

# Global Agricultural & Rural Employment Toolkit

1947–2024: User Manual • Powered by FAOSTAT-OEA • Published by TW Policy Group

## 1. What you can do with this dashboard

The dashboard gives a dynamic picture of agricultural and rural employment from 1947 to 2024. It helps you compare countries, track labour productivity, unpack gender and age composition, and turn indicators into policy options.

- See the latest year's employment level 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: sectoral shares, female vs male participation, youth vs older cohorts, and self-employment vs wage employment.
- Track **labour productivity**: value added per worker, average working hours, and productivity trajectories.
- Scan inclusion signals: gender parity, youth participation, informality levels, and demographic succession risks.
- Filter by **Country**, **Sex**, **Age band**, and **Data source** to tailor the view.
- Use *Summary for Decision-Makers* for a narrative, and *Policy Signals* for KPIs and deep labour-market signals.
- Watch country-level time series to see how employment structure evolves over decades.

**Tip:** The dashboard is **selection-aware**: labels, shares, and narrative switch automatically with your slicers (country, sex, age, source).

## 2. Quick start

- Start on the **Global view** to see the world baseline.
- (Optional) Select filters: a *Country*, a *Sex* (female/male), an *Age band* (youth/older), or a *Source*.
- Read **Summary for Decision-Makers**. It explains the latest year, total employed, sectoral share, female/male split, productivity context, growth (YoY, CAGR), and informality level. It updates instantly with your selection.
- Open **Policy Signals** for concise indicators and deep signals (gender gap, youth share, self-employment share, productivity momentum).
- Use the country time series to read multi-decade trajectories and spot turning points.

**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 (FAOSTAT-OEA), 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, sectoral share, gender split, productivity, growth, and informality signals.
- **Policy Signals (accordion)** — KPI pills (Total employed, Female share, Youth share, YoY, CAGRs, Productivity per worker, Self-employment share) and Deep Signals (gender gap, productivity momentum, demographic succession risk).

- **Time series charts** — multi-decade trends for employment volumes, productivity, and demographic composition.
- **Structural Notes (accordion)** — definitions, formulas, and interpretation bands.

## 4. The slicers and what they do

### Country

Select a single country for a national profile. The summary reports the country's share of world agricultural employment, female/male split, productivity per worker, growth rates, and informality level. Select multiple countries to compare.

### Sex

Filter by **Female**, **Male**, or **Total**. Shares, productivity, and employment quality indicators are computed within the selected sex scope — enabling direct comparison of gender outcomes.

### Age band

Split the workforce by age cohort (e.g. youth 15–24, prime-age 25–54, older 55+). Use this to flag demographic succession risks and prioritise skills, extension, and youth-employment programmes.

### Source

FAOSTAT-OEA harmonises multiple upstream sources (national labour force surveys, ILO modelled estimates, census data). Selecting a source lets you compare estimates and understand reporting quality variation.

*Tip: All slicers support multi-select. Use Ctrl/Command-click or the checkboxes to select more than one. The summary, Policy Signals, and charts reflect the combined selection, and the chips row shows all active selections.*

## 5. Summary for Decision-Makers — how to read it

- **Employment level:** latest-year total in a readable format (e.g., millions of workers) plus the exact value.
- **YoY note:** whether the latest year is up or down versus the previous year.
- **Sectoral share:** agricultural employment as a % of total employment — a key structural transformation indicator.
- **Gender split:** female and male shares within agricultural employment.
- **Productivity:** value added per worker, with a low / medium / high band.
- **Employment quality:** self-employment vs wage employment share (informality proxy).

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

## 6. Policy Signals (indicators)

### Policy Pulse

- **Total employed** — headline employment level for the selection.
- **Sectoral share** — agricultural employment as % of total employment.
- **Female share** — women as a % of agricultural workforce.
- **Youth share** — workers aged 15–24 as % of total.
- **YoY (latest)** — percentage change versus last year.

- **3-year CAGR** — medium-term growth.
- **5-year CAGR** — longer-term growth; compare with 3-year for acceleration.
- **Productivity per worker** — value added per worker with low/medium/high bands.
- **Self-employment share** — informality proxy; higher values signal precarious work.

