Global Capture Production Toolkit – 1950–2023: User Manual

1. What you can do with this dashboard

- The dashboard gives a dynamic picture of marine and inland capture fisheries from 1950–2023. It helps you compare countries and species, see long-term trends, and turn indicators into policy options.

- See the latest year's catch and how it changed versus last year (YoY), the last 3 years (3-year CAGR), and the last 5 years (5-year CAGR).

- Understand structure: top country or species, Top-3 share, and concentration (CR5 for countries, PC5 for species).

- Scan sustainability proxies from catch patterns: NEI – (Not Elsewhere Included), near-peak, collapsed share, decline breadth, and more.

- Filter by Country, FAO major fishing area, and ASFIS species to tailor the view.

- Use Summary for Decision-Makers for a narrative and Policy Signals for KPIs and deep sustainability signals.

- Watch the Animated Bar Race (ABR) to see how leaders change over time.

> **Tip**: The dashboard is selection-aware: labels and formulas switch automatically with your slicers (CR5 for countries, PC5 for species).

2. Quick start

- Choose an ABR item (Top Country or Top ASFIS Species).

- (Optional) Select filters: a country, an FAO major fishing area, or one or more ASFIS species.

- Read Summary for Decision-Makers. It explains the latest year, the leader, Top-3 share, concentration (CR5 or PC5), breadth, growth (YoY, CAGR), and reporting quality (NEI). It updates instantly with your selection.

- Open Policy Signals for concise indicators and sustainability proxies (e.g., NEI share, collapsed catch,).

- Use the Animated Bar Race: press Play to animate across years; hover bars for exact values; use the timeline to scrub.

> **Tip**: Start broad (Global), then add one filter at a time to keep the story clear.

3. Layout tour — how the dashboard is organised

- Header bar – title, data source (FAO FishStatJ), and branding.

- Chips row – rounded "chips" confirming scope and unit; appears when a parameter or filter is active.

- Summary for Decision-Makers – one paragraph: totals, top entity, Top-3 share, concentration (CR5/PC5), breadth, growth, and reporting quality.

- Policy Signals (accordion) – KPI "pills" (Top entity, Top-3 share, YoY, CAGRs, Concentration, Breadth) and Deep Signals (NEI, collapsed/near-peak, Δ Level).

- Animated Bar Race – the main chart, showing change over time.
- Structural Notes (accordion) – definitions, formulas, and interpretation bands.

4. The slicers (left panel) and what they do

ABR items (parameter)

- Top Country – shows the leading producer country and concentration among countries (CR5).
- Top ASFIS Species – switches focus to species and uses species concentration (PC5). If you also select a country, the summary adds the leading species and its share.

Country

Select a single country for a national profile. The summary reports the country's share of world catch, leading species (if Top ASFIS Species is chosen), growth rates, concentration context, and species breadth.

Capture Type

Results respect Capture Type (Marine vs. Inland vs. All), mapped from FAO Major Fishing Areas via lookup and applied before aggregations for shares/top-N and country metrics respect the selected capture type.

FAO major fishing area (Capture Area)

Filter by FAO area (Capture Area) to align with regional management and RFMO discussions. The narrative switches to catch within that area, with top countries or species and concentration. When multiple FAO areas are selected, totals and shares are computed over the union of the selected areas, and the chips display "FAO AREA" with the selected items.

ASFIS species

Selecting a species shows who catches it most and how that has changed. In species-only mode, Policy Pulse lists top countries and country-level concentration (CR5). If you also select a country and an area, the pulse inserts the Selected species share in that context.

Good to know (multi-select in slicers):

- You can select multiple countries or species; the narrative and Policy Pulse reflect your current selection.
- Clearing one slicer does not reset others. Review the chips under the header to see what's active.
- When nothing is selected, chips stay hidden to keep the header clean.

Tip: All slicers (Country, FAO Area/Capture Area, ASFIS species) support selecting multiple items. Use Ctrl/Cmd−click or the checkboxes to select more than one. The summary, Policy Signals, and ABR reflect the combined selection, and the chips row shows all active selections.

6. Summary for Decision-Makers — how to read it

- Catch level: latest-year total in a readable format (e.g., million tonnes) plus the exact value in tonnes.
- YoY note: whether the latest year is up or down versus the previous year.
- Top entity: top country or species with its share; Top-3 share for structure context.

- Concentration: CR5 (countries) or PC5 (species) with a low / medium / high band.
- Breadth: producer coverage or species breadth (% active), depending on mode.
- Reporting quality: NEI label with the NEI percentage.

> **Tip**: If the latest year has zero or missing values for your selection, the narrative hides details that could mislead.

