

Community-based monitoring and information systems (CBMIS) tools

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Wide range

- CBMIS is very diverse and can range from technically simple and basic to very technologically advanced approaches.
- Methodologies and processes include community mapping (3D or GIS), resource inventories, survey research, case studies, questionnaires, eco/agri-calendars and biodiversity surveys/registers, case studies.



Some of the tools used

- The tools being used include questionnaires and forms (hardcopies), cameras, GPS, participatory video, smartphones and tablets, community radio, measurement kits (e.g. for water and soil samples) and testimonies.
- Many communities work with selected software to link their data to maps and computer databases (e.g. EpiCollect, Sapelli, ODK, GIS Cloud, OpenStreetMap).

Surveys / questionnaires

- Verbal interviews / discussions
- Pen and paper
- Electronic writing up
- Can be published or not
 - Traditional occupations
 - Target 17-18 survey





Forest
Peoples
Programme

Community Mapping Tools; Options and Considerations

A Starting Question:

- What are your objectives for using CBMIS mapping tools?

And,

- What constraints do you face in achieving your objectives?

Disclaimer!

Disclaimer!

- This is not about a one size fits all solution!
- Only examples of what is out there, and how the range of tools can fit together

STOP!

The Toolkit/Spectrum



Trackers,
Canway, Google
Earth

- Can record tracks and waypoints without attributes



Voice activated
trackers,
Handheld GPS

- Can record tracks and waypoints with names/recordings



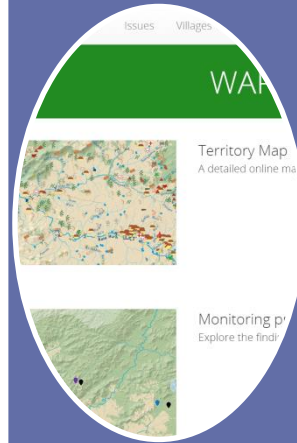
Smartphones
(can pair with
trackers)

- ODK collect
- GeoODK
- Sapelli
- KoboCollect
- TIMBY
- Bespoke OSM based tools..
- Can fully evidence data in the field



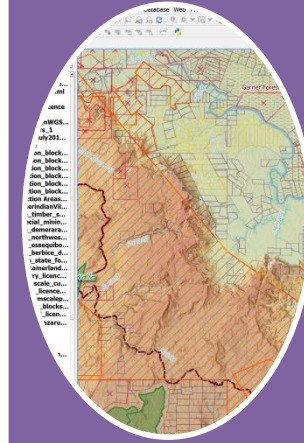
Monitoring hub
(+ map filter +
form manager)

- Aggregate and manage data from all sources
- Send out forms
- Printed monitoring reports locally
- Support to load different base maps
- Language support



Kobotoolbox,
Smartpaper,
Communitylands
websites

- Manage and complete long survey forms
- Publically share maps and data in context




QGIS, ArcGIS,
JOSM etc. +
3rd party data
(e.g.

- concessions),
- Can overlay and style data from many different sources for comparison in maps
- Can still be participatory



How to choose? Trade-offs ...

- Simple to use vs. range and power of observations
 - Ease of setup vs. ability to modify
 - Ownership vs. Guidance (facilitator's paradox)
 - Field capacity vs. Post processing needs
 - Retaining control of data vs. Gaining publicity
 - Mobilisation of community vs. Speed of response
- 
- A man with dark hair, wearing a red and white checkered shirt, is sitting outdoors. He is holding a handheld electronic device (possibly a PDA or early smartphone) in his right hand. The background is a lush, green, wooded area with sunlight filtering through the trees. The overall scene suggests a field researcher or a person using technology in a natural environment.

Where to Start..?



Baseline Data

- Baseline data is generally the original state of the system, or the earliest snap-shot you can get of it.
- Generally in our case, extent and justification for customary lands and resources access.

