



What is Sanitation? What is Hygiene? Nexus between WASH and Public Health

By

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Capacity Building workshop for Adamawa State Sanitation Task Group

Yola, Adamawa State, 23-25, November 2015

Outline

- What is Sanitation?
- Improved and Unimproved Sanitation
- What is Hygiene?
- Menstrual Hygiene Management (MHM)
- WASH and Public Health

What is Sanitation?

What is Sanitation?

1. Solid waste management
2. Medical waste management
3. Excreta and sewage management
4. Food sanitation
5. Sanitary inspection of premises
6. Market and abattoir sanitation
7. Adequate potable water supply
8. School sanitation
9. Pest and vector control
10. Management of urban drainage
11. Control of road and stray animals
12. Disposal of the dead (man and animal)
13. Weed and vegetation control
14. Hygiene education and promotion
15. Air hygiene

Source: Sridhar M., 2008.
23-25, November 2015

Capacity Building Workshop for Adamawa State Task Group on
Sanitation

What is Sanitation?

1. Excreta management
(faeces, urine)

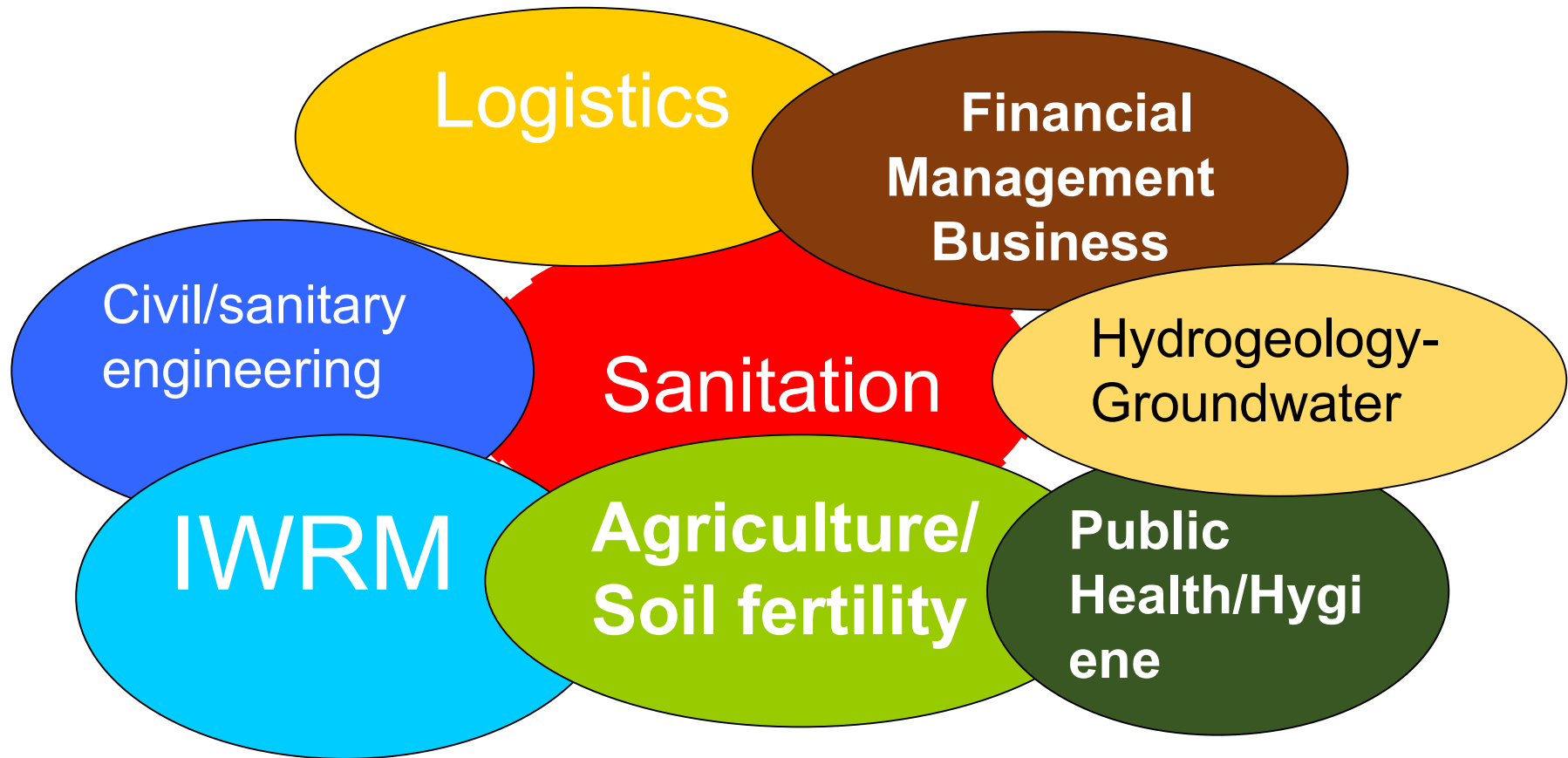
2. Greywater management

3. Solid waste management

4. Drainage (for rainwater / stormwater)



Sanitation terminologies



What is Sanitation?

- **Sanitation** is management of human excreta or better said- management of shit.
- **Improved sanitation** is a '*sanitation facility that hygienically separates human excreta from human contact*:'

[\(WHO//UNICEF Joint Monitoring Programme \(JMP\)\)](#)

What is Sanitation?

Sanitation hardware and software

- Hygiene and sanitation “**hardware**” are: toilets, pipes, sewers, taps, soap and ancillaries such as pit-emptying equipment.
- **Hygiene and Sanitation “software”** activities that focus on the hygiene and/ or sanitation promotional activities. Other “**software**” activities include policy development, training, monitoring and evaluation; in short, everything that allows a programme, project or intervention to take place.

Improved and Unimproved Sanitation

Improved and Unimproved Sanitation

Improved sanitation facilities:

