

## **SULABH INTERNATIONAL SOCIAL SERVICE ORGANIZATION**

Location:

The Sulabh International is located in New Delhi. The postal address:

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Website: a) [www.sulabhinternational.org](http://www.sulabhinternational.org)  
b) [www.sulabhtoiletmuseum.org](http://www.sulabhtoiletmuseum.org).

The Sulabh International location is well connected by bus, auto and taxi. It is around 12 to 15 kms (1 hrs) from the New Delhi railway station and 6 to 8 kms (30 mins) from New “I am going to turn the pages of history”. In 1968, Dr. Bindeshwar Pathak said to his father-in-law. Thirty-nine years later, his initiative is creating history with 15 million users’ everyday, steady flow of revenues, ever-increasing demand and expanding geographical reach, world wide appreciation, awards and invitations, and ambitious plans for future (see [www.sulabhinternational.org](http://www.sulabhinternational.org)).

Sulabh International – a social movement provides healthy and hygienic sanitation facility to everybody. But Sulabh is not a about community toilets only – it’s a social revolution, freedom from detestable social customs of discrimination based on caste and creed, end of shameful practice of defecation in open spaces, eradication of inhuman practice of scavenging and liberation of scavengers engaged in this occupation. Further, end of contagious diseases and epidemics, boos to non-conventional energy sources, enormous employment opportunities, educational institutions – including multiple schools and vocational training centers, a toilet museum in the heart of a the National capital – New Delhi. Delhi airport. The area where Sulabh is located is densely populated. Well equipped with technological facilities like telephone booth, ATMs and so on.

Introduction:

According to the census of India – 2001, 63% of households do not have a lavatory (78% in rural areas and 26 % in urban areas). In India, as many as 50 diseases are caused by lack of proper sanitation, affecting over 80% of the population. These include intestinal, parasitic, infectious diarrhea, typhoid and cholera. It is important for us to realize the significance of the initiatives taken by Sualbh International to overcome this crisis.

Did you know? India has the world's most ancient sanitation systems. The first private bathrooms, complete with inlet pipes and drains and flush toilets were found in Mohenjo-Daro. All these date from 3000 BCE. Such bathrooms were found even in humble hoes. It is a shame that 5,000 years later, somany homes do not have adequate sanitation, and so many people do not have access to good public sanitation.

Source: Sulabh International Museum.

#### The Genesis:

Sulabh is the brain child of Dr. Bindeshwar Pathak. Dr. Pathak was born in 1942 in a Brahmin family of Bihar state of India. During 1968, he was drafted into a committee to design celebration of birth centenary of Mahatma Gandhi, which was due in 1969. Gandhi worked tirelessly to restore the human rights and dignity of scavengers and to eliminate the evil of untouchables from the society. This was a turning point in young Dr. Pathak's life.

He started 'Sulabh Svachchh Shauchalaya Prashikshan Sansthan' (Sulabh Clean Toilet Training Institute) in 1970, which was later registered as 'Sulabh Shuachalaya Sansthan' (Sulabh Toilet Institute). It was renamed as 'Sulabh International in 1980 before adopting its present name – 'Sulabh International Social Service Organization (SISSO).

#### Present Status:

Sulabh International – a non-governmental organization (NGO), founded in 1970 to address the sanitation problems facing low-caste, low-income groups in India (See exhibit 1 for the organizational chart). Apart from its scale, what makes its delivery system of wider interest is its commercial viability.

Sulabh addressed the most significant problem of open defecation in India. Much of the defecation in India still occurs in open spaces.

Sulabh International works towards the improvement of the state of sanitation in India. Sulabh rehas been recognized as one of the largest pan- India social service outfit with over 35,000 volunteers. It began by helping the scavengers – men and women who carry and dispose of human excreta.

They developed a two-pit pour flush toilet (know as Sulabh Shauchalaya) which do not require scavenging to clean. Subsequently, Sulabh also started pay-and-use public toilets popularly know as Sulabh Complexes, with bath, laundry and toilet facilities. These are used by about approx ten million people every day.

Sulabh has also pioneered the production of biogas and bio-fertilizer from excreta-based plants.

Thus the pioneering work by Sulabh International, has shown that human waste can be disposed of affordably (productively) and in a socially acceptable way. Sulabh's approach is based on partnerships with local governments, backed by community participants, and has substantially improved environmental quality in rural and urban slums inhabited by poor people.

