

water & sanitation GLOSSARY

Water and Sanitation Glossary

Introduction

Access to safe water and sanitation is critical for human life, health, well-being, and sustainable development. By compiling this comprehensive list of the most frequently used terms related to water and sanitation, this glossary aims to bridge the gap between practitioners and the general public. Majority of these terms were adapted from various guidelines and reports on urban sanitation, treatment technologies, capacity building, institutionalisation, governance, enabling environment, and inclusion.

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Crafting the Glossary

- The process of glossary development began with identifying resources - glossaries, subject dictionaries and terminology list from various resources.
- The document was initially collated for the TNUSSP Website glossary.
- It has been updated four times so far over the years 2016-2020. The update also carefully looked at changing definitions of the same words, as some words got more nuanced year by year.
- The initial list was reviewed and vetted with the team leads- it had basic words around FSM and FCS, which was very TNUSSP specific.
- Slowly it was built more around changing/broadening focus areas: urban sanitation, capacity building, institutionalising, governance, enabling environment and inclusion. More from a student's perspective for UFP.
- The references are all attached in the document - standard international documents, govt guidelines, BMGF documents etc.

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A

Accessibility

The “ability to access” the functionality of a system or entity and gain the related benefits. The degree to which a product, service, or environment is accessible by as many people as possible.

Source: *Harvard Human Resources 2021*

Accessibility and safety audit

Participatory process used to evaluate water and sanitation facilities with the purpose of improving accessibility for people with disabilities and safety for all users.

Source: *Furniss, Aboma, and Shiferaw 2018*

Activated sludge process

An activated sludge process refers to a multi-chamber reactor unit that makes use of highly concentrated microorganisms in suspended mode under aerobic conditions, in order to degrade organics and remove nutrients from wastewater.

Source: *Tilley et al. 2014; Tchobanoglous et al. 2003*

Actor

A stakeholder that directly or indirectly influences the WASH system, including specific individuals or organisations (e.g., water operators, health extension workers, water committees, nongovernmental organisations and government agencies) or international entities with less direct links to the local system.

Source: *Agenda For Change 2021*

Adolescent girls

Adolescence describes the transitional period between childhood and adulthood. Girls aged 10 to 19 are adolescents.

Source: *Ministry of Drinking Water and Sanitation 2016*

Advanced or tertiary treatment

Treatment steps added after the secondary/tertiary treatment stage to remove specific constituents, such as nutrients, suspended solids, organics, heavy metals or dissolved solids (Eg: salts).

Source: *WHO 2006*

Affordability

Affordability is an essential consideration for improving the population’s access to products and services. The ownership of assets, the public-private mix and the regulatory context all play a role in determining affordability.

Source: *UNICEF 2017*

Anaerobic baffled reactors (ABRs) with filter

An ABR with a filter is an improved septic tank. ABRs incorporate one or more baffles which force the sewage to flow from the bottom to top until it starts to flow into the next chamber. The upflow chambers catalyse the sedimentation of solids and digestion of organic matter.

Source: *Bhitush et al. 2017*

Anaerobic digestion

The degradation and stabilisation of organic compounds by microorganisms in the absence of oxygen, leading to production of biogas.

Source: *Tilley et al. 2014*

Anaerobic pond

Treatment pond where anaerobic digestion and sedimentation of organic wastes occur; usually the first type of pond in a waste stabilisation pond system; requires periodic removal of accumulated sludge formed as a result of sedimentation.

Source: *WHO 2006*

Area-Wide Approach

An area-wide approach focuses on the local administrative entity with the appropriate level of responsibility for the planning, delivery and operation of lasting, inclusive and universal WASH.

Source: *Agenda For Change 2021*

Assistive Device

Devices that help someone overcome or manage their disability including mobility aids (e.g. wheelchair, crutches, cane) and hearing aids; also devices that overcome barriers such as ramps.

Source: *Furniss, Aboma, and Shiferaw 2018*

B

Barrier (to inclusion)

Something that prevents or hinders accessibility or the full participation of persons with disabilities.

Source: *Furniss, Aboma, and Shiferaw 2018*

Biochemical oxygen demand (BOD)

The amount of oxygen that is required to biochemically convert organic matter into inert substances; an indirect measure of the amount of biodegradable organic matter present in the water or wastewater.

Source: *WHO 2006*

Bio-degradable

A substance or object that is capable of being decomposed by bacteria or other living organisms and thereby avoiding pollution.

Source: *Ministry of Drinking Water and Sanitation 2016*

Biogas

Mixture of gases, mostly methane and carbon dioxide, produced in anaerobic decomposition of waste materials.

Source: *Franceys, Pickford, and Reed 1992*

Biosolid

Biosolids are a product of the wastewater treatment process. During wastewater treatment the liquids are separated from the solids. Those solids are then treated physically and chemically to produce a semisolid, nutrient-rich product known as biosolids. The terms 'biosolids' and 'sewage sludge' are often used interchangeably.

Source: *USEPA 2016*

Bio-toilet (aerobic)

Bio-toilets make use of aerobic digestion involving multiple strains of bacteria that break down waste matter through oxidation.

Source: *Bhitush et al. 2017*

Blackwater

Source-separated wastewater from toilets, containing faeces, urine and flushing water (and eventually anal cleansing water in "washing" communities).

Source: *WHO 2006*

Buffer zone

Land that separates wastewater, excreta and/or greywater use areas from public access areas; used to prevent exposures to the public from hazards associated with wastewater, excreta and/or greywater.

Source: *WHO 2006*

Cesspit

A subsurface enclosed container for the retention of sewage until it is removed by vacuum tanker or other means.

Source: *Franceys, Pickford, and Reed 1992*

Chemical oxygen demand (COD)

A measure of the amount of oxygen required for chemical oxidation of organic material in water by a strong chemical oxidant (expressed in mg/L). COD is always equal to or higher than BOD since it is the total oxygen required for complete oxidation. It is an indirect measure of the amount of organic material present in water or wastewater: the more the organic content, the more oxygen is required to chemically oxidise it (high COD).