Monitoring



- Monitoring is getting newer data to compare with this baseline.
- Generally threats and updates to lands and livelihoods (the baseline)

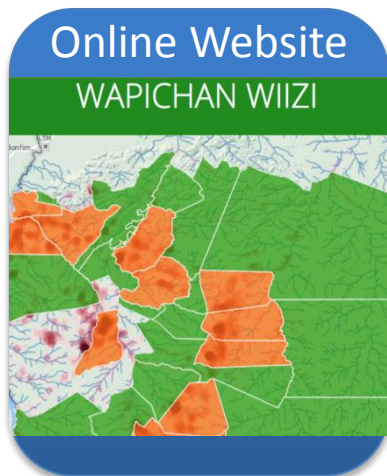
Data and info system (pilot 2015)



- Can collect information about the land
- Can take photos
- Can accurately describe and record exactly where the information was collected



- Can store all the information collected on the phones



- Can show the public map data in a clear and interesting way
- Can show photos, stories, video etc.
- Can show public and media and link to them

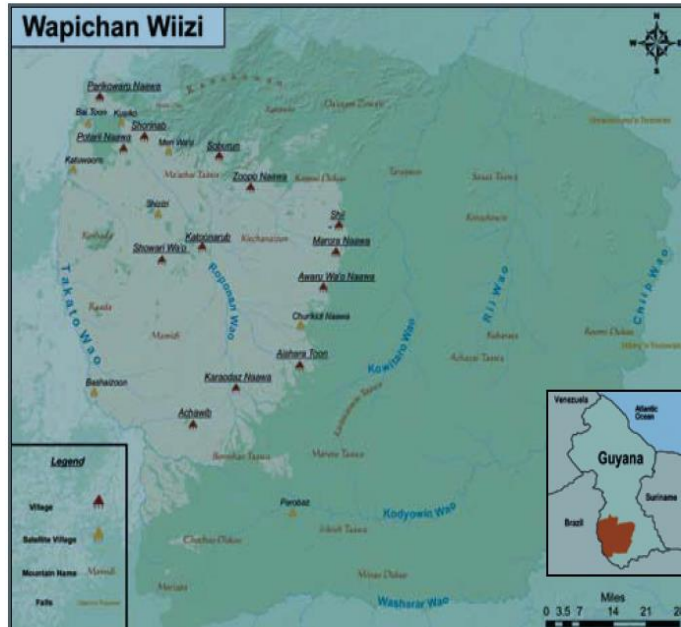


- Can download from the internet data store
- Can choose what is private for internal village planning and what should be made public.
- Can prepare and print maps and reports to explain issues to villagers and government
- Can update the website map

