



# User Manual

FAOSTAT Production Intelligence · 1961 to 2024 · English · French · Spanish

217 countries & territories · 273 products · 8 elements · 7 units · 1961 to 2024 · EN · FR · ES

This manual explains how to read and navigate the **Global Crops & Livestock Production** dashboard, a decision ready production intelligence interface built by **TW Policy Group** on FAOSTAT data (the QCL, Crops and Livestock, domain). The dashboard has **two pages**, selected from the tabs at the bottom of the report: **Production Intelligence** and **Trend Explorer**. The same capability is available in English, French and Spanish.

## 1. What you can do with this dashboard

- Track global crop and livestock **production, area harvested, yield, stocks and herd structure** from 1961 to 2024.
- See the latest year's value and how it changed versus last year (**YoY**), the last three years (**3 year CAGR**) and the last five years (**5 year CAGR**).
- Understand structure: **top producer, Top 3 share**, and concentration (**CR5** for countries, **PC5** for products).
- Read structural and momentum signals: breadth of growth, synchronisation, acceleration and absolute level change.
- Filter by **Year, Item, Country, Element and Unit** to tailor the view.
- Read the **Summary for Decision-Makers** narrative and the **Policy Signal** panel, and watch the **animated bar race**, all on the Production Intelligence page.
- Read the **KPI strip**, the **long run trend line**, the **Top 10 leaderboard** and the **composition donut** on the Trend Explorer page.

**Tip:** The dashboard is selection aware. Labels and formulas switch automatically with your slicers: with no country selected it ranks countries (CR5); when you select a country it ranks that country's products (PC5). Rankings always update within the selected unit.

## 2. The two pages at a glance

Switch between the two pages using the tabs at the bottom of the report (**Production Intelligence** and **Trend Explorer**). Your slicer selections carry across both pages.

|                         |                                                                                                                                                                                                                                                                                                                              |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Production Intelligence | The reading and interpretation page. Header bar and active chips, the <b>Summary for Decision-Makers</b> narrative, the <b>Policy Signal</b> accordion (Production Pulse and Deep Signals), the <b>Structural Notes</b> accordion, and the <b>animated bar race</b> that ranks countries or products and plays across years. |
| Trend Explorer          | The charting page. A <b>KPI strip</b> (Total, Momentum, Top Country or Item, Concentration, Coverage), the <b>long run trend line</b> with a 5 year average, the <b>Top 10 Countries</b> bar chart, and the <b>composition donut</b> of top items for the selected scope.                                                    |

## 3. Quick start

- **Choose one Element first** (for example Production, Area harvested, Yield, Stocks, Producing Animals/Slaughtered or Laying). Totals and rankings depend on the selected element and its compatible unit. Until an element is chosen, the page shows a prompt to select one.
- **(Optional) Add filters:** a Year or range, an Item (product), a Country, and a Unit.
- **On Production Intelligence**, read the Summary for Decision-Makers, then open the Policy Signal panel for the indicators, and press **Play** on the animated bar race to watch leaders change across years.

- **On Trend Explorer**, scan the KPI strip, then the trend line, the Top 10 leaderboard and the composition donut.

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

## 4. The slicers

Both pages share the same five slicers in the left panel.

### Element (start here)

The element is the production concept being measured (Production, Area harvested, Yield, Stocks, Producing Animals/Slaughtered, Laying and more). Choosing one element activates consistent totals, rankings and signals. Production, yield, area, stocks and animal counts are never merged into one misleading total.

### Unit

Each element is reported in its correct unit (for example tonnes for production, hectares for area harvested, kg/ha for yield, head or 1000 head for animals). Interpret every value within its measurement system. If you do not pick a unit, the dashboard auto resolves the dominant unit for the selected element.

### Country / Territory

Select a single country for a national profile. The narrative reports the country's share of the world total, its leading products, growth rates, concentration context and product breadth. Selecting a country switches rankings to that country's products (PC5).

### Item / Product

Select a product such as Apples, maize, cattle meat or milk to see which countries drive supply and how their positions have evolved. With no country selected, the animated bar race and rankings show the leading countries for that product.

### Year

Move across 1961 to 2024 to read a single year or a long run trajectory. The Trend Explorer trend line carries a five year moving average so momentum is readable without year to year noise.

**Good to know:** You can select multiple countries or products; the narrative and signals reflect the current selection. Clearing one slicer does not reset the others, review the chips under the header to see what is active. When nothing is selected, chips stay hidden to keep the header clean. Regional aggregates (World, Asia, Africa and sub regional groupings) remain selectable but are excluded from all rankings, concentration and breadth calculations.

## 5. Production Intelligence page

### Header bar & chips

The header shows the title, the data source (FAOSTAT, QCL) and TW Policy Group branding. A row of chips confirms the active selection, for example **ITEM: Apples, ELEMENT: Production, UNIT: t**. Chips appear only when a selection is active.

