



Zaidi

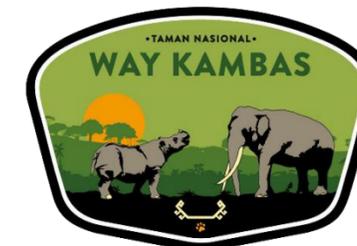


Dian R.



William M.

Giving Poachers an Alternative: Reducing the Harm of Snaring in Way Kambas National Park, Indonesia

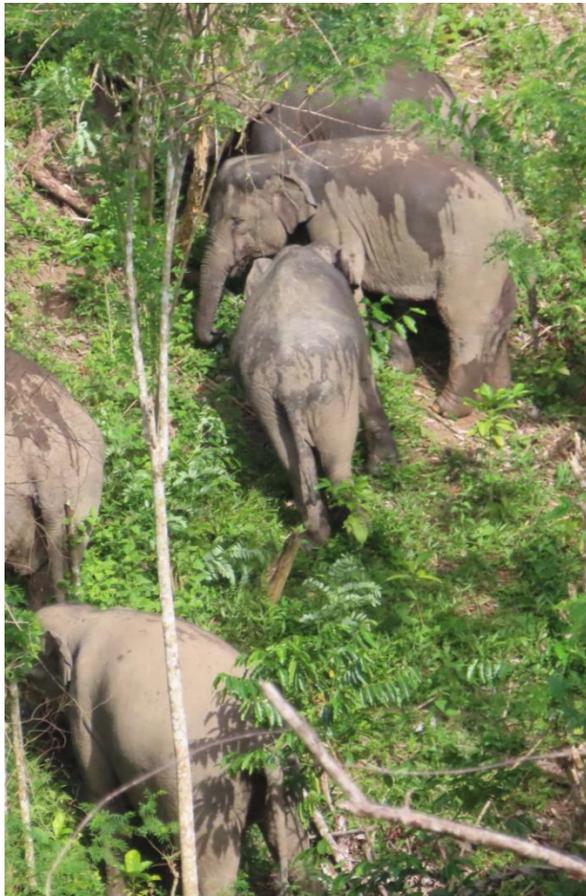


The indiscriminate nature of snaring



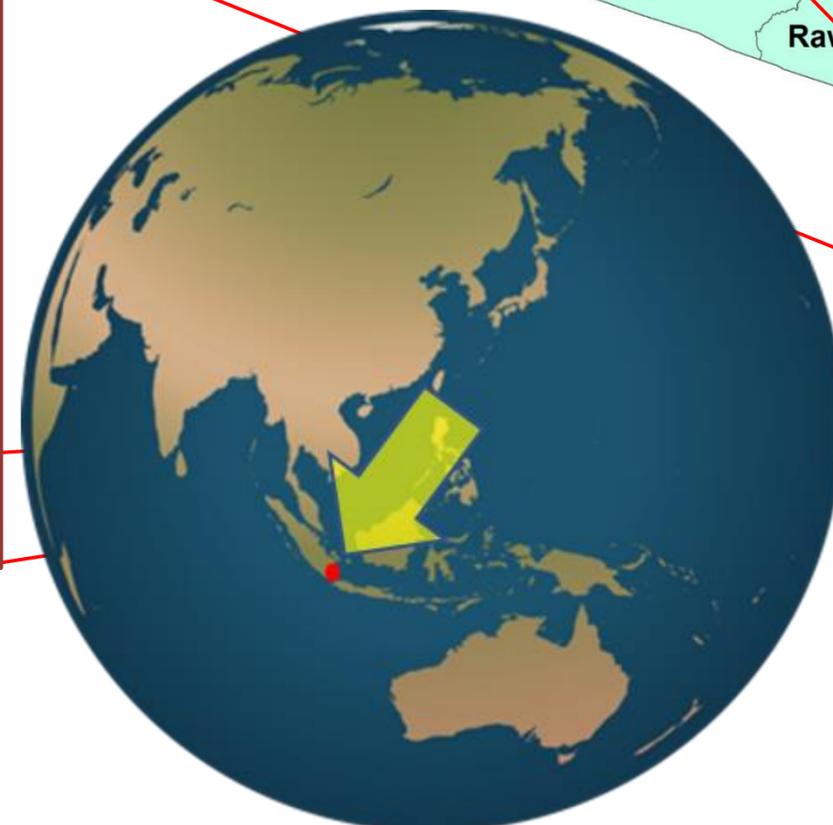
Way Kambas NP

Way Kambas National Park (TNWK) in Lampung, Sumatra, Indonesia, spans 1,300 square kilometers and boasts rich biodiversity, including elephants, tigers, rhinoceroses, and various species.





Way Kambas National Park
1,300 km²
11 sectors
(approximately @ 118 km²)

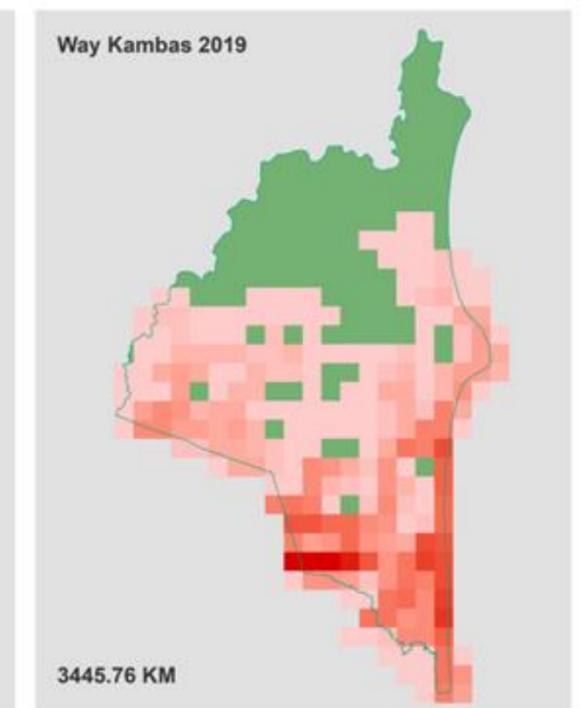
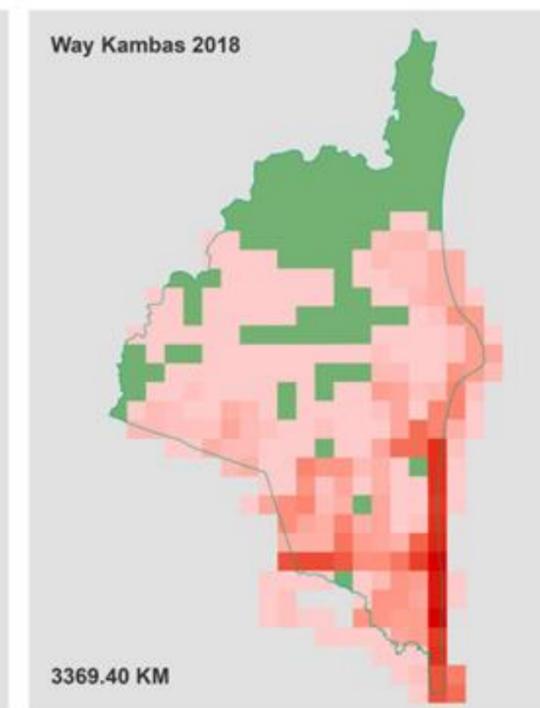
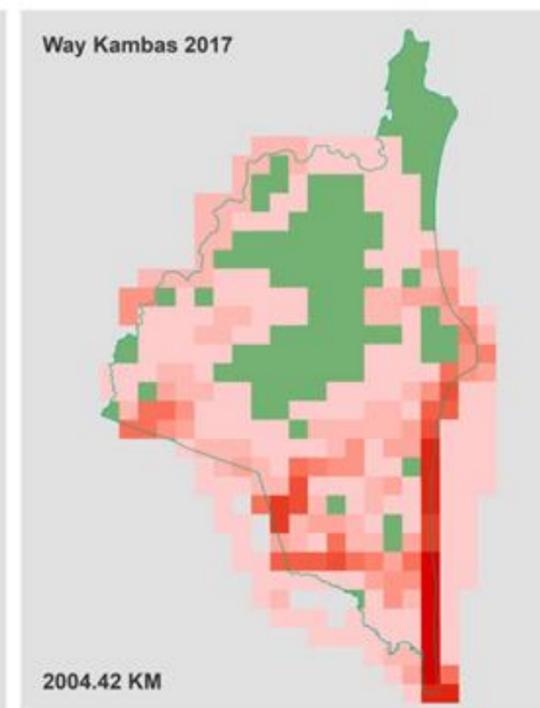
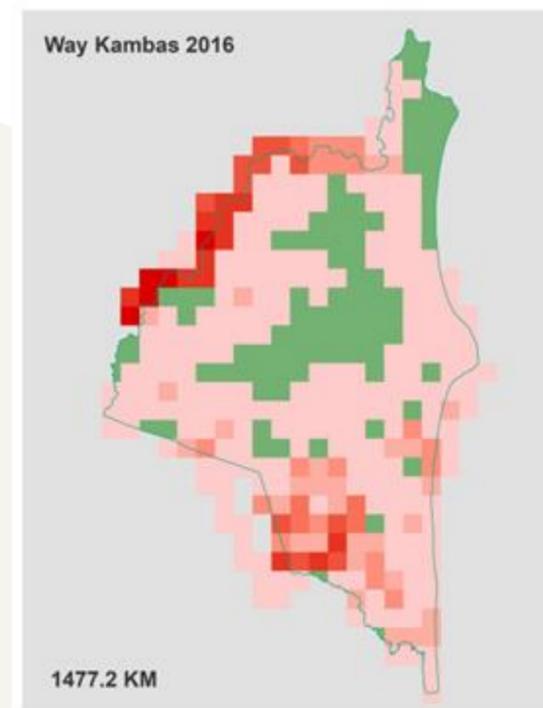


