

Module 1

Water, Sanitation and Health (WASH) in the Context of Rwanda

1 Legal Status of Women and Men in Rwanda.

Duration

One hour

Objectives

1. To allow participants to express what they know about the importance of gender in WASH
2. To allow participants to express what they know about the legal status of women and men in Rwanda
3. To build on this understanding by identifying laws based on gender equality
4. To identify barriers faced in implementing laws which commit Rwanda to gender equality

Methodology

- Brainstorming
- Questions and Answers
- Visual Presentation
- Participatory Discussion

Media/Materials

- Flipchart, white board and markers
- PowerPoint projector and presentation that summarises the handout
- Handout 1: *Legal Status of Women and Men in Rwanda*.

Preparation

1. Read the handout and procedures carefully before the session so that you are thoroughly familiar with the material and proposed methodology.
2. Download the PowerPoint presentation.
3. Make sure that you have sufficient copies of Handout 1: *Legal Status of Women and Men in Rwanda*, ready for the lesson.
4. Write the objectives of the session on a flipchart.

Procedures

1. Give a brief introduction to the beginning of the two-day module on mainstreaming gender into WASH programs, explaining the importance of understanding and recognising gender relations for successful WASH projects.
2. Briefly share the objectives of the session on a flipchart with the participants.
3. Start the PowerPoint presentation and use this as a guide throughout the lesson.
4. Begin by introducing the topic and asking the participants to brainstorm their ideas about the relevance of gender in WASH management.
5. Write their ideas on a flipchart.

6. Move on to a discussion of the status of men and women in Rwanda. Ask the participants what they know about Rwanda's legal framework with respect to equal rights for men and women. Ask whether there have been recent changes in gender relationships. Have things changed? How have things changed?
7. Write participants' comments on a flipchart.
8. Ask the participants to offer examples from countries they have worked, lived or travelled in which have either a progressive legal framework in relation to gender equality, or the opposite. If appropriate, give the following examples.
 - In Papua New Guinea the lack of quota systems severely affects women's involvement in domestic politics. Of 109 Assembly members in 2006, only one is a woman. Similarly, the Solomon Islands does not have a single female parliamentarian in its Assembly. In the total cluster of Pacific Island nations, women only make up 11 percent of parliamentarians.
 - Similarly, in Botswana, Lesotho and Malawi, women represent only 11.1, 11.7 and 13.6 percent of parliamentarians, respectively. (www.ndi.org accessed in July 2006)
 - Liberia has recently reformed rape legislation to make it easier for women to pursue their grievances through the legal frameworks.
9. Create three columns on a flipchart. In the first column, write a list of the most recent laws affecting the status of men and women (see handout for table with examples). In the second column write how these laws specifically affect women.
10. Ask the group to suggest barriers to the practical implementation of these laws, given some understanding that women rarely have as many rights as men.
 - For example, comment on how Rwanda's 1999 Inheritance and Marital Property Law gives women the right to inherit property from their husbands, but this is only in cases where a woman is 'legally' married. As legal marriages can be a costly process only one-third of the population is legally married, according to recent statistics. Therefore the law only provides efficient protection to one-third of the female population and provides no security for women outside legal marriages. This also adversely affects the children of these relationships as they are deemed to be 'illegitimate' and therefore have no succession rights to their father's property.
 - Point out the number of cultural and practical barriers that legally married women might face trying to enforce their right to inheritance in competition with the deceased husband's family.
 - The law also avoids addressing the issue of polygamous relationships which leave multiple wives vulnerable.

- Another issue to discuss is that, according to the 1999 law, both girls and boys are entitled to equal inheritance from their father. However, research has shown that this is rarely the case as sons, according to customary rules, are given either all of their father's property or a larger part than daughters.
 - This shows that formal rights do not necessarily translate to actual rights, and that sensitisation, legal aid and other supportive measures must be in place in order for women to enforce their right to equality.
11. In the third column write down this list of practical barriers to change.
12. Brainstorm the type of changes/interventions needed in order to address these barriers.
- For example, in relation to the 1999 inheritance law, the government has been urging couples to get married. All over the country mass weddings are being conducted. Although no doubt there is stigma attached to a free mass wedding, this eliminates the cost and allows vulnerable women an opportunity to legally marry their partner, thus entitling them to succession rights.
 - Another important intervention provided for by Haguruka (a Rwandan non-government organisation (NGO) which offers legal aid to women and children) is subsidised legal aid and information campaigns about women's rights.
13. Conclude the session by highlighting that, although Rwanda still has a long way to go in terms of gender equality, in comparison to its Western partners, where the struggle for women's rights has taken decades and is still ongoing, Rwanda is moving at an amazingly rapid speed. The introduction of quotas in Parliament in the Constitution introduced women into government decision-making structures at a rate rarely seen in the world before.
- Having female representatives in Parliament naturally introduces gender perspectives to all facets of governance and lawmaking. This can be seen, for instance, through the introduction of the gender-based violence (GBV) bill in 2006. This proposed legislation is more progressive than many of the legal frameworks in the West.
 - It is important for young women and their families to see that it is possible for women to reach powerful and influential positions. This gives young women motivation and ideals to aim towards.
 - The introduction of more women into influential and powerful positions illustrates a shift in official policy. Women are being encouraged to move away from the traditional role of domestic worker into the new role of income generator, on the same basis as men.

- In order to get well-paid jobs, education is necessary and therefore supporting daughters' education becomes increasingly important. Rwanda has achieved equity in enrolment for boys and girls in both primary and secondary education but completion and achievement rates are less for girls and their transition rates for entry to tertiary are low.
 - Having women in powerful positions also shows that women can perform on the same level as men if they are given the opportunity and equal access to the positions.
- 14 Show the participants the objectives of the session again, check that these have been achieved and ask if participants have any questions.

Review

- 1 Ask one male and one female participant to mention laws granting women equality with men in Rwanda.
- 2 Summarise the session by showing participants the learning outcomes and checking if participants consider that these have been achieved.

