

GOVERNMENT OF ARUNACHAL PRADESH
DEPARTMENT OF PANCHAYATI RAJ
ITANAGAR

Email: arunachalpanchayati@gmail.com



No.PR-EW/206/2019 /2317

Dated Itanagar the 16th Oct'2019

To,

**The Chairperson,
National Green Tribunal (NGT)
Faridkor House, Copernicus Marg, New Delhi-110001
Email: ngt.filing@gmail.com**

Sub: - **Submission of Solid Waste Management Rules with Action Plan in Rural Areas of Arunachal Pradesh.**

Respected Sir,

With reference to your NGT Vide order dated 12.03.2019 in the matter of OA No.247 of 2017 in EA No.13/2019 regarding furnishing of (Solid Waste Management Rules, 2016 with Action Plans) to the Central Pollution Board.

The Department of Panchayati Raj is now enclosing herewith the **Solid Waste Management Rules in Rural Areas of Arunachal Pradesh.**

This is for your kind information and necessary action please.

Encl: - **As stated above.**

**(Tapyam Pada) APCS
Director (PR)
Govt. of Arunachal Pradesh
Itanagar.**

Memo No.PR-EW/206/2019 /2317
Copy to:

Dated Itanagar the 16th Oct'2019

1. The Secretary to Governor, Arunachal Pradesh, Itanagar for kind information please.
2. The PPS to Hon'ble Chief Minister, Arunachal Pradesh, Itanagar for kind information please.
3. The PS to Hon'ble Minister (Home, PR&RD), Arunachal Pradesh for kind Information please.
4. The Under Secretary to the Chief Secretary, Government of Arunachal Pradesh, Itanagar for kind information please.
5. PS to the Secretary (Fin., Invest & Plng.), Government of Arunachal Pradesh, for information please.
6. The Member Secretary, Arunachal Pollution Control Board, Department of Environment & Forest, Paryavaran Bhawan, Yupia Road, Pappu Hills, Naharlagun (A.P).
7. Office copy.

**Director (PR)
Govt. of Arunachal Pradesh
Itanagar.**



SOLID WASTE MANAGEMENT IN RURAL AREAS OF ARUNACHAL PRADESH



Chapter I

Introduction

The villages in Arunachal Pradesh are predominantly nestled in the lap of pristine and serene environment. Far from hustle and bustle of modern economic centres such as emerging urban areas like district headquarters and the capital city, Itanagar, more than 80-90% of villages in the state are still languishing in their old ways. That is to say, they are still beset with remoteness, literally in terms of physical connectivity, cultural practices and economic conditions from the hub of modern economic centres. Depending primarily on shifting cultivation, the life in rural areas is intricately inter-twined with a sense of collective feeling, collective efforts and peaceful co-existence with all, including the nature. The life is inherently modest and contented.

While population is undoubtedly increasing in urban areas, mainly due to influx of migration of labourers from other states and from our rural areas, the population is correspondingly decreasing in many instances or remaining static in our rural areas. The idea of better opportunities and facilities for decent and successful life has initiated a mad-dash rush towards those urban centres. While it is so in majority of our villages, the villages adjacent to our urban centres are imitating urban life in all its manifestations. Along with all the good things and advantages of their proximity, detriments of urban life associated with modern economic system are gradually engulfing those adjacent villages, especially the menace of Solid Waste Management and their disposal. Until recently, the domestic waste generated in our villages mainly comprised of organic and biodegradable, and the quantity was less, which was used in kitchen garden directly or took relatively less time to bio-degrade. Their disposal wasn't of much concern. Of late, modern, urban culture in every aspect of our life, including food-habits and life-style in our adjacent villages of urban centres has led to generation of sufficient wastes in these villages, and the disposal of which is increasingly becoming an issue of serious concern. To add to the problem of disposal, the waste generated is not segregated in-situ.

Therefore, it's time to address the issue of waste management and disposal before the waste itself becomes the menace to our very survival. That's precisely why collective consciousness followed by collective efforts of every individual are needed to tackle the growing nuisance and harmful impacts of our unmindful life-styles, which, in turn, lead to ever-growing wastes.



