ECO TEMPLE AS MICROCOSM FOR AN IDEAL SOCIETY: MINDFUL CONSUMPTION AND SUSTAINABLE DEVELOPMENT

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INTRODUCTION

Buddhist Approach to Responsible Consumption and Sustainable Development Among the three poisons, which Buddha referred, ‘greed’ is the fundamental reason behind consumerism among the modern society. The poison of greed is so deep that it overshadowed the ability of reasoning which has resulted in maintaining the social status of any society whether it is based upon class, caste, ethnicity or religion. The human civilization will reach its end if the culture of breeding greed does not end. This culture of greed has polarized our societies in terms of poverty and social inequalities. The rigidity of caste system in India is based upon the endogamous nature sanctified through religion for the purpose of maintaining the status quo wherein one caste can maintain its power of resources over the other by clinging and encouraging policies, which nurtures consumerism. The cult of consumption and greed will destroy the achievements of climate change by any government or society. More than 6.8 billion human beings are now demanding ever-greater quantities of material resources, decimating the world’s richest ecosystems, and dumping billions of tons of heat trapping

* 1. Director, The Foundation for His Sacred Majesty, Chennai, Tamil Nadu, India.
2. Priya Moorjani, Kumarasamy Thangaraj, Nick Patterson, and others (2013); Genetic Evidence for Recent Population Mixture in India; American Journal of Human Genetics 93, 422–438, September 5, 2013; USA
gases into atmosphere each year. Making policies and technological changes will show minimum levels of changes due to the preservation of cultures centered in consumerism. The Buddhist teachings of impermanence helps us to recollect the elements constituting our body, and that all compounded things are impermanent. Ignorance to this teaching leads to greed. Such greed destroys the discriminatory wisdom of distinguishing need and desire. Since the conclusion of the 1st Eco Temple Community Development Project meeting in Sri Lanka in January of 2016, the members of International Network of Engaged Buddhists (INEB) have given greater importance to develop the Sukhavati Eco Temple to be constructed in Tamil Nadu, India. The Buddhist leaders of INEB construed the idea of creating a microcosm for an ideal society delivering mindful consumption and sustainable development not just through theoretical and value-based teachings but also through projects, which has the nature of replicability obtained with stated precision by different communities in different locations ensuring cultural adaptability, economic viability, social accessibility, and environment sustainability with the application of locally available resources.

BACKGROUND

The Interfaith Climate and Ecology Network (ICE) of the International Network of Engaged Buddhists (INEB) was initiated in 2012 after many years of individual members in the INEB network engaging in a wide variety of Buddhist/faith based environmental activities. These activities came from our commitment as Buddhists to engage in the suffering we encounter in the world (1st Noble Truth). In this context, it has been the suffering throughout Asia brought about by environmental degradation from the modern industrial development process, such as deforestation and the destruction of numerous habitats. A critical aspect of this process has been the economic marginalization of rural communities and the exploitation and destruction of their environments for the creation of massive energy projects for the creation of high consumption

3. Watts, Jonathan (2016); Eco Temple Community Project Report; International Engaged Buddhist Network; Bangkok, Thailand
urban lifestyles—e.g. massive dams that have relocated hundreds of thousands of people and nuclear power plants that endanger the entire fabric of life in rural areas. As such, INEB members in their environmental activities have pushed deeper into the structural and cultural causes of environmental suffering in their regions (2nd Noble Truth) and have articulated alternative visions based on Buddhist teachings (3rd Noble Truth) with activities to realize these visions (4th Noble Truth). The Eco-Temple Community Development Project is a plan to bring many of these activities in different regions together to bolster the integrative efficiency of each individual project and support and advance a wider movement among Buddhists, other communities of faith, and wider civil society, business, and governmental initiatives to build sustainable and ecological societies. The Eco Temple Working Group was formed at the 2nd ICE international conference in Seoul, Korea in April 2015. This working group has emerged from the participation of Rev. Hidehito Okochi of Japan in the 1st ICE Conference in Sri Lanka and the aftermath of the Fukushima nuclear incident. Since then, the Japan Network of Engaged Buddhists (JNEB) has created an International Project on Energy to share experiences on nuclear energy among Buddhists and other religious groups in the Global North, and in coordination with INEB conduct two study tours (2012, 2015) for those in the Global South to learn of the resiliency activities of Buddhists priests and other civil society groups in Fukushima and to study more in depth Rev. Okochi’s own eco-temple communities in Tokyo. A two-day meeting held just after the INEB General Conference in Sri Lanka from January 29-30, 2016 was the first time this new sub network had an extended period together to share their activities and delve more deeply into the numerous interconnected issues in eco-temple community design.

