



# ZOA POLICY ON WATER, SANITATION AND HYGIENE (WASH)

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# 1 PURPOSE AND RATIONALE

ZOA's overall mission is to ensure positive change at community level by supporting women, men, girls and boys to realize dignified and resilient lives. When it comes to WASH, ZOA strives that more people who live in fragile contexts, especially women and girls, will have increased sustainable access to safe water and decent sanitation, and apply adequate hygiene practices.

This WASH policy applies to all ZOA's operations, both emergency relief and (early) recovery. It has been designed to serve as a single point of reference for all ZOA staff. It is meant to support ZOA staff engaged in programme and project design and implementation, management, monitoring and evaluation, and those responsible for providing support and training related to these activities. This policy focuses on water for domestic use and small scale agriculture. It does not examine water supply for industrial use or hydro-energy nor does it endeavour to provide detailed operational guidelines. In principle, ZOA will limit itself to WASH interventions at the community level, while considering the implications at watershed level.

## Need for integrated WASH

Clean drinking water<sup>1</sup> and basic sanitation are of primary importance for human survival and wellbeing. Each person on earth requires at least 15 liters of clean, safe water a day for drinking, cooking, and simply keeping themselves clean. Contaminated water isn't just dirty—it's deadly. Some 1.8 million people die every year of diarrheal diseases like cholera, typhoid and dysentery. Tens of millions of others are seriously sickened by a host of water-related ailments—many of which are easily preventable. According to recent estimates, about 9% of the world population (663 million people) do not have access to safe drinking water, and 2.4 billion people do not have access to adequate sanitation<sup>2</sup>. These people are primarily concentrated in rural areas in developing countries. Limited or poor access to water and sanitation is aggravated in situations of conflict and disaster.

A lack of proper sanitation services not only breeds disease, it can rob people of their basic human dignity as well. Access to and use of hygienic sanitation facilities and an end to open defecation are crucial for public health. When people are also motivated to practice good hygiene – especially hand-washing with soap – health benefits of water and sanitation interventions are significantly increased. Handwashing with soap is an important barrier to the spread of diarrheal diseases as it prevents pathogens from reaching the domestic environment and food, and their subsequent ingestion<sup>3</sup>. Thus, interventions combining water supply, sanitation, and hygiene promotion have the highest impact on prevention and reduction of diarrhea.

WASH-interventions are in many ways related to ZOA's other sectors:

- Education suffers when sick children miss school, as children are particularly at risk from water-related diseases. Access to improved sources of water can result in better health and therefore better school attendance, with longer-term consequences for their lives.
- When water comes from improved and more accessible sources, people spend less time and effort in physically collecting it, meaning they can be productive in other ways. It can also result in greater personal safety by reducing the need to make long or risky journeys to collect water. Better water sources also mean less expenditure on health, as people are less likely to fall ill and incur medical costs, and are better able to remain economically productive.
- Competition over natural resources, including water, is often viewed as a driver of conflict. However, disputes over water, whether scarce or abundant, do not always result in violence. In fact, the management of water often brings parties together and encourages cooperation; it can be an integral factor in conflict prevention, peacebuilding, and reconciliation processes<sup>4</sup>.

<sup>1</sup> Note that 'water' in the context of this policy paper refers to water for domestic consumption (drinking, bathing, cooking and washing) of people and livestock. This policy paper does not deal with water for irrigation or for other productive uses.

<sup>2</sup> [http://www.wssinfo.org/WHO/Unicef Joint Monitoring Programme \(JMP\) for Water Supply and Sanitation \(September 2016\)](http://www.wssinfo.org/WHO/Unicef%20Joint%20Monitoring%20Programme%20(JMP)%20for%20Water%20Supply%20and%20Sanitation%20(September%202016))

<sup>3</sup> [http://www.who.int/elena/titles/bbc/wsh\\_diarrhoea/en/](http://www.who.int/elena/titles/bbc/wsh_diarrhoea/en/)

<sup>4</sup> USAID Water and Conflict Toolkit, 2014

## 2 KEY PRINCIPLES AND COMMITMENTS

This document is predicated on the understanding that ZOA's work in the area of WASH is underpinned by the same set of principles and approaches that apply to all other aspects of ZOA's work.<sup>5</sup> Moreover, the following specific principles guide this policy:

### UN-principles and commitments

- Access to clean water and sanitation is a **basic human right**<sup>6</sup>;
- Ensure availability and sustainable management of water and sanitation for all (SDG 6.1);
- Achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women, girls and those in vulnerable situations (SDG 6.2).