Chapter II

Directions Issued by the National Green Tribunal (NGT)

The NGT vide its order dated 12.03.2019 in the matter of OA no 247 of 2017 in EA no 13/2019 has directed that:

“All the States and Union Territories to ensure that reports in terms of Rule 13 are furnished to the CPCB positively within one month or 30th April, 2019, for the period the reports are due as per rules and not filed so far. The CPCB may furnish a status report of compliance of PWM Rules after proper analysis to this Tribunal within one month thereafter by e-mail at ngt.filing@gmail.com. It has also been directed that all the States may also prepare their respective action plans for compliance of Rules within one month and furnish the same to the Central Pollution Control Board by 30.04.2019”.

Arunachal Pradesh State Pollution Control Board (APSPCB) had furnished the status on the above order of the Hon'ble NGT to CPCB, Delhi stating the compliance of Rule 13 (Registration of producer, recycler and manufacturer) as Nil. Further, on the status on preparation of State Action Plan, it was informed that the “Action Plan for plastic waste management in each town/city shall be submitted within 6 months by the Department of Urban Development & Housing/Town Planning & ULB. The Urban Local Body is framing the Bye-Laws incorporating the provisions of the PWM Rules, 2016.”

ORIGINAL APPLICATION No. 606 OF 2018: The Honourable National Green Tribunal in its order dated 2nd May, 2019 in the above Original Application No. 606 of 2018 has directed:

- Steps for compliance of Rules 22 and 24 of SWM Rules be now taken within six weeks to the extent not yet taken. Similar steps be taken with regard to Bio-Medical Waste Management Rules and Plastic Management Rules.


Director (PR)
Govt. of Arunachal Pradesh
Itanagar



Chapter III

Solid Waste Management (SWM)

Under Rule 13 of the Solid Waste Management Rules, 2016, the Secretary-in-charge of Village Panchayat or Rural Development Department in the State or Union Territory has been bestowed the same duties as the Secretary-in-charge, Urban Development in the States and Union Territories, for the areas which are covered under these rules and are under their jurisdiction.

Under Rule 15, the local authorities and village panchayats shall prepare a solid waste management plan as per state policy and strategy on solid waste management within six months from the date of notification of state policy and strategy and submit a copy of respective departments to State Government or Union Territory Administration or agency authorised by the State Government or Union Territory Administration.

Accordingly, the Panchayat Department has the onus to:

- 1) Ensure implementation of the SWM Rules, 2016 through Panchayats for setting up of SW disposal facilities; identification and allocation of suitable land for the same; direct the developers of Special Economic Zone (SEZ), industrial estates, industrial parks if any in the areas of Panchayats to earmark at least 5% of the total area for recovery and recycling facilities; establishment of landfills; capacity building of local bodies and registration of waste pickers and waste dealers in rural areas.
- 2) Prepare Solid Waste Management Plan for Panchayat individually or a cluster of Gram Panchayat depending upon the feasibility/collection/transportation, waste segregation, preparation of annual reports and submission to the State; awareness campaigns; IEC activities; construction/operation and maintenance of SW processing facilities and obtain authorisation for landfill facilities from Arunachal State Pollution Control Board.

Plastic Waste Management

The Government of India has notified Plastic Waste Management Rules, 2016 for effective management of Plastic Waste in the country. The salient features of the Rules for management of plastic waste by the Local bodies are as under:



- a) Plastic waste, which can be recycled, shall be channelled to registered plastic waste recycler and recycling of plastic shall conform to the Indian Standard: IS 14534 titled as Guidelines for Recycling of Plastics, as amended from time to time.
- b) Local bodies shall encourage the use of plastic waste (preferably the plastic waste which cannot be further recycled) for road construction as per Indian Road Congress Guidelines or Energy Recovery or Waste to Oil, etc. the standards and pollution control norms specified by the prescribed authority for these technologies shall be complied with.
- c) Thermo-set plastic shall be processed and disposed-off as per the guidelines issued from time to time by the Central Pollution Control Board.
- d) The inert from recycling or processing facilities of plastic waste shall be disposed-off in compliance with the Solid Waste Management Rules, 2016 or as amended from time to time.

