## Data Quality Appendix

For each metric scored, assessors also indicated their level of confidence in the numeric score given according to the following rubric:

A. Reviewer is highly confident (95%) the 1-5 score is correct. Confidence can come from familiarity with the fishery, the reliability of another expert source, a calculation based on reliable data, or large ranges of the underlying measure for the given score that make another score highly unlikely for the fishery. Note that it is confidence in the 1-5 score that matters, and thus wide ranges for the underlying measure associated with a score can support A quality, even in the case when information about the precise level of the underlying measure is poor.
B. Reviewer feels 1-5 score is more likely than others, and reviewer is highly confident (95%) that the true underlying measure would be within one of the given score.
C. Reviewer is making an educated guess based on best available information, but reviewer is not highly confident the true measure would be within one of the given score.

## Average Metric Quality

Table QA1 shows the average quality score of each metric, coding alphabetic scores as 3.0 for A, 2.0 for B and 1.0 for C. The overall range is small, with nearly all averaging above a B (2.0), reflecting overall reasonable confidence on the part of reviewers (with the caveat that reviewers are often overconfident in their own judgments). More commonly, the drivers of differences in quality are based on the sector or case study, rather than one measure being uniformly lower quality across the dataset; eliminating lower quality measures would prevent measuring important dimensions of the indicators such as Risk and Labor Returns, which dominate the lower-quality metrics. That differences in quality are related to the prevalence of data programs in different fisheries (grouped usefully by developed or developing country) or by sector is reflected in Figure 6.

*Table QA1: Average Reviewer Quality Score of Each Metric*

| Metric | Quality Score | Input/Output | Dimension |
|---|---|---|---|
| QOFCertified | 2.933333333 | Output | Fish Stock |
| QIGResponsiveness | 2.931034483 | Input | Governance |
| QINGDP | 2.931034483 | Input | Economic Conditions |
| QINIEF | 2.929824561 | Input | Economic Conditions |
| QIGQuality | 2.913793103 | Input | Governance |
| QIIIce | 2.810344828 | Input | Infrastructure |
| QIEChronicConsumption | 2.793103448 | Input | Exogenous Environmental Factors |

| | | | |
|---|---|---|---|
| QIADurability | 2.771929825 | Input | Access Rights |
| QIHDurability | 2.771428571 | Input | Harvest Rights |
| QI_EPI | 2.766666667 | Input | General Environmental Performance |
| QIITechnology | 2.75862069 | Input | Infrastructure |
| QIHSecurity | 2.75 | Input | Harvest Rights |
| QIHProportion | 2.745762712 | Input | Harvest Rights |
| QIIRoads | 2.740740741 | Input | Infrastructure |
| QIHExclusivity | 2.717948718 | Input | Harvest Rights |
| QIEDisasters | 2.706896552 | Input | Exogenous Environmental Factors |
| QIAProportion | 2.706896552 | Input | Access Rights |
| QIDAvailability | 2.706896552 | Input | Data |
| QILTACs | 2.706896552 | Input | Management Methods |
| QIIExtenstion | 2.706896552 | Input | Infrastructure |
| QIIElectricity | 2.706896552 | Input | Infrastructure |
| QIHTransfer | 2.702702703 | Input | Harvest Rights |
| QOHSeasonLen | 2.7 | Output | Harvest |
| QOOEdAccess | 2.7 | Output | Community Services |
| QIEDisease | 2.689655172 | Input | Exogenous Environmental Factors |
| QIASecurity | 2.684210526 | Input | Access Rights |
| QOONonresident | 2.683333333 | Output | Local Ownership |
| QIATransfer | 2.681818182 | Input | Access Rights |
| QIHFlexibility | 2.675 | Input | Harvest Rights |
| QOSFinalMarket | 2.666666667 | Output | Product Form |
| QILMPAs | 2.655172414 | Input | Management Methods |
| QOSUSEUExport | 2.65 | Output | Trade |
| QIWHarvest | 2.642857143 | Input | Gender |
| QIEPollutionShocks | 2.637931034 | Input | Exogenous Environmental Factors |
| QIAExclusivity | 2.637931034 | Input | Access Rights |
| QOFRegMort | 2.633333333 | Output | Fish Stock |
| QOSFinalWealth | 2.633333333 | Output | Trade |
| QITBuyers | 2.631578947 | Input | Markets |
| QITVerticalIntegration | 2.631578947 | Input | Markets |
| QIMEnforcement | 2.620689655 | Input | Management Inputs |
| QIDAnalysis | 2.620689655 | Input | Data |
| QOOHealthAccess | 2.616666667 | Output | Health & Sanitation |
| QIEChronicStock | 2.603448276 | Input | Exogenous Environmental Factors |
| QIOParticipation | 2.596491228 | Input | Collective Action |
| QITPricing | 2.596491228 | Input | Markets |
| QOFSelectivity | 2.583333333 | Output | Fish Stock |
| QILSpatial | 2.578947368 | Input | Management Methods |
| QIMSubsidies | 2.571428571 | Input | Management Inputs |
| QOACapFunction | 2.566666667 | Output | Harvest Assets |
| QIMJurisdiction | 2.551724138 | Input | Management Inputs |
| QOOSocialStanding | 2.55 | Output | Managerial Returns |

