ownership in WATSAN projects and programmes. Water management institutions of government and water user groups need to stipulate the proportional share of women in participation and employment.

4 Gender-sensitive Budgeting/Financing for Gender Mainstreaming

Commitment to gender mainstreaming can only be realized with adequate budgetary allocations. Governments and organisations need to understand that failure to allocate adequate human and financial resources to gender activities can reduce the efficiency of the programs and policy implementation.

5 Ensuring the use of IWRM in WATSAN

Integrated Water Resource Management (IWRM) strategies enhance the equal participation, representation, and rights of women in the water sector, and thus for improving the effectiveness and sustainability of those strategies. The adoption of IWRM by governments, service providers and donors in WATSAN should be a national level

policy for African countries, where they present **a stated focus on gender in key Gender policy strategies and documents**. These should include identification of gender gaps in the WATSAN sector, clear statements on how these gaps will be reduced or closed, and a roadmap for how this will be achieved in the short, medium and long run.

6 Support Research on GDD Collection

Governments and multilateral donors should support further initiatives (like this Review and a GDD in WATSAN Database) to improve, adapt, collate, and extend gender-disaggregated data collection and analysis in the WATSAN sector.

7 Stricter Accountability and Enforcement of Gender sensitivity in WATSAN Interventions

There should be a binding policy and legal framework to halt projects and initiatives which do not recognize gender parity and the full participation of women as demonstrated by GDD. A clear Governance system helps clarification of the entitlements and responsibilities of water users and water providers (specified by gender) as well as the clarification of the roles of government, private sector and civil society institutions.

8 Gender Analysis of collected data should be done from Micro- to Macro- levels

Researchers should work together with technical WATSAN staff, Gender experts, and Policy makers to ensure that effective gender analysis is done at every level - from project data level, to regional, country, and global statistic databases - as a basis for monitoring progress in gender and equity goals in WATSAN, and for sound policy formulation.

9 Capacity Building at Organizational and Individual level

Gender experts should be supported to assist in mainstreaming gender at institutional policy levels by creating an enabling environment for training technical and other staff in gender issues in WATSAN, including a gender expert in WATSAN project teams, and by allocating sufficient time and budget for this.

10 Adopting a Rights Based Approach to WATSAN Programmes

Integrating human rights in WATSAN has proved useful in mobilising the requisite resources - both financial and non-financial- to inform the country laws and policies which have a direct influence on municipal and local levels.

8 CONCLUSION

On 28 July 2010, the UN General Assembly recognized that safe and clean drinking water and sanitation are human rights, essential to the full enjoyment of life and all other human rights of women and men. However, if this recognition is to have any meaning, future targets and monitoring systems must endeavour to take gender and equity issues in WATSAN into account.

There is a crucial need to involve policy makers in the promotion of the collection, analysis and utilization of GDD in WATSAN. First and foremost, organizations need to garner enough political will to support gender mainstreaming in policy planning, dialogue, and formulation, and in the collection, analysis and utilization of GDD in particular. At policy making level, there is still need for political will and a change of mindset regarding gender issues in WATSAN. Technical project staff must appreciate the place of gender mainstreaming in the planning, implementation, monitoring, and evaluation in project interventions to be equitable, responsive, efficient, effective, replicable and sustainable.

While there is growing awareness about the importance of collecting GDD in WATSAN, the review noted that there is still a lot of work required in collection, analysis, interpretation and dissemination of GDD in WATSAN. Many documents reviewed talk about the gender aspects but the actual data is hardly available. Even the current Joint Monitoring Programme (JMP) does not really capture the GDD aspects apart from the usual indicators. This makes this data unusable in other interventions, reduces replicating of good practices, and limits appropriate and equitable policy making - thereby undermining progress in the MDGs.

Although a lot of gender and water data exists in different organisations, especially within the UN agencies, the quality and type of GDD data is not adequate to support gender MDG goals in water and sanitation, often due to inappropriate units of analysis used, and use of methodologies and interviewers that are not gender-sensitive. The review found that in most global surveys, the unit of analysis used is the household, farm, and community, none of which distinguish the individual members, resulting in gender-blind analysis which ignores the differences in WATSAN between women and men of different ages, and different socio-economic background. When there is evidence of improved availability of safe and clean drinking water and sanitation services in UN-HABITAT projects and in other organizations, there is absence of actual GDD. In cases where it is disaggregated, it is mainly quantitative i.e. the parameters and indicators are limited to the number of women with access to safe

water supply and to improved sanitation, and to which member has the primary responsibility for water collection. Qualitative indicators which analyse the water and sanitation gender dynamics such as who is responsible for excreta collection and disposal, personal safety in access to sanitation facilities, and gendered intra-household differences in access, control, and use of facilities are seldom addressed and almost never done at a policy level. This kind of information was more easily available from databases found through the internet search, and the GWA website. Furthermore, there are reports which indicate impact of increased safe water nearer to people's homes saving time for women and girls. However, the actual statistics that show how many minutes (or hours) saved is lacking. In view of the gaps identified above, the review noted that in order to establish effective GDD collection and analysis there is need to include new specific indicators which are currently not being recognised such as percentage of women and men sensitized in protecting surface and groundwater; existence and quality of sanitation facilities with specific needs for girls, and ratio of men/female open defecation.

An important finding of this review was that there is a lot of qualitative micro-level GDD which does not find its way to the main global databases. This is a waste of resources as the quality and quantity of data gathered at grassroots level is more realistic than that compiled at global level. Therefore, there is need to consider micro-level qualitative and quantitative GDD in WATSAN which gives the necessary detailed analysis of gender issues. It often provides the best information about problems which might then be followed up with large-scale inquiry.

The review emphasizes that there is a crucial need for a central database of GDD which allows everyone interested to upload GDD upon approval by the database administrator. A proposed methodology for development, updating and maintaining such a central database forms part of this report. The methodology includes parameters and indicators which are usually excluded in global databases, with a user-friendly online tutorial on how to upload data, retrieve, convert data to graphics, interpret data, and how to make use of the data.

The review concludes that policy is the starting point for gender mainstreaming with GDD in WATSAN, as this is when the government or any other organization explicitly demonstrates its intention to redress inequality and adopts a gendered approach. However, to go beyond rhetorical support for gender inclusion, official agencies and governments need to specifically address the equitable division of power, work, access to and control of resources between women and men through use of GDD. Action is required at multiple levels to address gender inequities in field projects, research and policy frameworks. Of paramount

importance is the fact that beyond addressing access to domestic water and sanitation services, policies should target economic equality through water for productive uses, equality in decision making, and equality in the contracts, consultancy and general business around water and sanitation infrastructure development. This can only be enhanced through targeted and continuous capacity building in GDD.

9 REFERENCES

- *African Cities/WAC/ Program II /UN 1992 The Dublin Statement on Water And Sustainable Development International Conference of Water and Environment*
- *African Studies Quarterly Volume 12 Issue 1 Fall 2010 Original source Ghana Statistical Ser*
- Kritsonis W. (2009) *Research Design and Methodology*
- Arora-Jonsson, S. 2011. *Virtue and Vulnerability: Discourses on Women, Gender and Climate Change. Global Environment Change 21*
- Batini, C., Lenzerini, M. & Navathe, S.B. 1986. *A Comparative analysis of Methodologies for Database schema Integration. ACM Computing Surveys*
- Blacken, C. and Wodon, Q, eds. 2006. *Gender, Time, Use, and Poverty in Sub-Saharan Africa. Working Paper 73. World bank, Wasington, DC*
- Both Ends , GWA, *Comprehensive Assessment of Water management in Agriculture; Working Paper Series, Dec 2006, Effective gender mainstreaming in water management for sustainable livelihoods: From guidelines to practice*
- Creswel, J.W. 2007. *Qualitative Inquiry and Research design: Choosing Among Five Approaches. London: Sage Publications*
- Crotty, M. 1998. *The Foundations of Social research: Meaning and perspective in the research process. London: Sage publications.*
- Dawson, C. 2002, *Practical Research Methods, New Delhi, UBS Publishers' Distributors*
- Ethiopia Ministry of Water Resources and JICA, (2005), *Gender Mainstreaming Field Manual for Water Supply and Sanitation Projects.*
- FAO (2011), *Guidelines for the Routine Collection of Capture Fishery Data. Cooperate Documents Repository*
- *Gender Links 2000 Mainstreaming Gender in Water and Sanitation: Literature Review for the South African Department of Water and Sanitation, Johannesburg*
- GWA 2006, *Gender and Sanitation Policies in South Africa, Zambia and Zimbabwe*
- GWA 2006, *A Gender Approach to Sanitation for empowerment of women, men and children: A paper presented at SACOSAN*
- GWA 2006, *Gender in Integrated Rural Water Supplies and Sanitation*
- GWA 2003, *Policy Development Manual for Gender and Water Alliance Members and Partners.*
- GWA 2003, *Gender Perspectives on Policies in the Water Sector*
- HEDON 2010 *Field Tools For Collection Of Gender-Disaggregated Data*

