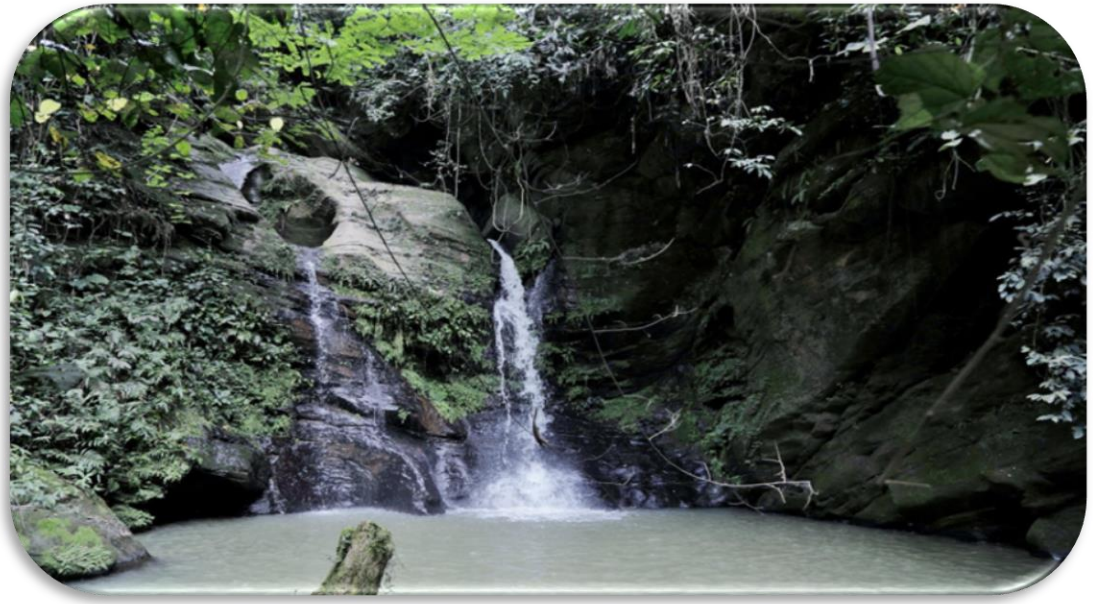
PROTECTING ATEWA FOREST THROUGH PARTICIPATORY BIODIVERSITY MONITORING IN THE ATEWA LANDSCAPE, GHANA



Phrynobatrachus afiabirago

CURRENT MANAGEMENT CHALLENGES OF ATEWA

- Degradation and encroachment associated with unsustainable activities threatening the ecological integrity of the forest
- Piecemeal approach to addressing unsustainable activities
- Inadequate knowledge on how the unsustainable activities are impacting management decisions
- Inadequate staff capacity and technical expertise to enhance monitoring of the site
- Inadequate assessment and monitoring of the threats facing the Atewa Range Forest Reserve.
- Inadequate law enforcement

PROJECT GOAL AND OBJECTIVES

OVERALL GOAL: Securing the long-term integrity of the forest

SPECIFFIC OBJECTIVES

CEPF: Develop innovative participatory monitoring system for sustainable management of critical ecosystems

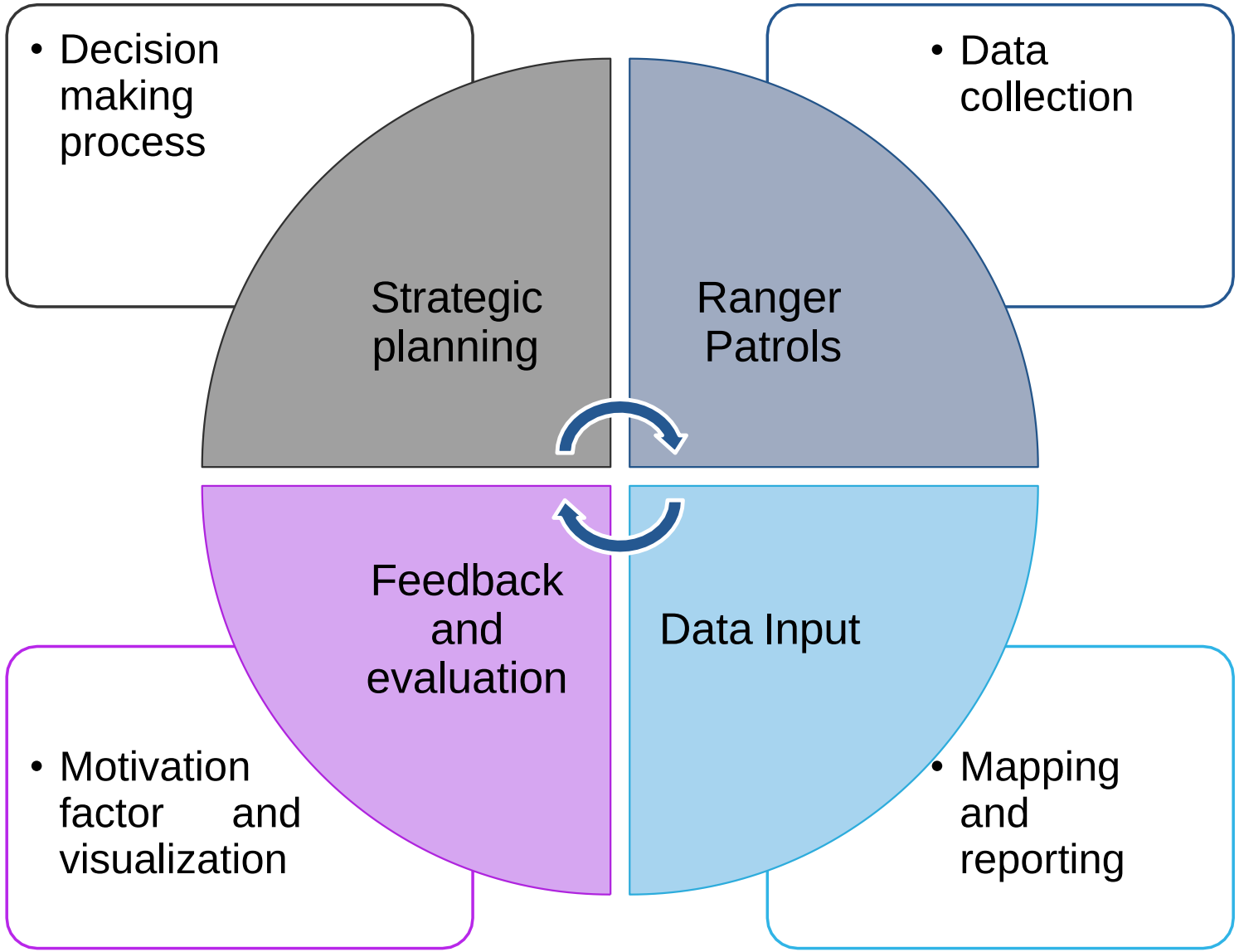
LEVENTIS: Citizen-based forest monitoring scheme initiated amongst key communities around Atewa Forest

SMART – Spatial Monitoring and Assessment Tool

What is SMART? 1/2

- Spatial Monitoring and Reporting Tool – based around law enforcement and site-based conservation activities
- More than a data collection tool. Suite of tools developed by ‘Users’ to help protected area managers make informed decisions for conservation management
- It is freeware
- It is highly flexible/customizable

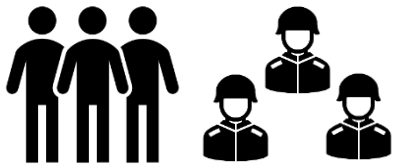
What Does SMART Do?



Who can be involved in the use of SMART?

A system to collect and report information about a Protected Area to help manage that Protected Area more successfully

Operated by conservation organisations and Protected Area managers



Information collected by Communities, Protected Area staff, NGO staff

Information collected by survey and patrol groups in the forest, using a mobile phone app

Information stored on a computer and on the web and reported to relevant authorities

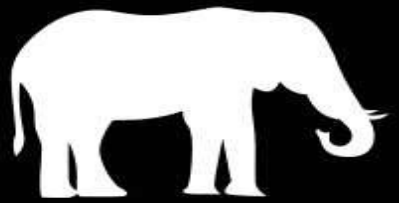
Roles of persons involved in operating SMART

Database manager – maintains incoming data, database structure, reporting

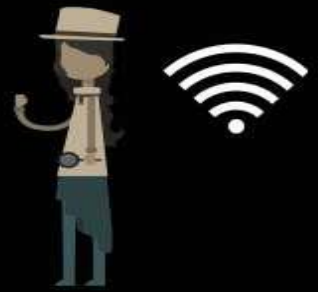
Protected Area managers – receiving and responding to reports arising from the data

Survey and patrol leaders – plan and direct where surveys and patrols should go

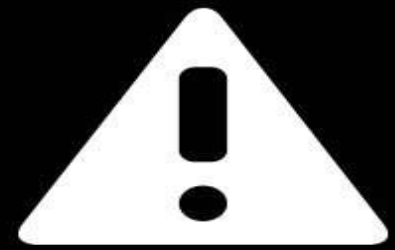
Survey and patrol teams - FC staff, community members, NGO staff collecting data in the forest



Rangers capture data on threats or positions (of animals or themselves)



