AgroTrace

National Fertiliser Traceability & Anti-Diversion Platform

Instruction Manual · v1.0 — August 2026

This manual explains every section of AgroTrace: the ministry command centre, the dealer field app and the inspector case workflow. Each entry states what the screen is for and the steps to work it.

Contents

GETTING STARTED

Signing in and finding your way around

AgroTrace has three workspaces behind one sign-in. The role attached to your account decides which one opens after you sign in.

Sign in /auth

Authenticate and land in the workspace for your role.

1. Open the site and choose Sign in from the landing page.
2. Enter the e-mail address and password issued by the Ministry.
3. Ministry staff land on the Command Centre, dealers on the field app, inspectors on the case queue.
4. If you are already signed in the page offers Continue or Sign out instead of a form.

Note Accounts are created by a ministry administrator. There is no public sign-up.

Roles and what each one sees

Understand access boundaries before requesting data.

1. Ministry admin: every region, every dealer, all alerts, plus Settings and quota changes.
2. Ministry analyst: read-only view of the same national data, no settings changes.
3. Dealer: only their own outlet stock, sales and farmers registered in their district.
4. Inspector: only the alerts and cases assigned to them, on a mobile-first layout.

Moving between workspaces

Return to the public home page or switch account.

1. Tap the AgroTrace logo (top-left in both shells) to return to the public home page.
2. Use the account chip (top-right) for AgroTrace home and Sign out.
3. On phones, the three-line button in the top bar opens the Command Centre navigation drawer.

MINISTRY COMMAND CENTRE

Command centre, section by section

The dark sidebar lists every ministry section. Search in the top bar accepts a bag QR, dealer name, vehicle plate or farmer ID.

Overview /app

One-screen national picture of the subsidy programme.

1. Read the KPI row: bags in circulation, bags delivered to farmers, open alerts and quota utilisation.
2. Use the map panel for live asset positions; the alerts panel beside it lists the newest signals.
3. Scroll to the quota and distribution table to compare allocation against actual movement by region.
4. Click any alert row to open the alert drawer with location, evidence and assignment controls.

Live Map /app/map

Track depots, dealers, trucks and critical alerts geographically.

1. Toggle asset layers (depots, dealers, trucks, alerts, geofences) in the Layers panel.
2. Tap the Legend and Layers headers to collapse them — on phones they start collapsed to free up the map.
3. Click a marker for a popup card with GPS accuracy, last-seen time and the linked record.
4. Truck markers rotate to their heading and can show a breadcrumb trail of recent positions.
5. Red circles are the 20 km border buffer zones; anything inside deserves attention.

Note On phones the asset panel stacks above the map and the map fills the rest of the screen.

Alerts /app/alerts

Work the national alert queue from raised to resolved.

1. Filter by severity, region, status or alert type to build your working list.
2. Open an alert to read the evidence chain, mini-map and custody history.
3. Assign an inspector — the case then appears in that inspector's queue.
4. Record the outcome (confirmed diversion, false positive, resolved) to close the alert and write the audit trail.

Intelligence /app/intel

Scored anti-diversion signals from the rules engine.

1. Read the four KPI cards: risk index, critical signals, signals awaiting promotion and bags implicated.
2. Click a rule card (border proximity, stationary truck, route deviation, bag reuse, quota anomaly) to filter the table to that rule.
3. Narrow further with the search box, region and minimum-score filters.
4. Swipe the signals table sideways on a phone to reach the Entity, Location and State columns.
5. Tap Evidence on a row to expand the evidence chain behind the score.
6. Tick the signals you accept and press Raise alerts — they move into the alert queue for assignment.
7. Export CSV hands the filtered signals to an investigator or an external report.

Note Thresholds (border buffer km, dwell minutes, deviation km, promotion score) are set in Settings.

Field Cases /inspect

Ministry-side view of inspector case work.

1. Review open cases, who they are assigned to and how long they have been open.
2. Open a case to read the inspector's findings, photo evidence and the case trail.

Consignments /app/consignments

Register imports and follow sealed batches out of the port.

1. Register a new import batch: supplier, product, tonnage, bag count and arrival port.
2. Seal the batch once bags are QR-labelled — sealing locks the bag range to the batch.
3. Open a batch to see its bags, current custody split and every custody event in order.

Distribution /app/dispatch

Move sealed stock from warehouses to licensed dealers.

1. Record warehouse intake against a sealed consignment.
2. Create a dispatch: destination dealer or depot, vehicle plate, driver and bag range.
3. Issue the waybill; the bags change custody only when the receiving side scans them in.
4. Outstanding dispatches stay visible until reconciled, so short deliveries surface quickly.

Bag Journey /app/journey

Trace one bag end-to-end from a QR code.

1. Enter or scan the bag QR code.
2. Read the custody timeline: registered, sealed, dispatched, received, sold.
3. Each step shows the actor, GPS stamp and time, and the map plots the route travelled.
4. A gap, a reversal or an off-route stamp is the evidence you cite in a diversion case.

