



*“Utilizing sustainable design to tackle
waste management at community
level”*

SUSDESI

*A project proposal for Sustainable Development Goal
(SDG) Innovation Participatory Action Research
Initiative*

THE PROBLEM

Of all the environmental issues, waste management is one area that our State 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.

About LiFE

Living For Environment (LiFE), a registered environmental NGO, formed in the year 2016 has been proactively working at the grassroots level in waste management since its inception.

After undertaking numerous projects like cleanliness drive, plastic road, waste assessment and research on waste management in Nagaland, in collaboration with the Urban Local Bodies and the State Government, LiFE has realized that without building sustainable communities, the issues of waste cannot be tackled.

Website:

<https://livingforenvironment.com/>

SUSDESI

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 our State, to attain the SDGs, we need to inculcate our community on the mounting environmental issues along with the SDGs. SusDesi 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. Simply creating a solution without building the foundation or addressing the root cause will end in a result that is not impactful or effective.

TARGET AREA BACKDROP

INDISEN VILLAGE, DIMAPUR, NAGALAND, INDIA.

Waste management in the State of Nagaland is still an elusive concept. The public lack the knowledge on waste management and the officials do not possess the requisite knowledge as provided by the existing Waste Management Rules. There is an urgent need for creating awareness at grass-root level to assist the government in ushering in a proper waste management system in the State. Further, Dimapur City being the commercial capital of the State, generates the maximum amount of waste on a daily basis.

The area, though is a rural sector is actually close to a semi-urban hub, has been selected based on a preliminary dialogue with the Council and its residents and are keen to collaborate. Also, the waste disposed at present is the traditional method as the sanitation services are not provided to rural areas.

