



TN

TAMIL NADU

US

URBAN SANITATION

SP

SUPPORT PROGRAMME

WHAT IS SANITATION?

Sanitation refers to the provision of facilities and services for the safe management of human excreta from the toilet to containment and storage and treatment onsite or conveyance, treatment and eventual safe end use or disposal. More broadly sanitation also included the safe management of solid waste which includes animal waste, industrial waste, hazardous wastes (including hospital wastes, and chemical/ radioactive and other dangerous substances)



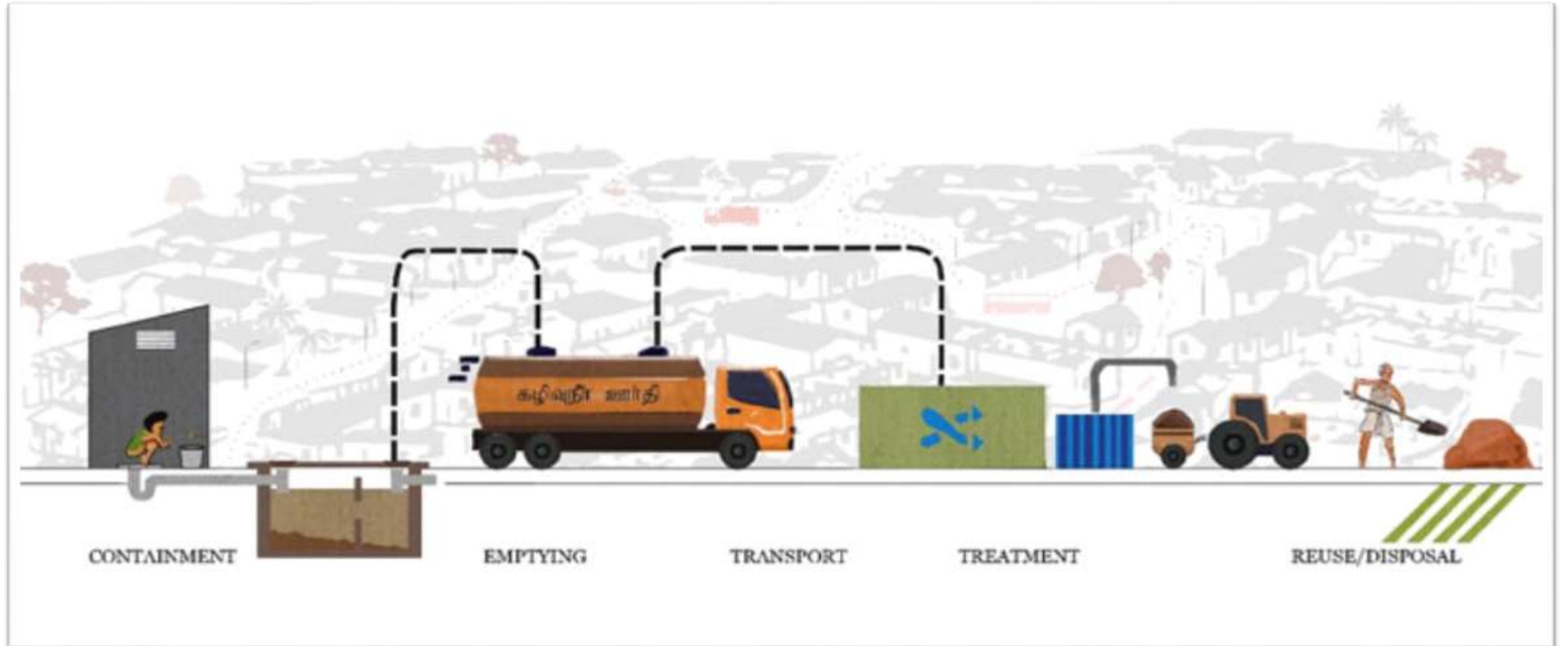
WHY SANITATION IS IMPORTANT?

1. 2.3 billion people still do not have basic sanitation facilities such as toilets or latrines of which 892 million still defecate in the open
2. Poor sanitation is linked to transmission of diseases such as cholera, diarrhoea, dysentery, hepatitis A, typhoid and polio
3. Poor sanitation also contributes to malnutrition.

