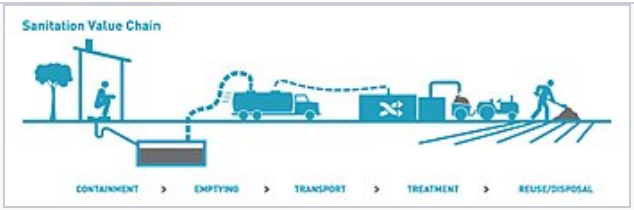

The sanitation system: collection, transport, treatment, disposal or reuse.

Sanitation refers to public health conditions related to clean drinking water and adequate treatment and disposal of human excreta and sewage.[1] Preventing human contact with feces is part of sanitation, as is hand washing with soap. Sanitation systems aim to protect human health by providing a clean environment that will stop the transmission of disease, especially through the fecal–oral route.[2] For example, diarrhea, a main cause of malnutrition and stunted growth in children, can be reduced through adequate sanitation.[3] There are many other diseases which are easily transmitted in communities that have low levels of sanitation, such as ascariasis (a type of intestinal worm infection or helminthiasis), cholera, hepatitis, polio, schistosomiasis, and trachoma, to name just a few.

A range of sanitation technologies and approaches exists. Some examples are community-led total sanitation, container-based sanitation, ecological sanitation, emergency sanitation, environmental sanitation, onsite sanitation and sustainable sanitation. A sanitation system includes the capture, storage, transport, treatment and disposal or reuse of human excreta and wastewater.[4] Reuse activities within the sanitation system may focus on the nutrients, water, energy or organic matter contained in excreta and wastewater. This is referred to as the "sanitation value chain" or "sanitation economy".[5][6] The people responsible for cleaning, maintaining, operating, or emptying a sanitation technology at any step of the sanitation chain are called "sanitation workers".[7]:2

Several sanitation "levels" are being used to compare sanitation service levels within countries or across countries.[8] The sanitation ladder defined by the Joint Monitoring Programme in 2016 starts at open defecation and moves upwards using the terms "unimproved", "limited", "basic", with the highest level being "safely managed".[8] This is particularly applicable to developing countries.

The Human Right to Water and Sanitation was recognized by the United Nations (UN) General Assembly in 2010. Sanitation is a global development priority and the subject of Sustainable Development Goal 6.[9] The estimate in 2017 by JMP states that 4.5 billion people currently do not have safely managed sanitation.[9] Lack of access to sanitation has an impact not only on public health but also on human dignity and personal safety.

Drinking water services

Sustainable Development Goal target 6.1 calls for universal and equitable access to safe and affordable drinking water. The target is tracked with the indicator of “safely

managed drinking water services" – drinking water from an improved water source that is located on premises, available when needed, and free from faecal and priority chemical contamination.

In 2017, 5.3 billion people used safely managed drinking-water services – that is, they used improved water sources located on premises, available when needed, and free from contamination. The remaining 2.2 billion people without safely managed services in 2017 included:

- 1.4 billion people with *basic* services, meaning an improved water source located within a round trip of 30 minutes
- 206 million people with *limited* services, or an improved water source requiring more than 30 minutes to collect water
- 435 million people taking water from unprotected wells and springs
- 144 million people collecting untreated surface water from lakes, ponds, rivers and streams.

Sharp geographic, sociocultural and economic inequalities persist, not only between rural and urban areas but also in towns and cities where people living in low-income, informal, or illegal settlements usually have less access to improved sources of drinking-water than other residents.