

Reporting Summary

Nature Portfolio wishes to improve the reproducibility of the work that we publish. This form provides structure for consistency and transparency in reporting. For further information on Nature Portfolio policies, see our [Editorial Policies](#) and the [Editorial Policy Checklist](#).

Statistics

For all statistical analyses, confirm that the following items are present in the figure legend, table legend, main text, or Methods section.

n/a	Confirmed
☐	☒ The exact sample size (n) for each experimental group/condition, given as a discrete number and unit of measurement
☒	☐ A statement on whether measurements were taken from distinct samples or whether the same sample was measured repeatedly
☒	☐ The statistical test(s) used AND whether they are one- or two-sided <i>Only common tests should be described solely by name; describe more complex techniques in the Methods section.</i>
☐	☒ A description of all covariates tested
☐	☒ A description of any assumptions or corrections, such as tests of normality and adjustment for multiple comparisons
☐	☒ A full description of the statistical parameters including central tendency (e.g. means) or other basic estimates (e.g. regression coefficient) AND variation (e.g. standard deviation) or associated estimates of uncertainty (e.g. confidence intervals)
☒	☐ For null hypothesis testing, the test statistic (e.g. F , t , r) with confidence intervals, effect sizes, degrees of freedom and P value noted <i>Give P values as exact values whenever suitable.</i>
☒	☐ For Bayesian analysis, information on the choice of priors and Markov chain Monte Carlo settings
☒	☐ For hierarchical and complex designs, identification of the appropriate level for tests and full reporting of outcomes
☒	☐ Estimates of effect sizes (e.g. Cohen's d , Pearson's r), indicating how they were calculated

Our web collection on [statistics for biologists](#) contains articles on many of the points above.

Software and code

Policy information about [availability of computer code](#)

Data collection	Data was collected using Microsoft Excel (Excel 2021 version 18.0) and Stata (version 17)
Data analysis	Data was analyzed using Microsoft Excel (Excel 2021 version 18.0), Stata (version 17) and R (version 4.2.0 and 4.3.1). R packages: rnatuarearth (version 1.0.1.9000), simple features (unique version) and raster (version 3.6-30). R codes available at https://zenodo.org/records/13887065 and https://github.com/DanOvando/ihh_figs

For manuscripts utilizing custom algorithms or software that are central to the research but not yet described in published literature, software must be made available to editors and reviewers. We strongly encourage code deposition in a community repository (e.g. GitHub). See the Nature Portfolio [guidelines for submitting code & software](#) for further information.

Data

Policy information about [availability of data](#)

All manuscripts must include a [data availability statement](#). This statement should provide the following information, where applicable:

- Accession codes, unique identifiers, or web links for publicly available datasets
- A description of any restrictions on data availability
- For clinical datasets or third party data, please ensure that the statement adheres to our [policy](#)

The data used in this analysis are publicly available on zenodo (<https://zenodo.org/records/13887065>). The file “1_non_anon_SI_input_data.zip” is organized into folders by dimension (employment, catch, landed value, nutrition and governance), with their corresponding data described in Section F of the Supplementary

Material. Outputs from the regression analysis from each dimension are available in the “3_anon_figures.zip” in zenodo. Since we considered as input data only the observations made for 58 countries, plus the independent variables used to make predictions for the rest of the countries, country-level model based extrapolations have been anonymized. Processed data used to create figures, including absolute and relative estimates of small-scale fisheries by country and region for all dimensions, can be accessed at https://github.com/DanOvando/ihh_figs. For the nutrient analysis, the dietary intake data from the Global Dietary Database used is available at: <https://globaldietarydatabase.org>, and the nutrient concentration data at www.fishbase.org

Human research participants

Policy information about [studies involving human research participants and Sex and Gender in Research](#).

Reporting on sex and gender	No human research participants were involved in the study so this is not applicable
Population characteristics	Not applicable
Recruitment	Not applicable
Ethics oversight	Not applicable

Note that full information on the approval of the study protocol must also be provided in the manuscript.

Field-specific reporting

Please select the one below that is the best fit for your research. If you are not sure, read the appropriate sections before making your selection.

☐ Life sciences ☐ Behavioural & social sciences ☒ Ecological, evolutionary & environmental sciences

For a reference copy of the document with all sections, see nature.com/documents/nr-reporting-summary-flat.pdf

Ecological, evolutionary & environmental sciences study design

All studies must disclose on these points even when the disclosure is negative.

Study description	Data on the contributions of small-scale fisheries to each dimension of sustainable development was compiled and synthesized through a transdisciplinary approach resulting in a database that provides estimates on catch, landed economic value, livelihood dependency, employment, number of women employed, nutrient supply and governance per country
Research sample	Data on small-scale fisheries catch was compiled through 58 country and territory case studies (20 strictly marine, 6 strictly inland, and 32 combined marine and inland). The compiled case study data was used as inputs for extrapolation to 152 countries using a set of suitable predictor variables. Governance data uses policy information from 51 case studies. For employment and livelihoods dependency, we used existing data from 78 standardized national household-based surveys. Empirically collected data for 58 countries is provided as described above. Names of countries resulting from extrapolations have been randomized to avoid confusing them with empirically generated data.
Sampling strategy	A prioritization approach was developed to select candidate countries as case studies. Countries were selected according to different criteria, including their contributions to global fisheries catch, small-scale fisheries catch and employment in fisheries, in order to cover a representative sample, as well as the role of fisheries within countries, e.g. looking at catch per capita and the importance of fish in the diet, to select countries with low absolute contribution but with high relative importance. The selection criteria allowed the selection of both countries with high absolute contributions to global fisheries indicators and countries where, despite low global contributions, fisheries played an important role.
Data collection	Data was collected by in-country and international experts in small-scale fisheries for each of the 58 countries included in the study. The total number of experts involved was over 800
Timing and spatial scale	From 2013 to 2018
Data exclusions	Some estimates did not include data from 2018 due to patchiness
Reproducibility	Not applicable, no experiments were conducted
Randomization	Not applicable as per sampling strategy described above
Blinding	Not applicable

Did the study involve field work? ☐ Yes ☒ No

Reporting for specific materials, systems and methods

We require information from authors about some types of materials, experimental systems and methods used in many studies. Here, indicate whether each material, system or method listed is relevant to your study. If you are not sure if a list item applies to your research, read the appropriate section before selecting a response.

Materials & experimental systems

n/a	Involved in the study
☒	☐ Antibodies
☒	☐ Eukaryotic cell lines
☒	☐ Palaeontology and archaeology
☒	☐ Animals and other organisms
☒	☐ Clinical data
☒	☐ Dual use research of concern

Methods

n/a	Involved in the study
☒	☐ ChIP-seq
☒	☐ Flow cytometry
☒	☐ MRI-based neuroimaging