

**AICTE ACTIVITY POINT PROGRAMME**

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<b>TITLE: Developing Sustainable Water Management System</b>	
<p><b>REPORT:</b></p> <p>Water is a priceless gift for humanity by mother nature . Life without water is not feasible. Even though water is a renewable resources, due to improper re-cycling and wasteful use , It has become a scarce resources in many part of country. The water disputes between states , and nations ,thanks to the lack of fore-sight of the hind eyed politicians have played havoc and caused untold and immense misery to common people.</p> <p>One of the most debatable and relevant issues on the contemporary time is sustainable development of water. It is becoming the need of the hour. As the term simply explains Sustainable development aims to bring a balance between meeting the requirements of the what the present demands while not overlooking the needs of future generations.</p> <p>Sustainable water management requires allocating between competing water sector demands, and balancing the financial and social resources required to support necessary water systems. The objective of this review is to assess SWM in three sectors: urban, agricultural, and natural systems. This review explores the following questions: (1) How is SWM defined and evaluated? (2) What are the challenges associated with sustainable development in each sector? (3) What are the areas of greatest potential improvement in urban and agricultural water management systems? And (4) What role does country development status have in SWM practices? The methods for evaluating water management practices range from relatively simple indicator methods to integration of multiple models, depending on the complexity of the problem and resources of the investigators. The two key findings and recommendations for meeting SWM objectives are: (1) all forms of water must be considered usable, and reusable, water resources; and (2) increasing agricultural crop water production represents the largest opportunity for reducing total water consumption, and will be required to meet global food security needs.</p> <p>The management of sustainable water aims to assort the various aspects of water</p>	

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management, and maximize benefits. This can be done through several processes such as: water reuse, water collection, and minimum water consumption. Nature maintains a delicate equilibrium through ecosystem processes, while the irrational human consumption causes imbalance. Sustainable water management can be thought of as the minimization of water use through making changes to the behavior of users, in addition to the application of water efficiency technology. Following are some of the methods and approaches for applying sustainable water management are:

- School sanitation facilities are among the most widely used water facilities so water-saving appliances, such as: low-flux faucets and appliances with small economic flush tanks can be used.
- Use advanced irrigation methods such as dripping and rationalization. Choose the appropriate times for irrigation to reduce evaporation and select local plants that adapt to the nature of the site.
- Reuse the water so that the gray water is separated from the water used in the sewers.

Sustainable development is a wonderful way to conserve the natural resources we have by changing our approach towards the use and development of technologies. We should not stop using these resources rather we should use it in a sustained manner. So that it does not become extinct and lead to the extinction of species. The effect of the water sustainability programs has been seen in the suppression of the chances of water scarcity. The water reclamation process, where used water is being recycled by making it suitable for consumption, the process has saved a huge quantity of water from getting wasted. Manual control measures of keeping water taps closed and preserving used water for using them for other domestic purposes have also contributed to the active water sustainability program.

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