This practice can be called as a best practice in governance. Governance, as we have come to understand is a social function whose performance is crucial to the viability of all human societies; it centers in the management of complex interdependencies among the actors (whether individuals, corporations, interest groups, or public agencies) who are engaged in interactive decision making and taking actions that affect each other welfare.

Given this understanding of Governance, Sulabh International can be considered as Best practice in governance. As the main purpose of Sulabh International is to restore and promote human rights of the most disadvantaged community, called the bhangis (in Hindi) or scavengers, a low caste community in India. Scavengers' occupation is to collect, transport and dispose human excretory wastes. Due to the great deal of negative social stigma attached to their occupation, scavenger communities remain isolated and various upper class communities in India are prejudiced against them. Many children of the scavengers follow in the footsteps of their parents. As a result, children of scavengers end up becoming scavengers. The Sulabh International movement led by Dr. Bindeshwar Pathak (popularly know as the 'Founder') performs the most required social function for the wellbeing of the most isolated and downtrodden population of the country. This pro-poor approach in addition to hygiene is no doubt a success story which contributes to the overall governance of our country.

Vision, Mission and Objectives :

Sulabh envisioned as an agent of social and cultural change. Inspired by Gandhian philosophy of truthfulness, non-violence, and altruism, more importantly Sulabh believes and practices Gandhian principle of Trusteeship. Sulabh seeks to develop an egalitarian society, based on equal opportunity for every human being irrespective of their caste, race, and natural endowments. Sulabh adopts a holistic development approach and promotes the concept of a happy home (see Exhibit – 1)

Some of the Key objectives of the Sulabh International are as follows:

- Social and economic liberation of scavenging community from their unhealthy and subhuman occupation of handling others' excreta through:
- Motivating people to have Sulabh Shauchalaya facility in houses where none exists;
- Conversion of bucket privies into Sulabh Shauchalayas;
- Rehabilitation by training and placement in other jobs;
- Opening English Medium School to offer modern school education to their children along with other
- Assistance in building their houses away from slums so that they can be taken out from the stinking environment;
- Prevention of environmental pollution and improvement of health, hygiene and ecology by
- Providing appropriate and low cost technologies for individual toilets, pay & use community toilet complexes, community toilets with biogas energy, and effluent treatment
- Tree plantation around public Shauchalayas;
- Procuring manure from Sulabh Shauchalayas and Sulabh toilet complexes and use it to raise farm productivity;
- Promoting consultancy, research and development in technical and social fields;
- Disseminating innovations and creating awareness particularly on sanitation and hygiene through mass communication and education.

#### Outcomes:

- The Sulabh technology has liberated and rehabilitated 60,000 scavengers so far from the demeaning practice of physically cleaning and carrying human excreta.
- In the state of Bihar Sulabh has installed 30,000 units and had converted 10,000 more from old dry-pit latrines.

- Sulabh has provided two-pit pour flush, water seal toilet systems to more than six million households (about 12,00,000 individual toilets) and 5,500 community centers in 1100 towns in 26 states and 3 Union Territories of India.
- Over 10 million people in India use Sulabh toilets daily.
- This self-sustaining system has helped in ending the uncivilized practice of open-air defecation and keeping the urban life clean and livable particularly in squatter colonies and places of congregation.
- Sulabh is already operating and maintaining about 100 Shauchalaya complexes at important railway stations.
- Sulabh is producing and using biogas from human excreta from its 100 plants.
- A combined Sulabh action plan on human waste disposal and social reforms has provided jobs directly to 35,000 people, and has created 10,000,000 man days of work, making 240 towns scavenging free. Over 4000 scavengers have been provided vocational training.
- It has set up an English-medium public school in New Delhi and also a network of centres all over the country to train boys and girls from poor families, specially scavengers, so that they can compete in open job market

The Concept of Sulabh Movement:

Target Groups:

The target groups of this project are impoverished residents of Delhi's slums and resettlement colonies, in particular those who have no access to sanitary latrines. Special attention is given to the needs of women in these groups, as well as the scavengers who must carry away the human excreta from dry latrines.

Geopgraphically the target sites include locations throughout Delhi. Only seven of the 44 resettlement colonies have civic amenities and running water lines provided. In most of them, especially in areas across the river Yamuna, no sewerage facility or proper drainage exist. Most of these colonies are located in low-lying areas about 10 to 12 feet lower than the yamuna bed. These areas across the river are primary targets for the Sulabh. Given the state of affairs, the only solution to the problem lies in low-cost sanitation techniques or Sulabh Movement (see above) and people's readiness to accept and use them.