Source: *Tilley et al. 2014; Tchobanoglous et al. 2003*

Cistern flush toilet

A toilet type that consists of a water tank which supplies the water for flushing the excreta and a bowl into which the excreta are deposited.

Source: *Tilley et al. 2014; Tchobanoglous et al. 2003*

Citywide inclusive sanitation (CWIS)

CWIS means that everybody benefits from adequate sanitation service delivery outcomes; human waste is safely managed along the whole sanitation service chain; effective resource recovery and re-use are considered; a diversity of technical solutions is embraced for adaptive, mixed and incremental approaches; and onsite and sewerage solutions are combined, in either centralised or decentralised systems, to better respond to the realities found in developing country cities. Cities need to develop comprehensive approaches to sanitation improvement that encompass long-term planning, technical innovation, institutional reforms and financial mobilisation. They will need to demonstrate political will, technical and managerial leadership, to focus on durable drivers for innovation, and to manage funding for sanitation in new and creative ways. CWIS requires collaboration between many actors, including: national, sub-national and city/municipal governments; utilities and municipal service providers; business and the private sector; civil society, local and international NGOs; donors, bilateral and multilateral agencies and private foundations; as well as academia and, importantly, households themselves. Each city is organised in a unique way. Local actors need to acknowledge shared responsibilities and work collaboratively to chart their own path to providing urban sanitation to all.

Source: *Citywide Inclusive Sanitation 2016*

Co-composting

Co-composting is composting of septage along with the organic fraction of municipal solid waste as a form of co-treatment. The organic fraction includes food waste, paper, yard waste (e.g. leaves and branches) cut or removed during landscaping.

Source: *Bhitush et al. 2017*

Co-treatment

Co-treatment simply means treating septage along with wastewater at a wastewater treatment plant. It is an option which can be considered in India, provided the characteristics of the septage are known, it is diluted with sewage to avoid shock load, and the STP has enough capacity to take the extra load. Cotreatment of septage with sludge from STP is also an option.

Source: *Bhitush et al. 2017*

Combined sewer system

The sewers carry both storm water and wastewater.

Source: *Tilley et al. 2014; Tchobanoglous et al. 2003*

Communication barriers

Absence of aids for people with impairments that affect communication, e.g. Braille, signposts, sign language interpreters.

Source: *Furniss, Aboma, and Shiferaw 2018*

Community

A group of people living in the same place. You can define communities at different geographic scales: neighbourhood, city, county, province, state, nation, or even internationally.

Source: *Agenda For Change 2021*

Community-based management

The service delivery model where communities have been delegated responsibility to operate and manage water facilities. This option includes many variations from purely voluntary committees, to those with systematic support, to those outsourcing tasks to individuals and even private companies, but where the community retains governance and oversight.

Source: *Agenda For Change 2021*

Community led total sanitation (CLTS)

CLTS is an innovative methodology for mobilising communities to completely eliminate open defecation (OD). Communities are facilitated to conduct their own appraisal and analysis of open defecation (OD) and take their own action to become ODF (open defecation free).

Source: *The Sanitation Learning Hub 2008*

Community participation

Process of involving a community or its representatives in planning and decision-making processes that have direct or indirect consequences on their lives.

Source: *Furniss, Aboma, and Shiferaw 2018*

Community toilets

Toilets that are situated in a common place where a certain number of families living within a community can use are called community toilets.

Source: *TNUSSP, n.d.*

Composting

Controlled decomposition of organic solid waste in moist conditions so as to produce humus. Used as soil conditioner.

Source: *Franceys, Pickford, and Reed 1992*

Constructed wetlands

Engineered pond or tank-type units to treat faecal sludge or wastewater; consist of a filtering body planted with aquatic emergent plants.

Source: *WHO 2006*

Containment

Containment describes the ways of collecting, storing, and sometimes treating the products generated at the toilet (or user interface). The treatment provided by these technologies is often a function of storage and is usually passive (e.g., requiring no energy input). Thus, products that are 'treated' by these technologies often require subsequent treatment before use and/ or disposal.

Source: *WHO 2018*

Convention

In the legal sense, a convention is a set of agreed, stipulated, generally accepted standards, and norms, taking the form of a treaty in international law.

Source: *UNW-DPAC 2011*

Conventional sewer system

Conventional gravity sewers are large networks of underground pipes that convey blackwater, greywater and, in many cases, storm water from individual households to a (Semi-) Centralised Treatment facility, using gravity (and pumps when necessary).

Source: *Tilley et al. 2014; Tchobanoglous et al. 2003*

D**Decanting facility**

Decanting facility is a point where septage from on-site sanitation systems like pit latrines and septic tank is pumped into the underground sewerage systems, to be treated at the centralised treatment plant. These assigned stations for emptying the septage are called decanting stations.

Source: TNUSSP, n.d.

Decentralised wastewater treatment system (DEWATS)

A small-scale system used to treat, discharge, and/or reclaim wastewater from a small community or service area.

Source: Tilley et al. 2014; Tchobanoglous et al. 2003

Desludging (emptying)

Removing settled solids from pits, vaults, tanks and septic tanks.

Source: Franceys, Pickford, and Reed 1992

Dewatering

The process of reducing the water content of a sludge or slurry. Dewatered sludge may still have a significant moisture content, but it typically is dry enough to be conveyed as a solid (e.g., shovelled).

Source: Tilley et al. 2014; Tchobanoglous et al. 2003

Disability

Functional limitation as a result of partial or complete loss of the function of a body part, and the resulting limitations and restrictions that an individual has in society; disability results from impairment combined with barriers in the environment.

Source: Furniss, Aboma, and Shiferaw 2018

Disaggregated Data

Data about a population that has separate records for different categories or groups of people.

Source: Furniss, Aboma, and Shiferaw 2018

Disinfection

The inactivation of pathogenic organisms using chemicals, radiation, heat or physical separation processes (e.g. Membranes).

Source: WHO 2006

Drain

A conduit or channel constructed to carry off stormwater runoff, wastewater or other surplus water. Drains can be open ditches or lined, unlined or buried pipes.

Source: WHO 2006

Dry toilet

A toilet type that operates without flush water and the excreta (both faeces and urine) fall through a drop hole.