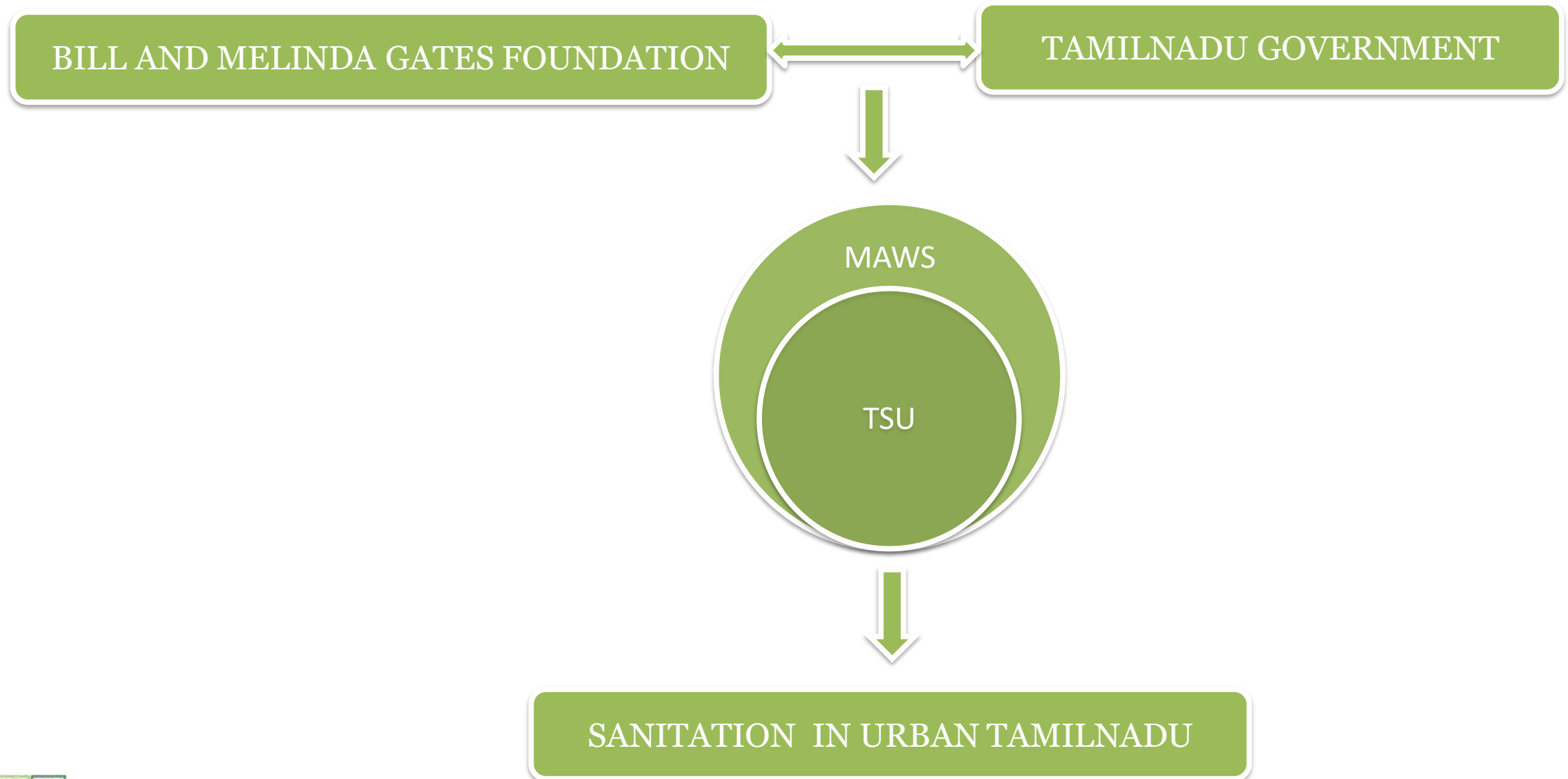


1. 280 000 diarrheal deaths annually
2. Globally, an estimated one in four children under age 5 suffer from stunting