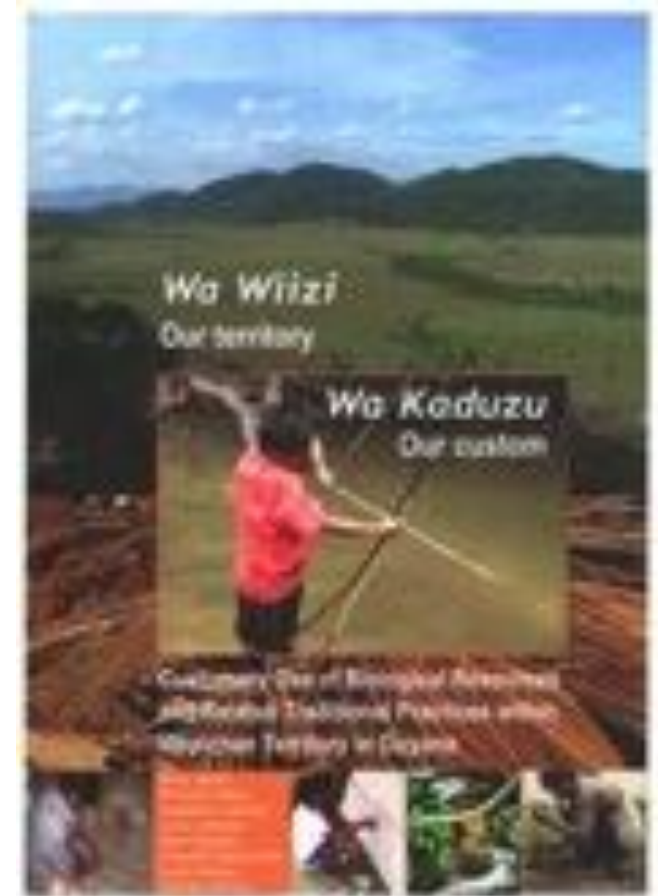
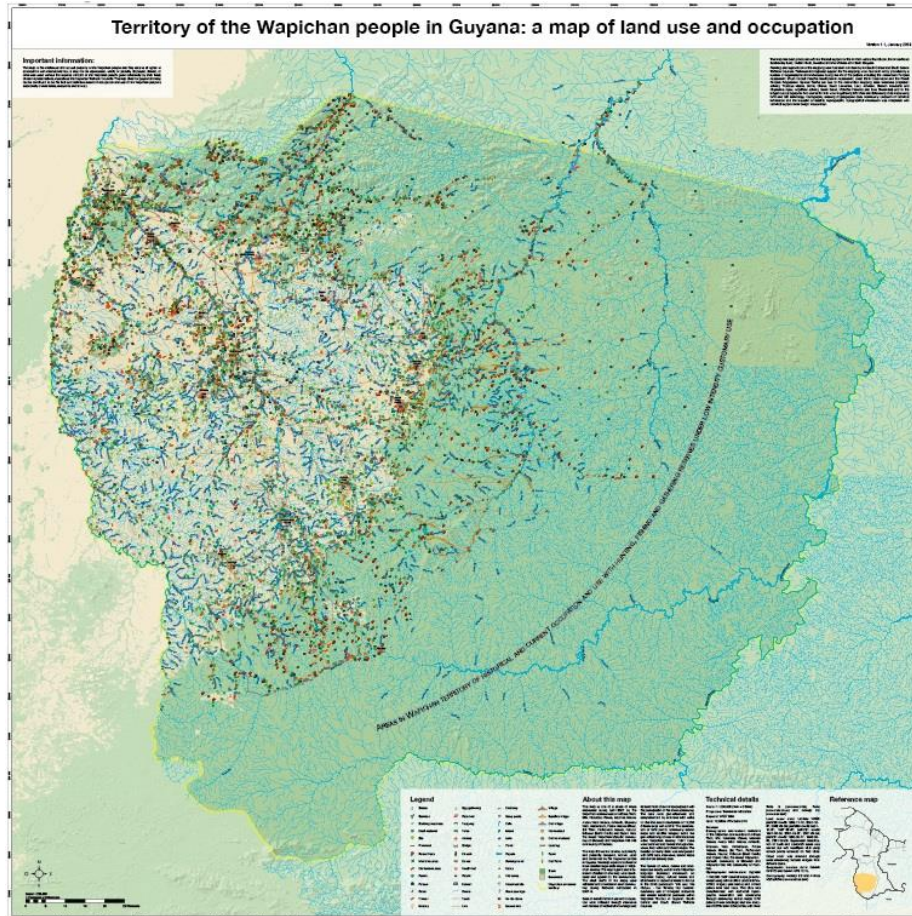
Matrix of factors affecting CBM

Factor	Country/Project
Internet Availability	
Power Availability	
Phone Signal	
General level of Literacy	
General level of Computer Literacy	
Access and Security	
Scope, size of area, and depth required	
Canopy cover, GPS signal?	
Available data sources? (e.g. Concessions)	
Baseline data set?	
Community mobilisation/ownership?	

