**In less than 800, please describe the remarkable and innovative effort carried out by the nominee to reduce the impact of disasters and build disaster resilience under the theme “shaping the future”.**

Architect Shankar is one of those rare individuals who managed to combine the technological advances in his professional domain with his social commitment in responding to the societal needs in developing countries. Professional architects in most countries often focus on creating houses and building for high net worth individuals and wealthy corporations. Their objective is primarily on visual features and building ambience, less so on functionality and least on cost. This has been the situation in India too before Shankar started his practice in the State of Kerala in 1987. At a time, when there was no concept of “Green Buildings” Shankar’s buildings stood out for its efficient use of local materials and adaptation to local climate, two factors which are the hallmarks of todays green buildings.

When he started his Habitat group in 1987, Architect Shankar brought revolutionary changes in the domain of buildings in the state of Kerala. Being an integral part of the growing environmental movement in Kerala, he focused on creating affordable dwelling for the middle and lower middle class group. When designing buildings of lower cost and better environmental features, he did not compromise on beauty or functionality. The biggest indication of his success was when individuals and institutions with higher income having shunned his buildings as “low cost” in early days, started to embrace them in large numbers. This, naturally removed the stigma attached to such architecture and in turn promoted the brand of his buildings. Over the last thirty years his group have built hundreds of thousands of buildings under his leadership. In addition he has motivated a new generation of architects and civil engineers who promote this philosophy and trained more than 15,000 artisans at the Habitat Technology School. He also holds the record of constructing the largest earth building, at 600,000 square feet, in Dhaka, Bangladesh.

Within the context of the Sasakawa award, I want to focus on his involvement in post disaster reconstruction. Shankar was already involved in post disaster reconstruction in Bhopal (1984), after the Union Carbide tragedy and he designed and supervised the construction of 400 dwelling units to rehabilitate those who were impacted. The post disaster work then continued in virtually every major disaster in India;

* 1991, Uttarkasshi Earthquake – Involved in construction of 500 demonstration units and training local artisans
* 1993, Latur earthquake – Introduced houses which are not only cost effective but also earthquake resistant and produced manuals of building such structures in local language
* 1999, Orissa Cyclone – Designed and constructed the “Manaveeyam” village built by the Government of Kerala for the affected population
* 2001, Gujarat Earthquake – Built earthquake resistant, low cost green institutional buildings such as schools, hostels and disaster shelters in addition to housing
* 2004, Tsunami – Involved in reconstruction both in India and Sri Lanka. In Sri Lanka alone built more than 95,000 dwelling units with self help groups

Three specific features charecterise Shankas’s buildings in post disaster settings. Firstly, they are “Green” in every way, from being built using locally available materials to making use of natural light and ventilation, thus being energy efficient. Secondly, they are built by training local people, often the impacted people themselves thus giving them not just a house but also increasing their resilience. Thirdly, his structures cost much less than any alternatives available so the resources, which are scare in any post disaster setting can benefit more families

Shankar’s contribution just does not stop at building green building sin disaster resilient areas. He is the Chairman of the “National Committee on Disaster Resilient Techniques” and has been instrumental in framing guidelines and policies in the field of Disaster Management and Reconstruction.

In addition to just creating buildings, Shankar also has been advocating the importance of buildings as means of achieving climate change resilience. Construction and maintenance of buildings account for more than 30 % of the green house gas emissions across the world. However, across the world people are introducing unsustainable building materials procured from across the continents and used in a most energy in efficient manner. Energy involved in the construction of glass and steel, the energy intensity of transport of marble and wood over large distances, the need to use extra energy to heat and cool buildings once the building is designed without factoring local climate all add to the carbon footprint. So by thinking through the building, its loci and function, ensuring local procurement, use of natural light and wind, maximizing renewable energy, one can contribute significantly to climate change mitigation. Shankar has been in the forefront of creating such habitat literacy.

While Architect Shankar is extremely well known and well recognized in India and is increasingly so in the South Asian region, he is one of those visionary persons in the caliber of E.F. Schumacher (Small is Beautiful) and Masanobu Fukuoka (One Straw Revolution) whose technology is of universal value. By awarding Mr Shankar with the Sasakawa award, the committee will not only be acknowledging his efforts but also be helping to promote his revolutionary concepts to greener buildings, including in post disaster settings, into much wider part of the world. Such effort will not only increase community resilience but also improve climate resilience.

**In less than four hundred word, please explain how the nominees work is funded**

Habitat Technolgoy Group, where Shankar is the founder director, been undertaking three very important functions;

* Designing and construction disaster resilience, lower cost, green buildings for both individual housing and institutional purposes
* Training and capacity building of thousands of engineers and artisans to adopt the new approach to building construction using local materials and locally adapted building practices
* Promoting the vision of lower cost, disaster resilience and greener buildings

Each of the above functions have various funding arrangements which are described below.

In terms of buildings, there are three possibilities;

* Small buildings as houses and offices – These buildings are built by individuals for their private use. The cost of such building is met by the owner of the building.
* Institutional buildings – Such as schools, hospitals, office complexes etc. Here the developer, which could often be Government agencies, meet the cost of the building
* Post Disaster Buildings – The cost of reconstruction is often underwritten by the local government, National government, donor agencies or NGOs

Capacity Building Efforts – Capacity building efforts are done both in the Habitat School in Kerala and field based training in other parts of India, Sri Lanka, Bangladesh and Nigeria. The training is done as an integral part of the building process.

Advocacy Work: The work which Shankar does globally to promote disaster resilient, green and lower cost building is done voluntarily by him without any expectation for remuneration.

If Mr Shankar were to be provided with the award, he could primarily use his funds to conduct such advocacy visits/events to a number of parts of the world where the approaches promoted by him will be very valuable.