ABSTRACT

This study has analyzed and evaluated the current water pricing policies in Ramallah and Al-Bireh District, which do not satisfy the full cost recovery principle. An important aspect in analyzing the current pricing policies was calculating the true cost/benefit values for investment, operation & maintenance, unaccounted for water and depreciation in order to determine the efficiency of the current tariffs in water utilities. Moreover it looked for Public affordability and willingness to pay that should be assessed towards judging the sufficiency of these policies. Area under study is the center of West Bank, precisely Ramallah and Al-Bireh District; under the occurring political situation it was difficult to move within the district. The current increasing block tariff system applied by Jerusalem Water Undertaking (JWU), and the other providers in the district was in range of (4 - 7) NIS/m$^3$, the majority of the population surveyed did not understand how the block system functions and most of them replied that they were not willing to pay any higher amount than 5 NIS/m$^3$ for water services, whereas the same sample replied that they were willing to pay a higher price for disposal of the wastewater. Consequently, conducting this study was difficult as it was based on a field survey involving the distribution of a questionnaire and an analysis of the results in order to build a model that showed a valid understanding of the affordability and willingness of consumers to pay their water bills.

The main objectives of this research were to evaluate of the current tariffs for water and wastewater services, suggest modifications if needed, and find the factors affecting tariffs.

These were achieved by conducting a questionnaire survey that covers 400 household, analyses of the results using SPSS software, and then two models were constructed to check the hypothesis based on both categorical data analysis, in addition to multiple linear regression.
Results analysis revealed that the current tariffs need adjustment and that the proposed variables were significant to willingness of consumers to pay for water and wastewater fees. It can be said that the socio-economic status of residents had no significant impact on their willingness to pay for wastewater or water significantly. However, there were many other determinants that affect consumer willingness to pay for the water services, such as: Knowledge of price paid per cubic meter of water, cost of emptying cesspits for inhabitants who rely on cesspits for sewage collection, availability of water from other sources, and the payment methods used to settle the bills. The percentage of what was paid for water bills to the total income ranged from 4.99% to 5.89%, which did not contradict with the hypothesis stating that 3-5% of the income was spent on water bills. The analysis also showed that income was not a variable of influence, as it had a confidence value not less than 0.05 which was the opposite of the hypothesis.