Supplementary Figures

Micronutrient production by coral reef fishes

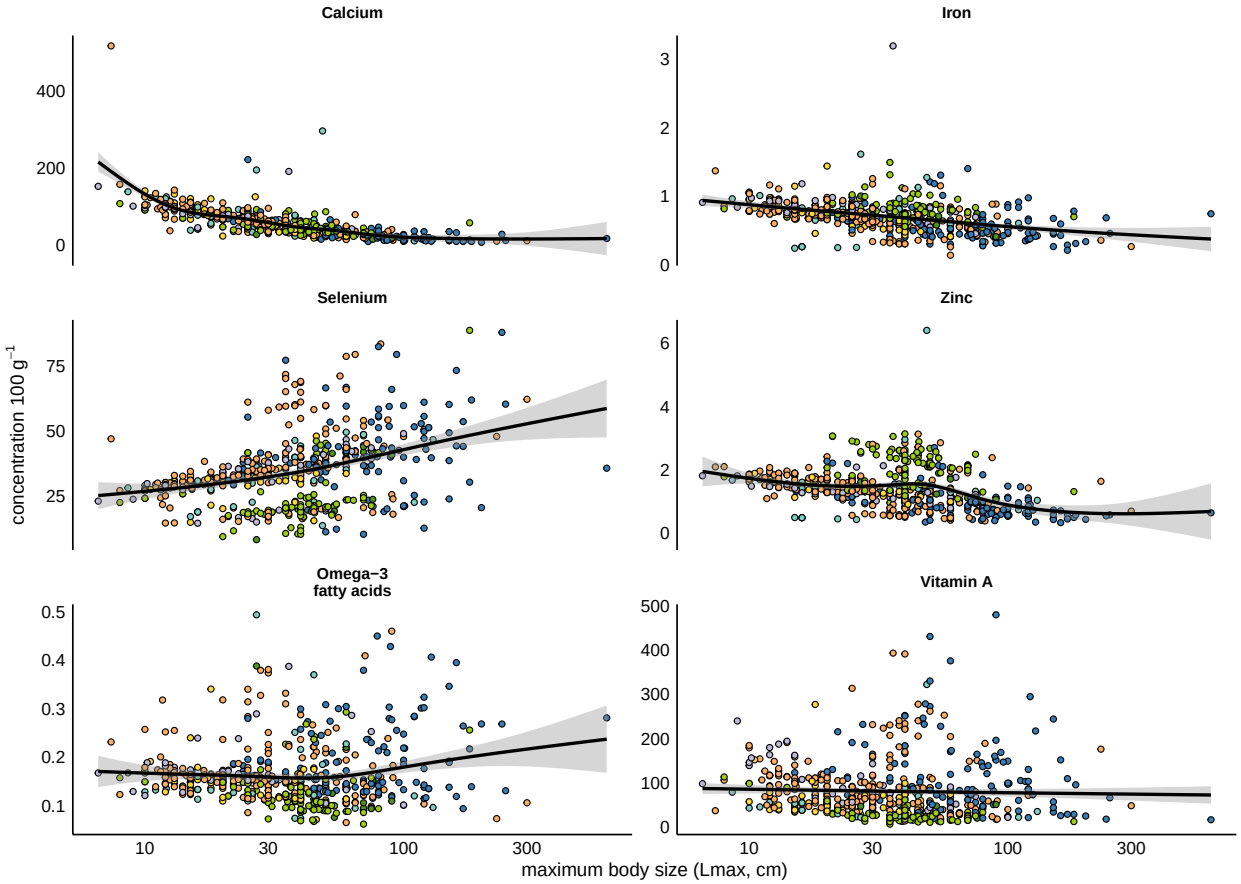

Fig. S1. Association between nutrient concentrations and body size (maximum length, Lmax) of 541 coral reef fish species. Points are individual species observed across Belize, Fiji, Madagascar, and the Solomon Islands. Nutrient concentrations are per 100 g of white muscle tissue, for calcium, iron, selenium, zinc, omega-3 fatty acids and vitamin A. Body size is species' maximum length (cm).