| | | | |
|---|---|---|---|
| QOPImprovement | 2.542372881 | Output | Product Form |
| QOMHealthAccess | 2.516666667 | Output | Health & Sanitation |
| QICCohesion | 2.50877193 | Input | Community |
| QOCHealthAccess | 2.5 | Output | Health & Sanitation |
| QOCNonresident | 2.5 | Output | Local Labor |
| QOMNonresident | 2.5 | Output | Local Ownership |
| QOALoanSource | 2.483333333 | Output | Harvest Assets |
| QORContest | 2.483333333 | Output | Community Services |
| QOFOverfished | 2.475409836 | Output | Fish Stock |
| QOFHabitat | 2.466666667 | Output | Fish Stock |
| QOWNonresident | 2.466666667 | Output | Local Labor |
| QIAFlexibilty | 2.456140351 | Input | Access Rights |
| QITPriceAvailabilty | 2.456140351 | Input | Markets |
| QOCExperience | 2.45 | Output | Career |
| QOSExport | 2.45 | Output | Trade |
| QIOMgmtInfluence | 2.438596491 | Input | Collective Action |
| QOCAge | 2.433333333 | Output | Career |
| QIWMgmtInfluence | 2.410714286 | Input | Gender |
| QICLeadership | 2.403508772 | Input | Community |
| QOHLandings | 2.4 | Output | Harvest |
| QOPSupport | 2.4 | Output | Community Services |
| QOMEdAccess | 2.4 | Output | Community Services |
| QOCEdAccess | 2.396551724 | Output | Community Services |
| QOPSanitation | 2.389830508 | Output | Health & Sanitation |
| QITNonTariffs | 2.385964912 | Input | Markets |
| QORAnnLandVol | 2.379310345 | Output | Risk |
| QOSPrice | 2.372881356 | Output | Harvest |
| QOOWage | 2.366666667 | Output | Managerial Returns |
| QOPUtilization | 2.366666667 | Output | Product Form |
| QITTariffs | 2.363636364 | Input | Markets |
| QIWBusInfluence | 2.357142857 | Input | Gender |
| QIOBusInfluence | 2.350877193 | Input | Collective Action |
| QOWHealthAccess | 2.35 | Output | Health & Sanitation |
| QIIShipping | 2.344827586 | Input | Infrastructure |
| QIWPostHarvest | 2.339285714 | Input | Gender |
| QIPDays | 2.333333333 | Input | Participation |
| QOSMargin | 2.322033898 | Output | Product Form |
| QOWSocialStanding | 2.316666667 | Output | Labor Returns |
| QOAAssetVal | 2.310344828 | Output | Harvest Assets |
| QORAnnPriceVol | 2.293103448 | Output | Risk |
| QOCSocialStanding | 2.293103448 | Output | Labor Returns |
| QIPFinancial | 2.293103448 | Input | Participation |
| QOHSafety | 2.271186441 | Output | Health & Sanitation |
| QOFIUU | 2.266666667 | Output | Fish Stock |