The Snaring Crisis

Snaring presents a significant and indiscriminate threat to wildlife, causing injury or death to any animal ensnared. Additionally, it has cascading impacts, as the hunting of ungulate species like wild boar and deer reduces prey availability for predators like the Sumatran tiger.



2500-3000km patrolled/year



Problem Oriented wildlife Protection

Why POWP?

1. Focused and structured
 - a. In-depth analysis to pinpoint the root issues
 - b. Structured thought process based on the SARA concept
2. Multi-stakeholder collaboration
 - a. Issue detection
 - b. Problem-solving
3. Variety of interventions CPTED (Crime Prevention Through Environmental Design)
 - a. Law enforcement against key offenders
 - b. Policy development

(POwP)



Implementation of POWP in WKNP in response to snaring crisis...



1st on-site training on problem solving

Jan 2020

Dec 2020

Oct 2023

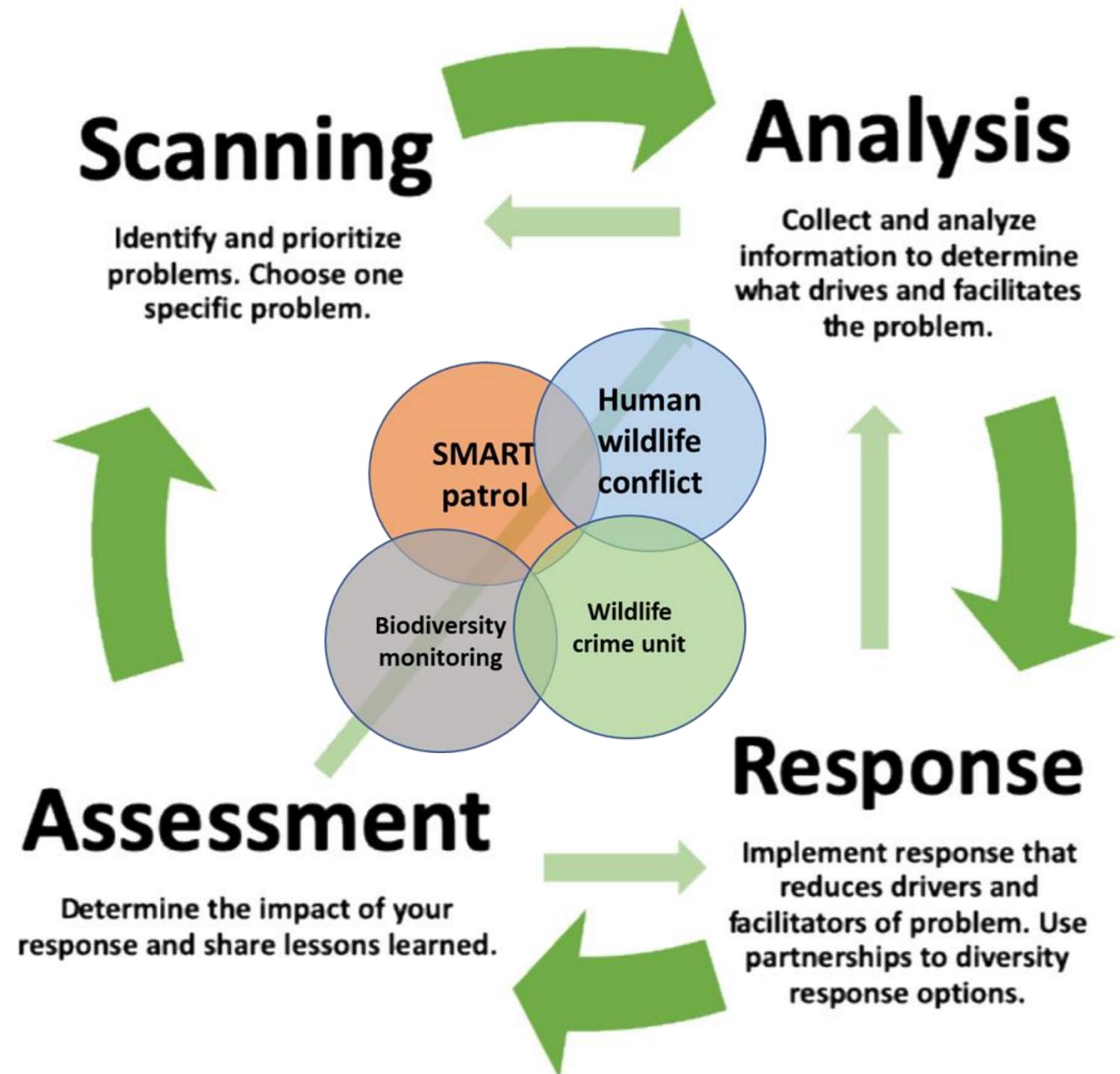


Learning continues....

Integrated Prevention Model (IPM)

“An approach to understanding the background of illegal activities involves using all available data to develop and implement preventive strategies that can help avoid such undesired actions.”

Structured Thought Process (SARA)



SCANNING

C **COMMUNITY** : Wildlife and PA managers

H **HARM** : Resulting in death, stress, and injuries to wildlife

E **EXPECTATION** : The PA management hopes that this issue can be addressed promptly.

E **EVENT** : Snaring occurs within the TNWK area.

