

MINIMUM STANDARDS FOR ADVANCED SERVICES IN HEALTH CARE FACILITIES (HCFs)

BASED ON JMP SERVICE LADDER, INTERNAL & EXTERNAL GUIDELINES

Disclaimer

This document is an attachment to the service offer **Construction/Rehabilitation of WASH Infrastructure in Health Care Facilities (HCFs)**, developed by the global programme *Sanitation for Millions*. The service offer is based on implementation experiences gathered by the programme in Jordan, Pakistan, and Uganda. Its development is part of the commission through the Federal Ministry for Economic Cooperation and Development (BMZ) in 2022. Purpose of this specific service offer is to give an overview of relevant background information, important minimum standards, and necessary working steps related to construction and rehabilitation of water, sanitation, and hygiene (WASH) infrastructure in HCFs.

Contents

Disclaimer.....	1
Sanitation for Millions’ Minimum Standards for WASH in institutions (based on JMP service ladder).....	3
Health Care Facilities.....	4
“Advanced services” translated into criteria (our minimum standards in simple words).....	4
Additional Information (Internal & External Guidelines).....	6
General Technical Minimum Standards to be followed.....	6
General Sustainability Minimum Standards to be followed	8
Exemplary Requirements for Accessible / Barrier Free Toilets, based on Uganda (2019)	10
Signage.....	10
Accessibility	11
Floor or ground surface	11
Doorway and door	11
Ramps	12
Exemplary Illustration of a Clean and Female Friendly Toilet, based on Fit For School’s MHM Concept.....	13
Sources.....	14

Sanitation for Millions' Minimum Standards for WASH in institutions (based on JMP service ladder)

	Schools	Religious Institutions	Health Care Facilities
Sanitation for Millions' requirements for Sanitation (Advanced Services)	Facilities are accessible to all, of adequate quality , provided with an adequate O&M system and are regularly inspected for cleanliness. Toilets are inclusive and female-friendly . Sewage and excreta are safely managed .	Facilities are accessible to all, of adequate quality , provided with an adequate O&M system and are regularly inspected for cleanliness. Toilets are inclusive and female-friendly . Sewage and excreta are safely managed .	Facilities are accessible to all, of adequate quality , provided with an adequate O & M system and are regularly inspected for cleanliness. Toilets are inclusive and female-friendly . Sewage and excreta are safely managed .
Sanitation for Millions' requirements for Hygiene (Advanced Services)	Handwashing facilities are functional at critical times (before eating and after using the toilet) and accessible to all, hygiene education is conducted, group handwashing is promoted, menstrual hygiene materials are available and awareness on MHM is created.	Handwashing facilities with water and soap are available after using the toilet, and accessible to all users. Safe hand-hygiene is promoted.	Availability of hand hygiene educational materials near handwashing stations and/or the patient waiting area, handwashing facilities are accessible to all staff members and patients. Waste is managed adequately, and IPC is addressed. Basic protocols for cleaning are available, and staff with cleaning responsibilities have all received training .
	Basic Service		
	Limited Service		
	No service		

Health Care Facilities

“Advanced services” translated into criteria (our minimum standards in simple words)

