

Ref: A2250

**Post-doctoral Research Associate – Further Information- Cultural values and contributions to food and nutritional security under climatic change for coral reef fishing communities.**

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### **The Project**

REEF SERVICES is seeking to appoint a Post-Doctoral Research Associate in environmental social science/human geography/ human ecology.

Coastal communities in the tropics are intimately connected to the environments in which they live. Environments within which people's identities, histories, and stories are formed. For example food, in addition to meeting people's nutritional needs, forges social and cultural bonds, connecting people to land, culture, community, and history. Food is therefore a central component of people's cultural identities forming a central bond between people and the environments in which they live.

Coral reefs are one of the most iconic ecosystems in the tropics, of immense biodiverse value, infused with local meanings, and providing a myriad of contributions to people's wellbeing at local, national, and global scales. This project aims, through a plurastic approach to uncovering values, to examine the cultural and nutritional contributions coral reefs provide to people, to situate these contributions within the ecosystem from which they emerge, and to establish the likely influence of climatic change on these values.

This project thus fits within a broader multidisciplinary project that aims to assess the impacts of climate change on ecosystem processes, food web structures, nutrient flows, and ultimately the contributions to human wellbeing (ecosystem services) from coral reef ecosystems. This is a multi institutional, multi country project, with core team members based in France, UK, and Australia,

Specifically, we are interested in:

- Establishing how reef fish assemblages and environmental change shape local knowledge and cultural values.
- Determining whether cultural keystone species can be identified that play a significant role in shaping and characterizing the social organisation and cultural identities of local communities.
- Evaluating the nutritional contributions associated with local knowledge, cultural values, and reef fish assemblage.
- Examining whether local communities can adapt to maintain cultural and nutritional contributions under conditions of climatic change.

The interested candidate will be part of a larger multidisciplinary team examining ecosystem process and change through time and across disturbance regimes in French Polynesia. The ideal candidate will have a background in human geography, sociology, anthropology, or similar fields; and a demonstrated interest in addressing environmental challenges. They should be committed to

working with or across diverse disciplines, speak French, and expect to spend time in French Polynesia as well as between the host institutions. The candidate will work closely with Dr C. Hicks, Prof J. Cinner, and Dr J. Claudet.

### **Further reading**

Hicks, C.C., Levine, A., Agrawal, A., Basurto, X., Breslow, S.J., Carothers, C., Charnley, S., Coulthard, S., Dolsak, N., Donatuto, J. and Garcia-Quijano, C., 2016. Engage key social concepts for sustainability. *Science*, 352(6281), pp.38-40.

Béné, C., Arthur, R., Norbury, H., Allison, E.H., Beveridge, M., Bush, S., Campling, L., Leschen, W., Little, D., Squires, D. and Thilsted, S.H., 2016. Contribution of fisheries and aquaculture to food security and poverty reduction: assessing the current evidence. *World Development*, 79, pp.177-196.

Golden, C.D., Allison, E.H., Cheung, W.W., Dey, M.M., Halpern, B.S., McCauley, D.J., Smith, M., Vaitla, B., Zeller, D. and Myers, S.S., 2016. Fall in fish catch threatens human health. *Nature*, 534(7607), pp.317-320.

Lamy T, Galzin R, Kulbick M, Lison de Loma T, Claudet J (2016). Three decades of recurrent declines and recoveries in corals belie ongoing change in fish assemblages. *Coral Reefs* 35: 293-302.

Sterling E, Filardi C, Toomey A, Sigouin A, Betley E, Gazit N, Newell J, Albert S, Alvira D, Bergamini N, Blair M, Boseto D, Burrows K, Bynum N, Caillon S, Caselle J, Claudet J, Cullman G, Dacks R, Eyzaguirre P, Gray S, Herrera J, Kenilorea P, Kinney K, Kurashima N, Macey S, Malone C, Maui S, McCarter J, McMillen H, Pascua P, Pikacha P, Porzecanski A, de Robert P, Salpeteur M, Sirikolo M, Stege M, Stege K, Ticktin T, Vave R, Wali A, West P, Winter K, Jupiter S. (éd&è). Biocultural approaches to well-being and sustainability indicators across scales. *Nature Ecology and Evolution*.