Tsunami-damaged coral reefs should be left to recover naturally, say scientists

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CORAL reefs damaged in the Asian tsunami tragedy should be allowed to recover naturally before countries launch into expensive restoration plans, according to some of the worldâ€™s leading scientists.
The scientists, led by a researcher from the University of Newcastle upon Tyne, and who set out their views in an advisory brief for the World Bank, point to historical records of major coral reef devastation by cyclones and typhoons, which show that reefs recovered without human intervention.

Although the devastation caused by the tsunami was on a much larger scale, the scientists say there is no evidence to suggest that the vast majority of reefs will not recover naturally this time.

They add that Governments should be very careful not to commit funds to costly repair programmes that may have little long-term effect.

About 20 per cent of the coral reefs in places such as Thailand and Sri Lanka were badly affected by the tsunami that happened in December last year. The damage was mainly caused by the backwash â€“ waves returning to the sea that sucked back debris from the shore such as trees, cars, sediment and parts of buildings, which broke and overturned corals.

The group recommend that, in most cases, simply removing the debris from the reefs would be sufficient to allow them to repair themselves. Only in areas where corals were more or less wiped out and no healthy reefs remained nearby to provide a source of new coral larvae, would

artificial methods such as coral transplantation be clearly beneficial.

Dr Alasdair Edwards, a researcher and senior lecturer with the University of Newcastle upon Tyne, UK, chairs the World Bankâ€™s Coral Restoration and Remediation Working Group. He said: â€œObviously, immediately after the tsunami, the main priorities have been to address the human toll, the health and sustenance of survivors and the rebuilding of livelihoods in all of the affected nations.

â€œHowever, long-term reconstruction efforts will need to examine requirements for rebuilding damaged sectors such as fisheries and tourism, and rehabilitating the natural systems on which they depend, such as coral reefs.â€?

Dr Edwards, of Newcastle Universityâ€™s School of Biology, added: â€œThere are many quick fixes on offer but scientific evidence suggests that in most cases these would not be a good use of scarce resources and could actually harm surviving reefs. We need to find a long-term, sustainable solution for restoration.
â€œWeâ€™re advocating a cleaning up of the debris in the majority of cases, so as to allow natural recovery processes to take place. Coral reefs have been subject to natural disasters for millions of years, and they have survived and adapted over a long time.â€?

Poorly planned reconstruction programmes undertaken on the land can also adversely affect marine wildlife, say the scientists. Professional environmental impact assessments should be carried out in the first instance so that projects can be undertaken with the minimum of impact.

Dr Edwards added: â€œFor example, many developers like to build right on the coastline but they would be better advised to set back their developments a little to minimise the impact on sea life. Communities that are rebuilding hotels should take advantage of reconstruction funds

to make sure there is effective sewage treatment available. And if builders are moving lots of earth around, they should do this in the dry season rather than the wet season to avoid sediment being washed into the sea.â€?

Source: University of Newcastle upon Tyne