

7.2.1 Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual.

Best Practice1

1. Title of the Practice

Estimation of biomass of trees

2.Objectives of the Practice:

Estimation of biomass of trees is a tool for getting information of growth contained within a single tree, a species, or a population. Based on the weight of the trees, the potential of trees to capture carbon dioxide can be assessed effectively. Estimation of biomass of trees is a routine practice of the college.

3.Context:

Planting trees is important because to clean the air we breathe. Trees add beauty to their surroundings by greening and cooling the campus area. Measurement of the tree trunk is the best practice to calculate weight, which further can be useful to calculate the carbon dioxide capturing capacity of the tree.

4.The practice:

Estimation of biomass of trees is a unique practice for carbon sequestration

- a) Meeting of staff is the first step to take stock of trees on the campus
- b) Identification of trees with a girth more than 30 cm
- c) Counting all the trees at breast height
- d) Summarising all the data for final conclusion

5.Evidence of Success:

Such practice is significant for research in forestry for staff and students. People outside the campus can also be benefited from the aesthetics of the campus and fresh surrounding

6.Problem encountered:

The unevenness of the tree trunk creates problems during the measurement

7.Resources required:

Basic accessories such as measuring tape and calculators are required for the collection and analysis of the data.



Figure1-Demonstration on estimation of “Tree Biomass”



Figure 2-Measurement of a “Tree Girth”

Best Practice 2

1. Title of the Practice:

Utilisation of AC condensed water in a laboratory

2.Objectives of the Practice:

Energy conservation is important for reducing dependence on conventional energy resources, it also helps save energy costs and energy bills. Overuse of water leads to scarcity of water and lowers the groundwater table. AC condensed water if properly collected can be utilized for many purposes. Our college has taken initiatives for its use in the laboratory for practical purposes.

3.Context:

The distilled water generation in the laboratory as well as procured from the market yields a high cost. The energy required to heat the water to boiling in the water distillation process is expensive, in this context the utilization of AC condensed water is effective to best use in the laboratory for general practices and washing laboratory glassware.

4.The practice:

Collection of AC condensed water with the involvement of students is beneficial because

- a) The additional cost of distilled water generation in the laboratory is reduced to its maximum
- b) Cost of energy is reduced
- c) The time required to generate water is also reduced
- d) Raw Water required to produce distilled water is also reduced
- e) Students could learn the importance of water and energy conservation
- f) The distilled water demand of the laboratory is fulfilled

The collection and utilization of AC condensed water involve the following activities.

- a) The Meeting is organized at the start of the session

- b) All the formalities like the use of fresh PVC container for a collection of AC condensed water is completed
- c) AC condensed water from principles cabin is routinely collected
- d) Water quality parameters are checked before use for laboratory practices
- e) The routine laboratory practices are performed using AC condensed water
- f) Surplus water is also used for washing glassware
- g) The quantity of condensed water obtained from the AC is adequate to fulfil the demand
- h) The cost of purchasing distilled water from the market is almost negligible

5.Evidence of Success:

Students are taking interest in this practice. They are regularly collecting and analyzing the water for its purity prior to its use in the laboratory

6.Problem encountered:

The collection efficiency of AC condensed water is reduced during non - operation of AC

7.Resources required:

Except for the PVC containers and active participation of staff and students, no other resources are required



Figure 3-Demonstration on “Air Conditioners Condensed Water”