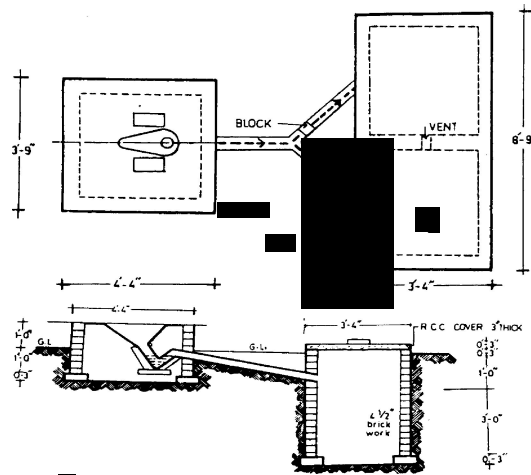


DESCRIPTION OF THE PRACTICE/INNOVATIVE EXPERIENCE AND ITS MAIN FEATURES

The main design of a Sulabh Shauchalaya comprises a few simple components which can be successfully constructed by village-level, trained masons. The first component is the toilet pan, which must have a steep slope and a trap with a water seal which would require not more than 1.5 to 2 litres of water for manual flushing purposes. Such pans are specially manufactured by Sulabh International so that the proper steepness is maintained, but are now routinely available in commercial outfits as well. (The use of conventional designs available in the market is not encouraged though they can still be used as they would require more water for flushing and this would create problems with the composting section of the system as well.) The second major element of the Sulabh system is that it requires that two leach pits be constructed outside (and usually behind) the toilet. Both leach pits are connected to the toilet through pipes or covered drains.

However, at any given time, only one pit must be open to the waste discharged from the toilet. Waste materials coming from the toilet lead into the leach pit: the water disperses into the soil through holes in the pit lining (the leach pit tank has a honeycomb pattern) and this leaves the solid waste dry so that it can be later used as manure. When one pit is full, the pipe leading to the second pit is opened and the first one blocked. After 18 months, the contents of the first pit are considered to be fully digested and safe for handling as good-quality compost. The pit can then be conveniently emptied and kept ready for use once the second pit is filled. The cost of the entire system is very low, compared to the others. Very little water is required (2 litres) for flushing the pan. Very little space is required for construction (a 6 ft x 6 ft area inside a house). The cost of construction is around Rs.2,000.

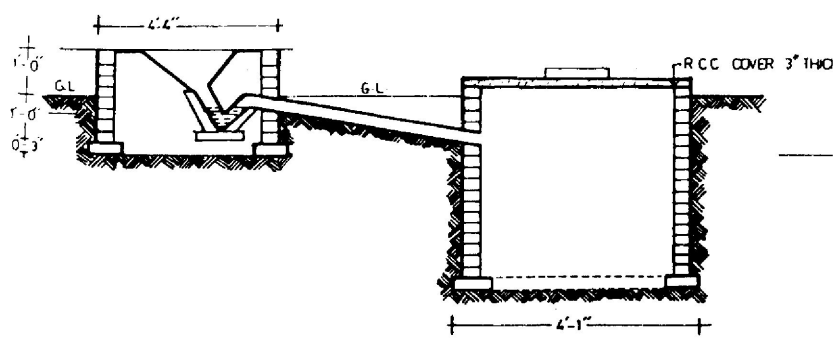
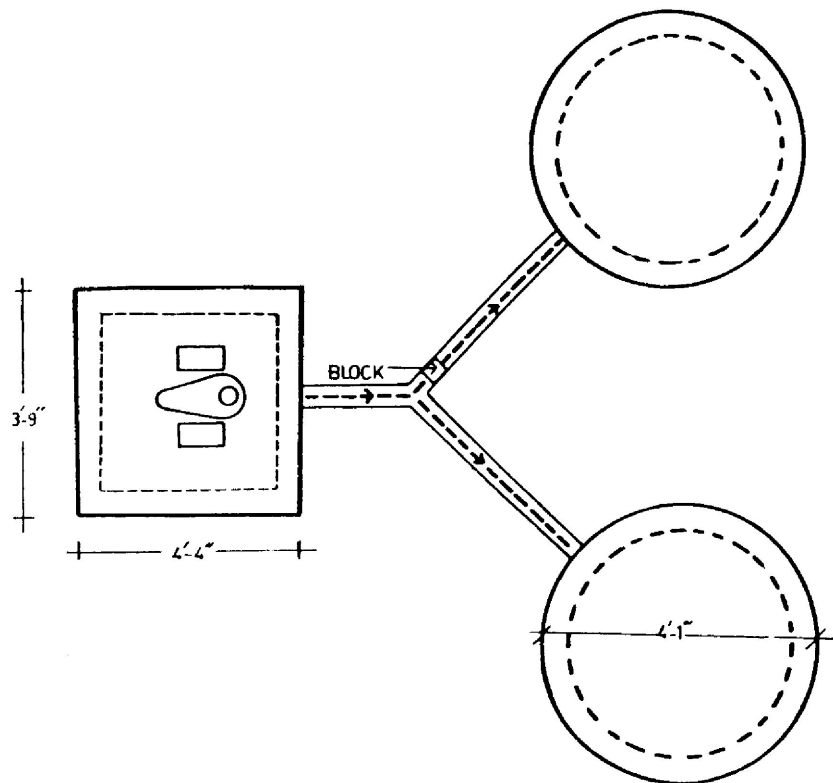
Diagram 1: Sulabh Shauchalaya (with rectangular pits)