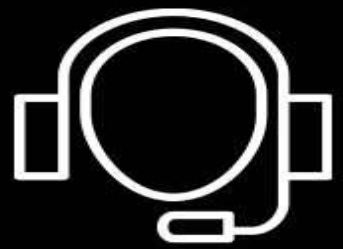
Rangers send data from the field



Transmitted as alerts in real time

Rich mapping of simultaneous alerts enhances prioritizing responses

Rangers deployed



Management receives alert and immediately responds

Key Benefits of SMART

Collect data from the field and share in real time

Manage and respond to real time alerts

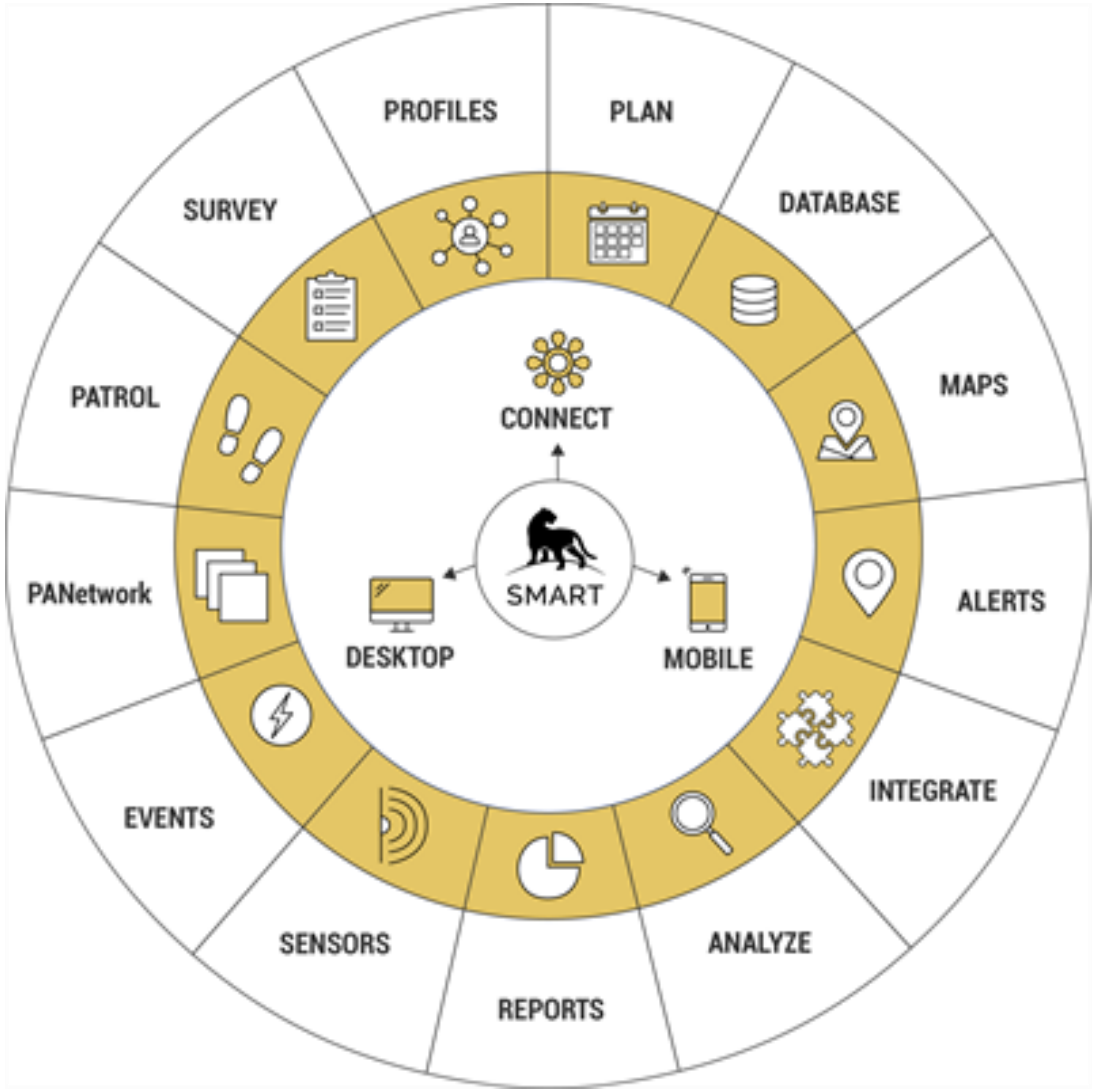
Centrally manage SMART deployments at multiple sites

Integrate SMART with other systems

Role of SMART in PA Management

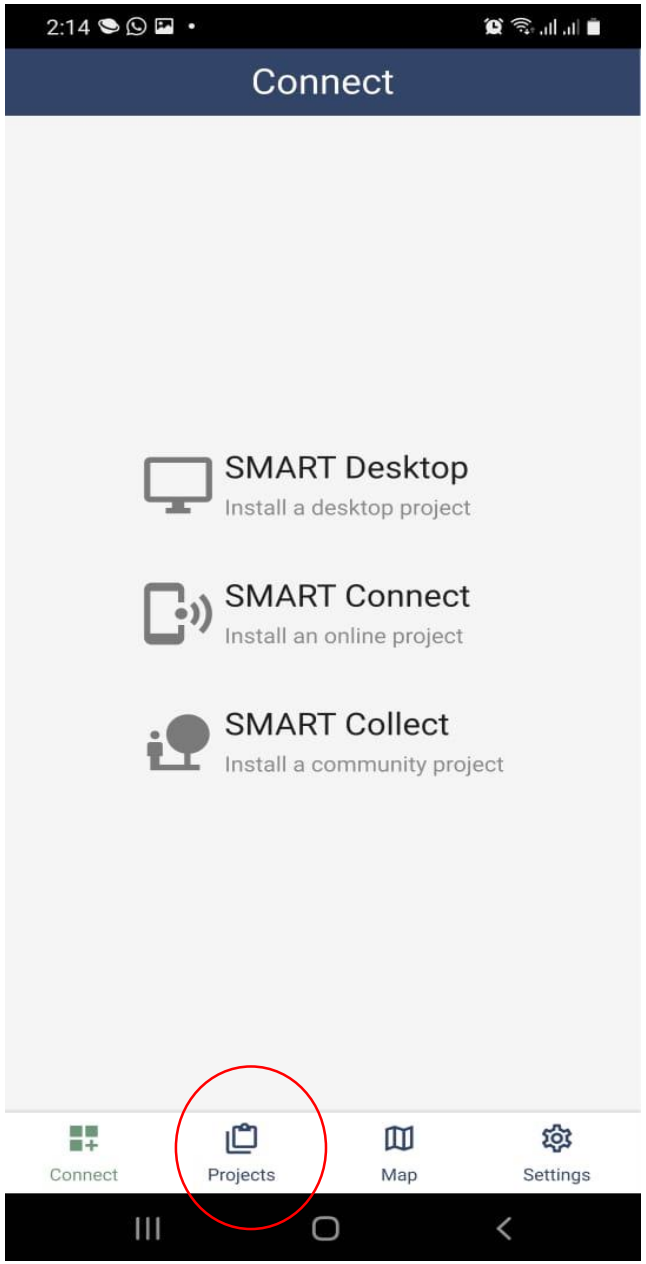
- Measuring Patrol Effectiveness
- Improving effectiveness of protected area management
- standardize reporting indicators
- Promote good governance and accountability

