The Great Forest Wall Project

I would like to thank UNDP and ARC for inviting me to this important gathering. I feel honoured to be among so many inspired and inspiring people, and to represent the Great Forest Wall Project.

Martin has asked me to explain how this project relates to the Sustainable Development Goals currently being formulated by the UN. I think the SDG's are a marvelous initiative. I can happily argue that the Great Forest Wall links to just about all of them. This is obviously so wherever the word 'sustainable' occurs and in particular with regard to Disaster Prevention. But I only have four minutes, and I think it would be even more useful for me to illuminate what the Great Forest Wall Project can bring to our discussions here in Bristol, and how it can perhaps provide an alternative model for imaging the SDG's.

Firstly, if you only see The Great Forest Wall as an innovation in sustainable construction, and disaster prevention, you are right but you are seeing less than half of the whole picture. Some of you may be familiar with how mangrove forests protected the coasts of Thailand and other countries against the terrible tsunami of 2004. They didn't stop the tsunami, but weakened its force and also prevented survivors and houses etc. from being swept out to sea. The Great Forest Wall will have a similar effect, but it is inland, close to the sea rather than in the sea, and it needs to be constructed first. It will generally be about only 5 metres high, but there will be higher points at regular stages where people can be sure of sanctuary. In all it will stretch about 500 kilometres. Construction utilizes the non-toxic rubble left behind by the tsunami, which is an eyesore and a disposal headache for government. Trees are planted on top. The method has been tried and tested in many other areas around the globe, by Professor Akira Miyawaki who is Vice-President of the Project. The details are all in the handout.

What may be less obvious is how the Great Forest Wall Project is also building on Japanese cultural traditions and on all the hopes and anxieties generated throughout the nation by the Tohoku Disaster. Very simply, it is building on 'values', but without assuming that everybody is going to have precisely the same values or motives. People suffered and were affected in different ways, but they all come together to help build the Great Forest Wall.

Before I go further, I should say one very practical thing. So much of the discussion about the SDG's has been about 'How much will they cost?' The Great Forest Wall costs almost nothing – mainly just the cost of raising seedlings and transporting them to the site! And, as a forest, it should last 1,000 years and maybe much, much longer. It's a very different approach to what we usually hear about government budgets or the 'long-term' meaning five years or even fifty years.

What's also different is that it's very traditional too. Recently, a lot of world attention has focused on 'Satoyama', the traditional landscape surrounding Japanese villages that has become a model of intensive but highly sustainable farming and forestry. Sensitive and close knowledge of the local environment enabled the villagers to get Mother Nature to do most of the work and develop a very rich ecology. It's unfortunately just one of those things that in the past 100 years of modernization, most of this knowledge and practice has come close to disappearing.

The Tohoku Disaster, and before that the Kobe Earthquake of 1995, highlighted other

elements of ancient wisdom we were beginning to forget. Much of the destruction in Kobe was caused by the fires generated after the earthquake. Whole streets were destroyed, but the fires were sometimes stopped by lines of trees. Along the Tohoku coast, so famous for its gorgeous scenery of white sands and trees, the tsunami swept everything away, except – once again – here and there some trees stood firm.

Tohoku may be more famous for the trees that were destroyed – the famous pine forests that were established hundreds of years ago as a windbreak as well for their beauty. However pine trees are not indigenous to Japan, and certainly not to its coastline. The trees that withstood fire in Kobe and the Tohoku tsunami were particular broad-leaf species indigenous to Japan and surviving most conspicuously in the sacred groves called '*chinju-no-mori*' that are a feature of every Shinto shrine. Over the centuries, and in particular in the last century, trees and forests have been valued for their commercial value. Here, instead, was knowledge of particular trees as a force to protect the community, and therefore needing to be conserved, even if they lacked apparent commercial value. Embankments such as the Great Forest Wall all rely on using only indigenous trees, because of their special resilience. The Great Forest Wall will also include the construction of Shinto shrines. It will be like one very long '*chinju no mori*'...

The Great Forest Wall however is a Secular Project. It has to be, because Japanese belong to various religious traditions and many to none at all. Moreover, the Constitution forbids any tie between either national or local government and religious activity. However, the national support for the Great Forest Wall can only be explained in terms of fundamental spiritual or religious values, that reflect traditional attitudes to Nature and also the community.

