

SITUATIONAL ANALYSIS REPORT



A DESK REVIEW

Situation of inclusiveness for Persons with Disabilities in Water, Hygiene and Sanitation services in Rwanda

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Acronyms

CBEHPP CHCs CSO DHS EDPRS EICV GoR	Community-Based Environmental Health Promotion Programme Community Health Clubs Civil Society Organization Demographic and Health Survey Economic Development and Poverty Reduction Strategy Enquete Intergrale des Conditions de Vie Government of Rwanda
IRC	International Rescue Committee
MDG	Mellenium Development Goals
MININFRA	Ministry of Infrastructure
MoH	Ministry of Health
NGO	Non-Governmental Organization
PSF	Public Private Sector
PwDs	Persons with Disabilities
SDGs	Sustainable Development Goals
UNCRPD	United Nations' Convention on the Rights of Persons with Disabilities
UNICEF	United Nations' International Children Education Fund
US	United States
WASH	Water, Sanitation and Hygiene
WHO	World Health Organization

Executive summary

Access and inclusion to clean water, hygiene and sanitation services is a right for every human being. However, in Rwanda, the environment is largely inaccessible to people with disabilities. Despite the challenge, Rwanda has met MDG targets for water and sanitation with coverage of improved water supply and sanitation estimated at 85% and 83%, respectively, in 2014. The government has led the process of developing the water and sanitation policies and strategies, which is focused on achieving universal access of basic services by 2020. It is noted that very few Rwandan households have installed flush toilets. The prevailing practice remains that water is used for cooking and washing. Total latrine (or toilet) coverage, including improved and not improved sanitation facilities, in Rwanda is estimated at 96 per cent according to the Census 2012 and the fifth Rwanda Demographic and Health survey (DHS) as of 2014/15. The report establishes a relation between disability as a condition or limitation (Medical model), and the environmental being an obstacle to someone's integrity is a limitation to someone's participation (Social model). In one or the other way, this impacts social and economic exclusion. Based on the 5 criteria: availability, accessibility, affordability, acceptability and accountability; PwDs need support services, specialised services and accessible mainstream WASH services. The article 28 of the UNCRPD strongly supports this commitment. The SD goal 6 does too. The findings of this desk review indicates that in urban areas, low-income groups, in particular those living in informal settlements, often lack access to an adequate water supply and sanitation. Statistics are also often under-estimated. Rwanda's report on the implementation of the article 28 of the UNCRPD stated that the third Household Survey (EICV3) found that 45% of households live below the poverty line. Rwanda politically commits to promote WASH services (EDPRS II, Sanitation policy of 2016 and signatory of Kampala Declaration on Sanitation). Despite the political commitment, innovative solutions to properly manage wastes are lacking and/or underdeveloped (fecal sludge and sewage management) Water supply equipment is improved in rural areas, but the issue of equity and access is still critical. The Rwanda's WASH policy is clear. It matches very well with the EDPRS II and the UN 2030 Agenda on the SDGs. In terms of achievements, 94.2% of households use pit latrines. Some initiatives are introduced too. The President of Rwanda launched an initiative meant to promote Hygiene and Sanitation. This initiative enabled to train Community Health Clubs at Village level. Rwanda improved sanitation between 1990 and 2010, from 36% to 55% respectively. About challenges, the major ones include lack of improved sanitary facilities, inaccessible infrastructure, ineffective enforcement of laws and regulations, limited awareness, unclear coordination, limited knowledge on inclusion of PwDs, lack of support and assistive devices, lack of statistics on the level of PwDs' access to WASH services and unfixed standards for inclusion of PwDs. Recommended action are: The Government of Rwanda to review the WASH policy and include disability inclusion, disseminate it at large and translate it into action. To make it happen, there is need for strong awareness, involvement of the private sector, adequate standards, accessibility of the WASH facilities, provision of the necessary assistive devices, timely information on inclusive WASH services and conduct ad hoc research.

Situational analysis report

O. Introduction

In May-June 2018, UPHLS commissioned a study on the situation of water, sanitation and hygiene (WASH) services and programmes and their level of inclusiveness for people with disabilities. The idea was to share information, knowledge and experience, and to conduct a field investigation study in order to empirically support the findings. The ultimate focus was on helping to improve access and inclusion for people with disabilities. A number of documents were identified, read and a summary compiled. This report presents the findings from this desk review.

1. Purpose of the desk review

1.1 General objective

To carry out a meta-analysis of policies, programs, guidelines and equipment in installation, distribution and usage of water, sanitation and hygiene services and assess their inclusiveness for PwDs and develop a related policy brief as well.

1.2 Specific objectives include:

- Assess disability inclusiveness vis-à-vis WASH services, guidelines, programs and policies
- Draw a comparison with the global and regional context and trend on disability inclusive WASH services
- Develop a policy brief recommending corrective measures and strategies to ensure the inclusion of PwDs in WASH services in Rwanda.

2. Background: Current WASH contextual factors in Rwanda

Access and inclusion to clean water, hygiene and sanitation services is a right for every human being. It is a priority at the international and national level to which all countries need to adhere. The United Nations (UN) stress that water is a source of life. If water, hygiene and sanitation are lacking, life becomes precarious and the situation of disabled people becomes more affected. Access and inclusion to clean water, hygiene and sanitation services is a right for every human being Internationally, the article 9 of the UNCRPD focuses on rights of people with disabilities states the following:

"In order to enable persons with disabilities to live independently and to participate fully in all aspects of life, States Parties shall take appropriate measures to ensure, on the basis of equality with others, access to physical environment, transport, information and communication ".

In sub-Saharan Africa, including Rwanda, the environment is largely inaccessible to people with disabilities. Access to infrastructure is not yet improved because of the physical barriers they face. This situation, therefore, does not allow them to enjoy their autonomy, and are limited in the completion of their daily tasks. On the other hand, it creates dependency and exclusion. It is high time for the world to change its way of marginalizing people with disabilities.

In this matter of course, Rwanda is striving for ensuring water, hygiene and sanitation services are accessed by all. The water, sanitation and hygiene sector in Rwanda is guided by the National Water Supply and Sanitation Policies and Strategies which were approved by the Cabinet in December 2016. The policies and strategies aim at achieving universal access to basic water and sanitation services by 2020. Rwanda has met MDG targets for water and sanitation with coverage of improved water supply and sanitation estimated at 85% and 83%, respectively, in 2014. The more ambitious WASH targets and standards under the SDGs, however, significantly raise the bar for what is required. Rwanda will aim to achieve 100% access to basic water supply and sanitation and 100% access to safely managed water and sanitation services by the years 2020 and 2030, respectively.

