

Digital solutions for remote food inspection and distance learning

Lessons from a Ghana pilot
for meat inspection systems

Better evidence. Stronger official oversight.

CCFICS28 side event | Perth, October 2026

Ghana: a response to access constraints

2022 / GHANA

FAO-supported
project

Remote inspection
and distance learning

THE CHALLENGE

Access and resource
constraints exposed
by COVID-19

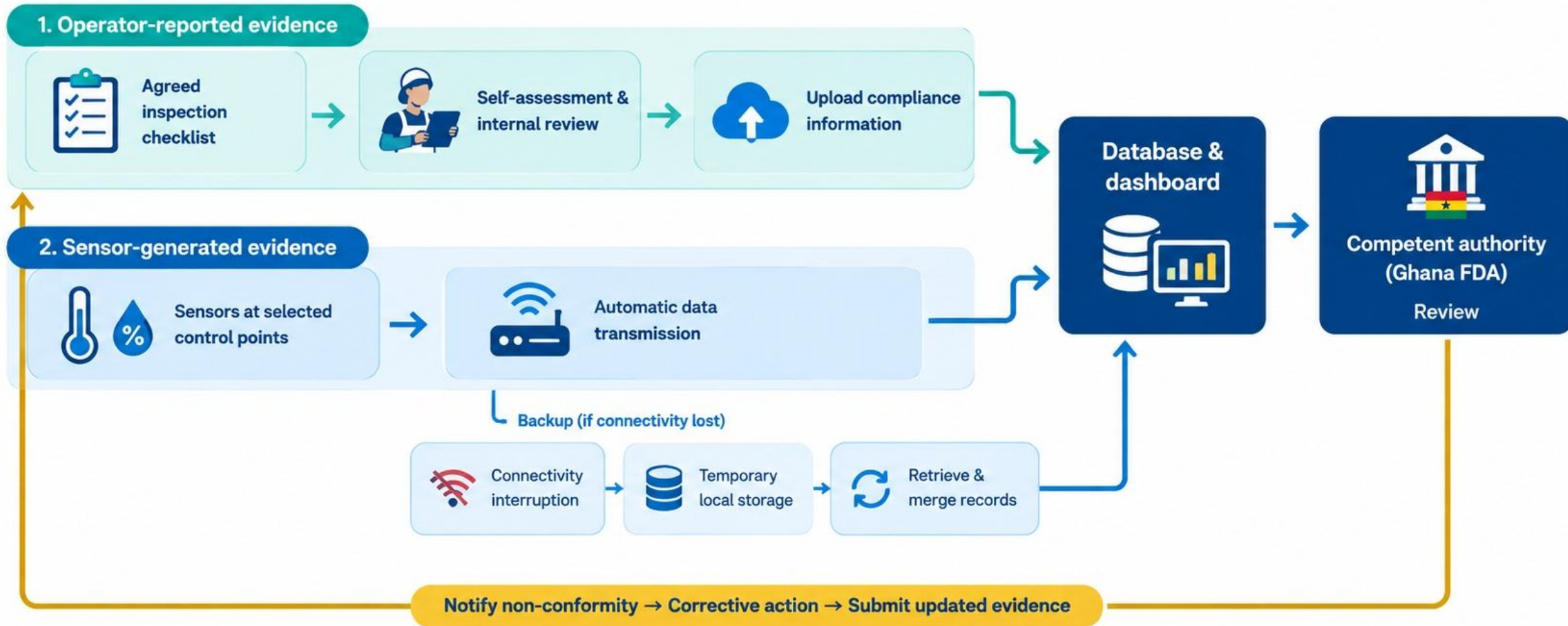
THE RESPONSE

Operator reporting
Sensor monitoring
Accessible training

Report-based concept: distinguish proposed architecture from validated implementation results.

Remote food inspection: two complementary evidence streams

Conceptual architecture proposed for Ghana (2022)



Operator reporting and sensor measurements support regulatory review; they are not interchangeable with official verification.

Adapted from Figures 1–2 and accompanying descriptions, Ghana project progress report, July 2022.

What reliable implementation requires

Infrastructure

Connectivity, power and offline fallback

Evidence integrity

Calibration, device location and traceable records

Confidentiality & privacy

Minimum necessary data; secure access, transfer and retention

Accountability

Alert ownership, response and on-site escalation

Affordability

Equipment, maintenance and technical support

Inclusion

Literacy- and device-adapted training

Reference: Codex CXG 102-2023 — protection of personal data and confidential information.

Looking forward: AI-assisted remote inspection

Potential evolution—not capabilities demonstrated by the Ghana report

CONNECTED EVIDENCE

More reliable sensors
Interoperable records
Offline-first collection

AI-ASSISTED ANALYSIS

Flag unusual trends
Help prioritize follow-up
Support record review

HUMAN-LED ACTION

Inspector validates alerts
Authority makes decisions
On-site fallback retained

Prerequisites: quality data • validation • explainability • confidentiality • skills

Sources: FAO, Artificial intelligence for food safety; Codex CXG 102-2023.

From digital tools to trusted controls

- 01 Integrate digital evidence into risk-based inspection
- 02 Keep self-reporting distinct from official verification
- 03 Evaluate reliability, costs and inclusion before scaling

Digitalisation should strengthen official oversight.

Capacity building: USSD audio • bulk messaging • live / recorded video