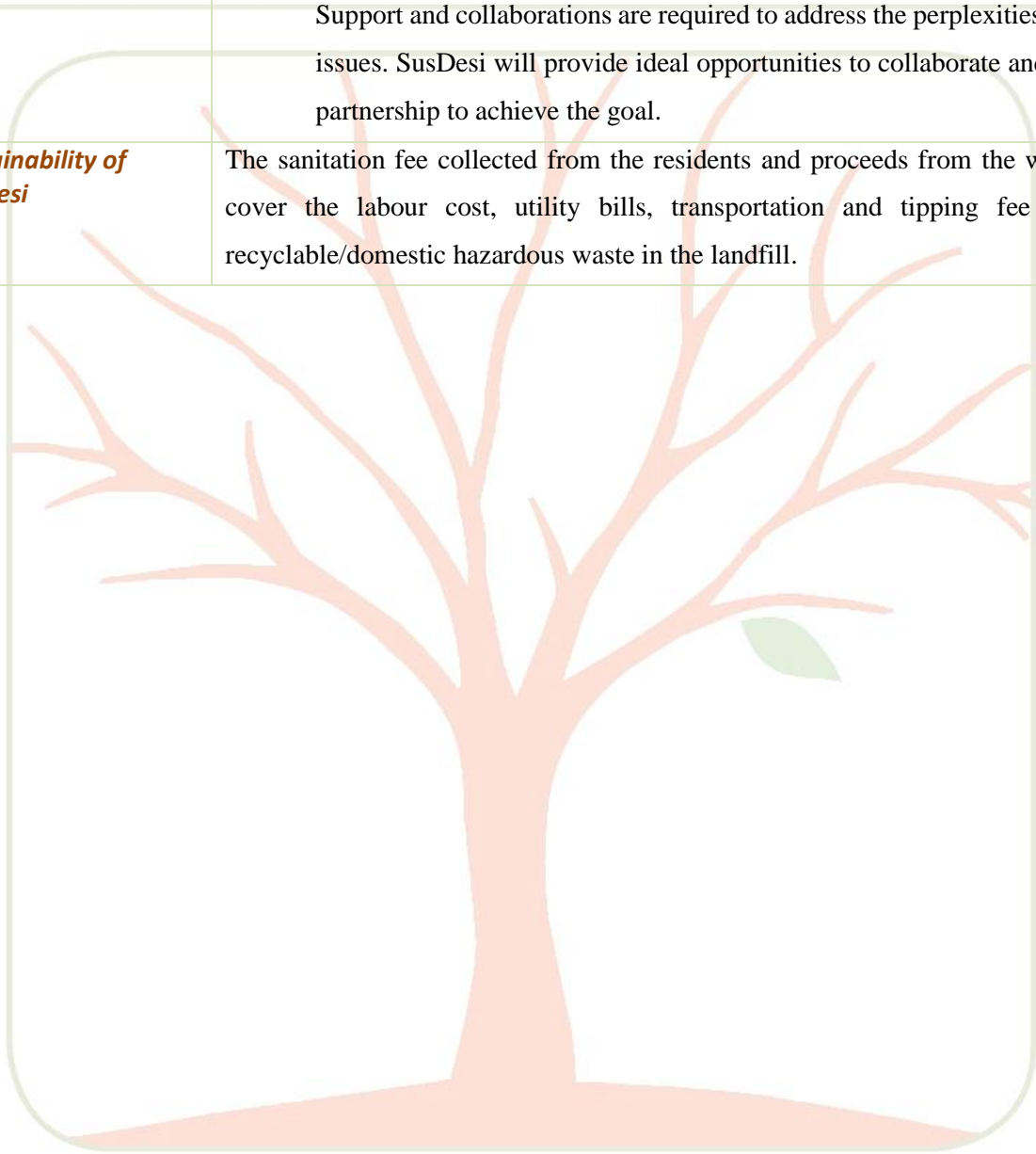
PROJECT SUMMARY IN BRIEF

| <h1>SusDesi</h1> | |
|-----------------------|---|
| Beneficiaries | <ul style="list-style-type: none"> ▪ Community, ▪ Institutions/Establishments, ▪ Local Authority ▪ Policy makers |
| Duration | 6 (Six) months |
| Budget | ₹2,00,000/- A financial breakdown of the budget is annexed as ANNEXURE – 1. |
| Theme | Building Sustainable Communities |
| Priority Issue | <ul style="list-style-type: none"> ▪ Human health ▪ Sanitation ▪ Environment ▪ SDGs |
| Goal | 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. |

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| Objective(s) | <ul style="list-style-type: none"> ▪ To set up a sustainable waste management system that is in conformity with the existing Rules. ▪ To build sustainable community that are well-informed and responsible. ▪ To achieve SGDs. |
| Location | Indisen Village, Dimapur |
| Activities | <p>In a nutshell, the activities involve are as under:</p> <p>1-3 months:</p> <ul style="list-style-type: none"> ▪ Collect demographics and waste generation data from the selected area with a combined population of about 3,000 with around 454 households. ▪ Set up the unit for waste processing ▪ Sensitizing the community bodies on framing/execution of rules ▪ Door-to-door sensitization on segregation and punitive action ▪ Make a systematic collection routine ▪ Train labors for waste collection and segregation <p>3- 6 months:</p> <ul style="list-style-type: none"> ▪ Commence collection of segregated waste and utilizing the unit ▪ Preference to youth, women and ragpickers to work in the unit ▪ Take punitive action for non-segregation ▪ Monitoring <p>At every stage, PDCA method will be adopted to evaluate and improve the process.</p> |
| Indicators to measure Impact/Desired Outcome | <ul style="list-style-type: none"> ▪ The number of households and establishments practicing waste segregation ▪ Per capita waste generation ▪ The amount of waste utilized ▪ The revenue generated from waste ▪ The amount of waste sent to dumpsite ▪ The impact on human health and environment ▪ Employment opportunities for the youth/women/informal sector ▪ Protecting the health of the workers |
| Outcomes/Impact | <p>The beneficiaries will see a functioning waste management system being put in place. Along with it, they will experience behavioural changes and, a cleaner and healthier environment.</p> |

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| | <p>Once our solution 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.</p> |
| <p>SDGs Supported</p> | <ul style="list-style-type: none"> ▪ SDG 1- No Poverty SusDesi 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, SusDesi’s activities can convert waste into biogas and provide clean renewable energy. ▪ SDG- 11 – Sustainable Cities and Communities SusDesi 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, SusDesi will further develop circular models to engage brands to adopt and implement innovative technologies and practices collectively. ▪ SDG 13 – Climate Action SusDesi’s integrated plan in dealing with indiscriminate waste disposal will aid to the climate change mitigation. ▪ SDG 14 – Life Below Water SusDesi’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 A healthy life on land can be achieved only if waste is effectively managed. |

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| | <ul style="list-style-type: none"> ▪ SDG 17 – Partnership for the Goals Support and collaborations are required to address the perplexities of waste issues. SusDesi will provide ideal opportunities to collaborate and work in partnership to achieve the goal. |
| <p>Sustainability of SusDesi</p> | <p>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 landfill.</p> |



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ANNEXURE – 1*Budget Breakdown*

| Sl. No. | Particulars | Amount |
|----------------|--|-----------------|
| 1. | Waste Processing Unit (Makeshift)* <ul style="list-style-type: none"> ▪ Bamboo ▪ Tin roof ▪ Bamboo thatch ▪ Fans and switches ▪ Bulbs ▪ Electric wire (9.5 HX15 LX10 B) *Cost includes materials required and making charges | 25,000 |
| 2. | Hand Carts X 5 | 30,000 |
| 3. | Compost maker | 15,000 |
| 4. | Plastic Bins/bucket (30 pieces) | 12,000 |
| 5. | Tarpaulin bag | 6,000 |
| 6. | PPE | 2,000 |
| 7. | IEC materials | 15,000 |
| 8. | Assessment, Capacity Building, Sensitization and Monitoring | 85,000 |
| 9. | Miscellaneous | 10,000 |
| | Total | 2,00,000 |

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