The main challenge is funding gaps for increasing access to WASH services, particularly in scattered settlements in difficult, hilly terrain. The critical bottlenecks to overcome include: funding gaps; human resource constraints, particularly at the decentralized levels; limited regulation of private water operators; and lack of a comprehensive sector management information system. If these are not resolved, progress will remain slow and the SDGs may be missed¹.

To achieve the SDGs by 2030, Rwanda has committed to secure US\$134 million to build and maintain universal basic coverage and an additional \$286 million to build and maintain safely managed services each year. The ambition is highest for rural water where coverage to basic level services is at 48% as well as on effective management of liquid and solid waste. Five major actions to ensure an aggressive

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Rwanda has met MDG targets for water and sanitation with coverage of improved water supply and sanitation estimated at 85% and 83%, respectively, in 2014

¹ MININFRA, Water and sanitation for all, available via http://sanitationandwaterforall.org/wp-content/uploads/downloadmanager-files/2017%20Rwanda%20Overview_final.pdf

approach to progress include: 1. Bridge the funding gaps by increasing public sector allocation, advocacy for increased support from development partners, and promotion and facilitation of private sector and household investments. 2. Roll-out the National Water and Sanitation Fund as a harmonized financing mechanism for WASH sector. 3. Strengthen sector regulation in urban and rural areas to improve service delivery, sustainability and achieve the new standards for safely managed services. 4. Strengthen the monitoring mechanism for WASH sector Management Information System. 5. Strengthen the capacity of, and coordination among, the line ministries, WASH sector institutions and partners at the national and sub-national level².

While striving for achieving the SDGs by 2030, development of synergies is a key priority. The government has led the process of developing the water and sanitation policies and strategies, which is focused on achieving universal access of basic services by 2020 and safely managed services by 2030. Several development partners have orientated their programs and funding to the achievement of this government-led strategy. More can be achieved if similar levels of alignment were achieved on the use of country systems by all the partners. While the government is working to further streamline procurement partners will gradually and progressively aim to use the government defined procurement systems.

Overview on household and institutional WASH services in Rwanda³

Rwanda has achieved remarkable progress in health. Since 1990, under-5 mortality has decreased by two thirds and maternal mortality by three quarters, while life expectancy has nearly doubled⁴.

Open defecation has practically been eradicated and most of Rwandan households have already financed and built their on-site private sanitation premises, albeit only about two thirds comply with the international standard definitions of an improved sanitation facility. Very few Rwandan households have installed flush toilets. The prevailing practice remains that water is used for cooking and washing (grey water, discharged mostly on surface) while excreta are disposed with waterless latrines, which is a rational solution considering the scarcity of the average water supply and financial constraints. The government has led the process of developing the water and sanitation policies and strategies, which is focused on achieving universal access of basic services by 2020 and safely managed services by 2030

Very few Rwandan households have installed flush toilets. The prevailing practice remains that water is used for cooking and washing

² MININFRA, Water and sanitation for all. 2016

³ http://www.mininfra.gov.rw/fileadmin/user_upload/new_upload/NATIONAL_SANITATION_POLICY__DECEMBER_2016.pdf

⁴ World Bank, World Development Indicators, 2015

The country has not yet invested in collective (water-borne) sanitation systems for densified urban areas, except a few small sewerage systems in Kigali for about 1,000 households altogether. Major hotels, hospitals, office buildings and some industries have installed their own (pre-) treatment systems. Actually, conventional sewerage and treatment systems for Kigali, Gasabo and Kicukiro are in the planning process.

Community Health Clubs have been established in all of the 30 districts in Rwanda. In addition 98 per cent of all 14,767 villages in Rwanda have registered Community health Clubs (CHCs). Of this number 5,376 villages have trained Village Health Workers (ASOC) who are running health sessions regularly. The remaining districts are set to be trained by 2018. Although sanitation hasn't been the main focus over the past few years, the CHCs provide an excellent platform to promote sanitation improvements.

Rwanda's schools benefited from the Community Health Clubs (replacing the Hygiene and Sanitation in schools programme that started in 2000) which focuses on behaviour changes in hygiene practice, including considerations for menstrual hygiene.

Progress towards the sanitation flagship targets

Improved sanitation coverage is estimated by the UNICEF/WHO Joint Monitoring Programme at 75% (rural: 71 per cent, urban: 83 per cent) for 2015 but including shared toilets. Rwanda's Joint Water and Sanitation (WATSAN) sector review, November 2015, provides slightly higher figures for 2015 with reference to Integrated Household Living Conditions Survey (EICV) results: overall access to improved sanitation is indicated with 83.4 per cent (rural: 81.4 per cent, urban 93.5 per cent)⁵. The fifth Rwanda Demographic and Health Survey (DHS) as of 2014/15 provides similar results (72 per cent including improved and shared facilities). It should, however, be noted that the reliability of the available access figures is limited. This is due to the difficulties in correctly assessing the quality of private pit latrines used by the vast majority of the population. Total latrine (or toilet) coverage, including improved and not improved sanitation facilities, in Rwanda is estimated at 96 per cent according to the Census 2012 and the fifth Rwanda Demographic and Health survey (DHS) as of 2014/15, which reflects a high household acceptance level for such infrastructure. However, the facility coverage level contrasts with relatively low hygiene practices as indicated by the Demographic and Health Surveys in 2010 and confirmed in 2016: only 12 per cent of households had a place for hand washing. The proportion of households with a place for hand washing increases with increasing wealth, from 9 per cent among

Total latrine (or toilet) coverage, including improved and not improved sanitation facilities, in Rwanda is estimated at 96 per cent according to the Census 2012 and the fifth Rwanda Demographic and Health survey (DHS) as of 2014/15

⁵ Source: 'Progress on Sanitation and Drinking Water: 2015 update and MDG assessment', Joint Monitoring Programme, 2015

households in the lowest three quintiles to (only) 20 per cent of those in the highest quintile. To achieve universal coverage with improved sanitation until 2018, and assuming a current improved toilets deficit of 25 per cent, Rwanda will not only have to improve, replace or build annually almost 500,000 facilities at household levels, but also increase hygiene awareness and practices and provide safe (collective) sanitation services for several million households throughout the country.

3. Philosophy behind disability

3.1 Definition of disability and related concepts

3.1.1 Disability

According to the World disability report (2011)⁶, disability is complex, dynamic and multidimensional concept. Over recent decades, the disabled people's movement– together with numerous researchers from the social and health sciences have identified the role of social and physical barriers in disability. The transition from an individual, medical perspective to a structural, social perspective has been described as the shift from a "medical model" to a "social model" in which people are viewed as being disabled by society rather than by their bodies.