Sulabh Initiatives - Social Wellbeing and Innovative Initiatives:

A. Community Toilet Technology:

Those households, which either can afford an individual TPPF or has no space for it, need a community toilet. Such a facility is also needed for commuters, pavement dwellers and other floating population mainly in urban settlements. Sulabh studied the behavior and attitude of people who did not use available public toilets in towns and cities. The study revealed that people would use such toilets if

- Facilities for bathing and washing clothes are provided alongside;
- The toilet is kept clean all the 24 hours of the day. Sulabh technology is providing community toilet complexes (known as Sulabh Shauchalaya Complex) with bathing, laundry and urinal facilities on the pay-&-use basis in urban areas and places where people congregate. The main features of a community toilet complex are:
  - There is no burden on the public exchequer.
  - A nominal charge is collected from each user.
  - Children, disabled and poor are exempted from payment.
  - No charge is made for use of urinals.
  - The earnings are used for operation and maintenance of the complex.
  - Attendants man each complex round the clock.
  - Lighting during nights and 24 hour water supply is maintained.
  - Soap for washing hands is provided free for the users.
  - Aesthetically pleasing architecture together with tree plantation around the complex are provided.

Box 2: Mammoth community toilet in Shirdi, Near Pune at an estimated cost of 2 crore.

Largest Community Toilet Complex at Shirdi-148 toilets and 108 bathrooms; with space for dressing, babysitting and breast-feeding; 5,000 lockers to care of the belongings of the pilgrims; the electricity made available through biogas generation from human excreta lights the complex; Upto 50,000 visitors use these facilities every day.

## B. Excreta-based Biogas & Biofertilizer Technology:

Dr. Pathak is probably the first person in the world who has promoted on a massive scale, the idea of obtaining biogas from human excreta collected in large-sized public toilets used by 2,000 to 5,000 persons a day. The first such biogas plant was set up at Patna in 1982 after almost six years of research. The successful and satisfactory functioning of this plant encouraged him to replicate the project all over the country. Excreta contain 66% methane, a burnable gas that can be used for cooking and electricity generation. In the absence of sewerage facility, the best option for human waste disposal, to be used in conjunction with large public toilets, is the biogas plant. It has the added advantage of being a source of renewable energy, which is lacking in the septic tank system. Biogas so produced is used for lighting, cooking, etc and the effluent is a rich fertilizer. To the biogas plant is attached the Sulabh effluent plant, that lowers down BOD of sewage from 200 mg/L to 10 mg/l. The effluent is made colorless, odorless and pathogen-free, fit for discharge into any water body, promoting a better and healthier environment.

The biogas plant consists of an inlet chamber, an anaerobic digester and an outlet chamber. The digester is cylindrical with arched bottom and domed top and is installed underground. Excreta from the toilet seats flow under gravity through covered drains into the inlet chamber and then into the digester. The digested slurry comes out of the digester through the outlet pipe, reaches the outlet chamber and then flows out through covered drains into soakage pits. A large round airtight manhole is provided at the top of the digester for facilitating cleaning (desludging), and other maintenance jobs. A gas outlet pipe and a safety pipe are attached to the manhole.

It is estimated that the 4.56kg of nitrogen, 0.55kg of phosphorus and 1.28 kg of potassium that the average human releases each year could produce enough wheat and maize for one person annually

If the number of users is less than 100, then the use of two-pit Sulabh toilet is preferable but in high-rise buildings, five star hotels and housing colonies, the Sulabh biogas digesters is an environment-friendly technology that should be used.

## C. Wastewater treatment through duckweed:



Only 20% of urban India has sewerage systems for treatment and disposal of wastewater. Wastewater pollutes the natural streams like rivers and the environment. It currently afflicts nearly all the 5000 odd towns and cities of India, posing a big challenge to ensure safe and healthy living environment for ever-increasing number of city dwellers. One of the major problems with wastewater treatment methods is that none of the available technologies has direct economic return. The available technologies are unaffordable due to high capital and maintenance costs.