Learning Outcomes for Participants

- 1 Participants will be able to describe laws that give equal status to women and men in Rwanda.
- 2 Participants will be able to identify barriers that limit these equal rights.

Handout 1

Legal Status of Women and Men in Rwanda

Summary

Gender relations in Rwanda have begun to alter in the post-genocide period due to awareness that reconciliation and development are tasks that 'men cannot do...alone.' (A. Muganza, Minister of Gender and Promotion of Women; quoted in, WCRWC, 2000:4). Whether this shift is the result of international pressure, political party preference or sheer necessity remains unclear. Nonetheless, the late 1990s witnessed the mass incorporation of women into governmental and legal bodies in Rwanda, as well as the introduction of legal reform that granted women access to areas that had previously been closed to them.

Background

Before the late 1990s, gender equality was not on the agenda of the Rwandan government, despite the fact that it signed the Convention on the Elimination of all forms of Discrimination Against Women (CEDAW) in 1980 and ratified it in 1982. There was only one female representative in Parliament and national laws restricted women's rights. Women could not engage in profit-making businesses or register a company. They could not act as an unsupported witness in legal proceedings without their husband's or a male family member's prior consent. A woman's testimony had to be supported by a man's in order to be considered as evidence. Male domination and patriarchy were maintained by the denial of women's basic rights.

The 1994 genocide left Rwanda's population decimated, the male population in particular. At the end of the violence, women accounted for roughly 70 percent of the population. Over 50 percent of households were headed by women. By the end of 1995, the percentage of women in the population was reduced to 57 percent after the mass return of refugees.

The reconstruction of Rwanda after the war, was supported by assistance from a large influx of development partners and NGOs, with the Rwandan Government leading the process.

The emphasis on gender mainstreaming since 1994 needs to be understood within the context of these two factors; namely

- Rwanda's population had an artificially high percentage of women due to the 1994 Genocide.
- With the launch of initiatives such as the Beijing Platform for Action in 1995, the Government of Rwanda (GoR), NGOs and the donor community began to understand more and more the need to integrate gender into a more holistic development framework.

Legal Framework

GoR has a good track record for signing international treaties on human rights. To what extent it implements these rights into national law and enforces them is another matter. Nonetheless, in relation to the rights of women, Rwanda has signed CEDAW, the Convention on Civil and Political Rights and the Convention on Social, Economic and Cultural Rights, which all decree gender equality and non-discrimination. Rwanda has also signed the regional Charter on Human Rights; the Banjul Charter and its Additional Protocol on the Rights of Women in Africa.

The new Rwandan Constitution was voted for by the public in a referendum in 2003 and reaffirmed by Parliament and the Supreme Court in 2004. The Constitution became a milestone in promoting gender equality in Rwanda. It set a benchmark for the population, governance institutions and courts. It made it clear that women were entitled to equal opportunities, respect and protection with men. Since the passing of the Constitution there have been several laws passed that have gone further to grant women these equal opportunities, and many laws has been reinterpreted with this principle as a guiding factor.

Selected List of Rwandan Laws	Changes Dictated for Women
Inheritance Law, 1999	Granted women and men equal rights to inherit land from their families.
Constitution, 2003	Declared women and men to equal under the law.
Sanitation Code, 2003	Stated that women and children were crucial to water management and therefore their needs had to be understood.
Land Law, 2005	Gave women and men equal rights to land under the law.
Gender Based Violence (GBV) Bill, 2006	Grants women legal protection from GBV, including claiming for back pay for domestic work upon divorce.

It is important to understand that ensuring a legal framework for the protection of women's rights and gender equality is only one of many steps in guaranteeing women these rights. Numerous social, cultural and historical barriers stand in the way of women using their new rights. The social and cultural barriers stem from centuries of gender subordination which severely limit women's independence and decision making in their own lives.

This subordination takes two forms:

- Physical, in which women are physically not allowed to engage in certain activities under the threat of violence and retaliation
- Psychological, which is illustrated by social peer pressure and condemnation.

Psychological subordination is a result of the centuries of male domination in all areas, which have limited the activities that women can engage in. It has restricted women from access to 'public' spaces, relegating them to their homes as domestic workers. As a result of this many women have been totally dependent on male acceptance and consent to engage in any social and business activities. For example, women may now have the right to open bank accounts, but many will not do so as they do not feel it is 'their place'.

Another example of this inherent feeling of subordination has been highlighted through the work of Human Rights Watch (HRW). HRW found that some women in Rwanda did not believe that the 1999 inheritance bill was necessary or appropriate as they considered that women did not know how to exploit land effectively, and Rwanda did not have enough land for misuse (HRW, 2001). Although both these factors may be true (though recent work from the Food and Agricultural Organisation [FAO] points to a clear 'feminization of agriculture'), this can be understood as an example of women remaining within their culturally dictated boundaries.

Another issue contributing to the subordination of women is the customary practice of dowry payment in connection with marriages. This practice leads to an objectification of women, where many men view their wives as 'property' because they have 'paid' for them. An example here is a GBV case that was reported in the print media, where a man was questioned as to why he had chopped off the head of his bride after staying with her for only two weeks. The man replied: "If you buy a cow and it misbehaves, what do you do?" The reply came from the spectators in the crowd: "You slaughter it and buy another one"

It is important to understand that, despite various barriers to achieving gender equality, these legal changes are critical to gender empowerment. Change is often slow and incremental. These legal frameworks provide the basis for women who have access to resources to utilize them and fight for equal rights. It also allows a framework for sectors of civil society to enforce these rights through advocacy and legal initiatives on behalf of socially vulnerable women.

2 Rwanda's Commitments: Women's Integration into the Management of Water, Sanitation and Hygiene

Duration of the Session

One Hour

Objective of the Session

- 1 To allow participants to express what they know about current commitments made by Rwanda to integrating the participation of women with men in the management of WASH
- 2 To further an understanding of the international, regional and national frameworks containing gender elements which guide government policy on the management of WASH.