- Kothari, C.R.,1985, Research Methodology- Methods and Techniques, New Delhi, Wiley Eastern Limited.
- Kramarae, C. and Spender,D. ed.2000. Routledge International Encyclopedia of Women: Global Women's Issues and Knowledge. Education of Women: Health to Hypertension Vol.2 New York
- Kumar, R, 2005, Research Methodology-A Step-by-Step Guide for Beginners, (2nd.ed.), Singapore, Pearson Education.
- Kumar, K. 1989. Conducting Key Informant Interviews in Developing Countries A.I.D. Program Design And Evaluation Methodology Report No. 13(Center for Development Information and Evaluation, Agency for International Development A.I.D.)
- Minter, E. 2003, Pros and Cons of Interviewing, University of Wisconsin-Extension, Program Development & Evaluation. February 2003
- McCaldin, D. 2010, Database Design Steps/How to develop a database
- Nordic Consulting Group 2011. External evaluation of UN-HABITAT's Water and Sanitation Trust Fund Part 2: Regional and Country Reports March 2011, Nairobi
- OECD Report 2009. Seventh meeting of the DAC network on Gender Equality OECD Headquarters Paris 10-12 June 2009, Workshop on aid effectiveness – *how strengthening and using country systems can help achieve gender equality and women's empowerment.*
- Office of the Special Advisor on Gender Issues and Advancement of Women, *Gender, Water and Sanitation; Case studies on Best Practices.* New York, United Nations (in press).
- Ritchie, J and Lewis, J (eds) 2003. Qualitative Research practice: A guide for social science Students and Researchers. London: Sage Publications Ltd.
- Rajabifard, A., Kalantari, M. and Binns, A. (2009). SDI and Metadata Entry and Updating Tools in. B. van Loenen, J. W. J. Besemer and J. A. Zevenbergen (Eds). *SDI Convergence. Research, Emerging Trends, and Critical Assessment* Delft
- Saunders, M, Lewis, P and Thornhill A. 2009. Research Methods for Business Students. 5th Edition. England: Pearson Education Limited.
- UNDESA and UNW-DPC 2009, Gender-Disaggregated Data on Water and Sanitation Expert Group Meeting Department for Economic and Social Affairs (UN-DESA) UN-Water Decade Programme on Capacity Development UNW-DPC
- UNDP 2011 Human Development Report. Sustainability and Equity; A Better Future for All.
- UNECA 2004 A Gender Perspective on Water Resources and Sanitation
- UN-HABITAT 2011 Gender Mainstreaming Impact Assessment, United Nations Human Settlement Programme
- UN-HABITAT 2008 Review of Progress of Water and Sanitation Programme of UN-HABITAT in 2007
- UN-HABITAT 2006 Framework for Gender Mainstreaming, Water and Sanitation for Cities
- UN-HABITAT 2011. Water in African Cities II (WACII) 2010, Review Technical Report
- UNECA 2010 Poverty eradication and socially sustainable development
- UNECA 2004 A Gender Perspective on Water Resources and Sanitation
- UNICEF and WHO 2012 Progress on Drinking Water and Sanitation: 2012 Update

- UN 2010 Access to safe Drinking water
- UN Water 2006 Gender Water and Sanitation Policy Brief
- UN 2012 World Development Report 2
- WAC II Performance Evaluation, 2010 Wodon, Q., and Ying, Y. 2010. Domestic Work Time in Sierra Leone. Working paper 27736. Munich Personal RePEc Archive, Munich
- Water Aid 2009 report
- White, K. 2001. "DBMS Past, Present, and Future." *Dr. Dobb's Journal* 26, no. 8 (2001): 216.
- Wubishet Y. 2008 Sanitation and Beautification Agency Of The municipality of Dire Dawa City
- Base line information on Sanitation & Hygiene in Dire Dawa City, *UNHABITAT Water for African Cities/WAC/ Program II*

References from Websites:-

www.fao.org/DOCREP/003/X2465E/x2465e0a.htm
<http://www.genderandwater.org/page/5685> (Case study Zimbabwe)
www.google.com/patents/US5794229
<http://www.hedon.info/docs/E-MINDSET-Field-Tools-Collection-Gender-Disaggregated-Data.pdf> (Field Tools for Collection of Gender-Disaggregated Data)
<http://www.majidata.go.ke/>
<http://www.mvula.co.za>
<http://www.screencast.com/users/espen.oecd/folders/Jing/media/684d8873-7b2a-4697-be0a-31131e69be5> (OECD website)
<http://www.quackit.com/database/tutorial/>
www.solutionsforwater.org
http://www.wateraid.org/uk/what_we_do/where_we_work/zambia/448.asp
<http://www.unhabitat.org/content.asp?typeid=19&catid=499&cid=3210>
<http://www.unicef.org/infobycountry/zimbabwe.html>

LIST OF ANNEXES

Annex 1: Terms of Reference for the Assignment
 Annex 2: List of Interviewees
 Annex 3: Interview guide
 Annex 4: Email to GWA members
 Annex 5: Inventory of Gender Disaggregated data
 Annex 6: Checklist for Integrating Gender Considerations into Water and Sanitation projects
 Annex 7: Minimum Agenda for Mainstreaming Gender in Water Management
 Annex 8: Checklist for Design, Conceptualization, and Logical Set-up of a Central Database on GDD in WATSAN

ANNEX 1 Terms of Reference for the Assignment

Project Title: Gender-disaggregated data review in water and sanitation management (FA4)

Summary : In many societies, women are often the primary users of water in domestic consumption, subsistence agriculture, health and sanitation. Therefore lack of access to water and sanitation directly affects women's and their families' health, education, income and empowerment. This also means that without the collection of gender disaggregated data, it is not possible to fully measure actual progress towards the MDG. Therefore it is important to better mainstream gender issues in national and global monitoring processes to ensure that the different needs of men and women are better understood, and that the specific needs and concerns of women are taken into account. Gender-disaggregated data are essential to assess the effects of policy measures on women and men. Viable data are essential to be able to evaluate and track the pivotal role of women in development and to apprehend the specific contributions of women as a "Major Group" in society

Against this background UN-HABITAT and GWA are carrying out a Review on Gender Disaggregated Data in Water for African Cities programme (WAC II).

Background

Sex disaggregated data form part of Gender Statistics, which represent both quantitative and qualitative statistics about the status of women and men in all spheres of public, social and economic activities. Gender statistics provide an opportunity to take into account the characteristic traits of women and men - as specific social-demographic groups - in the process of developing the optimal policy of the principle of equal rights and opportunities. Gender statistics are aimed at ensuring impartial data generated through the comparison of the status of women and men and of the gender equality. The development of collection of statistical gender data on the ground is very important for people working in planning and practice, in legislative bodies, government and civil organizations. Gender statistics are therefore central to the formulation and implementation of "evidence based" policies that affect women and men.¹⁵

Lack of progress is due in part to the stark absence of gender-disaggregated WATSAN data at a large scale. Without gender-disaggregated data, it is not possible to fully measure progress towards MDGs or other goals. Sound policy formulation is hampered by the lack of information about the gendered realities of water and sanitation access, need and use in private and public sectors. Gender-disaggregated data are essential to assess the effects of policy measures on women and men. Viable data are essential to be able to evaluate and

¹⁵ UNEP. Guidance note on gender statistics: collection and use of gender disaggregated data

track the pivotal role of women in development and to apprehend the specific contributions of women as a “Major Group” in society (as detailed in Agenda 21).¹⁶

2. Project statement and justification

UN-Habitat is one of the organisations that have collected various sets of gender-disaggregated data in various projects, but many of these data sets have not been analysed.

Without the use of gender-disaggregated data, it is not possible to fully measure progress towards MDGs or other goals. Sound policy formulation is hampered by the lack of information about the gendered realities of water and sanitation access, need and use in private and public sectors. Gender-disaggregated data are essential to assess the effects of policy measures on women and men. Viable data are essential to be able to evaluate and track the pivotal role of women in development and to apprehend the specific contributions of women as a “Major Group” in society (as detailed in Agenda 21).¹⁷

The achievement of the Millennium Development Goals related to water and sanitation is lagging behind. Counting is not always clear, which makes it sometimes easy for governments to show more positive figures than are actually true. Access to clean water and especially to sanitation is crucial for women, more than for men, which make the availability of gender-disaggregated data in this sector of major importance.

Collecting sex disaggregated data helps planners and decision makers to design efficient interventions and to make informed decisions that respond to the needs of women and men.

Worldwide, on the one hand, in various interventions and development efforts related to water and sanitation management, gender-disaggregated data may be documented, but often these are not processed, and therefore not used by planners and decision makers.

On the other hand, there are even more situations in which the unit of analysis is the households, villages and communities, which does not distinguish the individual members, resulting in gender-blind information. It is too often assumed that all persons of a household, or even of a community, share their interests, responsibilities, knowledge, problems, access and control, etc. In reality the differences between women and men of different ages and different socio-economic background differ a lot in all aspects important in water and sanitation management.

The lack of gender-disaggregated data at global scale, which is crucial to show the different water and sanitation situation of women and men and the trends for better or worse over time, could be less stringent, if the available data in geographical pockets could be made to

¹⁶ UN-water and UNW- DC. Gender disaggregated data on water and sanitation

¹⁷ UN-water and UNW- DC. Gender disaggregated data on water and sanitation

better use. Data about a relatively small scale situation are often denoted as anecdotal, and not adding to the real understanding at a larger scale. For the increased validity of data it is important to add data of many projects, locations, and origins.

The availability of qualitative information about the gender aspects of water and sanitation management is not less important than the need for quantitative data. Both sets of information will supplement each other. Qualitative explanations will help understand the quantitative data better, whilst the quantitative information can be of increasing scale, which will add to the viability, necessary to convince those policy and decision makers who consider all water and sanitation users as the same.

UN-Habitat is one of the organisations that have collected various sets of gender-disaggregated data in various projects, but many of these data sets have not been analysed. Some other international, government and civil organisations have also collected gender disaggregated data, with different degrees of analysis. The Gender and Water Alliance has access to various reports with gender-disaggregated WATSAN data.

The major questions are: How can we make use of these data? How should they be interpreted? How can they add to the global body of gender-disaggregated data?

Making an inventory of the most important gender-disaggregated data-bases related to WATSAN, and finding efficient ways of analyzing these databases will reduce the global lack of gender-disaggregated data as a whole, and contribute to the effectiveness of the decisions made in water and sanitation management. It will show the overall importance of taking gender into account in all water and sanitation efforts.

Available water and sanitation data so far are mainly used by Ministries of Water, whilst they are also important for Ministries of Planning, of Education, of Women Affairs, to name a few, especially when the data show the gender relations.

The Gender and Water Alliance has been working with UN-Habitat for more than 8 years in different programmes. GWA works with their members in the regions, appointing them for their contribution to specific activities.

2.1 Goal

The main goal of this review is to contribute to the achievement of Millennium Development Goals on water, sanitation, and gender equality by collecting relevant, viable data and large scale information that can make interventions in WATSAN more effective and sustainable, which will ultimately lead to more equitable and gender-sensitive decision making.

2.2 Objectives

The objectives of this activity are to:

- Develop a database of Africa-focused gender-disaggregated information related to WATSAN, and promote its use in the formulation and implementation of evidence-based policies.
- Demonstrate that information about women's and men's needs, concerns, responsibilities, access and control, knowledge and different status, if documented properly, will support the planning and decision making process in WATSAN related interventions and policy-making.
- Design a methodology to update and maintain the database of gender-disaggregated data related to water and sanitation management, available to all, especially policy makers.