Water:	Sanitation:	Hand Hygiene:	Health Care waste:	Environmental cleaning:
<p>In all HCFs</p> <ul style="list-style-type: none"> ▪ Sufficient clean water is available within the facility 24 hours a day. ▪ Drinking water is available 7 days a week. ▪ The quality of water in delivery rooms (if available) is checked by the relevant authorities. ▪ Improved water supply system <p>Water storage systems in place.</p>	<p>In all HCFs</p> <ul style="list-style-type: none"> ▪ Sanitary facilities are not locked. ▪ Sanitary facilities can be accessed by the users (patients, staff, visitors) when they are at the HCF. ▪ Sanitary facilities use “improved” technology. ▪ Sanitary facilities are robust and appealing. ▪ Sanitary facilities fulfil the patient stance ratio (min. 2 toilets for outpatients, 1/20 inpatients). ▪ Sanitary facilities are sex segregated. ▪ Sanitary facilities are “private” (can be locked from inside) ▪ Sanitary facilities are clean and functional ▪ Anal cleaning materials are available at the toilets ▪ Sanitary facilities have one or more female-friendly toilets for patients and visitors for safe MHM, incl. a functional disposal system ▪ Sanitary facilities include one or more “barrier free” toilets for people with impaired mobility 	<p>In all HCFs</p> <ul style="list-style-type: none"> ▪ HWFs are functional (with water & soap and/or alcohol-based hand rub). ▪ HWFs are available within 5 meters to the toilet facilities. ▪ HWFs are available at all points of care. ▪ HWFs are available in waiting/public areas. ▪ HWFs are available close to the waste disposal area. ▪ Hand hygiene (and respiratory hygiene) promotion materials are displayed and visible in treatment areas. ▪ Hand hygiene (and respiratory hygiene) compliance activities are undertaken regularly (“5 moments”) ▪ Hand hygiene (and respiratory hygiene) resources (hand rub, 	<p>In all HCFs</p> <ul style="list-style-type: none"> ▪ Color-coded containers/bins are available & functional (= >3 bins, leak-proof with lid, clearly labelled [sharp; infectious; non-infectious], <75% full). ▪ Staff receives capacity building/training in Health Care Waste Management. ▪ Waste is segregated as per waste management rules at generation points. ▪ Waste Policies (incl. Standard Operating Procedures, SOPs) exist in the HCF ▪ Waste workers and management of HCF are familiar with the waste management rules. ▪ Guidance on waste segregation is visible at all generation points. ▪ Protective clothing and equipment are available for staff <p>In HCFs with on-site waste treatment & disposal,</p> <ul style="list-style-type: none"> • Incinerator (or alternative technology) for treatment of hazardous waste is built as per national standard, well- 	<p>In all HCFs</p> <ul style="list-style-type: none"> ▪ Cleaning policy or protocol exists, is implemented, and monitored. ▪ Toilets are cleaned at least once each day and a record of cleaning is signed by the cleaners and displayed visibly. ▪ All staff responsible for cleaning have received training on cleaning/O&M. ▪ Appropriate and well-maintained materials for cleaning (i.e., detergent, mops, buckets, etc.) are available and sufficient. ▪ Repair and maintenance tools are available on the premises. ▪ IPC rules (as per national standard) are applied and

	<ul style="list-style-type: none"> ▪ At least 1 functional female-friendly toilet for staff is available. This toilet is clearly separated or labelled. ▪ An inspection system for the sanitary facilities (cleanliness and functionality) is established and practiced at the HCF. ▪ WASH budgeting (incl. O&M planning) is considered during the financial planning of the HCF. ▪ Sanitary facilities are either connected to a sewer system or a septic tank of which sludge is regularly emptied, transported, and treated safely off site. 	<p>soap, single use towels etc.) are always available (regular audits)</p> <ul style="list-style-type: none"> ▪ <i>A system of personal hygiene is established (including PPE).</i> ▪ <i>Information materials on sanitation and hygiene promotion (i.e. handwashing, good toilet use etc) are available</i> 	<p>maintained, functional, has sufficient fuel and capacity</p> <ul style="list-style-type: none"> • Disposal of non-hazardous waste is conducted as per national waste management rules <p>In HCFs with off-site waste treatment & disposal,</p> <ul style="list-style-type: none"> ▪ Hazardous waste is appropriately collected, separated, stored, and transported by responsible bodies ▪ Non-hazardous waste is collected by municipal authorities or used for recycling (e.g. organic waste for composting) 	<p>monitored by management.</p> <ul style="list-style-type: none"> ▪ IPC /WASH committee is established and functional at the HCF.
--	---	--	---	---

Additional Information (Internal & External Guidelines)

