

SOLID WASTE MANAGEMENT IN KOHIMA

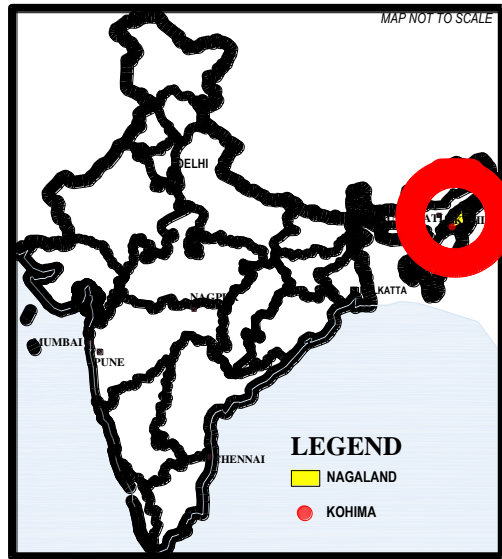


Dr. TOSHIMANEN OZUKUM
Addl. Director,
Municipal Affairs Cell, Urban Development,
Nagaland: Kohima

BACKGROUND

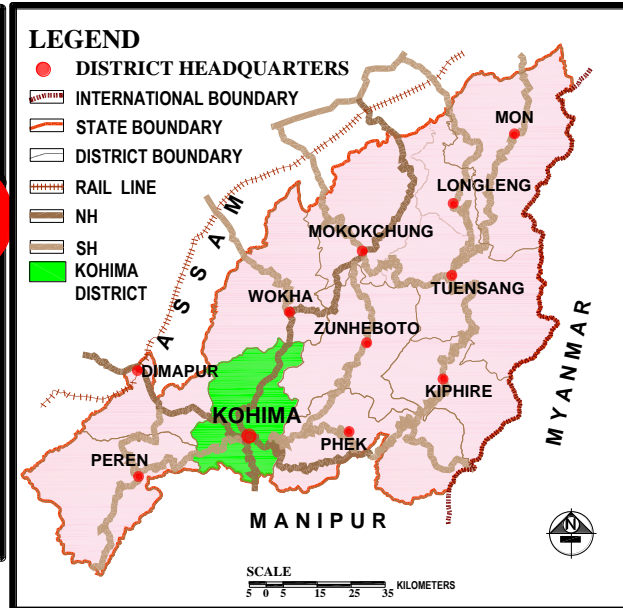
- o Solid waste management is one of the most neglected urban services.
- o It has lacked due attention in India and its urban areas.
- o Solid waste Management (SWM) is one of the important obligatory functions of Urban Local Bodies in India.
- o Implementation of Municipal Solid Waste (Management and Handling) rules 2000 by August 31 2003 by ULBs has become a distant dream.
- o This service falls far short of desired levels resulting in problems of health, sanitation and environmental degradation.