Based on the same technology, Sulabh International has also constructed hundreds of pay-and-use public toilet complexes which include bath cabins in addition to toilets. Some of these larger complexes are connected to bio-gas plants used to fuel cooking stoves and street lighting. These Sulabh Shauchalayas are to be found at bus stands, railway stations, slum areas, in critical spots of cities and on beaches.

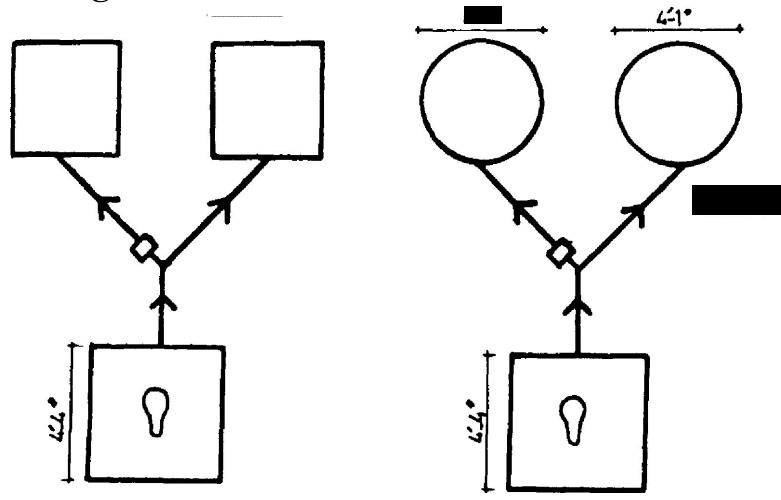
They have been designed and constructed with two purposes in mind:

- (a) to provide common services to groups of people who may not have the space to install individual toilets; and
- (b) for non-resident users, including tourists in towns, pedestrians and so on.



PART In: APPROPRIATE TECHNOLOGY

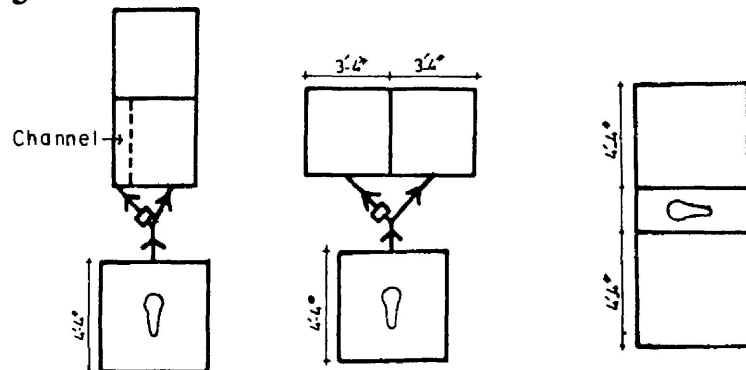
Diagram 3: Alternative arrangements of Sulabh



Shauchalyas

- a) MOST POPULAR IN URBAN AREAS b) POPULAR IN RURAL AREAS

3*



- e) LEAST USE OF c) USED IN URBAN d) SED IN URBAN AREAS SPACE
SUITABLE AREAS WITH SITE WITH MODERATE SITE IN VERY
CONGESTED CONSTRAINTS CONSTRAINTS URBAN AREAS