

Abstract for the International Union for the Scientific Study of Population
XXV International Population Conference, France, July 18-23, 2005

ABSTRACT

Medical Waste Management - How safe?
A Case study of Shillong Urban Agglomeration

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With rapid urbanization in the developing world the cities are experiencing rapid population growth and the local governments are often not able to provide for even the most basic needs for their citizens including waste collection disposal and management. Shillong the hill capital of Meghalaya situated in the North Eastern part of India faces similar problems due to its haphazard manner of growth. The population of Shillong urban agglomeration is growing at a rapid pace. In contrast the urban amenities including the medical needs of this ever increasing population are growing at a much slower rate and are indeed meagre.

Various categories of medical waste requires special mode of storage, treatment and disposal outlined by the Ministry of Environment and Forest under its notification of "bio Medical Waste (Management and Handling) Rules 1998. But this has been the most neglected concern in the majority of the urban centres of India and in Shillong too most of the health centres do not follow the rules which disposing off their infection wastes.

The changing scenario in health - care centre includes increase in the use of antibiotics, cytotoxic drugs, use of corrosive chemicals and radioactive substances. Rising cases of HIV and other infectious diseases coupled with unscientific practices like discharge of untreated waste and chemical discharge into the sewage system and in case of Shillong into the streams leads to severe contamination of the water bodies in particular and the environment in general. Needless to say this has serious repercussion on human health.

This paper highlights the type and amount of waste generated by the medical centres and its present method of disposal of the bio-medical wastes and its impact on the environment. It also attempts to analyse as to how far the guidelines of bio-medical waste (Management and handling rules are followed. Shillong being located in the highest part of the Meghalaya plateau at an average elevation of around 1500 metres above mean sea level is in the watershed zone. From here the streams either flow north into the Brahmaputra basin, on the south towards the Surma valley into Bangladesh. Hence contamination of these primary order streams at source leads to serious problems for the people living in the downstream areas as they use the contaminated water created by upstream population. It is in this context that the present paper attempts to discuss as to how the present disposal of bio-medical wastes into the streams of Shillong are affecting the general water quality of these streams.

The present paper is based on both secondary and primary data generated by questionnaires, interviews.