



## BUILDING SUSTAINABLE COMMUNITIES

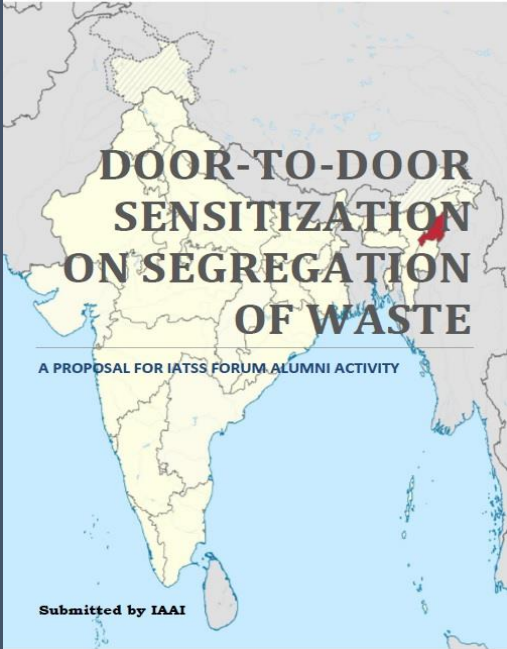
“ADOPTING SUSTAINABLE DESIGN TO TACKLE  
WASTE MANAGEMENT AT COMMUNITY LEVEL”

*Revised Project for IATSS Forum Alumni  
Activity submitted by IAAI*





## EARLIER PROJECT



## WHY THE REVISION/CHANGE?

Direction interaction with individuals was the core of the previous project and with the unprecedented Covid-19 pandemic, its execution became impossible. This dreadful calamity, however, helped in assessing the situation and putting forward a more concerted effort in tackling the waste management conundrum.

Rather than just focusing on creating awareness at grass-root level to assist the government in ushering in a proper waste management system, it became more imperative to build sustainable communities. Adopting sustainable methods at community level can mitigate the problem. Further, building sustainable communities not only furthers IATSS Forum’s goal but also, helps in achieving the UN Sustainable Development Goals.



## BUILDING SUSTAINABLE COMMUNITIES

### THE PROBLEM:

Of all the environmental issues, waste management is one area that State of Nagaland has failed in according the much-needed attention and action. The traditional methods of waste disposal are not suited to deal with the myriad of modern waste. Further, the State's substandard infrastructure; lack of resources, technical knowledge and accurate data have only intensified the problem.

People and government are not giving it the much-need attention because of the poor understanding of the hazards of waste, which results in indiscriminate waste disposal. Waste management is a perplexing and complex problem.



Sustainable Design is the key to address the plethora of environmental issues in tune with the SDGs. Adopting sustainable methods at community level can mitigate the environmental problems, which includes waste generation as well. Building sustainable communities helps in attaining the three pillars of sustainable development, viz., social, environmental and economic. Not only that, but the communities become aware of the environmental issues.

For the State of Nagaland, to attain the SDGs, the first thing is to inculcate the community on the mounting environmental issues along with the SDGs. This project devise sustainable ways of tackling the waste disposal dilemma with community participation, which will create path for other innovative solutions catered to the needs of the people and situation.

### TARGET AREA:

LAKE VIEW COLONY, one of the 96 colonies within Dimapur City, has been the first Colony that agreed to be adopted by PEKKORN International for execution of the revised project.

## PRELIMINARY ASSESSMENT OF THE TARGET AREA

After the Lake View Colony Council agreed to be adopted for the project, PEKKORN International conducted a preliminary assessment of the area from 15<sup>th</sup> – 31<sup>st</sup> March, 2021 to collect demographics as well as interact with the residents. Based on the assessment, the data are as:

- Households: 386
- Commercial establishments, including Pharmacy: 33
- Gas Agency: 1
- Hostel: 1
- Population: data is yet to be compiled