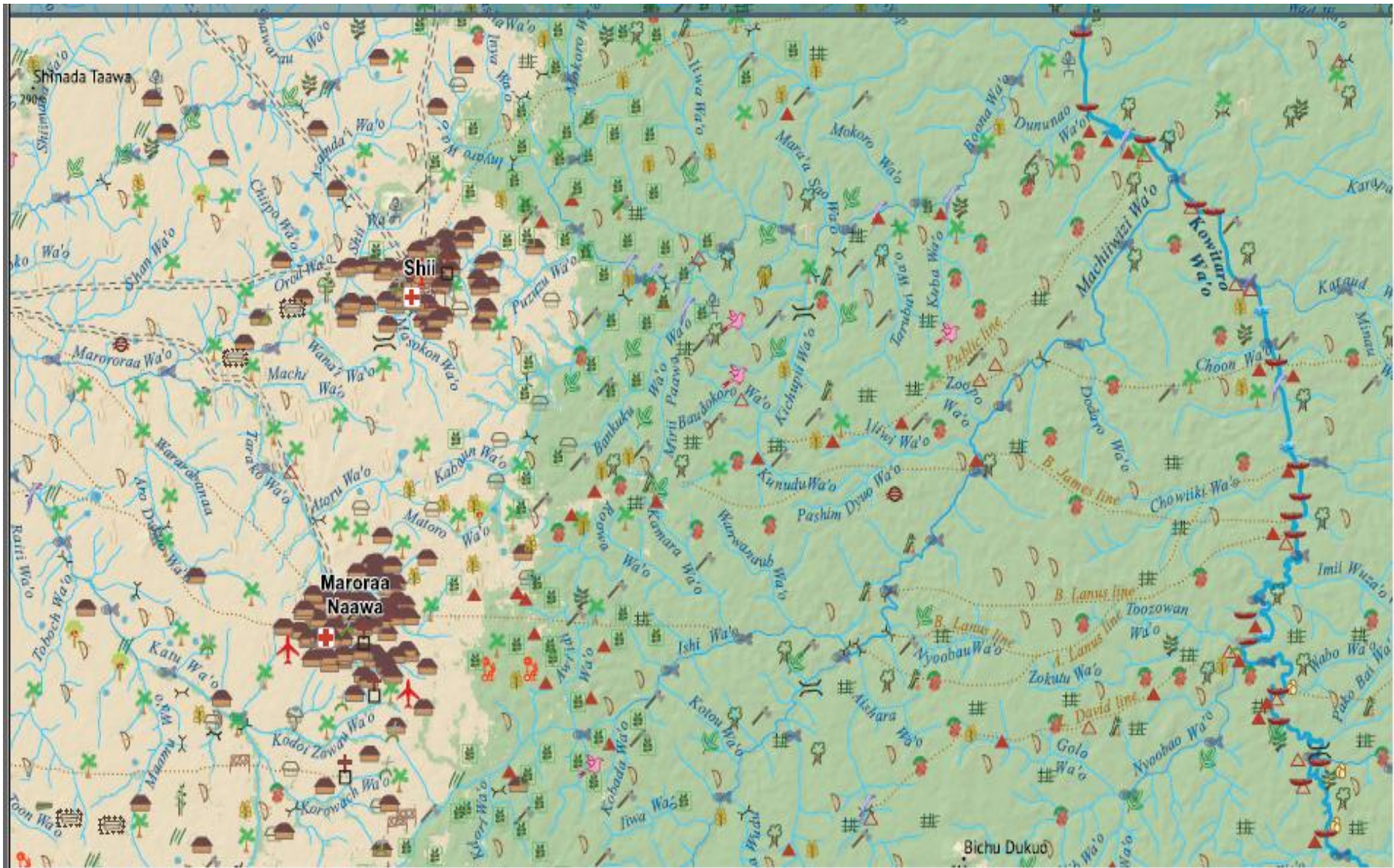
Wapichan People



Documenting customary use and law



Resource Use documentation





BAOKOPA'O WA DI'ITINPAN WADAUNIINAO ATI'O NII

Kaimanamana'o, wa zaamatapan, wa di'itapan na'apamnii wa sha'apatan Wapichan wiizi Guyana'ao raza

THINKING TOGETHER FOR THOSE COMING BEHIND US

An outline plan for the care of Wapichan territory in Guyana

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*A document of the
Indigenous peoples of the South Rupununi*