Regions /app/regions

Compare allocation and distribution across the sixteen regions.

1. Review allocated, dispatched, sold and remaining bags per region.
2. Sort by utilisation to find regions running ahead of or behind quota.
3. Drill into a region to see its districts, dealers and open alerts.

Dealers /app/dealers

Directory and compliance record for licensed dealers.

1. Search or filter by region, district, licence status or risk score.
2. Open a dealer profile for licence details, stock on hand, sales history and any alerts raised against them.
3. Use the profile before approving a new allocation to that outlet.

Reports /app/reports

Programme analytics and exports for briefings.

1. Choose the reporting period and scope (national, region or district).
2. Read distribution throughput, farmer coverage and diversion trends.
3. Export CSV to attach figures to a ministerial brief.

Settings /app/settings

Programme configuration — ministry admin only.

1. Set regional quotas for the season.
2. Maintain geofence zones, including the border buffer distance.
3. Tune the intelligence thresholds: dwell time, route deviation and the score at which a signal is promoted to an alert.
4. Review the audit log of configuration changes.

Note Analyst accounts can read this page but cannot save changes.

DEALER FIELD APP

Dealer field app, screen by screen

Built for a phone in the field: high contrast, big targets and full offline operation. Four tabs sit at the bottom — Home, Farmers, Records, Settings.

Home (Today) /dealer

Daily starting point for the outlet.

1. Check the header chip: your district and whether the device is Online or Offline.
2. The quota card shows bags allocated, sold and remaining for the season.
3. An amber strip appears when your outlet or a scan sits inside a border buffer zone — expect verification.
4. Use the four action tiles: Sell, Receive, Stock count and Farmers.

Sell fertiliser /dealer/sell

Record a subsidised sale to a registered farmer in three steps.

1. Step 1 — scan the farmer's QR card (or search by farmer ID) and confirm their remaining entitlement.
2. Step 2 — scan each bag QR one by one; the app rejects a bag that is not in your custody or already sold.
3. Step 3 — review the summary, confirm the GPS stamp and enter the OTP sent to the farmer.
4. Submit. The sale is stored on the device immediately and syncs when signal returns.

> **Note** First write wins: if a bag is scanned twice, the earliest accepted sale keeps the bag and the later attempt is flagged.

Receive stock /dealer/receive

Take delivery of a dispatch against its waybill.

1. Enter the waybill or dispatch reference.
2. Scan the bags as they come off the vehicle; each scan is GPS-stamped.
3. Review the variance line — missing or unexpected bags are listed.
4. Confirm receipt. Any variance automatically raises an alert for the ministry.

Stock count /dealer/stock

Reconcile physical bags against the system record.

1. Start a count and scan every bag on the shelf.
2. The app compares your scans with expected custody and shows the difference.
3. Submit the count to close it; discrepancies are recorded and visible to the ministry.

Farmers /dealer/farmers

Register and look up farmers in your district.

1. Search by name, farmer ID or community.
2. Register a new farmer with their ID, community, farm size and phone number.
3. Open a farmer to see entitlement remaining and past purchases.

> **Note** You can only see farmers registered in your own district.

Records /dealer/records

Your own audit trail of sales, receipts and counts.

1. Browse by date; each entry shows bags, farmer, GPS stamp and sync state.
2. A pending badge means the record is on the device and not yet uploaded.
3. Open a record to see the bag list and confirmation details.

Settings /dealer/settings

Outlet details, device pairing and offline sync.

1. Verify licence status, outlet name and the district your device is geo-locked to.
2. Press Sync now to force upload of pending records when signal returns.
3. Watch the offline counter — after seven days without a sync, selling is suspended until the device syncs.
4. Sign out from here when handing the device to another user.

Working offline

Keep trading without a network.

1. Install the app to the home screen when prompted so it opens without a browser.
2. Every sale, receipt and count is written to the device first with its own reference, so nothing duplicates when it uploads.
3. The header chip and the banner tell you when you are offline and how many records are waiting.
4. Find signal at least once a week: the seven-day rule protects the programme from stale devices.

INSPECTOR

Inspector case workflow

Inspectors get a mobile queue of assigned cases with photo evidence capture and a tamper-evident case trail.

Case queue /inspect

See the cases assigned to you, newest and most severe first.

1. Review each card: alert reference, severity, district and time raised.
2. Tap a case to open it in the field.

Working a case /inspect/case

Verify the signal on the ground and file findings.

1. Read the evidence chain and mini-map to know what triggered the alert.
2. Travel to the location; use Capture evidence to take GPS-stamped photographs.
3. Add your written finding, then set the outcome: confirmed diversion, no issue found, or escalate.
4. Submit. The case trail records who did what and when — entries cannot be edited afterwards.

Note Every action is appended to the audit log; the ministry sees the same trail under Field Cases.