Activities

- Consult UN HABITAT teams on the available data to determine the availability of gender-disaggregated data, with a focus on Africa.
- Make an inventory of these and other important sources of available gender-disaggregated data in WATSAN.
- Explore different parameters and indicators against which to organise the data and develop a framework.
- Review the existing data and information on water and sanitation to find gender-disaggregated information, from the source, including them in the framework.
- Document the different methodologies in use for collecting gender-disaggregated data.
- Document four relevant case studies of different contexts.
- Design and propose a methodology to update and maintain the database of gender-disaggregated data to make it available to all, especially policy makers.
- Write a brief explanation of gender aspects of WATSAN and the need for gender-disaggregated information, directed at policy makers, as part of the report, and applicable as policy brief.
- Recommendations for follow-up of this project, based on gaps found in worldwide gender-disaggregated data, and on the need to include gender indicators in international UN monitoring instruments.

4 Implementation Strategy

The approach of the Gender and Water Alliance will be one of participatory engagement and exploration with key project staff and stakeholders where necessary. The focus of this proposal is on Africa. Major GWA members will be involved to provide information from regions in which UN-Habitat may not (yet) be active, or less active. The consultations will preferably make use of electronic means rather than physical. Efforts to use other existing forums will be made in order to verify, validate and improve the data and information

collected. The aim will be to end up with an output that all partners and key stakeholders which were involved can attest ownership to.

Within the context, GWA will explore specific information about gender, water and sanitation. Concretely, the process will focus on the “need to know” information for which gender-disaggregated data is currently mostly absent or significantly incomplete but critical for decision making. Some of the parameters that have in the past been emphasized upon include:

- Uses and priorities for water and sanitation, by women and men
- Gender differences in access to safe and clean water and appropriate sanitation facilities
- Violence against women and girls in the context of water collecting or using sanitary facilities, and the various dangers they face
- Decision making and policies: the influence of women and men
- Participation in various decision making fora and other activities
- Costs and benefits analysis from a gender point of view
- Public and school-based water and sanitation.

In this proposed activity the parameters will depend on the availability and on the indicators applied. They will be limited to the most basic ones, to make sure that as many sets of information can be included as are available, without making them subject to strict conditions.

7. The Gender and Water Alliance

The Gender and Water Alliance (GWA) is a global network of about 2000 organisations and individuals in 120 countries, committed to mainstream gender in water management. GWA undertakes collaborative activities in the area of capacity building, development and sharing of knowledge, advocacy and policy support, oriented at positive impact. GWA believes that equitable access to and control over water is a basic right as well as a critical factor in the struggle against poverty and for efficient and sustainable development. The ultimate aim is to improve the situation of sanitation and water for domestic and productive uses of poor women and men worldwide.

During its first decade GWA sought to fulfill an identified need. When the network was established in 2000, there was no single organization dedicated to advancing gender mainstreaming into the water sector, and currently there still is no other global organization with the same mandate. The GWA was founded to provide gender-related training and support to water professionals globally. Rather than establishing itself as an autonomous NGO, the GWA chose to become a network that reflected the ideas and ownership of a

global membership. The network concept continues to be the driving force of the GWA, and its international steering committee ensures representation from different parts of the world. The network includes a wide range of women (55%) and men (45%) involved in the water sector, including engineers and hydrologists, university professors and students, water managers, policymakers, development practitioners, NGOs and grassroots groups.

GWA's work is aimed at poverty reduction. Many of the network members work at the grassroots level in direct poverty reduction, including in regions where conflicts and disasters serious impact poor women and men. More than eighty percent of the membership comes from a diversity of countries in Asia, Africa and Latin America.

The mission of GWA is to promote women's and men's equitable access to and management of safe and adequate water, for domestic supply, sanitation, food security and environmental sustainability. The provision of sustainable water and sanitation services that incorporate an integrated water resources management approach requires a special emphasis and focus on gender, social justice and human rights. GWA believes that equitable access to and control over water is a basic right for all, as well as a critical factor in promoting poverty eradication and sustainability.

GWA has a website in 5 languages (Arabic, English, French, Portuguese and Spanish), produces resource materials on gender mainstreaming in IWRM, like: CDs, reports, publications, capacity building plans, gender scan for water utilities, training manuals, guidelines, etc.(mostly available through the website, or on request through the secretariat), executes pilot projects, case studies, innovative research projects, gender audits, and e-conferences. It has a Travelling Exhibit on Gender and Water, updates the UNDP Resource Guide on Gender and IWRM, and develops training and training material on Gender and water management. Participatory Strategic Plans have been developed for 10 regions.

The gender concept is applied as gender and diversity, taking into account the differences between women, and between men, ethnicity, age, urban versus rural, socio-economic position, etc. Water is also applied in the broad sense, from a perspective of integrated water resource management, considering all different water uses.

GWA has had a significant impact at the policy level first by providing documents that can be used by policymakers (e.g. policy briefs, resource guides) and secondly through advocacy that has led to the integration of gender issues into national water policies in some countries.

The Gender and Water Alliance is qualified to implement this activity, because of her wide experience in this field, her unique position in the global gender-and-water subject, her many members who can contribute, efficiency, reasonable level of fees, and long-time partnership with UN-Habitat. Furthermore, GWA was a member of and has contributed substantially to the work of the Expert Group on Gender Disaggregated Data on Water and Sanitation organised by UN-DESA, UN-WATER and UNW-DPC (2009).

ANNEX 2: List of interviewees

	Name	Job Designation	Organization /Location	Sex
1	Dr Alabaster Graham	Chief, Section I , WSIB, Human Settlements Financing Division	UNHABITAT, Nairobi	Male
2	Angela Hakizimana	Officer, Micro- Credit in Sanitation , Gender Focal Point	UNHABITAT, Nairobi	Female
3	Anne Malebo	Officer, Lake Victoria Water and Sanitation (LVWATSAN)	UNHABITAT, Nairobi	Female
4	Harrison Kwach	National Project Officer, Kenya	UNHABITAT, Nairobi	Male
5	Tekalign Tsige	Regional Technical Adviser	South Africa and Ethiopia	Male
6	Eric Moukoro	Regional Technical Adviser	Francophone Countries-West Africa	Male
7	Lars Stordal	Junior Professional Officer	UNHABITAT, Nairobi	Male
8	Julie Perkins	Global Partnerships	UNHABITAT, Nairobi	Female
9	Daniel Adom	Chief Technical Adviser	UNHABITAT, Nairobi	Male
10	Charity Kabutha	Consultant Gender and Agriculture	Nairobi	Female
11	Anastacia Wahome	Data Specialist	Maji-Data-Water Services Trust Fund , Nairobi	Female
12	Loice Kinyanjui	National Officer	Secretariat, Kenya Slum Upgrading Programme (KENSUP) Ministry of Housing, Nairobi	Female
13	Alex Diouf	Consultant	UNHABITAT, Nairobi	Male
14	Rosemary Magambo	Socio-Economics Officer, NALEP	National Agricultural and Livestock Extension Programme, Nairobi	Female
15	Josiah Omotto	Executive Director	Umande Trust, Nairobi	Male

ANNEX 3: Interview Guide (used with Key Informants)

Background Information

UN-Habitat is one of the organizations that has collected various sets of gender-disaggregated data (GDD) in various projects, but many of these data sets have not been analyzed. Some other international, government and civil society organisations have also collected GDD, with different degrees of analysis. The Gender and Water Alliance has access to various reports with gender-disaggregated WATSAN data. The major questions are: How can we make use of these data? How should they be interpreted? How can they add to the global body of gender-disaggregated data?

Making an inventory of the most important gender-disaggregated data-bases related to WATSAN, and finding efficient ways of analyzing these databases will reduce the global lack of gender-disaggregated data as a whole, and contribute to the effectiveness of the decisions made in water and sanitation management. It will show the overall importance of taking gender into account in all water and sanitation efforts. Available water and sanitation data so far are mainly used by Ministries of Water, whilst they are also important for Ministries of Planning, of Education, of Women Affairs, to name a few, especially when the data show the gender relations.

The goal of this project is to contribute to the achievement of MDGs on water, sanitation and gender equality by providing viable data and large scale information that can make interventions more effective and sustainable, and that will add to equality in decision making.

The objectives of this activity are to:

- 1) Build and increase a database of Africa-focused gender-disaggregated information related to water and sanitation, and give it a central place in the formulation and implementation of evidence-based policies showing how they affect women and men.
- 2) Demonstrate that information about women's and men's needs, concerns, responsibilities, access and control, knowledge and different status, if documented properly, will support the planning and decision making process.
- 3) Design a methodology to update and maintain the database of gender-disaggregated data related to water and sanitation management, available to all, especially decision-makers.

Expected outcomes of our meeting:

- 1) To identify the main WATSAN projects in Africa and related activities (under WAC Phase I and II): Successes and challenges experienced in the course of implementation
- 2) To establish the kind of Gender Disaggregated Data(GDD) that is available parameters and indicators used in (1) above.
- 3) To determine its access and location (hard or soft copies). Is the data analyzed fully, partially, or not at all?
- 4) To decipher the best practices, lessons and challenges in the above (2 and 3). Identify case-studies in your area of jurisdiction.(The Case Study Guide was attached to the email)
- 5) To make recommendations (for 2, 3 and 4).

ANNEX 4: Sample of Letter sent to GWA members (by Email)

Dear GWA Members,

It is our pleasure to inform you that Gender and Water Alliance Secretariat in collaboration with UN-Habitat is carrying out a review on **Gender-Disaggregated Data in Water and Sanitation Management** focusing on Africa. Whilst many institutions have tried to collect gender disaggregated data, most of it is scattered and has not been analysed to make it usable to all, especially to water and sanitation managers, decision and policy makers. Globally, the gender-disaggregated information is scanty and not updated and therefore not very reliable. One of the objectives of this review is to build and increase a database of gender-disaggregated information related to water and sanitation. The major focus will be on Africa, but information from other continents is also important and welcome.