VISION AND STRATEGY:5

The specific goal of the project is to initiate and realize holistic Eco-Temple Communities based out of Buddhist temples (and

5. Watts, Jonathan (2016); Report on JNEB Energy Tour in Fukushima and ICE in Seoul; Interfaith Climate and Ecology Network; Seoul, South Korea.
applicable to the centers of other religions) in the INEB and ICE network. INEB and ICE members have a wide variety of communities, resources, and needs. By working together to develop an Eco-Temple Community Design Scheme, an information base of best practices and available resources can be developed for each community’s specific needs. The overarching goal is to develop ecological human communities that are sustainably interconnected with the natural environment through the community center of a religious facility/temple. Such religious centers will manifest ecological standards on the material, relational, and spiritual levels:

- Material: design, building materials, energy usage, waste management, economic sustainability, and connection to outer environment through gardens, agriculture, and forestry/water management
- Relational: community solidarity and interconnection through participation in various temple based ecological activities, including education and linkages with CSOs, government, and business
- Spiritual: cultivating the inner ecology of community members through spiritual practice and teachings that relate to ecological issues, which forms the basis of realizing the relational and material goals through grounded human interaction

The Eco-Temple Community Design⁶ (see chart below) is a holistic development process that involves much more than simply putting solar panels on the roofs of temples. It involves a comprehensive integration of: 1) ecological temple structure and energy system, 2) economic sustainability, 3) integration with surrounding environment, 4) engagement with community and other regional groups (civil society, business, government), and 5) development of spiritual values and teachings on environment, eco-dharma. As a faith based network, INEB and ICE see one of their key contributions to social change as the reform and revival of our Buddhist and spiritual traditions, especially in this case, the

⁶ Watts, Jonathan (2016); Eco Temple Community Project Report; International Engaged Buddhist Network; Bangkok, Thailand.
community and the physical presence of a holistic and ecologically minded religious center. Through the religious center, we can contribute greatly to the critical need for education and practice of inner ecology, while connecting that to outer ecological activities, such as community mobilization on environmental issues, right livelihood, and, foremost for this project, the establishment of a zero-waste, clean energy temple structure integrated into the local environment. From such a movement, religious communities can have a progressive role, contribution, and linkages with wider movements for ecological design and post-industrial societies, critical to the immediate global environmental crisis.

SOLAR SEED PLANTING⁷:

⁷ Watts, Jonathan (2016); Eco Temple Community Project Report; International Engaged Buddhist Network; Bangkok, Thailand.
In the Eco Temple Community Design mentioned above, this solar “seed planting” provides a key fulcrum for immediately realizing components of the holistic design—such as 1) ecological temple structure and energy system and 2) economic sustainability—while providing a financial base for realizing others—such as 3) development projects to support and maintain the surrounding environment, 4) educational projects with local community and other regional groups, and 5) realization of spiritual values by embodying environmental values in a religious community. In the long-term, as renewable energy grows, this “seed planting” can go beyond the installation of solar to include micro-hydro, wind, biomass, and even geo-thermal.

As seen in the Eco Temple Community Design, there are a wide variety of methods of engagement to realize a full-fledged eco temple community. “Seed Planting” can also start with other initiatives in Eco Temple Community Design, such as establishing Sufficiency Economy schools. INEB itself, as a predominantly Buddhist based network, has affiliates, members, and extended connections to temples throughout all of Buddhist Asia. These include extremely sensitive environmental areas, such as the Himalayas and the Mekong Delta, and areas of dense population where the human environmental footprint needs to be drastically
reduced, such as India and China. The potential of just Buddhist temples, not to mention all religious facilities, to act as centers for lifestyle change in terms of energy use and environmental preservation is needless to say immense. With this tremendous scope in mind, the Eco-Temple Community Development Project seeks to proceed step-by-step, temple-by-temple, by establishing a core foundation in a secretariat and its principal member temples. With the establishment of a secretariat and full time coordination, the essential work of 1) documentation of activities, 2) coordination of technological and methodological inputs in the network, and 3) coordination of site visits and conferences can be accomplished. The project, however, does not seek a funding model based on an annual budget for activities and administrative costs, which while yielding tangible outcomes does not create further financial resources and hence needs constant replenishing. Instead, using the model of solar “seed planting” mentioned above, the project seeks to secure single time donations towards the construction of solar facilities, ultimately enabling the temples in the network, like Zhengjue Temple in China, to in turn become “seed planters” for new temples in the network. This financial model has already been successfully achieved by Rev. Hidehito Okochi who not only has used the profits of his solar facilities to run a local environmental CSO but used the Buddhist practice of generosity (dana) and support for the local temple by its lay people to raise capital for the initial installation of solar panels.  

