

BEFORE THE NATIONAL GREEN TRIBUNAL
PRICIPAL BENCH, NEW DELHI
ORIGINAL APPLICATIONAL No. 199 OF 2014

IN THE MATTER OF:-

ALMITRA PATEL & ANR

...PETITIONER

VERSUS

UNION OF INDIA & ORS

...RESPONDENTS

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S.NO	PARTICULAR	PG NO.
1.	Counter Affidavit on Behalf of the Nagaland in Compliance of Order dated 5.2.2015	
2.	ANNEXURE R/1 A copy of action plan proposed for municipal waste management in Nagaland	

NEW DELHI
DATED 09.03.2015

K. ENATOLI SEMA
Advocate for state of Nagaland
310, LAWYERS CHAMBER
C.K. DAPHTARY BLOCK
SUPREME COURT OF INDIA
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**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI
ORIGINAL APPLICATION No. 199 OF 2014**

IN THE MATTER OF:

Almitra Patel & AnrPetitioner

Versus

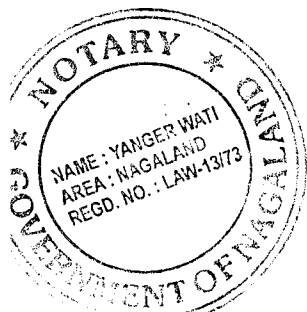
Union of India & OrsRespondents

**COUNTER AFFIDAVIT ON BEHALF OF STATE OF
NAGALAND IN COMPLIANCE OF ORDER DATED 5.2.2015**

I, Imjung M Panger, aged about 54 years, S/O Late I.Panger having my office at Nagaland Civil Secretariat, Kohima, Nagaland, do hereby solemnly affirm and state as under:-

1. That I am the Secretary, Urban Development Department and being familiar with the facts of the case on perusal of the contents of the Petition and based on official records competent in my official capacity to affirm and swear this present affidavit.
2. That in compliance of the order dated 5.2.2015 the Answering State is putting on record the current exiting position so far as it relates to collection, segregation, storage, transportation, processing and disposal of municipal solid waste, hereinafter referred to as 'MSW', in the State. That as directed by this Hon'ble Tribunal, the State is also putting on record the proposed action plan for the future of what the Department proposes to do in collaboration with the Urban local bodies in the State. That the State also puts on record it's reply/ suggestions with reference to the judgment of the Tribunal in the case of 'Capt Mall Singh & Ors Vs Punjab PCB & Ors. Appeal No. 70 of 2012'.

Imjung M Panger
18/2/15
Secretary
the Government of Nagaland
Urban Development Department
Nagaland : Kohima



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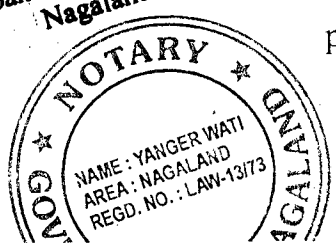
3. It is stated that at present there are 3 Municipal Councils, 16 Town Councils and 6 census towns in the State of Nagaland. It is stated that the 3 Municipal Councils constitute a population of 2,57,786 persons accounting for 45 % of the total urban population. That the approximate waste generation in these urban areas is about 286.00 metric tons per day. That in order to implement the Municipal Solid Wastes (Management and Handling) Rules, 2000, hereinafter referred to as '2000 Rules', the State has accorded highest priority to the three Municipal Councils as the generation of waste in the said Councils are more as compared to the other 16 town councils.

Current position

4. It is humbly stated that at present the segregation, storage, transportation, processing and disposal of MSW is not being done in accordance of 2000 Rules. It is however stated that the State is trying its level best and taking active steps to ensure that MSW is handled and managed in accordance with said Rules.

5. It is stated that in the State capital the Kohima Municipal Council (KMC) introduced the process of decentralization of waste management within its jurisdiction in 2011. In order to ensure proper collection of waste, under this programme the Municipal which is divided into 19 wards constituted Sanitation Ward Committees for each ward to monitor and regulate waste collection and management. The Committees have been provided with vehicles for collection and transportation of waste. KMC has authorized these Sanitation Ward Committees to collect Rs.50/- per household per month and the collected amount is utilized for

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Secretary
Public Health and Sanitation Department
Nagaland : Kohima



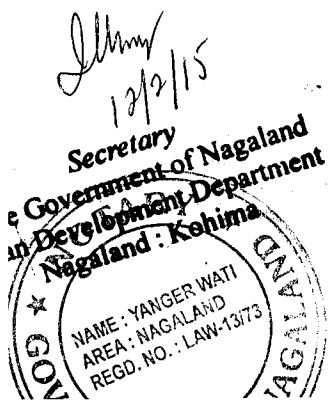
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maintenance of vehicle, fuel, salary /wages. This programme has proved to be very successful with the active participation of the stakeholders wherein every year award is given away to the best performing ward.

6. It is stated that KMC in collaboration with Nagaland Pollution Control Board and sponsored by Central Pollution Control Board inaugurated Kohima Demo project in 2006 with the objective of setting up a system for waste collection, segregation, storage and transportation in accordance to 2000 Rules. Under this Demo project in order to encourage segregation at source, coloured bins were distributed at household level after conducting awareness programmes at each ward involving respective Panchayats, Youth organizations, Women groups and local NGO's. Under this Demo project, vehicles were provided not only for transportation of solid waste but also for transportation of bio-medical waste.

A waste processing facility was also developed under this project which includes waste segregation centre, compost and vermin compost facility. At present this facility is functioning successfully.

7. It is stated that development of municipal waste treatment plant is in progress for Kohima Municipality. This project is implemented on turnkey basis and has been awarded to M/s Ramkyenviro Engineers Limited, Hyderabad. That the major scope of the plant is development of a 50 tons per day compost plant and a sanitary landfill for a period of 15 years. The other facilities being developed are primary and secondary vehicle garages, sub-station



with DG facility, administrative block, toilet block, Weigh Bridge and development of approach and internal roads. That the plant is likely to be commissioned by June 2015.