1. Pour-flush latrine/toilet to: public sewer, septic tank, pit latrine with slab
2. Ventilated improved pit latrine
3. Composting toilet.

Unimproved Sanitation facilities:

1. Service or bucket latrines (where excreta are manually removed)
2. Pit latrines without slab or platform
3. Hanging latrine
4. Open latrines
5. Open defecation

Source: WHO/UNICEF/Joint Monitoring Program (JMP)

Improved and Unimproved Sanitation

Unimproved drinking water sources	Unimproved sanitation facilities
<ol style="list-style-type: none"> 1. Unprotected dug well 2. Unprotected spring 3. Cart with small tank/drum 4. Bottled water 5. Tanker truck 6. Surface water (river, dam, lake, pond, stream, canal, irrigation channel) 	<ol style="list-style-type: none"> 1. Flush or pour flush to street, yard, plot, open sewer, ditch, drainage way 2. Pit latrine without slab or open pit 3. Bucket 4. Hanging toilet/latrine 5. No facilities or bush or field
Improved drinking water sources	Improved sanitation facilities
<ol style="list-style-type: none"> 1. Piped water into dwelling, plot or yard 2. Public tap/standpipe 3. Tubewell/borehole 4. Protected dug well 5. Protected spring 6. Rainwater collection 	<ol style="list-style-type: none"> 1. Flush or pour flush system to piped sewer system, septic tank, pit latrine 2. Ventilated improved pit latrine 3. Pit latrine with slab 4. <u>Composting toilet</u> (<i>UDD toilet as well</i>)

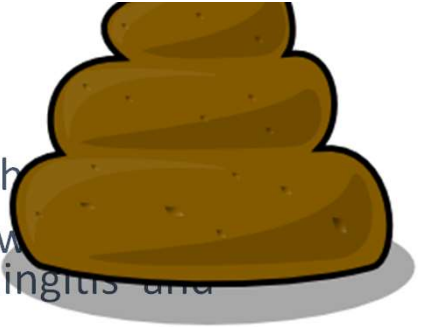
WHO terminology definitions (WHO/UNICEF, 2006, page 4)

Sanitation challenges

- About 45m Nigerians, 2.5m people in Adamawa state still defecating in the open
- Over 868,000 Nigerian children about a quarter of which are from vulnerable areas are at risk of vaccine preventable diseases such as pneumonia, diarrhea, meningitis and measles.
- 70 million Nigerians use unsanitary or shared latrines
- [On a typical day, more than half the hospital beds in Sub-Saharan Africa are occupied by patients suffering from faecal-related disease.](#)
- [Nigeria Sanitation Statistics](#)

([Sources: WHO//UNICEF Joint Monitoring Programme \(JMP\) and WSP](#))