| | | | |
|---|---|---|---|
| QOMWage | 2.266666667 | Output | Managerial Returns |
| QOATotRevenue | 2.263157895 | Output | Harvest Assets |
| QOAAssetEarnings | 2.254237288 | Output | Harvest Assets |
| QOBLoanSource | 2.25 | Output | Post-Harvest Assets |
| QOWEdAccess | 2.25 | Output | Community Services |
| QOALoanRate | 2.240740741 | Output | Harvest Assets |
| QOMEarnings | 2.224137931 | Output | Managerial Returns |
| QOPYield | 2.220338983 | Output | Product Form |
| QOMSocialStanding | 2.2 | Output | Managerial Returns |
| QOOEarnings | 2.186440678 | Output | Managerial Returns |
| QOCWage | 2.172413793 | Output | Labor Returns |
| QORAnnRevVol | 2.157894737 | Output | Risk |
| QOFRebuild | 2.147540984 | Output | Fish Stock |
| QOFDegOverfishing | 2.131147541 | Output | Fish Stock |
| QIMExpenditure | 2.107142857 | Input | Management Inputs |
| QOWExperience | 2.101694915 | Output | Career |
| QOHExCapacity | 2.083333333 | Output | Harvest |
| QOPShrink | 2.083333333 | Output | Product Form |
| QORIntrAnnPriceVol | 2.074074074 | Output | Risk |
| QOWEarnings | 2.016949153 | Output | Labor Returns |
| QOSRelativePrice | 2.016666667 | Output | Trade |
| QOBCapFunction | 2.016666667 | Output | Post-Harvest Assets |
| QOWWage | 2.016666667 | Output | Labor Returns |
| QORIntraAnnLandVol | 2 | Output | Risk |
| QOCEarnings | 1.98245614 | Output | Labor Returns |
| QORSpatialPriceVOl | 1.980769231 | Output | Risk |
| QOBLoanRate | 1.777777778 | Output | Post-Harvest Assets |

**Results Robustness to Score Quality**

Figure QA1 reconstructed Figure 4's rankings by calculating dimension scores by weighting individual metrics by 3 for A quality, 2 for B quality and 1 for C quality, then calculating the indicator values from the resulting dimension scores. The rankings are shown below; a rank correlation test fails to reject the hypothesis that these rankings match those in Figure 4 at conventional levels.

*Figure QA1: Fishery Performance Indicator scores for 61 global case studies, weighted by score quality; case studies from countries with per capita GDP above the global median are shaded, and scores are color coded by performance (green=high; red=low)*

