Forest Restoration Monitoring

Track restoration progress, verify fieldwork and plan for visitors at forest recreation sites.



Illustrated map of Sabah with sample locations. Relief by Mapzen / AWS Terrain Tiles.

Restoration
Sites and planting

Field projects
Work verification

Recreation
Sites and visitors

System modules and functions

Eight operational registers connect work on the ground with management review and reporting.

Restoration and replanting

p. 4

Restoration sites / Monitoring visits

Compare planted area with each site's target. Use tree counts and sample survival rates to identify where replacement planting is needed.

Projects and work verification

p. 6

Field projects / Work verification

Review reported progress alongside inspection records. Check photographs or documents before recording a verification outcome.

Recreation sites and visitors

p. 7

Recreation sites / Visitor admissions

Check access status, daily capacity and visitor numbers by site. Identify the dates and locations that need additional supervision.

Across all three modules

Vendors, assets and machinery	Identify the vendors, equipment owners and operating status of assets assigned to a site.
Role-based access	Superadmins set permissions. Supervisors manage their districts and auditors review work outcomes.
Management reporting	Print executive or register reports. Export to PDF, CSV or Excel according to the user's permissions.

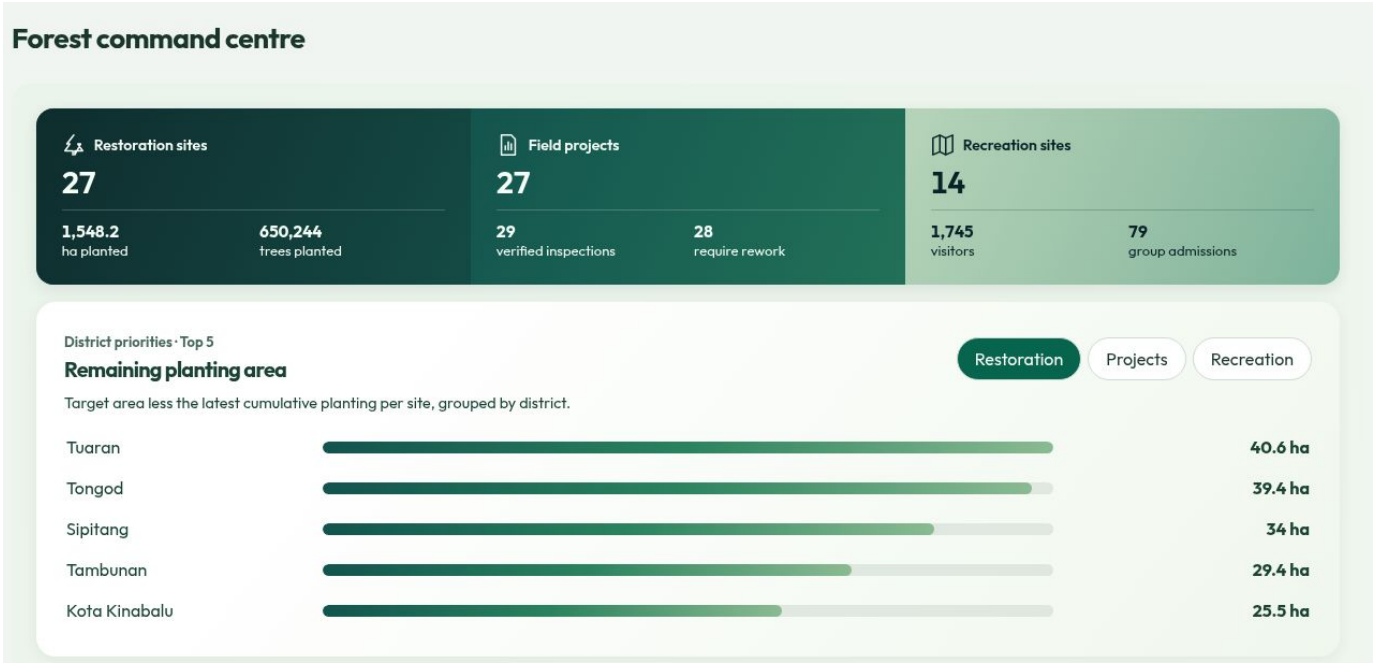
Forest command centre

Three workstreams in one view help management decide which district to review first.

27
restoration sites

27
field projects

14
recreation sites



System view with demonstration data.