General Technical Minimum Standards to be followed

Dimension	Topic	Standards	Reference
Technical	Durability	Durability is highly considered in the design of toilets, washbasins (e.g. trough), door handles, locks, taps, flushing systems etc.	GIZ internal
		Only hardwearing materials are selected (concrete, stainless steel, glazed ceramic tiles etc.).	GIZ internal
		Use of waterproof materials and sealing (floor, walls, ceiling, rooftop etc.) is considered to avoid water leakages.	GIZ internal, WHO 2009
		Water drainage is considered in detail. Drainage gullies and channels should be protected by suitable and lockable gratings.	GIZ internal
	Cleaning & Maintenance	Facilities are easy to clean and maintain.	GIZ internal, WHO 2009
		Lockable storage space for cleaning materials and tools is provided.	GIZ internal
		Male and/or female cleaning and maintenance staff is employed according to the institution's needs.	GIZ internal
		A cleaning plan is developed jointly with the institution's management and cleaning staff.	GIZ internal
		A maintenance is developed jointly with the institution's management and cleaning/maintenance staff.	GIZ internal
		A strategy on how to provide consumables is developed jointly with the institution's management.	GIZ internal
	Toilet-User Ratio	Sanitary facilities fulfil the patient-stance ratio (min. 2 toilets for outpatients, 1 stance for 20 inpatients).	WHO/UNICEF
	Accessibility	Restrooms and toilets fulfil ISO 21542 accessibility standards.	ISO 21542
		Ramps provide access to the HCF premises, building and sanitary facilities and are in line with national standards	GIZ internal
		Heights of door handles, flushing, toilets, washbasins, taps etc. are adapted to the users' needs (e.g. lower and higher washbasins for younger and older persons and wheelchair users).	GIZ internal
	Gender Sensitivity & Child Friendliness	Gender-separated toilets (with separated entrances) are provided.	GIZ internal
		Mirrors are included in the design.	GIZ internal
		During construction measures, the site is protected and inaccessible to the public. If needed, mobile latrines/sanitary containers are installed to provide sanitary facilities during rehabilitation works.	GIZ internal
		Doors to toilet units should provide enough privacy.	GIZ internal

	MHM & Solid Waste Management	Sanitary facilities have one or more female-friendly toilets for patients and visitors for safe MHM, incl. a functional disposal system	WHO/UNICEF
		For each toilet unit, 1 <u>cover</u> -bin (stainless steel) is provided. Discreet and safe disposal of sanitary pads is considered (MHM).	GIZ internal
		Color-coded containers/bins are available & functional (= >3 bins, leak-proof with lid, clearly labelled [sharp; infectious; non-infectious], <75% full)	WHO/UNICEF
		Guidance on waste segregation is visible at all generation points.	WHO/UNICEF
	Water Supply	If no daily water supply from the central network is ensured, water storage should be included in the design. Durable, plastic water tanks should have a capacity according to the institution's water supply and demand.	GIZ internal
		The provision of drinking water (e.g. drinking water fountains, filter in taps) should be considered.	GIZ internal
	Hand-Hygiene	Handwashing facilities are available (1) within 5 meters to the toilet facilities, (2) at all points of care, (3) in waiting/public areas, and (4) close to the waste disposal area.	WHO/UNICEF
	Ventilation, Lighting & Isolation	Ventilation is considered in the design (to reduce odor problems to a minimum). If possible, enough windows to allow continuous fresh air exchange should be provided.	GIZ internal, USAID 2014
		Enough lighting is provided (for each toilet unit, washbasin and outside of the restroom). If possible, daylight should be the main source of lighting.	GIZ internal, USAID 2014
		Cost- and energy-efficient isolation is considered in the design.	GIZ internal, USAID 2014
	National Building Codes	The technical design is in line with national building codes and relevant guidelines of the respective national authorities.	GIZ internal
	Scalability	The design has a modular character providing opportunities for upscaling.	GIZ internal
		The whole sanitation chain (toilet – collection – transport - treatment – reuse/disposal) is assessed and rehabilitated if needed.	GIZ internal
Fire Protection	Constructed/rehabilitated WASH facilities should meet the locally valid regulations on fire protection for institutions. An institution-wide concept for extinguishing acute fires should be existing.	GIZ internal	