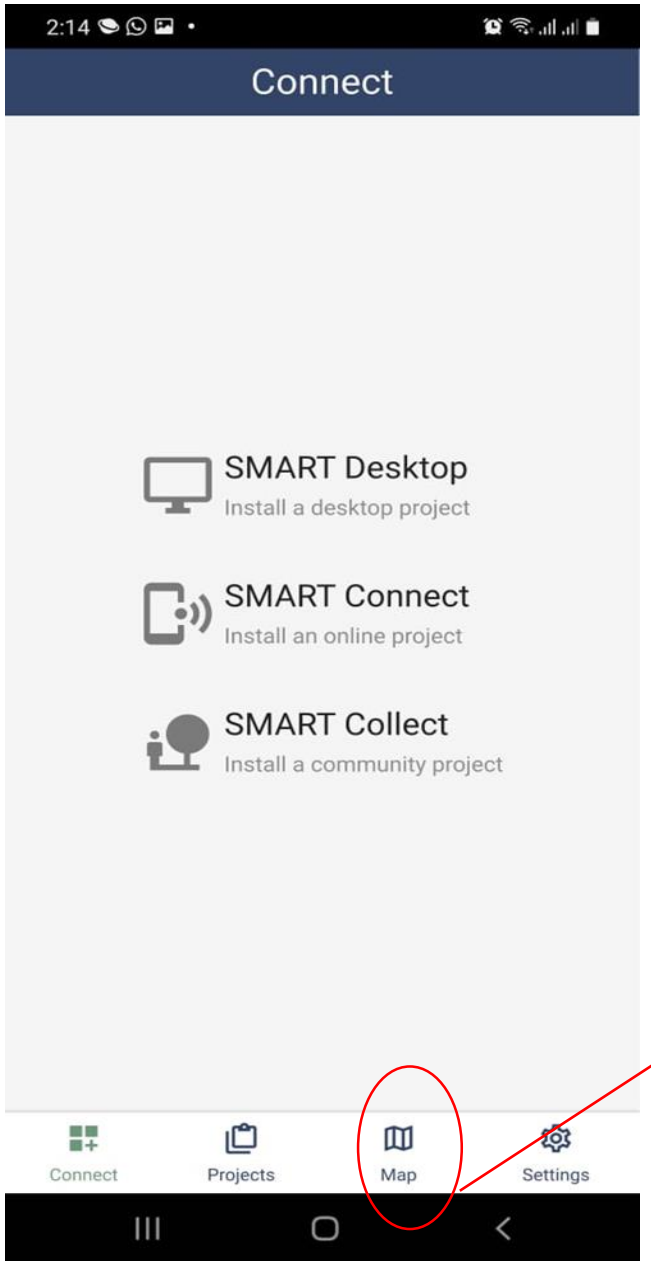
SMART CONNECT-online App



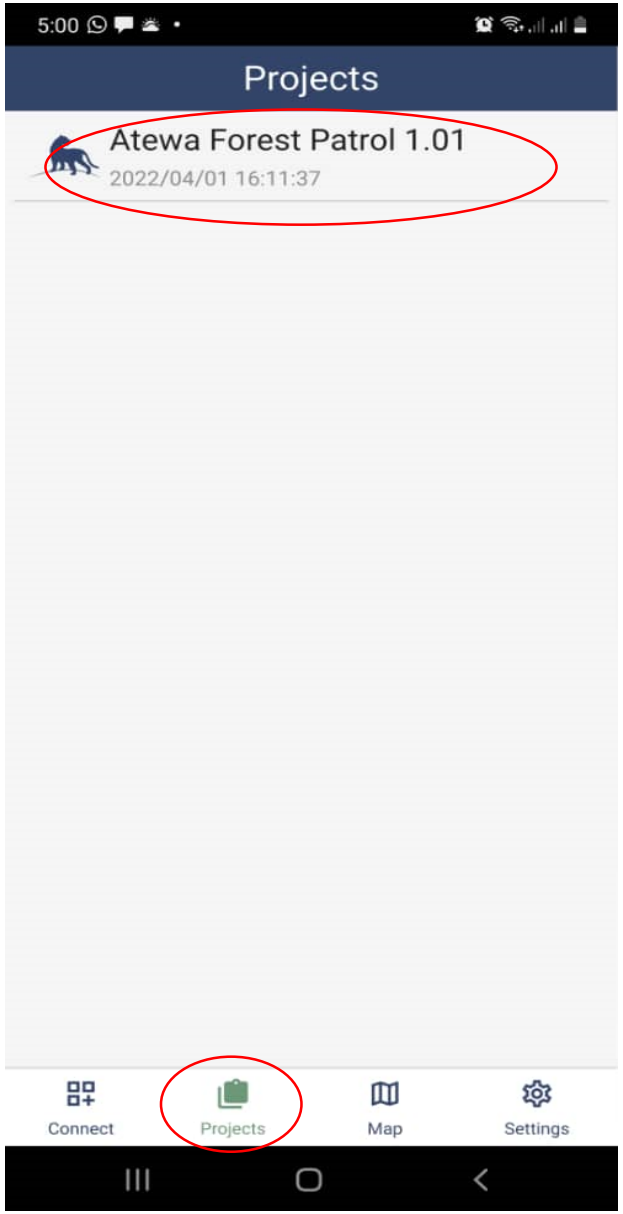
SMART

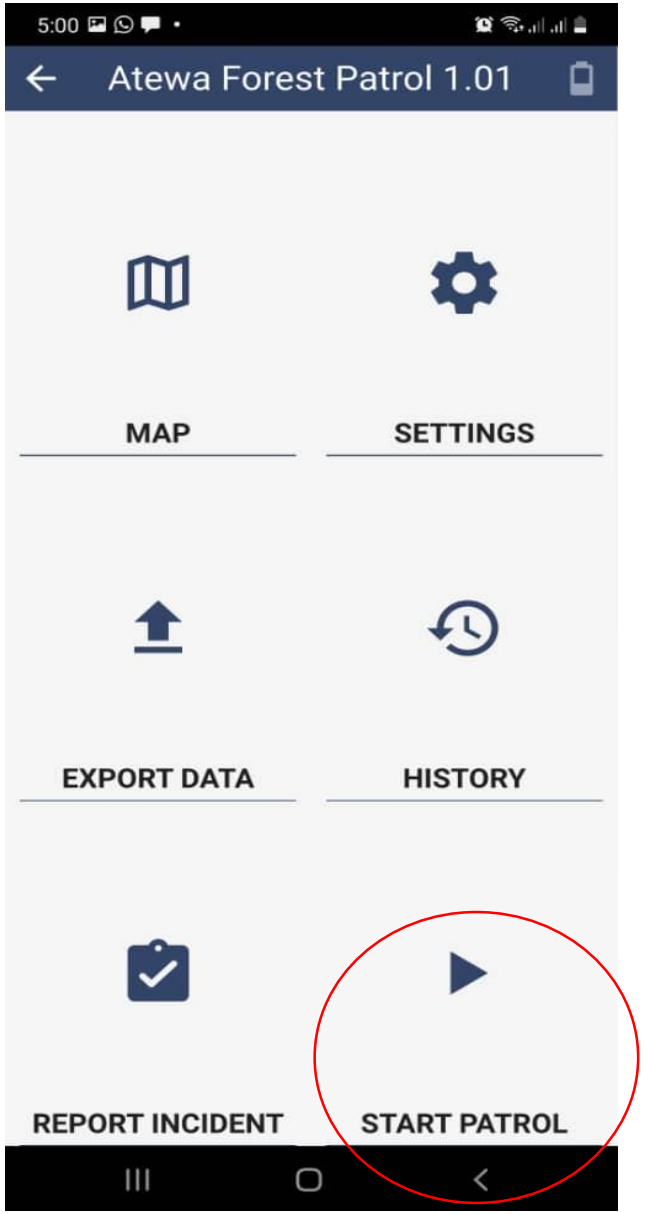
Basic Features of the Software

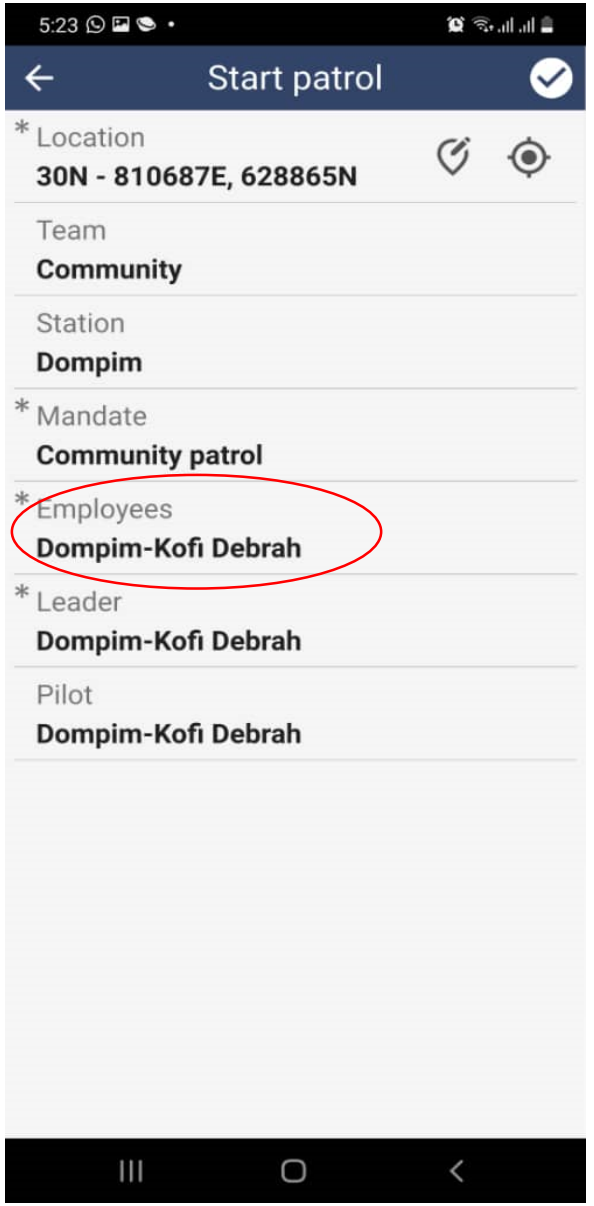


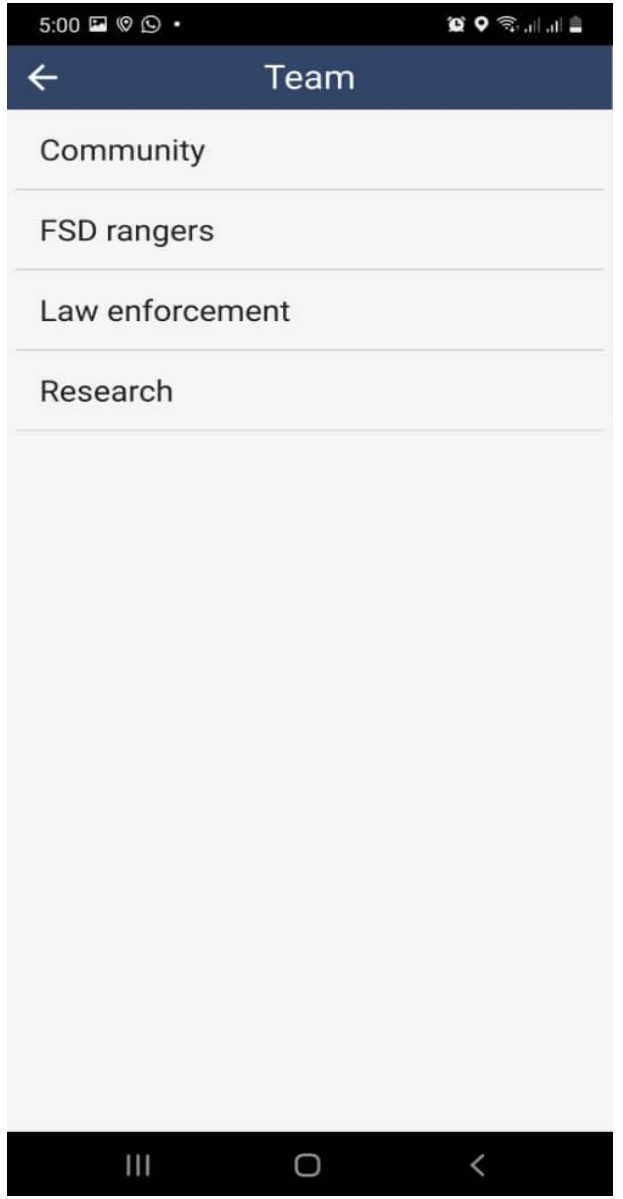


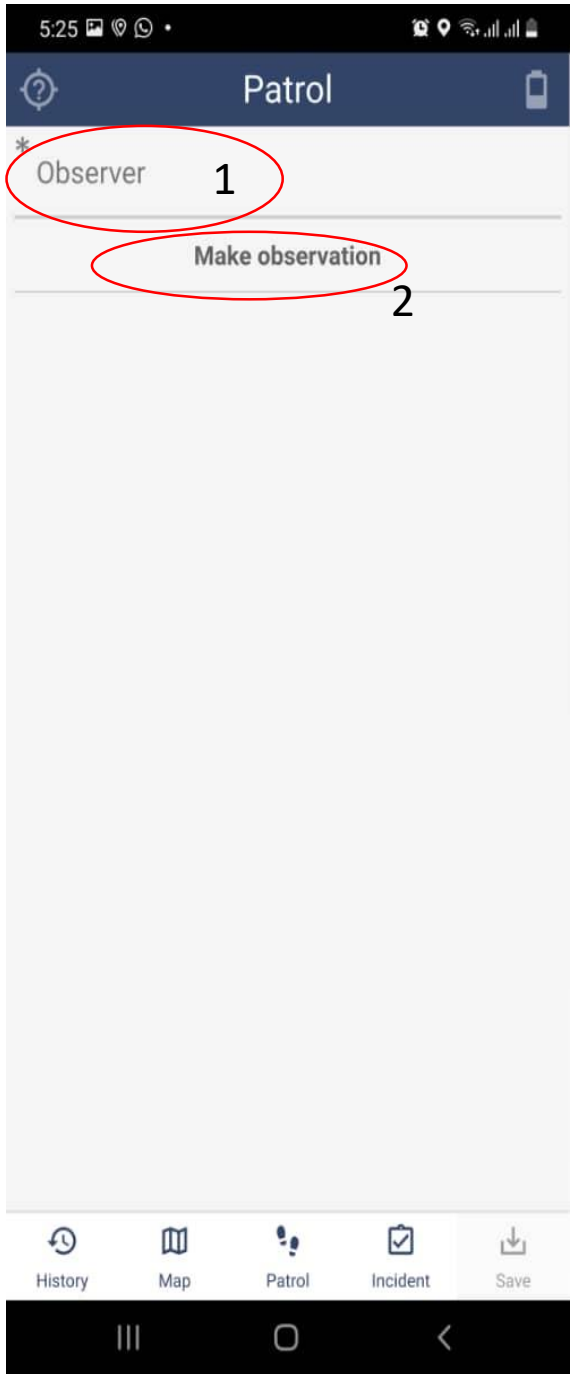