Proposed action plan

8. So far as the other 2(Two) Municipal Councils are concerned, ie Dimapur and Mokokchung Council, the waste collection, transportation and disposal are fully being taken up by the Municipalities. Dimapur is divided into 23(Twenty three) Wards and Mokokchung is divided into 18 (Eighteen) Wards. The Wards are further divided into sectors. Garbage collection bins are located in different sectors. The waste are generally collected in the early morning hours by the Municipal sanitary workers and transported by the Municipal trucks to the disposal sites. However, due to resource constraint, the collection, transportation and disposal is done in an unscientific manner which pose threat to the environment. The collection is done either on a daily basis or on alternate days depending upon the amount of waste collected. Segregation to some extent is done at the disposal site for recyclable waste and the rest of the waste is disposed by way of landfill. Comparatively, the sizes of the towns in Nagaland are small and as such waste generated is less. As of now, the Municipalities are able to manage in terms of collection and transportation, whereas there is no proper treatment/disposal mechanism which is a cause for concern. It is stated that the Government has engaged M/s Eco-Save Systems Pvt. Ltd Mumbai for preparing a Detailed Project Report 'DPR' to establish

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12/2/15
Secretary
Public Works and
Development Department
Nagaland : Kohima

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Municipal Waste Treatment Plant in both the Municipal Councils.

That the DPR is being designed to cater for a period of 25 years in both the plants. It is stated that once the technical clearance is obtained and sanctioned, the project implementation will start.

9. It is submitted that so far as the other 16 Town Councils are concerned, the State after studying various factors including population and ecological facts shall also be considered for cluster as below:-

1. Chumukedima & Medziphema Town Councils.
2. Peren & Jalukire Town Councils.
3. Tuli & Chantongya Town Councils.
4. Wokha & Tseminyu Town Councils.

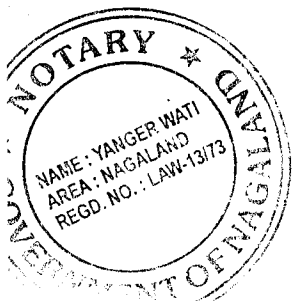
The following Towns shall be considered separately in view of the distance and topographical inconveniences:-

1. Zunheboto.
2. Phek
3. Pfutsero
4. Kiphire
5. Tuensang
6. Longleng
7. Mon
8. Naginimora

A copy of action plan proposed for municipal waste management in Nagaland is marked & annexed as ANNEXURE R/1

10. Presently, the nature of waste generated may not be as complex in terms of composition and quantity as compared to other larger towns and cities in other parts of India. This is so because, the towns in Nagaland are very small and also there are no factories and large scale industrial activities. However, there is serious urgency for the Urban Local Bodies in Nagaland to gear up for handling waste in a scientific manner in accordance with the Municipal Solid Waste Rules 2000.

J. J. J.
12/1/15
Secretary
Urban Development Department
Government of Nagaland
Kohima



Technology : For small local bodies such as in Nagaland, financial consideration is a major factor in determining the kind of disposal method. A combination of disposal techniques will be most feasible which includes sanitary landfill for non-biodegradable waste, vermin-composting for organic and bio-degradable waste and incineration for bio-medical waste. The bio-medical waste shall be segregated at source for safe handling and disposal.

Community participation for segregation at source and transportation of waste.

Community participation in development activities is one of the strongest assets of the Naga community. Nagaland is the first state in India to Communitization through legislation. Likewise, the involvement of the community through the concept of decentralization waste management in Kohima Town proved a major success. Therefore, the same concept will be replicated in all the Municipal and Town Councils in Nagaland. Ward Sanitation Committees shall be constituted in all the wards and shall be provided with the vehicles for collection and transportation of the waste. The responsibility of treatment and disposal of waste at the site shall continue to remain with the respective Urban Local Bodies.

Awareness campaign :

For the successful implementation of the solid waste management, extensive public awareness is crucial. Therefore, extensive public awareness creation in the area of segregation at source, use of bio-degradable products, re-use of waste generation shall be carried out in all the Municipal and Town Councils.

J. Wang
12/2/15
Secretary
Government of Nagaland
Urban Development Department
Kohima
NAGALAND
NOTARY
NAME : YANGER WATI
AREA : NAGALAND
REGD. NO. : LAW-13173
GOVERNMENT OF NAGALAND

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11.I say that the facts stated in the above paras are true and correct to the best of my knowledge and information.

[Handwritten Signature]
12/2/15

DEPONENT
Secretary
to the Government of Nagaland
Urban Development Department
Nagaland : Kohima

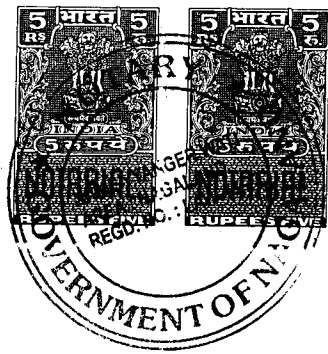
Verification

I, the deponent above named do hereby verify that the contents of the paras 1 to 12 of the above affidavit are true to the best of my knowledge and nothing material has been concealed there from.

Verified at Kohima, Nagaland on this .12.....day of .02..... 2015.

[Handwritten Signature]
12/2/15

DEPONENT
Secretary
to the Government of Nagaland
Urban Development Department
Nagaland : Kohima



"Solemnly affirmed before me this day, I certify that I read over and explained the contents to the declarant and that the declarant seemed perfectly to understand them."

[Handwritten Signature]
YANGGER WATI
NOTARY PUBLIC
NAGALAND

REPORT ON

**MUNICIPAL WASTE MANAGEMENT
IN NAGALAND**

**URBAN DEVELOPMENT DEPARTMENT
GOVERNMENT OF NAGALAND**

CONTENT:

- Executive Summary
- Introduction
- Urban Scenario in Nagaland
- Status of Municipal Waste management
- Action Plan: Way forward
- Photos

1. EXECUTIVE SUMMARY

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Nagaland is the 16th State of India Union having a population of 19,80,602 as per Census of India 2011. Nagaland recorded the highest urbanization rate in the country during the last two consecutive Censuses 2001 and 2011 at 69.44% and 66.70% respectively. The present urban population is recorded at 5,70,966 persons which accounts for 29% of the total population. Presently there are 3 Municipal Councils, 16 Town Councils and 6 census towns.