# FPI Output Scores

| Fishery | | | | Output Category | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Ecology | Econ. | Comm. | Ecology | Harvest | Post-Harvest |
| AK Pollock | - | US | 2013 | 4.75 | 4.00 | 3.30 | 4.75 | 3.97 | 3.77 |
| Lobster (*Nephrops Norvegicus*) | - | Iceland | 2010 | 4.74 | 4.02 | 3.80 | 4.74 | 4.08 | 3.91 |
| AK Halibut | - | US | 2011 | 4.64 | 3.62 | 3.06 | 4.64 | 3.55 | 3.36 |
| Skipjack Tuna | - | Maldives | 2013 | 4.54 | 3.06 | 3.54 | 4.54 | 3.53 | 2.90 |
| OR Dungeness Crab | - | US | 2010 | 4.52 | 3.20 | 3.39 | 4.52 | 3.29 | 3.40 |
| AK Salmon | - | US | 2009 | 4.51 | 2.61 | 3.02 | 4.51 | 2.69 | 3.00 |
| Cod | - | Norway | 2010 | 4.50 | 3.24 | 3.19 | 4.50 | 3.53 | 3.14 |
| Purse Seiners | - | Norway | 2010 | 4.50 | 3.27 | 3.19 | 4.50 | 3.56 | 3.14 |
| Gulf Prawn | - | Australia | 2010 | 4.38 | 3.50 | 4.13 | 4.38 | 3.90 | 3.83 |
| Lake Victoria Dagaa | - | Uganda | 2010 | 4.25 | 2.46 | 3.02 | 4.25 | 2.95 | 2.36 |
| Lake Victoria Tilapia | - | Uganda | 2010 | 4.25 | 2.48 | 3.04 | 4.25 | 2.60 | 2.72 |
| Southern Zone Rock Lobster | - | Australia | 2012 | 4.00 | 3.71 | 4.32 | 4.00 | 3.98 | 4.02 |
| Baltic Cod | - | Sweden | 2010 | 4.00 | 3.52 | 3.94 | 4.00 | 3.40 | 3.94 |
| AK Crab | - | US | 2011 | 3.93 | 3.91 | 2.35 | 3.93 | 3.56 | 2.99 |
| Suruga Pink Shrimp | - | Japan | 2010 | 3.88 | 3.07 | 3.77 | 3.88 | 3.55 | 3.29 |
| Hoki | - | New Zealand | 2011 | 3.86 | 3.04 | 2.93 | 3.86 | 3.33 | 3.01 |
| Indian Ocean Purse Seine Tuna | - | EU | 2013 | 3.84 | 3.49 | 3.84 | 3.84 | 3.76 | 3.60 |
| NE Groundfish | - | US | 2008 | 3.50 | 3.14 | 3.17 | 3.50 | 2.78 | 3.53 |
| Industrial Tuna | - | Ecuador | 2013 | 3.46 | 3.55 | 4.18 | 3.46 | 3.70 | 3.88 |
| Nearshore Artisanal | - | Seychelles | 2011 | 3.44 | 3.10 | 4.06 | 3.44 | 3.63 | 3.59 |
| Pacific Groundfish | - | US | 2011 | 3.33 | 3.07 | 2.75 | 3.33 | 3.10 | 2.68 |
| W. Pacific Tuna Artisanal | - | Indonesia | 2013 | 3.29 | 3.03 | 3.87 | 3.29 | 3.29 | 3.40 |
| Western Zone Abalone | - | Australia | 2011 | 3.27 | 2.82 | 3.18 | 3.27 | 3.13 | 2.88 |
| Semi-Industrial | - | Seychelles | 2011 | 3.21 | 3.56 | 4.05 | 3.21 | 3.83 | 3.84 |
| Beel Chatra Region | - | Bangladesh | 2010 | 3.19 | 2.53 | 3.59 | 3.19 | 3.68 | 2.10 |
| FL Spiny Lobster | - | US | 2010 | 3.15 | 3.16 | 3.62 | 3.15 | 3.36 | 3.47 |
| Artisanal Sole and Catfish | - | Gambia | 2010 | 2.98 | 2.83 | 2.96 | 2.98 | 2.96 | 2.85 |
| Kailin Nadi Region | - | Bangladesh | 2010 | 2.96 | 2.40 | 2.95 | 2.96 | 2.92 | 2.10 |
| Purse Seine/Ranching Tuna | - | Mexico | 2013 | 2.96 | 3.67 | 4.05 | 2.96 | 3.50 | 4.02 |
| Tokyo Bay | - | Japan | 2013 | 2.94 | 3.42 | 4.11 | 2.94 | 3.35 | 4.20 |