DECISION EXAMPLE

Review Tuaran first

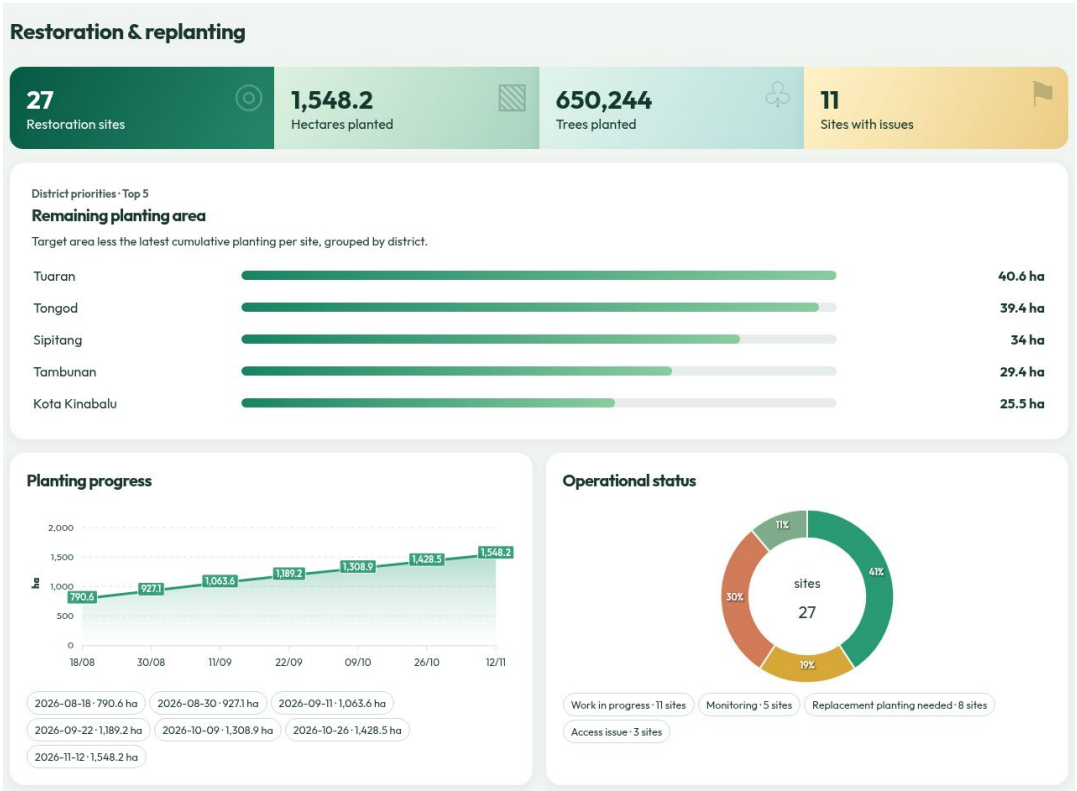
Tuaran has 40.6 ha left to plant, followed by Tongod at 39.4 ha. Check the latest visit records for both districts before scheduling the next site visit.

District priority charts

Switch between restoration, projects and recreation to rank five districts by remaining planting area, inspections requiring rework or recorded visitors. Select a bar to open its underlying records.

Restoration and replanting

Follow each plot through field measurements. The charts show planted area over time, work status and how much remains to plant in each district.



Planting progress and work status across 27 demonstration sites.

Restoration site register

Set the district, plot name, planting method, target area and assigned vendor. Select a site to check its work status and visit history.

Monitoring visit register

Record the date, cumulative planted area and tree count, sample size, surviving trees and follow-up action. The system calculates the survival rate.