Role of Department of Panchayati Raj and Rural Local Bodies

Following are the responsibilities of Department of Panchayati Raj and Rural Local Bodies:

- a) Setting up system, operationalize and coordinate for waste management in the rural areas by ensuring segregation, collection, storage, transportation of plastic waste.
- b) Channelization of recyclable plastic waste fraction to recyclers having valid registration.
- c) Creating awareness among all stakeholders about their responsibilities.
- d) Ensuring no open burning of plastic waste.


Director (PR)
Govt. of Arunachal Pradesh
Itanagar



Chapter IV

Efforts being taken so far

The Government of Arunachal Pradesh through the Secretary, Panchayati Raj vide letter no. PR-EW/206/2019/2288 dated Itanagar the 25th April, 2019 issued instructions to all the Deputy Commissioners and the District Panchayat Development Officers to take necessary steps and measures by involving both District Level and Gram Panchayat Level Interim Committees for the purpose of complying with the Solid Waste Management Rules, 2016 & Plastic Waste Management Rules, 2016 in Panchayat areas, and also to frame appropriate plans of Solid Waste and Plastic Waste Management, specific to the requirements of respective Panchayat jurisdiction without any further delay, and to submit the Action Taken Report on the compliance latest by 1st July, 2019.

In reference to the letter from the Department of Environment & Forests, Government of Arunachal Pradesh vide No. FOR (ENV)-22/2018/Pt-1/7196-7226 dated Itanagar the 13th May, 2019, wherein the Director (Environment) referred the Hon'ble NGT's letter dated 02-05-2019 in O.A. No. 606/2018, the Department of Panchayati Raj, Government of Arunachal Pradesh vide its No.PR-EW/206/2019/2381 dated Itanagar the 22nd August, 2019 issued Notification of 75 villages adjacent to the district headquarters of the 25 districts of Arunachal Pradesh as Model Villages.

Now, in compliance of the Hon'ble NGT's directions as well as in pursuance of the Rule 15 of the Solid Waste Management Rules, 2016 and Rule 7 of the Plastic Waste Management Rules, 2016, the state government has made in its Budget Announcement a sum of Rs. 500 lakhs only for providing Bins to be set up at various strategic locations in all the 75 Model villages, and another Rs. 250 lakhs only for establishing Vermicomposting Units in those Model villages.

Besides, the Women Self Help Groups (WSHGs) of the Arunachal State Rural Livelihood Mission under DAY NRLM are taking very pro-active part in dealing with the menace of solid waste management and disposal. In fact, through PRI-SHG Convergence, the Government of Arunachal Pradesh is encouraging the WSHGs to volunteer the efforts of house-to-house waste collection, segregation, transportation and disposal through vermicomposting units to be set up in those 75 model villages.


Director (PR)
Govt. of Arunachal Pradesh
Itanagar

The list of the model villages with their respective number of households notified under Solid Waste Management Rule, 2016 & Plastic Waste Management Rules, 2016 is as follows:

Table 1 – List of Model GPs with corresponding number of HHs

Sl. No.	Districts	Gram Panchayat	Households
1	Tawang	Namet & Bomdir Village	80
		Changprong Village	51
		Lemberdung Village	74
2	West Kameng	Sera Village	151
		Nafra East Village	225
		Sangti Village	1104
3	East Kameng	Lumdung	183
		Yangsey	84
		Pakke Camp	108
4	Papum Pare	Emchi	109
		Hollongi Chariali	39
		Sangdupota	15
5	Lower Subansiri	Siuro	36
		Abulyang	47
		Sibe	81
6	KurungKumey	Nyapin	1134
		Sangram	1718
		Riangchi Porlang	166
7	Kra-Daadi	Yaglung	117
		Langdang Bojo	95
		Tassar	130
8	Upper Subansiri	Dulom	70
		Sikar-II	102
		Nima	45
9	West Siang	1/5- Dego	49
		Pakam	147
		Kabu	147
10	East Siang	Boying Village	62
		Ledum Village	113
		Silluk Village	136
11	Upper Siang	Gette	75
		Simong	179
		Halleng	19
12	Siang	Lileng Village	60
		Koreng Village	60
		Kaying	150
13	Diabang Valley	Kongo-I	70
		Kongo-II	80
		Kaji	32
14	Lower Dibang Valley	Chidu	28
		Kebali	34
		Abango	126
15	Lohit	Telluliang Village	190
		Mekailiang Village	74
		Wakro Village	31
16	Namsai	Deobeel	228
		Chowkham-I	70
		Mahadevpur-II	83
17	Anjaw	Walla	41
		Changung	28
		Ngi	31