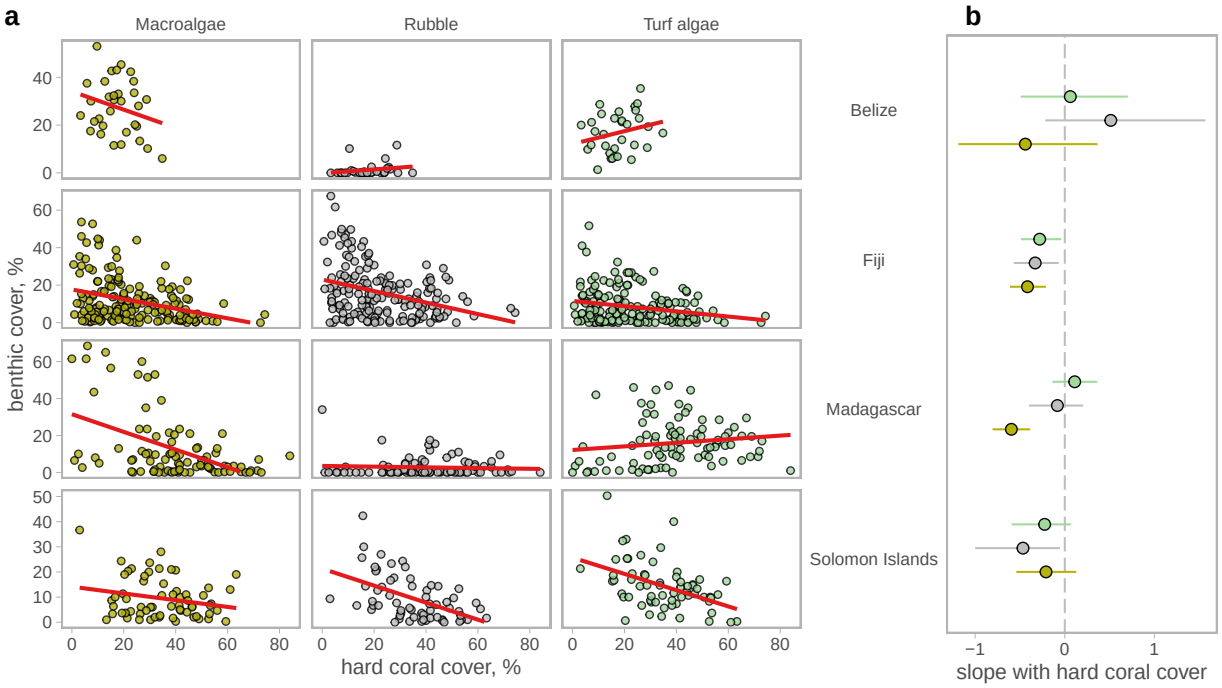

Fig. S2. Association between hard coral and other dominant habitat groups. In (a), points are hard coral cover at each reef, against cover of macroalgae, rubble, and turf algae, annotated with simple linear regression fits. In (b), points are slope estimates for relationships between hard coral and each dominant benthic group, from a simple linear regression, with 95% confidence intervals.