General Sustainability Minimum Standards to be followed

Dimension	Topic	Standards	Reference
Ecological	Environmental Impact	Environmental Impact Assessments (EIAs) are carried out before implementing waste water treatment or solid waste management systems.	GIZ internal
	Water Efficiency	Rainwater and greywater is reused for flushing or irrigation, if possible.	GIZ internal
		Water-efficient taps (e.g. incl. water-saving devices) and flush systems are installed. Installation of flushing toilets (10-20l/person/day) or pour flush toilets (1.5-3l/person/day) is considered.	WHO 2009
	Energy Efficiency	A main electricity switch is installed.	GIZ internal
		Low voltage electrical installations are considered.	USAID 2014
		Ceiling fans are installed (instead of ACs), if needed.	GIZ internal
		Solar panels, biogas or other renewable energy sources are considered.	GIZ internal
	Materials & Waste Management	Environmentally friendly and resource-efficient materials are used.	GIZ internal
		Old building components are recycled, if possible.	GIZ internal
		Bins are provided and a plan on waste collection and disposal in line with national health and environmental standards is in place.	GIZ internal
Social	Socio-Cultural Acceptance & Local Conditions	The type of toilet is selected according to the common type used in the community.	GIZ internal
		Toilet paper and/or hose/tap/bodna are provided according to what is common in the community.	GIZ internal
	Health & Hygiene Awareness & Behaviour Change	Visitors and staff are aware of the value of an improved sanitation and are willing and motivated to engage in improving the existing sanitary system.	UNILEVER and LSHTM 2016
		Hand hygiene (and respiratory hygiene) promotion materials are displayed and visible in treatment areas.	WHO/UNICEF
		Hand hygiene (and respiratory hygiene) compliance activities are undertaken regularly ("5 moments")	WHO/UNICEF
		Cleaning policy or protocol exists, is implemented, and monitored.	WHO/UNICEF
		Toilets are cleaned at least once each day and a record of cleaning is signed by the cleaners and displayed visibly.	WHO/UNICEF
		All staff responsible for cleaning have received training on cleaning/O&M.	WHO/UNICEF

		Education materials for interactive WASH activities have been developed and are available to the institutions.	GIZ internal
		IPC rules (as per national standard) are applied and monitored by management.	WHO/UNICEF
		IPC /WASH committee is established and functional at the HCF	WHO/UNICEF
Economic	Cost Efficiency	Cost-efficiency is considered in the design to reduce capital and operational costs (materials, services, maintenance, water, electricity).	GIZ internal
	Budget Management	A specific share of the institution's budget is allocated to soap.	GIZ internal
		A specific share of the institution's budget is allocated to cleaning and maintenance (personnel, material, tools, etc.)	GIZ internal
	Local Market & Job Creation	Purchase of goods and services on the local market, if possible.	GIZ internal
		Additional positions for cleaning and maintenance (janitor) are created by the respective Ministry and according to the institution's needs.	GIZ internal
		Additional positions for the implementation of hygiene activities are created by the respective Ministry and according to the institution's needs.	GIZ internal
		Additional positions for the cleaning and maintenance of decentralized/on-site waste water treatment plants are created by the respective Ministry and according to the institution's needs.	GIZ internal

Exemplary Requirements for Accessible / Barrier Free Toilets, based on Uganda (2019)

Crucial for the design of an accessible toilet is the provision of sufficient space for wheelchair users or people using other equipment, the instalment of easy-to-use amenities at a convenient height and the provision of adequate handrails and grab bars to assist people moving from a wheelchair or people with reduced strength.

Following shows selected examples of requirements of barrier-free toilets as described in the Building Control Code (Accessibility Standards For Persons with Disabilities), gazetted in Uganda in 2019. They are an example of standards the Sanitation for Millions programme must adhere to, when building barrier-free toilets in Uganda. The following highlights some of these standards valid in Uganda. For further details, it is referred to the original document *Uganda (2019): STATUTORY INSTRUMENTS 2019 No. 52; THE BUILDING CONTROL (ACCESSIBILITY STANDARDS FOR PERSONS WITH DISABILITIES) CODE, 2019*. In other countries, the standards might differ slightly, and must be identified prior to any construction activity. Besides nationally valid standards, the programme considers in its designs of barrier free sanitation facilities also other guidelines, for example the guideline *Promoting Access to the Built Environment* by CBM (2008), and especially the resp. ISO-norm. Herewith it is particularly referred to *ISO/FDIS 21542 Building Construction – Accessibility and usability of the built environment*, which builds an essential element of Sanitation for Millions' design works.

Signage

- A toilet facility used specifically by a person with disability must be clearly marked with an international symbol. The symbol as shown in the figure should be at the main entrance of the facility.



Figure 1: Signage, Uganda (2019)

Accessibility

- There must be suitable access for a person with disability, with a turning space allowance for a wheelchair outside and within the WASH facility. Dimensions as specified in the illustration should guarantee externally and internally enough space for moving with a wheelchair. The clear width of the walking surface should not be less than 1200 mm and should not be reduced by any protruding object.



Figure 2: source Uganda (2019)

Floor or ground surface

- A floor or ground surface should form an integral part of the accessible route throughout a site internally and externally as part of a continuous path of travel.
- A floor or ground surface must be stable, firm, and slip resistant under wet or dry conditions.