Duckweed has natural properties, which can treat even the toxic waste discharged from cities except for oil. The oil should be separated before the water is discharged into duckweed ponds. The water is purified and treated to the extent that it reduces BOD and COD and the quality of water is good even for pisciculture. One can rear fish in such water and it has been found on the basis of analyses of the brains and livers of the fishes that they have no harmful bacteria and, are, thus, perfectly edible. This technology is suitable for towns with a population upto 50,000.

Sulabh has taken up research-cum-demonstration projects on duckweed based low-cost waste water treatment in collaboration with concerned government agencies. The ambitious projects are underway in some rural as well as urban areas with direct economic return from pisciculture and use of duckweed as nutritious feed for poultry and animals.

D. Sulabh International Centre for Action Sociology (SICAS):

(i) Sulabh Public School:

Sulabh Public School was established in Delhi in 1992 with an objective of imparting quality education to children of scavenger community. The school is from primary to Xth class and the present strength of the school is around 400, of which a deliberate 60 per cent belongs to the children from scavenger community and remaining 40 per cent from other social classes. This type of class ratio prevents the social seclusion of children and helps them in mixing up with other communities. The mode of education is English and the school is recognized by Directorate of Education, Government of Delhi.

(ii) Vocational Training Centre:

With an objective of making individuals skilled and independent, the first Sulabh center was started in Patna in 1985. Subsequently, another vocational training



center was started in Mumbai, with collaboration of state government of Maharashtra. In Delhi, the Sulabh Vocational Training Center was started in 1992 in the Sulabh Public School campus, with separate facilities for the training center. The training is completely free for scavenger community, whereas other willing participants pay a nominal sum for training.

#### E. Sulabh International Institute of Technical Research and Training (SIITRAT):

SIITRAT runs refreshers and training courses for interested persons for skill building for constructing, operating and maintenance of various low cost water supply and sanitation schemes, and human excreta-fed biogas plants. Special training modules are designed with expert advice and experts of different disciplines are invited for lectures and demonstrations of innovative and update techniques of technology.

SIITRAT has also developed new technology – Sulabh Thermophilic Aerobic Composter (STAC). This technology requires only 8 to 10 days for making compost from any biodegradable waste, without any manual handling during composting. This technology does not require recurring expenditure. This technology is able to convert organic waste in manure and soil conditioner, to prevent spread of weed and disease. Also, it drastically reduces the cartage costs of waste to disposal sites.

#### F. Sulabh International Institute of Health and Hygiene (SIHH):

SIHH was set up in 1994 with a purpose of providing total health care. SIHH is an outcome of Sulabh's emphasis on development of integrated health care approach, with an added emphasis on yoga, use of medicinal plants, hygiene and health conscious attitude, and safe and clean food and drinking water. The focus of this integrated health planning is women, children and youth in rural areas and urban slums.

#### G. Sulabh International Museum of Toilets:

The Sulabh International Museum of Toilets is said to be only of its kind in the entire world. The museum has artifacts and their replica from different civilizations existing at different times. In addition, it has a detailed history of evolution of toilets since earliest available instances from 2500 BC and also detailed linguistic evolution of terms related to toilets and sanitation. The purpose of this museum is to educate students and general public about the historical trends in the development of toilets; to provide information to researchers about the design, materials and technologies adopted in the past and those in use in the contemporary world, to help policy makers to understand the efforts made by our predecessors in this field throughout.

#### Financing

Sulabh International as discussed above gets its financing from the following sources:

1. Charging 10 percent of the construction costs of its projects finances Sulabh.
2. Collecting payment from users covers the maintenance costs.
3. In state-funded sanitation projects, half the cost of a TPPF is subsidized by the state. SC/ST's are entitled for a higher subsidy.

### Replication

- All the technologies under the project are simple and indigenous.
- Their operation and maintenance is easier than other technologies.
- The on -site waste disposal technology can be replicated in various geological conditions.
- The public toilet complexes are most suitable for slums, railway stations, bus stands, court compounds etc. There are various designs of public toilets to suit space constraint area and different income sections of people. Cultural heritage is also taken into view while designing a toilet complex.
- Local skilled person can be trained to implement the whole system, which enhances its replicability chance in any locality.
- Biogas technology is also very simple and replicable at any place. The design is suited even in low temperature as it can bear temperature variation due to its underground structure.
- None of the technologies developed by Sulabh is patented; it is accessible to everybody interested with sanitation. Therefore, the chance of replication is high. More than one million TPPFs have been constructed by the organization itself.

