



Crown of Thorns Starfish on a reef. Picture: PACIFIC BLUE FOUNDATION

Crown of Thorns Starfish (COTS) devours the coral reef. Picture: PACIFIC BLUE FOUNDATION



The innovation aims to develop and pilot a community-owned and operated organic fertilizer business model that uses the biomass from overabundant Crown of Thorns Starfish (COTS) that devour the coral reef. Picture: PACIFIC BLUE FOUNDATION

11 Top innovators

Sustaining reef communities

PACIFIC Blue Foundation has been recognised as one of the 11 Global Top Innovators on the World Economic Forum’s Blue Food Challenge. Blue foods being fish, invertebrates, algae and aquatic plants captured or cultured in freshwater and marine ecosystems – have traditionally been undervalued in their contribution to global food systems yet are incredible sources of locally produced nutrition for millions of people. Friends of Ocean Action and UpLink had launched the Blue Food Challenge to uncover innovations to help accelerate the integration of aquatic foods into global food systems. The challenges called for solutions that will sustainably increase the production (farmed or fished) of blue foods with high nutritional value to local people, as well as provide economic benefits to local communities. It minimises food loss and waste to better meet the nutritional needs of people, including blue food storage and preparation and the improved use of by-products along value chains. Pacific Blue Foundation particularly encourages interventions that provide technical support for small scale producers and those that promote gender equality across the blue food system. It was recognised as a global top innovator because it develops strategic partnerships that deliver an innovative solution to coastal communities.

It does it through its integrated sustainable development while having conservation outcomes. The organisation’s programs are multi-disciplinary by nature and as such employs a systems approach when developing programs and solutions that ingrained with blue and green and circular economic models. “For this innovation, key partners from different sectors had collaborated to develop the concept and we were able to implement early trials,” Pacific Blue Foundation Beqa Lagoon Initiative program director, Sefano Katz said. The partners include Matanataki, The University of the South Pacific’s Centre for Environment and Sustainable Development (USP PaCE-SD), the Fiji Locally Managed Marine Area (FLMMA), Organic Matters Foundation and The Fertile Facility & Company. “The solution will reduce nutrient sources that lead to eutrophication and loss of fishing resources in coral reefs and coastal inhabited socio-ecological systems,” he said. “The innovation aims to develop and pilot a community-owned and operated organic fertilizer business model that uses the biomass from overabundant Crown of Thorns Starfish (COTS) that devour the coral reef, and pest seaweeds that smother corals and out-compete them for space on the reef. “These results in a financially viable and ecologically regenerative (circular)

scalable business that provides local income, it enhances food security and the nutritional value of local produce, provides a replicable methodology and scalable model and enhanced local artisanal fishery for blue foods through threat mitigation and community-defined marine protected areas (MPAs).” The foundation worked in partnership with local communities primarily through two of its program, the Lau Seascape Initiative, led by Conservation International (focused on the entire province of the Lau islands) and the Beqa Lagoon Initiative, led by PBF (focused) on the entire seascape of Beqa Lagoon, including the islands of Beqa and Yanuca, which inhabit about 1500 community members in 10 villages. The organisation aims to further develop and implement this innovative project with the communities of Beqa Lagoon to address fundamental causes of reef degradation and to facilitate diversified income opportunities while financially incentivising regenerative natural resource management practices of invasive species “The mission will be the creation of a synergistic, community-scale circular food pathway to improve management of coral reefs, enhance fish stock, support sustainable livelihoods, reduce pollution and enhance terrestrial crop production for coastal and maritime communities,” he said. “The project is aimed to be piloted

and scaled in Beqa Lagoon, and future plans will look to transfer this model to other parts of Fiji and other tropical coastal communities throughout the tropical belt of the Pacific and Indian oceans.” He said for next year, the strengths of the World Economic Forum, its networks and that of the challenge partners will be drawn to help the innovators scale their solutions. “The program will include mentoring, facilitated introductions, capacity building, exposure, and visibility. The Top Innovators organisations will join the growing UpLink Innovation Network of entrepreneurs who are benefiting from the platform,” he said. On being recognised, Mr Katz said it was a great honour to be globally recognised as top innovators on a platform that is known to have some of the stringiest selection criteria, judged by top world experts in a broad array of fields, including form a business investing potential. “The selection had to increase our confidence in the innovation’s potential to materialise.” The organisation is a non-profit organisation with a mission to provide research, education, encouragement and dissemination of sustainable practices in coastal regions of the Pacific with the ultimate goal of conservation and promotes biological and cultural diversity.