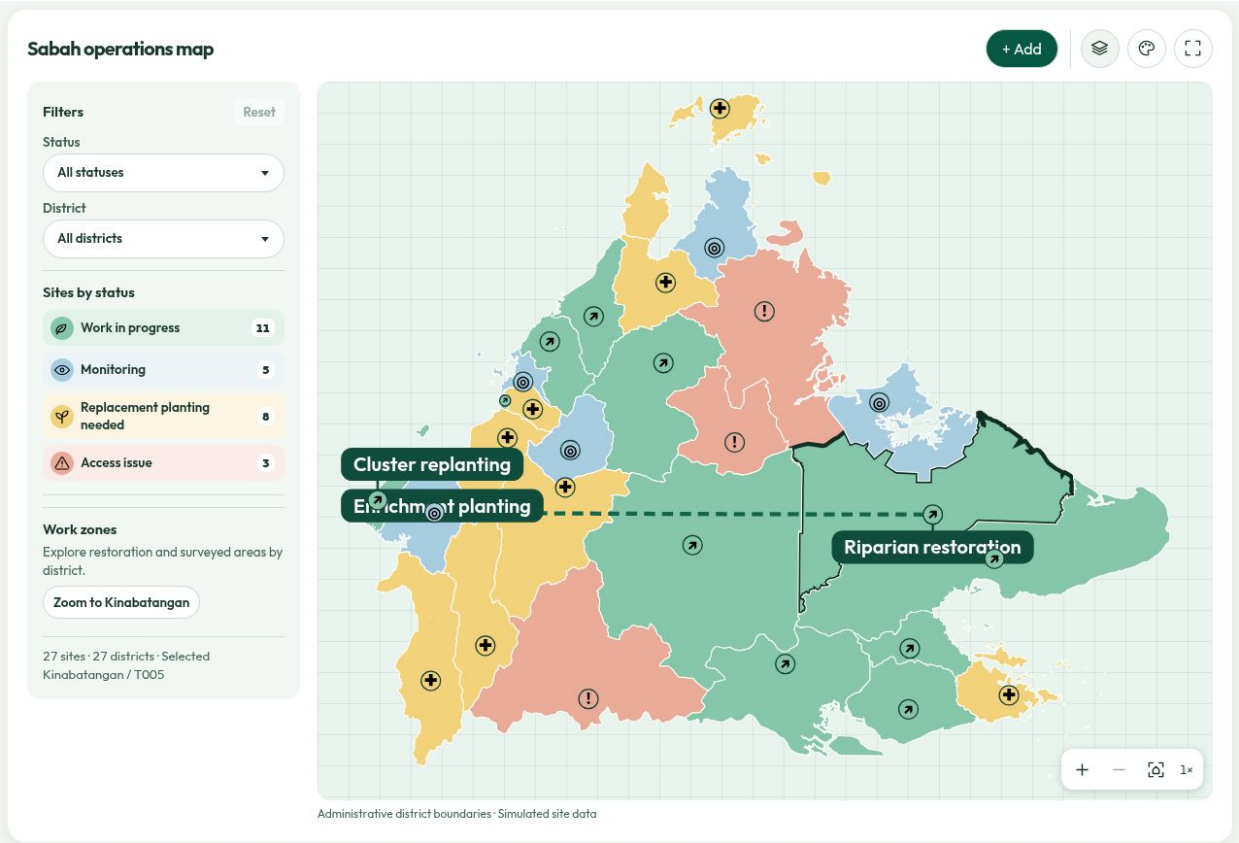
EXAMPLE PLOT T027

Tuaran has 40.6 ha left to plant

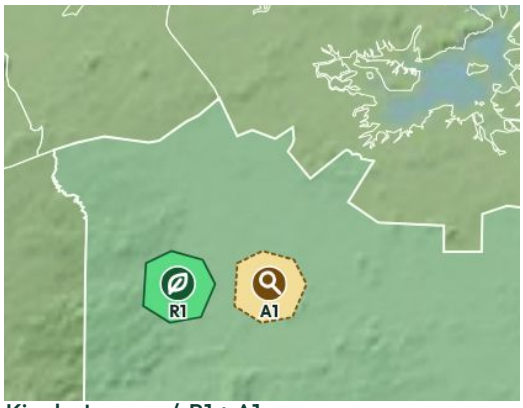
Of the 145 ha target, 104.4 ha have been planted. On 12 November, the team found 88 of the 100 sampled trees alive.

Restoration on the Sabah map

Filter by district and work status. Hover over a marker to see the method and any issue, then select the site.



Statewide view with district boundaries and simulated site data.



Kinabatangan / R1 + A1

ZONE DETAIL

From district to work zone

In Kinabatangan, select R1 for a restoration zone or A1 for an assessed zone. Zoom, pan or open full screen. Switch between Operations, Terrain, Satellite and 3D relief.