Methodology

- Brainstorming
- Presentation
- Participatory Discussion

Media/Materials

- PowerPoint projector and presentation which summarises the handout
- Flipchart and markers
- Handout 2: *International, Regional and National Commitments on Water Management, Sanitation and Hygiene*

Preparation

- 1 Read through the handout and procedures carefully before the session so that you are thoroughly familiar with the subject matter and proposed methodology.
- 2 Write the objectives of the session on a flipchart.
- 3 Write up a list of the international, regional and national commitments, with space after each to write a summary.
- 4 Download the PowerPoint presentation.
- 5 Ensure that you have sufficient copies of the handout to distribute to participants.

Procedures

- 1 Briefly share the objectives of the session on the flipchart with the participants.
- 2 Start the PowerPoint presentation and use this as a guide throughout the lesson.
- 3 Ask the participants if they know when gender was first put on the international agenda in terms of water management.
 - Discuss the lack of inclusion of gender on the agenda until 1991 and the problematic nature of this (all of which will be gone into in detail at a later session).
- 4 Ask the participants to list the international, regional and national frameworks regarding water management, sanitation and hygiene that they know about and those that Rwanda is committed to.

- 5 Write this list on the flipchart.
- 6 Distribute the handout *International, Regional and National Commitments on Water Management, Sanitation and Hygiene* and the Rwandan 2003 Sanitation Code.
- 7 Go through the commitments, asking each participant to read out one commitment each. Discuss the integration of women and the progress or lack of progress on the commitments over time.
- 8 Discuss the articles of Rwanda's *2003 Sanitation Code*, especially the emphasis on the privatisation of the water system (particularly in the context of the last discussion about the right to water versus water management). Do companies safeguard a community's best interests or are they more interested in their profit margins?
- 9 Ask participants to share any examples they may have through their work in the field about women's integration into WASH.
- 10 Ask the group to give an example of where Rwanda has met their commitments, and an example of where they have not.
- 11 Initiate a discussion regarding the number of commitments currently in place and their lack of implementation at the ground level. Ask participants if they think the commitments have been met at the ground level, and if not, why now? What is the difference between policy and practice?
- 12 Show participants the objectives of the session again, check that these have been achieved and ask if participants have any questions.

Review

- 1 Ask one male and one female participant to mention commitments made by Rwanda to women's participation in WASH.
- 2 Summarise the session by showing participants the learning outcomes and checking if participants consider that these have been achieved.

Learning Outcomes for Participants

- 1 Participants will have a clearer idea of the international guidelines which frame water use in Rwanda.
- 2 Participants will also have a clearer idea of the policy path of the Rwandan government, in terms of women's participation in the future management of WASH projects.
- 3 Participants will be able to explain how to get both women and men involved in the management of WASH projects and have a personal commitment to achieving this.

Handout 2

International, Regional and National Commitments on the Management of Water, Sanitation and Hygiene

Summary

International, regional and national frameworks on water that emphasise the importance of women participating with men in WASH management exist. Therefore there exists in writing the importance of making women a central component of water projects in Rwanda. Unfortunately this goodwill may be lost through the Government's emphasis on privatisation and commercialisation, as expressed through the 2003 Sanitation Code.

Introduction

Broadly it is understood that within the context of development and national growth, the proper management of WASH supports the strategies of poverty reduction and economic development through

- a positive impact on maternal and child health, as well as family health
- improved education rates, especially for girls.

As such, Rwanda has taken seriously its commitment to tackling the logistical and economic barriers to providing water for all. To show their dedication, Rwanda has signed a number of international, regional and national water-related commitments. The most recent of these have incorporated clauses which bind the government to promoting gender equality throughout the field of WASH management. These commitments include international and regional ones, all of which have been incorporated into Rwanda's 2003 Sanitation Code.

The commitments can be found in the following frameworks:

Dublin Statement on Water and Sustainable Development: Principle 3, 1992

The Dublin statement acknowledges that 'The pivotal role of women as leaders, providers and users of water and guardians of the living environment has seldom been reflected in institutional arrangements for the development and management of water resources. Acceptance and implementation of this principle requires positive policies to address women's specific needs and to equip and empower women to participate in all levels of water resources programmes, including decision making and implementation, in ways defined by them'.

More generally the Dublin Statement proclaims that 'Water has an economic value in all its competing uses and should be recognised as an economic good. Within this principle, it is vital to recognise first the basic right of all human beings to have access to potable water and sanitation at an affordable price'.

Principle 20 of the Rio Declaration, 1992

Principle 20 states that 'women have a vital role in environment management and development. Their full participation is therefore essential to achieve sustainable development.'

Agenda 21 - Conference of United Nations on Environment and Development, 1992

Agenda 21 contains an entire chapter on the importance of women and sustainable development.

Beijing Platform for Action, 1995

At the Beijing International Conference for Women, environmental issues were highlighted as one critical area of concern, and it was stated that 'gender inequalities in the management and safeguarding of natural resources and in the safeguarding of the environment must be addressed'.

Vision 2020, 2000

Rwanda's Vision 2020 states that

- The entire population will have access to potable water by 2020
- Rainwater harvesting and retention methods will be mastered for both domestic and farm use
- Natural water reservoirs, notably high altitude forests, will be reconstituted and managed with caution
- Water resources will be managed in a rational and integrated manner
- The population will be able to manage water in an equitable and sustainable manner
- Infrastructure for water production, protection, distribution and sanitation will be protected and maintained for all.

Millennium Development Goals, 2000

A number of the millennium development goals (MDGs) are applicable to WASH management:

- MDG 1: *The eradication of extreme hunger and poverty by 2015.* The provision of water for food security is essential for this goal to be achieved.
- MDG 5: *The improvement of maternal health.* Access to safe water plays a vital role in this goal, as pregnant women and nursing mothers no longer have to travel long distances with heavy loads of water. Sickness through water-borne diseases and hepatitis is also avoided through the use of potable water and better hygiene. Hookworm infection can have serious negative repercussions on pregnant women and their unborn children, as the disease has been linked to low birth weight and inhibited child growth.
- MDG 7: This goal specifically aims to *reduce by half the number of people who have no access to clean drinking water and basic sanitation.* (This MDG initially related only to water. This was changed through the World Summit on Sustainable Development in 2002, which brought in the sanitation component of the MDG.)