### Dublin-principles<sup>7</sup>

- **Fresh water is a finite and vulnerable resource, essential to sustain life, development and the environment.** Effective management links land and water uses across the whole of a catchment area or groundwater aquifer.
- **Water development and management should be based on a participatory approach, involving users, planners and policy-makers at all levels.** Access to water and sanitation is first of all the responsibility of government authorities and should be supported by its structures, with active participation of communities. ZOA does not only work with targeted communities, but also links them to the relevant government departments. ZOA works within the policies of national governments.
- **Women play a central part in the provision, management and safeguarding of water.** Water, sanitation and hygiene are closely linked to the domestic sphere of life, and women play a key role in accessing water and ensuring proper household sanitation and hygiene. This principle requires actions to address women's specific needs and to equip, and empower, women to participate at all levels in WASH-programmes, including decision-making and implementation.
- **Water has an economic value in all its competing uses and should be recognized as an economic good.** It is vital to recognize first the basic right of all human beings to have access to clean water and sanitation at an affordable price and no individual or group should be denied access to safe drinking water because they cannot afford to pay. Managing water as an economic good is an important way of achieving efficient and equitable use, and of encouraging conservation and protection of water resources.

### Additional principles

- **FIETS-principles:** Key areas of sustainability that need to be addressed in order to achieve structural impact consist of Financial, Institutional, Environmental, Technological, Social (FIETS) sustainability<sup>8</sup>.
- **Technical excellence:** all projects are implemented by **competent and qualified people**. Technical designs should take into account structural soundness and user-friendliness. Low-cost technologies (such as manual drilling) should be promoted through the private sector where possible and feasible.
- The water supply for each person must be **sufficient and continuous**<sup>9</sup> to cover personal and domestic uses, which comprise water for drinking, washing clothes, food preparation and personal and household hygiene.

<sup>5</sup> More extensive information on this can be found in chapters 1.4 and 1.5 of ZOA's Strategic Plan 2015-2018.

<sup>6</sup> <http://www.ohchr.org/EN/Issues/ESCR/Pages/Water.aspx>

<sup>7</sup> The Dublin Statement on Water and Sustainable Development, also known as the Dublin Principles, was a meeting of experts on water related problems that took place at the International Conference on Water and the Environment (ICWE), Dublin, Ireland in 1992. The Dublin Statement on Water and Sustainable Development recognizes the increasing scarcity of water as a result of the different conflicting uses and overuses of water.

<sup>8</sup> The Dutch WASH Alliance, a multi-national consortium of over 100 partners worldwide, identified five key areas of sustainability that need to be addressed in order to achieve structural impact. These are the so-called FIETS-principles: <http://washalliance.nl/our-approach/sustainability>

<sup>9</sup> A water supply could consist of multiple water sources throughout the year, together providing continuous water;

- Water for personal and domestic uses must be **safe and acceptable**. It must be free from elements that constitute a threat to a person's health. Water must also be of an acceptable colour, odour and taste to ensure that individuals will not resort to polluted alternatives that may look more attractive.
- Water and sanitation facilities must be **physically accessible and within safe reach** for all sections of the population, taking into account the needs of particular groups<sup>10</sup>, including persons with disabilities, women, children and the elderly.
- Integrated WASH: WASH interventions must integrate water supply, sanitation and hygiene (except where specific sub-sectors are addressed by other stakeholders) to reach the biggest impact.

<sup>10</sup> Approximately 15 per cent of people have some kind of disability and need to be considered in the design of WASH services.

## 3 KEY OBJECTIVES ZOA WASH INTERVENTIONS

### 3.1 OBJECTIVES

The policy on WASH contains three key objectives:

- Ensure availability and sustainable management of **water** for all.
- Achieve access to adequate and equitable **sanitation** for all and end open defecation.
- Increase water and sanitation related **hygiene** practices to improve public health.