Source: Tilley et al. 2014; Tchobanoglous et al. 2003

E**Effluent**

Liquid (e.g. treated or untreated wastewater) that flows out of a process or confined space).

Source: WHO 2006

Enabling environment

The set of interrelated conditions such as legal, governance and monitoring frameworks, political financing and human capital that are able to promote the delivery of WASH services.

Source: Agenda For Change 2021

Escherichia coli (E. coli)

A bacterium found in the gut, used as an indicator of faecal contamination of water.

Source: WHO 2006

Exclusion (from WASH)

when a person or group of people are prevented from having access to water, a toilet or hand washing facility, or where access is very difficult for them.

Source: Furniss, Aboma, and Shiferaw 2018

Excreta

Faeces and urine (see also faecal sludge, septage and night soil).

Source: WHO 2006

F**Factor**

A non-human element, aspect, or component of a system that directly or indirectly influences system functioning or outcomes. Together with actors, factors are part of the complex network of human and non-human elements that make up a system.

Source: Agenda For Change 2021

Faecal sludge

Sludges of variable consistency collected from on-site sanitation systems, such as latrines, non-sewered public toilets, septic tanks and aqua privies. Septage, the faecal sludge collected from septic tanks, is included in this term (see also excreta and night soil).

Source: WHO 2006

Faecal sludge management (FSM)

Faecal sludge management (FSM) deals with on-site sanitation systems, while wastewater management is concerned with sewerage sanitation. FS may be treated in separate treatment works or co-treated with sludges produced in wastewater treatment plants.

Source: Tilley et al. 2014; Tchobanoglous et al. 2003

Faecal sludge treatment plant (FSTP)

A treatment infrastructure established for treating faecal sludge.

Source: Tilley et al. 2014; Tchobanoglous et al. 2003

Faeco-oral diseases

Diseases in which the infectious agents are found in faeces (stool) and enter the body through the mouth (oral route). The mode of transmission may be in contaminated food or water, on the hands, or on objects such as bowls, spoons and cups. For simplicity, we will sometimes refer to these diseases as faeco-oral diseases.

Source: The Open University, n.d.

Full cycle of sanitation (FCS)

Full cycle of sanitation (FCS) includes five stages, namely, 1) safe containment (consisting of toilets and septic tanks/drainage systems), 2) safe emptying services like desludging, 3) safe transport of waste by trucks, 4) safe treatment in sewage treatment plants / faecal sludge treatment plants, and 5) safe disposal/reuse.

Source: TNUSSP, n.d.

G**Gender**

Gender refers to the social attributes and opportunities associated with being male and female and the relationships between women and men and girls and boys, as well as the relations between women and those between men. These attributes, opportunities and relationships are socially constructed and are learned through socialisation processes. They are context/ time-specific and changeable. Gender determines what is expected, allowed and valued in a woman or a man in a given context. In most societies there are differences and inequalities between women and men in responsibilities assigned, activities undertaken, access to and control over resources, as well as decision-making opportunities. Gender is part of the broader socio-cultural context. Other important criteria for socio-cultural analysis include class, race,

poverty level, ethnic group and age.

Source: UNICEF 2017

Gender equality

The concept that women and men, girls and boys have equal conditions, treatment and opportunities for realising their full potential, human rights and dignity, and for contributing to (and benefitting from) economic, social, cultural and political development. Gender equality is, therefore, the equal valuing by society of the similarities and the differences of men and women, and the roles they play. It is based on women and men being full partners in the home, community and society. Equality does not mean that women and men will become the same but that women's and men's rights, responsibilities and opportunities will not depend on whether they are born male or female. Gender equality implies that the interests, needs and priorities of both women and men and girls and boys are taken into consideration, recognizing the diversity of different groups and that all human beings are free to develop their personal abilities and make choices without the limitations set by stereotypes and prejudices about gender roles. Gender equality is a matter of human rights and is considered a precondition for, and indicator of, sustainable people-centred Development.

Source: UNICEF 2017

Gender equity

The process of being fair to men and women, boys and girls, and importantly the equality of outcomes and results. Gender equity may involve the use of temporary special measures to compensate for historical or systemic bias or discrimination. It refers to differential treatment that is fair and positively addresses a bias or disadvantage that is due to gender roles or norms or differences between the sexes. Equity ensures that women and men and girls and boys have an equal chance, not only at the starting point, but also when reaching the finishing line. It is about the fair and just treatment of both sexes that takes into account the different needs of the men and women, cultural barriers and (past) discrimination of the specific group.

Source: UNICEF 2017

Gender mainstreaming/Integrating

A strategy to accelerate progress on women's and girls' rights and equality in relation to men and boys. Gender equality is the goal. Gender mainstreaming is the process of assessing the implications for girls and boys and men and women of any planned action, including legislation, policies and programmes. It is a strategy for making girls' and women's, as well as boy's and men's, concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programmes so that girls and boys and women and men benefit equality, and inequality is not perpetuated.

Source: UNICEF 2017

Greywater / sullage

Water from the kitchen, bath and/or laundry, which generally does not contain significant concentrations of excreta.

Source: WHO 2006

Grit chamber

Where subsequent treatment technologies could be hindered or damaged by the presence of sand, grit chambers (or sand traps) allow for the removal of heavy inorganic fractions by settling.

Source: Tilley et al. 2014

Ground water

Water contained in rocks or subsoil.

Source: WHO 2006

Ground water table

The top surface of the zone of saturation or groundwater is known as ground water table.

Source: Bhattacharjya, n.d.

H**Helminth**

A worm, which may be parasitic or free-living.

Source: Franceys, Pickford, and Reed 1992

High-rate treatment processes

Engineered treatment processes characterised by high flow rates and low hydraulic retention times. Usually include a primary treatment step to settle solids followed by a secondary treatment step to biodegrade organic substances.

Source: WHO 2006

Human-centric design

Human-centred design is a problem-solving technique that puts real people at the centre of the development process, enabling you to create products and services that resonate and are tailored to your audience's needs.