R **RECURRING** : Snaring occurs continuously.

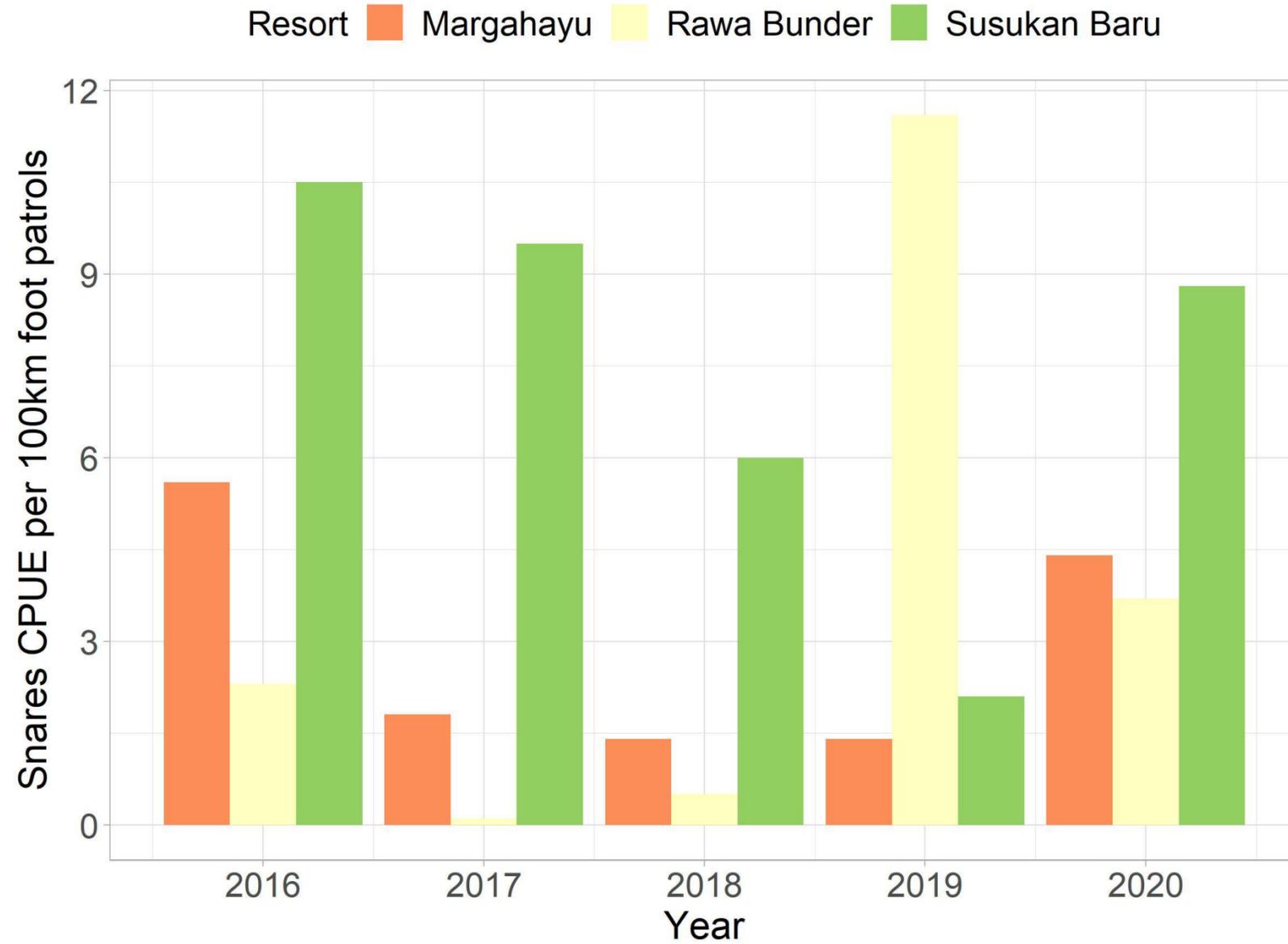
S **SIMILARITY** : Illegal hunting activities using snares.

Problem statement

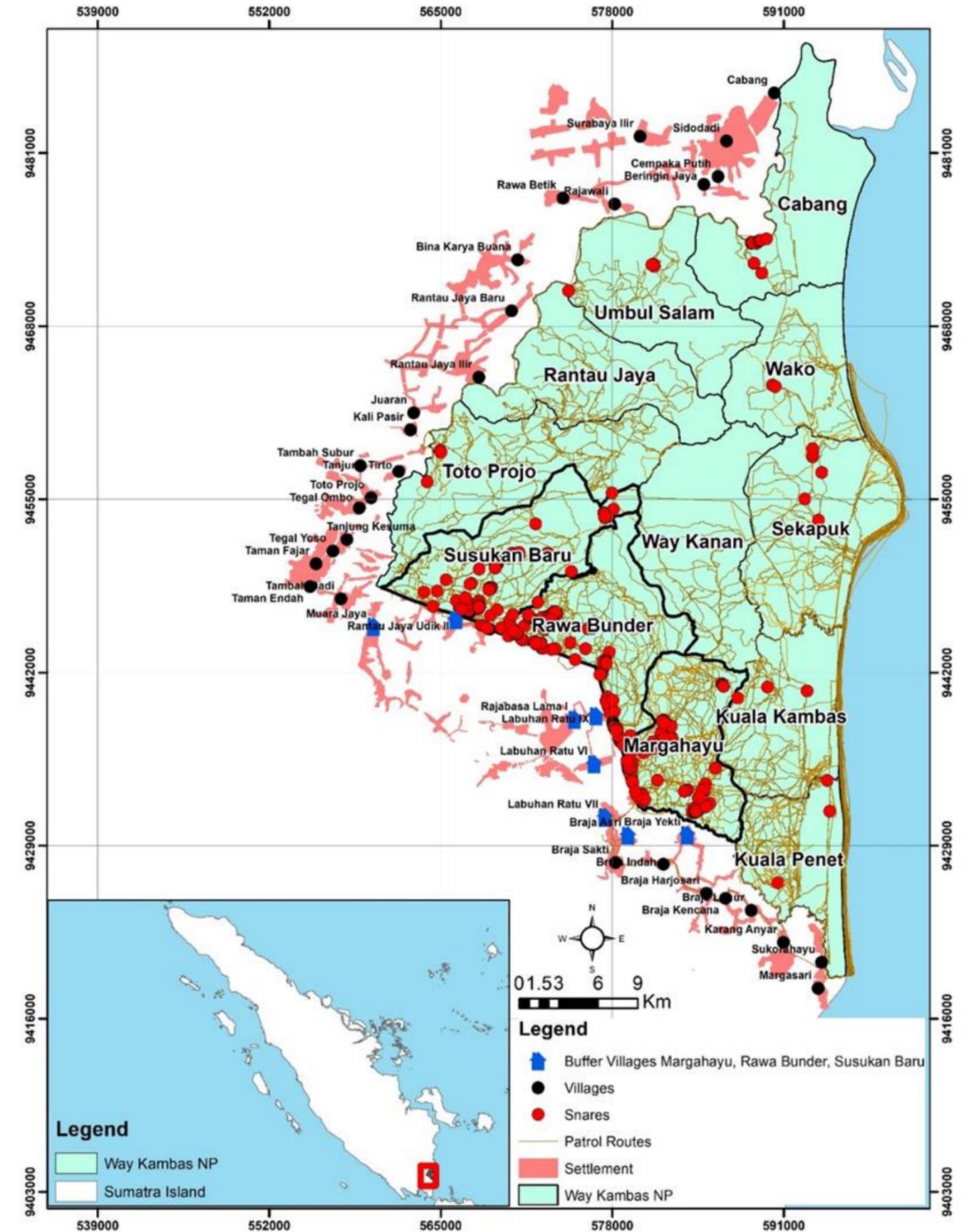
“Hunting mammals with snares for local consumption in Margahayu area of Way Kambas National Park.”