- One gram of faeces can contain 10 million viruses, one million bacteria, one thousand parasite cysts and 100 worm eggs
- Depending on diet each person excrete around 1.5 litres of urine and a 250g of faeces per day.
- Translating to an average value of 500 litres of urine and 90kg of shit per capital and per year respectively.
- Grey water generated depending on availability and accessibility could vary between 4,500 to 73,000 litres per capital/annum



Sanitation challenges

During the workshop held for the Adamawa State Task Group on Sanitation, I requested members to identify three main sanitation challenges and solutions to these challenges; their comments is summarised below:

Challenges of Sanitation in Urban/Town Areas

- Irregular evacuation of waste disposal to permanent site
- Lack/No public toilets in public places (leads to rampant open defecation)
- Lack of vehicles
- Lack of manpower to deliver services, and poor motivation of staff.
- Poor attitude of our people towards sanitation.

Sanitation challenges

- Open defecation
- Poor water supply qualities
- Indiscriminate disposal of refuse
- Blocked drainage system
- Water borne diseases contaminated by Animal and Human faeces
- Inadequate financial resources to implement sanitation programmes
- Lack of clear institutional leader
- Lack of commitment by government for sanitations to urban centre
- Poor personal hygiene

Sanitation challenges in Urban/Town Areas-Solutions

- Provision of Transport to evacuate refuse.
- Regular sanitation in the community at least weekly
- More training/Capacity building.
- State/Local Government Areas need to be committed and supportive
- Improved usage of latrine
- Ensure communities are sensitised about proper personal hygiene
- Discourage open defecation.

Sanitation challenges in Urban/Town Areas-Solutions

- Provision of resources, finance etc
- Building of public toilets
- Enforcement of sanitation laws
- The public to be sensitized on the danger of blocking drains
- Have a coordinated mechanism for waste evacuation in a regular basis
- Build public private partnership in constructive latrines in public places and sustainability
- Increase budget ... timely release of approved budget

What is Hygiene?

What is Hygiene?

Hygiene is appropriate behaviours including but beyond the management of human shit, which are used to break the chain of infection transmission in the home and community.

Hygiene includes:

- ✓ *Hand hygiene and personal hygiene-appropriate hand washing with soap and/or ash, sanitizer.*
- ✓ *Food hygiene (cooking, storing, preventing cross contamination)*
- ✓ *Menstrual Hygiene Management*
- ✓ *Ensuring safe water at point of use*
- ✓ *Respiratory Hygiene*
- ✓ *Safe disposal of faeces (both human and animal)*
- ✓ *General hygiene (laundry, surfaces, toilets, baths, and sinks)*
- ✓ *Disposal of solid wastes, control of waste water and rain water*

(Hygiene and Sanitation software: An overview of approaches, WSSCC 2010)

Menstrual Hygiene Management

Menstrual Hygiene Management

I had no idea about menstruation till I actually had my period. One night I work up with abdominal pain, and saw blood on my panties..I thought I had some big ailment and would die soon. I never buy sanitary pads from the market. I feel too shy to ask for it. Neelam 14 year girl (WSSCC MHM Training manual WASH and Health Practitioners)

Frequently Asked Questions on Menstrual Hygiene Management

Questions for men

1. Why do women menstruate?
2. What do women use to manage menstruation?
3. What different kinds of materials have you seen used for managing menstruation?
4. At what age does a girl begin menstruation?
5. How many times do women menstruate in a month?
6. Have you ever discussed with a woman-your office colleague mother, wife, sister, or daughter on menstruation and what is the subject of discussion?

Questions for women

1. Where and How do you dispose your menstrual pad/sanitary napkins after use?
2. Do you always have enough water and soap wo clean yourself after contact with menstrual blood?
3. Mention one embarrassing incidence you had during your menstrual period in the past

Menstrual Hygiene Management

In the **workplace** Women and girls face numerous challenges with managing their menstruation in workplace. These include:

1. *Inadequate toilet facilities.*
2. *Lack of facilities for washing and drying menstrual cloth.*
3. *Lack of disposal for sanitary pads or menstrual cloths.*
4. *Difficulty discussing menstrual issues with male managers.
Managers often do not understand the need for women and girls to be able to take additional time in the toilet or the washroom to manage menstruation.*
5. *Difficulty with concentrating on work due to menstrual cramps.*
6. *Lack of sanitary materials or medicines.*
7. *Lack of opportunities or facilities to change, wash or clean sanitary clothes while travelling for work.*

Menstrual Hygiene Management

At school, female teachers and adolescent schoolgirls face challenges in managing their menstruation at school. These include:

1. Lack of sanitary menstrual materials.
2. Less concentration and participation, including not being able to stand up to answer questions.
3. Lack of private facilities and water supply for washing and drying of soiled clothing, cloths and hands.
4. Absenteeism from school during menstruation because of lack of facilities.
5. Fear of using the latrine in case others discover menstrual blood. •
Lack of information about the menstrual process, leaving them scared and embarrassed.
6. Exclusion from sports.