Doorway and door

- A doorway should allow free access for a wheelchair user, with a clear opening, where a two-leaf door is used, the clear opening provided by the leading leaf should be at least 900mm when approached along a line perpendicular to the opening as in figure 3. The minimum access dimensions shall enable a wheelchair user to make a ninety-degree turn.

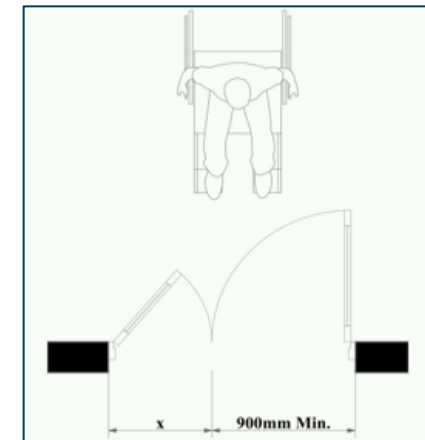


Figure 3: source Uganda (2019)

Ramps

- A ramp should provide a safe, comfortable, and convenient route for a wheelchair user. It should be provided where level access cannot be achieved, should have a gradient measured along the centre line, that is not steeper than 1:12 with handrail where applicable.

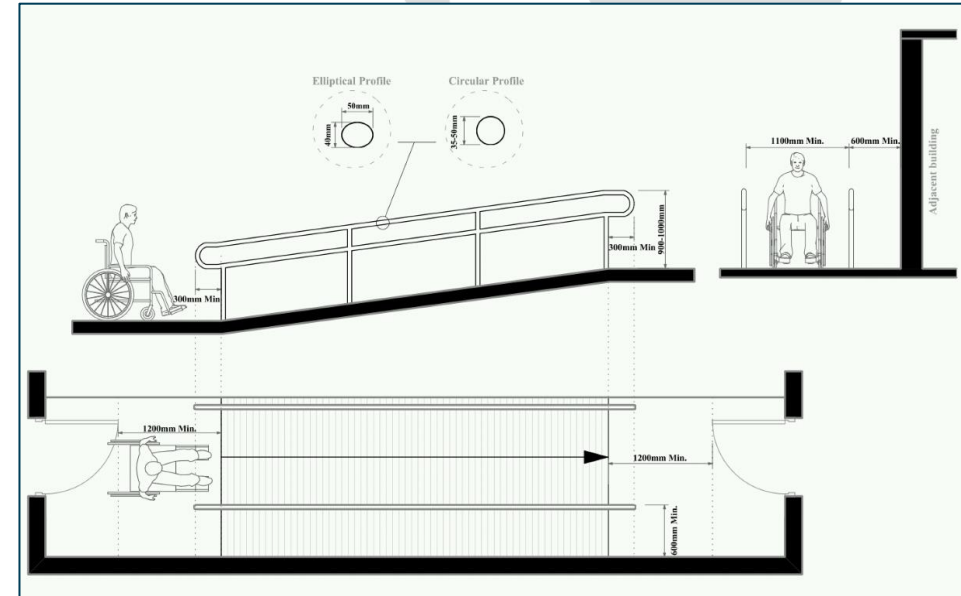


Figure 4: source Uganda (2019)

Exemplary Illustration of a Clean and Female Friendly Toilet, based on Fit For School's MHM Concept

This illustration by Fit For School shows, how a clean and female friendly toilet should be designed and could look like. It incorporates basic features, but small differences might be necessary due to cultural context, or different approaches of the implementing organisation. This example serves as an exemplary illustration.

