

# Times Standard

## Not My Fault: A week for tsunamis – not all of the water kind

Lori Dengler for the Times-Standard

Posted November 9, 2024

<https://www.times-standard.com/2024/11/09/lori-dengler-a-week-for-tsunamis-not-all-of-the-water-kind/>



*Lorna Bryant keeps the music flowing at the November 2 CUNA ribbon-cutting ceremony in Valley West.*

Tsunami has been front and center this week. I will set the political one aside and focus on water. Tsunami evacuation drills took place as part of the United Nations World Tsunami Awareness Day. On Thursday, The Japanese Meteorological Agency (JMA) announced concern that a major eruption in Indonesia could produce a tsunami.

The tsunami theme reverberated locally as well. On Saturday, new neighborhood resiliency center opened in Arcata. The Clarke Museum in Eureka has extended our community earthquake/tsunami display for another month. Last Sunday I gave a sermon of sorts when the Unitarian Universal Fellowship in Bayside asked me to talk tsunamis and resilience at their Service.

All these events gave me pause to think long and hard about resiliency and what it takes for communities to be prepared. Japan is a good place to start. Japanese society has evolved to withstand volcanic eruptions, earthquakes, tsunamis, landslides, storms, and floods. As a country, Japan has put a far larger percentage of their GDP into disaster preparedness than any other country in the world.

Last week I wrote about Hamaguchi Goryō, the man who lit the rice sheaves on fire to guide the way to high ground for his town. There are many in Japan today who have taken on his mantle of preparedness. I single out Professor Toshitaka Katada, a Civil Engineering Professor at Gunma University in northern Japan.

As a Civil Engineer, you might think his contribution would be to build seawalls and tsunami abatement structures. The real story is more interesting. Professor Katada has studied disasters his whole career. He understands the physics of tsunamis and how engineered structures can reduce impacts. But in studying past tsunamis, he recognized that it is not a problem that engineering alone can solve.

In 2004, Katada turned his focus on the metropolitan area of Kamaishi on Honshu's northwest coast. He convinced the Kamaishi Board of Education to develop a disaster preparedness program for children in the school system. His concern was heightened after the November 2006 earthquake north of Japan produced very low evacuation rates in schools. That magnitude 8.3 earthquake produced a tsunami that reached heights of over 65 feet in areas of Russia's Kuril Islands near the epicenter. There were no deaths, but the tsunami caused damage as far away as Crescent City where several boats and nearly half of the docks were ripped away by strong currents.

Professor Katada recognized that awareness programs work better when developed with the support of the community rather than handed down from on high. He worked closely with the school board and teachers to develop a manual and a training program aimed at elementary and high school students. His program was built on three principles:

- Don't believe in preconceived ideas
- Do everything you can to save yourself
- Take the leadership in evacuation

By preconceived ideas, he means don't assume that what happened in recent tsunamis provides an adequate margin of safety. If you can go a bit higher or further inland, do so.

Putting yourself first is a difficult concept in Japanese culture where helping others is a priority. The Kamaishi program emphasized that in the immediate aftermath of a major offshore earthquake, you need to do what you can to save yourself. There is no time search for loved ones closer to the coast. Coined before the 2011 earthquake and tsunami, the words jijo, kyojo, kojo became a mantra in Professor Katada's resiliency program.

Jijo (self-help), kyojo (mutual help), and kojo (government help) have now become a framework for disaster preparedness in much of the world. It always starts with self-help. In the minutes and hours immediately after a disaster, outside professionals won't be able to help you. Your first responsibility is to save yourself.

The third principle is don't wait for someone else to show you the way. You need to take action first. It is human nature to distrust your senses when something happens outside of your previous experience. There are countless stories of people working in the World Trade Center in 2001 resuming work after witnessing the plane impact. It's called denial or the

normalcy bias in sociology and it always takes us some time to comprehend what we are experiencing and take action WITHOUT direction.

The best way to put Katada's principles into action is to practice. Evacuation drills were a big part of the resilience training in Kamaishi schools. Older students were encouraged to assist younger ones in evacuation exercises and to adjust their plans on what they were observing.

On March 11, 2011, their training was put to the test. Everyone in Kamaishi felt the earthquake and recognized it was large enough to produce a tsunami. Unosumai School was close to the coast behind a seawall and the official plan was to go to the third floor. But the Junior High students put Professor Katada's training into action and immediately began running inland. Elementary students and teachers followed their example. That action saved their lives as the third floors of the schools were completely flooded. Over 2000 students and staff at the schools survived without injuries.

We need government instructions for many purposes in providing resilience – from structural building codes to tsunami hazard zone mapping, may be coming from far away. But like the Kamaishi program, it has to start with JIJO - self-help. You are the only one who can protect yourself when shaking starts and get yourself to high ground out of a tsunami's path.

Once you are out of the tsunami's path, KYOJO is critical. You need the assistance of your neighbors and community to provide for food, water, and shelter. It may take days or weeks for government responders to assist you. KOJO (government assistance) will eventually arrive, but you will be far more comfortable if your immediate neighborhood is organized to help respond.

On Saturday, a grass roots group opened its doors in the Valley West area of Arcata. CUNA (Comunidad Unida del Norte de Arcata/Community United of North Arcata) is the brainchild of a number of volunteers led by Arcata City councilmember Kimberly White who successfully landed a \$100,000 grant from PG&E, one of three granted throughout California.

I attended Saturday's ribbon cutting event - a joyful occasion with young and old and an equal mix of Spanish and English conversations. The food was good, the music terrific, and the sense of community pride pervasive. This is what preparedness should be about – getting to know your community, learning what to do to protect your loved ones, and having fun.

Check out two community resilience events this month – November 16 1-4 PM Ready Eureka is hosting a free introduction to Emergency Preparedness at 3030 L ST., Eureka – no charge but you must pre-enroll at 707-441-4000. November 23 11 AM – 3 PM CUNA is hosting a Disaster Preparedness Block Party 4700 Valley East Blvd.

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Lori Dengler is an emeritus professor of geology at Humboldt State University, an expert in tsunami and earthquake hazards. The opinions expressed are hers and not the Times-Standard's. All Not My Fault columns are archived online at

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