### Legal Dimension:

The practice of defecation in open spaces is very prevalent, especially in rural areas. In addition, there are dry toilets, which are cleaned by human scavengers and the human excreta is carried on the head by scavengers. They have been forced into this humiliating practice for generations and treated as untouchables. In the year 1993, the Indian parliament passed the "Adoption of the employment of manual scavengers and construction of dry latrines (prohibition) act. This law prohibits the practice of construction of dry latrines and human scavenging. However, 10 states (Rajasthan, Jammu and Kashmir, Himachal Pradesh,

Uttanchal, Kerala, Meghalaya, Nagaland, Manipur, Arunachal Pradesh and Mizoram) have still not adopted the act. Sulabh International movement played an important role in passing this act by the parliament. The activities of Sulabh International are legally supported after the passing of this act in 1993.

#### Efficient Service Delivery:

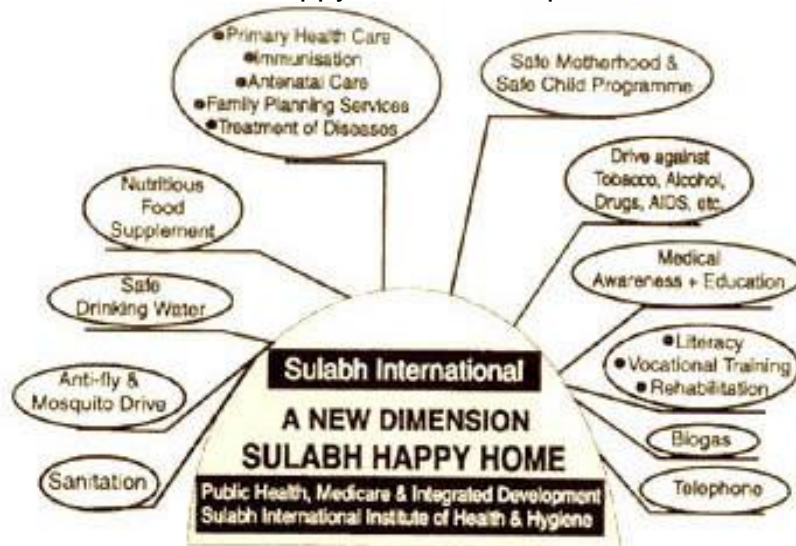
- The Sulabh sanitation technologies are easily marketable due to their comfort, cleanliness, dignity, privacy and aesthetics.
- The Sulabh toilet technology has been globally accepted as the most suitable, affordable and absolutely safe for developing countries by international agencies like the UNDP/World Bank, UNICEF and WHO.
- Sulabh's cost-effective and appropriate sanitation system has been recognized as a global 'Urban Best Practice' by the United Nations Centre for Human Settlements at the Habitat-II conference held at Istanbul (Turkey), in June, 1996.
- Sulabh has been granted Special Consultative Status by the Economic and Social Council of United Nations in recognition of its outstanding service to mankind.
- International St. Francis Prize for the Environment "Canticle of all Creatures" was conferred on Dr. Pathak in 1992 in recognition of his services to the cause of environment and social upliftment of oppressed people.
- The national and international media like Press, BBC, Doordarshan, Zee TV, All India Radio have widely acknowledged the achievements of Sulabh.
- New York Times, The Washington Post, Nation (Bangkok), The Times of India, The Hindustan times, The Statesman, Indian Express,
- India Today, Dinman, Water World, The Telegraph, Source (UNDP monthly magazine) have published articles lauding the achievements of Sulabh in the fields of low cost sanitation, liberation of scavengers, harnessing of energy from human excreta, environment improvement.

#### Sustainability - Future plans:

Believing in Gandhian philosophy and willing to work till the last moment of life for holistic social development of deprived, Dr. Bindeshwar Pathak is still very enthusiastic about the plans he has for further expanding the work of Sulabh. He terms Sulabh as a movement, not an organization, which has to keep on moving till the last human is served. However, he is worried about the lack of interest in fresh talent in this field providing healthy and hygienic sanitation.

## ANNEXURE

Exhibit –1: Sulabh Happy Home Concept



Sulabh Toilet Complexes will turn into a Sulabh Happy Home which will not only provide toilet facilities, but also a Health care Centre for poor slumdweller at a nominal price, covering the cost of medical examination, medicines, etc. it will also provide free immunisation service to children and pregnant women and "free family planning service" to eligible couples, who want to practise small family norms.