Due to financial constraints and various local issues, the duties and functions of the Urban Local Bodies (ULBs) are limited. Municipal Solid Waste management is one of the main functions of the Urban Local Bodies. The total approximate waste generated in the urban areas is about 286.00 metric tons per day. With limited resources, the ULBs are so far successfully managing the municipal waste.

The three Municipal Councils constitute 2,57,786 persons which accounts for 45% of the total urban population. The magnitudes of waste problem faced by these three towns are more complex than the other 16 town councils which are comparatively smaller towns. Accordingly, the State has accorded highest priority to the three Municipal Councils.

In respect of Kohima Town, the Kohima Municipal Council (KMC) is thus far managing the waste satisfactorily. The KMC has initiated an innovative approach of waste management with active participation of the community. Under this programme, the KMC distributed machinery and vehicle to all the 19 wards. A committee is constituted in each ward that is responsible for the collection and disposal of the waste to the landfill site. To meet the cost of fuel, maintenance and wages/salary, the committees are authorized to collect certain amount per kitchen every month.

The KMC launched Bio-Medical Waste project during April 2011. The project covers all the hospitals, clinics and nursing homes in Kohima.

A major project is under construction at Kohima which will be commissioned by June 2015. The project is prepared in compliance with the **MSW RULES 2000** and is funded by the Asian Development Bank through the Ministry of Urban Development, GoI.

The Government of Nagaland engaged **ECO-SAVE SYSTEMS PVT. LTD. MUMBAI** for preparation of Detail Project Report for Solid Waste Management project in Dimapur and Mokokchung Towns. The Detail Project

Reports have been prepared in compliance with the *MSW Rules 2000*. The proposed projects are designed to cater the Dimapur and Mokokchung Towns for 25 years. The DPRs are pending certain technical clearance.

For the rest of the 16 town councils, the Government is in the process of prioritizing projects keeping in view the population size and urgency of each town. Wherever possible, projects shall be clustered or combined keeping in view the technical feasibility and cost viability.

Presently, the Urban Local Bodies in Nagaland have been successful to a lot of extent in tackling the problems of municipal waste, though may not be in scientific manner. However, keeping in view the alarming rate of urbanization taking place in the State and the inevitable increase in waste generation, the ULBs have to be prepared to meet the challenges in the future towards handling the waste management in a more scientific manner. Towards this end, the Government of Nagaland is committed to empowering the ULBs with technical knowledge and financial resources so as to ensure efficient management of municipal waste in all the urban areas.

2. Introduction: NAGALAND PROFILE

Nagaland is by and large a hilly State, excepting about a thousand square kilometer of plains in the foothill belt bordering the State of Assam. The State is inhabited by tribals and remained isolated and neglected till the dawn of independence. Prior to this, there was only limited administration, which was considered essential by the Britishers to maintain the law and order in this region. As a result, for considerable period, progress and changes in other parts of the country did not make much impact in this area and people remained economically and socially isolated from rest of the country prior to independence.

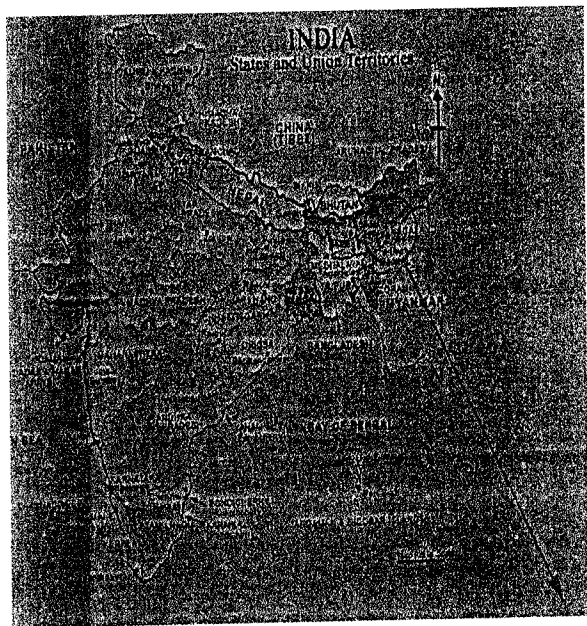
After Independence, Government of India adopted the policy to bring in the tribals under the main stream of development and to open up the avenues for removal of isolation and backwardness. Sustained efforts were made to bring about economic development in these remote areas by formulating various developmental programmes.

Nagaland achieved statehood on 1st December 1963 as the 16th State of Indian Union. It is bounded by Assam in the west, Myanmar in the east, Arunachal Pradesh and parts of Assam in the north and Manipur in the south. It covers an area of 16,517 sq. km. The population of Nagaland as per Census 2011 stands at 19,80,602 persons and literacy rate is 79.55%. The state consists of eleven Administrative Districts Headquarters inhabited by 16 major tribes and many other sub-tribes. Each tribe has its own distinct culture, language, custom and dress.

Geographically, the state of Nagaland lies between 25°6'N and 27°4'N latitudes and between 95°20'E and 95°15'E Longitudes. Kohima the capital of Nagaland is situated at 1444 metres above the mean sea level. Nagaland has a pleasant climate, generally cool in winter and pleasantly warm in summer, especially in the interior places and higher hills. In winter, the night temperature comes down between 4°C to 1°C in December, January, and February which are the coldest months in the year. The temperature does not rise beyond 32°C and the average summer temperature is 22°C to 27°C. The average annual rainfall for about seven months from May to October is between 200cm and 250cm in the state.