Source: Franceys, Pickford, and Reed 1992

Humus

Decomposed vegetable matter - the end-product of the composting process.

Source: Franceys, Pickford, and Reed 1992

Hydraulic retention time

Time the wastewater takes to pass through the system.

Source: WHO 2006

Hygiene

In the SDG definition, hygiene is subsumed under sanitation with a dedicated indicator referring to use / availability of a handwashing facility on premises with soap and water. Hygiene, however, includes a wider set of behaviours and measures that are able to reduce the burden of infectious diseases at home and in the community. It includes e.g. hand hygiene, personal hygiene, safe excreta disposal, ensuring safe water at the point-of-use, menstrual hygiene, general hygiene (laundry, surfaces, baths, sinks), food hygiene (cooking, storing, preventing cross-contamination), animal excreta management and solid waste management. In order to achieve better health outcomes, improved hygiene behaviours, cultural and social sensitivity, hygiene education, behaviour change and increased awareness at all levels of society are required.

Source: Agenda For Change 2021

Hypochlorite

Chemicals frequently used for disinfection (sodium or calcium hypochlorite).

Source: WHO 2006

Improved sanitation

An improved sanitation facility is one that hygienically separates human excreta from human contact and can consist of one of the following facilities: Flush/pour.flush.to piped sewer system, septic tank, pit latrine; Ventilated improved pit latrine; Pit latrine with slab; Composting toilet.

Source: UNW-DPAC 2011

Inclusion (in WASH)

When the needs of all members of a given community, regardless of who they are and their circumstances, are fully addressed in the design, planning and implementation of WASH services.

Source: Furniss, Aboma, and Shiferaw 2018

Inclusive design

Design of any product or service that makes it accessible to and usable by as many people as possible, regardless of age, gender and disability (also known as universal design).

Source: Furniss, Aboma, and Shiferaw 2018

Inclusive sanitation

Inclusive Sanitation is a public service approach to advance Equitable, Safe, and Sustainable outcomes, by strengthening the design and implementation of core public system functions of Responsibility, Accountability, and Resource Planning and Management.

Source: Citywide Inclusive Sanitation 2016

Indicator

Something that can be counted, measured or assessed, and provides evidence of progress towards achieving a specific goal.

Source: Furniss, Aboma, and Shiferaw 2018

Indicator organisms

Microorganisms whose presence is indicative of faecal contamination and possibly of the presence of more harmful microorganisms. These include E.Coli, Thermotolerant coliforms, etc.

Source: WHO 2006

Individual household toilet

Toilets that are within the premises of an individual house and are used by the people living in that house are called individual household toilets.

Source: TNUSSP, n.d.

Insanitary toilet

Insanitary toilet means a latrine which requires human excreta to be cleaned or otherwise handled manually, either in situ or an open drain or pit into which the excreta is discharged or flushed out, before the excreta fully decomposes in such manner as may be prescribed.

Source: Ministry of Urban Development 2014

Institutional barriers

Policies, programmes and directives that do not include clear statements about inclusion and how it should be achieved; also a lack of knowledge and skills among decision-makers.

Source: Furniss, Aboma, and Shiferaw 2018

Institutions

The formal organisational arrangements in a country and its WASH sector; the capacity and resources that each organisation has to perform its role, and the coordination mechanisms amongst the organisations.

Source: Agenda For Change 2021

Latrine

Place or building, not normally within a house or other building, for deposition, retention and sometimes decomposition of excreta.

Source: Franceys, Pickford, and Reed 1992

Learning and adaptation

The face of change to maintain progress towards a vision. This presumes inclusive platforms for regular sharing of information and the use of data for critical analysis, with insights from multiple stakeholders, including civil society. The stakeholders then respond to the learning through adaptation, changing their policies and practices accordingly. They are willing to address failure and work with others to do things differently.

Source: Agenda For Change 2021

Life cycle costs

The disaggregated costs of ensuring the delivery of an adequate, equitable and sustainable WASH service level to a population in a specified area, including capital expenditure, operational and minor maintenance expenditure, capital maintenance expenditure, cost of capital, expenditure on direct support and expenditure on indirect support.

Source: Agenda For Change 2021

Lime stabilisation

Lime stabilisation is the process by which hydrated lime (calcium hydroxide) is added to septage to form a product that can be disposed of on land for use as a fertiliser.

Source: Bhitush et al. 2017

M

Mainstreaming

Ensuring that an issue or topic is always at the centre (in the mainstream) of consideration and not left to one side or ignored.

Source: Furniss, Aboma, and Shiferaw 2018

Marginalised group

People who, in the opinion of others, are considered to be insignificant or not important, and as a result are confined to the outer limits (or margins) of society.

Source: Furniss, Aboma, and Shiferaw 2018

Maturation pond

An aerobic pond with algal growth and high levels of bacterial removal; usually the final type of pond in a waste stabilisation pond system.

Source: WHO 2006

Meaningful participation

Participation in which everyone involved actively contributes to all stages of a project and doesn't just receive information about it.

Source: Furniss, Aboma, and Shiferaw 2018

Membrane filtration

Filtration technique based on a physical barrier (a membrane) with specific pore sizes that traps contaminants larger than the pore size on the top surface of the membrane. Contaminants smaller than the specified pore size may pass through the membrane or may be captured within the membrane by some other mechanism.

Source: WHO 2006

Menarche

The first occurrence of menstruation.

Source: Ministry of Drinking Water and Sanitation 2016

Menopause

The time in a woman's life when her menstrual periods stop and she is no longer able to have children.

Source: Ministry of Drinking Water and Sanitation 2016

Menstrual absorbents

A sanitary cloth, napkin, towel or pad is an absorbent item worn by an adolescent girl or woman when she is menstruating, or directly after birth while she is bleeding. The material absorbs the flow of blood from her vagina.

Source: Ministry of Drinking Water and Sanitation 2016

Menstrual hygiene management (MHM)/menstrual hygiene

The (i) articulation, awareness, information and confidence to manage menstruation with safety and dignity using safe hygienic materials together with (ii) adequate water and agents and spaces for washing and bathing with soap and (iii) disposal of used menstrual absorbents with privacy and dignity.