7. Policy Signals (indicators)

Policy Pulse

1. **Top Country / Top Species** — The leading entity and its share (two-decimal %).
2. **Top-3 share** — How dominant the top three are (structure risk).
3. **YoY (latest)** — Percentage change versus last year.
4. **3-year CAGR** — Medium-term growth.
5. **5-year CAGR** — Longer-term growth; compare with 3-year for acceleration.
6. **Concentration (CR5/PC5)** — Top-5 concentration with risk bands.
7. **Breadth** — Producer coverage or Species breadth depending on mode.

> **Note**: Indicators are hidden where eligibility rules are not met (e.g., fewer than five active entities).

Deep sustainability signals

- NEI share: % of catch not identified to species (lower is better).
- Identified catch: 1 − NEI share.
- NEI trend (5y): change in NEI (percentage points).
- Collapsed share (C/Peak < 10%): watch for risk clusters.
- Near-peak share (≥80%): potential pressure or recovery.
- Decline breadth (5y): share of entities with a five-year decline.
- Level (YoY): absolute change in tonnes.

> - **Scientific caveat**: These are catch-only proxies, not formal stock assessments. Use with biological expertise and local knowledge.

8. Animated Bar Race (ABR)

- Pick Top Country or Top ASFIS Species.
- Press Play to animate year-by-year.
- Use the timeline to scrub to a specific year.
- Hover a bar for exact values.
- Filters keep the ABR in sync with the narrative and signals.

9. Common analysis recipes (tightened)

- Country profile (one-page): ABR item → Top Country → select a country → read the summary → open Policy Signals → run ABR.

- Species in a country: ABR item → Top ASFIS Species → select a country (narrative adds leading species).

- FAO area briefing: select an FAO area → choose ABR item to switch between country and species rankings.

- Sustainability scan: open Policy Signals → Deep Signals; review NEI (level and 5-year trend), collapsed/near-peak.

- Single-species focus (e.g., Skipjack tuna): select species; optionally add country and area to see Selected species share in context.

10. FAQs (grammar & clarity fixes)

Q: Nothing shows in the chips.

A: That's expected on the default global view. Select at least one filter or choose an ABR item.

Q: Are these sustainability indicators official stock assessments?

A: No. They are catch-only proxies to highlight where deeper assessment may be valuable.

Q: Why does concentration show PC5 instead of CR5?

A: PC5 is used when a country is selected or when the species parameter is active; otherwise CR5 summarises the top five countries.

Q: How do I reset to the default global view?

A: Clear all slicers (use the eraser icon or Ctrl/Cmd-click).

Q: Concentration shows 'n/a'.

A: You need at least five active entities (≥5 countries for CR5 or ≥5 species for PC5).

Q: Can I compare multiple countries at once?

A: Yes. Select several in the Country slicer; the ABR will rank them and the summary reflects the combined selection.

Q: Numbers differ from another source.

A: FAO data reflect country submissions and revisions. Ensure the same scope (filters, years, live-weight units).

Q: Bars don't move when I press Play.

A: Make sure the tab is active and the visual is not paused. Scrub the timeline to confirm year changes.

Q: I need exact numbers.

A: Hover bars for exact values; the narrative also shows the exact tonnage in brackets.

11. Good practice for responsible use

- Use Deep Signals to prioritise questions; do not replace scientific advice.

- When concentration and NEI are both high, prioritise data-quality improvements before major policy decisions.

- Read Structural Notes to understand formulas and thresholds.

- For presentations, pair the summary paragraph with the ABR for a clear story.

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- Caveat: Proxies are based on reported catches and are not a substitute for formal stock assessments.

- No endorsement. Neither the FAO or WTO endorsed any findings or interpretations. Any errors or interpretations are the sole responsibility of TW Policy Group.

12.   Structural Notes — Methods & Considerations

Acronyms & Symbols

- YoY: Year-over-Year growth.

- CAGR: Compound Annual Growth Rate.

- CR5: Top-5 countries' share of total.

- PC5: Top-5 species' share of total.

- NEI: Not Elsewhere Included (not identified to species).

- Δ Level: absolute change in tonnes (t − t−1).

Core computation rules (aligned with dashboard logic) – Read Structural notes for more

- Selection scope: All shares and proxies are computed over the current on-screen selection (Country, ASFIS species, FAO major fishing areas/Capture Area).

- Capture Type: Marine vs. Inland vs. All is derived from an Area→Type lookup and applied before shares/top-N.

- Dual-mode concentration: CR5 for countries; PC5 for species. The dashboard switches automatically based on your selection/parameter.

- Latest year (t*): Most recent year with non-blank totals under the current selection.

- Eligibility: CR5/PC5 shown only if ≥5 active entities at t*; otherwise concentration is 'n/a'.

- Top-3 share: Sum of shares for the top three entities (country/species depending on mode).

- Breadth: Producer coverage (countries) or Species breadth (active species vs global distinct species).

- Selected species share (country × area): When one species is selected with a country and area, Policy Pulse shows that species share within the country × area total. Zero/blank guards: Metrics show 'n/a' when inputs are blank; growth rates avoid divide-by-zero.