

AQUACULTURE FISHERY



In recent years, long-term climate change and extreme climate hazards have led to shocks to the aquaculture industry, such as environmental degradation and sudden deaths or losses of certain species, causing operational losses for fishers.

To understand the impact of extreme high and low temperatures and disasters on aquaculture in a warming scenario, this study used the extreme temperature event data under the AR6 GWLs (+1.5°C and +2°C) scenario published by the TCCIP in 2023 as climate change data, the module was used to simulate and analyze the climate hazards with exposure in the aquaculture production area of *Chanos chanos* and *Meretrix lusoria* under climate change scenarios details are shown in Figures 1 and 2. The results show that although aquaculture areas in different towns of Taiwan face identical problems, the degree of hazard and risk exposure differ from town to town (Figures 1 and 2).

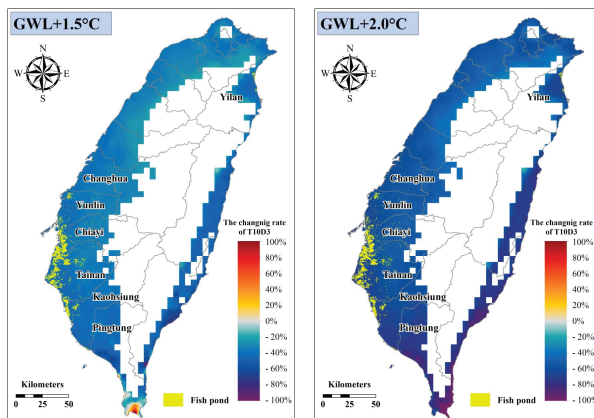


Figure 1
Changing Rates of Low-Temperature Hazards to the *Chanos chanos* Aquaculture Industry under AR6 GWLs (GWL 1.5°C and GWL 2°C)

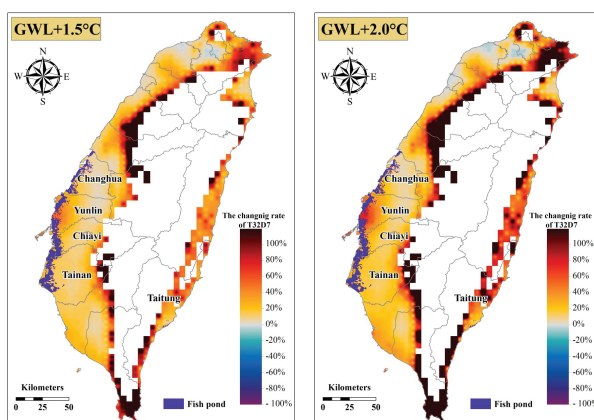


Figure 2
Changing Rates of High-Temperature Hazards to the *M. lusoria* Aquaculture Industry under AR6 GWLs (GWL 1.5°C and GWL 2°C)

Data source: TCCIP Project