The medical model and the social model are often presented as dichotomous, but disability should be viewed neither as purely medical nor as purely social: persons with disabilities can often experience problems arising from their health condition. A balanced approach is needed, giving appropriate weight to the different aspects of disability. Interaction between health conditions and contextual factors, both personal and environmental is required. Disability as a condition is itself a limitation (Medical model), but the environmental being an obstacle to someone's integrity is a limitation to someone's participation (Social model).

Therefore, disability is the umbrella term for impairments, activity limitations and participation restrictions, referring to the negative aspects of the interaction between an individual (with a health condition) and that individual's contextual factors (environmental and personal factors)

The UNCRPD acknowledges that disability is "an evolving concept", but also stresses that "disability results from the interaction between persons with impairments and attitudinal and environmental barriers that hinder their full and effective participation in society on an equal basis with others". Defining disability as an interaction means that "disability" is not an attribute of the person. Progress on improving social participation can be made by addressing the Disability as a condition is itself a limitation (Medical model), but the environmental being an obstacle to someone's integrity is a limitation to someone's participation (Social model)

⁶ http://www.who.int/disabilities/world_report/2011/chapter1.pdf

barriers which hinder persons with disabilities in their day to day lives.

Overall, it is clear that inaccessible environments create disability by creating barriers to participation and inclusion (for instance a deaf individual without a sign language interpreter, a wheelchair user in a building without an accessible bathroom or elevator, a blind person using a computer without screen-reading software, to name only few). Health is also affected by environmental factors, such as safe water and sanitation, nutrition, poverty, working conditions, climate, or access to health care.

In the Rwandan socio-cultural context, the concept 'disability" is used to denote 'dysfunctions of a body' often used to imply all the three (Impairment, Disability, Handicap) concepts interchangeably, and implying predominantly physical or organic disorders. It is commonly used to mean 'Ubumuga" in Kinyarwanda language⁷.

3.1.2 Impairment

In our desk review, impairment is used to refer to the people who have lost some organs of their body parts such as arms, legs, eyes and have limitation in regard to WASH services. Impairment is here defined as any temporary or permanent loss or abnormality of a body structure or function, whether physiological or psychological⁸. Thus, an impairment can be mental (Intellectual) or sensory (visual and hearing), internal (heart, kidney), or external (the head, the trunk or the limbs). In this report, we will have a restriction on those with Visual Impairment, Hearing Impairment, Physical Impairment, Intellectual Impairment and Multiple Impairments by assessing how they are accessing WASH services and programmes.

3.2 Disability, poverty and access to services

The World Health Organization currently estimates the number of people with disabilities worldwide at around 600-650 million, with as many as 80% living in developing countries. Approximately one in five of those living in absolute poverty are disabled⁹. Disability can be understood as both a cause and a consequence of poverty. Indeed this vicious circle of poverty and disability is today well understood, having been the subject of various research projects and reports¹⁰. People living in poverty usually lack access to basic social services, such as health care and education, as well as opportunities for safe employment and proper housing conditions. This exposes them to a high risk of accidents or of developing health problems which can lead to serious illness, injury or impairment. When a person living in poverty acquires an impairment, they face significantly more barriers to accessing health

When a person living in poverty acquires an impairment, they face significantly more barriers to accessing health services, education, employment opportunities and other public services. This in turn exacerbates social and economic exclusion

⁷ Karangwa, E. (2013). Baseline study on the situation of inclusive education in Kamonyi and Rubavu distric

⁸ WHO & World Bank (2011). World Report on Disability. Geneva, Switzerland: World Health Organization.

 ⁹ These figures can be accessed at WHO website: http://www.who.int/ as well as STAKES website: http://info.stakes.fi/ssd/EN/disabilityandpoverty/facts/index.htm
 ¹⁰ DFID. Disability, Poverty and Development, (DFID: UK: 2000)

services, education, employment opportunities and other public services. This in turn exacerbates social and economic exclusion and reduces opportunities for moving out of the condition of poverty¹¹. The focal point of this vicious circle is not the impairment itself. It is discrimination, social exclusion and the denial of people's rights, together with a lack of access to basic services that form the primary link between poverty and disability¹².

3.3 Access to services

Taking the example of WASH services (although this can apply for all social services), we can make an assessment of access to services based on the following 5 criteria:

- **Availability**: functioning services, where goods and programmes are available in sufficient quantity (services must also be of good quality (see below));
- Accessibility: a non-discriminatory approach; accessibility of the physical environment (to include transport and buildings); services being within safe physical reach, including in rural areas; and accessibility of health information and communication;
- Affordability (economic accessibility): affordable services for all, health care services as well as services related to the underlying determinants of health (safe and potable water, adequate sanitation facilities...). If payment is required, it is based on the principle of equity;
- Acceptability: services are culturally appropriate, respectful of medical ethics and of different values, needs and interests within communities. Sensitive to issues of confidentiality, gender and life-cycle requirements;
- **Accountability**: services and programmes are designed and implemented to respond to the needs and interests of all the community, including marginalised groups

Access to WASH services implies 5 criteria: availability, accessibility, affordability, acceptability and accountability

PwDs need

support services,

specialised

services and

accessible

mainstream WASH services at community level

To ensure quality, service providers need to actively consult and involve their users (including people with disabilities and their representative organizations) at all stages. Services are to be "effectively monitored by independent authorities¹³.

3.4 Provision of support and specialized services for persons with disabilities

One of the specific aspects of the disability service sector is the need for both support services (eg. Use of Braille on WASH facilities for example) and specialised services (eg Use of adapted assistive devices for example) and accessible mainstream services at community level (eg. Use of public water pumps for example). People with

¹¹ World Bank. Disability and Development and the World Bank. A Briefing Summary on February 2, 2005.

¹² Axelsson, C. A guidance Paper for an Inclusive Local Development Policy, (Handicap International, SHIA a

¹³ UNCRPD, Article 16 (3), Freedom from Exploitation, Violence and Abuse

disabilities have the same fundamental right to access mainstream services in the community (education, healthcare, employment, social services and social protection) as any other citizen. These services aim to increase disabled people's self-determination and participation in society¹⁴.

4. Initial findings

4.1. United Nations' Convention on the Rights of Persons with disabilities (UNCRPD)¹⁵

The desk review focused on the article 28 on adequate standard of living and social protection for persons with disabilities. Under the article, it is stated clearly that access to inclusive WASH services is not a favour but a must. In the same article, governments commit to achieve as expressed in the following:

1. States Parties recognize the right of persons with disabilities to an adequate standard of living for themselves and their families, including adequate food, clothing and housing, and to the continuous improvement of living conditions, and shall take appropriate steps to safeguard and promote the realization of this right without discrimination on the basis of disability.