As we greatly value the commitment and contribution of all GWA members and like to ensure your active participation, we kindly ask you to assist in providing information and/or sources of information that would contribute to the realisation of the above objective.

The main questions of this review are:

- Which gender-disaggregated data is collected and available, regarding water and sanitation?
- How can this data be used, so that it will eventually add to the empowerment of poor women and men?
- How can this data contribute/s to the global body of gender disaggregated data?

Indicators that may guide you to identify the appropriate information include the following:

- Uses and priorities for water and sanitation, by women and men
- Gender differences in access to safe and clean water and appropriate sanitation facilities
- Violence against women and girls in the context of water collecting or using sanitary facilities, and the various dangers they face
- Decision making and policies in water and sanitation: the influence of women and men
- Costs and benefits analysis in water and sanitation from a gender point of view
- Public and school-based water and sanitation.

In order to come up with an inventory that would form the basis of a gender disaggregated database in water and sanitation, it is important to include the website link (url) if the information is obtained online and to provide contact details for information which may not be obtained online.

Your support is greatly valued and we look forward to receiving your contributions,
Thanking you in advance,

Yours sincerely,
For the GWA Secretariat
Egline Tauya
etauya@gmail.com and

cc

to jokemuylwijk@chello.nl

ANNEX 5: Inventory of GDD in WATSAN–Selected Organizations

Document Details	Synopsis of Document	Parameters and Indicators	Remarks
UN-HABITAT			
<p>Author/Name of Organization : UNHABITAT (Razak Seidu, Anna-Maria Mwachinga et al)</p> <p>Title : Water for African Cities –Phase II Performance Evaluation ((Unpublished) Year : 2010 Websites/Links: www.unhabitat.org</p>	<p>The document reviews the Phase II of WAC II programme, launched by the African Ministers’ Council on Water following significant successes under the WAC I Programme. The aim of WAC II Programme was to build on the successes of the WAC I Programme and expand water and sanitation services in African cities using innovative approaches. This review covered projects in eight countries (Burkina Faso, Ghana, Mali, Senegal, Niger, Cote d’ Ivoire, Ethiopia and Kenya) under the programme. The main objective of the review was to assess the performance of the projects in relation to their impacts on beneficiaries, as well as the efficacy of the management and organisation of the projects to provide the basis for effective decisions for the Programme’s improvement. The review was based on interviews with National Project Officers, beneficiary groups, as well as key informants drawn from the staff of focal ministries and implementing partner organizations.</p> <p>PROJECT OUTCOMES/ FINDINGS OF DOCUMENT The review notes that women were involved in the planning, implementation and management of the project. The Project coordinator was a woman and 75% of her assistants were women too. Especially women and girls benefited from improvements in the quantity and quality of water as well as the time spent to fetch to water for some specific projects (Table 3). Improved toilet and shower facilities benefited both men and women, and mostly women made use of the better waste management services. 70% of those working during implementation were women. They thus gained skills and were empowered.</p>	<p>Participation and equity in decision making: international, regional, national and local levels</p> <p>Equitable access to water supply</p> <p>Access to appropriate sanitation in private and public places (including in schools)</p> <p>Equitable access to water rights for productive uses</p> <p>Training/ education</p> <p>Public and school based water and sanitation</p>	<p>Gender-sensitive aspects of project</p> <ul style="list-style-type: none"> • Stakeholder participation in the project implementation, monitoring and evaluation • Some women participated in the validation meetings of the consultants’ report <p>The document alludes to GDD indicators and parameters only in so far as they relate to the concepts of water governance and pro-poor approaches in UNHABITAT interventions.</p>

Document Details	Synopsis of Document	Parameters and Indicators	Remarks
	<p>School girls were most positively affected by the public WASH campaign (Rights-based). They were relays of information within their families and in the community which triggered further improvements in the WATSAN facilities as well as hygiene practices in schools, the capacity building of teachers, and integration of WATSAN concepts into schools' curriculum.</p>		
<p>Author/Name of Organization : UNHABITAT Title : Gender Mainstreaming: Impact Study - Document 04 (Water and Sanitation Trust Fund Impact Study Series) Year of Publication: 2011 Websites/Links: www.unhabitat.org</p>	<p>The report is a product of the first in a series of Impact Assessment studies commissioned in November 2009 with the purpose to assist UNHABITAT in the establishment of a long-term impact evaluation mechanism. The study has looked at global, regional and country activities. The country programmes reviewed are implemented in Ethiopia, Ghana, Kenya and Nigeria in Africa; India, Lao PDR, Nepal and Vietnam in Asia; and Nicaragua in the Latin America and Caribbean region</p> <p>The objective of this impact assessment is to provide an opportunity for WSIB to increase its understanding of what has “worked”, or “not worked” to date, in the attempts to mainstream gender concerns in countries’ policies at various levels, and in planning, implementation and follow-up of activities on the ground.</p> <p>PROJECT OUTCOMES/ FINDINGS OF DOCUMENT There has been increased Participation and equity in decision making through women empowerment through recruitment of women at higher levels, in government agencies and institutions, and more active participation by women in decision-making bodies such as WATSAN committees and Multi- Stakeholder Forums at Municipality level</p>	<p>Participation and equity in decision making through women empowerment</p> <p>Access to sanitation especially to women and girls</p> <p>Economic empowerment through sanitation projects</p> <p>Costs and benefits-Change in gender roles</p> <p>Equitable access to water rights for productive uses through economic empowerment</p> <p>Management support/training</p> <p>Policy influencing and funding</p>	<p>The document comprehensively addresses issues that relate to gender mainstreaming from policy to practice. It raises important concerns and observations on GDD and serves as an appraisal tool that is critical in monitoring and evaluation of the impact of gender mainstreaming. One recommendation makes a critical observation on the status of GDD: “Regarding Poverty, Gender Mapping and Baseline Surveys, at the time of the assessment there seemed to be no</p>

Document Details	Synopsis of Document	Parameters and Indicators	Remarks
	<p>There is improved access to sanitation especially for women and girls through “gender sensitive models” for WASH in the community and schools. It has been suggested by one WSIB project – CTA - that the third phase of Water for African Cities would focus even more on improved sanitation than earlier phases.</p> <p>There is a rise in Economic empowerment through sanitation projects with economic activities and microfinance for sanitation for both women and men. Women in particular, show great interest in informal economic-oriented activities. Micro-credit schemes set up to accelerate the attainment of the sector MDGs have been directed to the construction of toilets at household level.</p> <p>A Change in gender roles in WATSAN is observed where there is an increase in women caretakers of WATSAN facilities, and women water sellers managing water kiosks in some countries.</p> <p>Capacity building of women and youth through the learning of book-keeping and accounting, and promotion of non-traditional skills.</p> <p>In some countries where WSIB/UNHABITAT has operations, there is likelihood that benefits may be sustained even after its programmes/initiatives have ended, through influence on planning and policies. There are also examples of models replicated through other technical cooperation programmes</p>		<p>established system to collect, disseminate and report on GDD on a regular basis, which makes the baselines seem like ‘stand alone’ exercises with no systematic link to activities and progress despite the development of formats that were to be used systematically in projects.”, The report recommends that WSIB maintain a system for GDD at the very start of new interventions.</p>

Document Details	Synopsis of Document	Parameters and Indicators	Remarks
<p>Author/Name of Organization : UNHABITAT</p> <p>Title: <u>Evaluation of Gender Mainstreaming in UNHABITAT</u></p> <p>Year of Publication: 2011</p> <p>Websites/Links : www.unhabitat.org</p>	<p>The objectives of the evaluation are to assess UN-HABITAT's efforts in mainstreaming gender across its programmes and policies, and the appropriateness of its institutional arrangements and strategic partnerships for the promotion of gender equality in human settlements. In addition to the accountability objective, the purpose of the evaluation is to generate lessons to inform decisions about how institutional arrangements for gender mainstreaming and related strategic partnerships can be improved.</p> <p>PROJECT OUTCOMES/ FINDINGS OF DOCUMENT</p> <p>Efforts made to improve Participation and Equity, in decision making in WATSAN at international, regional, national, and local levels through participatory budgeting programmes implemented in Senegal, DRC, and Mozambique</p> <p>The programme has sought to engage stakeholders in local government and utility companies to raise their awareness on the gender equality issues pertinent to Access to safe, clean water and Access to appropriate sanitation in public and private places.</p> <p>Going beyond support for more equitable land tenure legislation, UN-HABITAT is supporting, assessing and disseminating information on new forms of tenure arrangement that help to improve women's security and, potentially, facilitate their greater control over decision-making within the household.</p> <p>In partnership with GWA many capacity building initiatives at organisational and individual level have been</p>	<p>Participation and equity in decision making at international, regional, national, and local levels : A participatory budgeting programme implemented in Senegal, DRC, and Mozambique has experimented with ways to increase women's representation and participation in local government</p> <p>Raising awareness of stakeholders in: Gender differences in access to safe and clean water: The WAC Programme has sought to engage stakeholders in local government and utility companies to raise awareness on the gender equality issues pertinent to the sector.</p> <p>Raising awareness in Gender differences in Access to appropriate sanitation in private and public places (including in schools) : The disposal of faecal wastes at household level and in public sectors</p> <p>Equitable access to water rights for productive uses: The organisation has taken considerable steps to promote women's access to security of tenure, and are challenging structural gender inequalities such as legislation on land and housing that is discriminatory towards women.</p>	<p>The Evaluation Report has provided recommendations that touch explicitly on GDD related issues. Among others, the policy related ones are the most notable as follows</p> <p>Programme design should integrate analysis of potential impact on gender equality and include specific indicators of achievement. Achieve this through cooperation between gender specialists and technical staff.</p> <p>In establishing a monitoring framework for UNHABITAT's work on gender equality and women's empowerment, the agency should consider adopting a results-based monitoring and evaluation approach. It should combine and prioritize a manageable</p>