World Summit on Sustainable Development, (Johannesburg) 2002

At the World Summit the importance of integrating women into water management was reaffirmed. It pledged to 'support capacity-building for water and sanitation infrastructure and services development, ensuring that such infrastructure and services are gender sensitive'.

New Partnership for Africa's Development (NEPAD), 2004

NEPAD has a short-term project regarding water management and sanitation. It is a five year program called the Short Term Action Program, which is operated in conjunction with the African Development Bank. The program aims to enable the environment for regional co-operation; support the development of national Integrated Water Resource Management (IWRM) policies, meet urgent water needs, improve water wisdom and strengthen the financial base for the desired water future.

Rwanda's 2003 Sanitation Code

The Sanitation Code aims to encourage and regulate private ownership over water. The principles of the Code are that:

- 1 Every person has the right to access water.
- 2 Water is a good with social and economic value.
- 3 A preference must be made in securing the country's needs in terms of water.
- 4 Men as well as women have to participate in an equal manner in the protection and management of water.
- 5 The management of water must be rational and take into account environmental dimensions.
- 6 The norms of quality and quantity must be protected.
- 7 The polluter must pay according to the pollution.
- 8 The beneficiaries must take care of the cleaning and maintaining of the water services.
- 9 The use of water must be equitable.
- 10 All partners in the area of water in Rwanda are to get involved in the management of the means of water.

There is a section of this Code that acknowledges the role of women and young people, stating that they are the most important and vulnerable group, 'so, any plan to increase access to drinking water and services must take into account the concerns of these two groups'.

While the Code looks at the need to privatise the water sector in Rwanda in the future, it also promotes participation of the community in problem solving, as opposed to the individual through the approach of *udehebe*. *Uduhebe* is a Rwandan tradition woven around the culture of working together as a community to resolve the problems of family dwellers: a group of households joining forces to work together.

3 Global Concepts and Trends in the Management of Water, Sanitation and Hygiene

Duration of the Session

One hour and 30 minutes.

Objectives of the Session

- 1 To allow participants to say what they know about global concepts and trends in the management of WASH.
- 2 To build on this knowledge by presenting an overview of the global situation of WASH, including the differences between the developed and developing world.
- 3 To outline the concepts and frameworks used in the management of WASH.

Methodology

- Brainstorming
- Presentation
- Participatory Discussion

Media/Materials

- PowerPoint projector and presentation that summaries the handout
- Flipchart and markers
- Whiteboard/chalkboard and markers/chalks
- (Visualisation in Participatory Programs (VIPP) cards and VIPP board
- Handout 3: *Concepts in Water, Sanitation and Hygiene and International, Regional and National Commitments.*

Preparation

- 1 Read through the handout and procedures carefully before the session so that you are thoroughly familiar with the subject matter and proposed methodology.
- 2 Write the objectives of the session on a flipchart. This is the page the flipchart should be open on when the participants enter the room.
- 3 Write the list of questions on the whiteboard, or blackboard if there is one, otherwise use the flipchart.
- 4 Write the key concepts on a flipchart page, followed by a list of Rwanda's national and international commitments.
- 5 Download the PowerPoint presentation.

Procedures

- 1 Briefly share the objectives of the session on the flipchart with the participants.
- 2 Start the PowerPoint presentation and use this as a guide throughout the lesson.
- 3 Write the exact time on the board.
- 4 Begin by asking the group what they know about the management of WASH.

- 5 Put on the board the following list of questions:
 - What is the World Health Organisation (WHO) estimate for the amount of water needed to meet basic personal and hygienic requirements, per person, per day? (answer: 20 litres).
 - What is the minimum human requirement for safe, clean water for survival, per person per day? (answer: between 1.8 and 3 litres).
 - What is the average amount of water used per household per day in a) Africa, b) the United Kingdom? (answer: a) 47 litres, b) 334 litres).
 - Name six water-related diseases. (answer: worms, malaria, typhoid, cholera, diarrhoea, hookworm, bilharzias).
 - Estimate the number of people who die annually from a) diarrhoeal diseases, b) malaria. (answer: a) 3,300,000, b) 1,500,000).
 - Estimate the average amount of time spent per day collecting water in Sub-Saharan Africa. (answer: 30 minutes).
- 6 Give each participant several pieces of blank paper and ask each person to write down estimates of their answers.
- 7 When the group has completed this task, put all the answers together and get one of the participants to write the estimates on the board next to each question.
 - For the question regarding WHO estimates of deaths from malaria/diarrhoea-related diseases, write the time again on the board and calculate the number of people who have died since the training started. (Given these statistics, six people die a minute from diarrhoea-related diseases, and three people die a minute from malaria. Emphasise that these people tend to be children under 5 years of age, the sick and the elderly).
- 8 Initiate a discussion on the politics of the management of WASH and the differences in access between the developed world and developing world, rich and poor, urban and rural, etc.
- 9 Move on to a brief discussion of concepts in WASH using the examples provided in the handout for improved and unimproved drinking water sources and improved and unimproved sanitation facilities.
- 10 Follow this by putting a table on the board that charts access to potable water against distance and consumption (see page 3 of the handout). On VIPP cards you should have the answers from the second to the fourth row: distance, likely volume of water, and public health risk. Hand out these VIPP cards and ask the group to put one in the appropriate box on the wall. After all the cards have been put on in the correct box have the group fill out the last category, 'interventions', together.
- 11 Distribute the handout, *Concepts in Water and International, Regional and National Commitments*.
- 12 Write up the key framework concepts: IWRM framework, human rights approach, gender mainstreaming.
- 13 Ask participants their understanding of these terms. Write their comments on the whiteboard.

- 14 Go through the three water management frameworks with the participants.
- 15 Initiate a debate regarding the right to water, its management and gender mainstreaming, asking participants to discuss each concept.
- 16 Finish by showing the participants the objectives of the session again, check that these have been achieved and ask if participants have any questions.