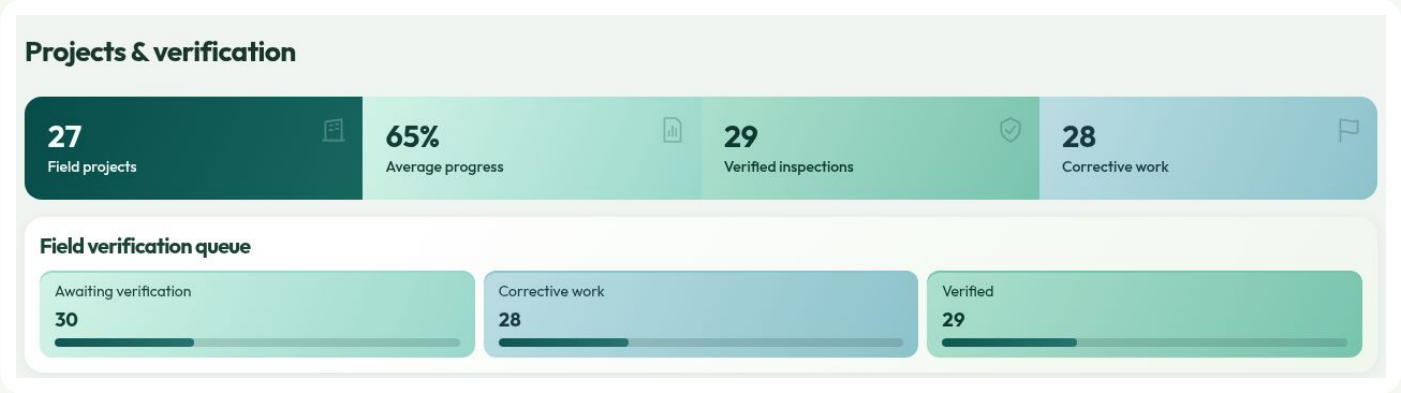
Mapzen / AWS Terrain Tiles

8 sites need replacement planting. 3 sites have access issues.

Icons identify work in progress, monitoring, replacement planting and access issues. Choose the Operations, Forest or High contrast palette.

Projects and work verification

Compare reported project progress with inspection outcomes. Charts show inspection activity by date and the districts with the most rework.



Verification queue grouped by inspection outcome.

Field project register

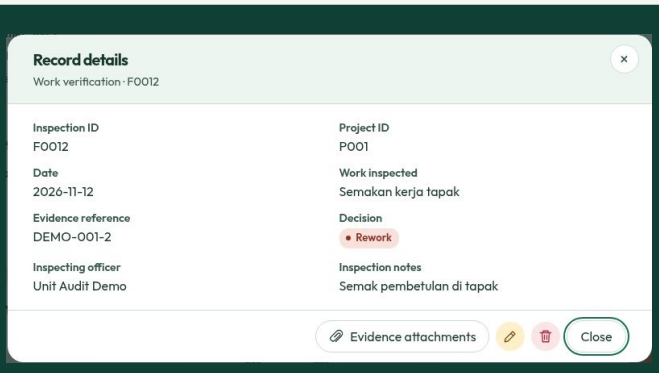
Record the project name, district, date and progress from 0 to 100%. Select a project to see its details and open supporting files.

Work verification register

Link the inspection to a project. Enter the date, work inspected, inspector, evidence reference, notes and verification outcome.