According to the prevalent weather condition, the year in Nagaland may be categorized into four distinct seasons. They are cold season (Winter), hot season (pre-monsoon), rainy season (monsoon) and cool season (Autumn). The cold season begins in December and continues till the end of February. March and April are the hot season. The rain season includes the months from May to September, the period from October to November is considered as cool season.

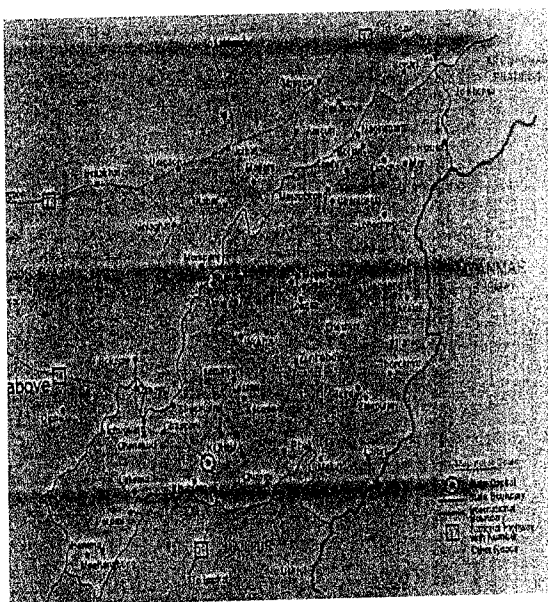
Since the emergence of Nagaland as a full-fledged state in 1963, there has been remarkable changes and improvement in terms of connectivity both within and outside the state through railways, air and roads. New roads were



constructed while the existing ones got widened and metalled. At present there are three National Highways passing through the state, namely the National Highway No.29 linking Dimapur with Imphal, National Highway No.02 connecting Kohima with Mokokchung and National Highway No. 202 connecting Mokokchung to

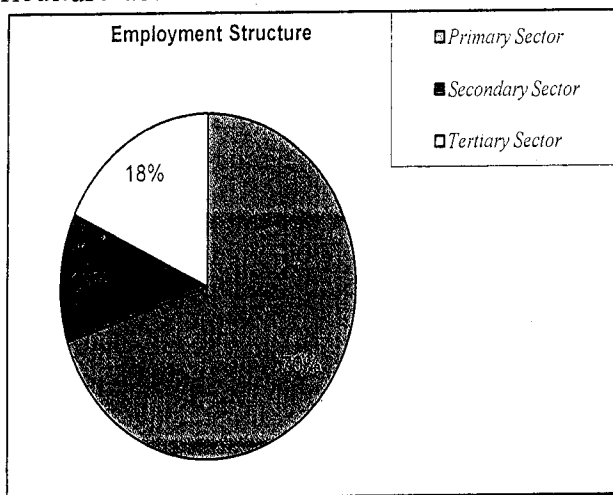
Tuensang to Meluri via Kiphire. Other state highways within the state fall within the purview of the State Department or Border Road Organization.

Due to topographical constraints, Nagaland is deprived of an efficient railway linkage. Presently Dimapur is the only town having railway station which comes under the North East Frontier Railway (NFR). As such Dimapur has become an important regional commercial centre.



The only airport in Nagaland is located at Dimapur. At the moment, there are daily flights to Kolkata and Guwahati.

The main economic activity of the State is Agriculture. About 70% of the workforce is engaged in agriculture activities while the other 30% are in engaged in Secondary and Tertiary sector i.e. Service Sector- Government employees and Commerce and Transport. These Secondary and Tertiary sectors are mainly concentrated in the urban centres.



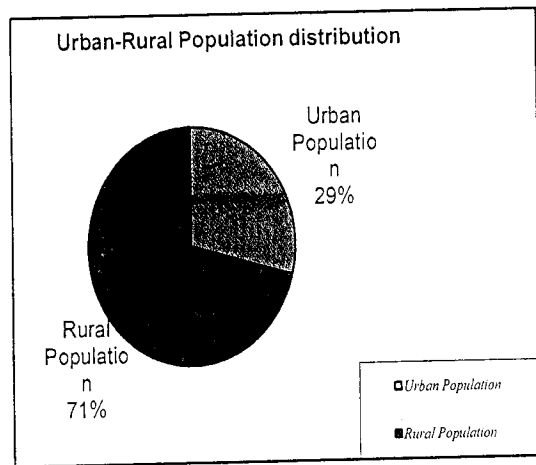
Industrial activity is still at an infancy stage. Therefore, at present the state can hardly account much in the industrial sector as an important economic base. There are few Small-scale industries functioning in the State such as plywood factory, mechanized brick factory and so on. However, there is immense deposit of minerals in the state, which are yet to be fully explored.

3. URBAN SCENARIO IN NAGALAND

Over the last twenty-five years the state of Nagaland has been experiencing tremendous urbanization at an alarming rate with decadal growth rate of 69.44% during 1991 – 2001, which was the highest in the country. The 2011 census data shows that the state urban population has increased from 17% in 2001 to 28.97% in 2011. The growth rate of urban population during for the same period was 66.70 percent which is the highest in the country, much higher than the national average of 31.80 percent. Since Nagaland achieved statehood in 1963, the total population had increased by 5.10 times in terms of absolute number while Urban population increased by 19.4 times which is remarkable. During Census 2011, the rural Nagaland recorded negative growth of (-)14%, while the urban Nagaland recorded 66.70% growth. It is estimated that by the year 2030, nearly half of the population of Nagaland will be living in urban areas.

On the basis of the last Municipal election, there are now 19 recognized Municipalities. In addition to the statutory towns, there are 6 census towns.

Apart from these recognized urban centers, there are around 80 small Townships which are neither covered by the Urban Development nor Rural Development which needs immediate attention as these urban centres are rapidly urbanizing without any planning intervention and thus becoming breeding places for anti-social activities.