Review

- 1 Ask one male and one female participant to mention one difference in the situation existing in WASH between the developed and the developing world.
- 2 Ask one male and one female participant to mention one problem facing women in relation to the management of WASH
- 3 Summarise the session by showing participants the learning outcomes and checking if participants consider that these have been achieved.

Learning Outcomes for Participants

- 1 Participants will have an overview of the global situation of water, with an understanding of the differences between the developed and developing world.
- 2 Participants will be able to describe the basic concepts and frameworks used in the field for the management of WASH.
- 3 Participants will have an understanding of the importance of addressing issues of gender in the management of WASH and will be committed to improving the current situation.

Concepts in Water, Sanitation and Hygiene and International, Regional and National Commitments

Introduction

We are currently living in the International Decade for action on 'Water for Life', launched by the UN General Assembly in the early half of 2005. Resolution 58/217 was issued by the Assembly, stating that the 'goals of the decade should be a greater focus on water-related issues...and implementation of water-related programmes and projects, while striving to ensure women's participation and involvement in the water-related development efforts'

Statistics and Trends

In trying to understand the management of WASH and gender relations it is necessary to begin by forming an understanding of the global trends in water use and sanitation.

The World Health Organisation (WHO) estimates a norm of 20 litres per capita per day as the appropriate water use to satisfy basic personal and hygienic requirements. Of that amount, 10 litres per capita per day is used for drinking and cooking (Bosch, et al, 2000).

The minimum human requirement for safe and potable water for survival ranges from about 1.8 to 3 litres per person (per capita per day [pcd]), depending on the temperature, the amount of work the person is doing and the amount of food consumed a day. The consumption rate varies depending on the time and energy spent collecting water. There are also a number of other important factors to be considered: distance to source, land to be travelled, method of transport, queuing time at source, number of consumers in the household, and number of people available to carry water. Over and above this, water must be obtained for cooking, washing, for livestock and for other activities like brick making, beer brewing, agriculture or construction.

Consumption rates vary widely across the world. While a refugee might be able to survive on a ration of 2 litres pcd, an urban inhabitant with a flush toilet and bath might use 120 litres pcd.

FAO (2002) conducted an assessment of different countries'/continents' average household water usage in 2002. In Africa, the average household use of water was estimated to be 47 litres per day. In the United Kingdom it was estimated at 334 litres per day.

WHO states that at any given time, one-half of all people in developing countries are suffering from one or more of six main diseases associated with water supply and sanitation: diarrhoea, cholera, typhoid, ascariis, Guinea Worm disease (a parasitic disease), and hookworm (Rathgeber, 2003)

Further, WHO estimates that 3,300,000 people die annually from diarrhoeal diseases and a further 1,500,000 die from malaria (which is directly related to poor water management and storage, operations of water points and drainage).

A water analysis across 43 different countries found a 30 percent difference in child mortality rates between the richest and the poorest countries (Leipziger, 2003). About a third of the population collects their water from sources outside the household and carry it in containers to their homes.

A 2002 United Nations Children's Fund (UNICEF) study of rural households in 23 Sub-Saharan African countries found that one-quarter of them spent 30 minutes to an hour each day collecting and carrying water, and 19 percent spent an hour or more per day (UNICEF, 2002) .

Various Types of Water Provision and Distribution

Improved Drinking Water Sources

- Piped water into house plot or yard
- Public tap/standpipe
- Tube-well/borehole
- Protected dug well
- Protected spring
- Rainwater collection (though this is dependent on collection and storage methods).

Unimproved Drinking Water Sources

- Unprotected dug well
- Unprotected spring
- Cart with small tank/drum
- Tanker-truck
- Surface water (river, dam, lake, pond, stream, canal, irrigation channels)

Improved Sanitation Facilities

- Flush or pour flush to piped sewer system, septic tank, pit latrine.
- Ventilated improved pit latrine
- Pit latrine with slab
- Composting toilet

Unimproved Sanitation Facilities

- Flush or pour flush to elsewhere
- Pit latrine without slab or open pit
- Bucket
- Hanging toilet or hanging latrine
- No facilities, bush or field

Global Concepts of Good and Bad Access to Potable Water

Service Level	Distance/Time	Likely Volume of Water Collected	Public health Risk from Poor Hygiene	Intervention Priority and Actions
No Access	More than 1 km - more than 30 minutes per round trip	Very low: 5 litres per capita per day	Very high: hygiene compromised; basic consumption may be compromised	Very high: provision of basic level of service and hygiene education
Basic Access	Within 1 km - within 30 minutes round trip	Average: approx. 20 litres per capita per day	High: hygiene may be compromised; laundry may occur off-plot.	High: hygiene education and provision of improved level of service
Intermediate Access	Water provided on-plot through at least one tap (yard level)	Average: approx. 50 litres per capita per day.	Low: hygiene should not be compromised; laundry likely to occur on-plot.	Low: hygiene promotion still yields health gains; encourage optimal access
Optimal Access	Supply of water through multiple taps within the house.	Average: 100-200 litres per capita per day.	Very low: hygiene should not be compromised: laundry will occur on-plot	Very low: hygiene promotion still yields health gains.

Source: Domestic water quantity, service level and health. WHO/UNICEF, 2004.

A Right to Water?

Water is an essential source of life and a necessary component of people's everyday lives. Access to it is therefore essential. It should be treated as an economic, social and environmental good that every person has a right to. However as water resources in certain areas are scarce, they are a source of competing demand, potentially leading to conflict.

The wealth of literature on water and conflict indicates that there are a number of historical events in which water has been a catalyst for cooperation. Several examples of workable treaties on water can be cited, even between states with a history of conflict, such as India and Pakistan, and Israel and Jordan.

Although water is considered as an essential good that every human being should be entitled to, it has generally been accepted that users have to pay a small/appropriate price for this good, covering the management and cleaning of the water.

As already stated, water for basic needs has been identified by the humanitarian field as a public good and a human right, not as a commodity to be traded on the open market. However, there has been a recent and controversial international debate regarding the privatization of water services.

