

REPUBLIC OF FIJI

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Geographic information

| | |
|--|---|
| Maritime area: 1 055 000 km ² | Reef area: 6 704 km ² |
| Land area: 18 270 km ² | Coastal length: 1 129 km |
| Number of islands: 332 islands and 522 islets | Distance to nearest continent: 2 700 km of Australia |
| Island type: volcanic, coral, limestone | Island age (oldest/newest): volcanic activity starting around 150 million years ago |
| Population: 909 389 | Number of uninhabited islands: 106 |
| Climate: Tropical marine | Major wind regime: Moderate southeast trade winds |
| Total MPAs: over 500 (466 LMMAs, 50+ Tourism MPAs) | GDP/CAP: USD \$5 411 |

Overview

Fiji became independent from the United Kingdom on 10th October 1970 and declared itself a Republic on 7th October 1987.

Over half the population is rural with many communities relying on small-scale commercial and subsistence fishing. About 75% of the dietary protein is sourced from the ocean.

Tourism is the major source of foreign income, with most tourist activity concentrated on the beaches and reefs of the coast of the main islands and smaller adjacent islands.

Reef biodiversity is high, with at least 422 taxa of marine algae, 342 species of hard corals, 253 species of marine molluscs and 1075 recorded reef-associated fish species. Fiji also has mangrove forests and seagrass beds, with 8 species of mangrove and 6 species of seagrass.

Timeline of major events

| | | |
|-----------|---|--|
| 1997 | ● | Start of formal marine protection: first Fiji Locally Managed Marine Areas (FLMMA) sites, and Namena Marine Reserve |
| 2000 | ● | Large-scale bleaching event followed by coralline lethal orange disease (CLOD), and crown of thorns star (COTS) outbreak |
| 2001 | ● | Cyclone Paula (category 4) |
| 2002 | ● | Bleaching event |
| 2004 | ● | Cyclone Ivy (category 4) |
| 2005-2006 | ● | COTS outbreaks, minor localised bleaching event |
| 2007 | ● | White syndrome disease first recorded |
| 2008 | ● | FLMMA reaches 150 sites |
| 2009 | ● | Catastrophic flooding at Nadi; freshwater affected shallow offshore reefs |
| 2011 | ● | Start of Vatu-i-Ra Conservation Park |
| 2012 | ● | FLMMA reaches 400 sites |
| 2014-2016 | ● | Minor localised bleaching events in shallow waters (<5m deep) |
| 2016 | ● | Cyclone Winston (category 5) |
| 2016 | ● | Establishment of the Oceania Regional Acanthaster Network (OREANET) to monitor COTS distribution and outbreaks in Fiji |