SCANNING

Defining and Measuring the Problem



CPUE = Catch per Unit Effort



ANALYSIS

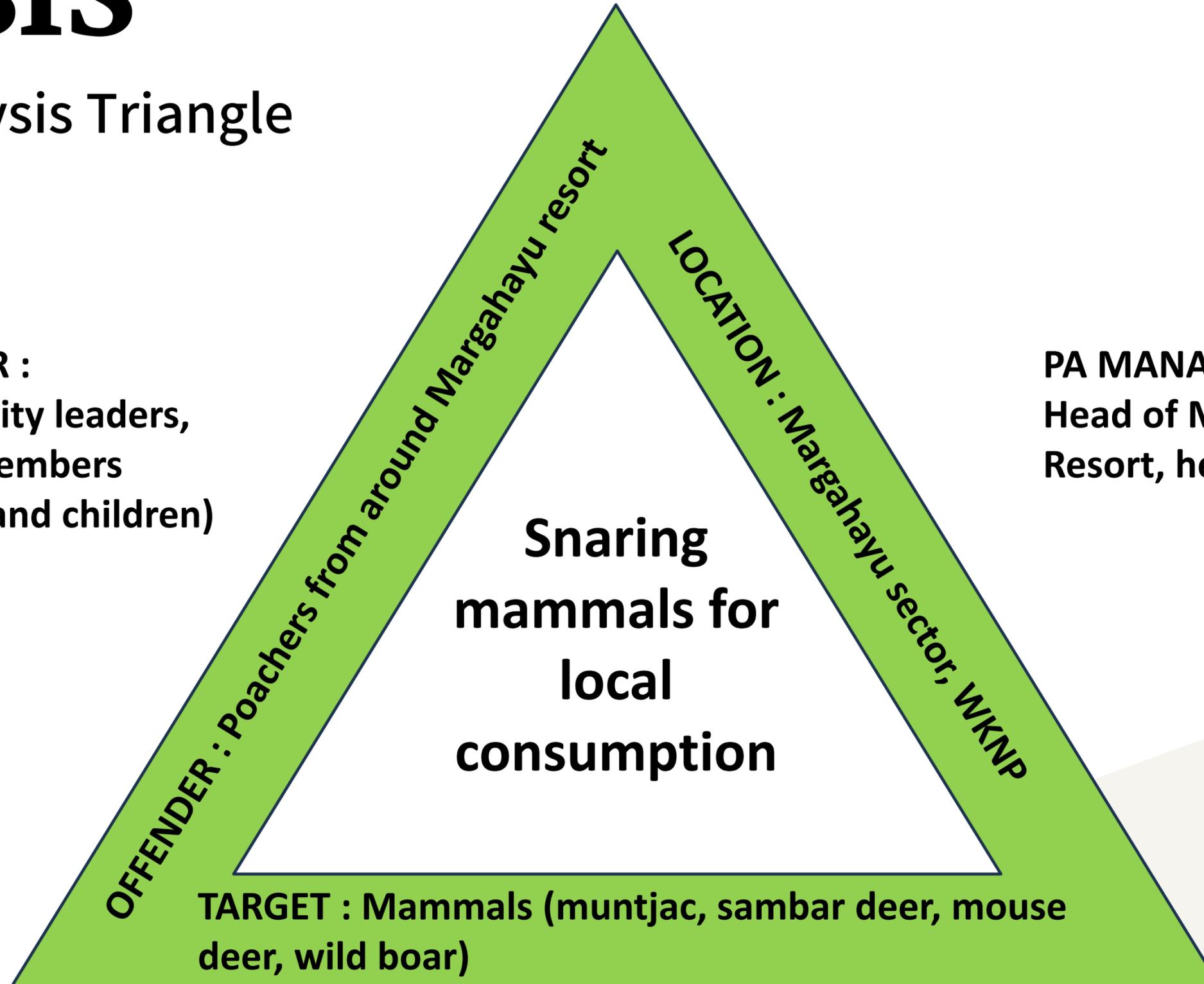
The Problem Analysis Triangle

HANDLER :

Community leaders,
family members
(spouse and children)

PA MANAGER :

Head of Margahayu
Resort, head of WKNP



GUARDS : Rangers, SMART-RBM patrol teams

ANALYSIS

Gathering information on motivated offenders

Patrol team found IN-02's phone in the forest



Approach head of village to meet with IN-02, IN-03, IN-08



Discussion with IN-02, IN-03, IN-08



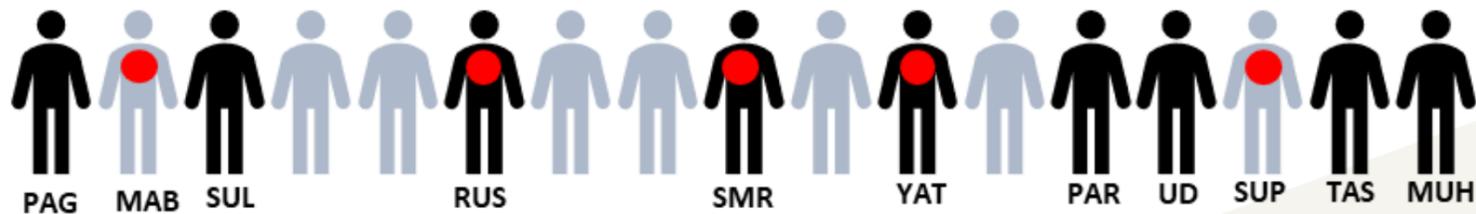
3 out of 9 initiators and 2 out of 8 followers were selected for intervention

Analyze the offenders' data

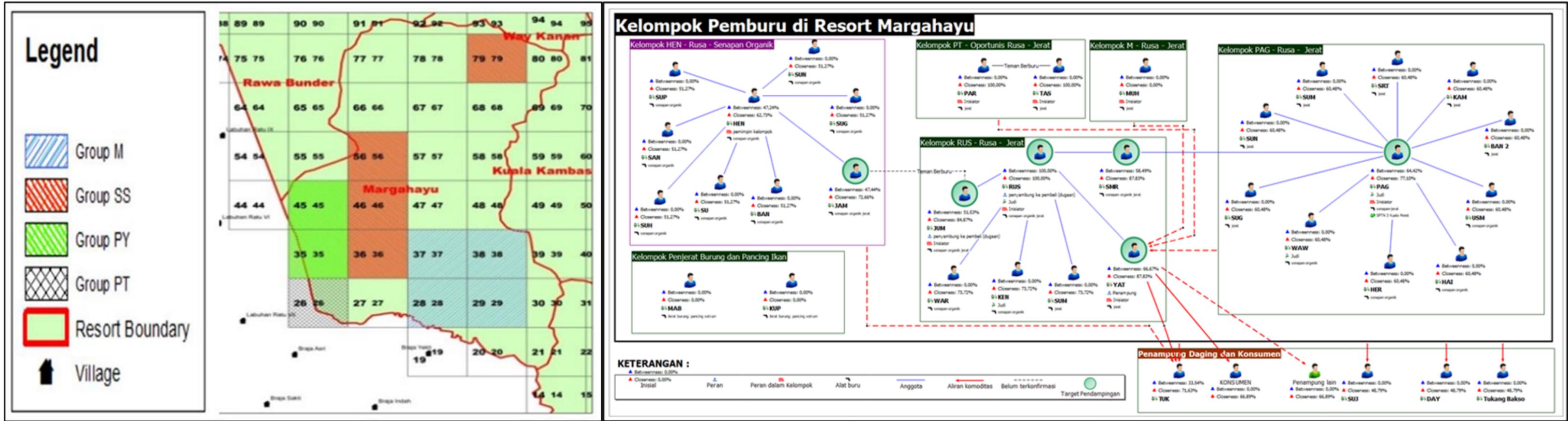
Collecting information on poachers in Margahayu sector (17 offenders)

