

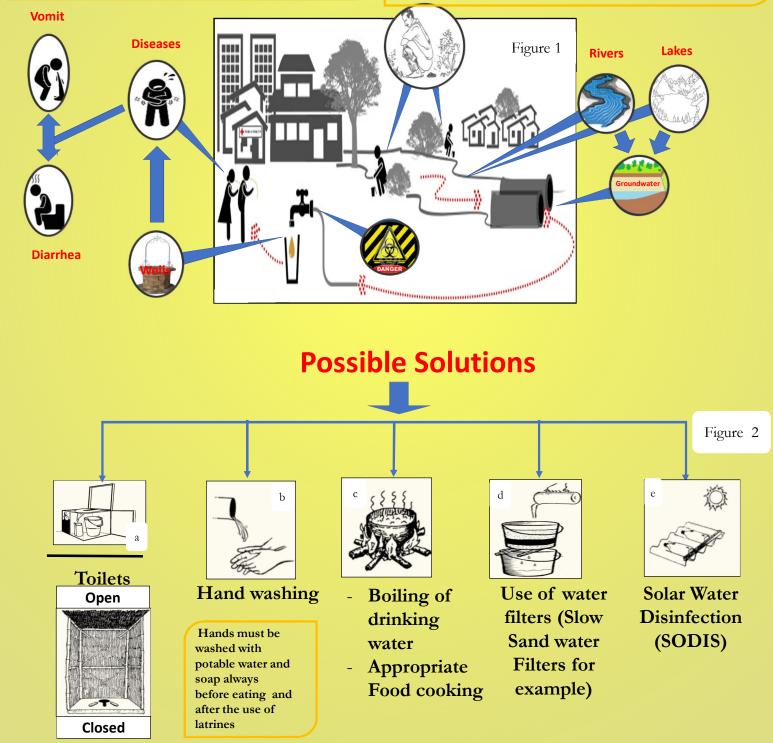
THE PROBLEM OF OPEN DEFECATION AND POSSIBLE SOLUTIONS

What open defecation is ?

Open defecation is the practice of people defecating outside and not into a designated toilet (figure 1). Open defecation causes public health problems in areas where people defecate in fields, urban parks, rivers, and open trenches in close proximity to the living space of others.

Open defecation and soil and water contamination

Open defecation is one of the main sources of water (lakes, rivers, open wells and aquifers) and soil contamination. Bacterial cells' leaching from soil layers and sludge matrix dynamically infiltrate to the effluents. This contamination of soil and particular of water is one of the main causes of gastrointestinal diseases.



Among the possible solutions to prevent gastrointestinal diseases caused by the open defecation practice are those illustrated in figure 2. The more important of these is the utilization of appropriate toilets because it prevent the spread of the fecal pathogenic bacteria and parasites.