| Louisiana Shrimp | - | US | 2010 | 2.94 | 2.51 | 3.67 | 2.94 | 2.64 | 3.34 |
| Small-Scale Longline Tuna | - | Chinese Taipei | 2013 | 2.87 | 3.52 | 3.96 | 2.87 | 3.19 | 4.30 |
| Sea Cucumber | - | Seychelles | 2011 | 2.84 | 3.24 | 4.13 | 2.84 | 3.30 | 3.97 |
| La Paz Bay Chocolata clam | - | Mexico | 2013 | 2.79 | 2.48 | 3.72 | 2.79 | 2.71 | 3.35 |
| Pabna Sadullaspracole Region | - | Bangladesh | 2010 | 2.76 | 2.37 | 2.80 | 2.76 | 2.60 | 2.10 |
| CA Urchin | - | US | 2010 | 2.73 | 3.44 | 2.63 | 2.73 | 3.07 | 2.99 |
| Ensenada de La Paz Bivalves | - | Mexico | 2013 | 2.69 | 1.95 | 3.27 | 2.69 | 2.52 | 2.19 |
| TRY Oysters | - | Gambia | 2010 | 2.69 | 1.72 | 2.30 | 2.69 | 1.82 | 1.62 |
| Lesser Sunda Artisanal Snapper | - | Indonesia | 2010 | 2.65 | 2.48 | 2.06 | 2.65 | 2.19 | 2.25 |
| C (Southern Zone) | - | Morocco | 2013 | 2.55 | 3.23 | 3.24 | 2.55 | 3.62 | 2.83 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Blue Crab | - | Phillippines | 2010 | 2.50 | 2.79 | 3.03 | 2.50 | 2.96 | 2.62 |
| Artisanal Robertsport /Marshal | - | Liberia | 2013 | 2.43 | 2.13 | 2.89 | 2.43 | 2.44 | 2.45 |
| Semi-Industrial | - | Liberia | 2013 | 2.43 | 2.08 | 2.35 | 2.43 | 2.35 | 2.29 |
| Artisanal | - | Senegal | 2010 | 2.40 | 2.64 | 3.27 | 2.40 | 2.60 | 3.07 |
| Ensenada de La Paz Bivalves | - | Mexico | 2011 | 2.38 | 1.94 | 2.94 | 2.38 | 2.22 | 2.11 |
| Artisanal Shimoni | - | Kenya | 2013 | 2.37 | 2.01 | 2.58 | 2.37 | 2.89 | 2.07 |
| Nile Perch | - | Uganda | 2010 | 2.37 | 3.01 | 3.28 | 2.37 | 2.77 | 3.25 |
| Artisanal Ngaparou | - | Senegal | 2013 | 2.24 | 1.97 | 3.04 | 2.24 | 2.19 | 2.53 |
| Sherbro | - | Sierra Leone | 2013 | 2.20 | 1.82 | 3.16 | 2.20 | 2.37 | 2.09 |
| Anchovy | - | Peru | 2011 | 2.20 | 3.15 | 3.41 | 2.20 | 2.92 | 3.38 |
| A+B (Central Zone) | - | Morocco | 2013 | 2.17 | 2.91 | 3.80 | 2.17 | 3.38 | 2.89 |
| Blue Crab | - | Indonesia | 2010 | 2.16 | 3.02 | 3.54 | 2.16 | 2.78 | 3.51 |
| Artisanal Axim | - | Ghana | 2013 | 2.14 | 2.35 | 3.69 | 2.14 | 3.07 | 2.62 |
| Artisanal Westpoint | - | Liberia | 2011 | 2.12 | 2.43 | 2.36 | 2.12 | 2.58 | 2.54 |
| Octopus | - | Kenya | 2013 | 2.05 | 2.49 | 2.76 | 2.05 | 3.16 | 2.39 |
| Shrimp Industrial | - | Colombia | 2010 | 2.04 | 3.15 | 4.22 | 2.04 | 3.09 | 3.92 |
| Tombo | - | Sierra Leone | 2013 | 2.00 | 1.91 | 3.11 | 2.00 | 2.52 | 2.34 |
| Shrimp Artisanal | - | Colombia | 2010 | 1.94 | 2.71 | 4.10 | 1.94 | 2.99 | 3.59 |
| Lake Chiuta | - | Malawi | 2013 | 1.81 | 1.50 | 2.70 | 1.81 | 2.11 | 1.70 |
| Artisanal | - | Ghana | 2010 | 1.65 | 1.70 | 2.60 | 1.65 | 2.08 | 2.12 |
| Thanh Hoa | - | Vietnam | 2011 | 1.54 | 1.84 | 2.72 | 1.54 | 2.06 | 2.08 |