Document Details	Synopsis of Document	Parameters and Indicators	Remarks
	<p>undertaken from appointment of staff at Headquarters, and regional GFP with technical WATSAN and gender expertise, trainings on Gender Equity issues in all Programme Countries.</p> <p>Efforts have been made to improve the coherence of the UN-HABITAT's work on gender mainstreaming include the preparation and endorsement of the Gender Equality Action Plan (GEAP) in 2009. In a significant effort to render the GEAP consistent with the agency's broader goals, it was aligned with the Focus Areas of the Mid Term Strategic and Institutional Plan (MTSIP)</p>	<p>Training/ education: Capacity building at organizational and individual level – In partnership with the GWA, specialists have been appointed in each of the programme countries to facilitate debate and training on gender equality. At headquarters level, the appointment of a staff member with specialist knowledge of both gender and WATSAN UNHABITAT counts upon a network of GFPs with high-level expertise in gender analysis and technical skills to help delivery on the agency's commitments to gender mainstreaming.</p> <p>Policy support: Preparation and endorsement of Gender Mainstreaming initiatives through the Gender Equality Action Plan (GEAP) in 2009.</p>	<p>smaller number of quantitative indicator assessments with qualitative assessments and self-evaluations from the long list of 'gender indicators' of the Mid-Term Strategic and Institutional Plan (MTSIP) and the Gender Equality Action Plan GEAP. Align the GEAP with the MTSIP monitoring processes. Collect sex-disaggregated data for a selection of already existing indicators. The MTSIP steering committee must ensure this happens.</p>
<p>Author/Name of Organization : UNHABITAT & Gender and Water Alliance Title : Navigating Gender in African Cities : Synthesis</p>	<p>The Report is a synthesis of the participatory and Rapid Gender Assessment (RGA) reports that were conducted in the 17 cities of the WAC Phase II Programme. They represent the first stage of the Gender Mainstreaming Strategy Initiative of the WAC. The RGA provides the baseline data and priority recommendations for pro-poor gender mainstreaming of the WAC programmes of the</p>	<p>Access to appropriate sanitation in private and public places (including in schools) : The disposal of faecal wastes at household level and in public sectors</p> <p>Equitable access to water rights for</p>	<p>GDD qualitative data is demonstrated in some of the Case Studies¹⁸. The rest of the data is quantitative and illustrates the indicators</p>

Document Details	Synopsis of Document	Parameters and Indicators	Remarks
<p>Report of Rapid Gender and Pro-poor Assessments in 17 African Cities</p> <p>Year of Publication: 2005</p> <p>Websites/Links http://www.unhabitat.org http://www.genderandwater.org</p>	<p>cities. The document discusses the need for gender mainstreaming at UNHABITAT and within the implementing partners. The Rapid Gender Assessment process and the tools used demonstrate a ‘best practice’ in how to generate GDD. The entire report which is further backed up by concrete case studies is a true reflection of the kind of information needed to help generate GDD in WATSAN.</p>	<p>productive uses: Total time spent by men, women, boys and girls in collecting water to meet daily needs including waiting time at public supply points</p> <p>Training/ education: Capacity building at organizational and individual level</p>	<p>and parameters needed in GDD. The emphasis on qualitative data to complement quantitative data is one key strength of helping to generate GDD in WATSAN (which technical staff normally overlook).</p>
<p>Author/Name of Organization : UNHABITAT and Gender and Water Alliance (GWA)</p> <p>Title : Framework for Gender Mainstreaming : Water and Sanitation for Cities</p> <p>Year of Publication: 2006</p> <p>Websites/Links: www.unhabitat.org/downloads/docs/Gender www.genderandwater.org</p>	<p>The Gender Mainstreaming Strategy Framework (GMSF) documents important issues related to gender and water, as well as sanitation services in urban areas across the African and Asian Continents.</p> <p>The framework seeks to implement the Habitat Agenda (especially paragraph 46); ECOSOC resolution 1997/2 on gender mainstreaming ; the UNHABITAT Governing Council (GC) resolutions , (i) GC 19/16 on women’s roles and rights in human settlements development and slum upgrading of 9 May 2003, (ii) GC 20/5 on access to basic services for all within the context of sustainable human settlements, and (iii) GC 20/7 on gender equality in human settlements development. The GMSF also supports the implementation of the Dublin Principle No. 3.</p>	<p>Level of satisfaction of both men and women with their WATSAN services</p> <p>Proportion of women and men participating in municipal management and local governance in WATSAN</p> <p>Proportion of women and men trained in use and maintenance of WATSAN facilities</p> <p>Proportion of women and men sensitized in protecting surface and ground water</p> <p>Positions of women in WATSAN utilities decision making</p>	<p>The GDD indicators and parameters are best exemplified in chapter 4 which outlines the Expected Results and Indicators of Achievement. Pg 24-26</p>
<p>Author/Name of Organization :</p>	<p>The report provides background information on the WAC Programme, the Gender Mainstreaming Strategy Initiative</p>	<p>The GDD indicators and parameters are embedded in the operationalization of</p>	

Document Details	Synopsis of Document	Parameters and Indicators	Remarks
<p>UNHABITAT Title : Gender Mainstreaming in Water and Sanitation in Africa: Report of the Expert Group Meeting Held in Mombasa, Kenya; 13-17 June 2005. Year of Publication: 2005 Websites/Links www.unhabitat.org/downloads/docs/Gender www.genderandwater.org</p>	<p>and the Rapid Gender Assessment Process. The meeting brought together key individuals from WAC cities including WAC Programme City Managers as well as representatives of water utilities and municipal authorities. In addition, there were gender specialists from the local and central governments. This was after the GWA facilitated Rapid Gender Assessments in the 17 African Cities. The document highlights key issues in relation to gender mainstreaming. The expectation of the workshop was to facilitate ownership of the RGA reports and to mainstream gender by incorporating it into their broader WAC II work plans and Results Based Management. The RGAs set the pace for more responsive planning and policy decisions on matters relating to gender mainstreaming</p>	<p>the Gender Mainstreaming Strategy Initiative which clearly states the 8 underlying principles including:</p> <p>Participatory research approach</p> <p>Utilization and investment in local expertise and resources</p> <p>Situational analysis –location specific context, knowledge and situations will be used to inform and influence national policy and sector wide reforms in order to ensure that they are pro-poor and gender sensitive</p> <p>Capacity building</p>	
GENDER AND WATER ALLIANCE (GWA)			
<p>Author/Name of Organization : Gender and Water Alliance Title : Gender and Sanitation Policies in South Africa, Zambia and Zimbabwe Year of Publication: 2006 Websites/Links</p>	<p>South Africa, Zambia and Zimbabwe have a low ranking of 88, 129 and 107 respectively in the Global Gender related Development Index. Therefore, more work has to be done to ensure that gender imbalances among men and women, rich and poor are addressed adequately. The document highlights the status of gender mainstreaming in WATSAN in the three different countries: South Africa, Zambia and Zimbabwe. At the national level the three countries have national gender policies that aim to achieve gender equality and equity in all sectors and at all levels. All organizations and institutions in the respective countries are expected to mainstream a gender perspective in all their policies, strategies and activities.</p>	<p>There are no real GDD indicators. Parameters include access, control and ownership of water resources</p>	<p>Of importance is that the document points out that sanitation policies do not address gender at all. In instances where they do, the focus is on addressing PGN (access to latrines) and not SGN (women professionals and women in decision making positions). that</p>

Document Details	Synopsis of Document	Parameters and Indicators	Remarks
<p>www.genderandwater.org/content/download/725.10381/file/Gender_GWA_WEDC_Sanitation_Policies_S.Africa_Zambia_a_Zi</p>	<p>However, whereas the Zambian national gender policy addresses sanitation in specific terms the South African and Zimbabwean policies do not. The Zimbabwean gender policies give comprehensive strategies for water supply but sanitation is not mentioned and the South African gender policy only makes a passing reference to water services.</p> <p>The report observes that national policies treat sanitation and gender just as household or social issues, but not as development problems.</p>		
<p>Author/Name of Organization : Gender and Water Alliance (GWA) (J.G. Muylwijk) Title : A Gender Approach to Sanitation for empowerment of women, men and children: A paper presented at SACOSAN</p> <p>Year of Publication: 2006</p> <p>Websites/Links: www.genderandwater.org/page/5374</p>	<ul style="list-style-type: none"> • Key issues in the paper are: Gender aspects of sanitation are evident, but it is not clear how mainstreaming gender would make the work of sanitation professionals more efficient, effective and sustainable. • For people to change their own gender ideology is not impossible, but if related to taboo subjects such as most sanitation issues are, it needs specific inputs and attention. • Participatory sanitation development has major empowering effects on poor women, girls, boys and men. • By including women’s knowledge and expertise, sanitation efforts will be highly effective and efficient. • Gender circle of sanitation: Women carry responsibility for hygiene, women have to do the work for it by fetching more water and women suffer most from the lack of hygiene. 	<p>Indicators are mainly qualitative with parameters on ideology and cultural issues in WATSAN coming out strongly through cases studies for e.g.</p> <p><i>“Whilst hygiene is extra important for pregnant women, they may particularly fear (to lose the child through) the deep hole (in latrines whilst answering to the call of nature)”</i></p> <p><i>“Women feel more responsible than men for cleaning toilets. If men have separate toilets, who will clean them? Once they are too dirty to use, men will not at all feel ashamed to use women’s toilets.”</i></p>	<p>The document provides an analysis of specific gender issues in WATSAN, responsibilities and participation of women in decision making</p>
<p>Author/Name of Organization : Gender</p>	<p>This manual provides guidelines designed to help development organisations - government, donor or civil</p>	<p>The guidelines have useful parameters but there are no real GDD mentioned</p>	<p>The Guidelines focus on the processes of policy</p>