Maps of individual surveys of substrate

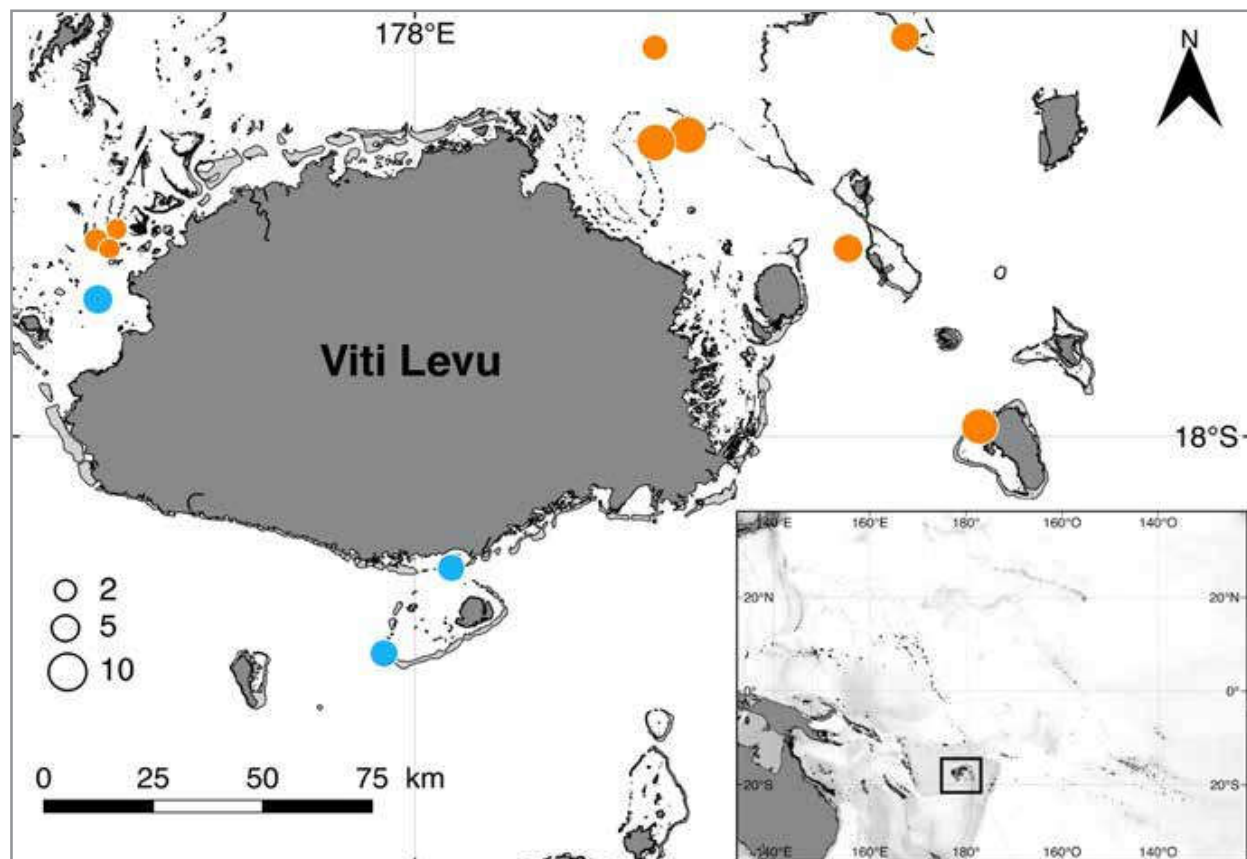


FIGURE 1

Map of the Fiji. Each colour represents a different dataset (orange: dataset n°52; blue: dataset n°20). Circle size represents the total number of times the site was sampled. Only sites where substrate was sampled are represented.

Table of data sources

TABLE 1

Data sources from Fiji used in the report. Dataset represent individual monitoring programs.

| Dataset N° | Contributor | Time period | Year count | Coral | Macroalgae | Fish |
|------------|---|-------------|------------|-------|------------|------|
| 20 | Bruce Carlson – Georgia Aquarium, USA | 2000 - 2010 | 5 | X | X | |
| 52 | FCRMN – Marine Ecology, Suva, Fiji | 2000 - 2013 | 14 | X | X | |
| 53 | FCRMN – Marine Ecology, Suva, Fiji | 2002 - 2013 | 12 | | | X |

Trends

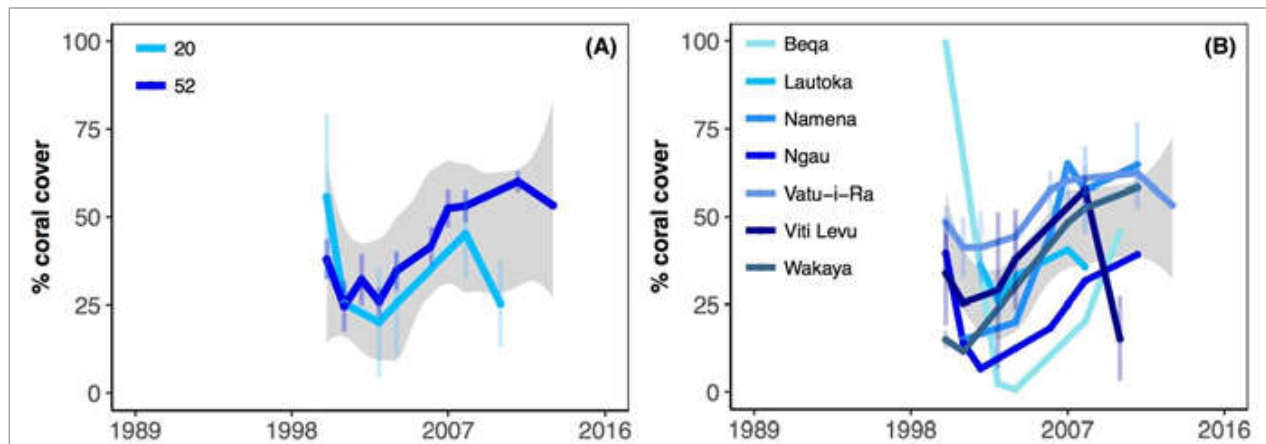


FIGURE 2.1

Average percent cover of live hard coral in Fiji: (A) Contribution of each dataset, all islands combined; (B) For Beqa, Lautoka, Namena, Ngau, Vatu-i-ra, Viti Levu, Wakaya. The grey area represents the average loess trend when all datasets or all islands are combined

