b. SPHEEHA

The **Society for Preservation of Healthy Environment, Ecology and Heritage of Agra (SPHEEHA)** is actively engaged with DEI in several projects for sensitizing the public towards ecology related issues. It has been undertaking tree-plantation drives in the Dayalbagh lands during Monsoon for the last few years.[5]

About SPHEEHA Mission:
SPHEEHA aims to work for sustainable management of life support ecosystem to protect and preserve physical environment for the cultural, emotional and spiritual well-being of the residents of Agra.[5]

Profile:
The Society is a registered body under Societies Registration Act (Act XXI of 1860). It is governed by a unique set of byelaws. The management of Society is in professional hands, which are highly experienced and dedicated to the cause. Quality and efficiency are the guiding principles for the Society. The Society aims to act as a bridge between the government departments, non-governmental organizations and residents to promote healthy environment for the well-being of the residents by providing specialized inputs, services and consultancy for better management of life support ecosystems of the city and raising public consciousness in matters regarding environment and ecology.[5]

Focus:

- ✓ Sustainable management of life support ecosystems.
- ✓ Protection, preservation and development of environment.
- ✓ Cultural, emotional and spiritual well being of residents.
- ✓ Developing Agra as an Eco-city.

Plantation Drives by SPHEEHA

SPHEEHA has always had a deep concern about the continued deterioration in the environmental quality in the city of Agra. Apart from some haphazard growth of new residential colonies without having adequate provisions for sewage, wastewater and garbage management, the rapid erosion of green belt in these areas to accommodate more and more colonies has been largely responsible for this deterioration and corrective measures are urgentlyrequired.[5]

SPHEEHA, despite its limited means and resources, took a bold step in this direction and launched an intensive tree plantation drive in the city. **In the year, 2009-10 more than 1300 saplings were planted in Zone 2 of the city.** In this programme, the society received good cooperation from the Forest Department, U.P. and National Service Scheme (NSS) Unit of Daylbagh Educational Institute (Deemed University), Agra.[5]

With the active and voluntary support given by NSS volunteers, in 2**010-11 the society was able to successfully monitor the growth of these saplings by timely watering, manuring, termite treatment, pruning, lapping and, wherever possible, installing tree guards and**

fencing. The exercise has generated more than **80% survival of saplings**. Further, at places of causalities, suitable replacements have been made.[5]

In 2012, SPHEEHA has once again planted over 3000 saplings**.** SPHEEHA aims to further proliferate and sustain this activity in coming years by extending its operations in other parts of the city as well.[5]

Water Conservation Initiatives by SPHEEHA

Given the fact that less than 1% of total water available on earth is fit for human consumption, the conservation of water has become the focal point for sustainable development. Ground water is one of the sources of water in Agra and the vicinity.[5]

To enhance the sustainable yield of the existing ground water structure and to arrest he decline in water table, SPHEEHA has taken an initiative to implement Rain Water Harvesting in Zone 2 of Agra. It has also held seminars and discussion, roped in experts and even implanted the system with the help Resident Welfare Associations.[5]

Agra receives approx. 628.6 mm rainfall in a year. This rain-water is captured from roof tops and storm water drain besides surface run-off from the non-paved areas and used for recharging existing dry dug wells.[5]

The goal is to encourage Rain Water Harvesting across the city and even in other areas of the country before it is too late.

Figure 9: View of Rainwater harvesting system in Colony

Figure: Rain water harvesting process

Waste Management Initiatives by SPHEEHA:

SPHEEHA's promotes waste management in the following methods:

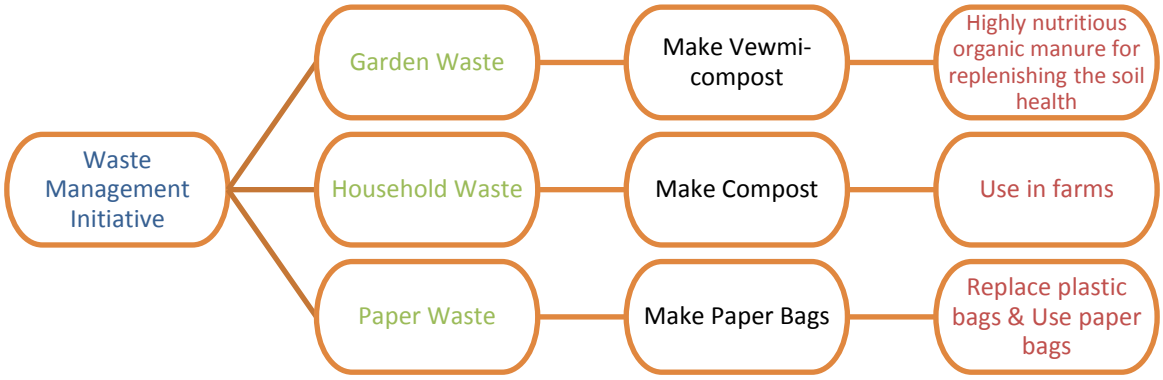
Vermi-Composting of Garden Waste

Garden waste generated in the twon area of Dayalbagh, Agra is being collected and utilized for making vermi-compost. Vermi-Compost is highly nutritious organic manure for replenishing the soil health.[5]

Organic Composting of Household Waste
The residents in Dayalbagh Town area have been trained in segregating bio-degradable waste generated in their houses and a system of door-to-door collection is in place. The biodegradable waste so generated is composted and the organic manure is used in the farms.[5]

Recycling of Waste Paper

Usage of plastic products, especially plastic bags are discouraged. Students in Dayalbagh town area collect old papers every Sunday and teams have been trained to make paper bags and envelopes. This has motivated people to use eco-friendly substitutes and to encourage shops in the vicinity to replace plastic bags with paper bags.[5]



Renewable Energy Initiatives by SPHEEHA

Renewable energy is energy that comes from natural resources such as sunlight, wind, rain, tides, waves and geothermal heat. One of the main interventions by SPHEEHA has been in this direction. Agra gets abundant sun light and therefore it was antural progression propogate the use of solar and non-petroleum based energy sources for the daily energy requirements.[5]

SPHEEHA has been able to achieve this goal by promoting:

Use of Solar Energy for Electricity

The colony of Dayalbagh and DEI University in Agra use Solar based electricity. DEI University became the first univeristy to go 100% on Solar Energy! [5]

Figure 10: View of use of solar system

Use of Solar Energy for heating systems

Solar thermal systems have been installed at institutions of Dayalbagh for water heating & cooking food (solar cookers)[5]

Use of battery operated vehicles

Inside the colony of Dayalbagh, only battery operated vehicles run for the benefit of residents.[5]

Use of Solar Vehicles

DEI university has been operating a Solar Van to provide local transport for its staff.[5]

Figure 11: View of Solar Van

5. Source: http://www.spheeha.org