Outcomes across 87 inspections

- **30** Awaiting review
- **29** Verified
- **28** Rework required



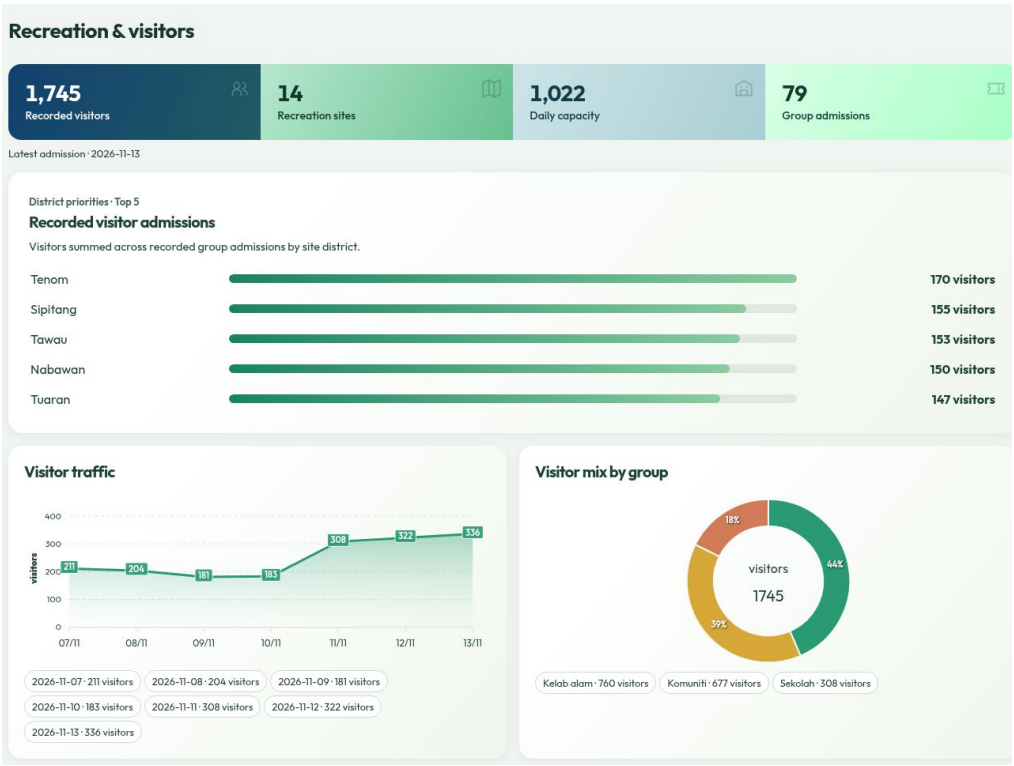
SAMPLE RECORD F0012

Verify corrections on site

The inspector marked this work for correction. Review the notes and supporting attachments before updating the outcome.

Recreation sites and visitors

Use admission records to identify high-traffic sites and dates that may need extra staff.



Visitor activity by date and group during the demo period.

Recreation site register

Set the site name, district, daily visitor capacity and access status. Mark the site as open, limited access or closed.

Visitor admissions register

Select the site and visit date. Enter the number of people and the group type, such as a school, community group or nature club.

1,745
recorded visits

79
group admissions

170
visits in Tenom

Plan staffing by site and date

Tenom recorded 170 visits over the demo period. Site R025 has limited access and a daily capacity of 84 people. Check group numbers for the proposed visit date.

Vendors, assets and machinery

Check the crew assigned to a plot and the equipment available before scheduling fieldwork.

6
registered vendors

54
assets and machines

27
demo restoration sites

Vendor register

Record each vendor's name, work scope and field crew. A vendor ID identifies the company on linked site and asset records.

Asset and machinery register

Identify each unit by asset ID, type, owner, assigned site and vendor where applicable. Update its operating status and latest inspection date.

EXAMPLE ASSIGNMENT

Beaufort plot · T001

Demo Kanopi (V01) provides the Kanopi crew for planting and plot maintenance. Two units at this site have different operating statuses.

Asset ID	Type	Owner	Status
A001	Handheld GPS	Department (demo)	Ready for use
A002	Mini excavator	Demo Kanopi	Under maintenance

FIELD PREPARATION

Check machine availability

The 12 November check shows the GPS is ready for use. Confirm when the excavator will be available before assigning work that depends on it.

Records and supporting evidence

Each record has an ID. Use it to open the details, identify the change needed and attach evidence to the relevant entry.

REGISTER MANAGEMENT

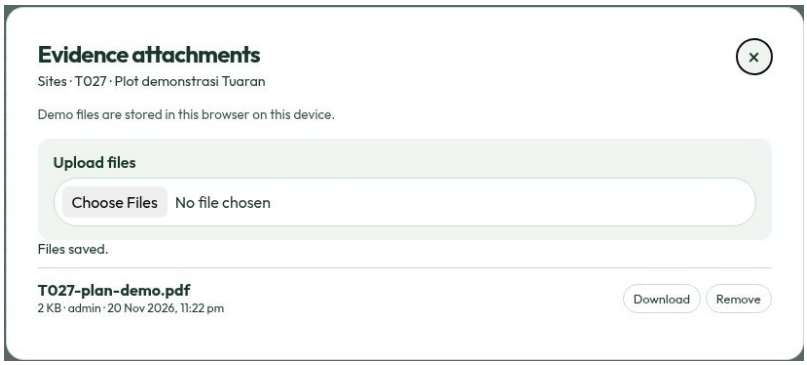
Find, inspect and update a record

Search a register by ID, name or district and open a row to inspect its details. Select Add to create a record, or use the edit and delete icons where your role permits.