Menstrual Hygiene Management

At home Women and adolescent girls face challenges in managing their menstruation in their homes as well. These include:

- 1. In some cultures girls and women are not allowed to bathe or wash themselves during menstruation. This causes discomfort and stress.*
- 2. Many women and girls have to manage their menstruation in the open air due to non-availability of toilets and running water.*
- 3. They can suffer from stress and anxiety due to the shame associated with menstruation.*
- 4. Moreover, they are unable to discuss these matters with family members due to taboos*

Menstrual Hygiene Management

Good practice for menstrual hygiene in the workplace

1. Provide separate water and sanitation facilities for women and men.
2. Provide facilities for disposal.
3. Have discrete supply of sanitary pads and clean cloths available in an emergency for women or girls at work

Good menstrual hygiene in school for girls and female teachers

1. Availability of sanitary protection material.
2. Clean and separate toilets for girls and boys.
3. Space for washing and drying.
4. Disposal facilities and supportive teachers/staff.

Good practice for menstrual hygiene in the household

1. Availability of toilet with running water.
2. Clean washing and drying spaces for cloth.
3. Safe and clean bathing space.
4. Facilities for disposal.

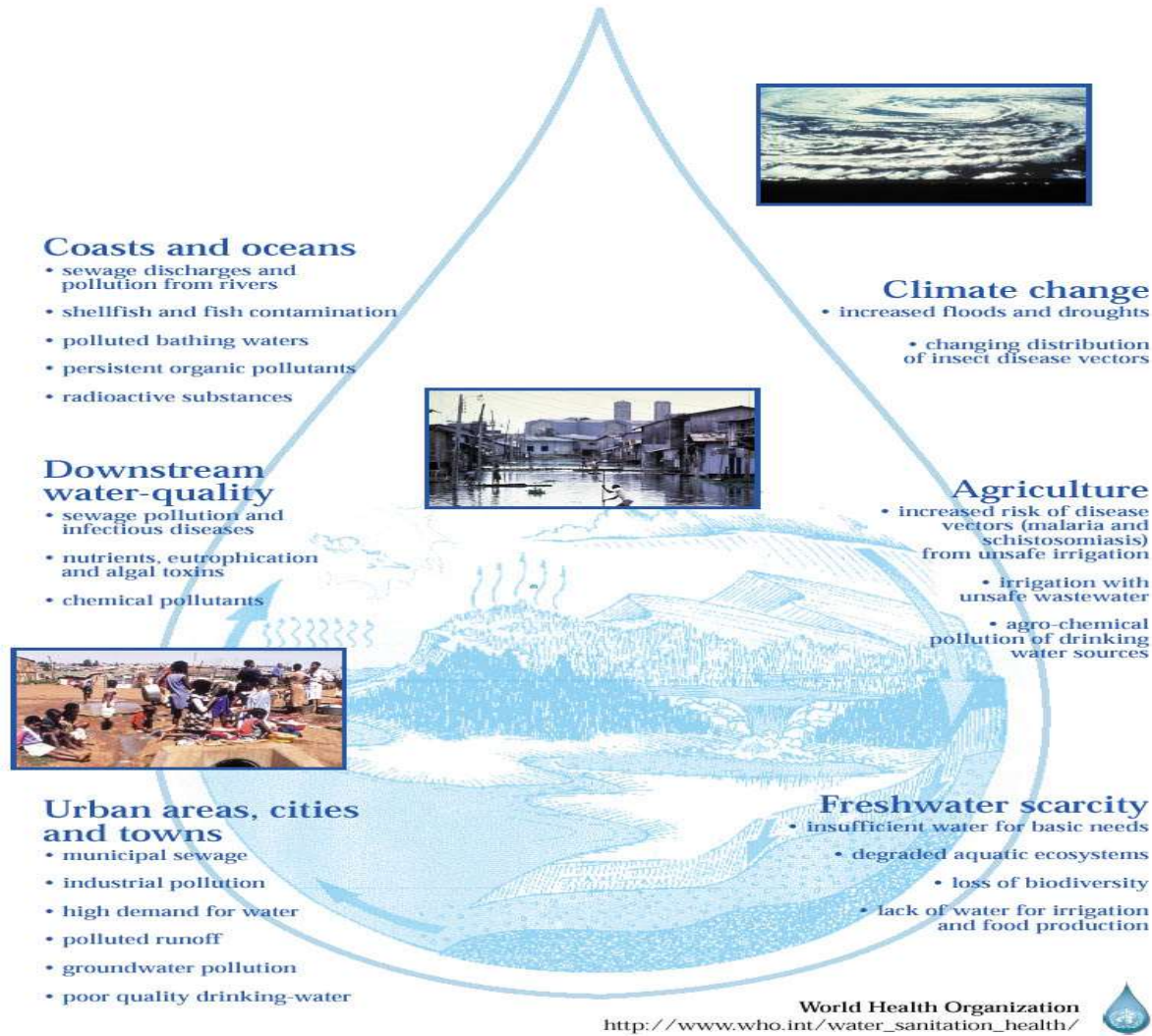
5. **Open environment to discuss issues.**