COMPONENTS OF FULL CYCLE SANITATION



TNUSSP-ORGANIZED STRUCTURE



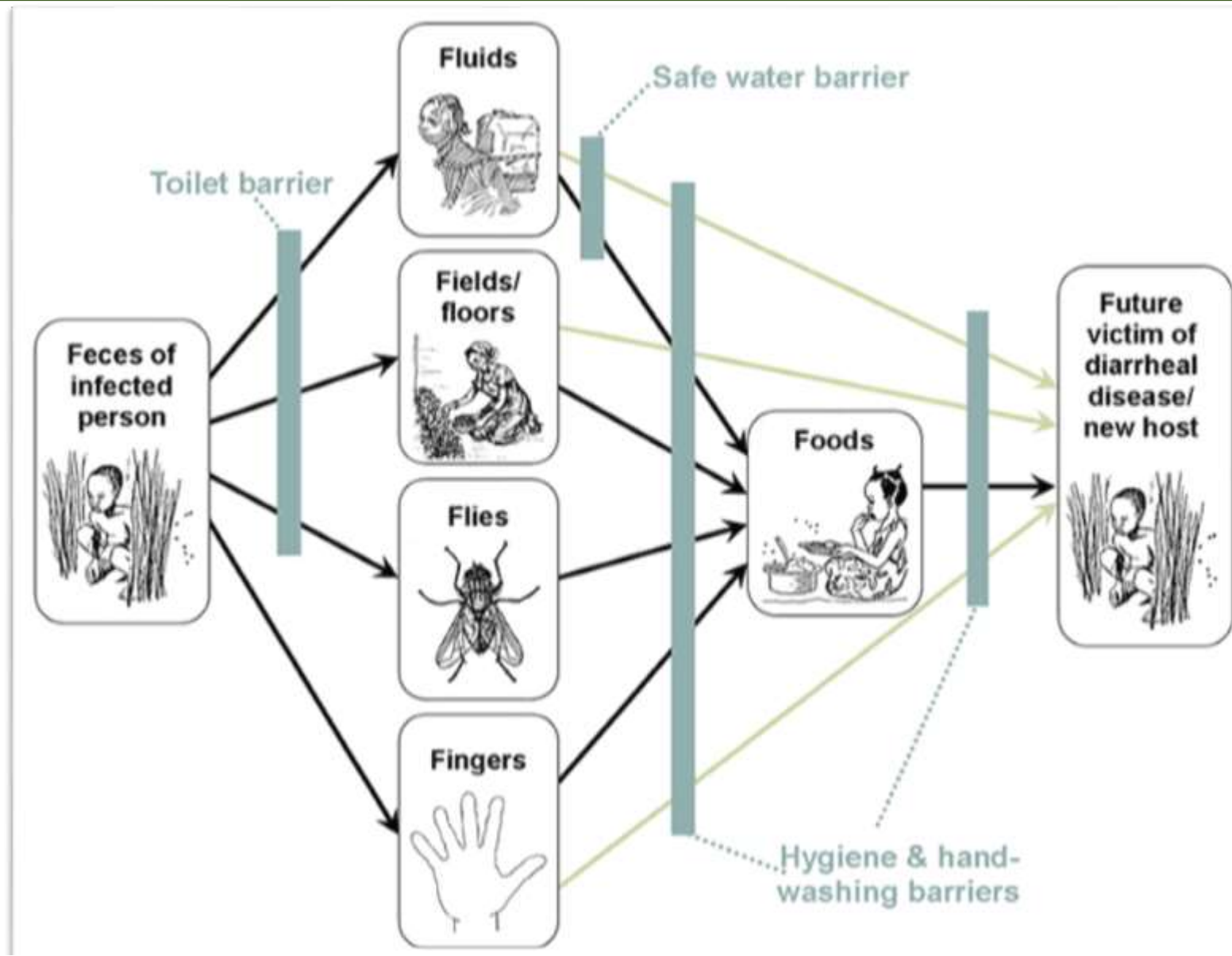
FAECES



Within One gram of human feces

- **1 million Bacteria**
- **10 million Viruses**
- **1000 parasites**
- **100 Parasites egg**