SUPPORTING FILES

Evidence linked to a site, visit or job

Users can attach files and photographs to restoration sites, monitoring visits, field projects and work verifications. Users with edit access can save a new record and attach evidence in the same step.



Sample attachment in a demo session. Files are stored in the browser on the device in use.

File access

Open the paperclip icon to see who uploaded a file, its date and size, or to preview an image. Export permission enables downloads. Delete permission enables attachment removal.

Deleting linked records

Reassign or remove references before deleting a vendor, project or recreation site. For a restoration site, check the warning about linked visits, assets and evidence that will also be removed.

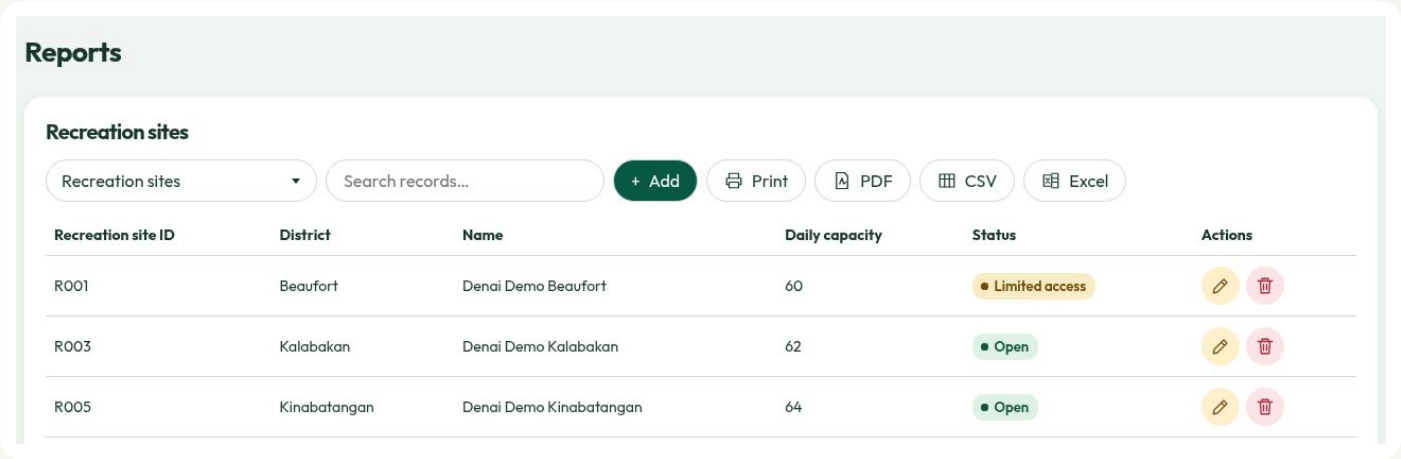
Reports and data exports

Choose the executive report for a management briefing, or a register report for a specific set of records.

EXECUTIVE REPORT

Indicators and management actions

From the command centre, generate indicators for the three workstreams and four action lists covering rework, pending inspections, restoration issues and restricted recreation sites. Content follows the user's module access and district scope.



Register selection and print or export controls in Reports.

Reports for eight registers

Select a register and enter a keyword. Print the matching rows or export to PDF, CSV or Excel (.xlsx). Record IDs let readers trace entries back to the source.

Reports from a chart

Select an interactive point, segment or bar to inspect the records behind a value. Use the PDF action in the detail list to export that selection.

Information included in a PDF report

The report shows the generation date, user account, number of records and page number. When a search is applied, the register report also includes the search term.

Access, integrity and audit

The superadmin selects the modules each role can open and grants create, edit, delete and export permissions for each register.

Default permissions by role

Superadmin

Statewide

Accesses all modules and eight registers. Maintains records, configures supervisor and auditor permissions, and reviews data integrity and the activity log.

Area supervisor

Five districts

Manages restoration sites, visits, assets, projects, recreation sites and admissions. Can read verification results. The vendor register and deletion require additional permission.

Auditor

Statewide

Reads all registers and can create or edit work verifications. Can review evidence and export permitted registers. Deletion requires additional permission.

The supervisor covers Kinabatangan, Sandakan, Tongod, Beluran and Telupid. Supervisors and auditors can export the registers permitted to their role.