### Deep labour-market signals

- **Gender gap:** difference between female and male productivity or earnings (where available).
- **Productivity momentum (5y):** change in value added per worker over five years.
- **Demographic succession risk:** share of workers aged 55+ vs youth entry rate.
- **Informality trend (5y):** change in self-employment share (percentage points).
- **Working hours:** average hours per worker — under/over-employment signal.
- **Level (YoY):** absolute change in number of workers.

*Note: Indicators are hidden where eligibility rules are not met (e.g., insufficient source coverage or fewer than three reporting years). Productivity signals are contextual proxies — use with national accounts data and local labour-market expertise for decisions.*

## 7. Common analysis recipes

- **Country profile (one-page):** select a country → read the summary → open Policy Signals → scan productivity trend.
- **Gender-focused brief:** select a country → add *Sex = Female* → read female share, productivity, and informality signals.
- **Youth employment scan:** select a country → add *Age band = youth* → compare youth share with the demographic succession risk signal.
- **Regional benchmarking:** select multiple countries in the same region → compare sectoral shares, productivity, and informality side-by-side.
- **Structural transformation watch:** track the sectoral share over decades to see how fast agriculture's share of total employment is shrinking — a core development indicator.
- **Donor-alignment check:** match Policy Signals to SDG, CAADP, and AfCFTA indicators before drafting proposals.

## 8. FAQs

### Q: Nothing shows in the chips.

A: That's expected on the default global view. Select at least one filter (country, sex, age, or source).

### Q: Are these productivity indicators the same as national accounts productivity?

A: They are harmonised FAOSTAT-OEA estimates and may differ from national accounts. Use with country statistics for final decisions.

### Q: Why do some countries have missing years?

A: FAOSTAT-OEA reflects country submissions and survey availability. Gaps are preserved rather than imputed to avoid false precision.

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

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

### Q: Productivity shows 'n/a'.

A: Productivity requires both employment and value-added data for the selected scope. When either is missing, the indicator is hidden.

### Q: Can I compare multiple countries at once?

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

**Q: Numbers differ from ILOSTAT.**

A: FAOSTAT-OEA harmonises several sources and may reconcile them differently. Check the Source slicer and compare matching definitions.

**Q: I need exact numbers.**

A: Hover charts for exact values; the narrative also shows the exact figure in brackets.

## 9. Good practice for responsible use

- Use Deep Signals to prioritise questions; do not replace national labour-force survey analysis.
- When informality and productivity stagnation both flag high, prioritise data-quality improvements and targeted formalisation support before major policy decisions.
- Read **Structural Notes** in the dashboard to understand formulas and thresholds.
- For presentations, pair the summary paragraph with the country time series for a clear story.
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- **Caveat:** Indicators are based on reported and modelled employment data; they are not a substitute for national labour-force surveys or formal impact evaluations.
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## 10. Structural Notes — Methods & Considerations

### Acronyms & Symbols

- **YoY:** Year-over-Year growth.
- **CAGR:** Compound Annual Growth Rate.
- **VA/worker:** Value added per worker (labour productivity proxy).
- **LFS:** Labour Force Survey.
- **NEET:** Not in Education, Employment, or Training (youth indicator, where available).
- **Δ Level:** absolute change in number of workers ( $t - t-1$ ).
- **ppt:** percentage points (used for share changes over time).

### Core computation rules

- **Selection scope:** All shares and signals are computed over the current on-screen selection (Country, Sex, Age band, Source).
- **Sectoral share:** Agricultural employment divided by total employment for the same scope.
- **Gender split:** Female or male workers divided by total agricultural workers.
- **Latest year (t\*):** Most recent year with non-blank totals under the current selection.
- **Eligibility:** Productivity and informality signals shown only when both numerator and denominator are non-blank; otherwise 'n/a'.
- **Growth rates:** YoY uses  $(t - t-1)/t-1$ ; CAGR uses the standard  $(V_{end}/V_{start})^{(1/n)} - 1$  formula with guards against zero bases.
- **Productivity bands:** Value added per worker is classified against FAOSTAT-OEA global quartiles (low/medium/high).
- **Zero/blank guards:** Metrics show 'n/a' when inputs are blank; growth rates avoid divide-by-zero.

## Scope & limitations

FAOSTAT-OEA harmonises country submissions, ILO modelled estimates, and census data. Coverage varies across countries and years; older series and developing-country data may be sparser. This toolkit supports **decision context**, not stock assessments of labour-market quality — pair it with national LFS data and qualitative diagnostics for final policy design.

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