 Intervened initiators

 Intervened followers

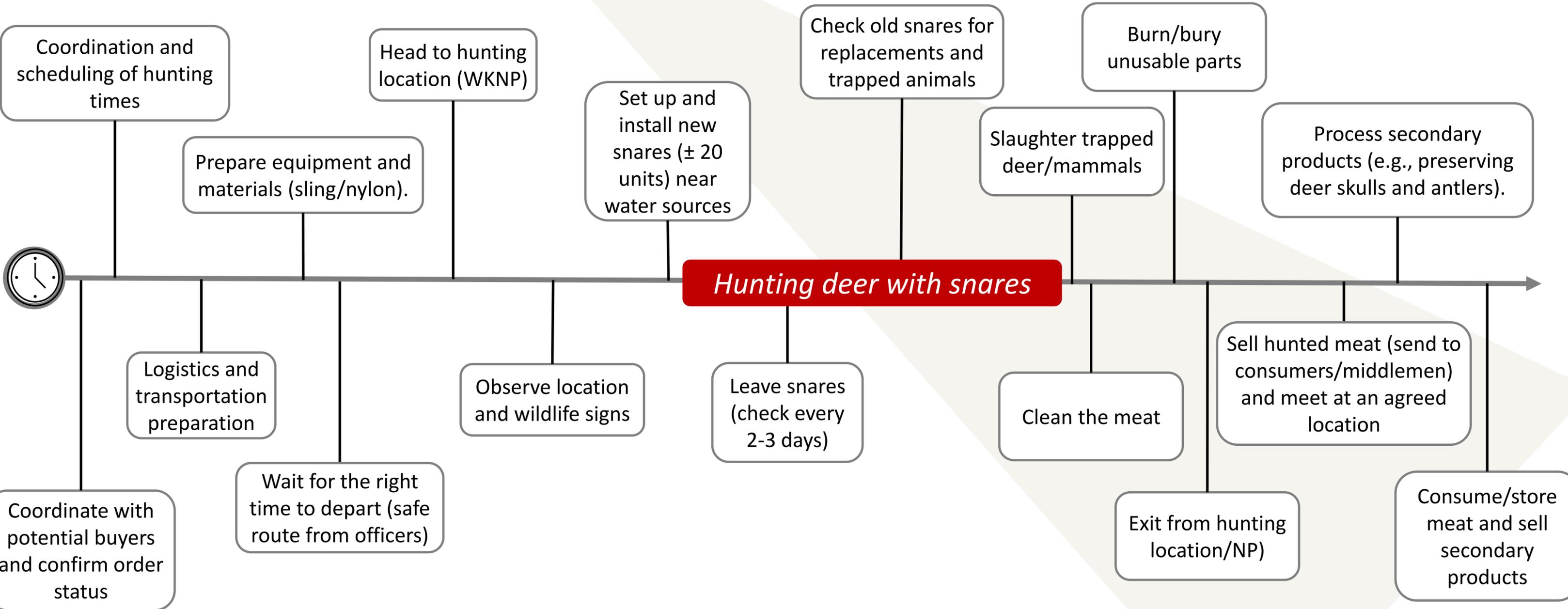


Poacher groups



1. These 17 violators are roughly divided into four groups.
2. There is a territorial division in Margahayu area for snare placement by these four groups.
3. Each group has unique way in setting snares.

Modus operandi (crime script)



Preparation

Pre-activity

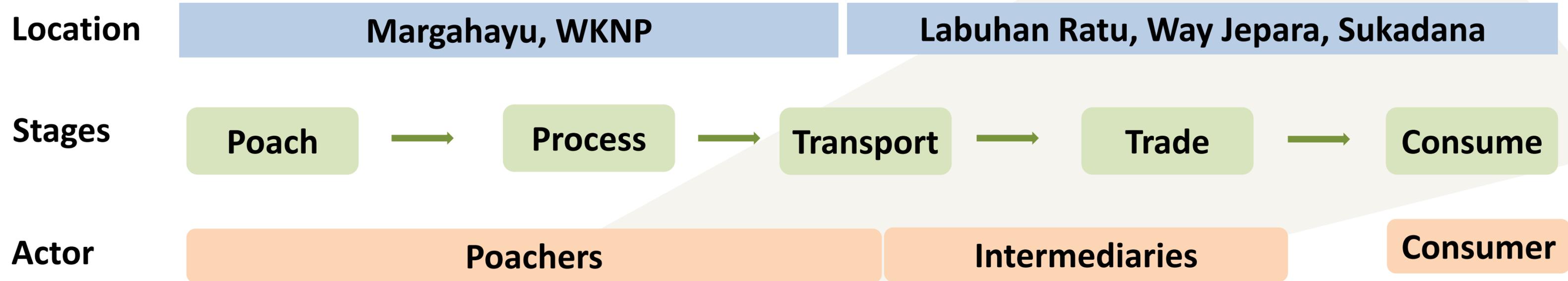
Activity

Aftermath

Discarded part of the hunted deer



Crime continuum



Role

HOW DOES THE PRODUCT GET FROM HARVESTER TO CONSUMER ?

Poachers kill wildlife using snares, mostly they target deer, sambar deer and napu. Obtain wildmeat, leave NP.



Collect the wildmeat. Intermediary can be poacher's wife or middleman.

- Poacher's wife: sell it door to door, small scale.
- Middleman : sell it



Local people consumed wildmeat



Building Trust with Offenders

"Building trust is vital in our efforts to transition economically disadvantaged offenders away from poaching and poverty."

Key point of regular visits (data gathering):

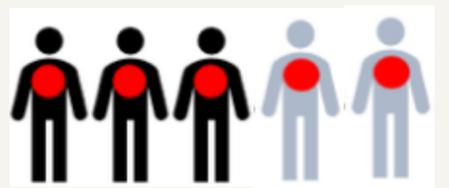
1. Ensuring no risk is posed to them,
2. Understanding their motives, modus operandi, and networks,
3. Assessing their willingness to transition from poaching,
4. Exploring opportunities to provide assistance.



