

Integrating Renewable Energy with Micro Architecture: A Sustainable Living Solution for Tropical Nations, an Integral Procedure of SLiM (Sustainable Living in Malaysia)

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Problem Statement: Areas for development focus on healthier sanitation, higher security, improvement of comfort, increase of knowledge and sustainability; while the aspect of technologies encompasses energy, clean water generation, waste management as well as a living space that is secure, comfortable and yet remains similar to the natural habitat.

Objective: The purpose of this research is to ascertain the relationships between communities' grassroots needs and the technologies implemented.

Methodology: Through the exploration, existing technologies will be challenged in authentic tropical ecosystem on its effectiveness.

Results: This study authenticates a past project implemented in a specific village in Malaysia on the effectiveness of development through users' account. The prevailing trend is that the development and technologies were not fully utilized due to limited research performed on empathy, which resulted in waste of resources and unmet needs. This births forth the development process model where relationship between needs and technologies is in union.

Conclusion: The result of this analysis can be used to determine the customization of technologies on micro architecture as a sustainable development solution. The findings may be useful in meeting rural development needs elsewhere by successively following through the SLiM (Sustainable Living in Malaysia) process model to improve efficiency and solutions delivery.