FECAL ORAL CONTAMINATION ROUTE



USER INTERFACE

OPEN DEFECATION



SAFE TOILET USAGE

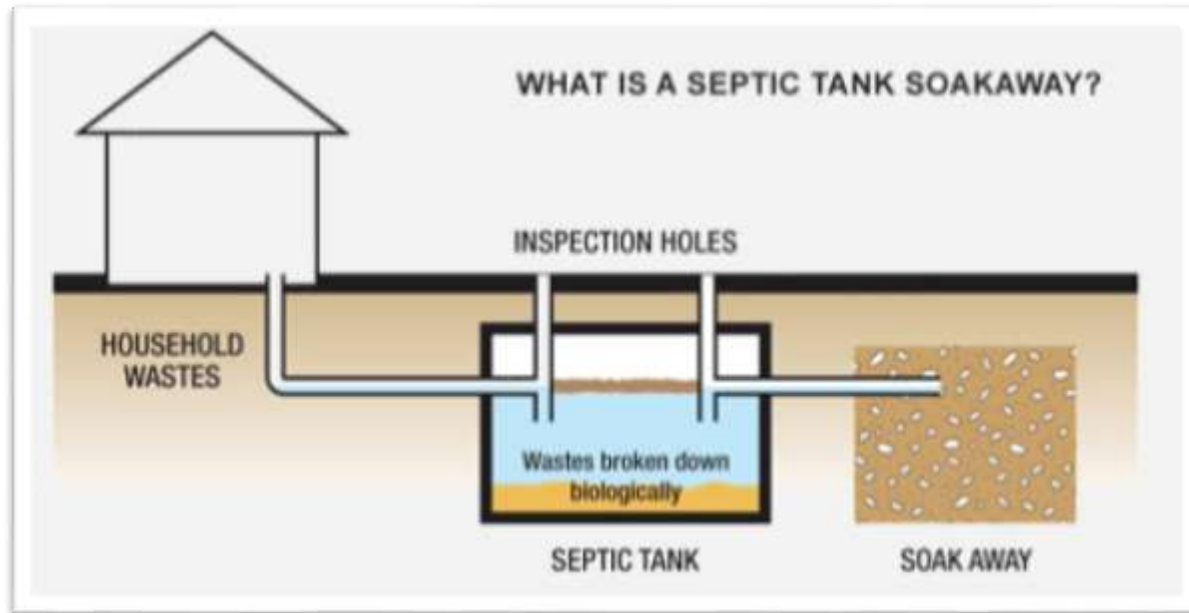
PUBLIC/COMMUNITY TOILETS



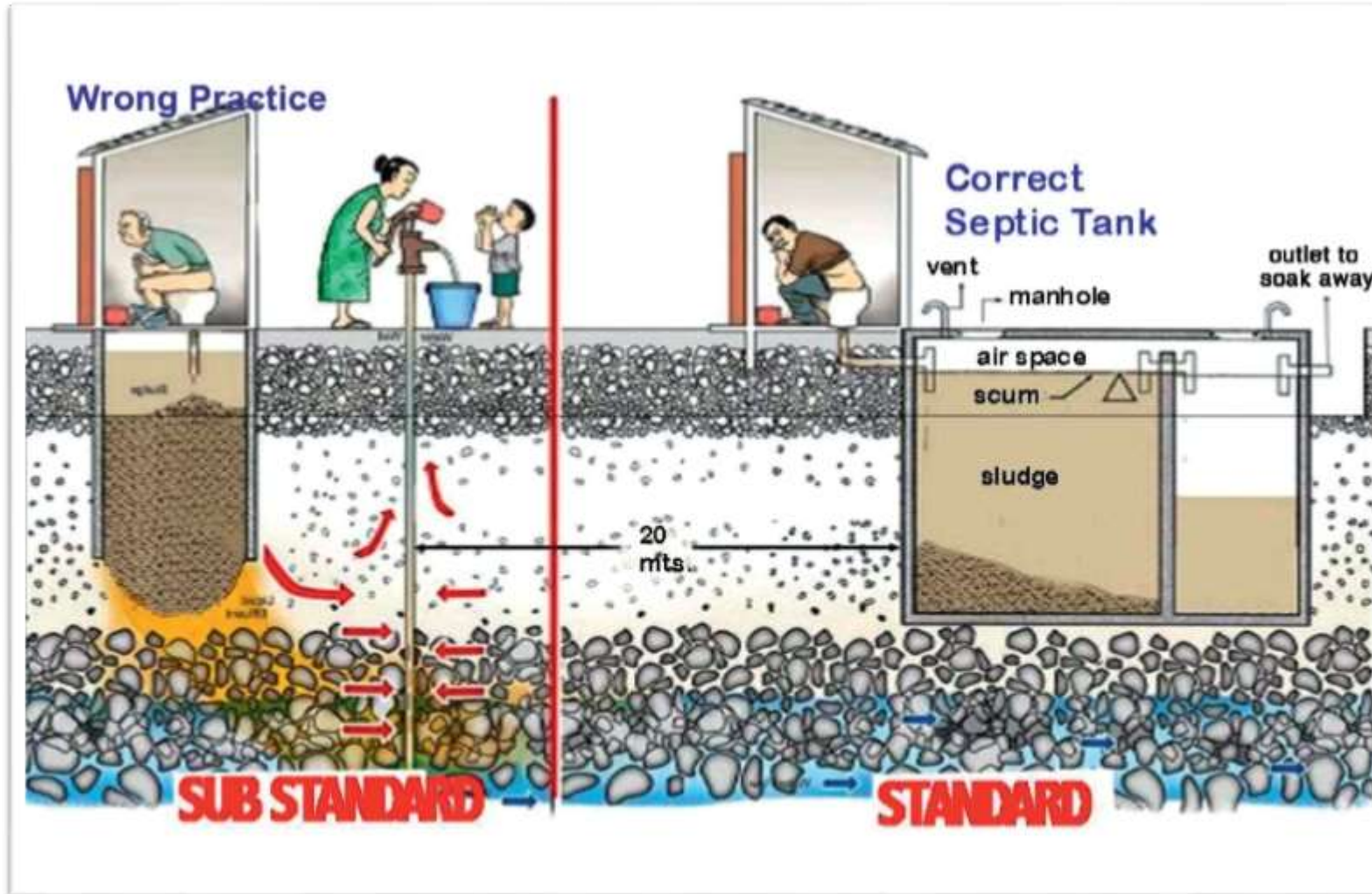
INDIVIDUAL HOUSEHOLD TOILETS



SAFE SANITATION SYSTEM



GROUND WATER CONTAMINATION



WATER-SANITATION RELATED DISEASES

Category	Example
Water-borne diseases	Diarrheal diseases, cholera, dysentery, typhoid, infectious hepatitis
Water-washed diseases	Trachoma, scabies, Skin & eye infection, ARI
Water-based diseases	Schistosomiasis , guinea worm
Water related (insect vector)	Malaria, dengue fever etc

COLLECTION AND CONVEYANCE

MANUAL SCAVENGING

- The Employment of Manual Scavengers and Construction of Dry Latrines (Prohibition) Act, 1993