Source: Ministry of Drinking Water and Sanitation 2016

Menstrual waste

Includes a used sanitary cloth, napkin, towel or pad that contains blood.

Source: Ministry of Drinking Water and Sanitation 2016

Menstruation /monthly periods

A biological process in a woman where each month blood and other material is discharged from the lining of the uterus. Menstruation occurs from the onset of puberty until the menopause, except during pregnancy.

Source: Ministry of Drinking Water and Sanitation 2016

Monitoring

The capture, management and dissemination of the information required to effectively manage WASH services at all levels. Monitoring is the basis for the information feedback loops that ensure effectiveness and allow adaptive change. It should be both systematic and reliable so that it is accepted by different sector actors and can be used for decision making.

Source: Agenda For Change 2021

N

Networks

An assemblage of entities in relationship, e.g., organisms in an ecosystem; networked entities may be totally parallel, embedded, or partially embedded (structurally intersected).

Source: Agenda For Change 2021

Night soil

Untreated excreta transported without water, e.g. via containers or buckets; often used as a popular term in an unspecific manner to designate faecal matter of any origin; its technical use is therefore not recommended.

Source: WHO 2006

O**Off-site sanitation**

System of sanitation where excreta are removed from the plot occupied by the dwelling and its immediate surroundings. It is otherwise known as centralised or network based sanitation.

Source: WHO 2006

On-site sanitation

System of sanitation where the means of storage are contained within the plot occupied by the dwelling and its immediate surroundings. For some systems (e.g. double-pit or vault latrines), treatment of the faecal matter happens on site also, through extended in-pit consolidation and storage. With other systems (e.g. septic tanks, twin-pit, single-pit or vault installations), the sludge has to be collected and treated off site (see also faecal sludge).

Source: WHO 2006

Open defecation free city/ward

A city / ward can be notified/declared as ODF city/ ODF ward if, at any point of the day, not a single person is found defecating in the open.

Source: Ministry of Housing and Urban Affairs 2020

Open defecation free ++ (ODF++) city/ward/work circle

A city / ward / work circle can be notified/ declared as SBM ODF++ city/ SBM ODF++ ward/ SBM ODF++ work circle if, at any point of the day, not a single person is found defecating and/ or urinating in the open, all community and public toilets are functional and well maintained, AND faecal sludge/septage and sewage is safely managed and treated, with no discharging and/or dumping of untreated faecal sludge/septage and sewage in drains, water bodies or open areas.

Source: Ministry of Housing and Urban Affairs 2020

Overhanging latrine

A latrine that empties directly into a pond or other water body.

Source: WHO 2006

P**Parasite**

Organism that lives in or on another living organism, called the host, from which it obtains its food and harms the hosts during the period.

Source: Franceys, Pickford, and Reed 1992

Participation

Taking part or being involved in something, usually a decision, process or activity.

Source: Furniss, Aboma, and Shiferaw 2018

Pathogen

Organisms that cause disease.

Source: Franceys, Pickford, and Reed 1992

Persons/people with disability

Those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in a society on an equal basis with others.

Source: UN 2006

Perspective

A way of experiencing that is shaped by our current state and circumstances, as these are influenced by our unique personal and social histories, where experiencing is a cognitive act.

Source: Agenda For Change 2021

pH

An expression of the intensity of the basic or acid condition of a liquid.

Source: WHO 2006

Physical barriers

Natural or technical (infrastructure) barriers that prevent access or participation, e.g. long distances to walk, uneven paths, steps (also known as environmental barriers).

Source: Furniss, Aboma, and Shiferaw 2018

Pit latrine

Latrine with one or two pits for accumulation and decomposition of excreta and from which liquid infiltrates into the surrounding soil.

Source: Franceys, Pickford, and Reed 1992

Planning

The foundation for implementing policies to achieve universal access to sustainable services. Plans must include costs and details on financing and may involve multiple phases. WASH systems require three types of planning: strategic, annual, and project planning for infrastructure development.

Source: Agenda For Change 2021

Pour-flush latrine

Latrine where a small quantity of water is poured by the user manually to flush excreta through a water seal into a pit.

Source: Franceys, Pickford, and Reed 1992

Primary treatment

Initial treatment process used to remove settleable organic and inorganic solids by sedimentation and floating substances (scum) by skimming. Examples of primary treatment include primary sedimentation, chemically enhanced primary sedimentation and upflow anaerobic sludge blanket reactors.

Source: WHO 2006

Public toilets

Public toilets are provided for the floating population / general public in places such as markets, train stations or other public areas, where there is a considerable number of people passing by.

Source: Ministry of Urban Development 2014

Q

Qualitative data or indicators

Not based on numbers but on assessments of people's opinions, attitudes, values and beliefs.

Source: Furniss, Aboma, and Shiferaw 2018

Quantitative data or indicators

Expressed as measurable quantities, such as numbers, percentages and averages.

Source: Furniss, Aboma, and Shiferaw 2018

R

Ramp

Gently sloping surface joining two different levels, usually made of cement or wood.

Source: Furniss, Aboma, and Shiferaw 2018

Resources

Elements (e.g., matter, energy, or information) that are available either within the system boundary or present outside the system in a manner the system can access and that enable a desired transformation.

Source: Agenda For Change 2021

S

Sanitation

The means of collecting and disposing of excreta and community liquid waste in a hygienic way so as not to endanger the health of individuals or the community as a whole.

Source: Franceys, Pickford, and Reed 1992

Screens

Screening is essential for removal of floating materials which are mainly sachets, plastic sheet bits, leaves, fibers, rags, etc. A screen is a device with openings generally of uniform size. The screening element may consist of parallel bars, rods, gratings or wire mesh or perforated plates and the openings may be of any shape, although generally they are contrived from circular or rectangular bars.

Source: Ministry of Housing and Urban Affairs 2013

Scum

Layers of suspended solids (grease, oil) less dense than water and floating on top of liquid waste from which they have separated by floatation.