WASH and public health

WASH and public health

- Sanitation is the most important medical advance since 1840.
- Improved sanitation reduces cholera, worms, diarrhea, pneumonia and malnutrition, among other maladies, that cause disease and death in millions of people.
- Today 2.6 billion people, including almost one billion children, live without even basic sanitation.
- Every 20 seconds, a child dies as a result of poor sanitation. That's 1.5 million preventable deaths each year.

Health Risks Around the Water Cycle



WASH and public health

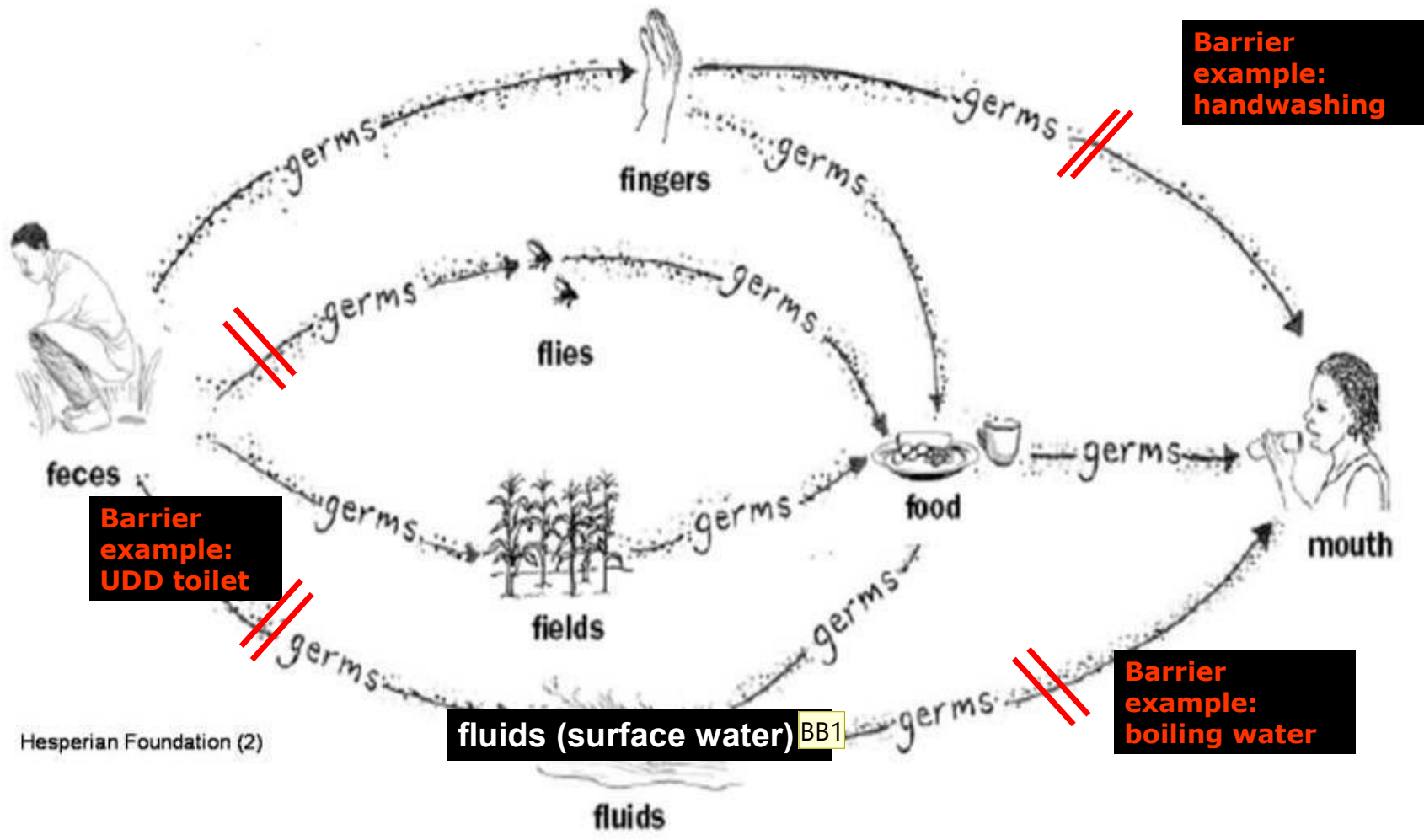
- **Waterborne diseases:** caused by **the ingestion of water contaminated** by human or animal faeces or urine containing pathogenic bacteria or viruses; include cholera, typhoid, amoebic and bacillary dysentery and other diarrheal diseases.
- **Water-washed diseases:** caused by **poor personal hygiene** and skin or eye contact with contaminated water; include scabies, trachoma, flea, lice and tick-borne diseases.
- **Water-based diseases:** caused by **parasites** found in intermediate organisms living in contaminated water; include dracunculiasis, schistosomiasis, and other helminths.
- **Water-related diseases:** caused by **insect vectors**, especially mosquitoes, that breed in stagnant water; include dengue, filariasis, malaria, onchocerciasis, trypanosomiasis and yellow fever.