The distribution of urban population as per census 2011 is shown below;

Sl. No.	District	No. of Household	Urban Population (Census 2011)
1	Kohima	26755	121088
2	Dimapur	42100	197869
3	Mokokchung	12730	55725
4	Mon	6156	34444
5	Wokha	6273	35004
6	Zunheboto	4821	27597
7	Phek	5057	24575

4. STATUS OF MUNICIPAL WASTE MANAGEMENT IN NAGALAND

The Urban Centres in Nagaland are small as compared to the mainland India. The largest town is Dimapur which is the commercial centre of the State followed by Kohima, the State capital. The problem of waste management is more serious in case of the three municipal councils, namely Kohima, Dimapur and Mokokchung followed by district headquarters and the other statutory towns. The Government of Nagaland has accordingly prioritized the projects according to the population size, volume of waste generated and other ecological considerations of the towns. The activities taken up in various towns are explained as below:

4.1 Kohima Town:

The erstwhile Kohima Town Council (KTC) came into existence in 1957, initiated by concern citizens as the time and situation demanded, with Lt. Dr. Neilhouzhu Kire as its first Vice-Chairman from July 1957 till May 1967. The first Municipality election was held in the month of December 2004 under the provision of the Nagaland Municipal Act, 2001 and subsequently Kohima Municipal Council was constituted during early part of 2005. Presently Kohima City is generating about 50-60 metric tons of waste per day. As of now the Kohima Municipal Council (KMC) has been able to tackle the waste management under its jurisdiction. However, the alarming rate of urbanization is a cause for concern in terms of basic infrastructure as well as solid waste management in the near future. Under the KMC jurisdiction, the following activities/projects related to municipal waste management are been initiated:

4.1.1 Decentralization of waste Management:

The KMC initiated the process of Decentralization of waste management during August 2011. Under this programme, each Ward has its own Sanitation Ward Committees to monitor/regulates the waste collections & management. The committees are provided with vehicle for collection and transportation of waste. KMC has authorized these Ward Committees to collect Sanitation Fee of Rs.50 per household. The collected amount is utilized for maintenance of vehicle, fuel, wages/salaries. Wards are declared as community dust-bin free zones, where all existing community bins have been removed/dismantle. This programme has proved to be very successful with active participation of the stakeholders. Every year, award is given away to the best performing ward.

4.1.2 Bio-Medical Waste:

Bio-Medical project was launched on 1st April 2011 in Kohima in collaboration with NPCB & sponsored by CPCB. Under this Project, KMC purchased 2 Mini-Tipper Trucks, One JCB, 2 pick-ups for Bio-Medical Waste, Push Carts for Rag Pickers, Pamphlets, Sanitary Equipments & Free distribution of about 18,000 bins of 5 litres to 100 litres to colonies, schools, colleges, Govt. Offices & other institute for creating awareness of Non Bio-Degradable (Recyclable waste) (Blue bins) & Bio-Degradable (Green Bins). Under this Demo- Project, KMC has set up a mini-landfill at Viyakhukie above Phek road (16 kms) from Kohima. Under this programme, the KMC is collecting Bio-Medical waste from all Hospitals, Clinics & Nursing Homes within Kohima jurisdiction.

4.1.3 Municipal Waste Treatment Plant at Lerie:

This Project is implemented by the State Investment Program Management & Implementation Unit (SIPMIU) under Urban Development Department, Government of Nagaland and funded by the Asian Development Bank (ADB) assisted North East Region Urban Development Project (NERUDP) through Ministry of Urban Development Government of India. The project is implemented in compliance with the MSW RULES 2000.

The project is implemented on turnkey basis and has been awarded to M/s Ramky Enviro Engineers Limited, Hyderabad. The total cost of the project is Rs. 39.11 Crores with an O&M period of 3 years from the date of commissioning. The major scope of this work is development of a 50 TPD Compost Plant and a Sanitary Landfill designed for a period of 15 years. The other components of the work are development of approach road, internal road and other ancillary structures necessary for operation and maintenance of the facility. This facility is being developed at Lerie for Kohima Municipal Council (KMC) to handle the wastes of Kohima Municipality. The work commenced in February 2012 and is expected to be commissioned by May 2015.

4.2 Dimapur Town:

Dimapur is the largest urban centre in Nagaland having a population of 1,22,834 person as per census 2011. It is the only settlement having the rail connectivity as well as air connectivity. The rail head at Dimapur serves as rail station for both Nagaland and Manipur States. The waste generation is

about 75 to 80 tons per day. Presently the method collection and disposal is unscientific. Therefore, the Government of Nagaland through the Urban Development Department is pursuing for taking up Municipal Waste Treatment plant for Dimapur Town. The Government of Nagaland has engaged Ms/ **ECO-SAVE SYSTEMS PVT. LTD. MUMBAI** for preparation of the Detail Project Report. The project has been prepared in compliance with the **MSW Rules 2000** and designed to cater for a period of 25 years. The total cost of the project is Rs. 49.78 crores. Upon technical clearance and subsequent sanctioned, the project implemented shall be started.

4.3 **Mokokchung Town:**

Mokokchung Town is the third largest urban centre in Nagaland having a population of 35,913 persons as per Census 2011. The waste generated is about 18.00 MT per day. The Mokokchung Municipal Council is so far satisfactorily managing the municipal waste. However, keeping in view the increase in waste generation in the future, a Detail Project Report in compliance with the MSW Rules 2000 has been prepared with the assistance of **ECO-SAVE SYSTEMS PVT. LTD. MUMBAI**. The total cost of the project is Rs. 36.51 crores and designed to cater for a period of 25 years. On completion of the technical formalities, the project implementation shall start.

5. **ACTION PLAN: WAY FORWARD**

Against the backdrop of the rapid urbanization, there is urgency for the ULBs in Nagaland to gear up to meet the challenges of Municipal Waste. With technological advancement in the field of electronic gadgets and increase in consumption on account of economic growth, the waste generated per capita is bound to increase. Electronic wastes and bio-medical wastes will pose major challenges to the city managers. The present municipal waste generated in the urban areas is about 286.00 metric tons per day which will increase manifold times in the near future.

