

Reply to comments for Discussion Paper 2012-64

We greatly appreciate the time devoted to reading and commenting our MS from two invited readers and one anonymous reviewer. Here, we present our reply. Page numbers refer to the latest version.

Reader 2 (John Whitehead):

1) As suggested, we performed a sensitivity analysis in order to include changes in price and in resource availability. Hence, a total of 816 scenarios were run: two species in 17 provinces for an upper and lower bound of temperature change, under 1% and 4% discount rates, assuming constant, upper and lower bounds of price changes, and assuming a constant and ten-year average resource biomass fluctuation. We explain scenario construction in detail in a new section ("3.4. Scenarios analysis") included in Methodology (pp. 10-11).

2) In Table 1 (p. 12) we report the ordinary least squares (OLS), the generalized least squares (GLS) and the generalized moments method (GMM) estimates for comparison purposes. Nevertheless, in econometrics, it is widely known that in the presence of persistence (i.e. lags), the most robust estimator in a dynamic panel is the GMM estimator, since it is unbiased and consistent (Greene, W.H. 2000. *Econometric Analysis*. New Jersey: Prentice Hall).

3) The discussion on the link between food security and adaptation was deepened in Discussion by adding a new section: "4.2 Adaptation actions and food security". We adapted a conceptual framework as suggested by another reviewer, we broaden our literature review, and improved the information on food security and climate change adaptation in Mexico (pp. 19-22).

4) We added a brief mention to implications of shifts in species distribution and trade for food security (pp. 21-22).

5) The format and information presented in Table 1 was improved. Due to the number of scenario outcomes (n=816) we present two tables, one for shrimp (p. 17) and another for sardine (p. 18), summing up the provinces results. The reader is referred to tables for each province in the supplementary spreadsheet file. Negative impacts are clearly denoted.