1. Introduction

Water, both for drinking and domestic purposes, is essential to human life. Yet currently around 0.8 billion people worldwide are without access to safe water. In addition, 2.4 billion people lack access to adequate sanitation, exposing them to the risk of diarrhoeal diseases, poor hygiene and contamination of water supplies. Over two million children die each year through diarrhoeal disease.

Tearfund is committed to facilitating meeting the rights of all people to water and sanitation which is:

- sufficient
- safe
- acceptable
- physically accessible
- sustainable
- affordable.

Hygiene promotion leading to sustained behavioural change should be integral to any water and sanitation project. Tearfund supports the Humanitarian Charter and Minimum Standards in Disaster Response (SPHERE), which includes many references to water and sanitation.

2. Definitions

‘Water’ refers to the use of water for domestic use (both drinking and washing), not irrigation.

‘Water supplies’ include protected hand-dug wells, bore holes with pumps, standpipes, rainwater tanks, capped springs and use of slow sand filters.

‘Sanitation’ refers to the safe and hygienic disposal of human excreta in privacy, which prevents the spread of disease. This can include pit latrines, water-sealed latrines, ventilated improved pit (VIP) latrines and flush toilets.

Most ‘hygiene promotion’ is concerned with stopping human faeces entering a person’s mouth – the faecal-oral route. Safe hygiene practice is the single-most effective intervention in reducing water-related diseases. It includes hand-washing, food hygiene and safe storage of drinking water.
3. Biblical and developmental justification

Water is part of God's creation, belonging to him and not to people, whether they are rich or poor. As stewards of the earth, mandated to manage and protect its resources, we have a responsibility to ensure that water is protected from exploitation and pollution. The Bible makes explicit the duty of people and the state to ensure justice is done in terms of the living conditions and economic well-being of poor and vulnerable people.

Access to sufficient water to meet basic needs and adequate sanitation are human rights. Poor people nearly always prioritise water and sanitation in participatory needs assessments, usually in the top five.

There is an increasing frequency and severity of floods and droughts worldwide, which increases demand for good water and sanitation interventions. Urbanisation is increasing the demand for sanitation.

In disaster and conflict situations, people are more susceptible to water-related diseases.

Millennium Development Goal 7 target 10 commits the international community to halve by 2015 the proportion of people without access to safe drinking water and adequate sanitation.

4. Role of the church

Churches can use their authority and influence to promote safe hygiene practices and advocate for better water and sanitation services in their communities.

The church could act as an arbiter in situations of conflict over access to water.

Churches should model good practice and provide access to water and sanitation in their compounds.

5. Specific areas that Tearfund will support

- The empowerment of communities to advocate for government provision of appropriate water and sanitation services. It is essential that governments recognise that it is their responsibility to see this human right met. Many NGOs focus only on service provision which absolves governments of their responsibility
- Establishing and supporting community-owned water and sanitation committees before every intervention.
- Provision of safe water supplies that are culturally, socially, financially and physically appropriate to the situation
- Household, church, or school water supplies which include ferro-cement or plastic water tanks for rainwater harvesting
- Training in either building, maintaining or repairing the hardware necessary for water and sanitation provision, such as pumps, tanks or latrines
- Sanitation projects that are culturally, socially, financially and physically appropriate to the situation.
- Micro-enterprise related to the provision of hardware or training
- Promotion of latrines and hygiene education in schools
- Emergency water and sanitation provision in disaster situations
- The use of grey water (waste domestic water) for agricultural use at household level.
6. Specific areas that Tearfund will not support

- Building of large-scale water-intensive irrigation systems, due to the environmental impact on water tables
- Water desalination because of the expense and technical expertise required.

7. Principles of good practice

Needs assessment

- Survey and map, with community involvement, all present water sources, latrines and sanitary arrangements, local roof design (for potential rainwater harvesting), watershed, potential sources of pollution of water supplies, and other key human and natural influences.
- Where the quantity or quality of water is unknown or poor, carry out a feasibility study.

Sustainability

- Involve the local government from the beginning of the project so that they can be encouraged to support the project.
- Identify local community or government health workers who will promote and monitor behavioural change in hygiene practices and latrine use.
- Create demand for sanitation as communities might not automatically see the need for it and behavioural change will not be sustainable. The PHAST (Participatory Hygiene and Sanitation Transformation) process could be used.
- Community members should contribute at least 5% of the capital costs for the water point (not necessarily financial). Subsidies for sanitation should be kept to a minimum, with money being spent instead on hygiene promotion through the use of community health workers.
- Identify the most appropriate technology for their needs, in terms of affordability, ease of use, maintenance and repair, and cultural acceptability.
- Establish a committee to manage maintenance and repair of the equipment, by identifying and training individuals responsible for upkeep and ensuring cost-recovery from the community for this work.
- Ongoing intermittent external support should be provided if local government is unwilling or unable to oversee sustainability of the project. This support might include visits, retraining and supporting local manufacture of spare parts. In emergency situations it may be appropriate to cover the costs of operation and maintenance.