18	Changlang	New Yumchum Village	58
		Kovin Village	29
		Laktong Village	104
19	Tirap	Lapnan Village	149
		Khonsa Village	103
		Kheti Village	167
20	Longding	Nginu	385
		Senua	246
		Chanu	197
21	Lower Siang	Malini	21
		Liru	383
		Kangku	50
22	Kamle	Godak	241
		Kigam	168
		Kicho	241
23	PakkeKesang	Lower Seijosa	107
		Ngoleko	48
		Upper Bazarline	161
24	Lepa Rada	Gori-I	65
		Red-Putu	20
		Chirne	120
25	Shi Yomi	Tato	50
		Tagur /quying/ heyo/ pabuying	54
		Mechuka Hq.	282

SOLID WASTE MANAGEMENT IN SELECTED LOCATIONS UNDER DAY NRLM

Solid waste generation in rural areas of the State is very minimal. However, no systematic assessment exists on the total tonnage of such waste at the Gram Panchayat level at present. (Table 2 contains the list of Gram Panchayats covered under DAY NRLM and Table 3 contains the Gram Panchayat wise – SHG Wise coverage of Solid Waste Management).

Under the initiatives for developing a community managed system for solid waste management, largely the activities cater to awareness generation, identification of locations for landfills, mobilisation of local community and segregation of waste.

The list of those Model Villages, where the WSHGs of the ArSRLM are leading the SWM efforts is as follows:


 Director (PR)
 Govt. of Arunachal Pradesh
 Itanagar



Table 2 – List of GPs under DAY NRLM in Arunachal Pradesh (as on 1st Oct 2019)

SL. NO	NAME OF DISTRICTS	NAME OF GRAM PANCHAYAT	REMARKS
1	UPPER SUBANSIRI	DULOM	Covered under NRLM
		SIKAR – II	
		NIMA	
2	EAST SIANG	BOYING VILLAGE	
		LEDUM VILLAGE	
		SILLUK VILLAGE	
3	UPPER SIANG	SIMONG	
		HAILENG	
4	SIANG	LILENG VILLAGE	
		KORENG VILLAGE	
		KAYING	
5	LOWER DIBANG VALLEY	CHIDU	
		KEBALI	
		ABANGO	
6	LOHIT	TELLULIANG VILLAGE	
		MEKAILIANG VILLAGE	
		WAKRO VILLAGE	
7	NAMSAI	DEOBEEL	
		CHOWKHAM – I	
		MAHADEVPUR 2	
8	LOWER SIANG	HANGKU	
9	KAMLE	GODAK	
		KIGAM	
10	LEPA RADA	GORI-I	
		RED-PUTU	
		CHIRNE	

Table 3 – List of GPs under DAY NRLM where Solid Waste Management has been initiated in Arunachal Pradesh (as on 1st Oct 2019)

SL. NO	NAME OF DISTRICTS	NAME OF GRAM PANCHAYAT	NO. OF SHGs
1	UPPER SUBANSIRI	DULOM {Sigin-I(C)}	2
		SIKAR – II {Sigin-I(G)}	9
		NIMA {Sigin-I(D)}	5
2	EAST SIANG	BOYING VILLAGE	
		LEDUM VILLAGE	
		SILLUK VILLAGE	
3	UPPER SIANG	SIMONG- I&II	6
		HAILENG	
4	SIANG	LILENG VILLAGE	
		KORENG VILLAGE	4
		KAYING	
5	LOWER DIBANG VALLEY	CHIDU	2
		KEBALI	4
		ABANGO	3