### Summary for Decision-Makers

A single plain language paragraph that updates instantly with your selection. It states the latest year and total (in readable form and exact units), the leading country or product and its share, the Top 3 share, concentration (CR5 or PC5), the year on year change and 3 and 5 year CAGR, plus coverage, breadth of growth and synchronisation.

### Policy Signal panel (accordion)

Open the **Policy Signal** accordion to reveal two blocks. **Production Pulse** is a row of eleven numbered indicator pills (see section 7). **Deep Signals** is a set of explanatory cards, each with what the signal means and what it tells you (see section 8). An analytical note reminds you that signals are computed only within the current Country, Item, Element and Unit, and that regional aggregates are excluded.

### Structural Notes (accordion)

Open the **Structural Notes** accordion for the acronyms and symbols, the interpretation bands, the structural rules and the key formulas behind every figure (summarised in sections 11 and 13).

Animated bar race

At the bottom of the page, the animated bar race ranks the leading countries (or products, when a country is selected) for the chosen element and item. A large year counter shows the active year.

- Press **Play** to animate year by year from 1961; use the skip controls to step.
- Bars are labelled with the entity name and exact value (for example China, mainland 51,285,100).
- The race stays in sync with your slicers and with the narrative and signals above it.

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

6. Trend Explorer page

Masthead & KPI strip

The masthead reads **Trend Explorer, Watch Global, Regional & National shifts** with the active range and an element chip. Below it sits a five card KPI strip:

|                           |                                                                                     |
|---------------------------|-------------------------------------------------------------------------------------|
| Total                     | Latest year total in compact form, with the year on year change as a coloured chip. |
| Momentum                  | 3 year CAGR, with the 5 year CAGR alongside for comparison.                         |
| Top Country / Top Item    | The leading entity and its share of the selected total.                             |
| Concentration (CR5 / PC5) | The top five share of the total, switching between countries and products by mode.  |
| Coverage                  | The number and share of reporting entities at the latest year.                      |

Until one element is selected, the strip shows a prompt: **Select a single Element to begin.**

Long run trend line

A time series from 1961 to 2024 for the selected scope, drawn as the **Global Trend Value** together with a **Global Trend 5 Year Average** line, so you can read momentum clearly against the smoothed trend.

Top 10 Countries

A horizontal bar chart of the ten leading countries for the selected element in the latest year.

Composition donut

A donut chart of the top items worldwide for the selected element in the latest year, with each item's value and share, so you can read the product mix at a glance.

7. Production Pulse, the eleven indicators

|   |                           |                                                                          |
|---|---------------------------|--------------------------------------------------------------------------|
| 1 | Top Country / Top Product | The leading entity and its share of the selected total.                  |
| 2 | Top 3 share               | How dominant the top three are, a structure risk indicator.              |
| 3 | YoY (latest)              | Percentage change versus the previous year (colour coded up or down).    |
| 4 | 3 year CAGR               | Medium term growth.                                                      |
| 5 | 5 year CAGR               | Longer term growth; compare with the 3 year figure to read acceleration. |
| 6 | Concentration (CR5 / PC5) | Top five concentration with low / medium / high bands.                   |
| 7 | Breadth (coverage)        | Producer coverage or product breadth, depending on mode.                 |
| 8 | Breadth of Growth         | The share of entities with non negative annual change.                   |
|   |                           |                                                                          |

|    |                                |                                                                          |
|----|--------------------------------|--------------------------------------------------------------------------|
| 9  | <b>Synchronisation</b>         | The share of entities moving in the same direction as the aggregate.     |
| 10 | <b>Acceleration (3Y vs 5Y)</b> | The difference between 3 year and 5 year CAGR, in percentage points.     |
| 11 | <b>Δ Level</b>                 | The absolute change in the selected unit (latest year minus prior year). |

**Note:** Indicators are hidden where eligibility rules are not met (for example fewer than five active entities for CR5 or PC5).

## 8. Deep Signals

Each Deep Signal card explains what it means and what it tells you:

- **Dominant Entity:** the leading individual country or item in the latest year, excluding regional aggregates.
- **Top-3 Share:** combined share of the top three individual countries or items; higher means stronger concentration.
- **Concentration (CR5 / PC5):** share of the top five; useful for judging diversification and structural balance.
- **Breadth of Growth:** share of entities with non negative annual change; shows whether improvement is widespread.
- **Synchronisation:** share of entities moving with the aggregate; higher means a more coherent global pattern.
- **Acceleration:** 3 year minus 5 year CAGR; positive implies stronger recent momentum than the longer trend.
- **Absolute Change:** latest year level minus prior year, in the original unit.
- **Coverage Breadth:** the number and share of individual countries reporting at the latest year.