2. States Parties recognize the right of persons with disabilities to social protection and to the enjoyment of that right without discrimination on the basis of disability, and shall take appropriate steps to safeguard and promote the realization of this right, including measures:

The article 28 of the UNCRPD is on adequate standard of living and social protection for persons with disabilities

a) To ensure equal access by persons with disabilities to clean water services, and to ensure access to appropriate and affordable services, devices and other assistance for disability-related needs;

b) To ensure access by persons with disabilities, in particular women and girls with disabilities and older persons with disabilities, to social protection programmes and poverty reduction programmes;

c) To ensure access by persons with disabilities and their families living in situations of poverty to assistance from the State with disability-related expenses, including adequate training, counselling, financial assistance and respite care;

d) To ensure access by persons with disabilities to public housing programmes;

e) To ensure equal access by persons with disabilities to retirement benefits and programmes;

¹⁴ Handicap International, Access to services for people with disabilities in challenging situations, 2016

¹⁵ www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/article-28-adequate-standard-of-living-and-social-protection.html

Based on the findings, there is a need for governments that have ratified the UNCRPD to put into action the commitments made as stipulated and specified above.

4.2 Global sustainable development goals

In line with the UNCRP, the UN 2030 Agenda Sustainable Development Girls, the goal 6 is on access to clean water and sanitation as well. The aim of the UN member states is to ensure universal access to safe and affordable drinking water for all by 20130 by investing in adequate infrastructure, provide sanitation facilities and encourage hygiene at every level. So, the world commitment to provide persons with disabilities with appropriate and inclusive WASH services is a must¹⁶.

The SD goal 6 is on access to clean water and sanitation

4.3 Research evidence

Despite the global commitment, challenges to access inclusive WASH services are still noted. Some studies conducted on the level of inclusiveness in WASH services for persons with disabilities have revealed the following¹⁷:

4.3.1 Persons with disabilities hardly access WASH services and programmes, as indicated in the following research evidence:

- 20% of people who live in poverty in developing countries have a disability and all need safe access to water, sanitation and hygiene (WASH) facilities.
- Social isolation and taboos around discussion of personal hygiene increase exclusion for people with a disability from promotion and education of WASH.
- Use of hands for support during defecation for people with a disability increases risk of acquiring and transferring disease.
- Inaccessible or distant water sources can force people with a disability to depend on others for water collection.
- People with mobility or vision impairments need accessible and safe latrines as open defecation is more difficult due to vulnerability to falls or animal attacks.

20% of people living in developing countries have a disability, face discrimination because of social and cultural taboos, and largely depend on others to access WASH services

 ¹⁶ http://www.undp.org/content/undp/en/home/sustainable-development-goals/goal-6-clean-water-and-sanitation.html
 ¹⁷ Water Aid. (2006). Equal Access for All – 2: Water and sanitation access for people with motor disabilities. Retrieved from http://www.wateraid.org/documents/plugin_documents/briefing_note_disability.pdf

4.3.2 Persons with limitations, including those with disabilities, are lacking access to clean WASH services and the situation becomes worse in rural areas

Worldwide, the majority of people are lacking clean WASH services. Over 748 million individuals lack access to a basic supply of water from a clean source that is likely to be safe; of these, the majority are people living in rural areas. This number does not include the number of people who are unable to afford water, including those who face challenges waiting times for collecting water and those who receive water at occasional intervals or have to collect water in unsafe areas. This situation is critical in rural areas, where many people collect water of dubious quality from unprotected wells or surface water sources, often at a great distance from their homes, deterring them from collecting sufficient quantities.

In urban areas, low-income groups, in particular those living in informal settlements, will often lack access to an adequate water supply and sanitation. Piped supplies seldom cover informal areas, meaning that people living there access water from a variety of generally inadequate water supply options, such as wells built close to latrines, water kiosks with water of dubious origin or from water vendors. Due to a lack of adequate statistics, the number of people without access to water is often underestimated. Statistics for access to water and sanitation services in urban areas therefore tend to be uneven¹⁸.

In urban areas, low-income groups, in particular those living in informal settlements, will often lack access to an adequate water supply and sanitation. Statistics are also often underestimated

4.3.3 Persons with disabilities are at high risk of poor conditions, not easily accessing adequate standards of living and social protection, including WASH services

In the Rwanda's report on the implementation of the article 28 of the UNCRPD (2015, p.48), it is stated that the third Household Survey (EICV3) finds that 45% of households live below the poverty line. Poverty is both a cause and consequence of disability and there is a significantly higher poverty index amongst households headed by a person with disabilities. Many Persons with Disabilities depend upon family members for social and material support; where this is the case this compromises their right to live independently and exposes them and the family to economic hardship.

However, as noted through the desk review, the legal framework is put in place. It is well stated as follows: 'The right to an adequate standard of living in Rwanda has its foundation in the general principles of the Constitution (Article 9) in which the State commits itself to building a State committed to promoting social welfare and establishing appropriate mechanisms for ensuring Rwanda's report on the implementation of the article 28 of the UNCRPD stated that the third Household Survey (EICV3) found that 45% of households live below the poverty line. There is a significantly higher poverty index amongst households headed by a person with disabilities

¹⁸ WHO/UNICEF Joint Monitoring Programme (JMP) Report 2014

social justice. The Law N° 02/2007 further protects the rights of ex-combatants with disabilities and those in 1st and the 2nd categories receive free shelter and monthly allowances. There is no similar entitlement for other Persons with Disabilities and no specific article in Law N°01/2007 specifying social protection measures. Rather Persons with Disabilities shall be entitled to equal rights under the law and have the right to live in the family in the same condition as others.

A part from ex-combatants, persons with disabilities in general are therefore entitled, on the same conditions as other poor households, to access broader social protection mechanisms or poverty- linked grants or other material support through UBUDEHE and Health mutual insurance. 'Umuganda" (Community work) is reported to be a kind of strategy to support families of persons with disabilities who may be selected as beneficiaries of works carried out to help clean environment and households¹⁹.

4.3.4 Political commitment to promote water, hygiene and sanitation facilities is highly expressed

The policy on sanitation is in place, reviewed in 2016. In the Economic Development and Poverty Reduction Strategy (EDPRS) 2, Rwanda has committed itself to reaching very ambitious targets in sanitation, among them the vision to attain 100 per cent sanitation service coverage by 2017/18. The importance of adequate access to sanitation as a driver for social and economic development, poverty reduction and public health is fully acknowledged in Rwanda's flagship policy documents and national goals (Sanitation policy, 2016)²⁰.