Source: <http://www.saniplan.org/waterdis.htm>

WASH and public health

- **Water-related diseases: Malaria!**
- Over one million people in sub-Saharan Africa will contract malaria this year because they live near a large dam, according to a new study which, for the first time, has correlated the location of large dams with the incidence of malaria and quantified impacts across the region.
- The study finds that construction of an expected 78 major new dams in sub-Saharan Africa over the next few years will lead to an additional 56,000 malaria cases annually.
- <http://www.malariajournal.com/content/14/1/339>

Transmission of diseases (the "F-Diagram")



Hesperian Foundation (2)

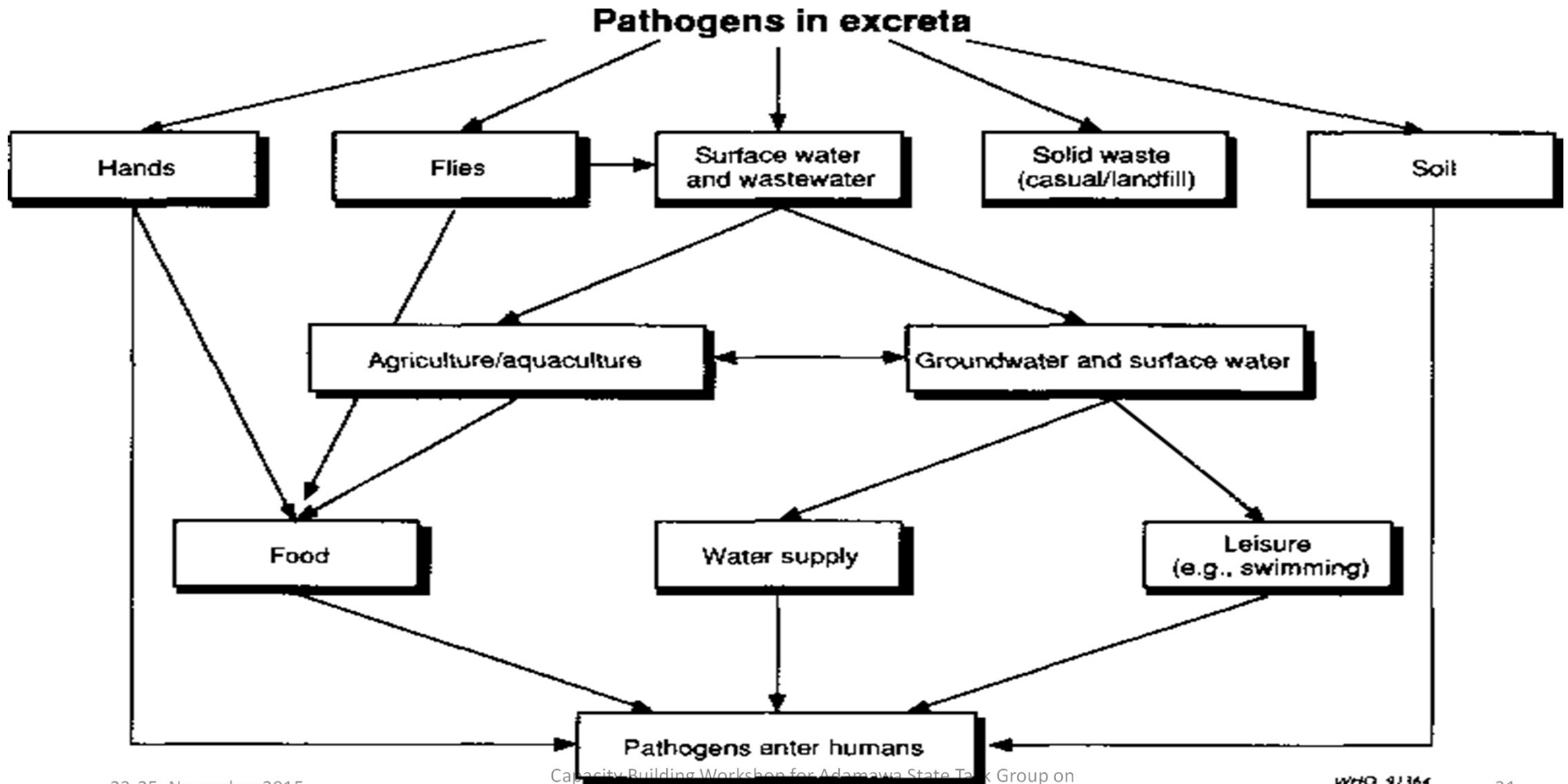
fluids (surface water) **BB1**

BB1 The main concerns about the safety of excreta are with the faeces, especially – as mentioned above – when they get untreated into the environment, and when contact with them is possible
While contamination of FINGERS is induced through direct contact or touching of faeces, and then touching FOOD, this can also be indirect, if FLIES or other animals first have contact with faeces, and then sit on food. Another possible transmission route of faecal contaminants is if faeces are not treated adequately and put onto FIELDS.
The term FLUIDS includes drinking water or drinks in general, as well as possible seepage of untreated leachate into groundwater or other waterbodies, where many of the pathogens can breed.
FACE here stands for the actual uptake of pathogens by humans – be it because the mouth is touched with fingers, because contaminated food is ingested, or because polluted water is consumed (3).