The impact of WASH programmes is in the end best demonstrated through morbidity data monitoring. When reliable morbidity data is not available, proxy indicators (e.g. improvement of the daily personal domestic water quantity) captured via comparison of initial and final KAP (Knowledge, Attitude and Practices) surveys must be used.

#### **IMPACT indicator for WASH interventions:**

Percentage of children under 5 years (disaggregated by gender) with diarrhoea in the last two weeks, where diarrhoea is defined as more than three loose stools passed in a 24 hour period.

### Overall Theory of Change

If households use more (basic/safe) water and sanitation **and** increase their hygienic behaviour (specifically hand washing practices), **THEN** their health and nutritional status will improve, which will in turn contribute to reduction in mortality **BECAUSE** it is assumed that:

1. a variety of water-related diseases will be reduced, amongst others diarrhoea;
2. with less disease, children can eat and absorb more food;
3. more time & energy will be available to engage in economic opportunities to improve household food security.

### 3.2 HOW TO ACHIEVE THE WASH OBJECTIVES

For ZOA's beneficiaries, it is not enough that water points, latrines etc. are available. First of all, it is important that *sufficient facilities of sufficient quality* are available to serve the beneficiary population. People need to be able to fetch enough water of sufficient quality and go to an adequate toilet within reasonable walking distance.

Secondly, the facilities should be *stable*. (A combination of) water points should yield enough water throughout the year, and water points, latrines, garbage collection mechanisms and the like should be accessible and in operation throughout the year<sup>11</sup>.

Thirdly, the facilities should be *sustainable*. This means that the users (or committees chosen by the users) should be able to keep the facilities functioning even after ZOA ends its involvement.

Lastly, the intended beneficiaries should have *access* to the facilities. This means that nobody should be excluded from their use for whatever reason. Sometimes, this will require separate facilities for separate groups (for example separate latrines for men and women, or for different social groups), and sometimes this will require attention for physical accessibility (for example for people with disabilities).

While the objectives remain the same in both relief and rehabilitation interventions, the activities may differ. In an emergency, ZOA will be more active in *providing safe water*, *construction* latrines and *distributing* hygiene kits or vouchers in order to provide lifesaving activities.

<sup>11</sup> The water supply could consist of different water sources who together provide water year round.

It is important though to change such a top-down approach as soon as the situation permits to a more collaborative approach, whereby ZOA *supports* communities in changing hygiene practices, stop open defecation and maintain safe water all the way to the point of use.

In urban areas, existing water supply and sanitation infrastructure is far more complex than that of rural areas and the technical know-how for such interventions may go beyond ZOA's experience and skill set. Here ZOA will strive to link beneficiaries as much as possible to existing WASH-providers and support such providers, where and when possible.

### 3.2.1 ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER FOR ALL

#### Instructions / Justification

Clean drinking water is of primary importance for human survival and wellbeing and accordingly access to safe water is routinely identified as a priority by poor households. Investment in this area produces tangible and measurable results for poor women and men, girls and boys. Water supply interventions should achieve:

- Average domestic water use in any household is at least 15 liters per person per day;
- Public water points are sufficiently close to households to enable use of the minimum water requirement<sup>12</sup>;
- Water quality of 0 E-coli/100 ml and within national standards.

#### Standardized indicators

**Outcome indicator:** percentage of the population using safe drinking-water of sufficient quantity and quality:

- Implies sufficient water: to meet domestic needs is reliably available close to home with a total collection time of no more than 30 minutes for a roundtrip including queuing.
- Implies drinking water facilities are maintained on a regular basis.