Rwanda strongly adheres to the 1997 Kampala Declaration on Sanitation. The latter encompasses the isolation management of excreta from the environment, maintenance of personal, domestic and food hygiene, safe disposal of solid and liquid wastes, maintaining a safe drinking water chain and vector control. It is therefore meant to improve: Rwanda politically commits to promote WASH services (EDPRS II, Sanitation policy of 2016 and signatory of Kampala Declaration on Sanitation)

- Urban storm water management;
- Fecal sludge management along the entire value chain (new definition);
- Difference between individual and collective sanitation;
- Coverage and access to safe sanitation;
- Definition of safe latrines/toilets;
- Electric and electronic waste;
- Industrial waste;

¹⁹ Republic of Rwanda, Initial report on the implementation of the Convention on the Rights of Persons with Disabilities, 2013.

²⁰ MININFRA, National Policy & Strategy for Water Supply and Sanitation Services, 2010

- Health-care waste;
- Nuclear/radioactive waste and
- Hazardous waste.

According to the Joint Monitoring Programme for Water and Sanitation (UNICEF/World Health Organization (WHO)) has defined for monitoring that an "improved" sanitation facility is one that hygienically separates human excreta from human contact. The policy states clearly what it should be done and sets indicators. It is also very much in line with the SDG goal 6. This is also supported by the Environment Policy adopted in 2003 in which it commits to improve management of the environment, both at the central and local level, in accordance with the country's current policy of decentralization and good governance. However, across the two policies, there is no clear mechanisms to reach and support persons with disabilities to access inclusive sanitation services.

In summary, a strong political commitment to promote WASH services is there. This the statement: 'Access to clean water and sanitation is key for healthy, dignified and productive lives. Therefore, drinking water is the first priority among the water uses in the catchment. The water resources. In Rwanda access in rural areas has increased but many people –often girls- still walk long distances to fetch water. Water is also the first need when it comes to sanitation and hygiene. Rwanda is progressing steadily to improve access and use of water, deal with liquid and solid waste management, storm water management and a large scale hygiene behaviour change of individuals, companies and institutions. Water and sanitation (Watsan, or WASH) include the components of water supply, storm water management and waste water and solid waste management."

The commitment to promote WASH services and programmes is read into the National Sanitation Policy (MININFRA, 2016) and the National Health Policy (MoH). It is stated as follows:

4.3.4.1 National Sanitation Policy

"Reaching the ambitious objectives of the 2030 Agenda demands that Rwanda addresses universal access to drinking water and sanitation along with issues of quality and supply, in tandem with improved water management to protect ecosystems and build resiliency. It includes two main goals: SDG Goal 6 "Ensure availability and sustainable management of water and sanitation for all", Goal 17 "Strengthen the means of implementation and revitalize the global partnership for sustainable development" and Goal 12 "By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse".

4.3.4.2 Health Policy 2014 and Health Sector Strategic Plan (2012–2018)

In the health policy, access to WASH services is clearly marked among other priorities. The objective of the Health Policy is centred on the reduction of burden of disease of the most important health problems in Rwanda – i.e., maternal and child health problems, infectious diseases and non-communicable diseases through access to primary health care. Both prevention and treatment and care services are included in these programs, as well as interventions aiming at improving important health-determining factors, such as behaviour

²¹ https://waterportal.rwfa.rw/toolbox/507

change communication, promotion of adequate nutrition, environmental health and sanitation and access to safe water.

Policy directions with relevance to the water supply sub-sector are as follows:

a) The health cross-sector collaboration has to be strengthened to tackle multi-factorial determinants affecting the health of the population (poverty reduction, nutrition and food security, water and sanitation, human rights, education and social protection, empowerment of youth and vulnerable populations).

b) Environmental health interventions will be strengthened from the national to the village level. Hygiene inspections will be decentralized to empower districts and sectors and the Community-Based Environmental Health Promotion Programme will be scaled up to be implemented country-wide.

c) Inter-sectoral collaboration between non-health departments and the MoH is essential for interventions targeting health determinants: water distribution and sanitation systems to meet essential health needs, and public hygiene activities (domestic and health-care waste management, health inspections).

4.3.4.3 National Policy on Injection Safety, Prevention of Transmission of Nosocomial Infections and Health-Care Waste Management (2009)

The National Policy on Injection Safety, Prevention of Transmission of Hospital Infections and HealthCare Waste Management has been developed to help health professionals to improve the quality of care and to establish procedures and evaluation mechanisms to ensure optimal quality of health care to prevent infections. The Policy aims at protecting and/or minimizing the risks due to unsafe injections and management of health-care waste practices for patients, health workers, consumers and the environment from the hazardous health-care waste disposal practices.

To help this move into action, a ministerial task force is put in place. Roles and responsibilities to different stakeholders are well defined. For instance, the Ministry of Infrastructure (MININFRA) handles the design of sanitation technology and systems, and the Ministry of Health (MoH) promotes hygiene and behavioural change. Apart from the above mentioned ministries, other national actors, as well as multilateral organizations and NGOs, and districts and sectors, also play key roles in promoting and providing sanitation and hygiene facilities.

4.3.5 Poor hygiene and lack of innovative solutions to integrate waste management are reported

In Rwanda most of the people have pit latrines or sceptic tanks in the urban area. Fecal sludge and sewage management is underdeveloped. Private entrepreneurs empty the pits, collect the fecal sludge in ponds and sell it to farmers. This is a good example of recycling of nutrients and reuse of water into agriculture. However, the ponds often leak and there is the risk of

Innovative solutions to properly manage wastes are lacking and/or underdeveloped (faecal sludge and sewage management) flooding during the rainy season. The faecal sludge ponds pose a threat to the public health (Source: <u>https://waterportal.rwfa.rw/toolbox/507</u>).

4.3.6 Water supply in urban areas is improved, but the equity and inclusiveness level is so critical

Though water supply equipment is improved in rural areas, the issue of equity and access is still critical. In urban areas, the scorecard shows that the enabling environment of the urban water supply service delivery pathway is reasonably well developed. Building blocks of the service delivery pathway relating to developing services are strong, relative to peer group, showing potential to develop new services despite a negative coverage trend over past decades. However, in relation to building accessible water supply building, it is still criticized as negative. The score for equity is limited, however, showing the lack of procedures and criteria for enhanced targeting, resulting in unequal service delivery across urban areas, with some suffering severe shortages²².



