



SHINTO

THE GREAT FOREST WALL PROJECT

(<http://greatforestwall.com>; Japanese name = 森の長城)

Along the northeastern coast of Japan from Aomori Prefecture to Fukushima Prefecture affected by the Great Northeast Japan Earthquake, the Great Forest Wall Project will build a five-meter-high embankment from soil and debris created by the earthquake. Then, along with volunteers and local residents, they will plant pots of evergreen broadleaf trees that are indigenous to the area, such as castanopsis, machilus, and oak. This project is a movement to create a “lifeguarding forest of tide embankment.” The pots of trees will strike root deep in the ground for about four to six meters, and in 15 to 20 years, they will grow into a reliable forest that acts as a buffer against a possible tsunami attack. Following standards set by the Ministry of the Environment of Japan, they will not use toxic debris but will only use finely crushed trees, concrete chips, and bricks.

THE GREAT FOREST WALL PROJECT AND THE SDGs

The project clearly directly relates to all SDGs that relate to sustainability. Therefore (15) but also (8) & (9) & (11) & (12) since the wall will be a foundation for sustainable economic development in the region, albeit building with trees instead of concrete, and with a timeframe of thousands of years instead ten years etc.

There is also a link with (13) combatting climate change, by creating an extensive forest.

In addition, the project relies on volunteer support and responds to the wishes of millions of Japanese to build a caring nation. The forest wall will be a massive testimony to future generations of the concern of so many individuals. Generating such concern seems to be a primary intention of ALL the SDGs. Perhaps (16) and (17) highlight such social and cultural aspects.

The project has received great support from all of Japan's faith traditions - primarily Shinto and Buddhism - and also political parties. Neither of the two leaders (former Prime Minister Hosokawa or Professor Miyazaki) are religious leaders. It is a secular project that brings together people from all over Japan by appealing to their deepest values, and uniting them in a common endeavour that can last for thousands of years, and inspire future generations.

Long Term Plan:

Over the next 10 years, to expand the area covered. For the moment this inevitably means just planning for one year at a time. Thus in 2016 the area will expand to include protecting two more communities, Minami Soma and a village in Iwate Prefecture. But the timeframe is in hundreds if not thousands of years, i.e. the forests will grow. The planting is scientifically planned so that the forest will achieve a rich bio-diversity. It will take 20 years before it starts to look like a forest, and more than 50 years to become fully established and mature. But it should require minimal maintenance. All the key work is finished once the trees have been planted. Nature will do the rest.

However the second part of the plan is the impact that such a project may have on Japanese society, and further afield. It will be a landmark to what people can do together, and to their concern to safeguard future generations.

The Great Forest Wall Project is an NPO founded as a response to the Great Tohoku Earthquake of 11 March 2011 ('3/11') and in particular to the tsunami that wrecked so much devastation along Japan's North-Eastern coastal region. The President of the project is Morihiro Hosokawa, former Prime Minister of Japan. The Vice-President is Akira Miyawaki, Professor Emeritus of Yokohama University and Japan's leading proponent of harnessing the power of living forests. The obvious link in the name to other historical 'great walls' such as the Great Wall of China highlights how this wall is different, a living ecology of woodland that can last thousands of years rather than ramparts of lifeless brick and stone that require regular maintenance so they do not crumble into dust.

Very simply the plan is to build a 5 metre high embankment retained by sustainable forest to act as a buffer against any future tsunami. It is inspired by ancient Japanese values encapsulated within Shinto, and also in modern ecological design, that stress 'working with Nature' rather than 'fighting against Nature'. It is also a movement that is generating mass support from across the whole country to join in the construction and create a lasting legacy for future generations, and a lasting testimony to the concern of Japanese people now, of all ages, for all the generations to come.