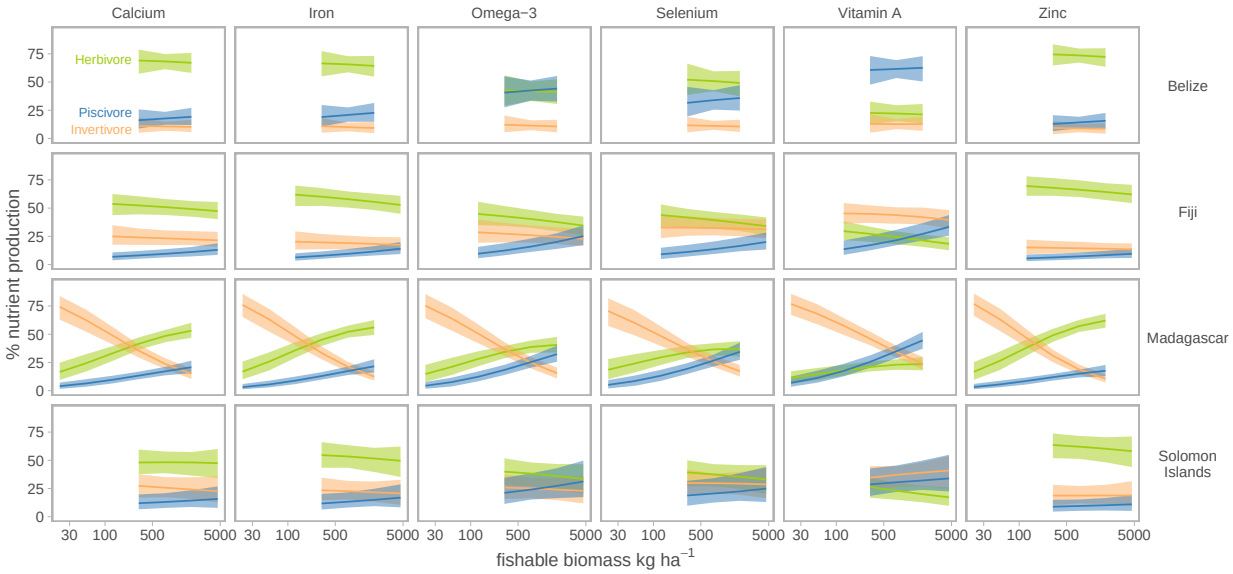

Fig. S3. Contribution to nutrient production by fishery target groups along gradient in fishable biomass. Percent contribution to production of six nutrients along fishable biomass gradients in each country. Lines are posterior median values with 95% highest posterior density intervals, for herbivores (green), piscivores (blue) and mobile invertivores (orange).

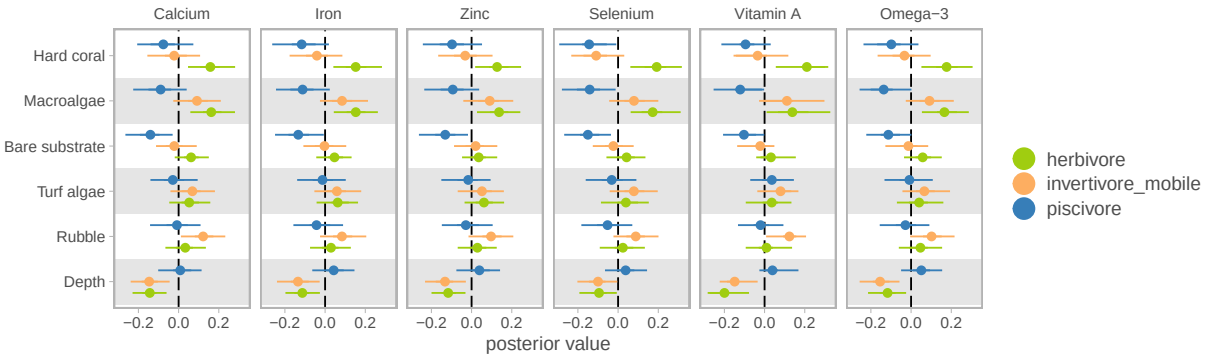

Fig. S4. Effect of benthic cover covariates on trophic structure of nutrient production. Points are median posterior effects of each covariate on each of the three trophic groups (herbivores, mobile invertivores, piscivores), with 95% highest posterior density intervals.

