SULABH INITIATIVES IN LOW COST SANITATION

By Y.D. Mathur

- In India 80 percent of all sickness and disease due to lack of safe drinking water & proper sanitation.
- Nearly 65 percent of the population still defecate in the open. In addition there are dry toilets cleaned by human Scavengers.
- Lack of safe sanitation deprives millions of people of health, energy, time, dignity and quality of life.
- Annual loss of 180 million person days and Rs. 12 billion to economy owing to sanitation related diseases.

- World Summit on Sustainable Development Johannesburg 2002, world's leaders accepted goal of halfing the proportion of people without safe water and sanitation by the year 2015.
- ➤ To accelerate progress the United Nations Secretary General Ban Ki-moon officially launched 2008 as the "International Year of Sanitation"

Integrated Low Cost Sanitation Scheme, operated through the Ministry of Housing & Urban Poverty Alleviation.

Main objectives to convert the existing dry latrines into low cost pour flush latrines and to construct new ones where none exist

- Total Sanitation Campaign operated through the Ministry of Rural Development, Department of Drinking Water Supply.
- Main objective to accelerate Sanitation coverage in rural areas to access to toilets for all by 2012 and to cover schools and anganwadis with Sanitation facilities, promote hygiene education and sanitary habits among students.

Sulabh International Social Service Organisation founded in 1970 Activities undertaken:

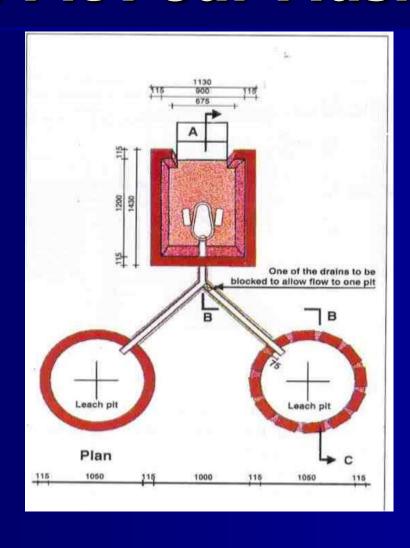
- Prevention of environmental pollution and improvement of health, hygiene and ecology.
- Educate people not to defecate in the open: promote improved water, sanitation and hygiene practices. Focus on Schools-formation of "School Sanitation Clubs"
- Motivate people to get dry latrines converted into Sulabh Shauchalaya. Build toilets where none exist.

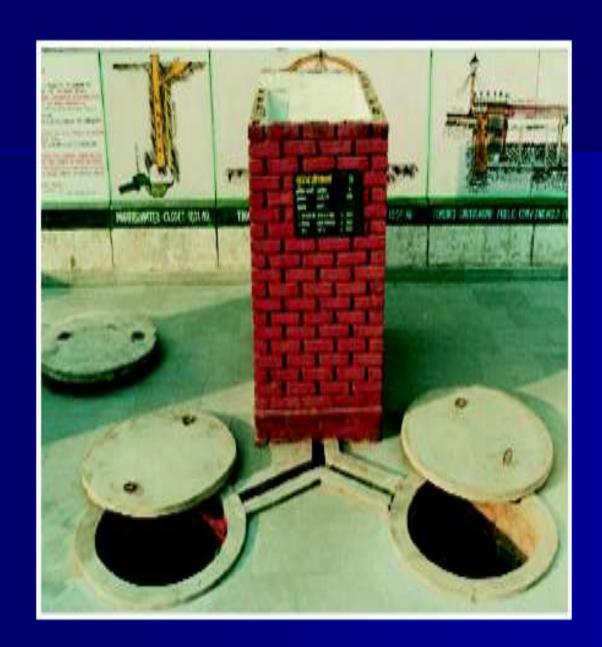
- Provide community toilet complexes for floating population and communities with houses having space constraint for latrine construction.
- Liberation and rehabilitation and social upgradation of Scavengers.
- Open schools and Vocational Training Centres for the Scavenger families.
- > Harness non-conventional energy sources from human waste.
- Procure manure from Sulabh Shauchalayas and Sulabh toilet complexes.