Source: Franceys, Pickford, and Reed 1992

Secondary treatment

Wastewater treatment step that follows primary treatment. Involves the removal of biodegradable dissolved and colloidal organic matter using high-rate, engineered aerobic biological treatment processes. Examples of secondary treatment include activated sludge, trickling filters, aerated lagoons and oxidation ditches.

Source: WHO 2006

Sector

A group of organisational actors that are similar in a society, e.g., philanthropy, business, government, nonprofits, etc.

Source: Agenda For Change 2021

Sector strengthening

Sector strengthening is a means to an end and is the process of improving the capability of national and local systems, led by the government, to deliver sustained services for all segments of the population in accordance with agreed standards. A strong national WASH sector is one where all of the requisite constituent systems are in place to plan, finance, deliver, monitor and regulate WASH services, ensuring appropriate accountability mechanisms in place and to guarantee services for all. A strong national system is also one that is able to continually reflect, learn and innovate in response to sector evolution and external shocks.

Source: Agenda For Change 2021

Sedimentation

Process by which suspended solids denser than water settle as sludge.

Source: Franceys, Pickford, and Reed 1992

Septage

Partially digested semi-solid sludge removed from septic tanks. It is frequently used as a synonym to faecal sludge.

Source: WHO 2006

Septic tank

An underground water tight tank that treats wastewater by a combination of solids settling and anaerobic digestion. The effluents may be discharged into soak pits to be safely treated or dispersed which ensures pathogen die-off.

Source: WHO 2006

Service delivery model

The legal and institutional setup for the provision of WASH services. A service delivery model includes all links in the value chain, the method of provision, the end use of services and the level of service delivered. Examples include a community water supply, a utility's sewerage service, and water kiosks managed by a small private provider.

Source: Agenda For Change 2021

Service provider

The entity responsible for the day-to-day management of WASH services, including operation and maintenance.

Source: Agenda For Change 2021

Settler

A settler is a primary treatment technology for wastewater; it is designed to remove suspended solids by sedimentation. It may also be referred to as a sedimentation or settling basin/tank, or clarifier. The low flow velocity in a settler allows settleable particles to sink to the bottom, while constituents lighter than water float to the surface.

Source: Tilley et al. 2014

Sewage

Mixture of human excreta and water used to flush the excreta from the toilet and through the pipes; may also contain water used for domestic purposes.

Source: WHO 2006

Sewage treatment plant (STP)

A treatment infrastructure established for treating domestic wastewater (sewage).

Source: Tilley et al. 2014; Tchobanoglous et al. 2003

Sewer

Pipe or conduit through which sewage is carried.

Source: Franceys, Pickford, and Reed 1992

Sewerage

A complete system of piping, pumps, basins, tanks, unit processes and infrastructure for the collection, transporting, treating and discharging of wastewater.

Source: WHO 2006

Sludge

A mixture of solids and water that settles to the bottom of latrines, septic tanks and ponds or is produced as a by-product of wastewater treatment (sludge produced from the treatment of municipal or industrial wastewater is not discussed).

Source: WHO 2006

Sludge drying bed

A drying bed is a simple, permeable bed that, when loaded with sludge, collects percolated leachate and allows the sludge to dry by evaporation. Approximately 50% to 80% of the sludge volume drains off as liquid or evaporates. The sludge, however, is not effectively stabilised or sanitised.

Source: Tilley et al. 2014; Tchobanoglous et al. 2003

Sludge retention time

Ratio of mass of biological solids in the system to that escaping from the reactor.

Source: CPHEEO 2013

Soak away

Soak pit or drainage trench for subsoil dispersion of liquid waste.

Source: Franceys, Pickford, and Reed 1992

Soak pit

A porous, covered chamber or a hole dug is a covered, porous-walled chamber that allows water to slowly soak into the ground.

Source: Franceys, Pickford, and Reed 1992; Tilley et al. 2014; Tchobanoglous et al. 2003

Social and attitudinal barriers

Shame, fear, prejudice against disabled people and the mistaken belief that disability is a curse.

Source: Furniss, Aboma, and Shiferaw 2018

Source separation

Diversion of urine, faeces, greywater or all, followed by separate collection (and treatment).

Source: WHO 2006

Squat hole

Hole in the floor of a latrine through which excreta fall directly to a pit below.

Source: Franceys, Pickford, and Reed 1992

Stakeholders

Individuals or organisations with the ability to influence the social issue. They may represent public, private, nonprofit, or philanthropic sectors, or the population targeted for change.

Source: Agenda For Change 2021

Sub – structure

The structure of a toilet system constructed below the ground.

Source: Tilley et al. 2014; Tchobanoglous et al. 2003

Superstructure

Screen or building of a latrine above the floor that provides privacy and protection for users.

Source: Franceys, Pickford, and Reed 1992

Suspended solids

Small solid particles which remain in suspension in sewage, septage or effluent.

Source: Bhitush et al. 2017

System

The group of interdependent, interconnected, and interrelated actors and factors, both formal and informal, that comprise a complex social problem. No one person or organisation has the ability to influence the entire system, but by working together, the group can move towards systems change.

Source: Agenda For Change 2021

System strengthening

Understanding that WASH exists in complex systems with many component parts and within different social, economic, political and environmental contexts. It involves identifying and working to address the barriers in behaviours, policies, processes, resources, interactions and institutions that block achievement of inclusive, lasting, universal access to WASH.

Source: Agenda For Change 2021

Systemic thinking

Refers to the understanding of a phenomenon within the context of a larger whole; to understand things systemically is to put them in a context, to establish the nature of their relationships.

Source: Agenda For Change 2021

Systems approach

Modern societies are, by definition, made up of complex and interlinked systems of people, laws, political and financial institutions, private companies, technologies, markets all constantly interacting, both formally and informally and responding to different sets of incentives, sanctions and influences. This is how they work, and this is how they provide services to their citizens. This is as true for the water and sanitation “sector” and the services they deliver as any other part of a modern economy. A starting premise for taking a systems approach is the understanding that any given WASH System is a complex adaptive system. Adopting a “systems approach” therefore means recognizing and understanding that any strong national system for WASH service delivery will require all of the elements (factors to be in place and at all institutional levels and include different actors – from households and communities to local government and national ministries to private companies and aid agencies to politicians – being able to work together effectively and at scale.

