Tsunami's environmental wreckage still huge, but human impact is even bigger

By MICHAEL CASEY
Associated Press Writer

Tsunami's environmental wreckage still huge, but human impact is even bigger

By MICHAEL CASEY
Associated Press Writer

BANDA ACEH, Indonesia (AP) _ There's enough tsunami trash in this Indonesian city to make a three-story-high pile covering 30 football fields. In Sri Lanka, the volume of waste dumped in lagoons and waterways is more than twice what was generated by the Sept. 11 terrorist attacks, by U.N. estimate.

The environmental devastation in the worst-hit countries is immense, yet experts say it pales in comparison with what humans had already managed to inflict before the giant waves struck on Dec. 26, 2004.

In the Maldives, many of the 1,100 islands are uninhabitable because they are covered in trash, and wells that provided drinking water for more than a quarter of the population are contaminated.

A year after the tsunami tore across the Indian Ocean, the signs of devastation are still everywhere.

The earthquake that caused the tsunami reshaped the landscape of some Indonesian and Indian islands, lifting reefs out of the water, eroding beaches and submerging coconut groves. The giant waves caused ecological damage across Indian Ocean coastlines.

But the destruction was mostly localized and overall it pales in comparison to years of rampant development and dynamite fishing, experts say.

Authorities are grappling with how to dispose of the vast volume of tsunami waste, some of it laced with oil, asbestos and hazardous waste.

And experts fear rebuilding could contribute to illegal logging, overfishing and unchecked coastal construction.

Pasi Rinne of the U.N Environmental Program said all the tsunami countries face the problem of debris and demolition waste. "In the long term, unsafe disposal of waste will cause further environmental damage," Rinne said.
The Dec. 26 tsunami devastated mostly rural, coastal communities in 12 countries, leaving at least 216,000 people dead or missing and leaving more than a million homeless.

The giant, fast-moving waves swept cars, fishing boats and houses up to four miles inland. Entire fishing villages were reduced to piles of bricks, corrugated tin and wood that together with ocean mud and thousands of dead bodies formed mountains of debris.

In Banda Aceh, the provincial capital of the Indonesian province on the island of Sumatra, the waters that raged through downtown gathered up to 350 million cubic feet of waste, all but 15 percent of which washed out to sea.

In Sri Lanka, some 95 million cubic feet of waste was dumped mostly in lagoons and environmentally sensitive waterways, the United Nations said.

By comparison, the Sept. 11 attacks generated 42 million cubic feet of waste, according to the U.N.

"It was everywhere. The waste was in the streets. We had dead bodies under houses and in ponds. We thought we were facing severe public health problems," said Tim Walsh, head of the U.N. Development Program's tsunami waste management operation in Aceh.

There were no epidemics, however, and Banda Aceh reopened its main landfill within weeks. The UNDP started a $15 million recycling program using hundreds of survivors to pluck wood and stone from the rubble to use in rebuilding, as fuel and in furniture.

But the city's sewage treatment plant still isn't working, forcing it to dump untreated waste into the ocean.

Nearly 50 tons of expired medications _ some of it donated after the tsunami _ sit in a warehouse awaiting safe disposal, and there are at least 32 unregulated dump sites containing leaky oil drums, medical waste and asbestos-laced roof tops.

Sigli is typical of coastal towns along Indonesia's battered coast. Its small dump is now half a mile long.

"Every day, the trucks come," said Siti Zakiah, whose house now borders the site. "I have a baby and this dump concerns me. ... I can't open my doors and windows because of the flies."

In the Maldives, salt and waste from septic tanks have contaminated groundwater, while tainted debris is scattered across the archipelago. "It is a serious challenge," said Donna Chanda, head of the Canadian Red Cross delegation that is running a $10 million waste management program.
The government wants more international help. Waste disposal has always been a problem on the small, low-lying islands, says Mohamed Hussain Shareef, a government spokesman, but now it's hampering reconstruction.

Not all the news is bad.

Mangroves emerged largely unscathed, and in Indonesia and Thailand less than 20 percent of reefs were damaged, mostly by debris that washed offshore, officials said.

Many farm fields swamped by seawater have recovered, and some farmers in Indonesia are reporting increased rice, peanut and vegetable crop yields.

But if coastal ecosystems came out relatively unscathed, it's chiefly because they were already so badly denuded by human activity that little was left for the waves to destroy.

"In general, the impact of the tsunami is a lot less than the human impact," said Clive Wilkinson, of the Australian Institute of Marine Science, who is preparing a report on the tsunami-hit reefs.

One quarter of all mangroves in Asia have been destroyed by human activity, while dynamite fishing has decimated many coral reefs. Now the fear is that illegal logging and overfishing, long the bane of the region's environment, will intensify. The United Nations says fish stocks could face collapse because donors are promising many more boats than existed before the disaster and are offering to industrialize what had been mostly a subsistence business.

"The media gets terribly excited about storms, tsunamis and oil spills where in fact the slow, chronic stuff is more damaging _ overfishing, sediment flows and development," Wilkinson said.

Jerker Tamelander, a Sri Lanka-based World Conservation Union worker, says so much rebuilding is bound to have a serious environmental effect.

"The actual implications of that," he warns, "will last for decades."