Integrity checks

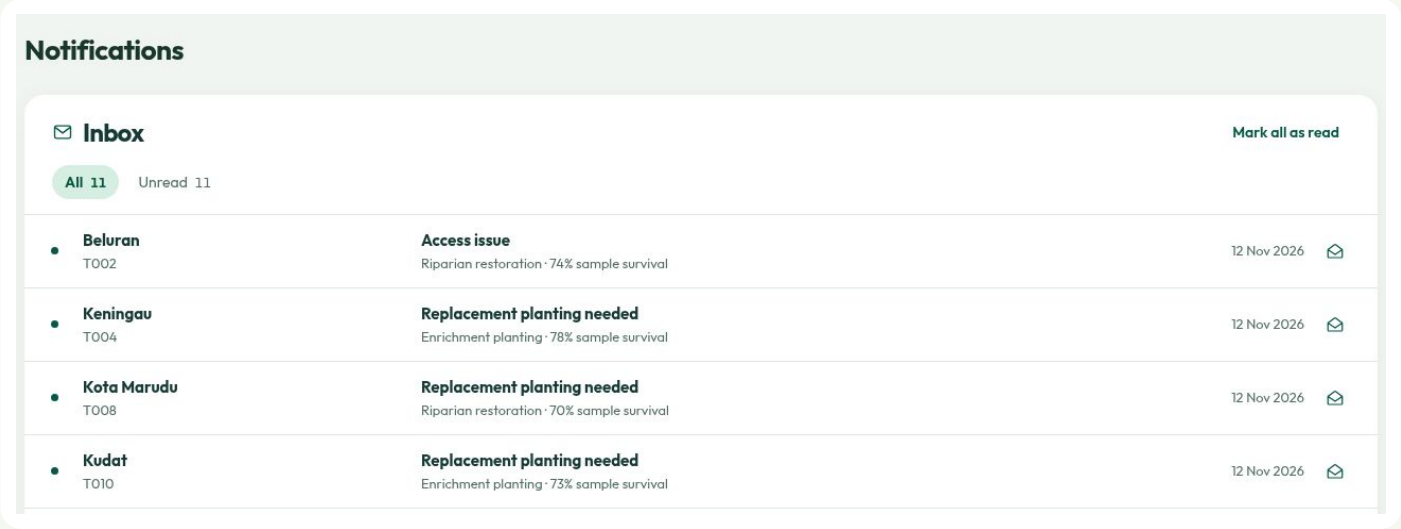
Check eight registers for missing or duplicate IDs, broken record links, unknown districts and survival counts that exceed the sample size.

Activity log

Review the latest 100 entries. Each shows the UTC time, account, action, register and record ID. Changes to role permissions are logged as well.

Inbox and workspace settings

Open the bell icon to locate sites needing replacement planting or affected by access issues.



Sample restoration inbox, ordered by the most recent visit.

Review notifications

Switch between All and Unread. Open a message for details and a link to the mapped site. Mark one notification or the entire inbox as read.

Search across registers

Use the header search to find an ID, name, district or date. Select a result to open the record within the registers available to your account.

Personalise the workspace

Language	Switch between Malay and English using the flag selector.
Display and colours	Choose light, dark or transparent mode. Set colours for the main theme, header and footer, or restore the default colours.
Navigation and account	Collapse the desktop sidebar or open the mobile menu. Sign out from the account menu. Help provides the demo notice and a contact link.

Explore the ForestGrid demo

Find districts that need replacement planting, review the verification queue and compare visitor numbers by site.

Open the ForestGrid demo →

syeratech.com/demo-product/forest-grid/

Scan for the demo

This prototype uses demonstration data.

DIGITALISATION PARTNER FOR GOVERNMENT AND INDUSTRY

SYERATECH SDN BHD

Related services

- Custom operational software
- Dashboards and data analytics
- Cloud and system integration
- Digital mapping
- Android and iOS mobile apps
- Technical support and maintenance

Contact SYERATECH

No. 9-2, Lot 16, 2nd Floor, Block D, 9, 1, Lorong Grace Square 1,
Kampung Sembulan, 88100 Kota Kinabalu, Sabah, Malaysia

Office telephone
088-413 238

WhatsApp Business
017-636 7142

Email
info@syeratech.com

Website
www.syeratech.com