Sulabh Sanitation Movement to improve socio-economic conditions of Dalits and environment.

During recent past there has been increasing deterioration of environment and ecological balance due to rapid urbanisation, burgeoning population, industrialisation, destruction of forests, increasing number of vehicles, untreated sewage and industrial effluents flowing into rivers, and uncontrolled use of natural resources resulting in a deep concern for human civilisation.

Over and above, in India one of the major concerns affecting environment is open defecation and manual cleaning and carrying of human excreta by scavengers Dalits (poorest of the poor). The country, on the one hand, has achieved remarkable achievements in recent years in the fields of technology, agriculture, medicines etc. on the other, there are over 700 million people out of one billion population that go for open defecation due to lack of toilets in their homes. Besides, there are about 10 million dry bucket privies cleaned manually daily by over half a million scavengers – a blot on our civilisation. This socio-economically deprived group of people is practically untouchables even today.

Women under the circumstance suffer the most. They have to go for open defecation before sunrise or after sunset; in between they have to suppress the call of nature with painful consequences. Due to insanitation, more than 700 thousand children die every year due to diarrhoea and dysentery.

India is the seat of ancient culture and religious heritage, with several centres of pilgrimage in many cities and towns, visited by many tourists. Similarly, public places like bus stands, railway stations, markets are visited daily by several people. But lack of toilet or unhygienic disposal of human excreta at these places, cause environmental and health problem.

To overcome these problems, Dr. Bindeshwar Pathak, Ph.D., D.Litt., an action sociologist, who founded Sulabh Sanitation Movement in 1970, developed affordable technologies of human excreta disposal both for individual houses and public places.

For individual households Dr. Pathak developed and modified the scavenging free Sulabh compost flush toilet technology with on-site composting mechanism. The system is appropriate, affordable, indigenous and culturally acceptable. So far Sulabh has installed more than a million household toilets to demonstrate that the technology can help in the eradication of manual cleaning of human excreta and open-defecation. The technology does not require scavengers to clean human excreta, as it is decomposed into manure, that is taken out by beneficiaries and used for agriculture purposes. Depending on material used for construction and the size of pit, cost of toilet varies from US $ 10 to US $ 1000 suitable for every economic group of people. It requires only 2 litres of water to flush excreta, thus conserves water. The Sulabh toilets helped liberate more than 60,000 scavengers (Dalits) from cleaning of others excreta. To make the liberated scavengers sustain, Sulabh started vocational training programmes in market oriented trades from them. After getting training they get employment opportunity.

Operation and maintenance of public toilets on pay and use basis is an important landmark idea of Dr. Pathak in the field of community health and hygiene. Sulabh has so far constructed about 6,000 public toilets, mostly in slums where people don't have space to have their own toilets.

Dr. Pathak has developed another technology for complete recycling and reuse of human excreta from housing colonies, high-rise buildings, public toilets, wherein biogas is generated from human excreta, that is used for cooking, lighting, body warming and even for electricity generation. The effluent of biogas plant is treated through a simple and convenient technology consisting activated charcoal and ultra-violet ray, that makes it free from odour, colour and pathogens, lowering its biochemical oxygen demand less than 10 mg/l. Treated

effluent is safe for using in agriculture, and cleaning of floor of public toilets. It can be discharged into any water body without causing pollution. The use of such organic manure will help improve soil texture for high productivity. So far, Sulabh has implemented 117 large size biogas plants in different states of India.

The facilities based upon the two technologies are used by nearly 10 million people on a daily basis making the system sustainable. The technology of waste water treatment through duckweed, developed by Sulabh is sustainable as there is direct economic return in terms of pisciculture. It does not require any treatment plant or high skill. Sulabh has developed a composting technology – Sulabh Thermophilic Aerobic Composter, that requires only 7-10 days to make compost that too without churning. It has also developed a technology to use dried and pulverised water hyacinth with human excreta for production of biogas.

Sulabh has established a Museum of Toilets where information about toilets from 2500 BC to till date is available.

Sulabh provides free of cost training to liberated scavengers in different market oriented trades like electrician, beautician, tailoring, motor driving, typing-shorthand, etc. For the education of children of scavengers, Sulabh is providing English-medium education that includes environment awareness.

Sulabh is a self-sustaining organisation functioning without any aid or grant from any agency. Finance for the aforementioned activities are borne from the monetary residue, garnered through the pay and use system. After meeting expenses over maintenance and overheads the residue is deployed for creating network of activities to help the disadvantaged and deprived and also for research and development etc. Sulabh creates and distributes dividends of social shares. This is the essence of Sulabh.

For his missionary zeal in combating pollution, Dr. Pathak has been conferred upon several national and international awards including Padma Bhushan, by the President of India and the International Saint Francis Prize for

the environment (Canticle of all Creatures). Pope John Paul-II blessed Dr. Pathak for his environmental work. Dr. Pathak, no doubt would plunge with greater enthusiasm in ending pollution and joining others who are engaged in this onerous task as he is being recognized for his services in this field by the United Nations Environment Programme.

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