Document Details	Synopsis of Document	Parameters and Indicators	Remarks
<p>and Water Alliance Title : Policy Development Manual for Gender and Water Alliance Members and Partners.</p> <p>Year of Publication: 2003</p> <p>Websites/Links http://cap-net.org/sites/cap-net.org/files/wtr_mngmnt_tls/29_GenderPolicy.pdf</p>	<p>society - concerned with water management or service delivery to develop gender policies appropriate to their own organizational context. The Guidelines have been developed in response to demand from GWA member organizations – but will provide useful information to staff in any organization striving to address gender issues in their work.</p> <p>The guidelines provide key steps and issues to focus on including:</p> <ul style="list-style-type: none"> • Deciding on who takes responsibility, • What you need to know about beneficiary groups in order to ensure that water services address the needs and priorities of poor women and men (girls and boys) • Benefit from the involvement of poor women and men? • Is there any difference between poor women’s and men’s influence over decisions related to water supply, sanitation, irrigation or environmental protection within households, and at the community level 		<p>development outlining key steps and issues to address.</p>
<p>Author/Name of Organization : Gender and Water Alliance (GWA) Title : Gender Perspectives on Policies in the Water Sector</p> <p>Year of Publication:</p>	<p>This report looks at four sectors: Water for Nature; Water for Sanitation; Water for People and Water for Food. It evaluates progress made by governments and external support agencies in policy, legislation and institutional change.</p> <p>A section on case studies demonstrates best practices and proposes areas for further work. In South Africa there have been significant improvements in free basic sanitation and water services for the very poor,. Recommendations include the compiling of reliable statistics and gender</p>	<p>Equal opportunities for men and women in employment in the water sector</p> <p>Establishment of goals based on a designated quantity of water as a human need</p>	<p>While the paper makes a good analysis of gender and WATSAN issues, real statistics are missing.</p>

Document Details	Synopsis of Document	Parameters and Indicators	Remarks
2003 Websites/Links : www.genderandwater.org	disaggregated data; improved awareness-raising and the development of new tools; encouraging better learning from best practices and pooling expertise; and improving policy dialogue and the development of model legislation.		
Author/Name of Organization : Gender and Water Alliance Title : Gender in Integrated Rural Water Supplies and Sanitation Year of Publication: 2006 Websites/Links : http://www.genderandwater.org/page/751	This is a case study of gender issues in WATSAN in Zimbabwe. Zimbabwe has been implementing IRWSSP since the late 80s. The programme basically focuses on three components of water supplies, sanitation and hygiene. It was initially largely implemented through inter-ministerial committees that are found at national, provincial and district level. The inter-ministerial committee at the national level known as the National Action Committee is a policy formulating body, defining standards, operational approaches and monitors the national programme	Parameters include: Division of labour and working conditions for men and women in WATSAN interventions (during stages of implementation, construction of WATSAN facilities)	While the case study does not really pin point out the specific indicators, it analyses real gender issues pertaining to division of labour, work conditions during WATSAN interventions not being favourable for women for e.g. worksuits designed for men only.
UN-SISTER ORGANIZATIONS			
Author/Name of Organization : United Nations Department for Economic and Social Affairs (UNDESA) Title: Gender Disaggregated Data on Water and Sanitation. Expert Group Meeting Report 2009 Year of Publication: 2009 Websites/Links : http://www.undesa_u	The report provides the rationale for GDD in WATSAN, overarching themes, obstacles to developing, collecting and using GDD on WATSAN, and data collection needs: gender-disaggregated indicators currently unrepresented or under-represented.	The indicators represented in most reports highlighted include: <ul style="list-style-type: none"> • Gender and mode of transport in water collection • Proportion of women and men trained in use and maintenance of facilities • Gender views of safety to access to water supplies or sanitation facilities • Documentation of violence against women/girls in the context of water collecting or using sanitary facilities • Total time spent by men, women, 	This is one of the documents which was found to have the most comprehensive information on GDD in WATSAN. It further highlights the specific indicators and parameters of measuring performance in WATSAN and gives recommendations on how to address the gaps indentified.

Document Details	Synopsis of Document	Parameters and Indicators	Remarks
w_dpc_genderdisaggregated_data_on_water_and_sanitation_2009		<p>boys and girls in collecting water to meet daily needs including waiting time at public supply points</p> <ul style="list-style-type: none"> • Gendered economic benefits from improved access to water 	
<p>Author/Name of Organization : United Nations Department for Economic and Social Affairs (UNDESA) Title: A Gender Perspective on Water Resources and Sanitation Interagency Task Force on Gender and Water Year of Publication: 2005 Websites/Links : www.unwater.org/downloads/unwpolbrief230606.pdf</p>	<p>The paper has brief case studies of access to water and sanitation in African countries. In Morocco, the Rural Water Supply and Sanitation Project of the World Bank aimed to reduce the burden of girls “who were traditionally involved in fetching water” in order to improve their school attendance. In the six provinces where the project is based, it was found that girls’ school attendance increased by 20 % in four years, attributed in part to the fact that girls spent less time fetching water. It was also found that convenient access to safe water reduced the time spent fetching water by women and young girls by 50 to 90 %.</p> <p>In the peri- urban areas of <i>Malawi</i>, female participation in water management has shown to be very constructive. At first, male managers were put in charge of the communal water points. However, this was found to be ineffective, as the men were absent during the day and lacked service orientation and financial management skills. A new management group, consisting only of females, was set up and both water and sanitation management improved significantly. However, this was a heavy burden for the women, and the programme now follows an equitable strategy where the management group consists equally of men and women and where the burden of work and influence is shared equally.</p>	<p>Indicators presented in the report are:</p> <ul style="list-style-type: none"> • Schools attendance of girls increasing • Time spent to fetching water reduced due to improved source • Female participation in water management seen to be very constructive 	<p>While the indicators are few at least the document provides real GDD data, both quantitative and qualitative</p>
Author/Name of			

Document Details	Synopsis of Document	Parameters and Indicators	Remarks
<p>Organization : United Nations Department for Economic and Social Affairs (UNDESA)</p> <p>Title The World's Women Trends and Statistics</p> <p>Year of Publication: 2010</p> <p>Websites/Links : www.wsp.org</p>	<p>The document is accompanied by a comprehensive website hosted by the Statistics Division of the Department of Economic and Social Affairs. The website displays the full range of statistics used for preparing the present publication, as well as links to numerous sources of gender statistics and references to international, regional and national compilations of relevant data.</p>	<ul style="list-style-type: none"> • Access to sources of drinking water • Access to improved sanitation • Percentage of women collecting water • Average time needed to collect water by gender. 	<p>Most data is not gender disaggregated. Such website should provide more of GDD WATSAN indicators. However ideas could be borrowed from here when developing the GDD in WATSAN database</p>
<p>Author/Name of Organization : United Nations Department for Economic and Social Affairs (UNDESA)</p> <p>Title Developing Gender Statistics: A Practical Tool The manual <i>Developing Gender Statistics: A Practical Tool</i>.</p> <p>Year of Publication: 2010</p> <p>Websites/Links : www.unece.org/stats/gender/manual/Welcome.html</p>	<p>Reference manual prepared by the UNECE Task force on Gender statistics Training for Statisticians , with contributions from various experts. It aims to guide statistical organizations in the production and use of gender statistics, building upon the seminal work</p>	<p>Indicators which relate to WATSAN include:</p> <ul style="list-style-type: none"> • Time Spent in Domestic Activities by Activity, Sex, Country and Year. • Free Time spent by Activity, Sex, Country and Year. • Enrolment ratio at secondary level by Sex, • Measurement, Country and Year. 	<p>This is a manual and therefore does not have the actual GDD.</p>
<p>Author/Name of</p>	<p>This report describes status and trends with respect to the</p>	<p>This report has indicators on access, type</p>	<p>There are no real GDD</p>

Document Details	Synopsis of Document	Parameters and Indicators	Remarks
<p>Organization : WHO/UNICEF Title: Progress on Sanitation and Drinking Water Year of Publication: 2010 Websites/Links http://www.wssinfo.org/</p>	<p>use of safe drinking water and basic sanitation, and progress made towards the MDG Drinking Water and Sanitation target. As the world approaches 2015, it becomes increasingly important to identify who are being left behind and focus on the challenges of addressing their needs. The report presents striking disparities for access to safe drinking water and sanitation between urban and rural populations in terms of services provided.</p>	<p>of WATSAN facility, but not all of the data are sex disaggregated. Indicators include:</p> <ul style="list-style-type: none"> • Access to safe drinking water urban/rural • Access to improved sanitation by urban and rural 	<p>in WATSAN apart from indicating that women have the most responsibility of collecting water</p>
<p>Author/Name of Organization : WHO/UNICEF Title: Core Questions on drinking-water and sanitation for household surveys. Year of Publication: 2006 Websites/Links www.who.int/water_sanitation_health/monitoring/oms_brochure_core_questionsfinal24608pdf</p>	<p>This document is intended for use in comprehensive surveys that include questions on drinking-water and sanitation. The report states that In national and sub national household surveys, use of the questions and response categories in this guide will improve survey comparably. Over time there is a need to harmonize the surveys with international monitoring programmes</p>	<ul style="list-style-type: none"> • Population using improved water sources • Population using improved sanitation facilities • Water, sanitation and hygiene attributable deaths 	<p>Indicators related to WATSAN are not gender disaggregated</p>
<p>Author/Name of Organization : WHO/UNICEF Title: Water, Sanitation and Health Databases and Statistics Websites/Links</p>	<p>The WHO and UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP) keep a data base containing not only water supply and sanitation coverage estimates but also all the data from household surveys (MICS, DHS, Censuses, etc) which were considered for these estimates. This database is not yet fully operational</p>	<p>No GDD are included as yet. Indicators on access to water and sanitation are by total population per country.</p>	<p>JMP needs to set an example in integrating GDD in all their data sets and surveys.</p>

