

## Criteria 7: Institutional Values and Best Practices

### 7.1.4.: Water Conservation

#### 1. Rain water harvesting:

In college campus rain water is harvested from the roof top of all the buildings and also running water percolated from the hills behind the college campus are also harvested. Open well and bore wells are recharged scientifically in order to maintain the quality of the potable water. Rain water after the commencement of the rainy season, rain water is is also harvested for the laboratory use. As distilled water is the major requirement in the chemistry laboratory. Rain water harvesting is done through the permanent infrastructure constructed and installed at roof top, bore well and open well. Most of the bore well and open well is well protected from the interference of the external polluting factors hence harvested water is passed through pre-constructed sand layer filters around the bore well.



Figure 1 Bore Well Recharge



Figure 2. Rain Water Harvesting from Roof top of the buildings



Figure 3 Collection of Pure Rain water for Laboratory Use

## 2. Open Well Recharge:

In campus one open well is maintained. Rain water percolated from the hills is collected through the well constructed water canals. Water canals are well constructed and closed to avoid the, running soil, dust, garbage and external polluting agents. After the wash off of the first rain water, from second rain water is allowed to use for the open well recharge. Most of the water is naturally well filtered through the rocks of mountain hence is the main source of potable water.



Figure 4. Open well Recharge

### 3. Waste water Recycling:

Most of the waste water is released and passed through the municipal common sewage canal. There is no treatment requirement in the campus as most of the water is. Most of the laboratory hazardous chemical wastes are detoxified by adding salt and finally diluting by water then is released.

### 4. Maintenance of water bodies and distribution system in the campus:

In campus open wells and Bore wells are the main source of the potable water. Most of the water bodies are covered with steel gauge and protected from the entry of the animals, plants and garbage. All the bore wells are covered with well designed structures and electric submersible motors are installed. In campus two open wells are very well maintained in order to maintain the quality of water and to avoid from the Eutrophication. One open well is fully closed with iron gauge while another is kept open with installation of aeration facility. After fully recharging the water bodies they becoming polluted and microbial growth may takes place in order to avoid the same open well is aerated by lifting the water and is shown in fig. 5.



**Figure 5 Maintaining of water bodies by Aeration**