#### Strategy

- Context analyses and baseline surveys in any area where WASH interventions are foreseen must look at practices and taboos related to drinking water, sanitation and hygiene.
- Where activities related to water supply and/or drainage are foreseen, an adequate assessment must be made of rainfall patterns (including normal fluctuations and long-term trends), run-off, groundwater availability and pollution risks.
- Water supply planning and design is based on the availability of water in dry years rather than in average years and should plan for population growth (for next 10 years) and changes in climate and land use, as those affect the quantity, quality and reliability of available drinking water.
- Physical infrastructure should be adapted to expected natural disasters (floods, earth quakes).
- Water that is safe at the point of delivery can nevertheless present a significant health risk due to recontamination during collection, storage and drawing (*secondary contamination*). Steps that can be taken to minimize such risk include improved collection and storage practices and distribution of clean and appropriate collection and storage containers.
- In order to monitor the effectiveness of WASH programmes, water must be tested for faecal coliform contamination and, if applicable, residual chlorine, at household level and at water points, at regular intervals. Testing should be done by adequately trained people.
- For the operation and maintenance of water points, funds need to be contributed by the users to pay for the maintenance and the responsible people need to be linked to a functional spare parts supply chain.
- Especially in areas where drinking water is scarce, but also in socially segregated societies, access to water points may be a source of conflict. By actively stimulating locally appropriate mechanisms for the resolution of these conflicts, ZOA can contribute to wider social harmony, peace and stability.
- ZOA recommends the rehabilitation of existing infrastructure before constructing new structures.

<sup>12</sup> SPHERE recommends a distance of 500 meters, but this is not always possible in all locations, especially in arid regions.

- Construction work should always be supervised by qualified technical staff or externally recruited supervisors and not left to a contractor only.
- Especially in urban areas, ZOA will not create any alternative or parallel water systems but supports connection to existing water supply systems and providers. An exception is made when lobby and advocacy work has not brought change in an emergency setting and no access to the existing system can be provided.

### (Possible) activities and technology choices

- In emergencies, provide safe water through water trucking, set up of water treatment systems and/or distribution of water treatment tablets. In urban settings vouchers for water provision is an option.
- Construction of communal water supply through borehole drilling, well construction, spring protection, gravity fed systems etc.
- Provision of household water treatment systems or support private sector provision of such systems.
- Conduct water quality testing: water supply sources will only be handed over when they meet national / SPHERE standards for water quality.
- Build capacity of Water User Committees for fundraising, operation and maintenance of water supply systems.
- Support / set up spare part systems for water supply systems.

### 3.2.2 ACHIEVE ACCESS TO ADEQUATE AND EQUITABLE SANITATION FOR ALL AND END OPEN DEFECATION

#### Instructions / Justification

Sanitation is a comprehensive term and it means more than just toilets. Sanitation can be understood as all measures intended to keep people's living environment healthy and hygienic by erecting barriers to prevent faecal-oral disease transmission. This includes the safe management of human excreta (including collection, transportation and disposal), the control of vector-borne diseases, drainage and solid waste disposal. It encompasses too the re-use and ultimate disposal of human excreta.

#### Standardized indicators

**Outcome indicator:** percentage of the population using improved sanitation facilities

- Sanitation facility not shared with other households.
- Sanitation facilities are maintained on a regular basis.
- In case of public latrines, these should be equally accessible for all people.

#### Strategy

- ZOA's sanitation interventions go beyond the household level and rather focus on communities, as disease development and transmission are not limited to single households.
- Interventions should focus on stopping open defecation rather than counting single latrines. ZOA prefers to implement a Community Led Total Sanitation (CLTS) approach without subsidies in order to reach Open Defecation Free (ODF) communities and get people on the sanitation ladder.
- Sanitation interventions should consider faecal sludge management (including collection and disposal of faeces) in its design.
- Sanitation facilities should be placed in such a way not to contaminate water sources.
- Sanitary infrastructure should be safely accessible and provide dignity and security to its users.
- Planning of school sanitation is based on the expected number of pupils in the coming 5-10 years. School sanitation should include washing facilities for young girls (during menstruation) and disposal opportunities for sanitary pads.
- Sanitation is a priority for women, as it opens opportunity for school going, private defecation (during the day) and thus they should be actively involved in planning.

- Where possible, involve the private sector through sanitation marketing approaches.
- In urban settings land lords have to be actively involved in order to upgrade/construct sanitation facilities, as people renting a house are often not willing to invest in sanitation facilities themselves.

### **(Possible) activities**

- In emergency settings (coordinate) construction of trench latrines and defecation fields.
- Implement Community Led Total Sanitation.
- (Support) construction of public sanitation facilities at schools, market and health institutions (possibly including ecological sanitation<sup>13</sup>)
- Facilitate involvement of private sector in latrine construction, material provision, waste disposal.
- Support solid waste management systems.
- Construction of drainage channels.
- Conduct vector control activities, like spraying campaigns in urban and camp settings
- In urban settings, support urban solid waste collection and pit emptying services.
- ZOA will normally not be involved in sewerage construction.