Document Details	Synopsis of Document	Parameters and Indicators	Remarks
www.wssinfo.org .	online but the main outputs of the database can be seen at http://www.wssinfo.org/data-estimates/table/		
OTHER MAJOR ORGANIZATIONS			
<p>Author/Name of Organization : Water Supply and Sanitation Collaborative Council (WSSCC) and the Water, Engineering and Development Centre (WEDC), Gender and Water Alliance (GWA)</p> <p>Title : FOR HER IT'S THE BIG ISSUE Putting women at the centre of water supply, sanitation and hygiene Evidence Report</p> <p>Year of Publication: 2006</p> <p>Websites/Links http://www.genderandwater.org/page/5124</p>	<p>This report is a collection of evidence, brief examples highlighting the effect and benefits of placing women at the core of planning, implementation and operations of WASH programmes. The experiences also show how women's empowerment and the improvement of water supply, sanitation facilities and hygiene practice are inextricably linked. One cannot be successfully achieved without the other.</p> <p>The evidence comes from a variety of sources, some of it from recent literature, project reports and evaluations and some from personal correspondence with those involved, where changes are currently happening but not yet documented.</p> <p>Although the report is organised around selected key themes, the multiple impacts of any single intervention or improvement where known are also indicated.</p>	<p>Ratio of female to male enrolments in primary and secondary school (%)</p> <p>GDD indicators include those on empowerment, privacy and dignity, who benefits, women taking managerial roles , and are found in different short case studies such as below.</p>	<p>The report aims to collect and analyse noteworthy examples that demonstrate the widespread impacts of women's contributions to WASH activities. The report provides further proof that if women play a central role in water, sanitation and hygiene efforts, progress towards achieving all the Millennium Development Goals will be significantly advanced.</p>
<p>Author/Name of Organization : Water and Sanitation Programme</p> <p>Title : <i>Water and sanitation programme</i></p>	<p>It is a working paper as the Water and Sanitation Program and its partners continue to explore and document emerging practice from the field. The review is intended for easy reference by sector ministries, donors, citizens, development banks, non-governmental organizations and water and sanitation service providers committed to</p>	<p>No GDD in WATSAN</p> <p>Indicators are per household (HH) so the gendered intra-household dynamics are ignored (who makes decisions, who is affected most, what are the specific needs and constraints of different HH</p>	<p>A well structured portal which could be improved by including GDD.</p>

Document Details	Synopsis of Document	Parameters and Indicators	Remarks
<p>Working paper Gender mainstreaming in Water and Sanitation</p> <p>Year of Publication: 2010</p> <p>Websites/Links www.wsp.org</p>	<p>mainstreaming gender in the sector.</p>	<p>members)</p>	
<p>Author/Name of Organization : World Bank</p> <p>Title: World Development Report 2012 Gender Equality and Development.</p> <p>Year of Publication: 2012</p> <p>Websites/Links http://www.wdronline.worldbank.org/</p>	<p>The lives of girls and women have changed dramatically over the past quarter century. Today, more girls and women are literate than ever before, and in a third of developing countries, there are more girls in school than boys. Women now make up over 40 percent of the global labour force. Moreover, women live longer than men in all regions of the world. The pace of change in many developing countries has been faster than in developed countries over an equivalent period: What took the United States 40 years to achieve in increasing girls' school enrolment has taken Morocco just a decade.</p>	<p>Indicators related to WATSAN include:</p> <ul style="list-style-type: none"> • Gender Time use and employment segregation • Participation in education by gender • Ratio of girls to boys enrolment in primary schools • Employment by economic activity including agriculture by gender • Access to improved sanitation facilities- but not gender disaggregated 	<p>The main message of this year's <i>World Development Report: Gender Equality and Developments</i>. One would expect to find a lot of GDD data in all sectors including WATSAN but this is not the case. The GDD is in other areas such as education, policy making, and health.</p>
<p>Author/Name of Organization : OECD Development Centre</p> <p>Author: Issy-les-Moulineaux</p> <p>Title : Measuring Gender Equality, Taking Stock- Looking Forward.</p> <p>Year of Publication: 2007</p>	<p>The paper stems from the International Expert Workshop May 2007 on 'Improving Gender sensitive Data Collection and Quality in Africa: Challenges and Opportunities'. It notes that all proposals and decisions must be analyzed from a gender perspective in order to map all possible consequences for women and men at regional as well as national and local levels. It notes that Gender statistics are required to Provide evidence and unbiased basis for policies and measures; Monitor and evaluate policies and measures with respect to gender dimension; Raise consciousness, persuade policy makers and promote changes. The central aim of engendering statistics , the</p>	<p>The document only underscores the importance of GDD in all sectors but does not pin-point the specific indicators. It is however a good document which highlights key GDD challenges in Africa</p>	<p>The paper notes the need to mainstream gender in all phases of the programme/project, policies. The African Gender Development Index, The GEM, do not recognize the WATSAN indicators - yet they are crucial in human livelihoods</p>

Document Details	Synopsis of Document	Parameters and Indicators	Remarks
<p>Websites/Links www.oecd.org/dataoecd/32/39/38640915.pdf</p>	<p>paper states, is to get representative and statistically reliable information about the progress in removing of gender gaps and inequalities, and women's access to social and economic resources. Without statistics, it is difficult to obtain systematic information or to estimate the real situation and to respond to the needs of the women.</p>		
<p>Author/Name of Organization : African Development Bank Title : Checklist for Gender in Water and Sanitation Sector Year of Publication: 2009 Websites/Links http://www.afdb.org/fileadmin/uploads/afdb/Documents/Policy-Documents/Checklist%20for%20Gender%20Mainstreaming%20in%20the%20Water%20and%20Sanitation%20Sector%20EN.pdf</p>	<p>The Checklist is intended to provide a tool for effective gender mainstreaming within the framework of DWSS programs and projects, with a view to: (i) guiding project managers and implementation teams in identifying, preparing, appraising, implementing, monitoring and evaluating gender-sensitive DWSS programs and projects; and (ii) supporting RMC in analyzing and implementing the activities of programs and projects financed by the Bank. It has Indicators for the Intermediate Monitoring, Social and Gender Impact in DWSS Projects.</p>	<p>Main parameters are: financial and economic, health, education, Participation and socio-political position of women and youth, Social conflict, Mobilisation and sensitization.</p> <p>Has many WATSAN indicators including:</p> <ul style="list-style-type: none"> • Distance covered to reach water points and sanitation facilities by men and women • Additional income generated • Size of poor households benefiting from subsidized connections • Number of women heads of household who pay their water regularly • Level of savings of beneficiary women and youth 	
<p>Name of Organization : JICA and ASCU 2011 Author: Mugo, K., J. Title: Mapping of Existing Gender</p>	<p>The research carried out by consultant Kabutha Mugo for Japan International Cooperation Agency (JICA) and Agricultural Sector Coordination Unit (ASCU) was meant to offer direction for the policy by conducting a mapping of existing gender-disaggregated data and methodologies in Agriculture and Rural Development.</p>	<p>Indicators include:</p> <ul style="list-style-type: none"> • Percentage of female staff members in Water and Irrigation; • Gender representation in the agriculture sector; • Fishers by gender; Fish processors 	<p>While this study was mainly for agriculture, there are water related issues since agriculture and gender issues are linked to water and</p>

Document Details	Synopsis of Document	Parameters and Indicators	Remarks
Disaggregated Data and Methodologies in Agriculture and Rural Development in Kenya Website: http://www.jica.go.jp/activities/issues/gender/pdf/e10ken.pdf		by gender; <ul style="list-style-type: none"> • Average earnings of female and male farmers 	gender issues.
MAJOR GLOBAL AND CONTINENTAL WATSAN DATABASES WITH GENDER ISSUES			
WATSAN Database http://www.ngof.org/wdb/databases.php	The databases provide information and resources for a variety of water and sanitation needs. Resources are categorized by format and type to allow a more localized search and, within each database, further information can be found through the links provided or by sorting the information available. It contains the following: <ul style="list-style-type: none"> • WATSAN Project Database • News Database • Document Database • Image Gallery • Poster Gallery • Audio-Visual Database • Maps Database 	No GDD are found	Whilst there are no specific GDD, the database provides an inventory of key WATSAN documents.
WATSAN Portal http://watsanportal.org/	The WatSan Platform enables African Countries to rapidly set up a free database and website for monitoring WATSAN, Web portals created on the WatSan Platform are participatory tools for information for dissemination in the water and sanitation sector at national and regional level	Portal has most recent WATSAN indicators with lots of photos of women fetching water but no real GDD.	Could have been a very useful portal if data was gender disaggregated

ANNEX 6: Checklist for Integrating Gender Considerations into Water and Sanitation Projects¹⁹

- Location/access to safe drinking water sources as well as sanitation facilities in relation to : convenience, safety, dignity and safety by age, gender and level of vulnerability
- How are men and women using the water or sanitation resource and for what purpose(s) (Priorities/needs)?
- How are contributions (labour, time, payments, and contributions in kind) to the development and management of water resources or sanitation facility divided between men and women depending on age, background and level of vulnerability?
- Who makes the decisions and controls their implementation by age, gender and level of vulnerability at the various levels (family, community, national)?
- Who gets the project or programme resources, such as jobs and training?
- To whom goes the benefits and the control over these benefits, such as status, water, products produced with this water, income resulting from products and functions and decisions on how this income is used?
- How is the division of these attributes among women and among men of different wealth, age, and religious and ethnic divisions? In other words: do some women and men benefit more than others?
- What are the transformative changes in relation to gender power relations caused by the WATSAN programmes? Who is most affected (positively or negatively?)
- Is water access restricted to those with land rights?
- Are these predominantly men?
- Which creative mechanisms have been devised to ensure that women have direct access to water?
- Overall management and participation
- What percentage of women is there on these committees and what role do they play?
- Can women participate in line with their own potential, without harm, and present new tasks and opportunities?
- Do women and men have individual or organized influence on the operations, maintenance and management of water and sanitation services? What roles do women and men play in these areas?
- Are women's capacities to engage in public consultation processes enhanced so that they can contribute meaningfully?
- Are women's knowledge and experience effectively harnessed and employed?

¹⁹ From: Gender Links 2000 Mainstreaming Gender in Water and Sanitation: Literature Review for the South African Department of Water and Sanitation, Johannesburg

- Are participatory techniques employed to ensure the above?

Policy and attitudes

- What is the attitude of government, local leaders and project management towards gender sensitive programming?
- Do these parties explicitly view women's involvement both as a condition of for the success of project improvements and as a pre-requisite of genuine advancement of women's interests?
- Will this be reflected in plans for training staff and staff composition?

Research

- Is gender analysis integrated into water research, problem diagnosis and formulation of solutions and actions?
- Does research focus on low cost, innovative, conservation and delivery systems?