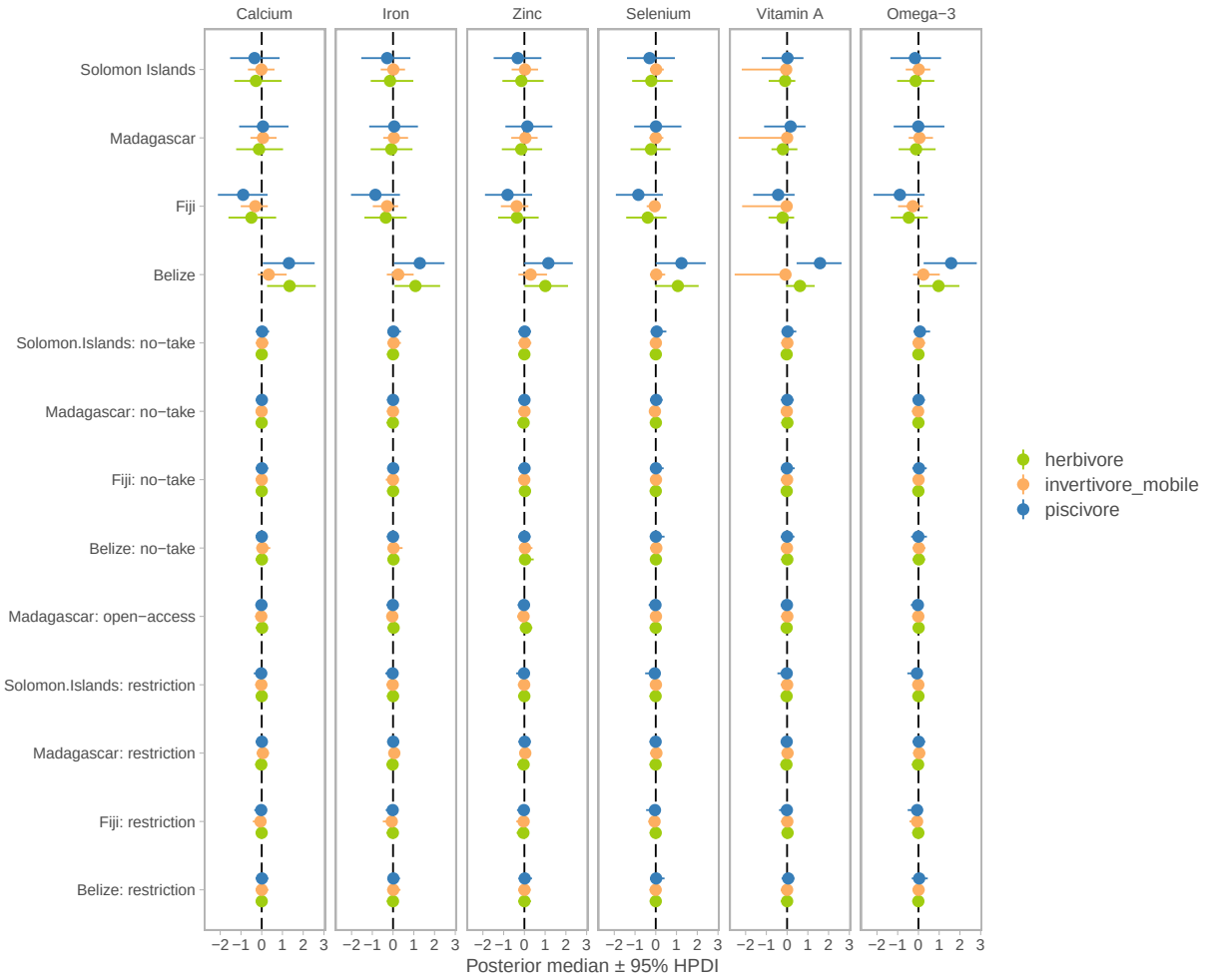

Fig. S5. Effects of country and management type on trophic structure of nutrient production. Points are median posterior effects of each covariate on each of the three trophic groups (herbivores, mobile invertivores, piscivores), with 95% highest posterior density intervals.