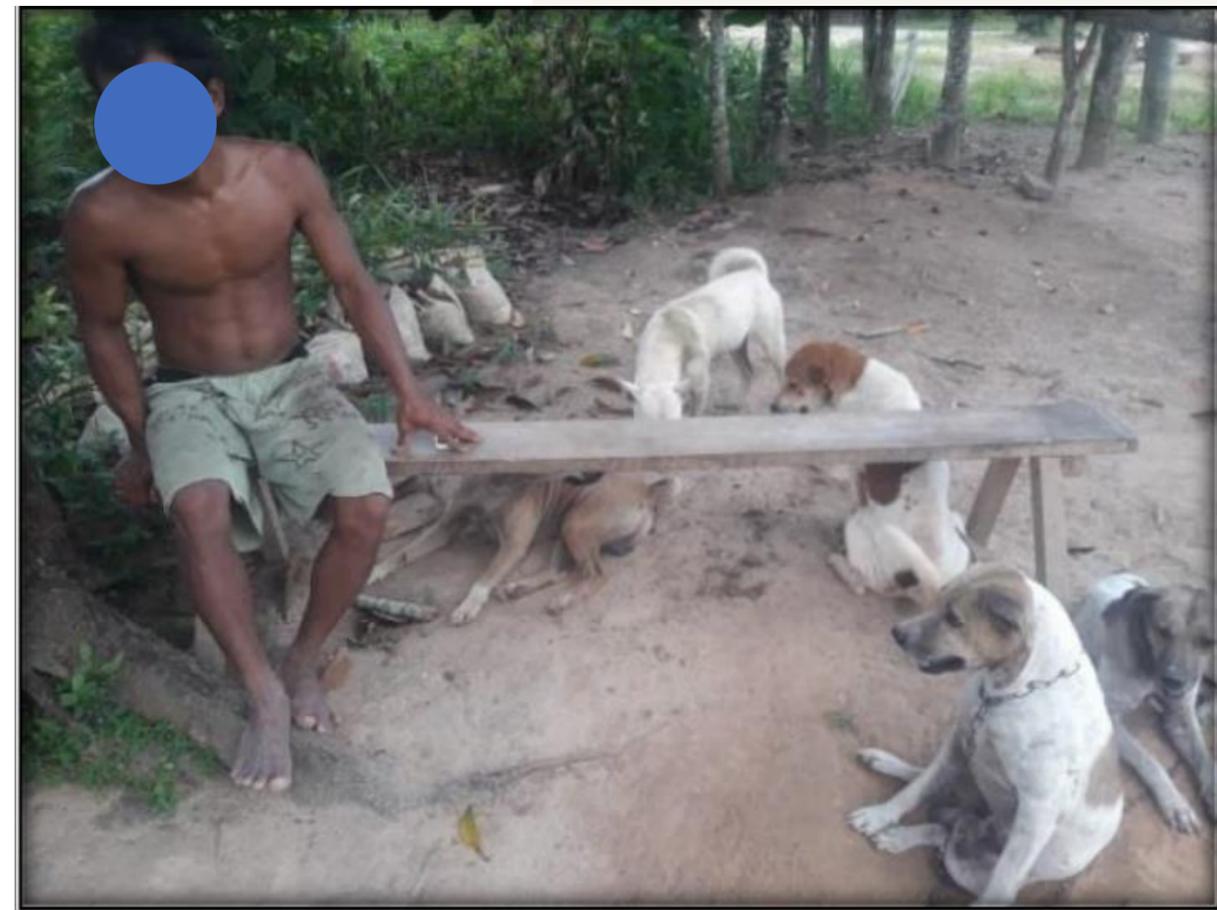
Interventions

Our team frequently visits identified offenders to establish trust

Motivation of poachers

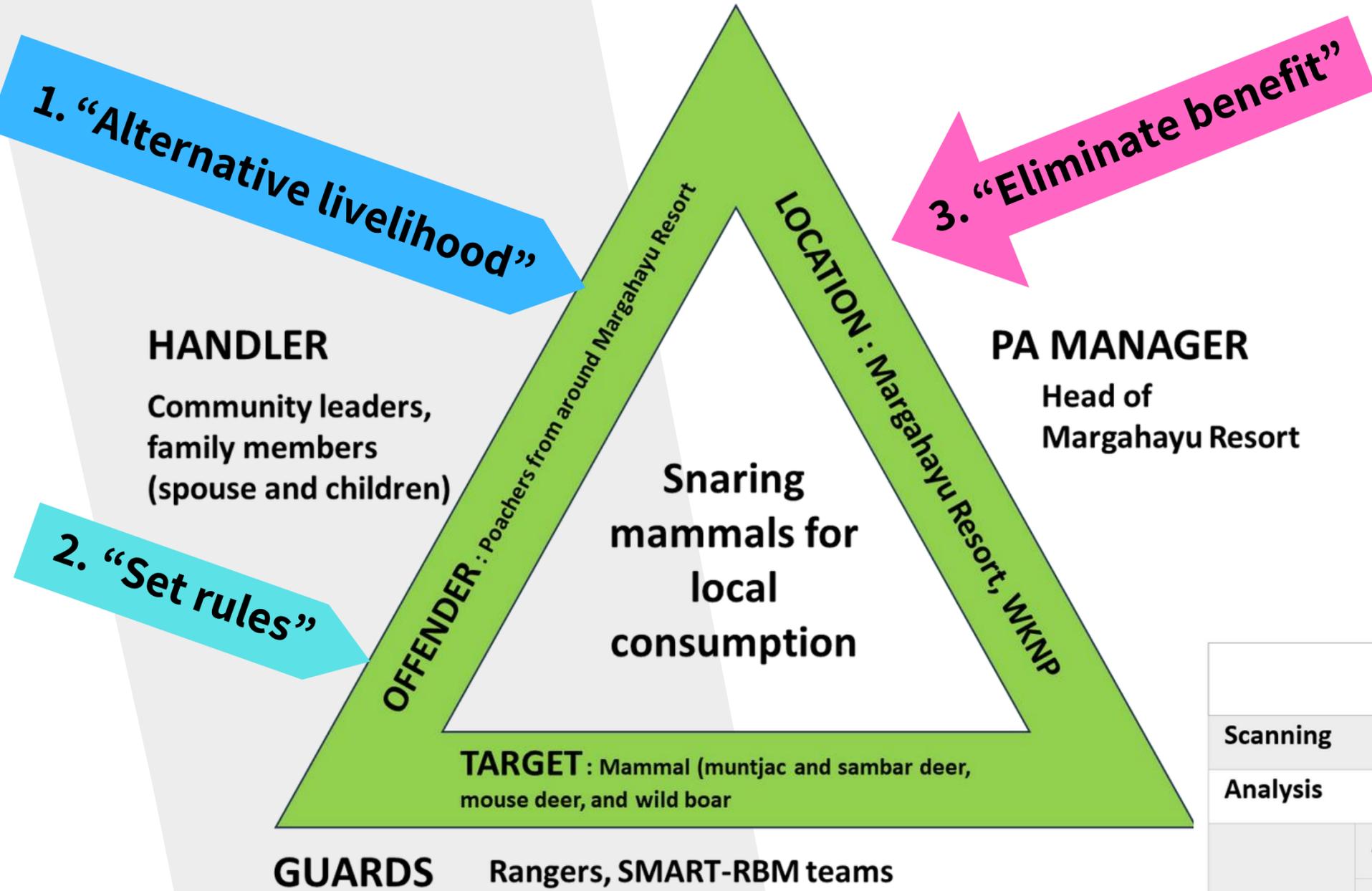


The economic factors
motivating snaring activities



The living conditions of one of the poachers

RESPONSE



SARA process and Intervention Implementation		Month Commenced
Scanning		May 2020
Analysis		May 2020
Response	<i>Eliminate Benefits</i>	December 2020
	<i>Providing Alternatives</i>	December 2020
	<i>Set Rules</i>	May 2021
Assessment		September 2022

INTERVENTION

for these 5 hunters

- 50 ducklings/offender
- 75 days caring before “harvest”
- Total investment of USD \$318.60

1. The 'Alternative livelihood' program

The providing alternatives intervention targeted five key hunters (29% of the total hunters) to help them obtain a legal source of income.



Why small duck farming ?

1. Priority hunters sought a reliable legal income.
2. Local availability and easy sale of ducklings.
3. Intensive supervision needed for ducklings, limiting hunting.
4. Time spent with ducklings encouraged exploring alternative livelihoods.