BASIC FEATURES OF THE SOFTWARE

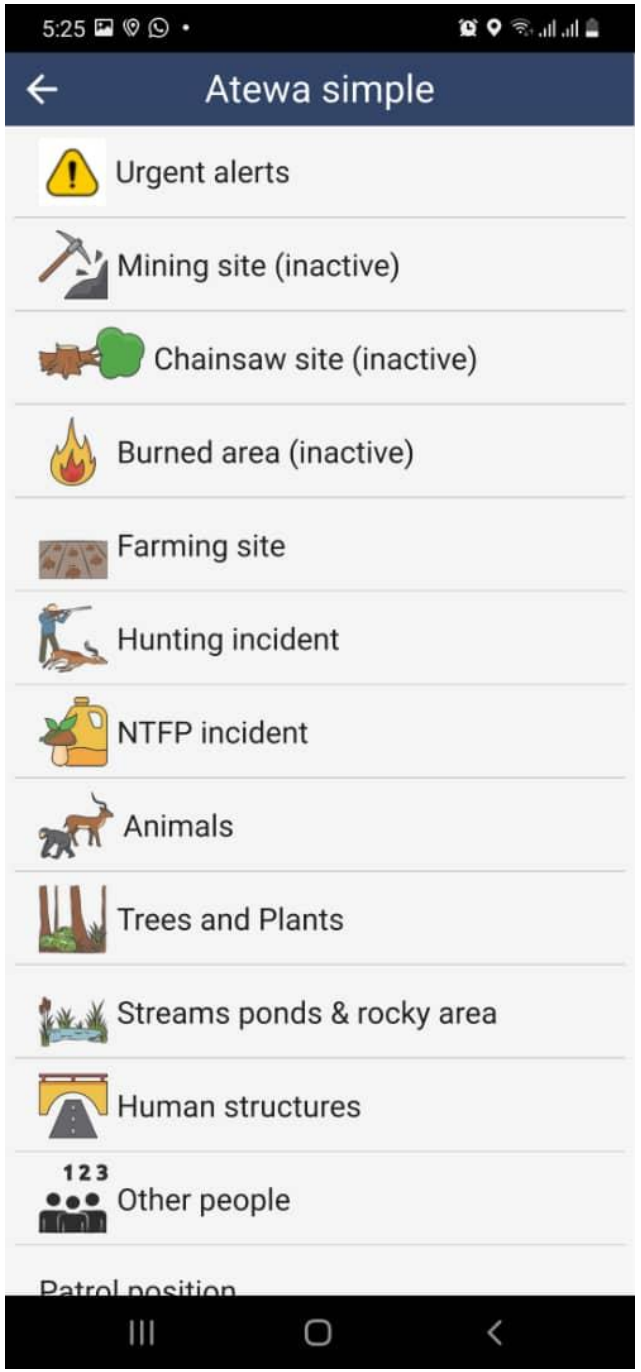


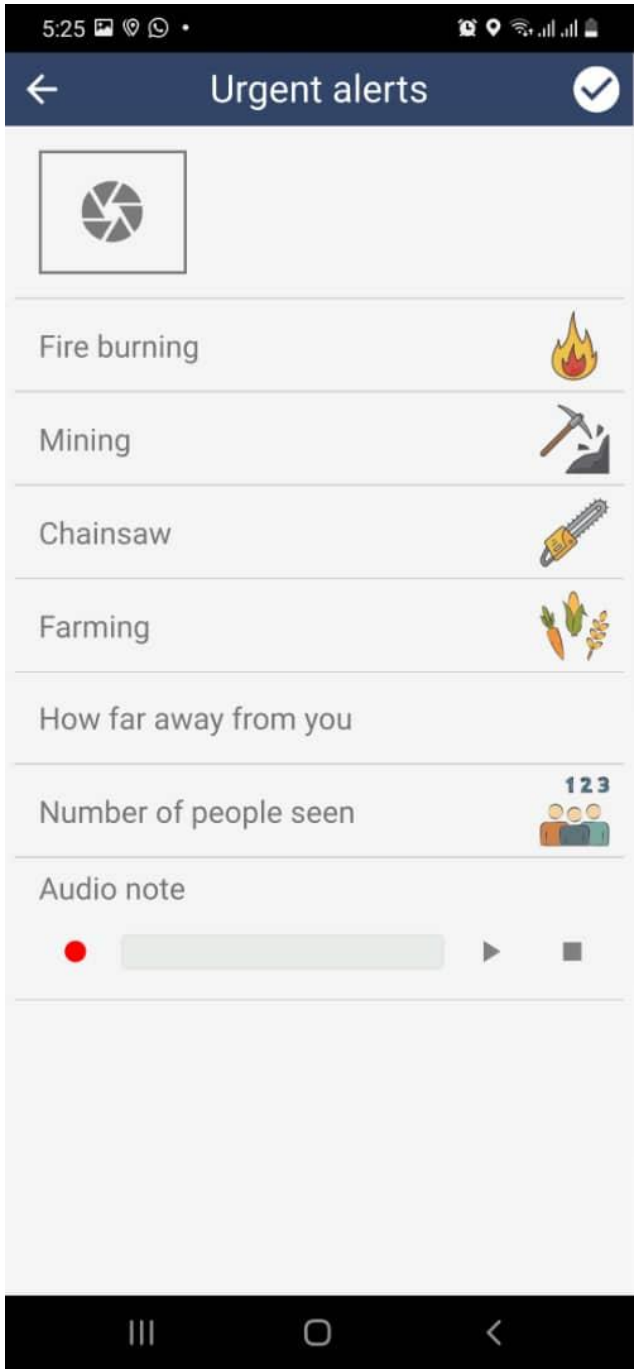


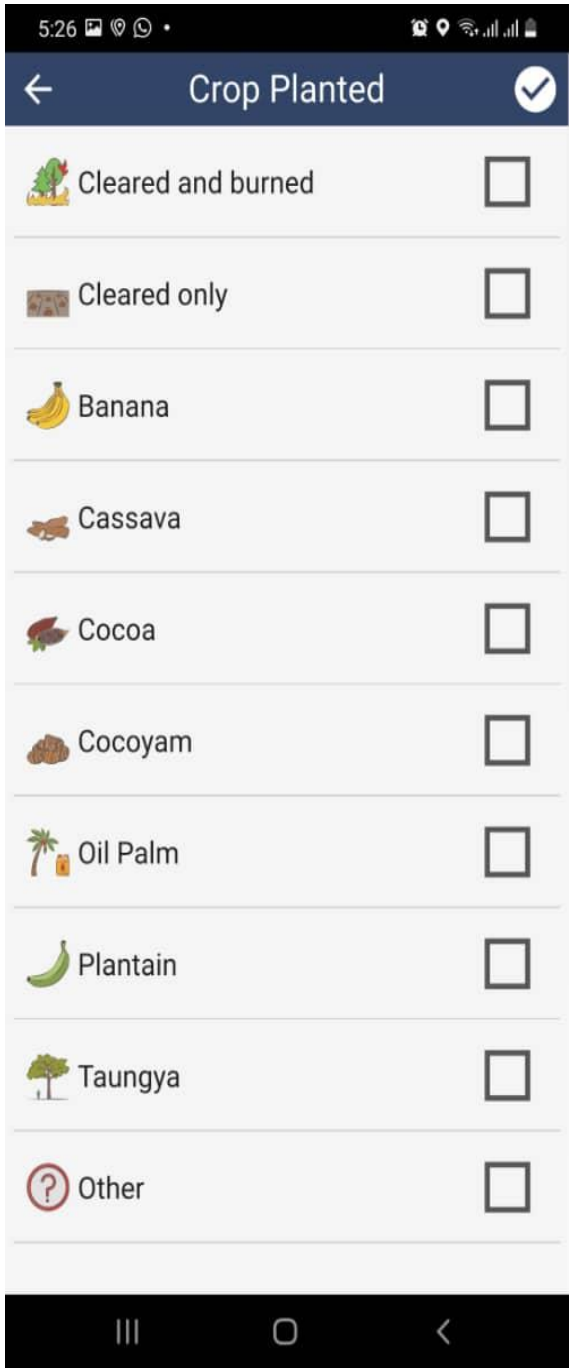


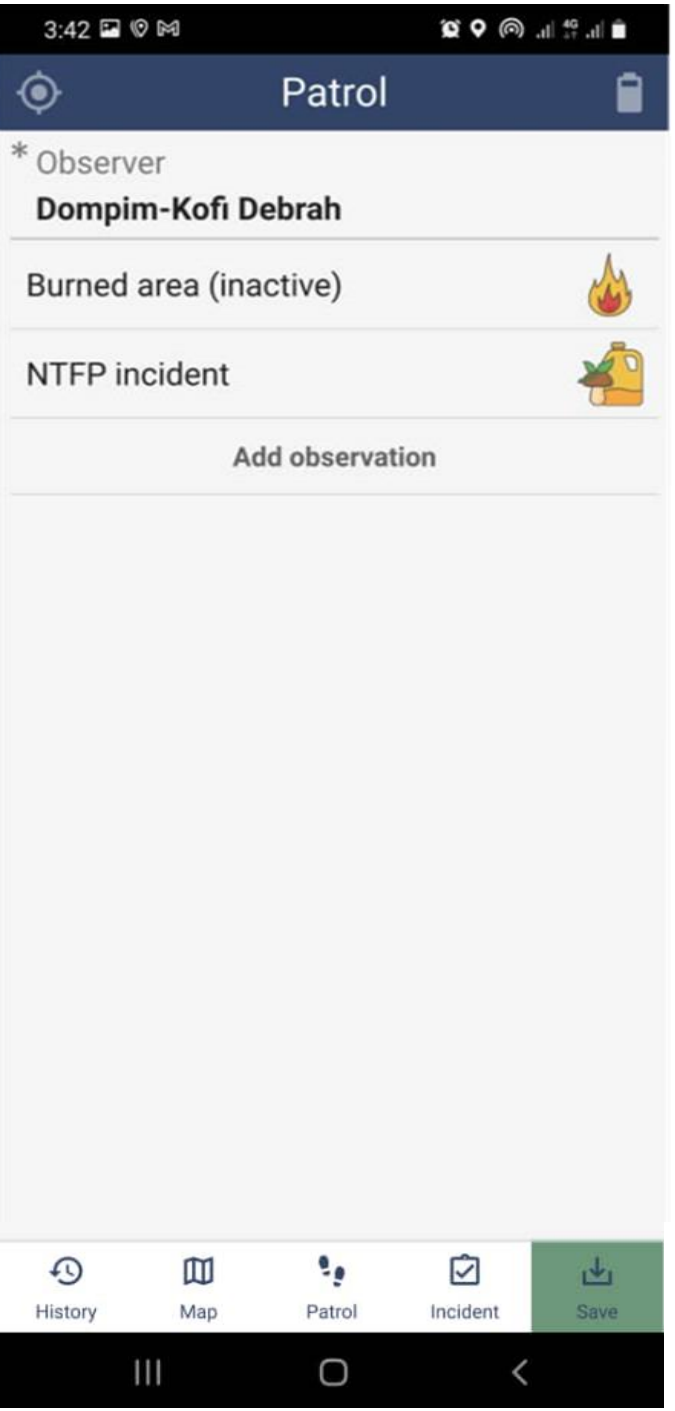


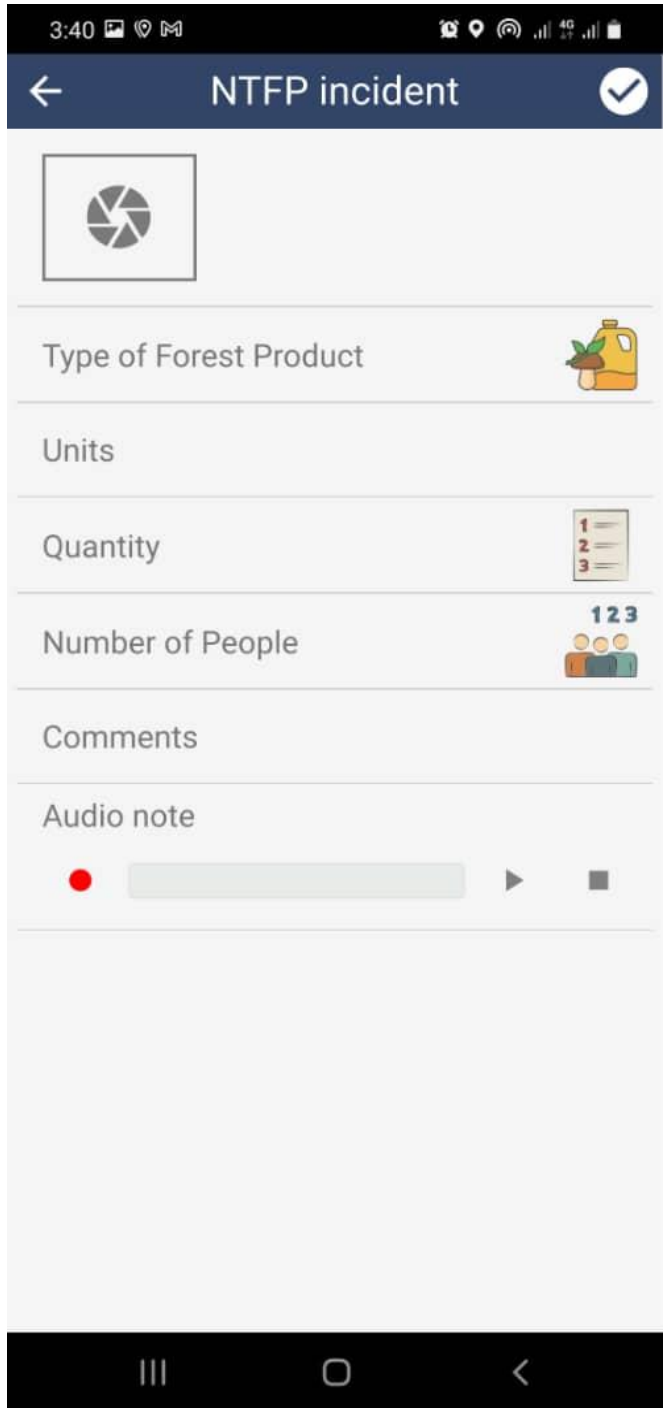

5:25
Patrol
Observer
1
Make observation
2
History
Map