[Signature]
 Director (PR)
 Govt. of Arunachal Pradesh
 Itanagar

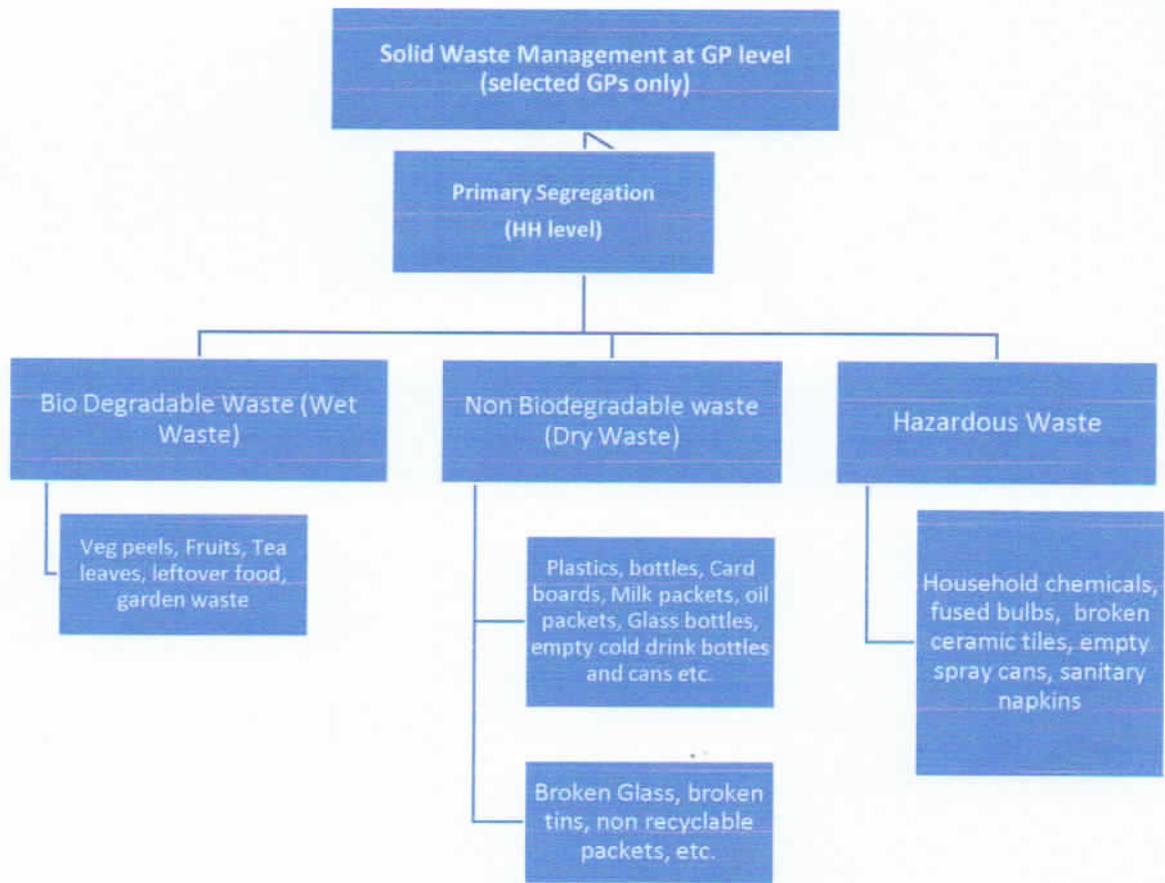


SL. NO	NAME OF DISTRICTS	NAME OF GRAM PANCHAYAT	NO. OF SHGs
6	LOHIT	TELLULIANG VILLAGE	9
		MEKAILIANG VILLAGE	5
		WAKRO VILLAGE	
7	NAMSAI	DEOBEEL-I&II	26
		CHOWKHAM – I	4
		MAHADEVPUR 2	
8	LOWER SIANG	HANGKU	
9	KAMLE	GODAK	
		KIGAM	
10	LEPA RADA	GORI-I	7
		RED-PUTU (Galu/Sibe/Siru)	4
		CHIRNE	6

As of now, a total of 15 nos. of GPs are under DAY NRLM from amongst 23 Nos. of GPs notified as model GPs being covered under Solid Waste Management Rules, 2016 and Rule 7 of the Plastic Waste Management Rules, 2016, a Solid Waste Management has been explained to the local communities by the SHGs, wherein different treatment is prescribed for disposing different categories of waste as mentioned below –