Indicator map

Established from the analysis

Hunters would stop hunting if alternative sources of income were available

Intervention

Offer hunters duck farming for alternative income

Indicator (effort)

1. % of hunters engage in duck farming.
2. # ducks provided to each hunter.
3. % of ducklings sold in the market.

How does the intervention make hunters stop ?

Duck farming reduces hunters' leisure time

Hunters invest their time in caring for ducks

Leisure time is used to consider alternative income options

The presence of other legal alternative income sources, such as cattle farming, vegetable farming, labor, and fish farming

The absence of primary hunters results in a decrease in assistant hunters for hunting

A decrease in the hunting activity of assistant hunters

The potential emergence of new hunters in previously intervened hunting locations

The number and names of new hunters at previously intervened hunting locations

Conservation outcome

A decrease in the snaring of mammals in Margahayu

Indicator (Outcome)

1. Snares per kilometer patrolled (CPUE) in the area decreased."
2. Increased sightings of wildlife (CPUE)."
3. Reports of declining quantities of wild animal meat in the market

INTERVENTION

for hunter communities

2. The “Set Rules” intervention

The set rules intervention was used to raise awareness amongst hunters and community members about the rules for entering and gathering resources from the national park

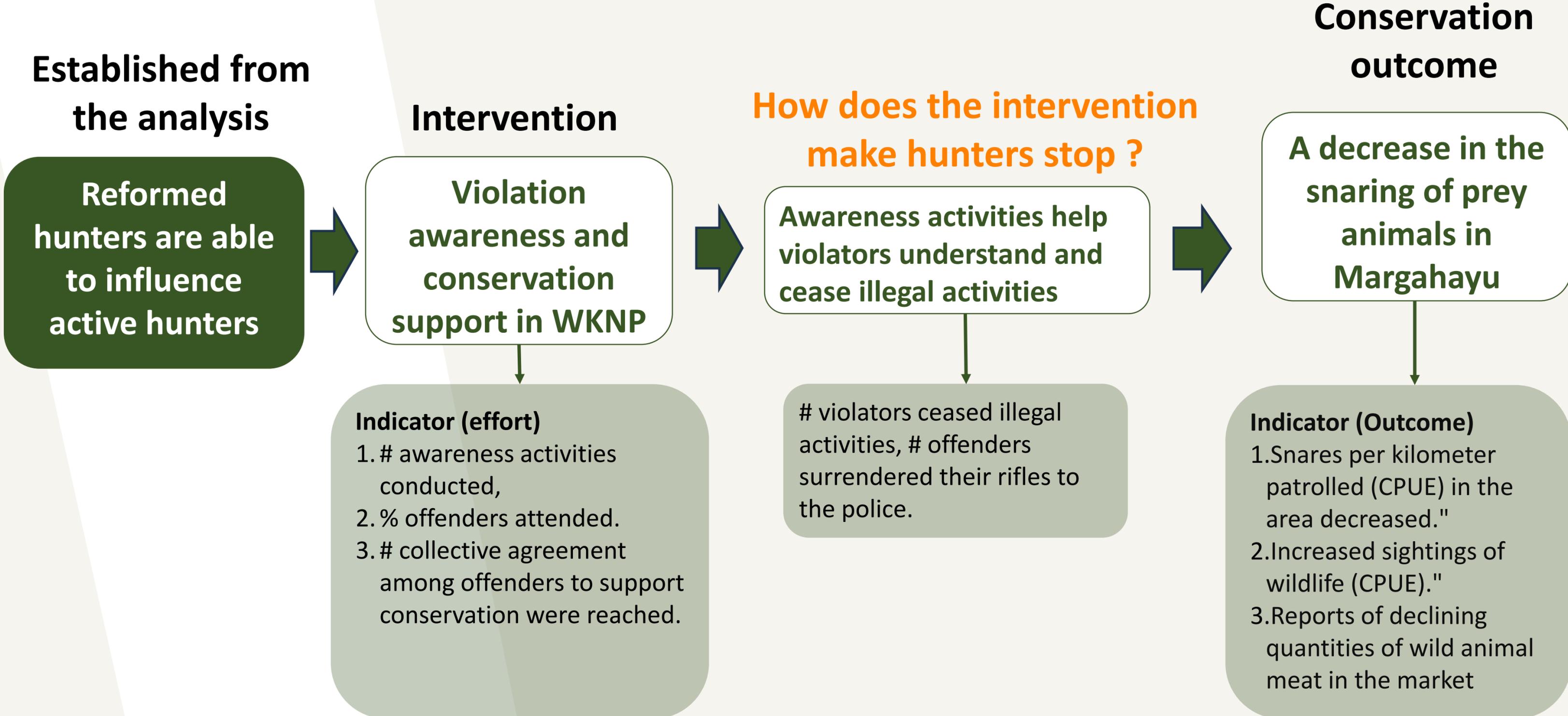


Two socialization & awareness events

- 6 May 2021: 25 suspect offenders invited (17 attended; not strictly those operating in the Margahayu resort), 11 offenders commit to not conduct illegal activities.
- 14 October 2021: 29 suspect offenders invited (20 attended).