So far, efforts have focused on the area around Sendai airport, that was totally devastated by the tsunami. Over the past 12 months, embankments have been created and trees are being planted in a sequence of volunteer 'events' that feature immense support from companies, colleges, schools both locally and from far away, plus local survivors, inspired mainly by feelings towards the almost 20,000 people lost and a responsibility towards future generations to come. The project simply needs the support of local townships to go ahead. It will take time - the coastline is 500 kilometres long! Besides Sendai, plans are already in hand for Minami Soma, and a village in Iwate Prefecture. In addition, other regions of Japan, such as Shizuoka and the island of Shikoku are planning similar initiatives since although unaffected by the disaster of March 2011, they are also vulnerable to tsunami. There is also growing interest from foreign countries. It has become a snowball.

In the months immediately following the disaster, there was a massive rescue operation and an enormous amount of money was donated, mainly either directly to the Japanese government or to the Japanese Red Cross. However reconstruction and revitalisation have been slow. Obviously the scale of destruction, made so visible in photographs and video coverage, was catastrophic to local communities and to the local economy. But Japan is not unaccustomed to natural disasters. The international city of Kobe, for example, suffered a massive earthquake in 1995 that killed about 6,000 people, but only a few years later it was possible to visit and simply see a very modern city, with hardly any sign of so much destruction. Even Hiroshima and Nagasaki were re-built fairly quickly, and nowadays need museums to remind people of the horrors they experienced in 1945. The Great Tohoku Disaster seems different. A different kind of healing seems necessary.

Firstly, unlike Kobe or even Hiroshima & Nagasaki, simply re-building what was destroyed must be out of the question. Now that we know the vulnerability of this coastal region, the Japanese government must come up with a plan that will safeguard local communities, and the local economy, against any future mega-tsunami. Almost certainly this means re-siting villages to safer locations, and finding better ways to protect harbours. This must be done in a way that at the same time safeguards one of the regions primary industries - tourism. This is not easy since the same sea-vistas, inlets, local trains, local fishing communities etc. that inspired so much poetry and romanticism have also become unforgettable images of destruction by the tsunami. Yet, for example, moving villages away from the coast and creating a massive concrete breakwater that shuts out views over the sea almost guarantees the death of the tourist industry. Nevertheless, until the government can come up with a long term plan, reconstruction and revitalisation must remain stymied.

Secondly, the multiple nature of the Tohoku Disaster generated a deep spiritual crisis both for people in the region and within Japan as a whole. A vast area was affected, including Tokyo. The combination of earthquake, tsunami and then nuclear disaster was new. It began as a 'natural' disaster, but very quickly it became obvious that the causes of so much of the devastation were man-made - inadequate preparation against tsunami, and inadequate planning at the Fukushima nuclear power plant. National Government found it difficult to provide the kind of leadership and inspiration that people expected. A lot of traditional confidence and trust in 'experts' and 'authority' was undermined.

The Japanese government has already done much to re-start local business, such as the fishing industry and the ports. To avoid further delay, it has decided a long-term plan that depends upon the construction of a massive concrete breakwater along the coast, enough to withstand another massive tsunami, many metres high. The cost will be enormous, and the project will consume a very high proportion of resources, such as concrete and earth, that might otherwise be available for other projects. Nevertheless, this seems the only way to bring back confidence and a feeling of safety to the region, without which reconstruction and revitalisation cannot really begin.

The Great Forest Wall Project is a very different kind of initiative, in response to the same anxieties pressures. It does not aim to compete with the concrete breakwater, but to complement it. It is however rooted in a very different attitude and strategy. It does not require massive amounts of money. In fact so far it has not received any financial support from the government. The primary costs are simply the propagating of seedlings preparatory to planting by volunteers.