The Sukhavati Eco-temple is the first of its kind in South-India and plans to have the following to start with, as the foundation. This foundation will serve as an educational tool with various modules functioning.

MAIN OBJECTIVES OF THE SUKHAVATI ECO TEMPLE PROJECT:

1. To build and demonstrate that earth, as a building material, can be used to create modern, progressive, eco-friendly and safe habits.
2. To train local communities on cost effective technologies and make it affordable to all

3. To develop capabilities of local communities on environmental protection, and encouraging responsible participation in green governance

4. To protect and preserve Buddhist heritage sites which are models of sustainable architecture and iconographic transmission of teachings of the Buddha

5. To develop self-sustainable green economy projects for continuous intervention with communities, and sustain social and environmental activism.

COMPONENTS OF SUKHAVATI ECO TEMPLE PROJECT:

1. Compressed Stabilized Earth Blocks:

It was a result of a research program in Colombia to improve the hand moulded and sun dried brick (adobe). This press could get regular blocks in the shape and size, denser, stronger and more water resistant than the common adobe. Since then many more types of machines were designed and many laboratories got specialized and skilled to identify the soils for buildings. Many countries in Africa as well as South America, India and South Asia have been using a lot this technique. The soil, raw or stabilized, for a compressed earth block is slightly moistened, poured into a steel press (with or without stabilizer) and then compressed either with a manual or motorized press. CSEB can be compressed in many different shapes and sizes. Compressed earth blocks can be stabilized or not. But most of the times, they stabilized with cement or lime. Therefore, we prefer today to call them Compressed Stabilized Earth Blocks (CSEB). CSEB is sustainable and environmental friendly. Earth is a local material, and soil should preferably extracted from the site itself or not transported far away. In Sukhavati Eco temple project

9. Riza Fetra Venny, Ismail Abdul Rehman, Ahmad Mujahid Zaidi (2010); A brief review of Compressed Stabilized Earth Brick (CSEB); International conference on Science and Social Research; Kualalumpur, Malaysia.

we would like to excavate a pond and that soil shall be used for producing CSEB blocks. It is a labor-intensive technology, which would provide job opportunities in the locality. It is a cost and energy effective material, as it is not being fired like the conventional bricks. Similarly, it does not cause pollution similar to that of fired bricks. CSEB is much cheaper in cost than the conventional fired bricks.

2. Biogas Plant:

Recycling and reuse of human excreta for biogas generation is an important way to get rid of health hazards from human excreta. Human excreta contain a full spectrum of pathogens. Most of these pathogens are eliminated due to anaerobic condition inside the digester.\(^\text{11}\) Besides using biogas for different purposes, biogas plant effluent can also be used as manure or discharged safely into any river or water body without causing pollution. Thus biogas technology from human wastes has multiple benefits – sanitation, bioenergy and manure. Human excreta based biogas technology remained unnoticed for long due to the fact that the available technology was not socially acceptable, as it required manual handling of human excreta, which contains a full spectrum of pathogens.\(^\text{12}\) This does not require manual handling of human excreta and there is complete recycling and resource recovery from the wastes. The Digester is built underground into which excreta from public toilets flows under gravity. Human excreta based biogas contains 65-66% methane, 32-34% carbon dioxide and, rest the hydrogen sulphide and other gases in traces. Biogas is utilized for cooking, lighting through mantle lamps, electricity generation and body warming during winter. Cooking is the most efficient use of biogas. It burns with a blue flame and without soot and odour.

3. Vermi Composting and Vermi Culture Production Unit

Earthworms will be procured from various sources for

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June 2015; USA

11. Singh, Puja & Bajpai, Usha (2011); Anaerobic digestion of flower waste for methane production: An alternative energy source; Environment Progress and Sustainable Energy, Wiley Publications; New Delhi, India.

12. Rastogi, Siddhartha Kumar (2015); A Case Study of Sulabh International Social Service Organisation; Indian Institute of Management; Ahmedabad, India.
our vermicomposting projects. The project is planned to have earthworm manure in surplus to supplement the cultivation with manure as and when needed. The raw material for vermicomposting will be the waste from the biogas plant in the form of slurry. Also, the solid waste from the sewage treatment plant will be used in smaller quantities along with the biogas plant waste. As in all our ventures at the eco-temple, the vermicomposting process will be educating students and villagers, apart from providing technical support to install vermicomposting units. The earthworms will be offered with other such units to promote this practice of producing natural manure. The earthworms produced will be periodically, usually after a harvest, dispersed in our cultivable lands. We are confident that this endeavor at our temple will replenish our temple land and combined with chemical free practices, our land will be ready for certification in 5-10 years’ time as an organic farm.