INTRODUCTION TO THE STUDY AREA



SOURCE: MAPS OF INDIA

LOCATION OF KOHIMA IN INDIA



SOURCE: GIS CENTRE, NAGALAND

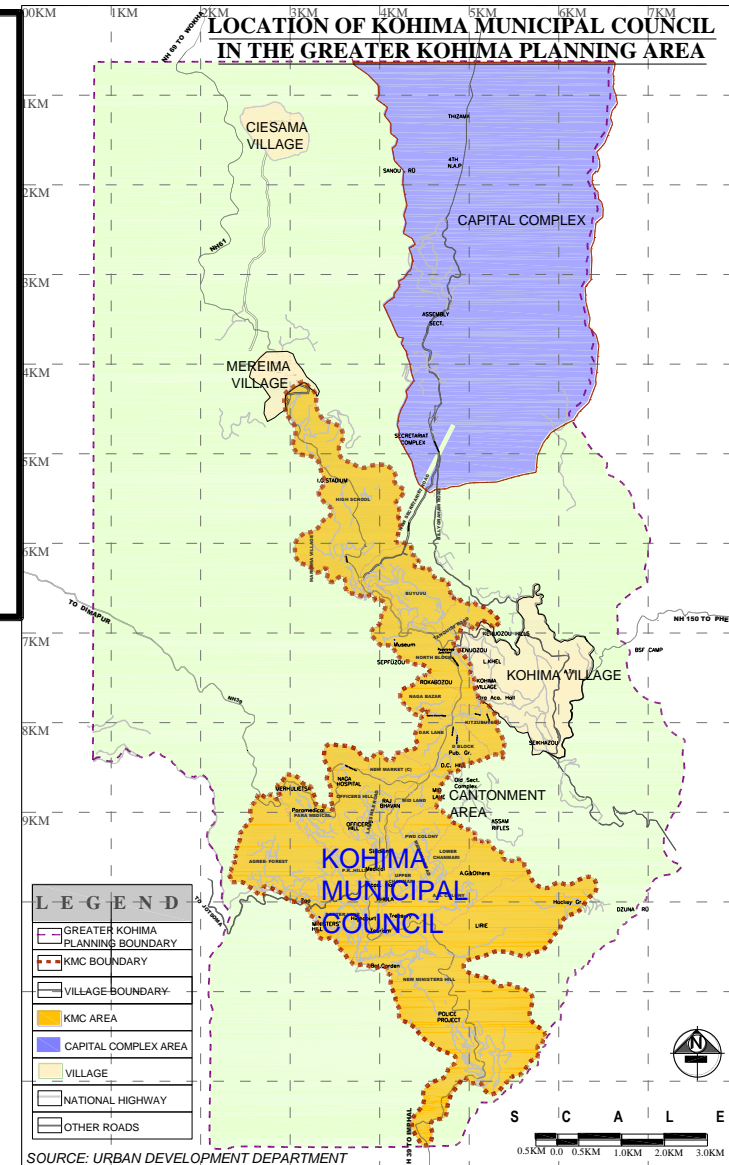
ORIGIN AND HISTORY

1878: KOHIMA ESTABLISHED AS CHIEF ADMINISTRATIVE CENTRE

1881: THE DISTRICT OF KOHIMA ESTABLISHED AS A SUB-DIVISION OF FORMERLY **NAGA HILLS DISTRICT** WITHIN ASSAM

1957: UNION TERRITORY BY AN ACT CALLED THE NAGA HILLS TUENSANG AREA ACT OF 1957

1963: NAGALAND BECAME A FULL-FLEDGED STATE WITH KOHIMA AS ITS CAPITAL



KOHIMA MUNICIPAL AREA CONTEXT

- o Kohima Municipal Council is a young body
- o Kohima city has been increasing in population due to its administrative importance, trade and commerce
- o The natural topography is a constraint
- o Kohima receives heavy rainfall most part of the year
- o Health and environmental concern related with solid waste
- o Aspiration for better services and improved quality of life

INTRODUCTION OF KMC AREA

LOCATION

- KOHIMA LIES BETWEEN 94° 5' 11" TO 94° 7' 12" EAST LONGITUDES AND 25° 28' 20" TO 25° 31' 51" NORTH LONGITUDES.
- IT IS SITUATED ON THE DIMAPUR TO IMPHAL NH 39

TOPOGRAPHY

- RUGGED AND HILLY TERRAIN
- MEAN ELEVATION OF THE CITY IS 1468 M (RANGES FROM 150M -3000M)
- LIES IN SEISMIC ZONE V
- PRONE TO LANDSLIDES DUE TO HEAVY RAINFALL

REGIONAL LINKAGES

ROADS

- THREE NATIONAL HIGHWAYS 39, 61 AND 150. WELL CONNECTED WITH STATE CAPITALS OF NEIGHBOURING STATES

RAIL

- NEAREST RAILWAY HEAD IS AT DIMAPUR, THE LARGEST URBAN CENTER AND COMMERCIAL CAPITAL WHICH IS 74 KM AWAY

AIRPORT

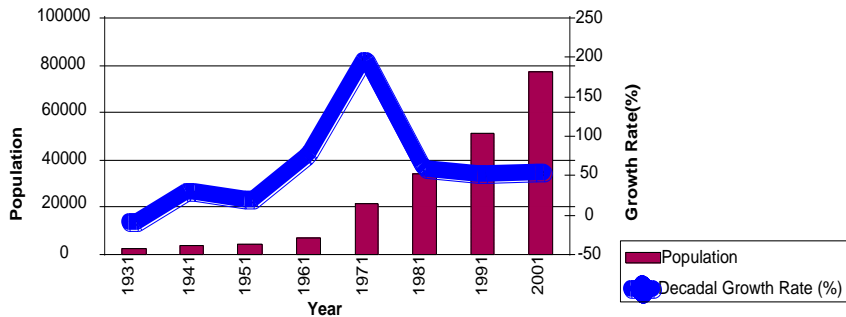
- NEAREST AIRPORT IS AT DIMAPUR AND CONNECTED DIRECTLY WITH KOLKATA AND GUWAHATI