Privatisation

The argument states that privatization maximises water efficiency and creates the incentives for companies to provide global access to a water supply. Thus water is perceived as a good with an economic value. If one has the means to pay for this good, they are granted access to it. As water is a necessity, it is assumed that the market will regulate an affordable price for this good and that access will not be denied. Yet in understanding water to be something of economic value, there will be higher levels of efficiency by both users and vendors. This is an argument held by many resource economists, who argue that water prices should be raised, as this will inevitably lead to more water for all through greater efficiency.

While this may be true in some cases, primarily privatisation has disastrous effects on poor people, who are forced to reduce consumption in terms of water use for sanitation and hygiene. Secondly, it is questionable whether large private companies providing traditionally public services will be accountable to the people they are supposed to benefit, or instead to their shareholders. If the latter case is true, there will be many circumstances where an economic argument for extending a water pipe to a remote rural area cannot be made, thus denying the right to water for certain marginalised areas. However, it must be noted that first and foremost the extension of a water source is dependent on the capacity of that source.

A number of problems have been highlighted within the privatisation brand of water delivery. A major problem is that privatisation creates a situation where non-productive uses of water (e.g. health and hygiene) may not be integrated into the economic models because they are not financially lucrative. Understanding water to have an economic value goes beyond the privatising framework. While it views water as having an economic value, it also understands water as a basic necessity, which all should have access to.

Going beyond arguments for privatisation to key water frameworks, there has been recognition that water is a scarce resource that needs to be managed, not only for its sustainability, but also in terms of the environmental effects of water harvesting and irrigation. New water policies have tended to focus not only on the distribution and access of water, but also on how to manage it. This has led to the birth of an IWRM framework.

Integrated Water Resources Management Framework

IWRM is one of three key frameworks utilised in the examination of water relations in this workshop. IWRM looks at all of the different uses of water and assesses them together. Water allocation and management decisions consider the effects of each use on the others. They are therefore able to take account of overall social and economic goals, including sustainable development. All users are given a voice in the process and thus have the ability to influence strategy. IWRM takes into account water for agriculture, mining, industry, tourism, fisheries, energy, water supply, waste water and transport.

IWRM is based on four pillars:

- 1 The multifaceted nature of water: understanding the different uses of water - drinking water, water for agriculture, water for industry, etc;
- 2 Open dialogue - the consultation process between users and providers, covering every sector;
- 3 Highlighting the link between the geographical area of the water, such as a lake or river basin, and the physical aspects of water movement, such as the hydrological cycle;
- 4 Safeguarding water resources for future generations.

IWRM is a cross-sectoral approach to water management, which aims to identify the complex relations between water, its users and its environment, examining water through multiple frameworks, including economic, without prioritising one over the other.

Human Rights and Gender Mainstreaming

Two other frameworks used in this workshop are:

- 1 Human rights, where basic access to water is understood to be a human right.
- 2 Gender mainstreaming, which takes a cross-sectoral approach to integrate women's needs and roles into all aspects of water and sanitation projects

In this workshop we will be centring upon the second framework, that of gender mainstreaming for initiating water management and sanitation projects.

It is worth noting that change is slow, both in terms of gender mainstreaming and enhanced access. The second is particularly true in the face of rapid population growth. While trying to meet international milestones and benchmarks, rapid population growth must be addressed by both population analysts and policy makers.

4 Trends in Water, Sanitation and Hygiene in Rwanda

Duration of the Session

One hour

Objectives of the Session

- 1 To discuss participants' personal experiences in the management of WASH in Rwanda.
- 2 To further an understanding of the current trends in the management of WASH.

Methodology

- Brainstorming
- Presentation
- Participatory Discussion

Media/Materials

- PowerPoint projector and presentation that summarises the handout
- Flipchart and markers
- Handout 4.1: *Trends: Water, Sanitation and Hygiene in Rwanda*
- Handout 4.2: *Fact Sheet on Water, Sanitation and Hygiene, Rwanda*

Preparation

- 1 Read through the handout and procedures carefully before the session so that you are thoroughly familiar with the subject matter and proposed methodology.
- 2 Write the objectives of the session on a flipchart.
- 3 Download the PowerPoint presentation.

Procedures

- 1 Briefly share the objectives of the session on the flipchart with participants.
- 2 Start the PowerPoint presentation and use this as a guide throughout the lesson.

- 1 Ask each participant to say where they think Rwanda is placed on the Human Development Index among 177 countries? (answer: 159th)¹ Burundi is placed 169th and the Democratic Republic of Congo 167th. Of Rwanda's neighbours, Uganda is placed the highest at 144th.
- 3 Ask the same question about Rwanda's placement on the Gender Development Index. (answer: 122nd out of 177)²
- 4 Ask the group to estimate the percentage levels of female and male literacy in Rwanda. (answer: male: 70.5%, female: 58.8%)
- 5 Ask the group to estimate the percentage of people with access to improved drinking water in Rwanda (answer: 73% in 2003, and this grew from 41% in 2000). Ask them to do the same in relation to improved sanitation (answer: 41% in 2002, which grew from 8% in 2000).
- 6 Ask the group to estimate the average amount of water used per household in Rwanda (answer: 8.3 litres [2003 Rwanda Sanitation Code]).
- 7 Ask the group to go outside. Remind the group that in session 3 we learnt that 20 litres was the global norm in terms of water use. Give everyone a jerry can filled with only 8.3 litres of water. Tell each participant to try to account for the amount of water they use each day. Give them a cup, and with each activity ask them to pour out the amount they would use. Start with brushing teeth. They should see clearly that all the water would be gone by lunchtime.
- 8 Ask participants how water is understood in Rwanda (as a gift from God, and not an economic good). If this is raised, explain that this belief creates problems in that people do not think that water is something that must be managed and maintained.
- 9 Ask each participant to write down a list of things that they know about the management of WASH in Rwanda.
- 10 Ask each participant to read out their list and write the points on the board.
- 11 Distribute the handout that contains a summary of the available data on trends in the management of WASH in Rwanda.
- 12 Ask each participant if there is anything that surprises them on the handout; for example, whether certain statistics reflect better or worse trends than they had expected.

