Water Policy in the University of Baghdad

Water is considered one of the basics of life; and there is no facility for human life within any development sector that could work or live without the availability of suitable water in quantity and quality. In fact, there are many problems that confront this fact in university life. Accordingly, the main aim of the water policy adopted by the university is to provide water in a sustainable manner, with a better quality and lower operational costs. Such a step helps to ensure overcoming and reducing the current reality of water cuts in the daily life. Further, it encourages to step forward in this vital field on the part of students, faculty and staff. To that effect, the University of Baghdad relies on several policies for the purpose of meeting the optimal use of water, and as follows:

1. Water Rationalization Policy

The main aim of water rationalization policy is to invest most of the available water, reduce its waste, preserve it and its sources, reduce losses, and enhance its areas of use with the highest levels of efficiency. Such a policy contributes and reduce the gap and address the imbalance between the increasing demand for water and the limited resources. Among the procedures that encourage to optimize the use of water are the following:

- 1. Encouraging university formations to rationalize water use and increase the conservation program.
- **2.** Spreading the culture of rationalizing water consumption in the university by promoting awareness, and guidance through the media.
- **3.** Holding educational and awareness workshops and seminars to reduce the waste of water.
- **4.** Encouraging the use of faucets equipped with automatic sensors to significantly reduce water consumption and waste.
- **5.** Encouraging, for drinking purposes, to find systems that treat water and make it drinkable, or to buy bottled water from the local market at low and subsidized prices. A laboratory can also be established inside the university for this purpose under a specific scientific supervision and a field follow-up that involves continuous field examination.
- **6.** Using modern methods of irrigation, such as sprinkler and drip irrigation, which will lead to saving the amount of water to more than 80% of the water that was used within the previous irrigation systems. In addition, examining the possibility of using modern technologies within the agricultural activities.

2. Water Resources Policy'

There must be several sources of water that are optimally used, and relied upon, as illustrated below:

- **1. Surface Sources from Tigris River**: Tigris River water is utilized after being filtered from dust and silt at locations close to the water source. Then, it enters into a large system that is linked with the system of watering gardens and green spaces.
- **2.** Underground Sources of Water through Wells: It is possible to dig wells as needed to be a supportive source of water, noting that the groundwater level is close to the surface of the earth and providing it is inexpensive.
- **3. Air Resources (Rainwater)**: Rainwater can be used by directing it on the ground to be collected in a concrete basin or a specific reservoir (water harvesting). Or, it can be used directly within the agricultural mechanisms of the university according to a future field plan.
- **4.** Working on setting up a mechanism to collect the water generated from the air conditioners and using it plants irrigation.

3. Water Replacement and Reuse Policy (Water Sustainability Policy)

This policy activates the policy of substitution and reuse to manage efficiently scarce water resources. It also maximizes the benefits and returns, makes a maximum use of treated water for

non-drinking purposes, and provides suitable methods and means for storing it until use. Thus, it helps to find a new water source that can replace fresh water and reuse it safely in irrigation.

The policy further entails expanding the use of treated water for agriculture to the maximum extent possible, taking into account that the mixed treated wastewater and treated wastewater must conform in terms of quality and quality to the standards of the World Health Organization (WHO) and the Food and Agriculture Organization.

The policy also implies expanding the introduction of modern technological methods, rehabilitating old sewage stations, and using modern technologies for treatment, in a way that makes the quality of reclaimed and treated water ready for use in various fields, and that allows additional quantities.

Gray water: Gray water, resulting from the use of toilets, is one of the complementary sources to traditional water sources. However, methods, programs and instructions for its implementation and use must be developed in a way that does not cause environmental damage, pollution or health risks. This is because the use of gray water should be specified for watering gardens and plants.