Session – II

Conservation of Natural Heritage – Environmental Perspectives

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Good afternoon, Ladies and Gentlemen,

At the outset, I thank you for the opportunity given. In fact if the question comes to heritage and environment, then there is a dilemma whether I should talk about Environmental Impact on Heritage Building or Impact of the heritage building on environment. If you see against the building, then all the majority of the audience, because I am the odd man out in the group ,we will feel bad about it. . But in the present scenario, the question is you know, the topic is the Natural Heritage. For most of the building, little attention is paid to environment management that is what the observation is.

Ultimately, the purpose of maintaining the heritage building may be lost if you do not pay adequate attention to the environmental issues. At one point of view we say, heritage whether it is religious or cultural or historic based. But the question is the Natural Heritage whatever may be but basically unless environmental component when you say – all the five elements say right from water, air, as well as land based things and living things, biota and iota everything is included. Let us go one by one.

If you just take water environment little attention is given how this water is managed during the rainy season, especially how it is harvested and water is taken away from the building.

The top of the terrace will have always pot holes like minor cracks. Little attention is paid how the water is harvested away from the building. We find in most of the buildings, we just allow them to stagnate at one corner, or it may go deep into the foundation level and we find that surprisingly that too in a place where we have lot of trees around the building. If we ask soil experts, my friend Mr. Illamparithi here may say what should be the type of trees, should be planted around the building. Suppose if you have a mango tree, around the building and you know the mango tree will give fruit in the month of May in summer. But in summer water is at low level and when this lowest level of water is taken by trees during the summer, we find the drastic effect on the foundations into the soil is not perfect. We find that the technology based

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things to be taken into account. But if the life of the building is affected by the Environment then that should be taken care of. We should not cut away the trees. What are the things should be made to be green? But selection of species of trees in the green environment should not go against the basic principles of preservation of the building. But at the same time it gives a natural back ground since the green scenery will always enhance the value of the visitors. Now a days , they are able to generate funds out of the buildings example: Thirumalai Nayakar Mahal at Madurai and other buildings are very good examples. Every building is designed for a particular load that is live load and dead load. If so much of people is allowed in the building in a short span of time especially school excursions, you know about 100 people will dash into the building and what is the dynamic load ultimately? Each and every factor will go deep into it and we find that the building will put into lot of strain. I did not know whether any systematic research has been done on stress load on the building. With the technical assessment whether structurally being analysed, probably a long term research may be required.

Next we see the waste water management.

If you allow lot of people and we never care about how the waste is managed especially plastic and other wastes and even the material like chemical used for preservation of course, those days we know right from Panchalakurichi building, they were made out of only natural material available there. To protect the building what kind of chemical is used and its impact on environment. We do know the impact, but suppose the chemical used is a banned one or having lot of arsenic material. As environmentalist, we should have material balance. What kind of materials is required. Though it may have the protection effect on the building, the environmental impact is going to affect the people. If the buildings emit arsenic, then the fare of the people will have to be taken in to account. Hence, the health and safety of the people should be taken care of not only for living things and also for non living things.

What about the air environment? It is one of the most important thing. Example is the Taj Mahal because of the refinery due to its air pollution on the building, long time impact is felt. Some kind of cure is necessary. Ultimately we want to grade them into several kind of groupings. We want to grade them probably the city environment and rural environment whether the particular place is affected by environmental pollution. Normally categorised into 3 categories like sensitive, residential, and industrial and others. Particularly for a heritage building located in the industrial area we should have stringent standard for the development of industries around it. Power is always being one of the top most requirement for any development. Once we allow a thermal power plant in a site example, mamallpuram right 5 km

is away so much of chemicals is coming out. If you cross, pattipulam you feel that the punchat smell from the chemical factory, a kind of impact on the environment, if you decide to preserve it, then we should say the most important is air environment and industries around. So a kind of classification A,B,C should be made. What kind of development control rules you should plan for? Ultimately the policy should be whether the rural bound or urban bound.. What is impact of global temperature rise? similarly the rising level of sea which is likely to happen in coastal environment and lot of changes will happen. The impact of environment on heritage building is very essential. So just to define it as heritage probably I feel a kind of holistic, eco-friendly, rational, innovative technology, appropriate genuine and empowerment basis will go a long way to protect this.

Thank you.

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