Baseline

- Have existing water supply and sanitation practices been thoroughly investigated, including which types of technology and what water sources are used by who, when.
- Have findings been distinguished for different user categories: men, women, and occupational income groups.
- Have women and men been asked what they like about their current water and sanitation facilities and what they do not like.
- Have poor women been directly approached as informants on their own particular roles, needs, problems and possibilities?
- Has this been done appropriately- e.g. female interviewees in an informal setting, asking how things are actually done rather than who is officially in charge?
- What is women's role in the provision of family health?
- What is women's role in the provision of family hygiene?
- Who collects, stores and uses water?
- Who is responsible for sanitary arrangements?
- Do women encounter any difficulties in ensuring their own sanitary privacy?
- What are the competitive demands on women's time and energy in general?
- How do water and sanitation impact on these competitive demands?
- How do they impact on women's opportunities to engage in new activities, such as income generation; community work and self-development?
- Do men play any of the roles above, and if so, give a similarly detailed picture.

Planning

- Are there formal or informal barriers to women's participation in planning? If so, what plans have been made to limit these barriers?
- Do men and women feel a need for the project? If so, what are their respective priorities?

- Are men and women, including female heads of household, equally free to participate in the planning?
- Is the design acceptable to women in terms of: quality, design; adequate access; appropriate technology and access; cultural acceptability?

Design

- Have women been consulted/ had a hand in the detailed design: for example in the case of latrines, the type of enclosure, building materials, doors, locks, size or type of super structure, lighting, siting, orientation.

Implementation Personnel

- Are women and men equally involved in all stages and at all levels of the operation?

Construction

- Have women and men been consulted about the techniques to be employed, for example, whether to use small contractors or self employed labour for production of materials such as bricks, thatch, etc.
- Can women assist in the construction without being disproportionately burdened?
- Are women equally free to participate in all aspects of construction: for example in the case of latrines, digging, erecting walls; manufacture of materials to be used in construction; as well as housing/feeding labourers from outside the area.
- Are women and men equally remunerated?

Training

- Is training for both men and women adequate?
- Are women trained in the actual construction, operation and long-term maintenance of the system?
- Has all project personnel staff received gender sensitivity training?

Location

- Are the facilities conveniently located for men and women?

Finances

- Do funding mechanisms exist to ensure programme continuity?
- Are women and men equally involved in making decisions on how these resources are spent?
- Is the preferential access of men to resources avoided?
- Is it possible to trace funds for women from allocation to delivery with a fair degree of accuracy?

Information networks

- Have women's groups been approached to assist with information; motivation; reinforcement and/or maintenance activities.
- Is women and men's access to project information sufficient? Does the choice of channels through which information is disseminated inadvertently exclude or by pass women?

Maintenance

- Is the polluter pays principle enforced?

- Do men and women participate equally in maintenance of both water and sanitation facilities? In particular, are men encouraged to assist in maintaining sanitation facilities? Do both men and women carry water for pour flush facilities and for general latrine cleaning? Do men and women participate in decisions for upgrading and improvements?

Monitoring and Evaluation

Data

- Does the project's monitoring and evaluation system explicitly measure the project's separate effects on women and men?
- Is data collected to assess changes in women and men's involvement in the project and their access and control over management and resources?
- Are women and men involved in designing the data requirements?
- Are the data collected with sufficient frequency so that necessary adjustments can be made during the project?
- Is the data feedback to the community? How? With what effect?
- Are data analysed to provide guidance on the design of other projects?
- Are key areas for gender research identified?

Impact

- In what way does the project increase women's productivity and or production?
- Do women derive economic benefits from saved time?
- Do they use saved time for other activities? If so, what activities and why?
- In what way does the project increase women's access to and control of resources? Have women been consulted in identifying these?
- Does the project increase or reduce women's access to or control of resources and benefits?
- Might it adversely affect women's situation in some other way?
- What are the effects on women and men in the short and long term?

ANNEX 7: Minimum Agenda for Mainstreaming Gender in Water Management

11 All actors in water and sanitation development and management

There is a need for all to:

Demonstrate how a gendered approach to water management by increased contributes to increased efficiency, visible impact and sustainability.

Document pathways taken to overcome difficulties and constraints.

Raise awareness and share experiences and lessons learned

2. Practitioners in the field

Water and sanitation practitioners should:

- Always carry out a comprehensive social analysis, including;
 - ◆ stakeholder analysis: who is involved or impacted, who does what
 - ◆ agency analysis: ways and strategies to formally and informally access resources
 - ◆ water use analysis: who are the users; how much do they use and how; what water do they use (surface, ground saline, wastewater; what are spheres of influence
- Collect and make use of gender and diversity disaggregated data in design, implementation and monitoring of water and sanitation projects.
- Involve all local stakeholder groups- men and women of different age groups and classes through a facilitated dialogue process from the start.
- Involve social/gender experts in projects and programmes from the design stage
- Share expertise and knowledge among practitioners and give feedback to academics and policy makers on gender issues and mainstreaming efforts.
- Lobby at higher political levels to stimulate the right environment for social changes enabling equity

To be able to do this they need:

- Practical tools for comprehensive social analysis
- Access to information on rights and responsibility for women and men regarding natural resources.
- Essential social sciences training, including facilitation skills and appropriate methodologies and terminology to use (tailored to local contexts)
- Documented evidence of how gender mainstreaming impacts on efficiency
- Financial, institutional and legal support from policy makers to mainstream gender

3. Policy Makers (and funding agencies)

Policy makers should:

- Avoid gender neutrality in policies, laws and budgets by making the impact and benefits for, and rights and responsibilities of men, women and other socio-economic groups explicit.
- Base their policies on comprehensive social analyses, including sex disaggregated data and gender impact analysis through a dialogue process, with ability to take corrective actions.

- Reflect social diversity in policies, laws, financing agreements and institutional arrangements for the development and management of water and sanitation.
- Build upon existing studies and cases and use the expertise at the local level.
- Facilitate equality and gender mainstreaming efforts with financial support
- Stimulate institutionalized learning and sharing between practitioners, academics and policy makers on gender issues and mainstreaming efforts
- Ensure the right to information on the rights for women and regarding natural resources as well as the right to be informed.
- Integrate gender mainstreaming in the formal and non-formal education streams.

To be able to do this they need:

- Clear arguments for and cases of gender mainstreaming in water management and sanitation
- Expertise/case studies tailored for the policy and decision makers
- Training of staff on key elements of social sciences to allow for gendered policies (skills in collecting sex-disaggregated information, analysing data sets and monitoring).
- Develop mechanisms to institutions and individual practitioners and build these into performance appraisals.

4. Researchers and trainers in water and sanitation

Researchers and trainers should:

- Always include gender specific and disaggregated data in all disciplines, analyses and document findings
- Enhance the gender content of disciplines, by:
 - ❖ Updating conventional social sciences with state-of-the-art gender studies;
 - ❖ Updating existing curricula to include social issues especially in technical training courses.
- Make sure that research is participatory involving all stakeholders, including women, from the onset and recognizing that local men and women are also experts with relevant knowledge.
- Respect women's difficulties in participation in meetings by taking into account the time and place most suitable to them.
- Ensure that researcher's knowledge does not remain in isolation, but is shared with local people and policy makers (tailored for their needs).
- Work in multidisciplinary teams, including social scientists and gender experts and share knowledge and expertise among researchers of different disciplines and with practitioners

To be able to do this they need:

- Guidance on a minimum set and gender-disaggregated data for different scientific fields
- To assess lessons learned from existing gender projects in their discipline to identify gaps

5 Gender experts

Gender experts should at least:

- Focus on revising methodologies and tools for different audiences, and as per context and community needs.
- Always attempt to view the water management situation from the perspective of the water technician for better communication, avoiding the use of

gender jargon.

- Contribute to improved integration of gender in disciplines in the formal and informal sectors by:
 - ❖ Updating conventional social sciences with latest gender studies approaches;
 - ❖ Updating existing curricula to include more social and gender issues especially in technical training courses
- Raise awareness and create sensitization on what difference a good gender approach can make in water management and sanitation, as well as the inherent dangers of not mainstreaming gender in policies and decisions on water management and agriculture.
- Communicate information, cases, experiences and research, using gender study centres.
- Provide tailored training/capacity building according to specific needs of projects, institutions;
- Suggest pathways to involve stakeholders on the ground and at different levels from the design to the implementation and evaluation phase of projects.
- Lobby at all levels to get the appropriate environment for social transformation.

To be able to do this they need:

- To get regular feedback from non-specialists on tools, approaches and methodologies.
- Revisit existing tools to make them accessible to non-specialists by tailoring and contextualizing them to specific local needs, users and uses(changing the language and guidelines with multi-disciplinary and multi-cultural teams.

Adapted from Both Ends Working Paper Series, December 2006, GWA, Both Ends, and Comprehensive Assessment of Water Management for Agriculture

ANNEX 8: Checklist for Design, Conceptualization, and Logical Set-up of a Central Database on GDD in WATSAN

(source: McCaldin, D. 2010 Database Design Steps/How to develop a database)

1. As recommended in (Batini et al., 1986) the 'database designer's first step is to draw up a data requirements document. This is a summary of what data fields and items will be stored in the database, and how the various data items relate to one another. The fields should include, references, data collection tools, methodologies of uploading data onto the database, data storage techniques, data retrieval, methodologies of analysing data. The inventory, framework, methodologies of collecting data, case studies developed in output 1-4 will act as a requirement document which can be converted into a conceptual model. The database designer may also contact experts familiar with databases (such as FAO, who has a lot of experience in combining databases with geospatial information such as Aquastat).
2. The end result of the conceptual design phase is a conceptual data model, which provides little information of how the database system will eventually be implemented. The conceptual data model is simply a high-level overview of the database system.
3. The conceptual data model is translated into a logical representation of the database system. The logical data model conveys the logical functioning and structure of the database. Logical database model is a lower-level conceptual model, which must be translated to a physical design.
4. By drawing up a logical model, extra data items can be added more easily in that model than in the physical model. The database design that can change easily according to needs of the organisation is important, because it ensures the final database system is complete and up-to-date
5. The database will have links leading to different sets of data using the parameters and indicators in the framework in output two.
6. It will be organized in such a way that one can retrieve data at different levels at national, provincial, district and area level. This methodology will then cater for the community level data which is normally not recorded
7. There is need for a search link which allows one to search particular data. Key words may help to retrieve desired data quickly
8. The data should be organized in excel sheets with categories/parameters accessed with a click.
9. There should be RSS feed notifying the user on change in structure or value

