Six rows, two sources, one table

An IPC evidence table is not a spreadsheet of results. It is a structured argument in which each row carries an indicator, a value, a reliability score and a phase — and the analyst's job is the last column.

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Lesson 7 of 8

What this lesson covers

- What the table is for
- Building the rows
- Direct and indirect evidence
- Reliability, and why it is scored
- What convergence looks like
- The table as it goes into the workshop
- What comes next

What the table is for

- Every row of an evidence table carries five things

What the table is for

Column	What it holds	Who supplies it
Indicator	The measure, by name	The standard
Value	The number, with its denominator and n	The analyst
Reference table	The phase thresholds for that indicator	The IPC manual
Phase	Which phase the value falls in	Arithmetic
Reliability	How much weight this row can bear	**The analyst's judgement**

Building the rows — In Python (cont.)

```
import pandas as pd

evidence = pd.DataFrame([
    {"indicator": "Food Consumption Score, poor",
     "value": "7.4%", "n": 1989, "source": "household survey"},
    {"indicator": "Household Hunger Scale, moderate or severe",
     "value": "42.9%", "n": 2075, "source": "household survey"},
    {"indicator": "reduced Coping Strategy Index, 19 or above",
     "value": "51.0%", "n": 2112, "source": "household survey"},
    {"indicator": "Livelihood coping, crisis or emergency",
     "value": "48.5%", "n": 2121, "source": "LCS module"},
    {"indicator": "Maize price, year on year at the lean peak",
     "value": "+22%", "n": 10, "source": "market monitoring"},
    {"indicator": "Wage to maize terms of trade, change",
     "value": "-49%", "n": 10, "source": "market monitoring"},
])
```

Building the rows — In Python (cont.)

```
print(evidence)
```

Building the rows — In R

```r
library(dplyr)

evidence <- tibble::tribble(
  ~indicator,                          ~value,   ~n,   ~source,
  "FCS poor",                           "7.4%",  1989, "household survey",
  "HHS moderate or severe",            "42.9%",  2075, "household survey",
  "rCSI >= 19",                        "51.0%",  2112, "household survey",
  "LCS crisis or emergency",           "48.5%",  2121, "LCS module",
  "Maize price, year on year",          "+22%",    10, "market monitoring",
  "Wage terms of trade, change",        "-49%",    10, "market monitoring"
)
```

Building the rows

- Six rows, two sources, six different denominators — Building the table in code from the same script that computed the...

Direct and indirect evidence

- Direct evidence — measures the outcome itself: food consumption, nutritional status, mortality
- Indirect evidence — measures something that causes or accompanies the outcome: prices, terms of trade, rainfall,...
- Indirect evidence cannot classify on its own — A 49% fall in wage terms of trade is a powerful argument that...
- But indirect evidence is what makes a classification forward-looking — The household indicators describe the lean...

Reliability, and why it is scored — In Python

```
evidence["reliability"] = [
    "high -- 1,989 households, standard instrument",
    "high -- 2,075 households, standard instrument",
    "medium -- no context-specific threshold established",
    "medium -- 58 households cannot be classified above crisis",
    "medium -- balanced panel of 10 of 12 markets",
    "medium -- same panel; wage series is a single occupation",
]
print(evidence[["indicator", "value", "reliability"]])
```

Reliability, and why it is scored — In R

```
# The reliability column is prose, and it is the part that gets read.
```

Reliability, and why it is scored

- Write the reason, not a score — "Medium" tells a reader nothing; "58 households cannot be classified above crisis"...
- **A denominator smaller than the sample** — the FCS's 1,989 of 2,112.
- **A threshold borrowed rather than established** — the rCSI's 19.
- **A panel that changed composition** — the price series without MK001.
- **A rule applied where the data cannot support it** — a maximum severity over a partly administered module.

What convergence looks like — In Python

```
evidence["direction"] = ["worse", "worse", "worse", "worse", "worse", "worse"]
print(f"rows pointing the same way: "
      f"{(evidence['direction'] == 'worse').sum()} of {len(evidence)}")
```

What convergence looks like — In R

```
# Six of six. That is convergence -- and it is not the same as agreement on level.
```

What convergence looks like

- All six rows point the same direction and they disagree about severity by a factor of seven — That combination — strong...
- "They disagree, so the data is bad." — They disagree because they measure different things, and the disagreement...
- "Four of six say over 40%, so it is over 40%." — Voting across indicators measuring different quantities is not an...
- "The most severe row is the safest." — Nor is the least severe

The table as it goes into the workshop — Example (cont.)

```
Evidence table -- lean season 2024, four districts

  Direct evidence
    FCS poor (28/42 set)          7.4%   n=1,989   high reliability
    HHS moderate or severe       42.9%   n=2,075   high
    rCSI >= 19                   51.0%   n=2,112   medium, threshold not local
    LCS crisis or emergency      48.5%   n=2,121   medium, 58 partial modules

  Indirect evidence
    Maize, year on year at peak   +22%   10 markets, balanced panel
    Wage terms of trade           -49%   10 markets, same panel

  Convergence: six of six rows indicate deterioration.
  Divergence: severity estimates range from 7.4% to 51.0%, reflecting
  different constructs rather than measurement error.
  Not available: nutritional status, mortality, food access at the
```

The table as it goes into the workshop — Example (cont.)

```
household level in physical quantities.
```

The table as it goes into the workshop

- The "not available" block is not a formality — Nutrition and mortality are the two outcome indicators the IPC weights. . .

What comes next

- The table is assembled.

Read the full lesson, with runnable code

https://data-analysis.cassion.dev/courses/food-security-ipc/fs-07-the-evidence-table