The Tohoku Disaster led to serious distrust in government planning. The risk of tsunamis was well known. There had been enormous investment in great embankments to protect villages along the coast. The experts said they did not need to be more than 10 metres high. The nuclear power station at Fukushima was built according to similar estimates. Even when evidence was produced to question these assumptions, it was overruled. Of course, the consequences were tragic. But what the trees surviving in Kobe and along the Tohoku coastline taught was also something else, that it's simply a mistake to aim to 'control' or 'fight' Nature. Instead, they taught an older wisdom, of 'working With Nature'. This is precisely what Reverend Iwahashi has described as, 'the Shinto view of Nature'

So far, I have spoken of the Great Forest Wall as a sustainable, scientifically proven, form of construction that is rooted in traditional wisdom and traditional values. But I have still not mentioned the most important feature: Smiling faces.

So far we have planted about 200,000 trees with the help of more than 20,000 volunteers. There is still of course a long way to go! Why are those people so keen to volunteer? This I think goes to the heart of what the Great Forest Wall is all about, and what I think the SDG's must also be about.

Government, maybe with the help of some big corporations, could order the construction of the Great Forest Wall. It would look the same, and might even be finished more quickly. But it would not BE the same. Volunteers come from all over Japan. Some, especially if they are local, want to plant trees to remember lost loved ones or to express remorse that they 'could not have done more' to save people. Others

come because of an overpowering urge simply 'to do something'. Colleges, schools and companies send teams because they all benefit from participation. The emotions and motives are always varied and intense, but building the forest wall is an opportunity for everybody to come together as a community, with a common concern for the future. I often hear people talking about how they hope to protect future generations 'for a thousand years'. Families of 3 or even 4 generations come to plant trees together. They are investing themselves in the project, in a way that will be a legacy that future generations cannot forget.

In actual fact, the Japanese government has already decided to build a concrete wall along the whole of the Tohoku coastline. It will be high enough to withstand 30 metre or higher tsunamis. Of course, it will become more difficult to see the sea, fishing will become a problem and tourism, which used to be one of the mainstays of the local economy, will not revive if instead of the famous sand and trees, the only thing to see for 500 kilometres is a towering concrete wall! The budget is truly enormous not only in Yen but in the amount of concrete and earth required. All other major construction projects in Japan must be put on hold.

It has been really difficult, in the aftermath of the Tohoku Disaster, to achieve a long term plan that everybody can support. There has been the common complaint of those who want to help not being appreciated, and those who seek help not being listened to. The Government felt obliged to do something. After all, who knows when the next great tsunami may come?

The Great Forest Wall by comparison is so many different things. It will be a defence against tsunami but also a place for recreation, where children can play and families can picnic. It will not be an eyesore. It will be a great ecological resource. At the same time, water from the mountains will still find its way to the sea, and bring the nutrients that sustain Japan's traditional fishing industry. It will be a memorial not only to remember those who died and how much people suffered, but also to celebrate how much people cared for future generations. It also celebrates traditional wisdom, of working with, not against, Nature and how the trees can protect us, plus of course the value of community, and how much we can do if we work together. These are all things that a concrete dyke, for example, cannot achieve and they cannot be measured in money, not least because almost no money is involved....

The Japanese government is not opposed to the Great Forest Wall, nor is the project opposed to the government. As a project, it appeals to the whole nation and primarily needs support from local government. It doesn't need money. It will no doubt take time to build. Trees take time to grow. In the meantime, there will be the security of the concrete dyke, irritating eyesore tho this may be. But the dyke will last maybe 50 years at most. By then the Great Forest Wall can be finished, and last for a thousand or more years.

Already other areas of Japan, also historically vulnerable to massive tsunamis, are seeking advice in order to create something similar. What seemed simply an answer to Tohoku's problems seems to have a much wider potential. The science and method speak for themselves. I have tried to explain, in just a few words, how rooting this technology in traditional values, through which people can express their most fundamental aspirations, is key to the goal of the Great Forest Project. It will stand as a celebration for thousands of years not simply to some clever eco-technology, but for so much more: how a whole nation cared for future generation; how much can be achieved

by each individual when we work together; how much can be achieved by working with Nature rather than against Nature... All the words I have heard in discussions here – hope, empowerment, fulfillment community etc. etc. – are among the flowers that will grow. So much is missing if we just think of it just as a wall, or even, perhaps, a SDG....