Patrol
Incident
Save

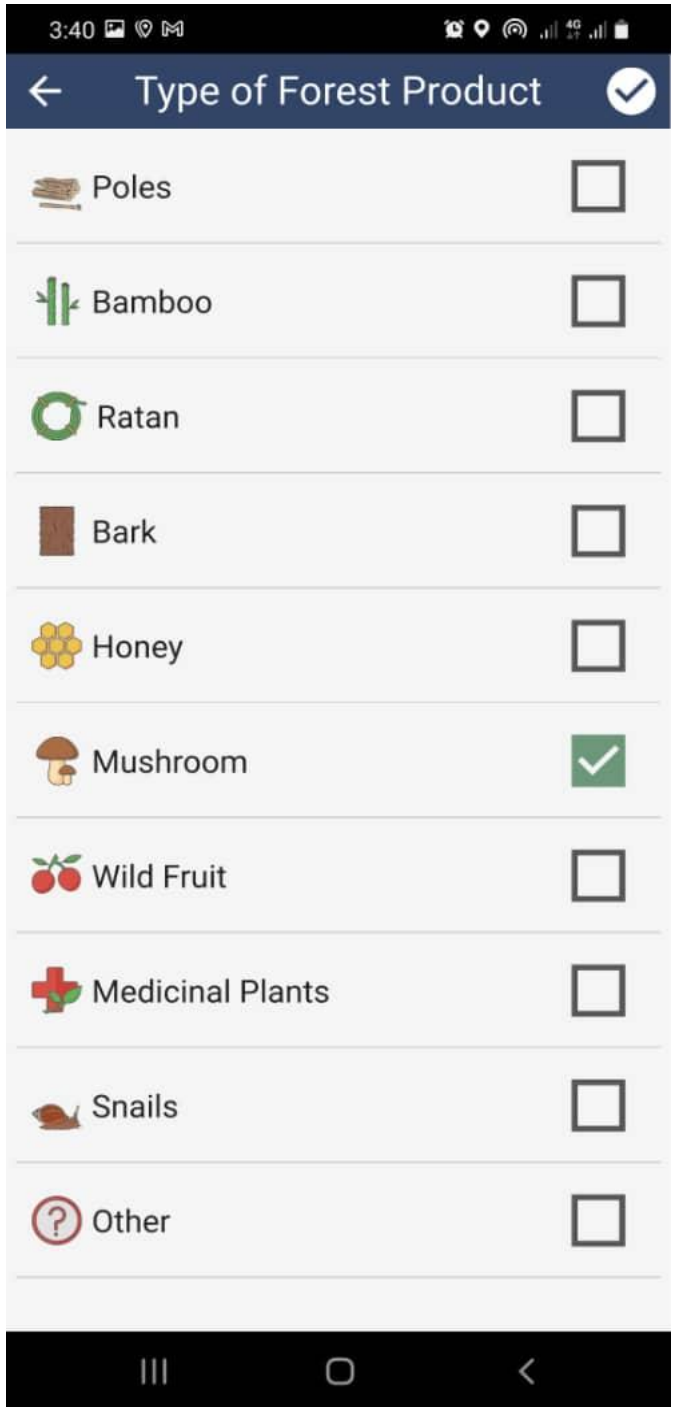

5:25
Atewa simple
Urgent alerts
Mining site (inactive)
Chainsaw site (inactive)
Burned area (inactive)
Farming site
Hunting incident
NTFP incident
Animals
Trees and Plants
Streams ponds & rocky area
Human structures
Other people
Patrol position