4. Solar powered kitchen and Solar roofs for residence:

India in general and the southern part in particular, can boast of having round the year sunshine, with summers having heat to unbearable extents. As one moves from the coast towards the interior, the intensity of sun increases. With such amounts of solar energy, the eco-temple plans to sustain its electricity needs by harvesting the solar energy to the extent possible and be less dependent on the government provided energy. The solar panels that will be established will provide energy for the kitchen and the other general electrical purposes. The excess energy will be connected to the grid. While the excess energy can be considered to bring revenue from the government, we plan to save the excess power generated in our compound to be compensated with the power that we get from the government during less sunny days.

13. Ismail S.A. (2005); *The Earthworm Book*; Other India Press; Goa, India.
15. Report of United Nations Development Program (2014); *India brings sun into the kitchen*; United Nations Development Program; New Delhi, India.
16. Monica Parpal (2014); *Solar power for commercial kitchen*; Food Service Warehouse; New Delhi, India.
5. Rainwater Harvesting System:

The southern part of India satisfies its water needs through the Southwest monsoons. Traditionally, the Indian villages have been designed to harvest rainwater through natural and artificial water bodies that have been constructed in the periphery of the villages.\textsuperscript{17} The villages were so constructed that the rainwater was trained to reach these water bodies.\textsuperscript{18} We at the eco-temple plan to have a water body to serve as the primary percolation pond and which will be the lowest elevation of all the places in the temple. The roofs of the buildings will be so designed that, there will be efficient harvest of the rainwater, which will lead to the percolation pond.\textsuperscript{19} The setting up of percolation pits will involve participation of local villagers and students from the neighboring schools and colleges.

6. Garden with plants of medicinal values:

The Indian medicinal systems have been in existence for several centuries and their use is increasing exponentially in India and abroad. Plants are an integral part of this system and many of these plants are in fact consumed as regular food. Villagers are aware of all or most of these plants by-heart and don’t depend on institutionally trained doctors for common ailments. There are trained physicians of folk medicine in every village who have the expertise to treat conditions, which are bit more serious than the common ailments. With science based medicinal systems taking over, the knowledge system of these traditional practices is fading away and it will not be long before all this knowledge is lost and hence calls for documentation. The temple will maintain a complete list of the plants that were and are used to treat various ailments and the procedure of administering them. A farm will also be maintained to complement the catalog of plants of medicinal value. A seed repository will also be maintained and these seeds will

\textsuperscript{17} Sushmita Sen Gupta (2015); \textit{Tamil Nadu's temple tanks hold key to water recharge}; Down To Earth; New Delhi, India.


\textsuperscript{19} \textit{Report on Rain water Harvesting} (2012); Tamil Nadu State Government; Chennai, India.
be germinated regularly (once in two-four years) to ensure that we do not lose the viability of the seeds. Our seed bank is also being planned with an aim to be a source for other such farms. Biannual meetings focusing on plants of medicinal value will be conducted to bring together various traditional practitioners and also to motivate youngsters who are interested in this field.

7. Sewage treatment plants (STP)

Urban and rural planning in developed countries has significant allotments towards treatment of the sewage generated. The eco-temple plans to invest significantly in sewage treatment policies, with an aim to educate the same to the neighboring villages about the effective handling of sewage. Given that the lifestyle and practices at the eco-temple will be free of chemicals, the sewage generated will be free of chemicals and treatment by means of natural methods will be prioritized. It will be stored in a place, which will not bother any of our neighbors or the temple. The sewage will be treated with micro and macro algae by growing these algae in them. The effluent water will be moved to a second storage tank where there will be second treatment using micro algae. Fish will be introduced in this tank to control over growth of the algae. The water so treated will be used to irrigate the crops along with the regular well water. The sediments from the sewage will be treated using earthworms and used for production of manure for our farm.