## PROJECT DETAILS

BUILDING SUSTAINABLE COMMUNITIES	
<b>Beneficiaries</b>	<ul style="list-style-type: none"> <li>▪ Community,</li> <li>▪ Institutions/Establishments,</li> <li>▪ Local Authority</li> <li>▪ Policy makers</li> <li>▪ Sanitation workers</li> </ul>
<b>Duration</b>	<p>6 (Six) months (April – September, 2021)</p> <p style="text-align: center;"><b><u>Note:</u></b></p> <p><i>The duration of the said project is indicated as 6 months to measure the impact. However, PEKKORN International will continue this project till the community can oversee/manage the system on its own.</i></p>
<b>Theme</b>	<b>Building Sustainable Communities</b>
<b>Priority Issue</b>	<ul style="list-style-type: none"> <li>▪ Human health</li> <li>▪ Sanitation</li> <li>▪ Environment</li> <li>▪ SDGs</li> </ul> <p style="text-align: center;"><b><u>Note:</u></b></p> <p><i>The current practice of waste disposal, within the selected area, is dumping the unsegregated waste in the Colony's three community receptacles. However, the waste is not collected on a routine basis, which causes release of noxious smell and also, scavengers being attracted, viz., dogs, rodents, ragpickers, etc., bestrewing the waste in the open. Further, this makes the public to dump the waste in the drains, water bodies, roadside or burning it in the open. These practices not only mar the aesthetics of the Colony but is starting to have a drastic effect on the human health and environment.</i></p>
<b>Goal</b>	To enable the community in tackling the waste management menace and help bring about a sustainable community design for each particular community, which will serve as a model for the other communities to follow.
<b>Objective(s)</b>	<ul style="list-style-type: none"> <li>▪ To set up a sustainable waste management system that is in conformity with the existing Rules.</li> <li>▪ To build sustainable community that are well-informed and responsible.</li> <li>▪ To achieve SDGs.</li> </ul>
<b>Location</b>	<p>Lake View Colony, Dimapur City</p> <p style="text-align: center;"><b><u>Dimapur City in Brief:</u></b></p> <p><i>Dimapur City is the most urbanized city in Nagaland and also the State's commercial hub. It generates the most waste in a day, i.e.,</i></p>

	<p>111.12 TPD (Tonnes Per Day) and has no treatment plant at present. Dimapur City has 23 Wards which is comprised of around 96 Colonies.</p>
<p><b>Activities</b></p>	<p>The activities involve in brief:</p> <p>1-3 months:</p> <ul style="list-style-type: none"> <li>▪ Collect demographics and waste generation data from the selected area.</li> <li>▪ Set up a Material Recovery Facility/ unit for waste processing within the selected area.</li> <li>▪ Sensitize the community bodies on framing/execution of rules.</li> <li>▪ Door-to-door sensitization on segregation and punitive action.</li> <li>▪ Make a systematic collection routine.</li> <li>▪ Train labors for waste collection and segregation.</li> </ul> <p>3- 6 months:</p> <ul style="list-style-type: none"> <li>▪ Commence collection of segregated waste and utilizing the unit for further sorting of the segregated waste. Recyclables will be sold; wet waste/food waste will be composted and rejects (non-recyclable waste, including sanitary waste) will be sent to the Dimapur City's dumping site/landfill.</li> <li>▪ Preference to youth, women and ragpickers to work in the unit</li> <li>▪ Take punitive action for non-segregation</li> <li>▪ Monitoring</li> </ul> <p>At every stage, PDCA method will be adopted to evaluate and improve the process.</p>
<p><b>Indicators to measure Impact/Desired Outcome</b></p>	<ul style="list-style-type: none"> <li>▪ The number of households and establishments practicing waste segregation</li> <li>▪ Per capita waste generation</li> <li>▪ The amount of waste utilized</li> <li>▪ The revenue generated from waste</li> <li>▪ The amount of waste sent to dumpsite</li> <li>▪ The impact on human health and environment</li> <li>▪ Employment opportunities for the youth/women/informal sector (ragpickers)</li> <li>▪ Protecting the health of the workers</li> </ul>

## Outcomes/Impact

- The beneficiaries will see a functioning waste management system being put in place. Along with it, they will experience behavioral changes and, a cleaner and healthier environment.
- Once the project is executed, the immediate result will be the sensitized and responsible beneficiaries. The potential value of the waste will be utilized and the proceeds invested back in the system. Accurate and up-to date data of the demographics and waste generation, including its characterization and composition will also be acquired.