- Promote job-oriented education and primary healthcare.
- Mobilise public opinion against social evils and for the cause of economically poor.
- Create new job opportunities by training change-agents for integrated development.
- Promote consultancy, research and development in technical and social fields.

- Diffusion of innovations, education, motivation and awareness through mass communication.
- Sulabh International "Museum of Toilets" built at New Delhi
- The Organization has implemented several programmes in coordination and collaboration with the Local Bodies, State Governments and Government of India.

Sulabh Technology Twin Pit Pour Flush Toilet



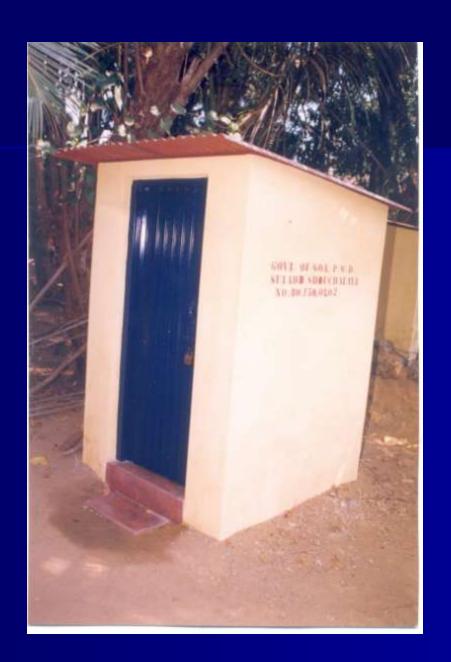












Key advantages of Sulabh twin pit pour flush toilets

- Hygienically and technically appropriate, and socio-culturally acceptable.
- Affordable and easy to construct with locally available materials.
- Design and specifications can be modified to suit householder's needs and affordability.
- > Eliminates mosquito, insect and fly breeding.
- Can be constructed in different physical, geological and hydrogeological conditions.

- Free from health hazards and does not pollute surface or ground water, if proper precautions and safeguards are taken during construction.
- Can be located within the premises as it is free from foul smell and fly/mosquito nuisance etc.
- > Can be constructed on upper floors of houses.
- Pits are generally designed for 3 year desludging interval, but if desired, it can be designed for longer periods or it can be reduced even to two years.
- Maintenance is easy, simple and costs very little.

- Needs only 1.5 to 2 litres of water for flushing, while conventional flush toilet needs 12 to 14 litres of water.
- Needs less space than septic tank toilet system.
- Does not need scavengers for cleaning the pits or disposal of sludge, this can be done by the householders.
- Makes available rich fertilizer and soil conditioner.
- Can be constructed in non sewered areas and subsequently connected to the sewerage system when available.

Besides the twin pit pour flush toilet, other cost-effective and environment friendly technologies.

- Construction and maintenance of pay and use public toilets.
- Generation of biogas and biofertiliser from excreta-based biogas plants with Sulabh Effluent Treatment Technology.
- Waste water treatment through duckweed and vermi-composting.







Public toilets linked with biogas plant (with gas holder)





Use of biogas for mantle lamps







Achievements

- Initiatives well recognised by National & International Agencies.
- Water Supply and Sanitation Collaborative Council (WSSCC) Geneva collaborating for promotion of "WASH" Campaign.
- Several national and international awards have been conferred on Sulabh International and its Founder.

Achievements at a glance

No. of individual toilets constructed/converted

1.2 million

7,500 nos.

Sulabh Shauchalaya complexes constructed

and being operated and maintained

No. of users of Sulabh toilet facilities per More than 10 million

day

Towns made scavenging free 640 nos.

Scavengers liberated 1,20,000 nos.

Scavengers trained and resettled 7,000 nos.

Human excreta based biogas plants 190 nos.

constructed

Personnel trained Over 1,00,000

including 12,000 women volunteers on

sanitation, health and

hygiene.