Quality control

- Test new sources of water for contaminants such as arsenic, fluoride, harmful bacteria.
- Set up an ongoing water quality monitoring system at the source and at distribution points.
- Ensure that infrastructure is well built to protect users and meet proven building standards.
- Assess the quality of water pumps, comparing their output, ease of use, maintenance and repair and cost.
- Ensure that latrine design includes adequate ventilation, reinforced sides in soft soil, ease of cleaning and adequate privacy.
- Dig pit latrines at least 1.5 metres above the wet season water table.
Siting

- Site water points upstream of potential pollution sources, such as pit latrines, petrol stations, rubbish pits or burial grounds.
- Locate pit latrines at least 30 metres downstream from groundwater sources.
- Fully consult the main users of water supplies (usually women) about potential sites.
- Site water supplies, washing areas and latrines for the benefit of all in the community.
- Agree the siting of water points and conduits with landowners.

Networking

- Seek advice from those with specialist knowledge before action is taken.
- Consult key stakeholders, such as local landowners, government, other NGOs to reduce potential for conflict and duplication.
- Commit to influencing and sharing learning from the project with those that have the recognised national authority for delivering water and sanitation.

Behaviour change

- Integrate sanitation and hygiene promotion into all drinking water supply projects.
- Hand washing before food preparation and after using latrines is key to good hygiene and reducing diarrhoeal infections. Seek ways to promote hand washing, such as education, provision of soap and use of tippy taps.
- Include men in any hygiene and behavioural change objectives.
- Ensure that children are key recipients of hygiene education as they can be very effective instigators of behavioural change.
- Ensure that hygiene promotion components include water treatment (e.g. SODIS and slow sand filters) and domestic transport and storage of water.

Environmental sensitivity

- Seek ways to ensure that waste rinse water from washing is recycled.
- Seal pit latrines for one year before the contents are used as manure.
8. Cross-cutting issues

Gender sensitivity
Women are primarily responsible for managing domestic water use and latrines in most countries. This responsibility can place heavy burdens on women. For example their health may be affected by carrying water on their heads, or by using inefficient hand pumps. The time taken to collect water leaves them with little time to do other things.

- Does the location of water supplies and latrines compromise the safety of women and girls, exposing them to the risk of abuse or rape?
- Is there privacy for women, both for washing themselves and for washing and drying cloths used during menstruation?
- Is priority given to women in decision-making, planning, design, monitoring and evaluation processes?
- Are at least one third of members of any water management committee, women?
- Are local schools encouraged to provide separate latrines for girls?

Hygiene messages are most likely to reach women and children through their regular attendance at clinics. Therefore efforts should be made to ensure men are included in hygiene education initiatives.

- What particular water and sanitation needs and concerns do men and women have?
- What impacts will the proposed project have on both men and women?

Consideration should be given to women’s and men’s ability to contribute in terms of time and labour during project implementation.

- Can they afford to spare time to participate?
- How can financial contributions be made? This may involve convincing men of the importance of contributing to water and sanitation supplies or finding ways for women to contribute financially or to assist in maintenance and repair.

Conflict sensitivity
Consider the potential impact of projects on other stakeholders, such as pastoralists, nomadic groups, downstream water users and those with shallow wells to avoid potential conflict.

- Will third parties be included as stakeholders and invited to participate in project design?
- What efforts are made to ensure that water supplies are sited to benefit all stakeholders, avoiding potential future conflict?

Environmental sensitivity

- What will be the positive and negative impacts of the project on the environment?
- What steps are taken to reduce the negative impacts on the environment?
- What are the positive and negative impacts of the environment on the project?
- Is the risk of cross-contamination between water supplies and sanitation considered?
- Are water supply systems designed to allow good run-off of waste water to avoid breeding of disease vectors?
- Will water points be protected from livestock and wild animals?
- In disaster-prone areas, are disaster-related risks taken into account, such as drought and flooding?
  - Has flood risk been considered in location and design of water points and sanitation facilities?
  - Is there a need to install handpumps on raised platforms?
  - In drought areas, will the facilities still be effective when water is in short supply?
  - Has the potential to harvest rainfall been considered in areas with a long dry season?
Child sensitivity
Children often play an important part in water collection. They can be taught to promote latrine building and safe hygiene practices. Technologies should take them into account. For example, handpumps should not be too heavy and children should be able to reach them. Water points and latrines should be positioned where children can use them safely, without danger of abuse or exploitation. Ideally projects should work with local schools to integrate hygiene education into their curriculum and build latrines to encourage girls to attend.

- Are children consulted in decisions taken about the location and construction of latrines and water pumps?
- What steps are taken to ensure that children benefit from hygiene education?

HIV and AIDS
People with HIV and AIDS are particularly vulnerable to water-related diseases. They require ease of access to latrines when suffering from diarrhoea. They require adequate supplies of safe drinking water in order to take anti-retroviral drugs and treatment for opportunistic infections, to replace fluids lost through diarrhoea, and for mothers to make up formula milk if they decide not to breastfeed.

- Are the needs of people with HIV and AIDS taken into account?
- Are people with HIV and AIDS involved in water and sanitation committees?
- Are communities aware that HIV cannot be spread through water supplies or faeces, in order to ensure equal access of those with HIV and AIDS to such community facilities?