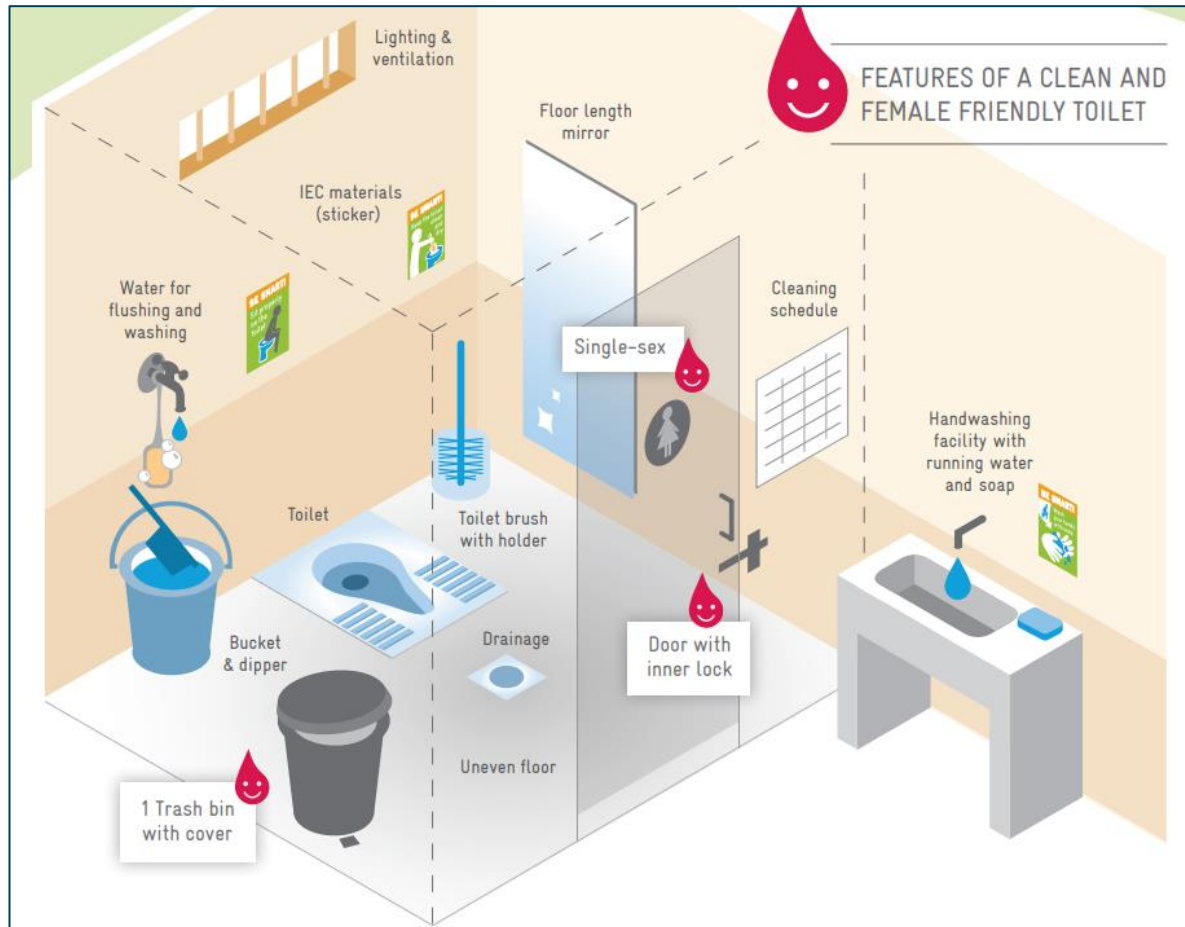


Figure 5: Features of a clean and female friendly toilet, as promoted by Fit For School

Sources

- **CBM (2008):** *Promoting Access to the Built Environment - Guidelines*
- **FIT FOR SCHOOL (undated)** // **CONCEPT - MENSTRUAL HYGIENE MANAGEMENT**
- **ISO (2011):** *ISO/FDIS 21542 Building Construction – Accessibility and usability of the built environment*
- **Uganda (2019):** *STATUTORY INSTRUMENTS 2019 No. 52; THE BUILDING CONTROL (ACCESSIBILITY STANDARDS FOR PERSONS WITH DISABILITIES) CODE, 2019*
- **Unilever and London School of Hygiene and Tropical Medicine (LSHTM) (2013):** *Critical Success Criteria for Evaluating Sanitation Models.*
- **USAID (2014):** *Learning Environment: Improved Infrastructure Program, Design Guidelines & Concept Report.*
- **SDC and UNICEF (2017):** *WASH in Schools Guidelines for Lebanon – Setting Standards, Ensuring Children’s Health.*
- **WHO and UNICEF (2016):** *Core questions and indicators for monitoring WASH in Schools in the Sustainable Development Goals*
- **WHO (2009):** *Water, Sanitation and Hygiene Standards for Schools in Low-Cost Settings*