<sup>13</sup> Ecological sanitation (EcoSan) is based on three fundamental principles: preventing pollution rather than attempting to control pollution; rendering the urine and feces safe for reuse; and using the safe products for agricultural purposes. <http://water.worldbank.org/shw-resource-guide/infrastructure/menu-technical-options/ecological-toilets>

### 3.2.3 INCREASE WATER AND SANITATION RELATED HYGIENE PRACTICES TO IMPROVE PUBLIC HEALTH

#### Instructions / Justification

Hygiene promotion is the term used to describe activities that aim to encourage changes of behaviour with the ultimate goal of preventing water, and sanitation, related diseases. It has been defined as *'the planned and systematic attempt to enable people to take action to prevent water and sanitation related illness, and to maximize the benefits of water and sanitation facilities'*. Hygiene promotion is thus an essential component of water and sanitation programmes, rather than a cheap add-on. Serious efforts to change behaviour require serious investment and professional skill. Such change needs to be voluntary and typically only occurs when people want to change. Household level interventions, such as hand-washing and water treatment, are cost-effective and have a high impact on health outcomes.

#### Standardized indicators

**Outcome indicator:** percentage of population washing their hands with soap at critical times.

- Critical times for hand-washing are:
  - After defecation
  - Cleaning babies bottom's/changing diapers
  - Before food preparation
  - Before eating
  - Before feeding children
- Monitoring actual hand washing behaviour is difficult but the presence of soap and water at a designated place can be measured through household surveys and has been shown to be a robust *proxy* indicator.

#### Strategy

- The following principles for good hygiene promotion have been identified (WELL, 2005).
  - Target a small number of risky practices. As only a limited number of unhygienic practices are likely to be responsible for most diarrhoeal episodes and since behaviour change is difficult, efforts should not be diluted by targeting too many practises. Efforts to promote hygiene should focus around three practices, for which there is strong evidence of a health benefit. These are:
    - Hand-washing with soap (or a local substitute) at critical times.
    - The removal of stools from the household environment.
    - The home treatment of drinking water.
  - Target specific audiences.
  - Identify motives for behaviour change.
  - Hygiene messages need to be positive and appeal to people's interests.
  - Identify appropriate channels of communication.
- Hygiene promotion programmes have to be designed around the real needs, wants and contexts of the beneficiaries themselves and need to be informed by KAP-surveys and barrier analysis.
- Messages are delivered in a way that is compatible with socio-cultural aspects. Relevant messages on water, sanitation and hygiene are made available in people's mother tongue and that, where part of the population is illiterate, appropriate messages will be developed.
- In urban areas higher levels of literacy and more extensive media penetration may make mass communication more effective at spreading hygiene promotion messages than the intensive methods used in rural areas.

## **(Possible) activities**

- Support behaviour change using PHAST: Participatory Hygiene and Sanitation Transformation.
- A variety of communication methods can be used: Community drama, puppet shows and games, storytelling and songs, large and small group discussion, one to one home visits, mass campaigns/announcement, radio/TV/Video and posters / wall charts / leaflets etc.
- In emergency settings: distribution of hygiene kits (or vouches for such items).
- Menstrual hygiene management activities, like sanitary pad production.
- Providing training on soap making.
- Support School Sanitation and Hygiene Education through school clubs and support to teachers.

# ANNEX I TERMS AND DEFINITIONS

## Hygiene promotion

Hygiene promotion is defined as the mix between the population's knowledge, practice and resources and agency knowledge and resources, which together enable risky hygiene behaviours to be avoided. The three key factors are 1) a mutual sharing of information and knowledge, 2) the mobilisation of communities and 3) the provision of essential materials and facilities. Effective hygiene promotion relies on an exchange of information between the agency and the affected community in order to identify key hygiene problems and to design, implement and monitor a programme to promote hygiene practices that will ensure the optimal use of facilities and the greatest impact on public health. Community mobilisation is especially pertinent during disasters as the emphasis must be on encouraging people to take action to protect their health and make good use of facilities and services provided, rather than on the dissemination of messages. It must be stressed that hygiene promotion should never be a substitute for good sanitation and water supplies, which are fundamental to good hygiene (Sphere 2011: 59).