- a) Wet Waste - Kitchen waste that includes left over food, etc. This is being collected daily by the household members. A portion of this waste is being turned into organic manure. Nearly 1 – 2 kgs of waste is generated per household on a daily basis. A portion of this is placed in the compost pits for generation of organic manure. On an average each household is found to be generating nearly 10 – 12 kgs. of organic manure per month, which is consumed locally.
- b) Dry Waste – Empty bottles, used toothpaste / shaving cream / beauty cream tubes, empty milk packets, used tooth brush, soap covers, old newspapers, empty cold drink cans and bottles, wrappers, etc. Certain merchants from nearby towns come once a month or once every 2 months for collecting the dry waste. Broken glass and other non saleable items are disposed off in a landfill.
- c) Hazardous Waste – used batteries, fused bulbs, sanitary napkins, used blades, razors, broken glass, empty or non usable cans of paints, lubricants, etc. These are disposed off in a landfill.


 Director (PR)
 Govt. of Arunachal Pradesh
 Itanagar




Director (PR)
Govt. of Arunachal Pradesh
Itanagar

Activities performed by the WSHGs of the ArSRLM towards SWM in villages:






Director (PR)
Govt. of Arunachal Pradesh
Itanagar





Chapter V

The Steps in Solid Waste Management & Action Plan

The following flow-chart depicting the steps as well as stages in Solid Waste Management, which has been designed by the Centre For Rural Infrastructure, National Institute of Rural Development & Panchayati Raj (NIRDPR), Rajendranagar, Hyderabad, has been attempted to suggest the Action Plan to be followed by the Panchayati Raj Department of Government of Arunachal Pradesh in rural areas:

Steps/stages		Timeline
Preparation	<ul style="list-style-type: none"> •Panchayat Functionaries Meeting •Gram Sabha •Community Education •Identify the suitable sites for waste collection •Community preparation 	2 nd Oct-31 st Dec, 2019 (During People's Campaign) Plan
Planning	<ul style="list-style-type: none"> •Area Survey •Material Planning •Man-power Planning •Technical Planning •Financial Planning 	2 nd Oct-31 st Dec, 2019 (During People's Campaign) Plan
Organizing	<ul style="list-style-type: none"> •Manpower •Materials & Facilities •Technology •Funds •Coordination 	2 nd Oct-31 st Dec, 2019 (During People's Campaign) Plan
Implementation	<ul style="list-style-type: none"> •Segregation at source •Collection •Secondary Segregation •Facility for Treatment and Treatment of Waste •Service Collection 	14 th Nov, 2019 onwards
Monitoring & Collectives	<ul style="list-style-type: none"> •Household Adherence •Feedback from Households •Feedback from Waste Collectors •Physical Verification •Corrective Measures 	1 st week of Feb, 2020

(Signature)
Director (PR)
Govt. of Arunachal Pradesh
Itanagar



Chapter VI

Role of Women Self Help Groups (Under DAY NRLM) in Solid Waste Management in Arunachal Pradesh

Background

Water, Sanitation and Hygiene factors directly impact human lives. In context of Arunachal Pradesh, a highly positive land to man ratio and abundant forest cover support human lives to a large extent despite the by and large neglect / ignorance of proper management of these factors.

Proper management of Solid and Liquid Waste in rural areas of the State especially in rural areas, is an immediate requirement. There are potential hazards including considerable adverse downstream impact, if proper management of solid and liquid waste management (SLWM) is not implemented in rural areas.

The second phase of Swacch Bharat Mission Grameen (SBM-G) focuses on SLWM. Concentration on turning waste into energy should be an integral aspect of this strategy. This will not only expand the livelihoods basket of rural poor besides ensuring participation in a voluntary yet beneficial manner for the local communities.

First phase of SBM-G has demonstrated active role of women SHGs in community mobilisation as well as facilitating in toilet construction by and large in a similar manner across the country. SHGs under NRLM take turn to clean their villages and create awareness on cleanliness and waste management in their respective villages.