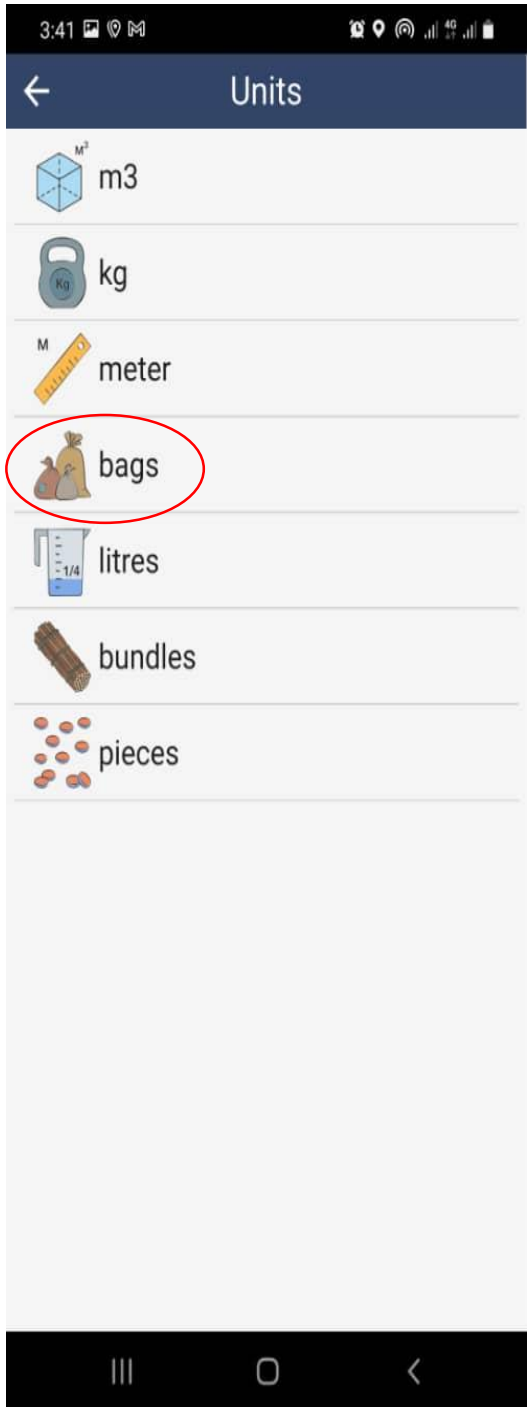

5:25
Urgent alerts
Fire burning
Mining
Chainsaw
Farming
How far away from you
Number of people seen
Audio note

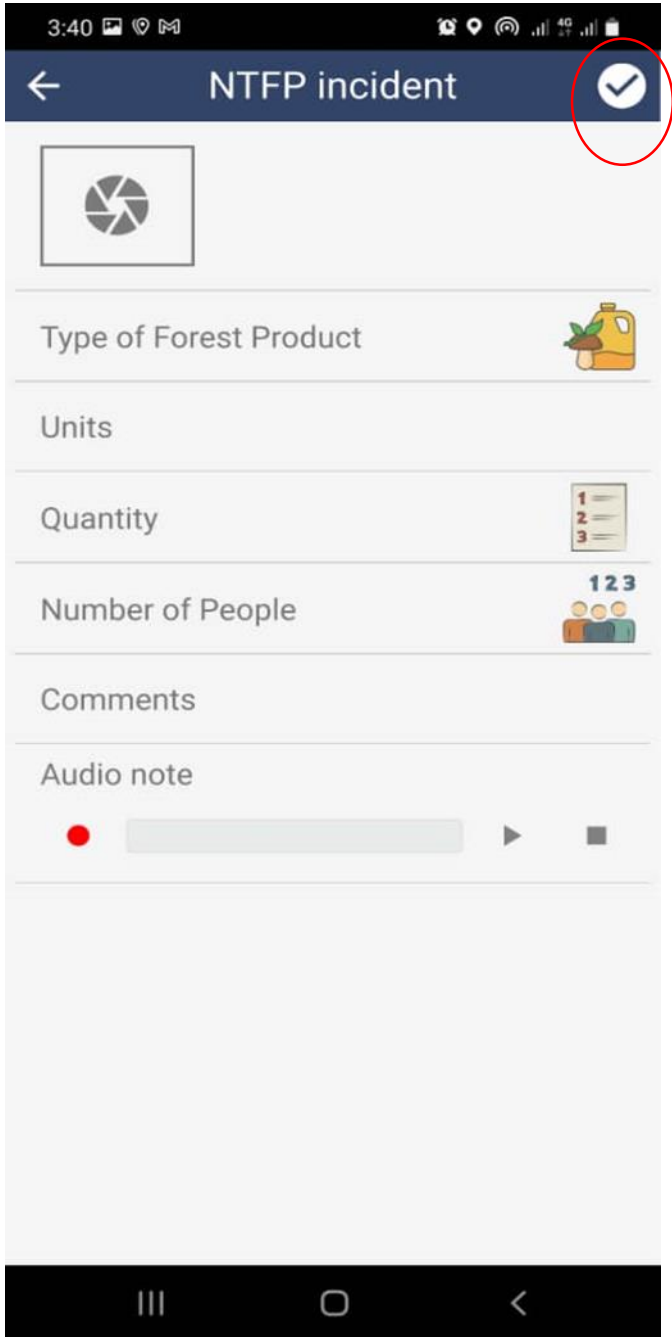

5:26
Crop Planted
Cleared and burned
Cleared only
Banana
Cassava
Cocoa
Cocoyam
Oil Palm
Plantain
Taungya
Other

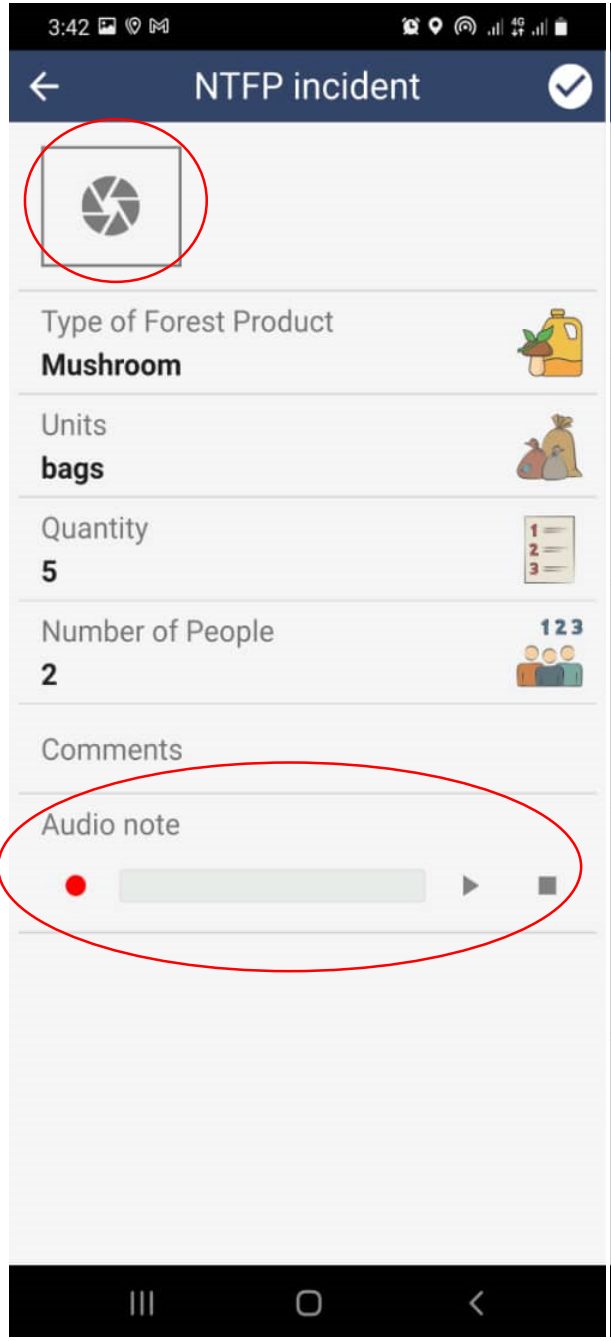

3:42
Patrol
* Observer
Dompim-Kofi Debrah
Burned area (inactive)
NTFP incident
Add observation
History
Map
Patrol
Incident
Save

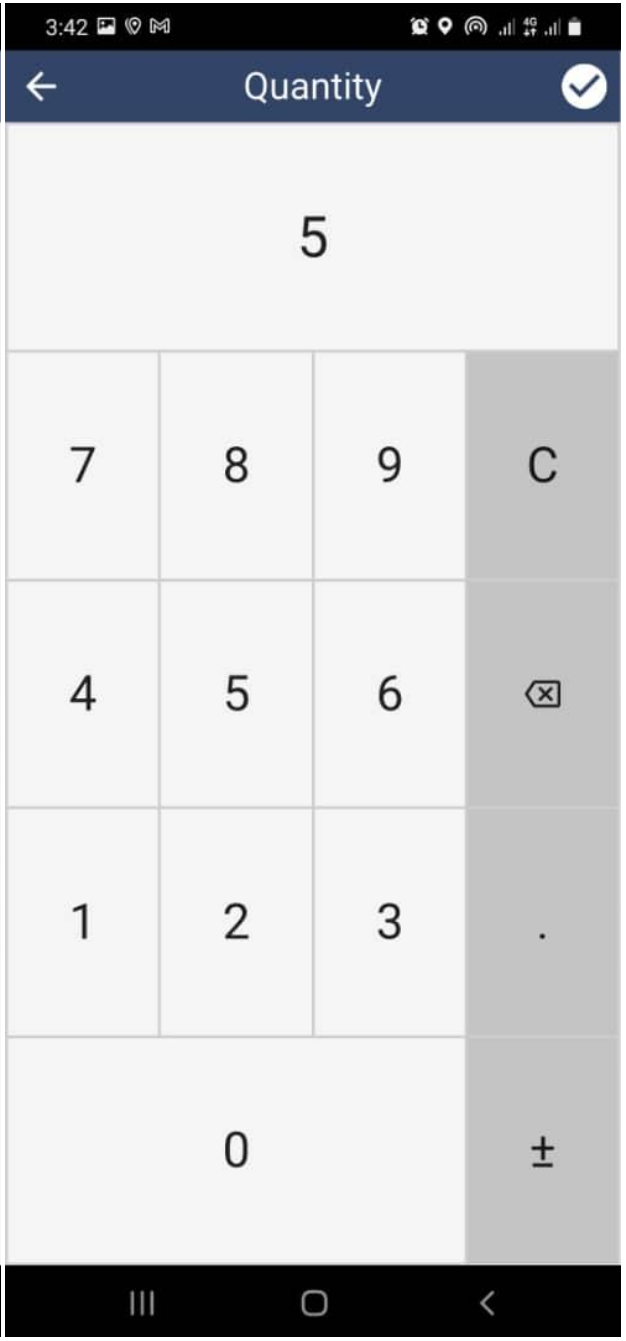

3:40
NTFP incident
Type of Forest Product
Units
Quantity
Number of People
Comments
Audio note