KOHIMA MUNICIPAL COUNCIL

- **AREA** **10.98 SQKM**
- **POPULATION** **146914 (2011)**
- **NO OF WARDS** **19**

SOCIAL AND DEMOGRAPHIC PROFILE

Kohima Municipal Council-Population Growth Rate-1931-2001



SOURCE: Census of India, 2001 & Urban Development Department, Govt. of Nagaland

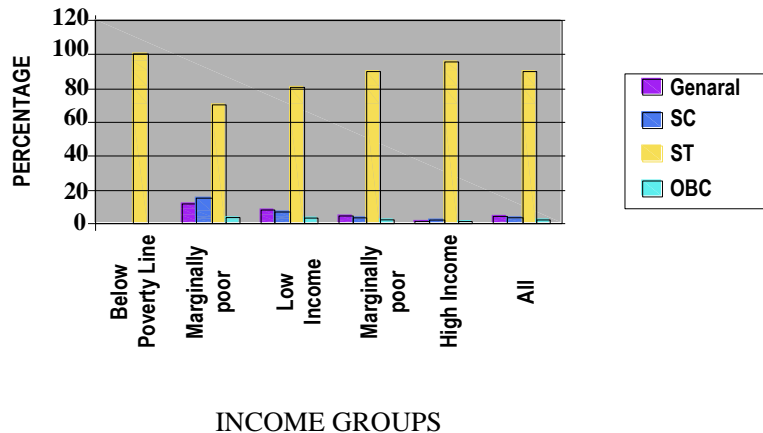
POPULATION GROWTH

➤ THE DECADAL GROWTH RATE WAS THE HIGHEST DURING 1961-1971 AT 197%. IT WAS DUE TO THE DECLARATION OF KOHIMA AS THE CAPITAL AFTER ATTAINING STATEHOOD IN 1963.

PRESENTLY THE ANNUAL GROWTH RATE IS AROUND 5%

89.6 % OF THE POPULATION CONSTITUTE SCHEDULED TRIBE(ST) POPULATION
100 % OF BPL ARE FROM THE ST POPULATION

SOCIAL GROUP WITH RESPECT TO INCOME



SOCIAL GROUP

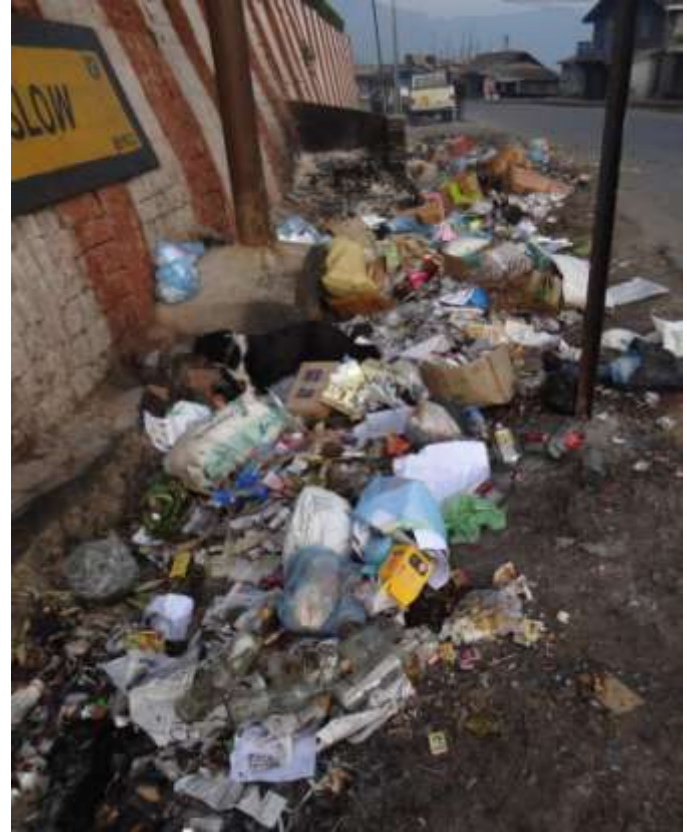
EXISTING SOLID WASTE MANAGEMENT MECHANISM

- **Present Generation of waste is 60 tonnes/day @ 408 gram/capita/day (Source: KMC)**
- **The Solid Waste Management in Kohima Municipal Council is decentralized with the involvement of all the Panchayats/communities in all the colonies**
- **Door to door collection of waste**
- **An amount of Rs 1/- per day per HHs is collected by the Panchayats**
- **Disposal of Waste at a distance of about 15 KMs on NH 150**

PROBLEMS FACED



Garbage not collected on time



PROBLEMS FACED



Choked Drains

PROBLEMS FACED



Health Hazard to the Workers

PROBLEMS FACED



Health Hazard to the Workers

PROBLEMS FACED

DUMPING SITE:

- **Old dumping site on NH 39 affected by landslide and has been abandoned**
- **New Sites have been procured a number of times by the KMC but problems have cropped up due to complaints by the adjacent land owners.**

PROJECTS

A modern Landfill site is under construction below Lerie with loan assistance by Asian Development Bank which will be completed within the next 12 months.

THANK YOU