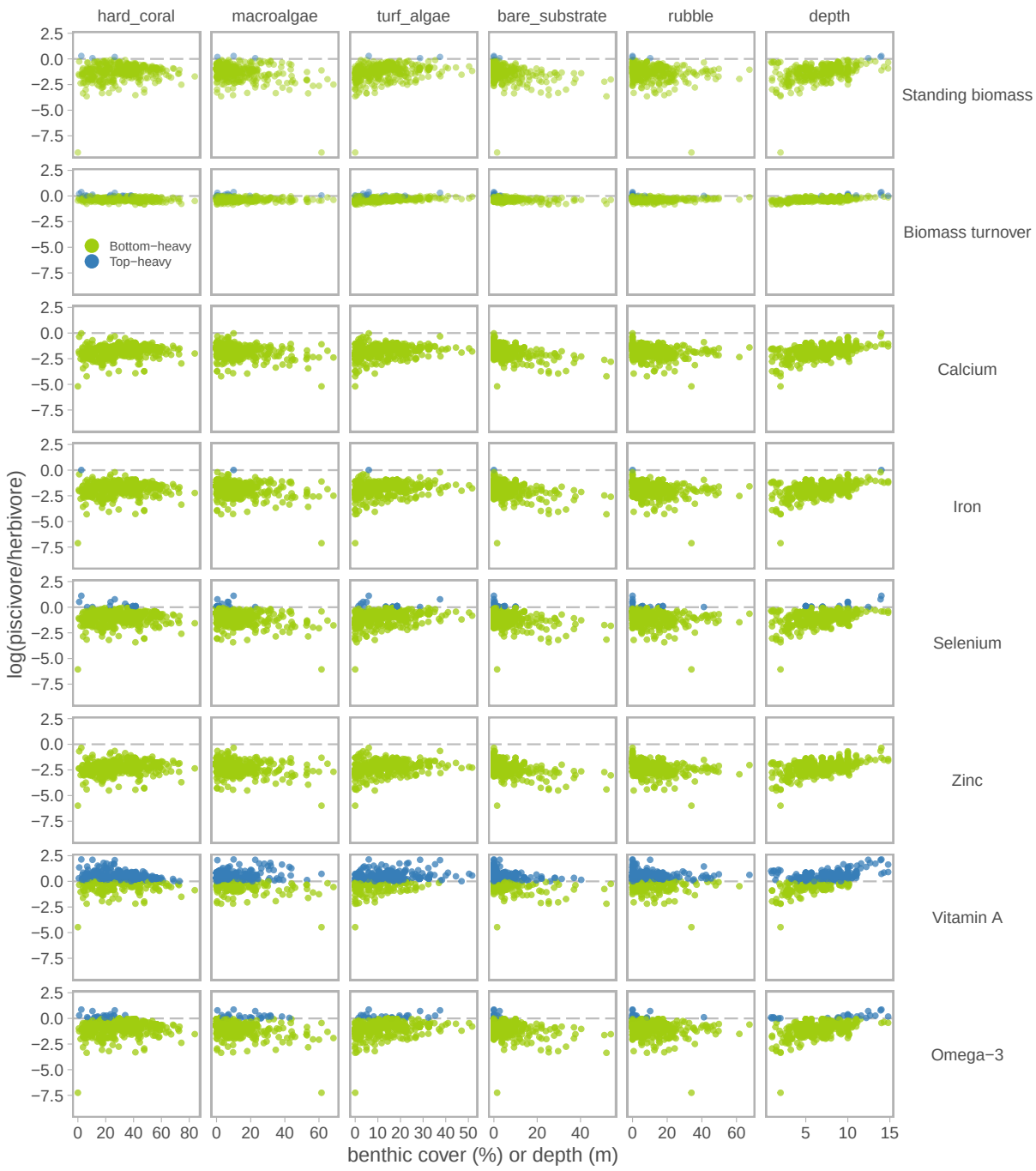

Fig. S6. Trophic pyramids along gradients in benthic cover (%) and depth (m). Points are the predicted trophic pyramid (median posterior value) at each reef, for each fishery service and benthic covariate. Top-heavy reefs are coloured blue and bottom-heavy reefs are coloured green.