WATER CONSERVATION AND RAINWATER HARVESTING POLICY

1. Water Conservation Measures

1.1 Ablution Water Reuse

To promote water conservation across all levels, from agricultural lands to domestic use, UAF takes the following measures:

1. **Ablution Water Segregation and Reuse**:
   - Develop a comprehensive plan and design for ablution water segregation and collection at the Central Mosque of UAF (University of Agriculture, Faisalabad) and other mosques within the campus.
   - Utilize this collected water for irrigating adjacent lawns, thereby achieving fresh water conservation.
   - Installation of sensor-based taps in mosques can lead to significant water savings (approximately 70-80%). This reduction in water usage will result in less grey water, ultimately reducing the cost of storage and re-use infrastructure.

1.2 Toilet Water Efficiency

To address water wastage in campus toilets, we recommend the following:

Flush Tanks with Adjustable Water Provision:

- Install flush tanks that allow users to adjust the water flow based on their requirements.
- Users can choose between less or more water usage, optimizing water efficiency without compromising hygiene.

2. Rainwater Harvesting

Rainwater harvesting offers substantial benefits for water storage, irrigation, and aquifer recharge. We propose the following rainwater harvesting strategies:

1. **Lawns and Grounds**:
   - Develop sloping lawns and grounds to facilitate rainwater collection.
   - Implement "soak ways" along these sloping areas to capture harvested rainwater.
   - Soak ways consist of layers of soil, fine sand, coarse sand, and gravel, allowing for groundwater recharge while enhancing the landscape.

2. **Green Belts Along Roads**:
   - Design green belts along campus roads below ground level.
   - These green belts can also function as soakaways, contributing to groundwater recharging.

3. **Rooftop Rainwater Harvesting**:
   - Explore the potential of rooftop rainwater harvesting.
   - Consider implementing a model rooftop rainwater harvesting setup similar to the one already developed at the Engineering Faculty in UAF.
   - By adopting these water conservation and rainwater harvesting practices, we can contribute to sustainable water management and environmental stewardship within our campus community.

WATER CONSERVATION, RECYCLING, AND RATIONAL USE POLICY

1. Rooftop Rainwater Harvesting

1.1 Purpose and Implementation

The University of Agriculture, Faisalabad (UAF) recognizes the critical importance of water conservation. To this end, we propose a comprehensive plan for rooftop rainwater harvesting across the entire campus. The following measures will be implemented:

1. **Plastic Tanks for Rainwater Storage**:
   - Multiple plastic tanks will be strategically placed on rooftops to temporarily store rainwater.

- This harvested rainwater will serve two primary purposes:
  - Groundwater Recharge: The stored rainwater will replenish the groundwater table.
  - Small-Scale Gravity-Driven Drip Irrigation: The rainwater will be used for efficient irrigation of green spaces.

2. **Phased Implementation**:
   - By 2030, 30% of the total UAF buildings will transition to rooftop rainwater harvesting systems.
   - Between 2031 and 2040, the remaining 70% of university buildings will adopt rooftop rainwater harvesting.

3. **Groundwater Recharge Sites**:
   - Design and develop dedicated groundwater recharge sites across the main and PARS (Punjab Agricultural Research System) campuses.

2. Waste and Saline Water Management

2.1 Effluent Treatment and Recycling

The Estate Management Department plays a crucial role in sewage disposal and water pollution control within the campus. We recommend the following initiatives:

1. **Effluent Treatment**:
   - Ensure proper treatment of effluents and hazardous discharges before disposal into nearby drains.
   - Explore cost-effective and innovative treatment technologies.

2. **Treated Wastewater for Irrigation**:
   - Utilize treated wastewater from the main and PARS campuses for irrigation purposes.
   - This sustainable practice contributes to water conservation.

3. **Optimizing Canal Water Usage**:
    - Address over-irrigation in lawns and grounds.
    - Store precious canal water supplies in farm storage ponds near tubewells.
    - Blend this high-quality canal water with saline groundwater to enhance overall irrigation water quality.

3. Rational Water Use for Crops

The Department of Irrigation and Drainage, in collaboration with the Water Management Research Center (WMRC), UAF, advocates for efficient water application techniques:

1. **Improved Irrigation Methods**:

   Promote the adoption of:

- Drip and Sprinkler Irrigation
- Furrow Bed Planting
- Laser Land Leveling
- Skimming Wells
- Implement these techniques across all agricultural fields at Campus Farms to enhance overall irrigation efficiency.
- By implementing these policies, UAF aims to be a leader in sustainable water management practices, ensuring a greener and more resilient campus for generations to come.