¹ The United Nations **Human Development Index (HDI)** is a comparative measure of poverty, literacy, education, life expectancy, childbirth, and other factors for countries worldwide. It is a standard means of measuring well-being, especially child welfare. It is used by many people to distinguish whether the country is a developed, developing, or under developed country. The index was developed in 1990 by Pakistani economist Mahbub ul Haq, and has been used since 1993 by the United Nations Development Programme in its annual Human Development Report.

The HDI measures the average achievements in a country in three basic dimensions of human development:

? A long and healthy life, as measured by life expectancy at birth.

? Knowledge, as measured by the adult literacy rate (with two-thirds weight) and the combined primary, secondary, and tertiary gross enrolment ratio (with one-third weight).

? A decent standard of living, as measured by gross domestic product (GDP) per capita at purchasing power parity (PPP) in USD.

² The GDI (Gender-related Development Index) measures gender equality in a country in terms of life expectancy, literacy rates, school attendance and income.

- 13 Allow a discussion on participants' experiences in Rwanda, through both their personal experiences and what they have heard, in terms of gender and the management of WASH.
- 14 Show participants the objectives of the session again, check that these have been achieved and ask if anyone has further questions.

Review

- 1 Ask one male and one female participant to mention a key statistic related to WASH in Rwanda.
- 2 Summarise the session by showing participants the learning outcomes and checking if participants consider that these have been achieved.

Learning Outcomes for Participants

- 1 Participants will have shared experiences from their homes and travel in relation to the management of WASH in Rwanda.
- 2 Participants will be able to describe the actual situation in Rwanda in terms of gender and the management of WASH, including coverage and infrastructure.

Handout 4.1

Trends in Water, Sanitation and Hygiene

Summary

Statistics are hard to collect in many developing countries, including Rwanda, due largely to a lack of infrastructure. Nonetheless, there is a body of data and information, much of it dating back to 2001 that can be considered. This data offers a picture of the situation of both health and the management of WASH in both urban and rural areas in Rwanda. Unfortunately, the picture that emerges is that of a dilapidated water management system with a largely urban bias.

Statistics and Trends

Health

In 2000, Rwanda's maternal mortality rate of 1,071 per 100,000 live births was one of the highest in the world (NEPAD and United Nations Fund for Women [UNIFEM], 2005). In 2005 this had dropped to 750.

In 2005, infant mortality dropped from 107 in 2004 to 86 for every 1000 live births. The under-5 mortality also dropped from 196 in 2004 to 152 in 2005 (Ministry of Health [MINISANTE], 2005). There is a correlation between the levels of child and natal mortality and water quality (Leipzig, 2003).³ The reduction of child and maternal mortality rates provides an indicator that Rwanda is making positive changes in terms of the management of WASH.

Water and Sanitation

In Rwandan culture, water is traditionally seen as a gift from the gods. It is not deemed to be an economic good or one that needs to be taken care of, but a free good, given by nature. This has created a number of problems in trying to sensitise the Rwandan public into understanding the need for input and recovery costs for a good that has been historically free.

This task of sensitisation is being undertaken by the Ministry of Lands, Environment, Water and Natural Resources (MINITERE).

Through the 2003 Sanitation Code, reviewed in the previous session, MINITERE proposed to commercialise and privatise water resources and management.

The Sanitation Code reported that the daily consumption of water per head in Rwanda stood at an estimated 8.15 litres in 2003. This is well below what the FAO (2002) found to be the African average - 47 litres per head per day, or the 20 litres per person that the Sanitation Code quoted to be the minimum requirement as the norm. The difference between these is a major cause of

³ D. Leipzig conducted a cross-country water analysis in 43 countries in 2003 and found a 30 percent difference in child mortality rates between the richest and the poorest countries.

national concern for a variety of health and safety reasons previously described.

In 2004, GoR allocated 1.24 percent of its annual budget to water and sanitation. This was decreased to 0.88 percent in 2005 and has gone down further to a proposed 0.40 percent for 2007. Despite an apparent decrease in budget allocation, in monetary terms the number has increased as the total budget has increased. The 0.88 percent translates to 9.22 billion Rwandan Francs (RWF), while 0.40 percent translates to 22.12 billion RWF.

In trying to address the gap between the average amount of water needed to maintain basic hygiene and the average amount of water that Rwandese are currently using, MINITERE, among other projects (e.g. the Nile Basin Initiative) is working towards preserving rainfall. While Rwanda does have an abundance of water, due largely to its good rainfall, it only utilises 12.2 percent of its available water resources. Compared to other African countries, this figure is low. More problematically, the distribution of potable water is far from even across the country.

In 2004, the ex-province of Gisenyi, now encompassed in the new province of the West, had the lowest rate of access to drinking water at 36 percent, i.e. less than four people in ten had access to potable water (GoR, 2004).

Urban centres have higher rates of access to water. However, due to the dilapidated state of the water network, managed by Electrogaz, there is a 40 percent annual loss of potable water. It is worth noting that this is not necessarily unique to Rwanda. Losses in developed countries can also be very high, for example in the United Kingdom.

In 2005, 55 percent of the rural population had access to potable water compared to 69 percent of the urban population. This translates into 3.5 million people without access to potable water in rural areas. Rational motives can be found for this urban bias. Firstly, the poor living conditions in many urban slums and the speed at which disease can travel under these circumstances. Secondly, a cost/benefit analysis shows that because of the density of the population, the limited availability of money, and the lack of viable water resource alternatives, it is relatively easy to install infrastructure. Nevertheless, the difference between access to potable water in rural and urban areas should be addressed.

In rural areas, there are four kinds of infrastructure that provide access to drinking water:

- 1 small developed water sources
- 2 simple gravity fed supply systems
- 3 complex water supply systems and
- 4 boreholes with hand pumps.

The system of small developed water sources is the least expensive and the most popular method, used by nearly 75 percent of the rural population with access to drinking water (GoR, 2004).