The immediate priority of the Government is the completion of the mega project at Lerie, Kohima which is expected to complete/commission by June 2015. Equally immediate concern are technical clearance and sanction for the Dimapur Municipal Council and Mokokchung Municipal Council.

For the remaining 16 Town Councils, project prioritization shall be made taking into accounts various factors such as population and other

ecological factors. Wherever feasible, the towns shall be considered for cluster as below:

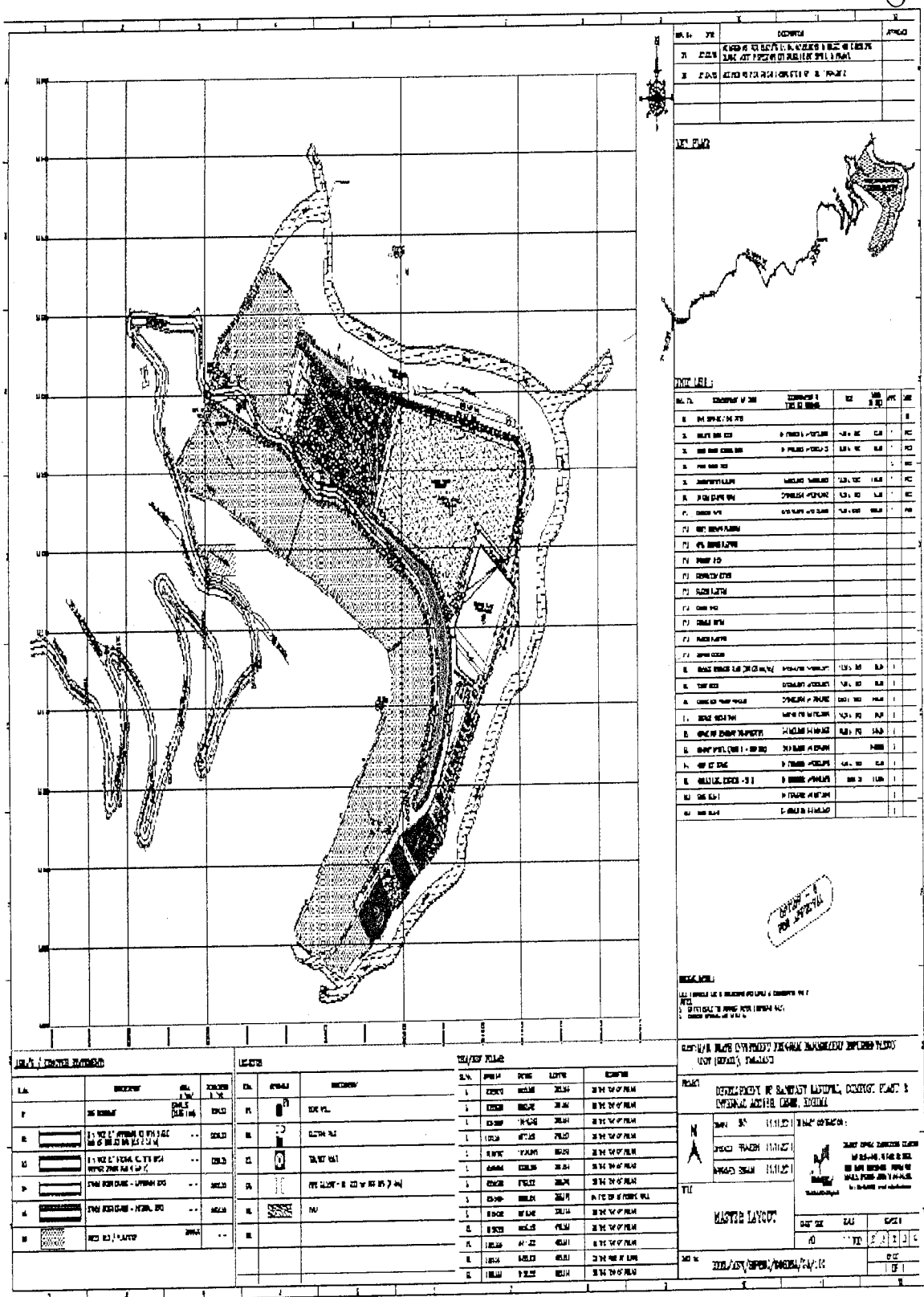
1. Chumukedima & Medziphema Town Councils
2. Peren & Jalukie Town Councils
3. Tuli & Changtongya Town Councils
4. Wokha & Tseminyu Town Councils.

The following towns shall be considered separately in view of the distance and topographical inconveniences:

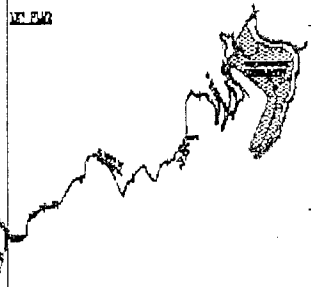
1. Zunheboto
2. Phek
3. Pfutsero
4. Kiphire
5. Tuensang
6. Longleng
7. Mon
8. Naginimora

The preparation of the Detail Project Report for the above Town Councils on finalization of the priority list shall be initiated very soon.

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NO.	DATE	DESCRIPTION	STATUS
1	1980.05.15	PRELIMINARY DESIGN	COMPLETED
2	1980.08.10	FINAL DESIGN	COMPLETED
3	1981.01.20	CONSTRUCTION	IN PROGRESS



ITEM LIST

NO.	DESCRIPTION	QUANTITY	UNIT	REMARKS
1	CONCRETE	1000	M ³	
2	STEEL	500	TONS	
3	BRICKS	100000	NO.	
4	CEMENT	500	TONS	
5	SAND	1000	M ³	
6	GRAVEL	1000	M ³	
7	AGGREGATE	1000	M ³	
8	WOOD	100	M ³	
9	PAINT	100	LITERS	
10	LABOR	1000	MAN-DAYS	

APPROVED
FOR APPROVAL

REMARKS:
1. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.
2. ALL MATERIALS TO BE USED SHALL BE OF STANDARD QUALITY.
3. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE SPECIFICATIONS.

