CODEX ALIMENTARIUS COMMISSION

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Food and Agriculture Organization of the United Nations

World Health Organization

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Agenda Item 3 **CF11/CRD29**

JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON CONTAMINANTS IN FOOD

SIDE EVENT ON CIGUATERA

COMMENTS OF TONGA

Background

1. Tonga expresses it's full support to the intended side-event on Ciguatera during the Codex Committee on Contaminants in Food. The Ciguatera fish poisoning in Tonga is the most common non-bacterial food-related illness in Tonga from contaminated fish (mainly finfish) with symptoms *includi*ng vomiting, diarrhoea, abdominal pain, tingling of hands and feet, reversal of hot/cold sensation and death. Traditionally, Ciguatera fish poisoning in Tonga is most frequently linked to certain fish species during the summer months of the year and also to certain reef system.

2. The traditional strategy for preventing Ciguatera fish poisoning in Tonga is by avoiding consumption of two main fish species: the *Ludjanus Bohr* Red Bass (*Fangamea*) and *Gymnothorax javanicus* Moray eel (*Toke*) caught from Hakau-fisi reef in the Ha'apai Island group during the months of September to March. This Hakau-fisi reef is adjacent to two volcanic islands. Several studies has been reported on ciguatera fish poisoning in Tonga.[1,2] Local experiences relates that Ciguatera fish poisoning incidences in the Ha'apai group increases after a cyclone event or during the drought periods of an El nino event.

3. In January, 2015 a volcanic marine eruption occurred and form a new Island Hunga Tonga in the Haapai Island group. A red algae bloom event was observe on the main island Tongatapu and Vava'u coastal areas. Current research attributes the cause of ciguatera to the transfer and metabolism of naturally synthesized biotoxins from blooms of benthic dinoflagellate micro-algae from the genera *Gambierdiscus* through tropical marine food webs[3,4].There is currently no known cure for ciguatera poisoning, with both acute and chronic cases reported and an inability to definitively diagnose the disorder as com*mercial* laboratory diagnostic tools are unavailable[5]. Benthic dinoflagellates are commonly found on a variety of substrates and a number of environmental factors that influence *Gambierdiscus* growth that in turn will also influence distribution, as well as additional ecological factors to consider including substrate preference, presence of host species, disturbance and wave energy, and seasonal changes.[6,7,8]

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