

Food security in Polynesia

Climate change is making French Polynesia more vulnerable, affecting food security in particular. It is therefore necessary to implement adaptation strategies.



Parrotfish fishing in Reao, French Polynesia.

As a result of climate change, extreme weather events are expected to become increasingly destructive, particularly in French Polynesia. But of far greater concern to local populations are the insidious and irreversible changes that are gradually altering ecosystems and threatening their livelihoods.

In the lagoons, for example, the gradual rise in water temperature is leading to the death of coral reefs, creating an environment conducive to the proliferation of toxic microalgae. The *Gambierdiscus toxicus* endemic algae is known to cause a severe form of food poisoning, ciguatera. It secretes ciguatoxins that contaminate fish and make them unfit for consumption, without it being visible to fishermen or consumers. This has resulted in an increase in the intensity and frequency of poisoning episodes, which is causing Polynesians to avoid eating fish from the lagoon. They therefore turn to other sources of food, produced in Tahiti or imported, increasing food dependency in the islands.

... The growth of a toxic microalgae is threatening the food security of people living in Polynesia ...

However, fishermen and local communities have long developed detailed knowledge of contaminated fishing grounds and the most ciguatoxic species, in order to prevent poisoning. In insular environments, where community links exist, this information can be easily circulated to limit the risks of poisoning. The local knowledge of Polynesians is therefore a key factor in allowing these populations to adapt to climate change.

Ciguatera is a major issue for most Pacific territories, for which specific measures are required (development of inshore and offshore fishing, support for local food production) to help guarantee food security during outbreaks. This will reduce the vulnerability of local residents to food shortages.

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“In regions affected by major endemic diseases, people’s often fatalistic attitude to the risk of ciguatera explains the remarkably high number of cases of fish poisoning reported each year. It is therefore essential to draw on ancient traditional knowledge used within these communities to better manage the health and socioeconomic impacts of this foodborne illness, ensuring greater acceptance of preventive measures implemented by authorities.”

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Tahaa Lagoon, French Polynesia.

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Children fishing on a reef flat in Reao, French Polynesia. © IRD/S.Andréfouët

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