In certain locations the task of collecting garbage has been handed over to SHGs for a fixed fee, where the fee has been a mutually acceptable amount between the Panchayat / Municipal authorities and the concerned SHGs (or their higher order federations).

In views of the above, Government of Arunachal Pradesh is committed to devise a strategy for effective SLWM through involvement of women SHGs under DAY NRLM. State Government is also actively considering to replicate a similar strategy for urban locations under DAY NRLM.


Director (PR)
Govt. of Arunachal Pradesh
Itanagar

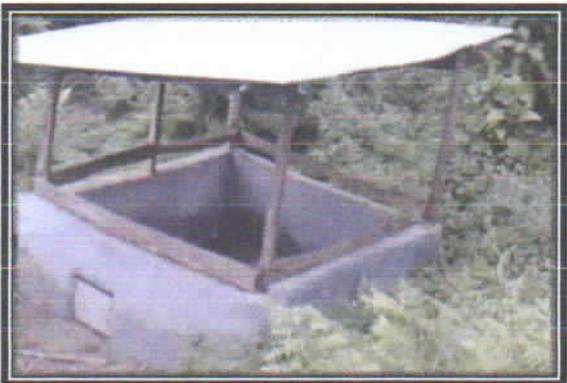
Chapter VII

SWM Works under SBM (Grameen) by Public Health Engineering Department (PHED)