## Sanitation

Sanitation is a comprehensive term and it means more than just toilets. Sanitation can be understood as interventions that reduce human exposure to diseases by providing a clean environment in which to live. It involves both behaviours and facilities, which work together to form a hygienic environment (UNICEF, 2016). The term **environmental sanitation** is used to cover the wider concept of controlling all the factors in the physical environment which may have deleterious impacts on human health and well-being. In developing countries, it normally includes drainage, solid waste management, and vector control, in addition to the activities covered by the definition of sanitation.

All measures intended to keep people's living environment healthy and hygienic by erecting barriers to prevent faecal-oral disease transmission. This includes the safe management of human excreta (including collection, transportation and disposal), the control of vector-borne diseases, drainage and solid waste disposal. It encompasses too the re-use and ultimate disposal of human excreta

## Water supply

Water supply includes access to a safe supply of water for domestic use, meaning water for drinking, food preparation, bathing, laundry, dishwashing, and cleaning. In many cases, domestic water may also be used for watering animals and vegetable plots or gardens. Definitions of 'access' (distance to the nearest water-point and per capita availability) and 'safe' (water quality) may vary from country to country. Water supplies for agriculture, industry, power generation, ecosystem protection, navigation, etc., involve different considerations which are beyond the scope of this policy.

There are, however, evident and important links between domestic water supply and the management of water resources as a whole. Though water for domestic use accounts for only about five per cent of water consumption, it is a proportion that must be safeguarded in both quality and quantity as a basic human need.

## Water supply system

A water supply system is a system for the collection, transmission, treatment, storage and distribution of water from source to consumers.

## ANNEX II TOOLKITS

Check the ZOA Project Management System for new and updated relevant WASH documents.

- Sphere (2011). *The Sphere Project. Humanitarian Charter and Minimum Standards in Disaster Response*. Third edition. Practical Action Publishing.  
<http://www.sphereproject.org/handbook/>
- Engineering in Emergencies 2<sup>nd</sup> edition (EN)  
<http://www.missions-acf.org/kitemergency/HTML/5.5-washEN.html>
- Water, sanitation and hygiene for populations at risk 2<sup>nd</sup> edition (EN/FR)  
<http://www.actionagainsthunger.org/publication/2005/12/water-sanitation-and-hygiene-populations-risk>
- Handbook Community Led Total Sanitation (EN/FR)  
<http://www.communityledtotalsanitation.org/resource/handbook-community-led-total-sanitation>
- Manual PHAST (Participatory Hygiene and Sanitation Transformation) (EN/FR)  
[http://www.who.int/water\\_sanitation\\_health/publications/phastep/en/](http://www.who.int/water_sanitation_health/publications/phastep/en/)
- Menstrual Hygiene Matters (EN)  
<http://www.wateraid.org/what-we-do/our-approach/research-and-publications/view-publication?id=02309d73-8e41-4d04-b2ef-6641f6616a4f>
- Gender WASH and Violence toolkit (EN/FR)  
<http://violence-wash.lboro.ac.uk/toolkit/>
- Disability Compendium of accessible WASH technologies (EN)  
<http://www.wateraid.org/what-we-do/our-approach/research-and-publications/view-publication?id=aff6d098-00f2-42e5-b9a0-22ec2b264a5e>
- Water and post-conflict peace building (EN)  
<http://www.environmentalpeacebuilding.org/publications/books/water-and-post-conflict-peacebuilding/>
- Urban wash in emergencies (EN)  
<http://www.alnap.org/resource/19245>
- Manual effective WASH programming in schools (EN)  
[http://www.unicef.org/wash/schools/washinschools\\_53115.html](http://www.unicef.org/wash/schools/washinschools_53115.html)  
[http://www.unicef.org/wes/files/TP\\_48\\_WASH\\_Schools\\_07.pdf](http://www.unicef.org/wes/files/TP_48_WASH_Schools_07.pdf)
- IFRC WatSan Mission Assistant website  
<https://watsanmissionassistant.wikispaces.com/>