

Urbanization deteriorates Manipur's Nambul river

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The urbanization race has just about begun in Imphal, the capital city of Manipur in India's northeastern region, however it has started showing its fangs – the most palpable being the pollution of the Nambul River running through the city covering an area of around 10 kilometre dividing its area into almost two equal halves providing the people extremely convenient to throw and dump garbage and making their drains out through it.

Out of this 10 km stretch, the most polluted part of the Imphal city begins from Hump Bridge to Keishamthong bridge – a distance of hardly 1.5 km. Nambul or Yangoi Achoyba originates from Lilan Waiphei area of Kangchup hills in Senapati District and passes through two important districts – Imphal West and Bishnupur – through its over 54 kilometre long journey to the Loktak Lake – the largest fresh water lake in North East India.

The river has now become not only the most polluted river in the state but also a model river of pollution in the region. Even the National Rivers Conservation Plan under Union Ministry of Environment and Forest had listed it among the country's polluted rivers. The stretch of the river in Imphal city serves as the major garbage dumping ground of almost all the shop keepers, vendor and residents from both sides of the river. Unchecked and untreated drainage system existing, which open its mouth to the river directly, particularly within the Imphal City area, due to improper and unplanned urbanization.

Besides random throwing and dumping of their households waste wrapped in plastic bags in broad daylight and during the night time that decorate both the river banks is an eye sore. Burning down the heap of waste materials containing plastic bags at the river bank without acknowledging its disastrous impact on health of the water body which directly affects health hazard of the general public. Above all widespread using of fertilizer and pesticides in the fields especially during kharif season also deteriorates the river's water body. Nearly 60 percent of state's agriculture land in the valley areas which covers 1.57 lakh hectares of land out of state's total 2.34 lakhs hectares of agricultural land uses pesticides. "The most alarming thing is the excessive use of fertilizer and pesticides in a single crop (paddy)" felt K Jiten, state's weed specialist. Government monitors use of pesticide till late eighties but they now decontrols it following central government's directive.

Thus State Agriculture Department's plant protection unit at Mantripukhri near Imphal had been authorizing as many as 345 outlets in Manipur by this year end to sale the pesticides for the needy addicted soil and farmers. Out of state's annual fertiliser consumption of around 50,000 metric tones, Imphal west and Bishnupur district wherein the river flows uses 9165 and 5702 metric tones last year as per official records. Absence of sewerage system in the city, the residents on the eastern side of the river mostly non-local business community who live with modern amenities compelled to use it as the main outlet for their drainage system through more than fifteen nullah emptying into the river. Those locals on the western side also follow the same even though the number of outlets was minimal. According to Imphal Municipal Council (IMC), the daily volume of solid waste in Imphal city alone is estimated in between 80-100 metric tones. But due to shortage of manpower, equipments and lack of coordination between government departments, the IMC could not dispose the garbage in time.

IMC's Health Officer Dr K Arunkanta said, "It is very difficult for us to fulfill the public demand as we don't have enough fund or equipment." The public also has lack of knowledge about disposing their garbage. He also want some stricture against those who violates its rule apart from introducing a proper solid waste management programme in the state. Interestingly the IMC had engaged four private parties since July this year to assist the collection, transportation and disposal of solid waste in and around the 2.46 lakhs (2001 census) populated Imphal Municipal Council area measuring 33 sq km. At present IMC managed to dispose only about 12-14 trips of garbage in day against the demand of 35 to 40 trips. For this the council utilizes 11 vehicles including 4 tractors, 5 Leyland trucks and 2 mini trucks.

"But we cannot operate it regularly due to paucity of fund," L Mohendro, Sanitary Officer in charge of the Council said, "however we're compelled to do it round the year despite getting salary for six months only". The government's failure to see the grievances and other unpronounceable factors including the political influence made IMC's life more miserable.

In olden days, the river Nambul was a source of water for the Imphalites. However, the pressures of urbanization have crippled both systems, with garbage being dumped and flow of nightsoil from houses directly into the main channel, the river is today a stinking open sewer. The pollution rate of the river water has been suddenly on the rise during the lean season particularly in winter which in turn spreads not only water borne diseases but dysentery, typhoid fever, hookworm disease, jaundice, poliomyelitis, Pneumonia etc. The joining of popular Naga nullah, a small stream cum nullah which originates from Koirengai hill range under Senapati district, after passing through the main colonies of Imphal city, with Nambul river at Hump Bridge point in Imphal's main market Khwairamband Keithel also helps in polluting the water quality in it's middle course.

"We should think about it seriously, every one talks about the dumping of garbage and other waste products," Dr M Gonchandra, Principal Scientific officer of the Manipur Pollution Control Board (MPCB) explains, "so we should not neglect Naga nullah." He said the emptying of nightsoil and hazardous articles directly to the Naga nullah is the main factor for polluting the water quality of the river. But the government is yet to take its legal action against those who violates the rules and regulations of the government as per Pollution Control board due to their lack of the government's 'seriousness' in saving the river from pollution.

MPCB have been conducting tests of the Nambul water at two sampling stations-Hump Bridge and Heirangoithong regularly once in every three months to monitor the status of the water quality while Environment and Ecology Wing of State's Forest Department at Eroishemba, Naoremthong, Hump-bridge, Keishamthong, Hiyangthang, Upokpi and Toubul points at regular intervals. Though there is flow of fresh water during monsoon season (June, July and August), the quality of the water is very during post monsoon season (November to January). Except for irrigation purposes, no one uses Nambul water in Imphal. Residents of Shamourou, Wangoi, Mayang Imphal, Upokpi villages in Imphal west district on the either side of the river also used the Nambul water for the same.

Dr T Brajakumar, an analyst of Environment and Ecology wing who had been studying the life of the Nambul River pointed out that the water of the river could be used only for irrigation purposes. "Nambul's water cannot even used for bathing purposes," he added. "Because, it contains huge quantity of high bio-chemical oxygen demand (BOD)," he said. BOD should be very low for human consumption-but the water available in between Hump bridge to Keishamthong bridge in Imphal contains 52 mg (BOD) per litre during pre-monsoon and post monsoon season, he added. As echoed by experts, the water quality of the Nambul River is not consumable as of now as per the reports available, so it's high time to save Nambul in order to save Loktak Lake which in turn would help in preserving the ecology of its surrounding as well as the region.

Nambul's deteriorating condition which deliberately reflects the negligence of its heirs who are supposed to take care. A question is still lingering, Who will come and save its ecology and environment? Is anyone from USA or UK or from Japan or Delhi would come here and to save its life?