

Distributions of Pb, Cr, Cd and Hg in
the soil, irrigation water and vegetable
products of Dhapa, the Kolkata city-
garbage based and wastewater
irrigated vegetable fields

ABSTRACT : Now-a-days the rapid growth of population and advanced industrial activities are producing enormous amount of wastes. The handling and disposal of city solid wastes, sewage and industrial effluents have become a priority policy issue. The use of solid waste as topsoil of vegetable cultivation and wastewater irrigation in Dhapa area (the eastern fringe of Kolkata Municipal Corporation) has long history of about 120 years. This unique system of recycling municipal waste, both solid and liquid, into the agricultural products in Dhapa has developed a highly organized, efficient and profitable return of great socio-economic upliftment. This paper deals with the distribution of toxic metals e.g. Pb, Cr, Cd and Hg in vegetables, irrigated water and topsoil in Dhapa area. It also focus to have an idea the intake of these individual metals by the consumers, comparing the values with the acceptable daily intake (ADIs) or provisional tolerable weekly intake (PTWIs) as guided by WHO/FAO.