4.3.7. The legal framework around WASH services and programmes in Rwanda

Rwanda's first public hygiene law was passed in 1926. Since then, a number of sanitation and hygiene laws, the National Constitutions and regulations have followed:

Type of law/ constitution/ regulations	Content	Observation
1. Order No. 74/345	All houses, shops, workshops, construction sites or any other establishments shall have clean toilet facilities. Latrines shall be built according to the relevant regulations. Latrines, septic tanks and sewers shall be built after approval by the technical departments of the Public Hygiene Department. Latrines shall be built according to the relevant regulations. Night soil shall be removed and buried or discharged in an appropriate manner as determined by the local territorial	700/176 of 14 September

Table 1: Key laws and contents

²² An AMCOW Country Status Overview, Water Supply and Sanitation in Rwanda: Turning Finance into Services for 2015 and Beyond

	authority	
2. Rwandan constitution (2003)	Article 49: Every citizen has the right to a healthy and satisfying environment. Every person has the duty to protect, safeguard and promote the environment. The State shall protect the environment.	
3. Organic law No. 04/2005 for environmental protection and conservation	Article 81, Part 1: The dumping of wastes of any kind in streams, rivers, lakes, and surroundings is prohibited. Part 2: prohibits the damage of air and surface or groundwater. Article 83 and 84: The discharge of untreated waste in wetlands is prohibited. Article 84: The disposal of wastes in a way that makes them serve as favourable breeding ground for disease vectors is prohibited	Article 102: A fine of RWF 1–5 million or a prison term of six months to two years is given to people who dump waste indiscriminately. Article 107: A fine of 10 thousand to 100 thousand Rwandan francs is given to a person who pours sewage in public or private places that are not authorized by competent authority
4. Rwanda Building Control Regulations (2009)	3.3.2.13: Latrines shall be located on the plot on which the building is to be erected and shall be arranged and maintained to be conveniently accessible to any person employed or housed in the building at all times during the period of employment or residence.	
	3.3.2.14: Latrines shall be located not more than 30 m from any building in which persons are employed or housed.	
	3.3.2.16: A dwelling unit shall be provided with approved latrine facilities in accordance with the requirements of these Regulations. Any owner of a dwelling unit normally employing servants shall provide latrine facilities for the exclusive use of the servants, which shall be in additional to those provided for the occupier of the dwelling unit.	
	3.3.2.17: No building containing more than one dwelling unit shall be erected or occupied without	

	provisions being made for separate latrines for each unit.	
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Source: Sano, 2007²³

Table 2: Minimum standards for water supply, hygiene and sanitation promotion for vulnerable groups²⁴

S/N	Area	Minimum standard
1	Water, hygiene and sanitation	 All groups within the population have safe and equitable access to WASH resources and facilities, use the facilities provided and take action to reduce the public health risk All WASH staff communicate clearly about available WASH services. There is a system in place for the management and maintenance of facilities as appropriate, and different groups contribute equitably All users are satisfied that the design and implementation of the WASH programme have led to increased security and dignity

Table 3: Minimum standards to achieve quality of WASH services for vulnerable groups²⁵

4		
1	Hygiene promotion	Hygiene promotion and disease prevention
		measure available
		• All facilities provided are appropriately used
		and regularly maintained.
		• All people wash their hands after
		defecation, after cleaning a child's bottom,
		before eating and preparing food
		Communication about hygiene promotion
		and messages to address misconceptions
		• End-users involved in prevention and
		response plan
		Children's mothers, care-takers are provided
		· · · · ·
		with the means for safe disposal of
		children's faeces

²³ Sano, J.C., 2007. Urban Environmental Infrastructure in Kigali City, Rwanda. The Challenges and Opportunities for Modernised Decentralised Sanitation Systems in Poor Nighbourhoods. Msc Thesis. Wageningen University, Netherlands.

²⁴ http://www.spherehandbook.org/content/pages/en/6.minimum-standards-in-water-supply-sanitation-and-hygiene-promotion.pdf ²⁵ Idem

2	Water cupply	Thore are no focal california nor 100ml of
2	Water supply	 There are no faecal coliforms per 100ml of water at the point of delivery and use Household-level water treatment options available and effectively used There is no negative effect on health due to short-term use of water contaminated by chemicals (including carry-over of treatment chemicals) or radiological sources, and assessment shows no significant probability of such an effect People drink water from a protected or treated source and water is readily available There is no outbreak of water-borne or water-related diseases
3	Excreta disposal	 The environment in which the affected population lives is free from human faeces All excreta containment measures, i.e. trench latrines, pit latrines and soak away pits, are at least 30 metres away from any groundwater source. The bottom of any latrine or soak-away pit is at least 1.5 metres above the water table In flood or high water table situations, appropriate measures are taken to tackle the problem of faecal contamination of groundwater sources Drainage or spillage from defecation systems does not contaminate surface water or shallow groundwater sources Toilets are used in the most hygienic way possible and children's faeces are disposed of immediately and hygienically
4	Vector control	 All populations have access to shelters that do not harbour or encourage the growth of vector populations and are protected by appropriate vector control measures All populations at risk from vector-borne disease understand the modes of transmission and take action to protect themselves All people supplied with insecticide-treated mosquito nets use them effectively All food stored at the household level is protected from contamination by vectors such as flies, insects and rodents
5	Solid waste management	 All households have access to refuse containers which are emptied twice a week at minimum and are no more than 100 metres from a communal refuse pit All waste generated by populations is removed from the immediate living environment on a daily basis, and from the

		constructed and operated pit or inci with a deep ash pit, within the bou	iner is where lisposal nimum to the ogerous essings sed of signed, nerator
6	Drainage	 of each health facility Water point drainage is well planned and maintained. This includes due from washing and bathing areas as water collection points and hand we facilities There is no pollution of surface and/or groundwater sources from due water Shelters, paths and water and sate facilities are not flooded or eroded by There is no erosion caused by due water 	rainage well as vashing water rainage nitation water

5. What lessons were learnt?

In this desk review process, we identified a number of best practices and lessons learned:

- > Rwanda has a water, hygiene and sanitation policy in place
- The government of Rwanda has acknowledged the importance of proper sanitation and hygiene for human and economic development. The government prioritizes the issue and has put in place a strategy and structure to accelerate progress in the sanitation sector.
- The policy are clearly matching with the Rwanda Economic Development and Poverty Reduction Strategy (EDPRS II) and the UN 2030 Agenda on the Sustainable Global Goals adopted in 2015;
- A big number of Rwandan households access to sanitation and hygiene facilities and it has increased in rural Rwanda. MININFRA (2011) reports that 94.2% of households use pit toilets and 0.2% of households use UDDTs in Rwanda

Rwanda has a clear WASH policy. The latter matches very well with the EDPRS II and the UN 2030 Agenda on the SDGs. In terms of achievements, 94.2% of households use pit latrines. Some innovations are introduced too Innovative systems like productive sanitation have also recently been introduced in the rural areas to boost sanitation and hygiene coverage as well as crop yield. Certainly, having access to facilities is a positive step up the sanitation ladder (A study conducted in Burera district)²⁶.