Babatope Babalobi, 03/11/2015

BB2 Babatope Babalobi, 03/11/2015

Transmission routes for pathogens found in excreta




WASH and public health

- Water, sanitation and hygiene (WASH) are critical in the prevention and care for all of the neglected tropical diseases (NTDs) scheduled for intensified control or elimination by 2020.
- Provision of safe water, sanitation and hygiene is one of the five key interventions within the global NTD roadmap. Yet to date, the WASH component of the strategy has received little attention and the potential to link efforts on WASH and NTDs has been largely untapped

WASH and public health

Key message - Good sanitation and hygiene stop the spread of diseases

- Sanitation is vital for good health
- Sanitation is critical in the fight against Neglected Tropical Diseases
- **World Health Organisation 2015 List of Neglected Tropical Diseases**
- Sanitation is entry point for preventive health care -need for 'One WASH' – Integration between WASH and Medical health
- **WHO standards on water, sanitation and hygiene in health care facilities (WHO, 2008)**

A ginger and white kitten is climbing a dark tree trunk in a grassy field. The kitten is standing on its hind legs, reaching up with its front paws on the bark. The background is a soft-focus green field.

In achieving universal coverage
for safe sanitation , we may
face roadblocks

So stay alert



Jump over obstacles





Face challenges

Confront obstacles



Above all ... be
ready for adventure





And we Will be able to go far SDGs are only setting goals to accomplish