## SDGs Supported

- ***SDG 1- No Poverty***  
The project will not only create opportunities for employment but also, entrepreneurs in the waste management sector. This will contribute towards eradication of poverty.
- ***SDG 6 – Clean Water and Sanitation***  
The project aims at providing clean water and environment, sans the contamination from waste, for the community.
- ***SDG 7 – Affordable and Clean Energy***  
In the integrated plan, the project activities can convert waste into biogas and provide clean renewable energy.
- ***SDG- 11 – Sustainable Cities and Communities***  
The project will help local bodies understand the concept of waste management and utilize the waste in creating a sustainable community.
- ***SDG 12- Responsible Consumption and Production***  
The success of the project will enable in reducing the waste generated as citizens realize the issue of modern waste. Further, it will develop circular models to engage brands to adopt and implement innovative technologies and practices collectively.
- ***SDG 13 – Climate Action***  
The project's integrated plan in dealing with indiscriminate waste disposal will aid to the climate change mitigation.
- ***SDG 14 – Life Below Water***  
The project's aim at preventing waste, especially plastic waste, from reaching the water bodies will help in improving the water quality and life below water.
- ***SDG 15 – Life on land***

	<p>A healthy life on land can be achieved only if waste is effectively managed.</p> <ul style="list-style-type: none"> <li>▪ <b><i>SDG 17 – Partnership for the Goals</i></b> Support and collaborations are required to address the perplexities of waste issues. The project will provide ideal opportunities to collaborate and work in partnership to achieve the goal.</li> </ul>
<b><i>Action Needed</i></b>	<ul style="list-style-type: none"> <li>▪ To create awareness on the importance of segregation of waste not only in Dimapur City but the whole of the State.</li> <li>▪ To promote and replicate the project in other States of India where other IAAI members reside.</li> <li>▪ To coordinate with the other members of PEKKORN International in introducing similar projects in the other ASEAN Countries.</li> <li>▪ To form a forum/body with the rest of the IATSS Forum Alumni for addressing the issue of waste management as a joint IATSS Forum Alumni Activity.</li> </ul>
<b><i>Budget</i></b>	<p>2,726 USD (Refer to ANNEXURE- 1)</p>
<b><i>M &amp; E Plan</i></b>	<ul style="list-style-type: none"> <li>▪ The fund will be provided in two installments.</li> <li>▪ Routine report to be submitted by the Project Implementer/Manager.</li> <li>▪ The IAAI will be kept abreast of the ongoing project and based on the report, adjustments, if required, will be made to ensure success of the project.</li> <li>▪ The second instalment will be released only if the progress report of the project is satisfactory. The second installment may be released upon the successful submission of the three-monthly report to IAAI</li> </ul>
<b><i>Partner and Sponsor to the Project</i></b>	<p>Living For Environment (LiFE) will assist as well as fund the project.</p> <p style="text-align: center;">Note:</p> <p><i>LiFE is an environmental based NGO formed in the year 2016 and has been working extensively in the field of waste management since its inception.</i></p> <p style="text-align: center;"><i>Website: <a href="https://livingforenvironment.com/">https://livingforenvironment.com/</a></i></p>
<b><i>Project Team</i></b>	<p>Miss Niksungla, representing PEKKORN International, will be the Project Implementer/Manager and will report to the IAAI on a routine basis.</p>

***Sustainability of the Project***

The sanitation fee collected from the residents and proceeds from the waste will cover the labour cost, utility bills, transportation and tipping fee of non-recyclable/domestic hazardous waste in the Dimapur City's landfill.

Signature:

A handwritten signature in black ink, appearing to read 'A. Banerjee', with a horizontal line underneath.

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PRESIDENT  
IATSS Forum Alumni Association of India (IAAI)  
India



## ANNEXURE – 1

### BUDGET BREAKDOWN

Sl. No.	Particulars	Amount
1.	Waste Processing Unit (Makeshift)* <ul style="list-style-type: none"><li>▪ Bamboo</li><li>▪ Tin roof</li><li>▪ Bamboo thatch</li><li>▪ Fans and switches</li><li>▪ Bulbs</li><li>▪ Electric wire</li></ul> *Cost includes materials required and making charges	340
2.	Hand Carts X 5	409
3.	Compost maker	205
4.	Plastic Bins/bucket (30 pieces)	164
5.	Tarpaulin bag	82
6.	PPE	27
7.	IEC materials	205
8.	Assessment, Documentation, Capacity Building, Sensitization and Monitoring	1158
9.	Miscellaneous	136
	<b>Total</b>	<b>2,726</b>