1. Working WITH Nature, rather than Working AGAINST Nature: a concrete breakwater aims to hold back the force of a tsunami. Until 11 March 2011, Japan had the biggest breakwaters in the world, but they were shattered by the tsunami like sandcastles on the beach. The Great Forest Wall will not hold back a tsunami, but it will significantly reduce its force, and block the outflow out to sea of houses/boats/people as the tsunami recedes. In other words it will significantly limit the destructive power of even the most massive tsunami, by NOT aiming to block it completely with a massive breakwater that need only prove inadequate in one location for the whole defensive line to collapse (as in March 2011).
2. In recent environmental conferences, such as C.O.P., much has been made of the 'satoyama' traditions of Old Japan, that made remarkably sensitive use of the local ecology to create a very intense but also sustainable form of land-use. These values were enshrined within traditional Shinto beliefs and customs, that focus above all on harmony with Nature and within the community.

The Great Forest Wall adopts the same practical and spiritual principles in ways such as the following:-

- a) The base of the embankment is composed of non-toxic rubbish such as rocks and wood, left behind in massive quantities by the tsunami, and a major disposal headache for local government.
- b) The tree cover will be a combination of trees local to the region. The roots will bind the foundations and the trees themselves will not only form a barrier to tsunami and typhoons, but also a rich ecological resource for the natural eco-system and recreation opportunities for local people and tourists.
- c) The forest wall will be sustainable, and is confidently called 'a forest for 1,000 years', in stark contrast to the concrete breakwater which will certainly be valuable in the short-term, whilst the forest wall grows, but cannot be expected to last much beyond 50 years.
- d) The actual techniques and models have been applied by Professor Akira Miyawaki, one of the joint-leaders of the project, in a variety of locations both in Japan and overseas. He has pioneered the use of embankments and trees to protect and beautify communities or factories at a fraction of the cost of ordinary 'construction' and adding natural resources to an area instead of taking them away.

3. At a spiritual level, it is important to realise that traditional spiritual values in Japan emphasise both respect for Nature and also social harmony. The Great Forest Wall Project is a secular initiative, that has attracted strong support from all across Japan, from people with profound faith in Shintoism, Buddhism, Christianity or no particular faith at all. So much broad support testifies to how it is meeting deep spiritual needs across the whole nation.

- a) It is not based on leaving everything to government. Instead it requires massive numbers of volunteers and the power of 'community'. One person may only plant one or two trees. But a few thousand volunteers can plant the beginning of a whole forest in a single afternoon.
- b) A common slogan for the project, shared by the volunteers, is 'creating a forest and protecting lives'.
- c) One of the problems in the aftermath of the Tohoku Disaster was that it proved difficult for everybody - survivors, volunteers, officials, political leaders and people in

other parts of Japan - to feel 'on the same page' or to share the same agenda and recognise all the conflicting emotions and perspectives involved. The Great Forest Wall by its very simplicity brings everybody together in a common endeavour on behalf of future generations. In no small part this is because it recognises Nature as part of this partnership.

- d) The Great Forest Wall thus builds on values deep with Japan's religious traditions that inspire so many people, of all ages, to participate. At the same time it appeals to those whose values are more rooted in Science and Ecology, without any particular need for gods etc. But over all these private belief systems, it spreads the traditional wisdom of how much can be achieved if people work together and think not only in terms of short-term, personal gain but also in terms of the needs of future generations.
- e) In this way the Great Forest Wall is not only an effective strategy to deal with future tsunami, it also revitalises community values and pride across the whole nation, not only now but for many generations to come.
- f) Japan may be a very modern country but until the 1970's 70% of the people lived in the countryside and most were farmers. There is still a close sensitivity about the seasons and nature. There was profound respect for the powers of nature, not least of course because Japan is so susceptible to volcanic eruptions, earthquakes, typhoons and tsunami. 'Working WITH Nature' and respecting the powers of Nature may have been ignored during so much of Japan's rapid modernisation but the Tohoku Disaster served as a major reminder of this ancient wisdom, and above all that the right response to such a disaster is to have a better relationship with Nature....
- g) There is also a tradition of planting trees to commemorate the death of loved ones. The cherry trees that bring colour to the mountainsides in Spring are often trees planted in memory of sons lost in the Pacific War. Thus many of the volunteers may simply want to plant trees as an ecologically sound way to protect against tsunami, but others will also want to commemorate the death of loved ones.