Traditional Knowledge and our Ocean

What is Traditional Knowledge?

Traditional knowledge is the knowledge held by those living off the land and ocean, be they indigenous or non-indigenous. This knowledge is not static and can evolve over time and is often imbedded in practice and belief.

By closely observing their local environment, communities in the Pacific have developed skills that enable them to build coping strategies for variable weather and climate conditions, including oceans and tides.

Figure 1. In Fiji, when flocks of seabirds locally known as 'Toro' or Brown Booby (Sula leucogaster) are seen diving into the sea, it is a signal that a large school of fish is nearby. (Photo: A Daphne)

Understanding tides and oceans

Pacific communities have long used traditional methods of preparing for and responding to natural hazards, including tsunamis. For remote communities, or when natural hazards occur before official warnings can be received, these traditional approaches are particularly important for saving lives.

Figure 2. Aftermath of the 2009 Tsunami at Lalomanu, Aleipata, Samoa. Photo: J. AhKau and M. Leavasa.

In many Pacific nations, unusual animal behaviour can indicate an approaching tsunami. This includes dogs making strange noises and cats, chickens and dogs running to higher ground. Other signs or indicators of tsunamis include the retreat of sea water and unusual environmental sounds. A traditional response to these signs is to move to higher ground.

Tropical cyclones are also predicted through close observation of the oceans. For example, in the Solomon Islands, unusual current movements around the island of Tikopia, accompanied by seabirds flying along the coast and facing the ocean, were used to predict Tropical Cyclone Zoe in December 2002. In Tonga, before the arrival of Tropical Cyclone Gita in February 2018, coastal sea water changed to a greyish colour and unusual behaviour of dolphins and fish were observed.

Figure 3. Traditional knowledge from Vanuatu says turtles laying their eggs inland means a cyclone is on the way in 2 – 3 months, with associated storm surges. Photo: Lynda Chambers (2012).

For further information on the use of traditional knowledge in the Pacific, please contact:
Secretariat of the Pacific Regional Environment Programme Website: http://www.sprep.org
Pacific Meteorological Desk Partnership https://www.pacificmet.net/
Email: PacMetDesk@sprep.org

Australian AID
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