LEGEND

NO.	DESCRIPTION	SYMBOL
1	CONCRETE	[Symbol]
2	STEEL	[Symbol]
3	BRICKS	[Symbol]
4	CEMENT	[Symbol]
5	SAND	[Symbol]
6	GRAVEL	[Symbol]
7	AGGREGATE	[Symbol]
8	WOOD	[Symbol]
9	PAINT	[Symbol]
10	LABOR	[Symbol]

STRUCTURE SCHEDULE

NO.	DESCRIPTION	QUANTITY	UNIT	REMARKS
1	CONCRETE	1000	M ³	
2	STEEL	500	TONS	
3	BRICKS	100000	NO.	
4	CEMENT	500	TONS	
5	SAND	1000	M ³	
6	GRAVEL	1000	M ³	
7	AGGREGATE	1000	M ³	
8	WOOD	100	M ³	
9	PAINT	100	LITERS	
10	LABOR	1000	MAN-DAYS	

GENERAL NOTES:

1. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.
2. ALL MATERIALS TO BE USED SHALL BE OF STANDARD QUALITY.
3. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE SPECIFICATIONS.

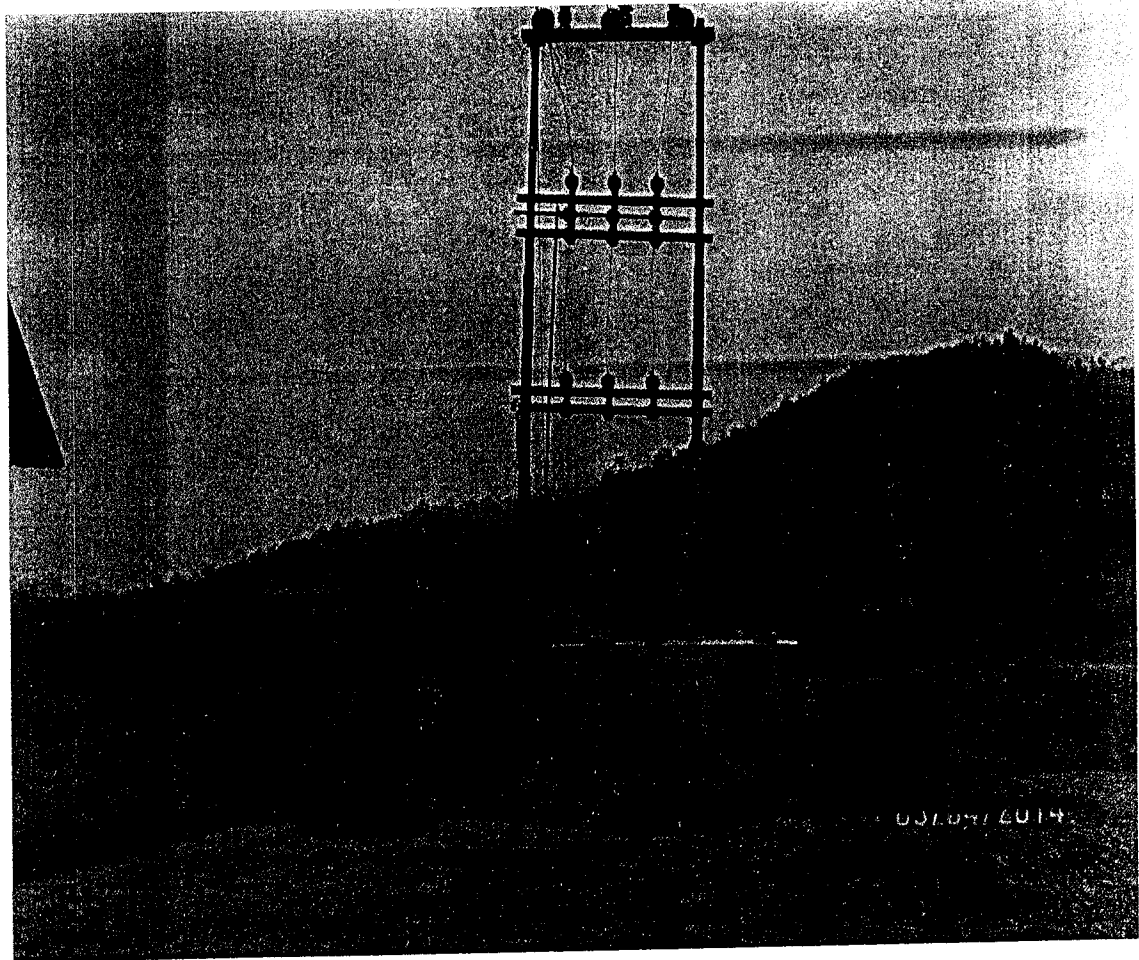
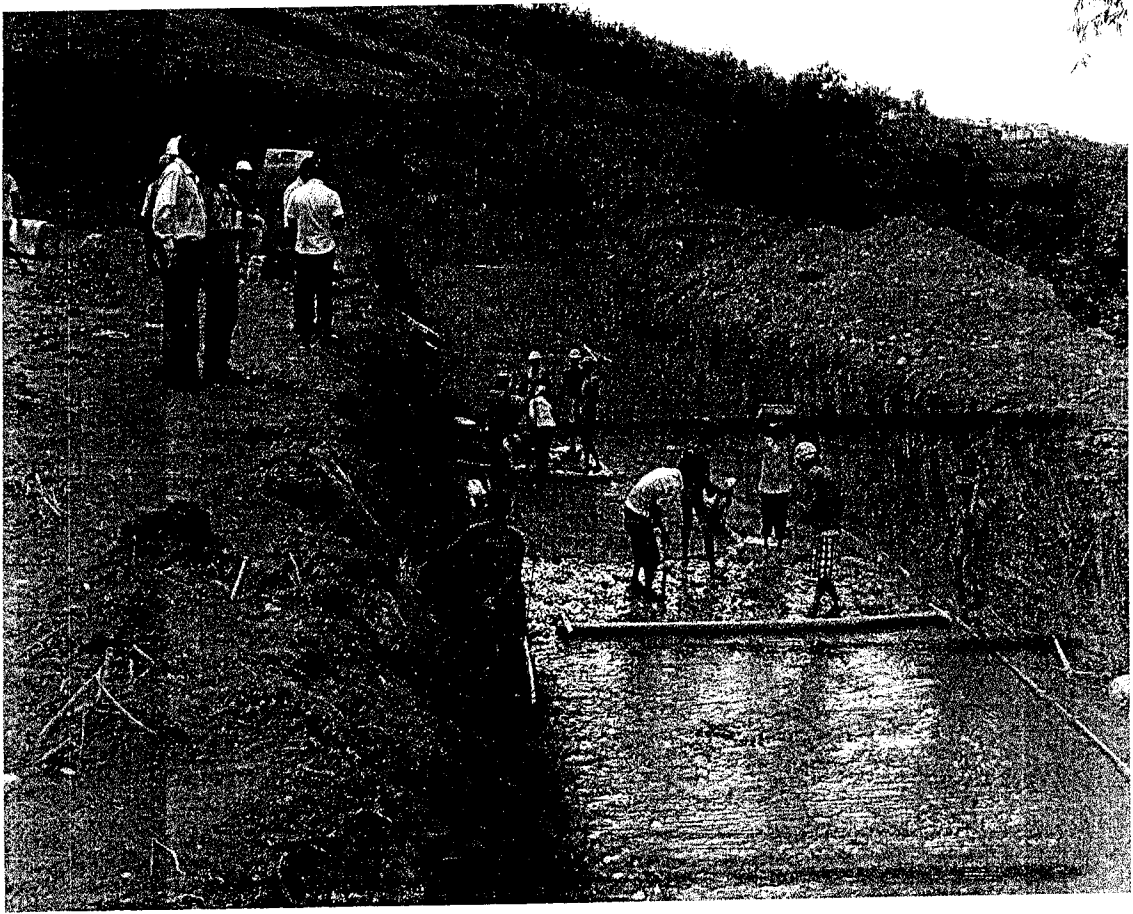
APPROVED FOR APPROVAL