**Caution:** High production volume does not by itself imply high productivity, competitiveness or sustainability. Read yield and area together, and interpret each value within its correct unit.

## 9. Dual-mode logic & the single-element rule

- **Single element rule.** Exactly one element must be selected so totals aggregate in a single consistent unit.
- **Dual mode.** With no country selected, the dashboard ranks countries and reports CR5. When a country is selected, it ranks that country's products and reports PC5.
- **Regional exclusion.** Aggregates such as World, Asia, Africa, Europe and sub regional groupings are excluded from all rankings, concentration, breadth and synchronisation. They remain selectable for aggregate exploration.
- **Unit safety.** When no unit is selected, the dominant unit for the chosen element is resolved automatically.

## 10. Common analysis recipes

- **Country profile:** choose an element, select a country, read the Summary on Production Intelligence, open Policy Signals, then check the KPI strip and trend line on Trend Explorer.
- **Product across the world:** choose an element, select an item (no country), and watch the animated bar race rank the leading producing countries.
- **Productivity scan:** switch the element to Yield and compare countries on efficiency rather than size.
- **Composition read:** on Trend Explorer, use the donut to see which items dominate the selected element worldwide.
- **Structure scan:** open Policy Signals and read concentration (CR5/PC5), Top 3 share and breadth together before drawing conclusions.

## 11. Interpretation bands

- **Concentration (CR5/PC5):** Low below 50% (dispersed); Medium 50 to 69.9%; High 70% or more (concentrated).
- **Breadth of Growth:** Broad 60% or more; Mixed 40 to 59.9%; Narrow below 40%.
- **Synchronisation:** High 60% or more; Moderate 40 to 59.9%; Low below 40% (divergent).
- **Acceleration:** positive means improving momentum; negative means a recent slowdown; zero is a stable trajectory.
- **YoY:** positive is growth versus the prior year; negative is contraction; colour coded green or red.

## 12. Frequently asked questions

**Q: Nothing shows in the chips or the page asks me to select an element.**

That is expected on the default view. Choose one element and, optionally, a filter.

**Q: Why does concentration show PC5 instead of CR5?**

PC5 is used when a country is selected (product focused mode); otherwise CR5 summarises the top five countries.

**Q: Concentration shows n/a.**

You need at least five active entities (five countries for CR5 or five products for PC5).

**Q: Where is the animated bar race?**

On the Production Intelligence page, below the Policy Signal and Structural Notes panels. The Trend Explorer page holds the trend line, Top 10 bar and composition donut.

**Q: Can I compare several countries or products at once?**

Yes. Select multiple items in the slicer; the summary, signals and charts reflect the combined selection.

**Q: My numbers differ from another source.**

FAOSTAT reflects country submissions and revisions. Make sure the element, unit, filters and years match.

## 13. Structural Notes, acronyms & formulas

### Acronyms & symbols

|         |                                                                                       |
|---------|---------------------------------------------------------------------------------------|
| YoY     | Year over year growth between the latest year and the prior year.                     |
| CAGR    | Compound annual growth rate, the annualised rate of change over n years.              |
| CR5     | Combined share of the top five individual countries in the selected total.            |
| PC5     | Combined share of the top five items in the selected total.                           |
| Δ Level | Absolute change, latest year value minus prior year value in original units.          |
| pp      | Percentage points, used for differences between two rates (for example Acceleration). |

### Key formulas

|                                                                                                                                                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>YoY Growth:</b> $(X_t - X_{t-1}) \div X_{t-1} \times 100\%$                                                                                                |
| <b>CAGR (n years):</b> $(X_t \div X_{t-n})^{(1 \div n)} - 1$                                                                                                  |
| <b>Acceleration:</b> 3 year CAGR – 5 year CAGR, in percentage points                                                                                          |
| <b>Entity Share:</b> $X_t(\text{entity}) \div X_t(\text{total excluding regions}) \times 100\%$                                                               |
| <b>CR5 / PC5:</b> sum of the share of the top five sovereign countries (CR5) or items (PC5) at the latest year                                                |
| <b>Breadth of Growth:</b> $\text{count}(\text{entities where YoY} \geq 0) \div \text{count}(\text{eligible entities})$                                        |
| <b>Synchronisation:</b> $\text{count}(\text{entities matching the aggregate direction}) \div \text{count}(\text{eligible})$                                   |
| <b>Coverage Breadth:</b> $\text{count}(\text{sovereign countries with data at the latest year}) \div \text{count}(\text{total sovereign countries in scope})$ |

## 14. Data, attribution & disclaimer

**Data & attribution.** This dashboard is a TW Policy Group visualization and production intelligence interface built on FAOSTAT production data (Crops and Livestock, the QCL domain). Analysis, interpretation and presentation are TW Policy Group's own. Figures may be revised by FAO in subsequent releases, and signals are dashboard analytics rather than official FAO statistics.

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