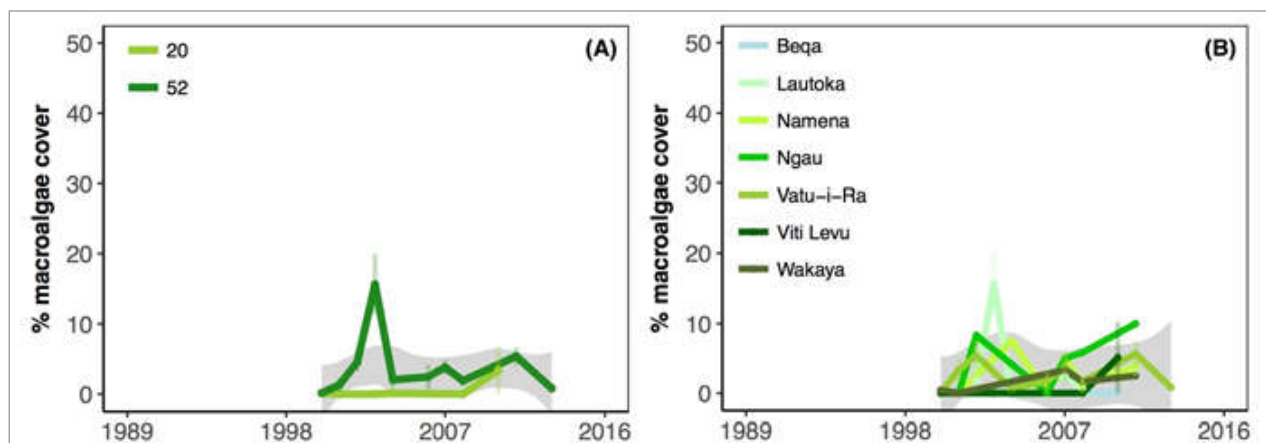
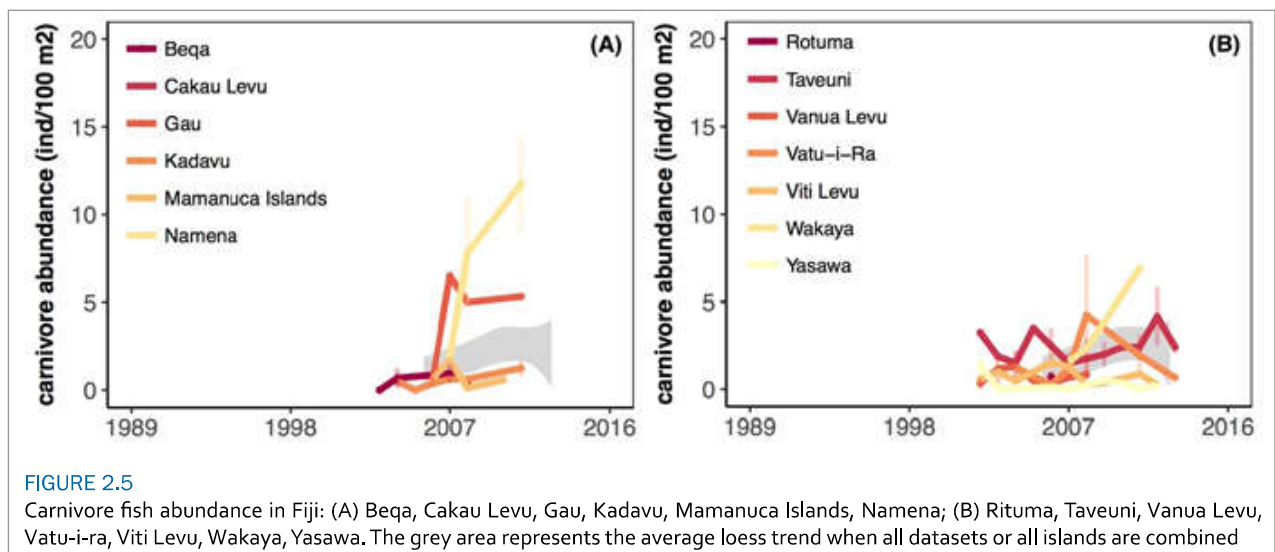
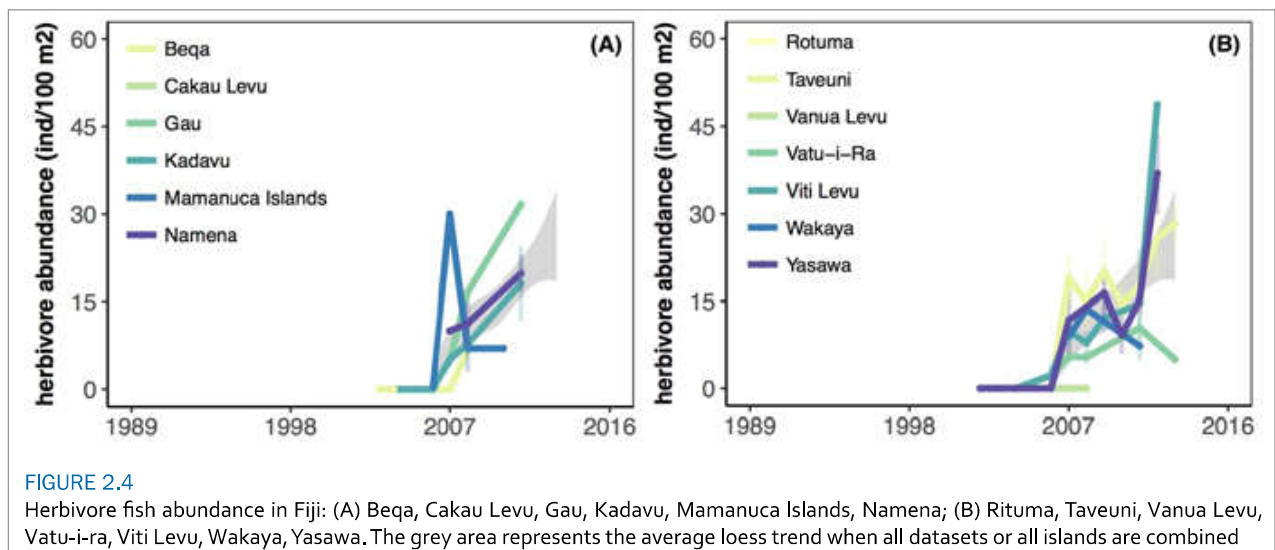
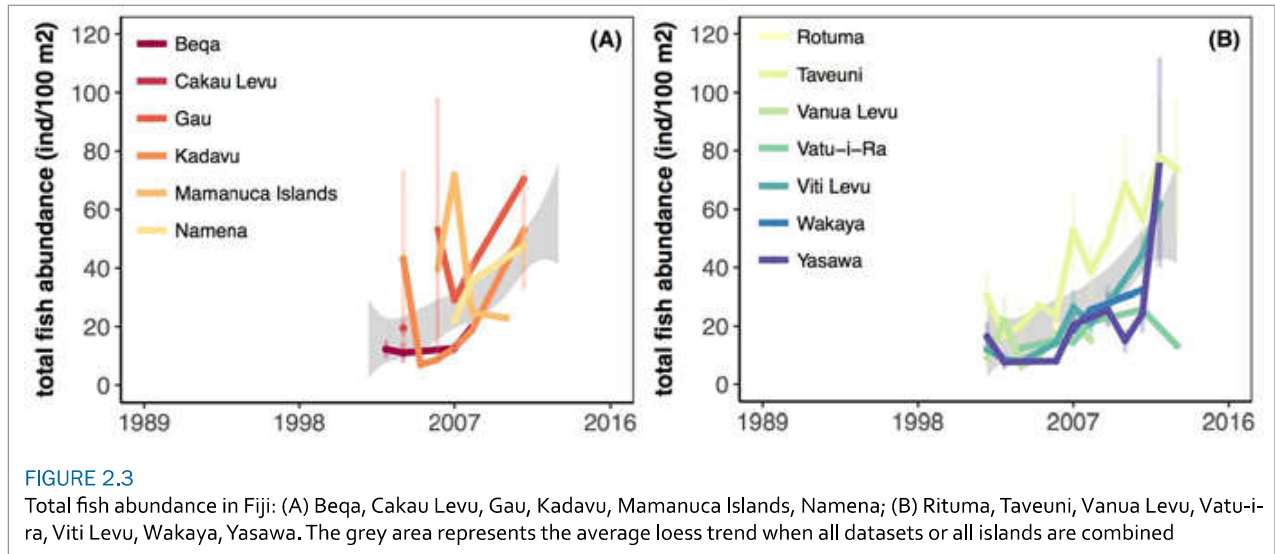


FIGURE 2.2

Average percent cover of macroalgae in Fiji: (A) Contribution of each dataset, all islands combined; (B) For Beqa, Lautoka, Namena, Ngau, Vatu-i-ra, Viti Levu, Wakaya. The grey area represents the average loess trend when all datasets or all islands are combined



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