Source: Agenda For Change 2021

Systems change

A variation – positive or negative – in the strength of factors (i.e., technology, financing, regulation, coordination, service delivery, learning, accountability mechanisms, etc.) and actors (i.e. the capacity of institutions, organisations and individuals) that make up a system. System change also reflects variations in the dynamics and inter – relationships among actors (i.e. improved access to information or participation in decision – making). There has been significant progress in our collective ability to measure systems change in the WASH sector in terms of factors and actors (“the what”), but much less progress in assessing changes in the dynamics among actors (“the how”). Systems strengthening is a deliberate effort to effect systems change, but systems change is a result of both intended and unintended changes within the WASH sector and the broader political economy.

Source: Agenda For Change 2021

T **Thermotolerant coliforms**

Group of bacteria whose presence in the environment usually indicates faecal contamination; previously called faecal coliforms.

Source: WHO 2006

Toilet

Place for defecation and urination, which may be the superstructure of a latrine.

Source: Franceys, Pickford, and Reed 1992

Total solids

The residue that remains after filtering a water or sludge sample and drying it at 105 °C (expressed in mg/L). It is the sum of Total Dissolved Solids (TDS) and Total Suspended Solids (TSS).

Source: Tilley et al. 2014

Transect walk

Community process of walking through a village from one side to the other, observing, asking questions and listening to the replies.

Source: Furniss, Aboma, and Shiferaw 2018

Transformational change

The emergence of an entirely new state prompted by a shift in what is considered possible or necessary which results in a profoundly different structure, culture or level of performance.

Source: Agenda For Change 2021.

Turbidity

The cloudiness of water caused by the presence of fine suspended matter.

Source: WHO 2006

Twin-pit system

Twin-pit system consists of a superstructure (toilet) and treatment units (two chambers). The two underground chambers (pits) are provided to hold faecal sludge. There are two alternating pits generally connected to a pour-flush toilet. Only one pit is functional at a time while the other is allowed to rest as the liquid leaches out of the pit. Pathogenic germs are absorbed into the soil while solids dry inside the pit.

Source: Bhitush et al. 2017

U **Urine diverting dry toilet (UDDT)**

A toilet type that operates without water and has a divider, so that the user can divert the urine away from faeces.

Source: Tilley et al. 2014; Tchobanoglous et al. 2003

V **Vacuum tanker**

Lorry-mounted tank into which the contents of septic tanks, aqua-privies, cesspits, vaults or pits are drawn by vacuum pump and stored in a tank for transport to a treatment or disposal site. Also referred to as vacuum truck / cess-pool vehicle / honey sucker.

Source: Franceys, Pickford, and Reed 1992; Tilley et al. 2014; Tchobanoglous et al. 2003

Vault

Watertight tank for storage of excreta.

Source: Franceys, Pickford, and Reed 1992

Vent pipe

Pipe provided to facilitate the escape of gases from a latrine or septic tank.

Source: Franceys, Pickford, and Reed 1992

VIP latrine

Ventilated improved pit latrine; pit latrine with a screened vent pipe and a partially dark interior to the superstructure.

Source: Franceys, Pickford, and Reed 1992

Vulnerable and marginalised groups

Vulnerable groups are those, such as children, who require special attention due to their physical conditions. Marginalised groups are those, such as those living in informal settlements, which require special attention due to their traditional and/or current exclusion from political power and resources

Source: UNW-DPAC 2011

W **WASH**

Abbreviation for water, sanitation and hygiene; generally used to mean water supply, provision of latrines and facilities for handwashing.

Source: Furniss, Aboma, and Shiferaw 2018

WASH systems

All the behaviours, policies, processes, resources, interactions and institutions necessary for delivery of inclusive, lasting, universal access to WASH.

Source: Agenda For Change 2021

Waste-fed aquaculture

Use of wastewater, excreta and/or greywater as inputs to aquacultural systems.

Source: WHO 2006

Waste stabilisation ponds (WSP)

Shallow basins that use natural factors such as sunlight, temperature, sedimentation, biodegradation, etc., to treat wastewater or faecal sludges. Waste stabilisation pond treatment systems usually consist of anaerobic, facultative and maturation ponds linked in series.

Source: WHO 2006

Wastewater

Liquid waste discharged from homes, commercial premises and similar sources to individual disposal systems or to municipal sewer pipes, and which contains mainly human excreta and used water. When produced mainly by household and commercial activities, it is called domestic or municipal wastewater or domestic sewage. In this context, domestic sewage does not contain industrial effluents at levels that could pose threats to the functioning of the sewerage system, treatment plant, public health or the environment.

Source: WHO 2006

Water closet (WC)

Pan from which excreta is flushed by water into a drain.

Source: Franceys, Pickford, and Reed 1992

Water point

This is a generic term used to describe any point of access to water for domestic uses. This includes a household connection, stand-pipe, well, borehole, spring, rainwater harvesting unit, water kiosk or other point of transaction with a water vendor. The term is used to avoid any bias or confusion regarding certain types of access to water.

Source: UNW-DPAC 2011

Water seal

Water held in a U-shaped pipe or hemispherical bowl connecting a pan to a pipe, channel or pit to prevent the escape of gases and insects from the sewer or pit.

Source: Franceys, Pickford, and Reed 1992

Water security

The capacity of a population to safeguard sustainable access to an adequate quantity and acceptable quality of water to sustain livelihoods, human well-being, and socio-economic development; ensure protection from water borne pollution and water related diseases; and preserve ecosystems in a climate of peace and political stability.

Source: Agenda For Change 2021

Women's empowerment

Giving power to women and girls so that they can play a significant role in society; women and girls participating actively in socio-economic and political processes; finding ways to ensure that women are confident, they are given a voice in society and their opinions are respected.