3:40
Type of Forest Product
Poles
Bamboo
Ratan
Bark
Honey
Mushroom
Wild Fruit
Medicinal Plants
Snails
Other


3:41
Units
m3
kg
meter
bags
litres
bundles
pieces


3:40
NTFP incident
Type of Forest Product
Units
Quantity
Number of People
Comments
Audio note


3:42
NTFP incident
Type of Forest Product
Mushroom
Units
bags
Quantity
5
Number of People
2
Comments
Audio note


3:42
Quantity
5
7
8
9
C
4
5
6
1
2
3
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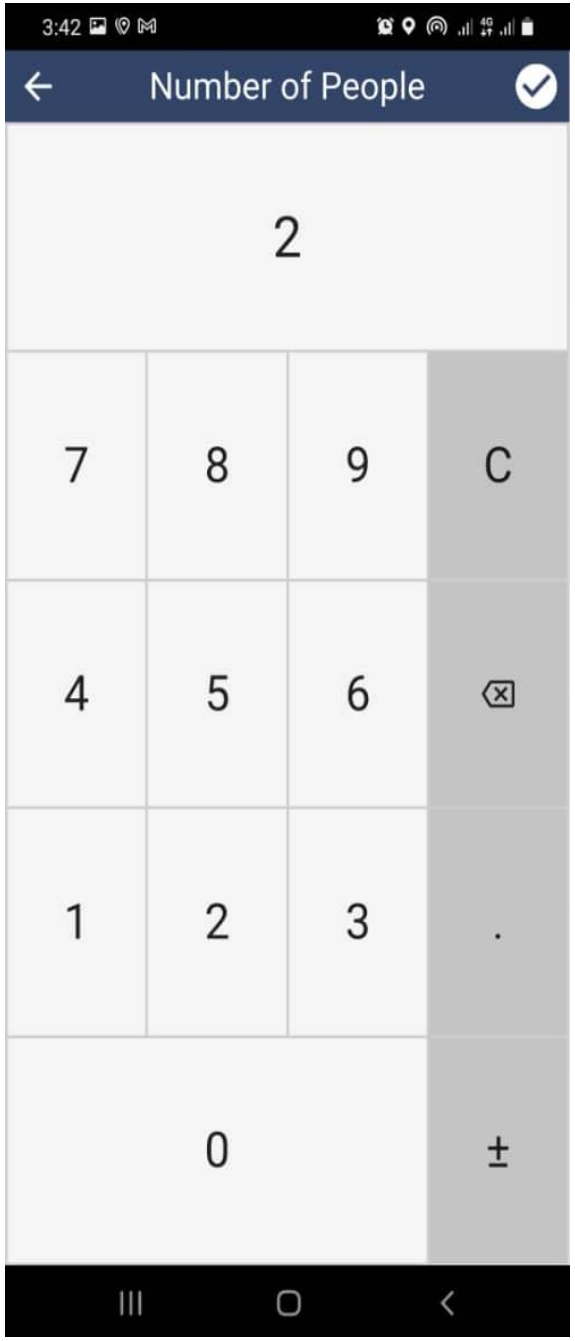
0
±


3:42
Number of People
2
7
8
9
C
4
5
6
1
2
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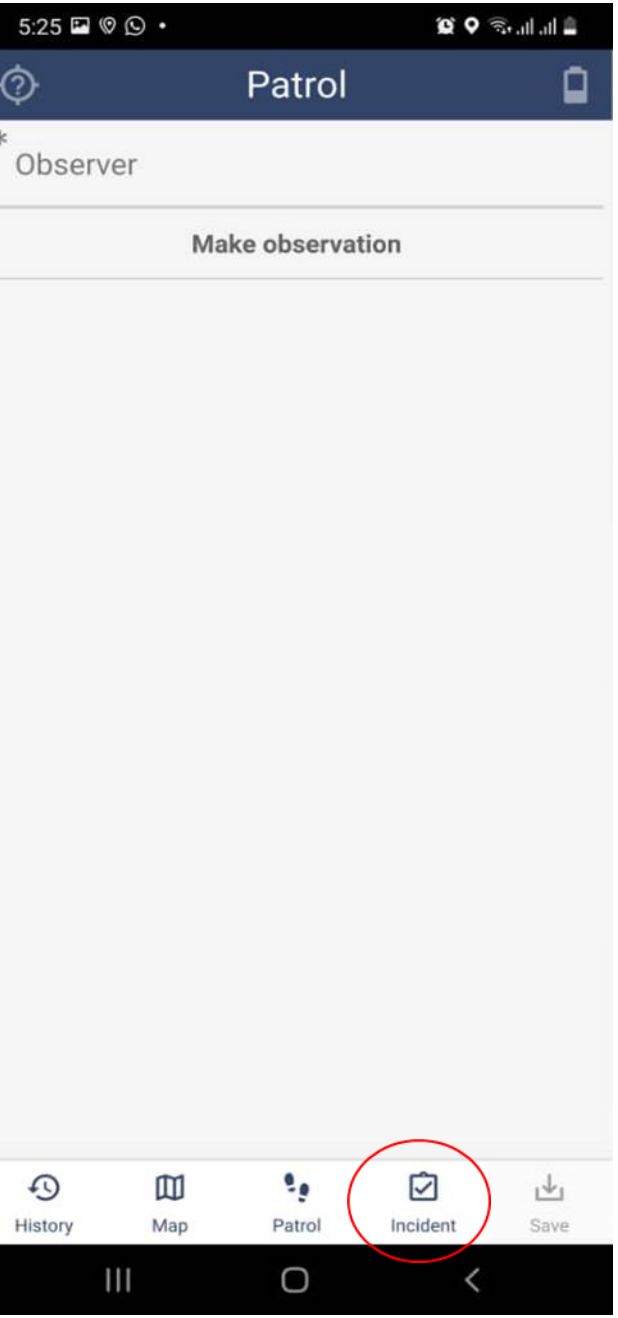
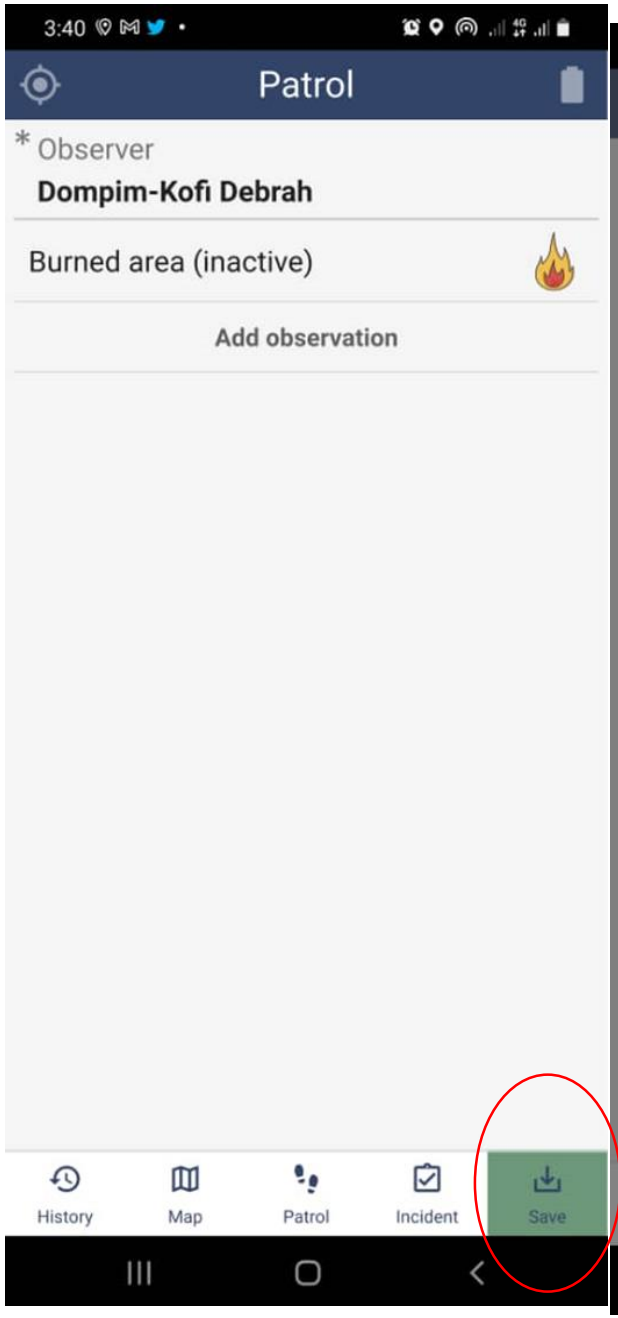
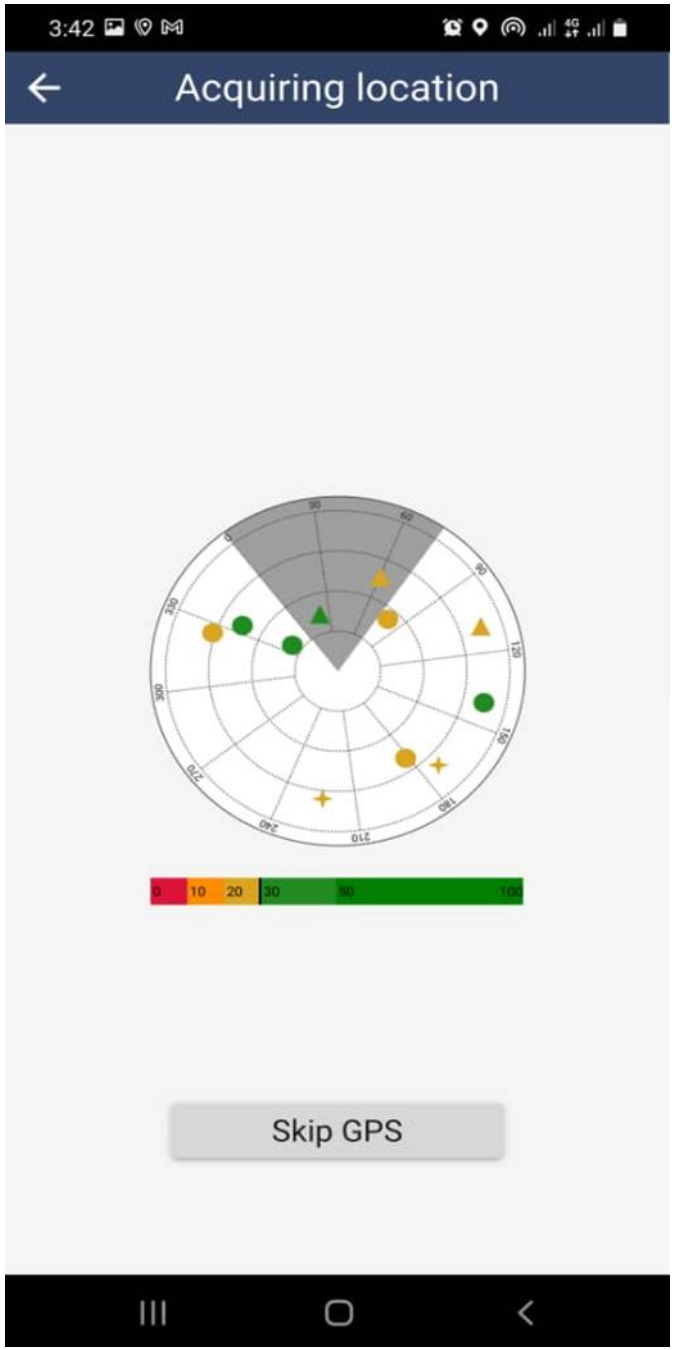
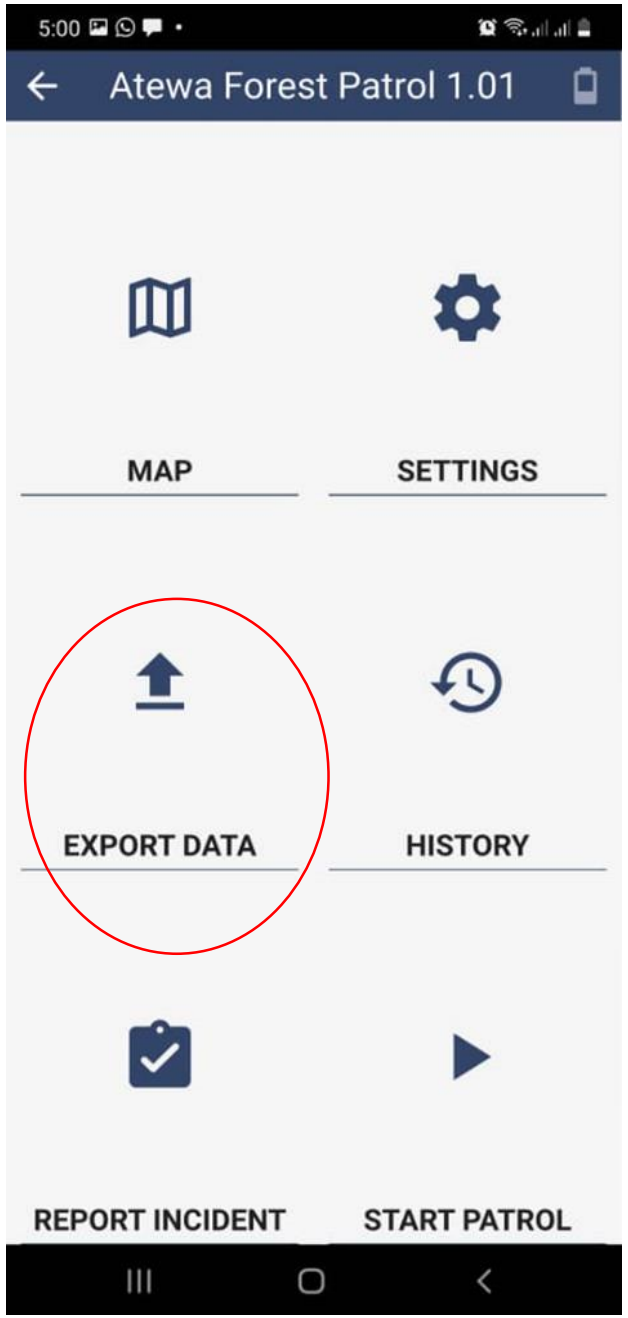