For a more recent assessment of water infrastructure in Rwanda, the drinking supply system in 2004 comprised of 18,241 developed water sources and 788 water supply points, 78 of which had pumps (GoR, 2004) They supplied up to 7,421 public standpipes and 2,482 private connections. There has been a push to increase the number of wells and, in response, 185 wells have been fitted with hand pumps in the ex-provinces of Kibungo (area), Umutara, Kigali Ngali and Byumba.

Despite these progressive movements, there remains a great need for scaling-up water provision. An estimated 30 percent of the existing water supply facilities in rural areas are in need of rehabilitation. Simply put, the country's drinking water systems are in a poor state.

Sanitation Infrastructure

In relation to the sanitation infrastructure, adequate sanitation facilities are few in urban areas and virtually non-existent in rural areas. While over 80 percent of the country's population has access to latrines, in 2005 only 10 percent of these met hygienic standards (such as a sanitation platform for the toilet and a cover for the hole). This translates into 6.4 million people living in precarious hygiene conditions (MINTERE, 2004)

In terms of wastewater and stormwater drainage systems, there is no adequate system for water disposal in the urban centres. In Kigali, as in the secondary cities, wastewater is generally discharged into traditional septic tanks or directly into water courses resulting in pollution of the ground water. Only 3.2 percent of household refuse is evacuated through a public collection system. A similar situation applies in rural areas, where the infrastructure for sanitation is even more minimal - highlighted by Umutara that has the lowest level of sanitation at 5 percent.

The disposal of industrial effluent is problematic because there is no treatment for this type of waste. It is generally released untreated into rivers and streams. With the intensity of rain in Rwanda, the safety of banks, water pipes and crossings are seriously jeopardized.

The Government has identified a number of constraints to water management and sanitation in Rwanda (GoR, 2004). These are:

- 1 Absence of an exhaustive inventory of the country's water resources
- 2 Absence and lack of knowledge about the importance of basic hydrological and climatological data
- 3 The high rate of deforestation, soil erosion and inadequate and non-integrated management of water and soils
- 4 At central and local levels, insufficient skilled technical staff lacking adequate training
- 5 Insufficient and/or dilapidated water infrastructure
- 6 Industrial pollution of lakes and watercourses from urban areas affecting the sanitation and hygiene infrastructure in rural areas.

The country must allocate sufficient funds to utilise water resources and build capacity and leadership to effectively combat these difficulties if this situation is to be improved.

Handout 4.2

Fact Sheet on Water, Sanitation and Hygiene, Rwanda

Table 1: Proportions (in %) of housing units and of the corresponding resident population by main source of water supply and place of residence

Main Source of Water Supply	Urban		Rural		Total	
	Households	Population	Households	Population	Households	Population
	100.0	100.0	100.0	100.0	100.0	100.0
Piped Water in the Unit	2.6	3.4	0.1	0.1	0.5	0.6
Piped Water within the Yard	11.3	13.3	0.3	0.3	2.0	2.3
Piped Water outside the Yard	36.2	35.3	18.7	18.8	21.4	21.4
Protected Well/Spring	30.2	29.3	46.5	46.3	43.9	43.6
Unprotected Well/Spring	10.8	10.4	16.9	17.1	16.0	16.0
Rain Water	0.0	0.0	0.6	0.7	0.5	0.6
River Water	4.3	4.1	7.4	7.3	6.9	6.8
Lake/Stream/Pond/Surface Water	4.1	3.8	9.4	9.3	8.6	8.5
Other Sources	0.5	0.4	0.1	0.1	0.2	0.1

Source: Republic of Rwanda, Feb 2005, 3rd Census of Population and Housing of Rwanda on August 15th 2002.

Table 2: Proportions (in %) of housing units and of the corresponding resident population by type of toilet facility used and place of residence

Type of Toilet Facility	Urban		Rural		Total	
	Household	Population	Households	Population	Households	Population
	100.0	100.0	100.0	100.0	100.0	100.0
Water Closet	2.3	2.9	0.0	0.0	0.4	0.5
Private Latrine	65.3	70.5	86.3	89.1	83.0	86.2
Public Latrine	30.6	25.2	10.1	8.2	13.2	10.8
In the Bush	0.8	0.6	1.9	1.5	1.7	1.3
Other	1.0	0.8	1.7	1.2	1.7	1.2

Source: Republic of Rwanda, Feb 2005, 3rd Census of Population and Housing of Rwanda on August 15th 2002.

Table 3: Proportions of ordinary households by province according to standard of living category⁴.

Province/City	Very Low	Low	Average	High	Very High	Total	Very Low or Low
RWANDA	0.08	0.72	0.17	0.02	0.00	1.00	0.91
Gikongoro	0.09	0.83	0.08	0.01	0.00	1.00	0.89
Kibuye	0.05	0.84	0.10	0.01	0.00	1.00	0.89
Byumba	0.10	0.79	0.11	0.01	0.00	1.00	0.88
Ruhengeri	0.11	0.77	0.11	0.01	0.00	1.00	0.85
Gisenyi	0.10	0.75	0.14	0.01	0.00	1.00	0.85
Butare	0.06	0.77	0.15	0.02	0.00	1.00	0.83
Kibungo	0.12	0.72	0.16	0.01	0.00	1.00	0.83
Gitarama	0.02	0.81	0.16	0.01	0.00	1.00	0.83
Cyangugu	0.11	0.68	0.19	0.02	0.00	1.00	0.79
Kigali Ngari	0.07	0.72	0.20	0.01	0.00	1.00	0.79
Kigali City	0.00	0.24	0.51	0.21	0.03	1.00	0.25

Source: Republic of Rwanda, Feb 2005, 3rd Census of Population and Housing of Rwanda on August 15th 2002

⁴ The composite index of the level or standard of living was constructed using details of the type of dwelling and of the facilities available within it (building materials used, source of water supply, source of lighting, type of toilet facility used, etc) and the possession of some valuable goods (radio, telephone, vehicle, etc).