Community UAV



Piloting UAVs

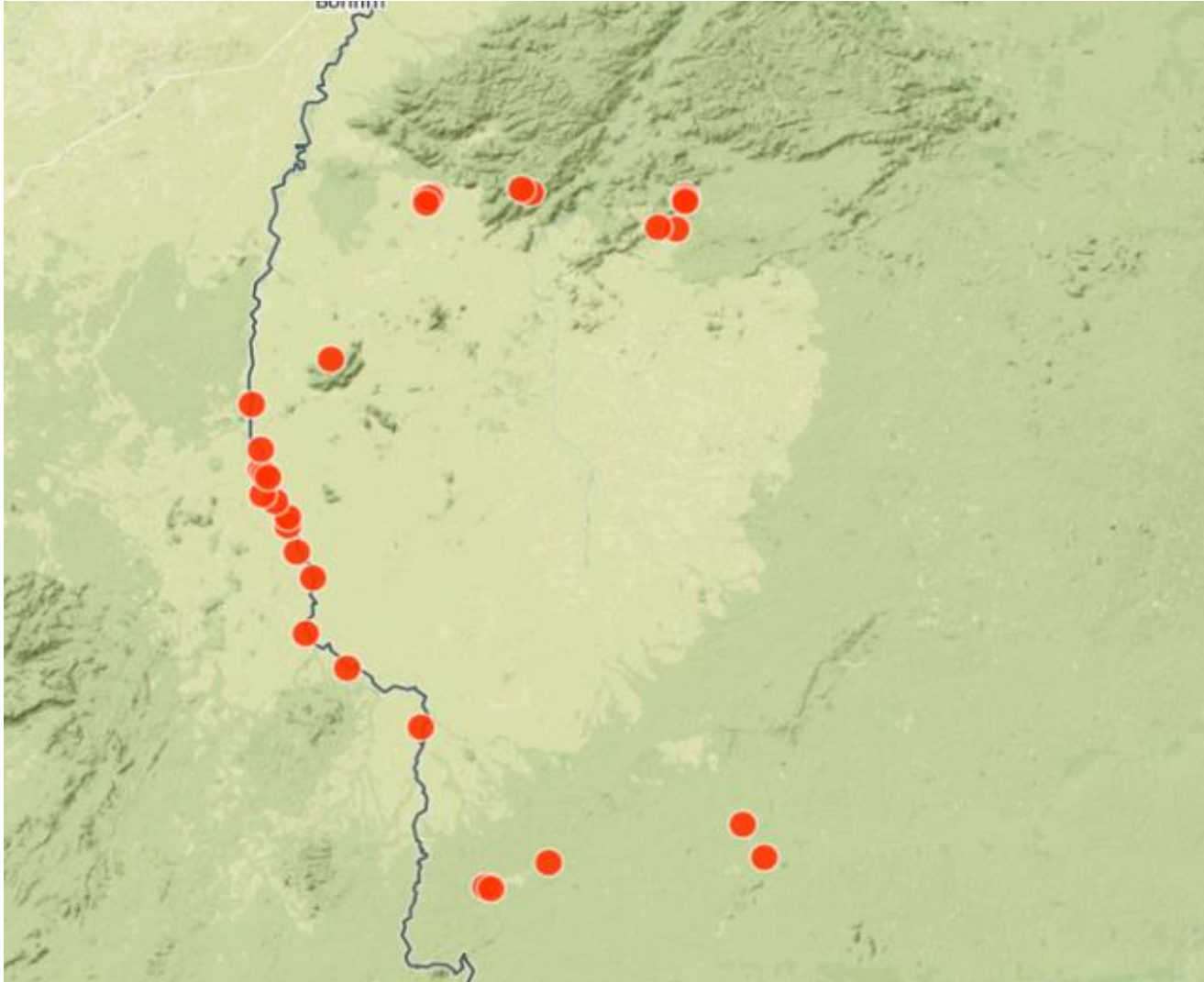


Monitoring mining and logging





Recent monitoring trips addressing encroachment by outsiders



Mobile drone control unit





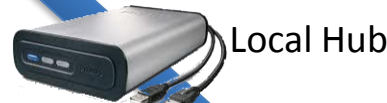
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**Wapichannao
Kazanatap nii Kanoko
(Wapichan Conserved Forest)**



Wapichan conserved forest

Thank you!



Group break out exercise

CBMIS needs analysis

- Q1: What could be the potential uses of CBMIS for your communities?
- Q2: If your community wanted to pursue CBMIS, what would be the main needs?