

# **ASSESSMENT OF IMPACT OF WATER POLLUTION ON HUMAN HEALTH IN THE CITY OF CHENNAI, TAMIL NADU**

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## **ABSTRACT**

The present work assesses the economic costs of water pollution in the different regions of Chennai city, the state capital of Tamil Nadu. The assessment is carried out in terms of losses to human health. The cost estimates are based on the detailed primary (household level) data collected from an intensive study of three regions in Chennai – Manali, an industrial cum residential area; Adyar, a residential area; and Thyagaraya Nagar (T. Nagar), a commercial cum residential area. The cost estimate of total economic loss, replacement cost and willingness to pay for avoiding one or one more day of illness are based on the human capital and the various replacement activities adopted to escape from the damages caused by water pollution. The assessment carried out revealed that the impact of water pollution is quite substantial in monetary terms. Ground water contamination is the major problem faced in the Manali region, which occurs due to the waste water discharges from the various industries based in this region. Central Pollution Control Board has identified Manali to be the 10<sup>th</sup> most polluted region in India as per the nation-wide water quality analysis and management carried out under the provisions of The Water (Prevention and Control of Pollution) Act, 1974. One of the highly posh regions of Chennai, Adyar faces few problems of water contamination, sewage and drainage to be the causes of water pollution in this region. The main reason behind this cause is the high contamination of River Adyar resulting in a large number of mosquitoes in Adyar. The commercial cum residential area of Chennai, T. Nagar also faces few problems of water pollution as Adyar. The compensation principle for water pollution might work if the estimates of damage are realistic. Further, mere passing of laws and creating institutional structures are necessary but not sufficient to address the environmental problems. Policies should be implemented in their right perspective. Institutions should be strong enough, with more autonomy and powers, to deal with the problems at hand.