5:25
Patrol
* Observer
Make observation
History
Map
Patrol
Incident
Save

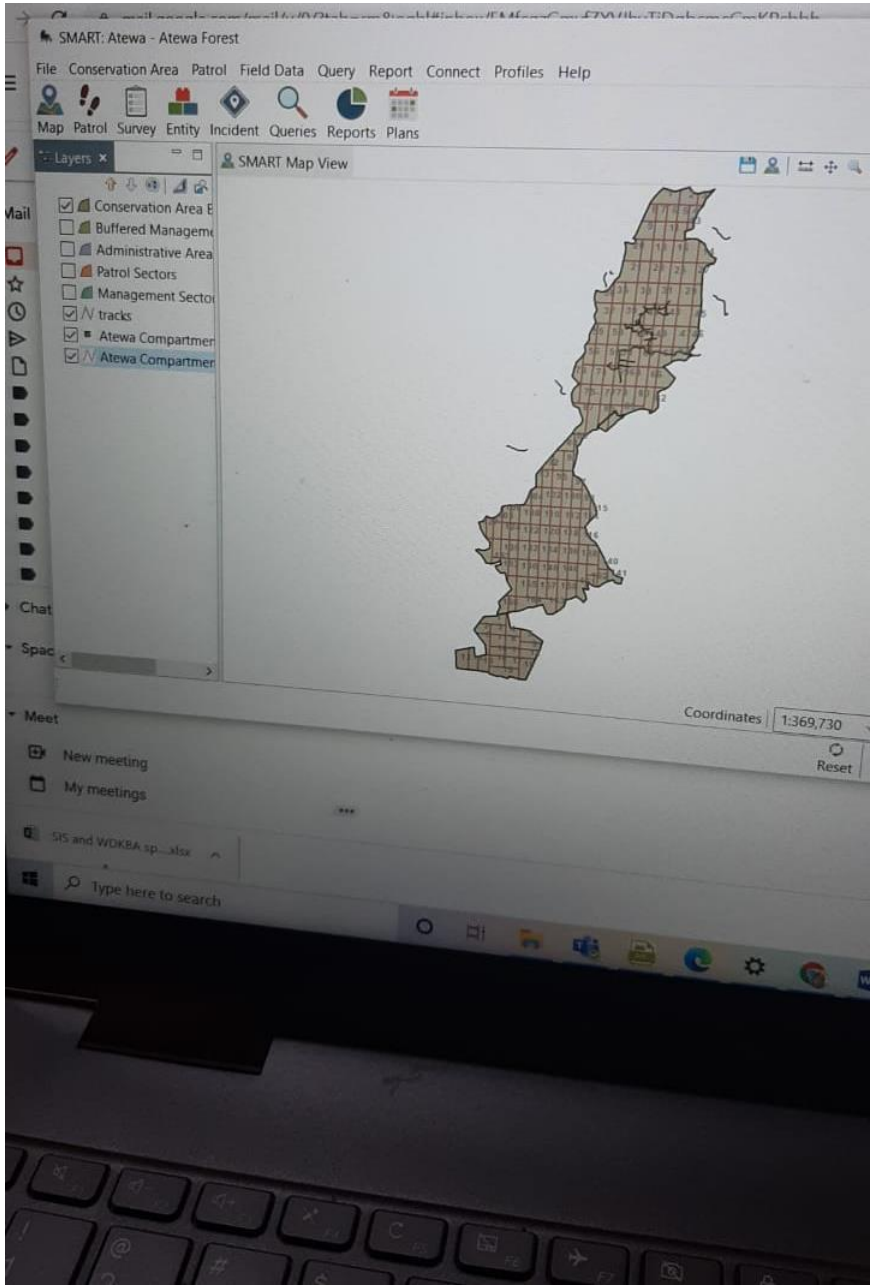

3:40
Patrol
* Observer
Dompim-Kofi Debrah
Burned area (inactive)
Add observation
History
Map
Patrol
Incident
Save


3:43
Patrol
* Observer
Dompim-Kofi Debrah
Make observation
End patrol
Pause patrol
Change patrol
Statistics
Toggle dark theme
History
Map
Patrol
Incident
Save


3:44
Patrol
* Observer
Dompim-Kofi Debrah
Make observation
Confirm end patrol?
History
Map
Patrol
Incident
Save


3:42
Acquiring location
0
10
20
30
90
100
Skip GPS


5:00
Atewa Forest Patrol 1.01
MAP
SETTINGS
EXPORT DATA
HISTORY
REPORT INCIDENT
START PATROL


SMART: Atewa - Atewa Forest
File Conservation Area Patrol Field Data Query Report Connect Profiles Help
Map Patrol Survey Entity Incident Queries Reports Plans
Layers
SMART Map View
Conservation Area
Buffered Manageme
Administrative Area
Patrol Sectors
Management Sector
tracks
Atewa Compartmer
Atewa Compartmer
Coordinates
1:369,730
Reset
New meeting
My meetings
Type here to search

REPORT AND DECISION MAKING