Source: Furniss, Aboma, and Shiferaw 2018

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WATER AND SANITATION • ACCESSIBILITY • ACCESSIBILITY AND SAFETY AUDIT • ADOLESCENT GIRLS • WATER AND SANITATION • ANAEROBIC BAFFLED REACTORS (ABRS) WITH FILTER • ANAEROBIC POND • ASSISTIVE DEVICE • WATER AND SANITATION • BARRIER (TO INCLUSION) • WATER AND SANITATION • BIOSOLID • BIOCHEMICAL OXYGEN DEMAND (BOD) • BIOGAS • WATER AND SANITATION • BUFFER ZONE • CESSPIT • CISTERN FLUSH TOILET • WATER AND SANITATION • CITYWIDE INCLUSIVE SANITATION • COMMUNITY TOILETS • WATER AND SANITATION • COMMUNITY LED TOTAL SANITATION • DECANTING FACILITY • DECENTRALISED WASTEWATER TREATMENT SYSTEM • WATER AND SANITATION • DISABILITY • EFFLUENT • ENABLING ENVIRONMENT • FAECAL SLUDGE • FAECAL SLUDGE MANAGEMENT • WATER AND SANITATION • FACTOR • FULL CYCLE OF SANITATION • GENDER EQUALITY • GREYWATER • GROUND WATER • GROUND WATER TABLE • HYGIENE • HYDRAULIC RETENTION TIME • IMPROVED SANITATION • INCLUSIVE DESIGN • WATER AND SANITATION • INCLUSIVE SANITATION • INDICATOR • INSANITARY TOILET • LEARNING AND ADAPTATION • LIME STABILISATION • WATER AND SANITATION • MATURATION POND • MENSTRUAL ABSORBENTS • WATER AND SANITATION • MENSTRUAL WASTE • NETWORKS • OFF-SITE SANITATION • OVERHANGING LATRINE • PERSPECTIVE • PRIMARY TREATMENT • QUALITATIVE DATA OR INDICATORS • RESOURCES • WATER AND SANITATION • SANITATION • SECTOR STRENGTHENING • SERVICE DELIVERY MODEL • SEWAGE • THERMOTOLERANT COLIFORMS • TOILET • TRANSFORMATIONAL CHANGE • WATER AND SANITATION VACUUM TANKER • WASH SYSTEMS • WATER AND SANITATION • WASTEWATER • WATER POINT • WATER SECURITY • WOMEN'S EMPOWERMENT • WATER AND SANITATION • ACCESSIBILITY • ACCESSIBILITY AND SAFETY AUDIT • ADOLESCENT GIRLS • WATER AND SANITATION • ANAEROBIC BAFFLED REACTORS (ABRS) WITH FILTER • ANAEROBIC POND • ASSISTIVE DEVICE • WATER AND SANITATION • BARRIER (TO INCLUSION) • WATER AND SANITATION • BIOSOLID • BIOCHEMICAL OXYGEN DEMAND (BOD) • BIOGAS • WATER AND SANITATION • BUFFER ZONE • CESSPIT • CISTERN FLUSH TOILET • WATER AND SANITATION • CITYWIDE INCLUSIVE SANITATION • COMMUNITY TOILETS • WATER AND SANITATION • COMMUNITY LED TOTAL SANITATION • DECANTING FACILITY • DECENTRALISED WASTEWATER TREATMENT SYSTEM • WATER AND SANITATION • DISABILITY • EFFLUENT • ENABLING ENVIRONMENT • FAECAL SLUDGE • FAECAL SLUDGE MANAGEMENT • WATER AND SANITATION • FACTOR • FULL CYCLE OF SANITATION • GENDER EQUALITY • GREYWATER • GROUND WATER • GROUND WATER TABLE • HYGIENE • HYDRAULIC RETENTION TIME • IMPROVED SANITATION • INCLUSIVE DESIGN • WATER AND SANITATION • INCLUSIVE SANITATION • INDICATOR • INSANITARY TOILET • LEARNING AND ADAPTATION • LIME STABILISATION • WATER AND SANITATION • MATURATION POND • MENSTRUAL ABSORBENTS • WATER AND SANITATION • MENSTRUAL WASTE • NETWORKS • OFF-SITE SANITATION • OVERHANGING LATRINE • PERSPECTIVE • PRIMARY TREATMENT • QUALITATIVE DATA OR INDICATORS • RESOURCES • WATER AND SANITATION • SANITATION • SECTOR STRENGTHENING • SERVICE DELIVERY MODEL • SEWAGE • THERMOTOLERANT COLIFORMS • TOILET • TRANSFORMATIONAL CHANGE • WATER AND SANITATION VACUUM TANKER • WASH SYSTEMS • WATER AND SANITATION • WASTEWATER • WATER POINT • WATER SECURITY • WOMEN'S EMPOWERMENT • WATER AND SANITATION • ACCESSIBILITY • ACCESSIBILITY AND SAFETY AUDIT • ADOLESCENT GIRLS • WATER AND SANITATION • ANAEROBIC BAFFLED REACTORS (ABRS) WITH FILTER • ANAEROBIC POND • ASSISTIVE DEVICE • WATER AND SANITATION • BARRIER (TO INCLUSION) • WATER AND SANITATION • BIOSOLID • BIOCHEMICAL OXYGEN DEMAND (BOD) • BIOGAS • WATER AND SANITATION • BUFFER ZONE • CESSPIT • CISTERN FLUSH TOILET • WATER AND SANITATION • CITYWIDE INCLUSIVE SANITATION • COMMUNITY TOILETS • WATER AND SANITATION • COMMUNITY LED TOTAL SANITATION • DECANTING FACILITY • DECENTRALISED WASTEWATER TREATMENT SYSTEM • WATER AND SANITATION • DISABILITY • EFFLUENT • ENABLING ENVIRONMENT • FAECAL SLUDGE • FAECAL SLUDGE MANAGEMENT • WATER AND SANITATION • FACTOR • FULL CYCLE OF SANITATION • GENDER EQUALITY • GREYWATER • GROUND WATER • GROUND WATER TABLE • HYGIENE • HYDRAULIC RETENTION TIME • IMPROVED SANITATION • INCLUSIVE DESIGN • WATER AND SANITATION • INCLUSIVE SANITATION • INDICATOR • INSANITARY TOILET • LEARNING AND



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