Other successes noted (based on statistics available so far), include but not limited to:

In 2010, the President of Rwanda launched the Hygiene and Sanitation Presidential Initiative (HSPI), which raised the profile of Community-Based Environmental Health Promotion the Programme (CBEHPP) for domestic sanitation. The CBEHPP was launched in 2009 (Jain 2011)²⁷. Since the programme was launched, about 45,000 community health officers have been trained by officials from the Ministry of Health. Community health clubs (CHC) are also being formed as part of the CBEHPP in villages all over Rwanda to promote sanitation and hygiene at the local level, and more than 80% of the country's 15,000 villages now have such clubs (IRC 2011)²⁸. HAMS was also initiated to promote hygiene and sanitation by influencing positive behavioural change in schools.

In terms of improving sanitation in Rwanda, Jain (2011) reports that household access to sanitation facilities has increased faster in rural Rwanda than in many other Sub-Saharan African countries. Rwanda's population grew from 7 million to 11 million people between 1990 and 2010, while the percentage of the Rwandan population using improved sanitation increased from 36% in 1990 to 55% in the same period. This increase in usage mainly occurred in rural areas, i.e. from 34% in 1990 to 56% in 2010 (WHO/UNICEF, 2012). National data shows that 94.2% of households use pit toilets, 3.1% of households use ventilated improved pit (VIP) toilets, 0.2% of households use UDDTs-ecosystems, and 4.5% of households use flush toilets (MININFRA, 2011)²⁹.

The President of Rwanda launched an initiative meant to promote Hygiene and Sanitation. This initiative enabled to train Community Health Clubs at Village level

Rwanda improved sanitation between 1990 and 2010, from 36% to 55% respectively

²⁶ Stockholm Environmental Institute, *Sanitation and Hygiene: Policy, Stated Beliefs and Actual Practice A Case Study in the Burera District,* Rwanda, 2012

²⁷ Jain, N., 2011. Getting Africa to Meet the Sanitation MDG: Lessons from Rwanda: Case Study. Water and Sanitation Program, World Bank.

²⁸ IRC International Water and Sanitation Centre, 2011. Water and Sanitation News. Source Bulletin No. 66.

²⁹ MININFRA, 2011. Guideline for Latrine Technologies Usable in Rwanda. Ministry of Infrastructure, Rwanda.

6. What challenges are faced?

In summary, the desk review presented a number of challenges limiting PwDs from accessing WASH services and programmes, including:

- WASH services are hampered by a lack of improved sanitary facilities as well as limited service provision for excreta disposal, management of solid and liquid wastes, combined with inadequate hygienic practices and storm water risks.
- Limited financial capacity to develop accessible and infrastructure for PwDs for households, private and public sectors;
- Insufficient enforcement of existing and new regulation (e.g., sludge emptying services, household solid waste separation, storm water standards);
- Limited awareness on hygiene practice;
- Unclear coordination mechanisms and lack of a monitoring and reporting system for WASH services and programmes;
- Limited knowledge on inclusion of persons with disabilities in regard to WASH services;
- No clearer mechanisms to include persons with disabilities are set in the policies (eg. Sanitation, Health and Injection Safety, Prevention of Transmission of Nosocomial Infections and Health-Care Waste Management).
- Where WASH services are, there are no adequate standards to ensure they are accessible and inclusive enough for PwDs;
- Lack of support and assistive devices that are meant to strengthen and support the autonomy of PwDs to access and use WASH facilities as appropriately as they wish;
- Lack of access to right and timely information in regard to WASH services for PwDs;
- The score for equity to meet PwDs' needs is limited, due to lack and appropriate support services;
- Lack of statistical information on how many PwDs access inclusive WASH services and programmes, with no qualitative, empirical evidence on how they access it.

Main challenges include lack of improved sanitary facilities, inaccessible infrastructure, ineffective enforcement of laws and regulations, limited awareness, unclear coordination, limited knowledge on inclusion of PwDs, lack of support and assistive devices, lack of statistics on the level of PwDs' access to WASH services and unfixed standards for inclusion of PwDs

7. How could disability inclusion in WASH services be improved?

To improve the situation of inclusiveness in the WASH services and programmes, the report suggests the following actions:

- The Government of Rwanda (GoR) to review the WASH policy and commits to promote inclusion for persons with disabilities for them to access inclusive WASH services, no one left behind. The policy alone is not adequate. Effective policy should not only be comprehensive and coherent within itself; it must also be converted into practice on the ground.
- The GoR to disseminate the policy at all levels: there must be a common understanding of policy at all levels – national, regional, and local – and by all actors, including households, for policy to be legitimate and guide behaviour.
- The GoR to translate the set WASH policies into action. There are contradictions between policy and practice. To address these contradictions, it is imperative to integrate policy and practice at all levels, and to harmonize norms and local practices with prescribed guidelines and standards. This requires a range of actions and measures, including: coordination between actors in the sector; effective capacity development; sustained support for and monitoring and maintenance of standards; and effective enforcement, especially at the local level (Nelson Ekane, Marianne Kjellén, Stacey Noel and Madeleine Fogde, 2012³⁰);
- The GoR to put in place provision for excreta disposal, management of solid and liquid wastes, combined with inadequate hygienic practices and storm water risks.
- The GoR to raise a general public awareness raising on importance of clean, accessible, inclusive, safe and quality WASH services for the population in general and persons with limited capacity including PwDs;
- The GoR to build a strong Public-Private Partnership (PPP) to bring the Central and local leaders, development partners, the PSF, the CSO and family members on board in an effort to change people's mindset on inclusive WASH services and practices, inclusion of PwDs, invest in affordable, innovative

Recommended actionS: The Government of Rwanda to review the WASH policy and include disability inclusion, disseminate it at large and translate it into action. To make it happen, there is need for strong awareness, involvement of the private sector, adequate standards, accessibility of the WASH facilities, provision of the necessary assistive devices, timelv information on inclusive WASH services and research on inclusiveness in WASH services

³⁰ Stockholm Environmental Institute, Sanitation and Hygiene: Policy, Stated Beliefs and Actual Practice A Case Study in the Burera District, Rwanda, 2012

and inclusive WASH services, move it into practice at community level and ensure strong coordination and monitoring mechanisms are put in place at national and local level;

- The GoR to ensure WASH services are meeting adequate standards of accessibility and inclusion for PwDs;
- The GoR, through the established PPP, to provide support and assistive to strengthen PwDs' capacity to access and use WASH facilities as appropriately as they can;
- The GoR to ensure PwDs are accessing to right and timely information in regard to WASH services and put in place a system to inspect efficiency and respect;
- To GoR to support research work that are meant to provide quantitative and qualitative information in relation to WASH services and programmes for PwDs.