DATE: 1981.01.20

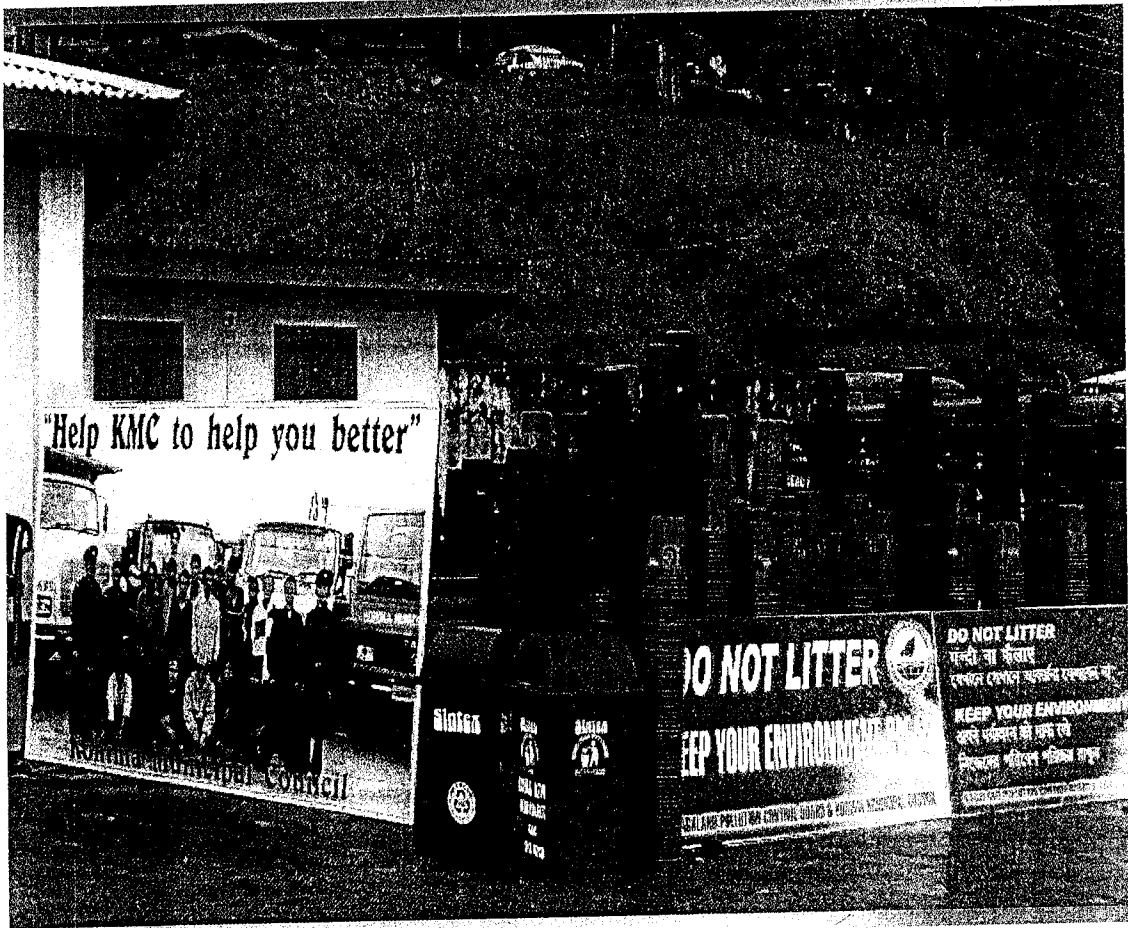
BY: [Signature]

Master Plan of the On-going Mega project Lerie, Kohima funded by Asian Development Bank

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On-going works at Lerie, Kohima



Various initiatives of the Kohima Municipal Council