BEST PRACTICES (2018-19)

Best Practice-1:

Department of Geology

1. **Title of the Practice:** Rainwater harvesting of the University Campus

2. **Goals:**

- Creating for the University community an ambience and learning environment that advances a civil and sustainable society.
- Ensuring the conservation of biological diversity and the protection of this eco-sensitive area by adopting sound and sustainable development.
- Encouraging the University community to pilot and promote sustainable solutions through teaching, research and extension activities that tackle live issues of the campus and its adjacent communities.
- Promoting and protecting the natural and semi natural habitats of existing species in the campus to ensure their survival and growth.
- Harnessing the traditional knowledge and practices of local communities and involving them in the conservation and sustainable use of these resources.

3. **The Context:**

- **Accessibility**: The lush green plantation surrounded by hilly terrain of the campus has helped in creating spaces for academic, residential and recreational areas that blended in with the landscape while also being accessible and eco-friendly.
- **Water Resources Management**: Sustainable water resource management practices need to be addressed to make the campus environmentally sustainable, like judicious water consumption, water sources, appliances, wastages etc. Leakages and overflow of water from overhead tanks were identified. Waste management and disposal pose a challenge at the implementation level. To motivate students in large numbers to cultivate the social and environmental attitude is a huge responsibility. Green initiatives taken up by the institution will benefit the campus through reduced resources consumption and waste diversion.
- **Management of wildlife** in the campus: the campus is home to a number of barking monkeys, several varieties of snakes including the gliding viper, several varieties of birds (parrots, herons, wood pigeons, among the few), hordes of wild bees and a bevy of wild leopards.
- **Security issues:** A campus covering 470 acres with a lot of dense forest cover called for an effective yet unobtrusive security plan.

4. **The Practice:**

- The uniqueness of SGB Amravati University Campus is that it demonstrates respect for environment and stewardship of natural resources while ensuring the quality of life in the campus. The master plan of the university has been designed to ensure and sustain a harmonious blend of human and environmental well being.
- The university has undertaken various initiatives to setting up an Eco-friendly campus.
- **Agroforestry and conservation of biodiversity**: in its endeavour for conservation of healthy ecosystems, the University has embarked on a plantation drive spread over 470 acres of its campus. The variegated cropping of neem, bamboo, papal, gulmohar have been established as livelihood projects within the scope of demonstration farms and seed gardens to demonstrate and promote scientific research in crop development and inter-cropping. Once they start yielding, the university will promote such plantations in the villages and facilitate farmers.
- **Grid connected roof top solar photo voltaic power projects**: the University has started roof top soalr installations at the campus with an installed capacity of 580 KW. A MOU has also been signed with Solar Corporations Energy of India, New Delhi to set up a solar farm in the campus to generate I Megawatt of electricity for domestic consumption and to feed the surplus to the national grid.

- **Water conservation and supply management**: The University has invested enormous resources to ensure sustainable waater management and use.
    - It has created a major reservoir, spread over 10 Acres, with an average depth of 30 feet, by tapping a small stream passing through the campus and the many natural springs in the adjoining creeks.
    - It has created one minor reservoir of an acre or more in area and 15 to 20 feet in depth, by creating bandhs around existing permanent springs.
    - While the reservoirs help in the water harvesting, storm water management and replenishment of the ground water table, the university has also invetsted in five deep bore wells to supply drinking water through a network of three water tanks with a capacity to store 3,00,000 litres at a time.
    - The master plan of the campus provides for three more check dams to ensure that the water resources in the campus are well controlled, managed and utilised.

5. **Evidence of success:** Success of creation of an eco-friendly University Campus is seen in the following:

- **The plantations and their maintenance:**
  - A very hilly terrain has been tackled for the plantation mentioned above, and great care if taken for their systematic maintenance and robust growth.
  - Whatever plants have been destroyed by urbanisation have been promptly replaced.
  - Research is being done by several students in the areas of tissue-culture, pest resistance, seed production and medical properties.

- **Grid connected roof top solar photo voltaic power project:**
  - The 580 KW project is operational at the campus.

- **Waste management**
  - The pilot project to transform solid waste into harmless landfill material is operational for a year now, and will be scaled up shortly
  - The production and use of organic fertiliser from vermin-composting is operational for the last two years.
  - The collection of food waste from the food courts and kitchens has been outsourced to benefit a nearby biogas farm.
  - All dead wood and seasonal trimming of trees in the tea garden are distributed to the labourers and nearby institutions for fuel

- **Water Conservation and supply management**
  - Effective use of earthen bandhs and check dams have ensured zero damage by storm water flooding
  - The minor and major reservoirs have ensured efficient water harvesting and water distribution

- **Wildlife management**
  - To allow for the unhindered movement of animals inside the campus, and their access to water and foliage, only boundary pillars are used to demarcate the land of the University- no walls or fences.
  - No one is allowed to hunt or harm animals and birds in the campus.
  - Faculty and students are working on a project to map flora and fauna in the campus to study and minimise the impact on wildlife and vegetation.

6. Problems encountered and resources required:

- While the opportunities to explore eco-friendly possibilities are evident, actions devoted to conservation for a green campus are expensive.
- Building of bandhs and check dams need expert advice and investment of resources. But once created, they have greatly reduced the destructive power of flooding and storm water surges. They have also created welcome spaces for relaxation and sports for campus community.
- Selection and preparation for locations for academic and residential buildings call for expertise in soil erosion management, drainage, placement of retaining walls and plans for proper landscaping. Though such attention to detail cost a lot of resources, the net result has been buildings that blend into the landscape and a network of drains and walls that effectively control erosion.
- Systematic planning of trees, bushes and vertiver grass to stabilise slopes and embankments were expensive but fruitful.

Rain water Harvesting

Best Practice-2:

Department of English

1. **Title:** Reading Club – *The Book I have Read*
2. **Objectives:** To enhance critical skills and foster enjoyment of literature
3. **The Context –** Owing to too much focus on the examination related study, students often miss out the importance and opportunity of reading for deeper understanding and appreciation of great pieces of literature not just in English but other Indian Literature. As such, a platform is very much needed which would foster their reading, comprehension, and critical skills.

4. **The Practice —its Uniqueness, Limitations:**

   A group of interested candidates is formed who are ready to read and discuss in detail the book of they have read. There is no binding on the medium of expression. Students are free to choose the language of their choice and the book of their interest and taste. Every fortnight a meeting is arranged wherein two readers would talk on the reading of the book they have done. The participants are required to give in advance their name and topic for their address. Even students and teachers from other departments and colleges are permitted to attend and participate in the discussion if they want to. This reading club activity has not been found to be common or routine practice in many departments and affiliated colleges and therefore seldom organised. Hence, the practice has become unique in its own way. It is seen that students coming from rural background and with low confidence level and lack of sufficient mastery & fluency in language often hesitate to come forward and make a presentation despite having deep interest in language & literature and those who have cultivated reading as their hobby.

5. **Evidence of success:** In the beginning few students came forward to make presentations and participate in discussions but over the time there has been gradual increase in their number.

6. **Problems Encountered:** Owing to examination pressure, students generally have a tendency to avoid participation in other extra–curricular activities and develop insular attitude.

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