8. Conclusion

"Inclusiveness in WASH services and programmes for PwDs in the Rwandan context" is still critical. As in many more of other developing countries, embedding inclusion of PwDs into WASH services is still a challenge. Water, hygiene and sanitation policy is there, but moving it into action is another issue. There is need to joint efforts (the Central Government, the Local Government, Development Partners and the Civil Society) in an effort to improve water, hygiene and sanitation related behaviour and practices.

In Rwanda, sanitation and hygiene are high on the government's development agenda, a range of guidelines and standards for toilet technologies appropriate for different regions are clearly set and stated in the National Sanitation Policy (2016), the National Health policy (2004) and the National Policy on Injection Safety, Prevention of Transmission of Nosocomial Infections and Health-Care Waste Management (2009). These policies are fully matching with the National Strategy for Economic Transformation and the 2030 UN Agenda on Sustainable Development Goals, especially with the Goal 6, 12 and 17.

Though the policies are set, the actual implementation of equity and inclusiveness for PwDs is not well highlighted, nor clearly marked in commitments. Regarding the respect of guidelines and standards on WASH services and facilities, specifically those pertaining to urine diversion dry toilets, as well as those on the use of treated human excreta as fertilizer, and on pit latrines; they are not inclusive yet. They present, however, the prevailing sanitation and hygiene norms and practices according to internationally and nationally acceptable benchmarks. This is very much appreciated by the Joint Monitoring conducted by the World Banka and UNICEF (2015).

Conclusion

Inclusiveness in WASH services and programmes for PwDs in Rwanda is still critical. Embedding inclusion of PwDs into WASH services is still a challenge. Most of the WASH services in the Rwandan community are not inclusive. Accessibility standards are not respected. There is need for the Government to set appropriate measures and ensure WASH services become inclusive.

In a nutshell, this desk review shows that the level of inclusiveness in water, health, hygiene and safety aspects of sanitation remain unsatisfactory, and are not aligned with national guidelines and standards set in the policies ad hoc. Most of the WASH services in the Rwandan community are not inclusive, not properly constructed, do not respect standards of accessibility neither do not comply with acceptable norms and standards (Nelson Ekane, Marianne Kjellén, Stacey Noel and Madeleine Fogde, 2012). In addition to this, there is no clear path to conduct inspection and report on what is missing, matching or could be improved in the long run. Reasons for the contradictions between prevailing practice and national guidelines and standards include the following: people do not place a high priority on including needs of PwDs while developing WASH infrastructures; financial constraints limit household investment in WASH facilities; there is a lack of proper

understanding of prescribed sanitation and hygiene guidelines and standards; and there are challenges in carrying out sanitary inspections.

For effective and inclusive WASH to be put in place, there is need to overcome the challenge related to poor understanding of how the system can really work and meet needs of PwDs in terms of access, inclusion and quality of services. Furthermore, there is need for the Ministry of Infrastructure, the Ministry of Health and decentralized institutions (districts and sectors) to understand that the prescribed guidelines and standards set in the policies on WASH and health services are vital, learn how they can be translated into action and put in place the level of inspection at all levels in order to ensure that health and safety, livelihoods are improved to meet the minimum hygiene and sanitation standards required for meeting needs of PwDs in the Rwandan society. To collect evidence on how PwDs' acces WASH services and programmes, an empirical assessment is required. To this end, a field investigation study will identify how the situation is in the City of Kigali, particularly in the districts of Gasabo (Ndera Sector) and Nyarugenge (Nyamirambo sector).

References

IRC International Water and Sanitation Centre, 2011. Water and Sanitation News. Source Bulletin No. 66.

Jain, N., 2011. Getting Africa to Meet the Sanitation MDG: Lessons from Rwanda: Case Study. Water and Sanitation Program, World Bank.

Karangwa, E. (2013). *Baseline study on the situation of inclusive education in Kamonyi and Rubavu districts*. Kigali.

MININFRA, (2011). Guideline for Latrine Technologies Usable in Rwanda. Ministry of Infrastructure, Rwanda.

MININFRA (2010), National Policy & Strategy for Water Supply and Sanitation Services, Rwanda

MININFRA, Water and sanitation for all, available via <u>http://sanitationandwaterforall.org/wp-content/upload</u> 20Rwanda%20Overview_final.pdf

MININFRA (2016). Water and sanitation for all. Rwanda

Republic of Rwanda (2013), Initial report on the implementation of the Convention on the Rights of Persons with Disabilities, Kigali

Sano, J.C. (2007) *Urban Environmental Infrastructure in Kigali City, Rwanda. The Challenges and Opportunities for Modernised Decentralised Sanitation Systems in Poor Nighbourhoods.* Msc Thesis. Wageningen University, Netherlands.

Stockholm Environmental Institute (2012), *Sanitation and Hygiene: Policy, Stated Beliefs and Actual Practice A Case Study in the Burera District*, Rwanda

UNICEF & WHO (2015) Progress on Sanitation and Drinking Water: 2015 update and MDG assessment', Joint Monitoring Programme report UNCRPD, Article 16 (3), Freedom from Exploitation, Violence and Abuse

Water Aid. (2006). Equal Access for All – 2: Water and sanitation access for people with motor disabilities. Retrieved from http://www.wateraid.org/documents/plugin_documents/briefing_note_disability.pdf

WHO & World Bank (2011). World Report on Disability. Geneva, Switzerland: World Health Organization.

WHO/UNICEF (2014). Joint Monitoring Programme (JMP) Report. Kigali

World Bank (2015). World Development Indicators, Kigali

World Bank (2005). Disability and Development and the World Bank. A Briefing Summary on February 2, Kigali.

Important links

http://www.mininfra.gov.rw/fileadmin/user_upload/new_upload/NATIONAL_SANITATION_POLICY__DECEM http://www.spherehandbook.org/content/pages/en/6.minimum-standards-in-water-supply-sanitation-and-hy promotion.pdf

http://www.undp.org/content/undp/en/home/sustainable-development-goals/goal-6-clean-water-and-sanita http://www.who.int/disabilities/world_report/2011/chapter1.pdf https://waterportal.rwfa.rw/toolbox/507