



Indigenous People, Traditional Ecological Knowledge, and Climate Change: The Iconic Underwater Cultural Heritage of Stone Tidal Weirs (Decade Project: ID 180)

Fujian Province, China



The underwater cultural heritage of stone tidal weirs is a type of fish trap operated only by tidal amplitude; the structures, made of large rocks, extending along the shoreline on a colossal scale in semicircular, arrow-like, or almost linear shape, are completely submerged during high tide, while they emerge into full view at low tide, allowing people collect fish. These weirs are located within seascapes created and maintained by the harmonious interactions between humans and marine ecosystems: eco-friendly fishing gear supplying healthy seafood to coastal communities, artificial womb for sustaining marine biodiversity, and cultural trait for maintaining cultural diversity. The physical and supernatural processes are based on a rich local traditional ecological knowledge, which has brought on by members of indigenous coastal communities.

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Mullet Memorial Service Pagoda in Japan

Mullets (or fish generally) are anthropomorphic beings having spirits, which are respected profoundly by indigenous people. In celebration of large catches with stone tidal weirs, therefore, the local community conducts ceremonial rituals and elects religious memorial service pagodas, which is also actuated by community spirit (fishing, repairing, breeding fries, celebrating).



Decade Challenge 10: Ensure that the multiple values and services of the ocean for human wellbeing, culture, and sustainable development are widely understood, and identify and overcome barriers to behaviour change required for a step change in humanity's relationship with the ocean.

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<https://www.facebook.com/Stonefishweirs>

Climate Change

Damage of Tangible, Intangible, or Living Underwater Cultural Heritage

Biodiversity Loss, No Nutritional and Healthy Seafood, and Disappearing Community Spirit

Dissolution of Coastal Communities

Traditional Ecological Knowledge Extinction and Cultural Diversity Loss

This cultural heritage is the most vulnerable against the global ocean climate change, such as sea level rise, coastal erosion, or destructive storm. Many are now disappearing rapidly before researchers study them or the national and local governments start to protect them properly.



FSM



JAPAN



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