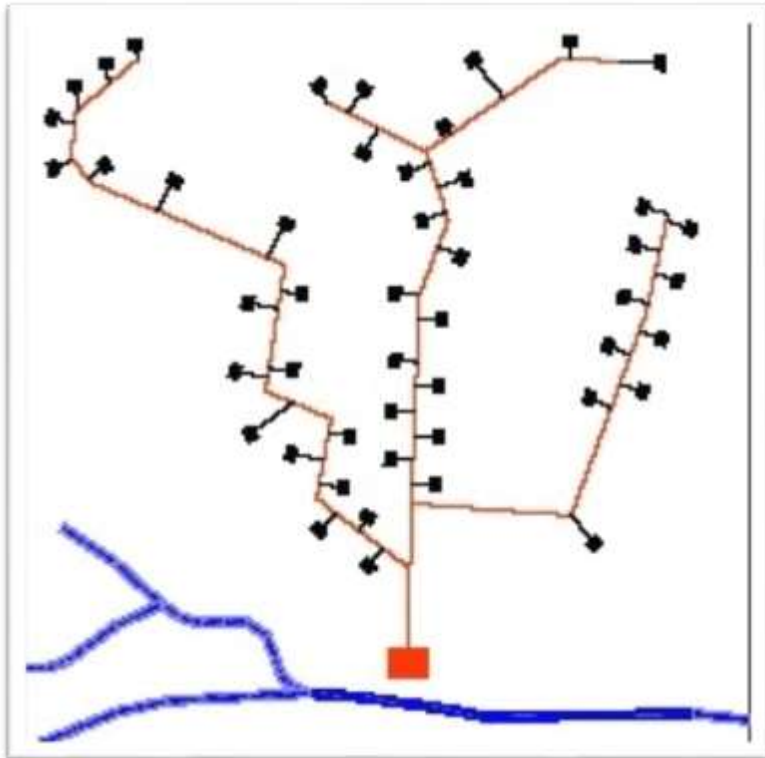


SAFE DESLUDGING

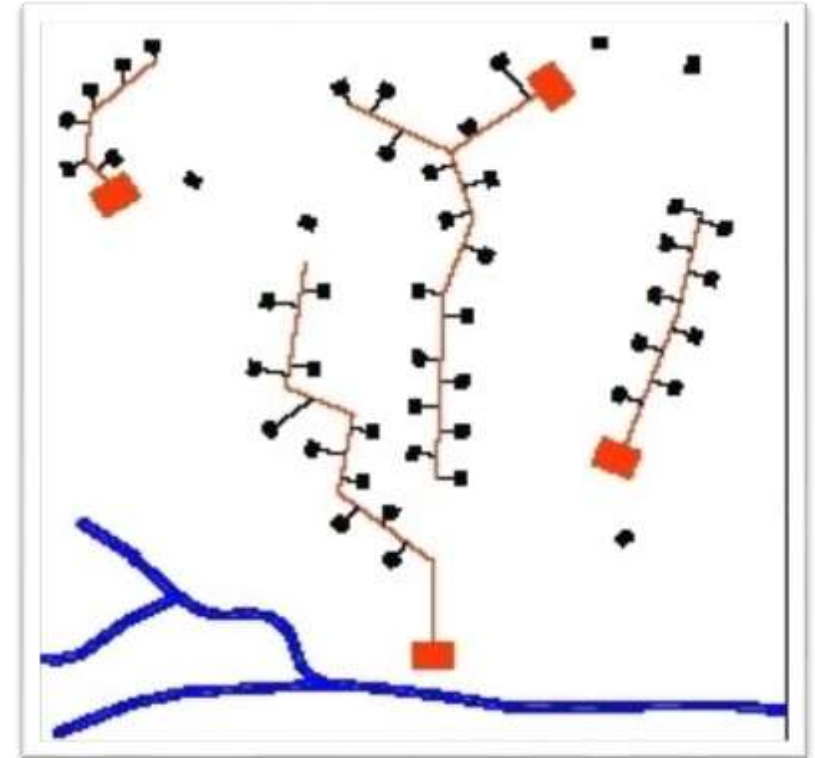


TREATMENT SYSTEMS

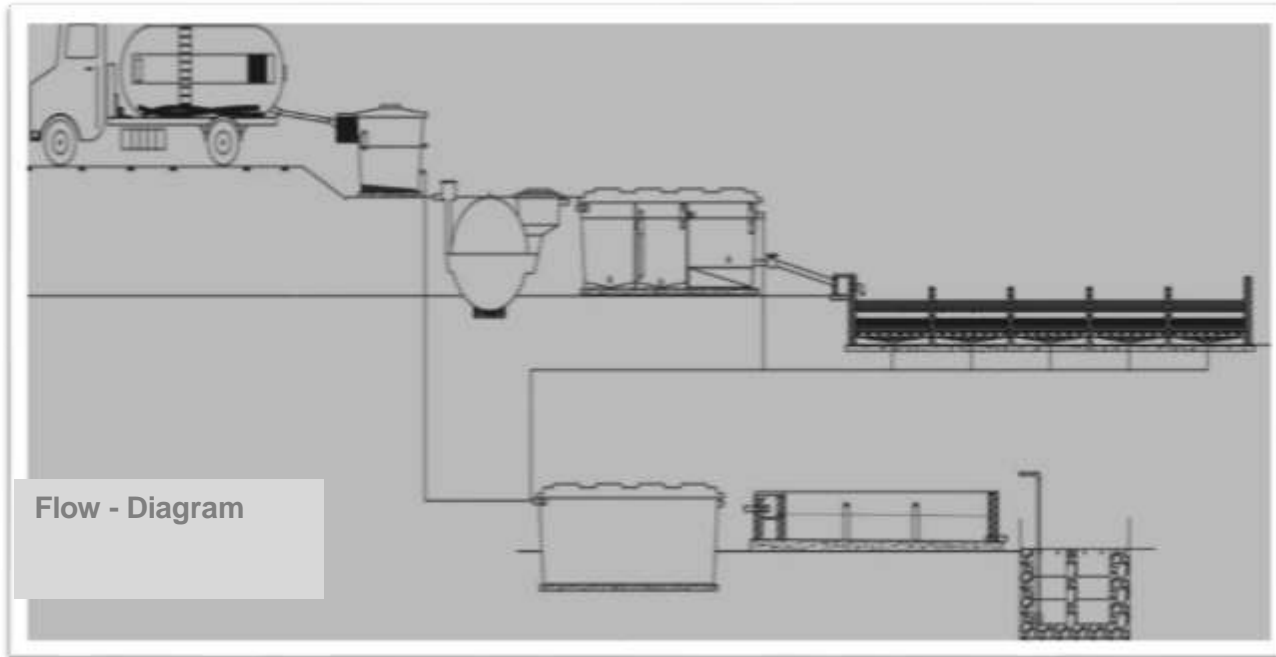
CENTRALISED TREATMENT SYSTEMS



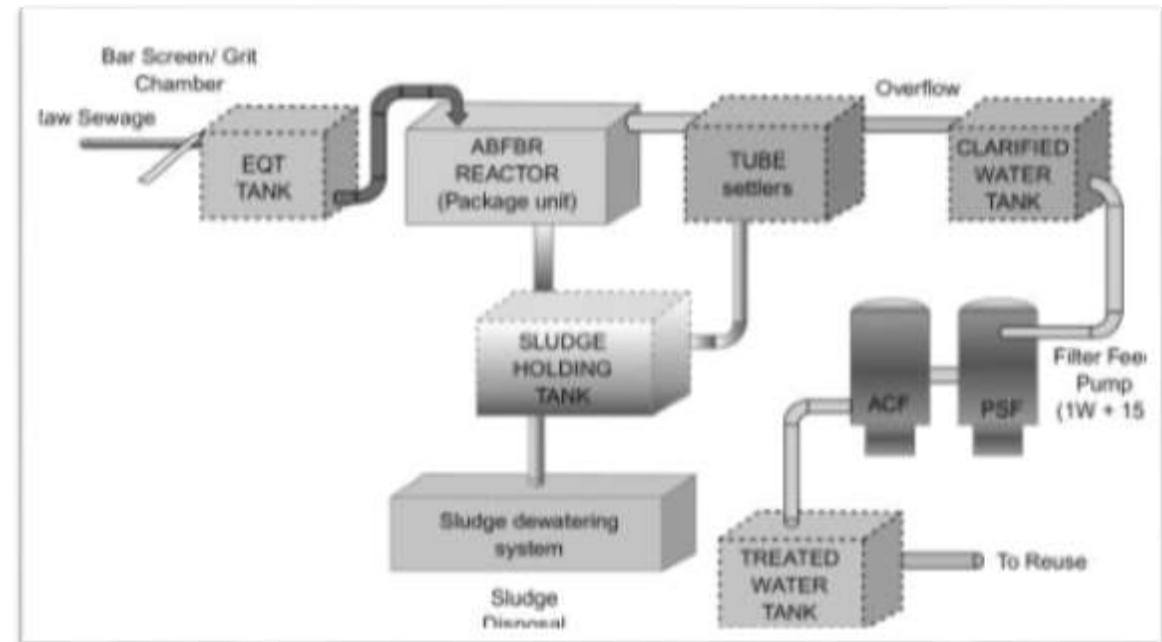
DECENTRALISED TREATMENT SYSTEMS



FECAL SLUDGE TREATMENT PLANT



BIOLOGICAL PROCESS



ELECTROMECHANICAL PROCESS

DISPOSAL & RE-USE

CURRENT PRACTICE



SAFE PRACTICE



Composted sludge

Treated water



QUERIES



THANK YOU