8. Agrophotovoltaic Farming Systems

Agrophotovoltaic Farming Systems is co-developing the same area of land for both solar photovoltaic powers as well as for agriculture. Presented in the early 1980s, these conditions still serve as a reference in the definition of agrivoltaic systems: Orientation of solar panels in the south for fixed or east-west panels for panels rotating on an axis, sufficient spacing between solar panels for sufficient light transmission to ground crops, and elevation of the supporting structure of the solar panels to homogenize the amounts of radiation on the ground. Simulations and studies indicate electricity and shade-resistant crop production do not decrease in productivity, allowing both to be simultaneously produced efficiently. Sukhavati Eco Temple wanted to develop a project
integrated with the production of solar energy, millet farming and organic vegetable production spread over in 65 acres of land with 10 MW.

9. Spiritual and value based training centre

The temple is based on the principles of sustainable use of resources and conservation of the same. While practicing sustainability and conserving the resources, we also aim to teach sustainability and conservation through the temple to students and villagers. We also, plan to restore the lost natural resources like native tree species in and around the eco-temple. The needs for the tree saplings will be supplemented from our nursery that will be housing tree saplings of native tree species. The trees will also be distributed to local schools to promote tree planting. Our education will focus on use of naturally available products for everything in a human life. The importance of reducing chemical wastes being released into nature will be stressed and alternatives taught. Experts will be invited on a regular basis for lectures focusing on sustainable development.

10. Buddhist Architecture, Heritage Preservation, and Digital Museum

Buddhist religious architecture developed in the Indian subcontinent. Three types of structures are associated with the religious architecture of early Buddhism: monasteries (Viharas), places to venerate relics (stupas), and shrines or prayer halls (Chaityas, also called chaitya grihas), which later came to be called temples in some places. As with Buddhist art, architecture followed the spread of Buddhism throughout south and east Asia and it was the early Indian models that served as a first reference point, even though Buddhism virtually disappeared from India itself in the 10th century due to counter forces. Now there is a huge Buddhist revival movement, which is spreading all over India. Thousands and thousands of Indians are embracing Buddhism especially among the so-called lower castes of the Indian society. The South Indians took the inspiration from Pandit Ayotheethsar in the 19th century,

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20. Jean Philippe Vogel; Adriaan Jacob Barnouw (1936); Buddhist Art in India, Ceylon, and Java. Asian Educational Services; New Delhi, India.
21. Ravikumar (2005); Iyothee Thass and the Politics of Naming; The Sunday Pioneer; Chennai, India.
and the 20th century Buddhist revival movement of Dr. Ambedkar has given a nationwide consolidation of Buddhists of India. In Tamil Nadu state, there is no single Buddhist temple except for few small centres. Tamil Nadu happened to be the home for Dravidian based Buddhist architectures, which are still in existence though the Hindus have taken it over. This gives an opportunity for the Buddhist to construct a Dravidian based Buddhist architecture eco-temple. This will help in preserving the rich heritage of Buddhist architecture in Tamil Nadu and also connect with South East Asian countries like Vietnam, Thailand, Cambodia, Indonesia and Myanmar in reviving the ancient path of silk route and maritime Buddhism. The eco-temple also proposes to have a digital museum for maritime Buddhism and digitize Buddhist cultures and traditions. This will help to connect the former Buddhist communities who are treated as lower-caste Indians to connect with their rich cultural heritage of the past and rediscover the enlighten path.

CONCLUSION

Seeing the realization of a community development sector gives one an even stronger sense of the potential for success for the Sukhavati Eco-Temple project. At this stage, it seems like further development of the land and its environment would be the next step before actually building the temple. However, the time is ripe for proceeding with temple construction as the next stage as a means to provide further inspiration and energy to the community. As Buddhist identity, education, and training is still underdeveloped in this new movement among so-called lower caste Indians, an actual temple—of which there are none for Dalit communities in Tamil Nadu—would be an important sign of empowerment and identity. The status of a major religious center would have further benefits in their continual negotiations and struggles with various government and business sectors. It is hoped that a major Sukhavati eco-temple would add to this culture by not only restoring the original Buddhist culture of the region but also bringing the teachings and insights of ancient and modern Buddhist leaders on spirituality and

social justice to the wider communities of this region. While social and spiritual teachings take place, it is also necessary to develop the environment sensibility among the communities for a better future. The sukhavati eco temple will revive the cultural ethos of the locality through giving life to the Buddhist architectures and artifacts. In a society, which is becoming more consumerist economy will foresee a brighter future with the opportunities and contributions of sukhavati eco temple. Greed, hatred and delusion; the three poisons should be erased in our society which is the root cause behind social inequalities, economic disparity and environmental degradation. Another world is possible through the hopes of the present. A just world with peace and harmony needs to be established through a microcosm. Sukhavati eco temple will be the harbinger of this microcosm of the Ideal society realizing the true spirit of Buddhist responsibility.

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