

10 years after the Christmas tsunami in Indonesia

A natural disaster brought peace and, for now at least, the chance of a future

by Jacopo Pasotti

"Before the tsunami hit, going out at night was dangerous. Not a day would pass without a clash between the military forces and the GAM rebels. We would always hear gunshots," says Ayi, a fisherman and spokesman for the Banda Aceh fishing community. The guerrillas of the Free Aceh Movement (GAM) were out to obtain independence for the Aceh province, if not the entire island of Sumatra.

A gateway to Islam and the landing stage for Dutch invaders of the 19th century, GAM militants believe Aceh deserved to be more than just a province on the outskirts of Indonesia, a country made up of thousands of islands and almost as many ethnic groups. The often-savage conflict raged for at least 30 years.

Ayi lost his boat in the tsunami. Now he owns another, and has a second in the making. On 26 December 2004, the colossal wave, triggered by a fearful underwater earthquake of 9.3 magnitude, swallowed up 270,000 people and destroyed 15,000 boats. But it also swept away the conflict. The catastrophe hit everyone: rebels and common folk alike. It dealt a devastating blow to a region that was already on its knees, isolated by decades of conflict. After the disaster, the militants soon handed over their weapons and joined in

the reconstruction efforts. According to Katja Brundiers, a sustainable development expert at Arizona State University, the tsunami "provided an opportunity. It broke the inertia of years of conflict, attrition and injustice, making a fresh start possible." She maintains that natural disasters give distressed societies a chance to change. A fresh start for Banda Aceh was made possible by international support. Brundiers explains that, often, "to take advantage of opportunities you need outside help." After the disaster, the international community provided a fund of \$654 million (€526 M) for reconstruction.

The hospital, airport, roads and schools are all new. And there have also been social developments, such as immigration. "Now we have Balinese, Javan and Malay restaurants. In the evenings the bars are full of people, and there's a feeling of optimism," says Togu Santoso, an Indonesian urban planner.

One such optimist is the owner of the drinks and souvenir kiosk near a monument to the tsunami. He used to be a GAM militant. The former rebel proudly passes round a photo of himself in his military uniform. He says, "Things are better now, I've finally got a good business." His is a small business; the wave swept away 104,000 such small businesses.



The GAM have not been completely eradicated, anything but: they have transformed into a political party. And a powerful one. The current Aceh governor is a member of GAM. The grip of Islamic law is slowly tightening after having loosened its prescriptions right after the disaster. Moreover, for the faithful, a majority in the province, the tsunami was a warning from God.

At the moment the question is, now that funds have been depleted, is Aceh safer than before? And have science and technology provided people with the means to prepare for the next appointment with a natural disaster?

Indonesians are generally optimistic or, perhaps, just fatalistic. "Allah has punished



PH. JACOPO PASOTTI

REUTERS/DAMIR SAGOLJ/CONTRASTO

RICCARDO VENTURI/CONTRASTO



📷 Tourists posing for photographs in front of the monument dedicated to the Banda Aceh victims of the 2004 tsunami.

📷 Banda Aceh, three children in a school show drawings in which they've reproduced the tsunami catastrophe.



us for our sins. It won't happen again, and if it does, Allah will have willed it," explains Burdin, a woman who runs a small bar in the fish market. On the one hand, religion has helped people overcome the traumatic experience quite rapidly. On the other, some now believe that all attempts to reduce the risk are another way of challenging God's will. In the meantime, scientists have developed tsunami warning systems for the population. A complex network of geophones, buoys and satellite communications should be able to warn people of the danger in just a few minutes via radio, television, Twitter, Facebook and text messages. Even though a few false alarms in recent years have shown that the

technology is by no means foolproof. In 2011, the evacuation sirens didn't go off despite a tsunami warning being put out. It was a technical error. The result of ten years of studies is that "now the world knows about the problem of tsunamis," explains Khairul Munadi, head of the Tsunami and Disaster Mitigation Centre. "We've learned a great deal. For example, how to detect the premonitory signs of a tsunami in the making." Today, science - risk-mitigation knowledge - is faced with a new issue: how to ensure that what has been learned is not forgotten in the next decade or century? "In 1907, there was a similar event. We found reports of it in some archives and in the oral histories of several communities,"

says Munadi. "Tsunamis like these occur rarely, and like we forgot the one of 1907, we could forget this one." Forgetting means setting the stage for a new disaster. That's the lesson: building skills and knowledge is just as important as finding a strategy for passing it on to future generations. As things stand, this is a priority shared by both the stern commanders of the Islamic GAM party and the scientific experts. Whether this collaboration will stand the test of time, we'll have to wait and see. ■

— Jacopo Pasotti is a geologist who writes about and photographs scientific, environmental and social issues. He also teaches science communication.