PIGSTY



To control animal feces



Director (PR)
Govt. of Arunachal Pradesh
Itanagar



Solid Waste



DISTRIBUTION OF DUSTBIN



Director (PR)
Govt. of Arunachal Pradesh
Itanagar

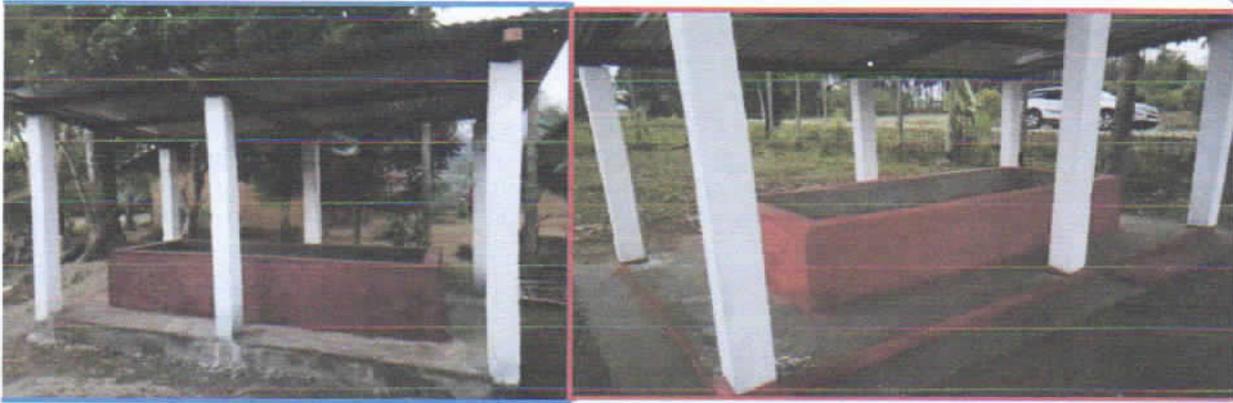


DUSTBINS MADE FROM LOCALLY SOURCED MATERIALS

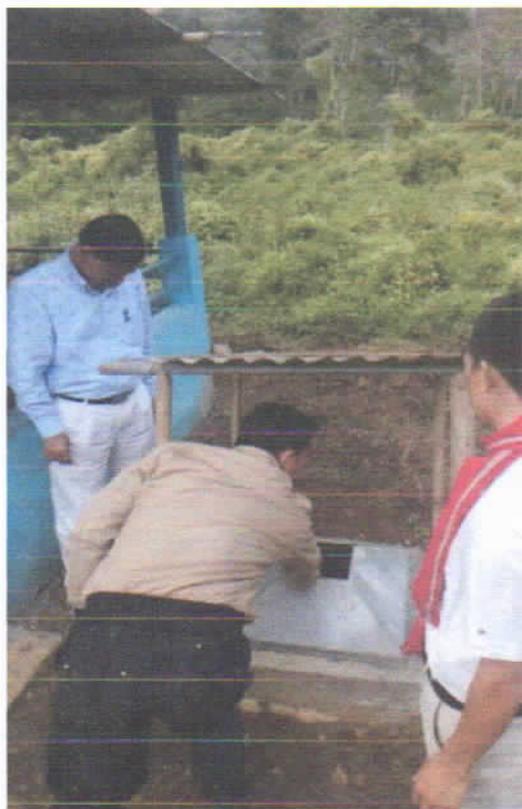
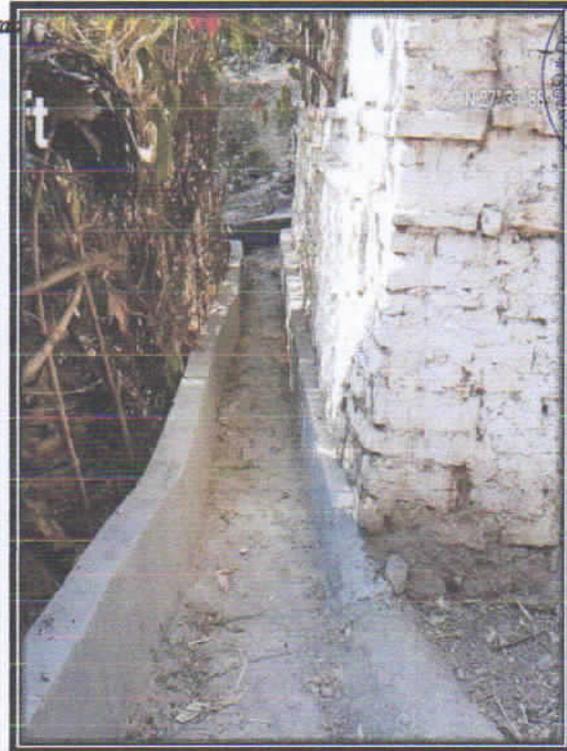



Director (PR)
Govt. of Arunachal Pradesh
Itanagar

VERMI COMPOST



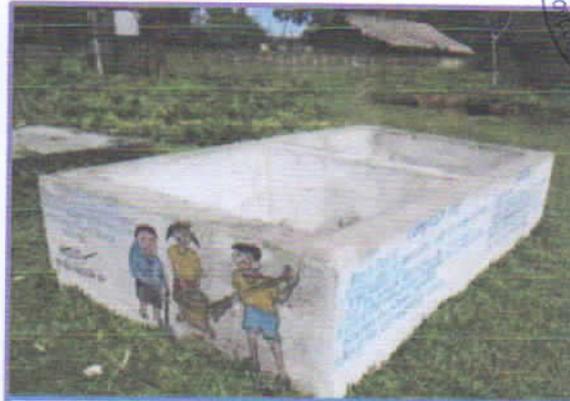
A
Director (PR)
Govt. of Arunachal Pradesh
Itz



Director (PR)
Govt. of Arunachal Pradesh
Itanagar



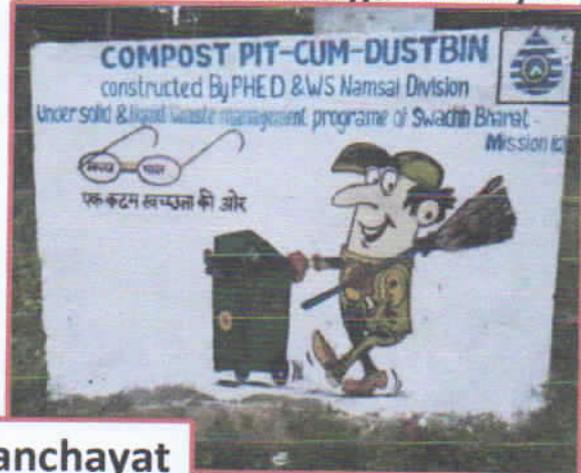
Rangalibe Panchayat



Kathalgu Panchayat



Sengapather Panchayat



SLWM AT GOSSANG-MOYING GRAM PANCHAYAT



COMPOST PITs



CC DRAIN FROM PSP