Indicator map

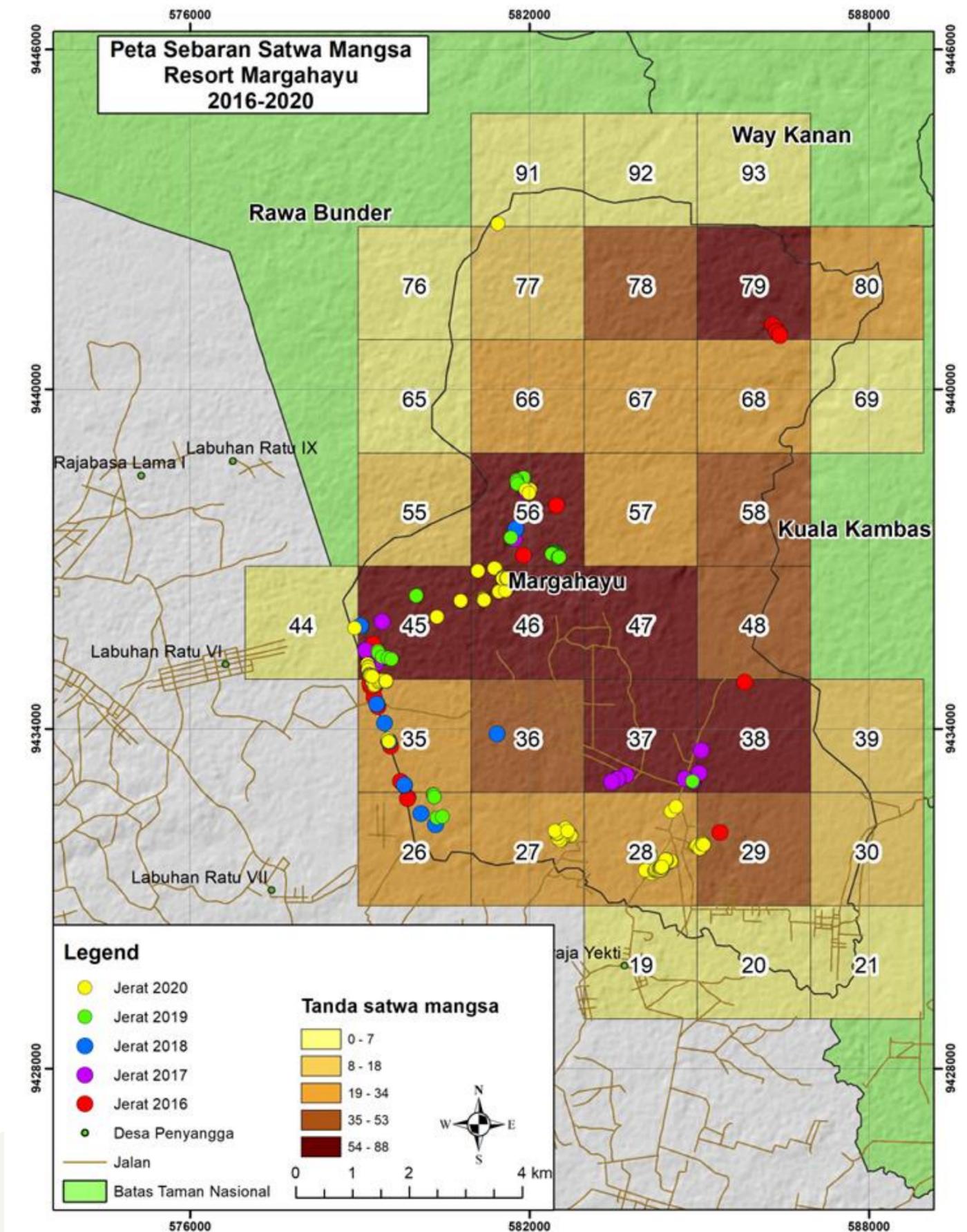


INTERVENTION

for hunting hotspots

3. The “eliminate benefit” intervention

Deploying patrols to target high-risk snaring areas and remove snares to prevent harm to wildlife



Indicator map

Established from the analysis

Snares are concentrated in specific locations



Intervention

Assign patrols to high-snaring areas to locate and remove snares

Indicator (effort)
1. Number of grids patrolled in Margahayu Resort has increased
2. Number of patrols per kilometer each month is higher than before.

How does the intervention make hunters stop ?

Snaring becomes unprofitable as traps are consistently destroyed before catching animals

More active snares in priority grids were destroyed

Hunters need more funds for new snares, increasing logistical costs

More hunters are quitting as it's no longer profitable.



Conservation outcome

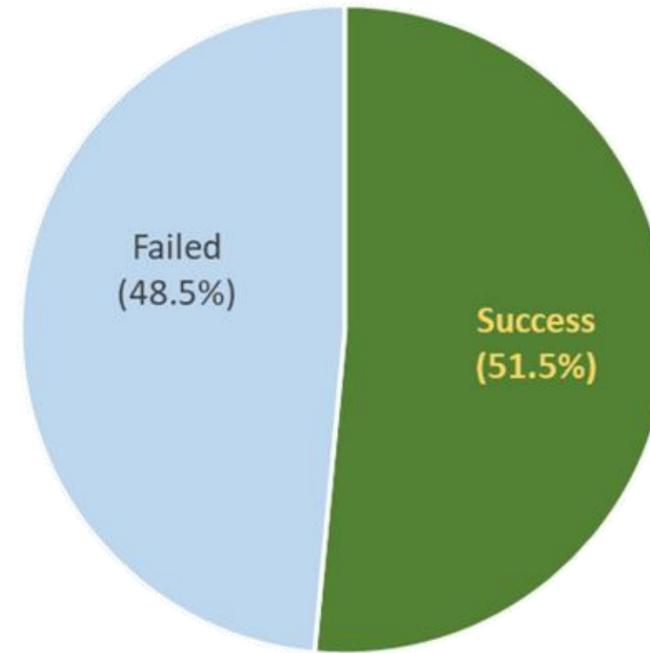
A decrease in the snaring of mammals in Margahayu



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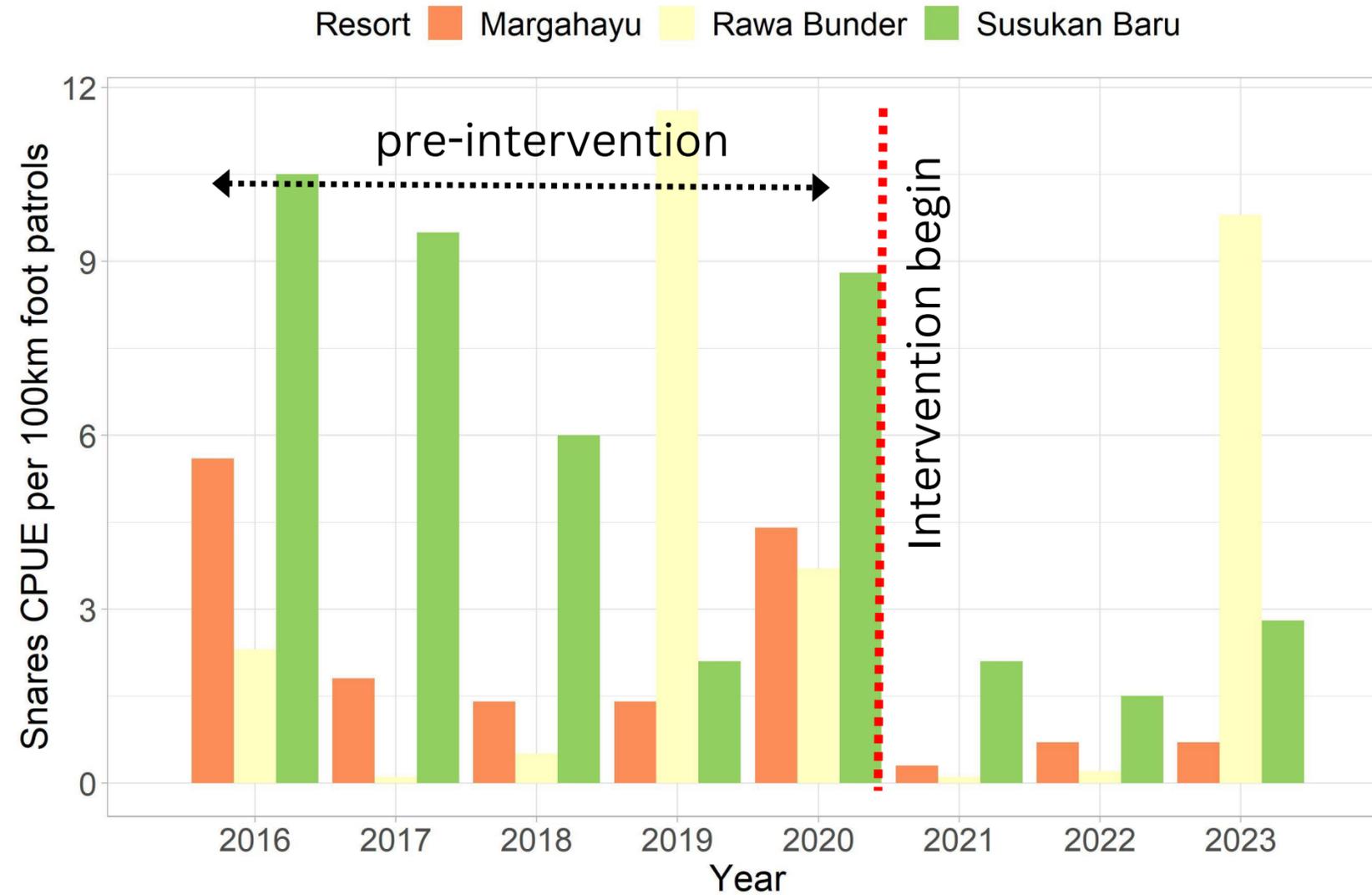
ASSESSMENT

Impact of interventions to the reformed hunters



ASSESSMENT

Number of snares removed before and after the intervention



Margahayu

Rawa Bunder

Susukan Baru

2020

2020

2020

93%

97%

76%

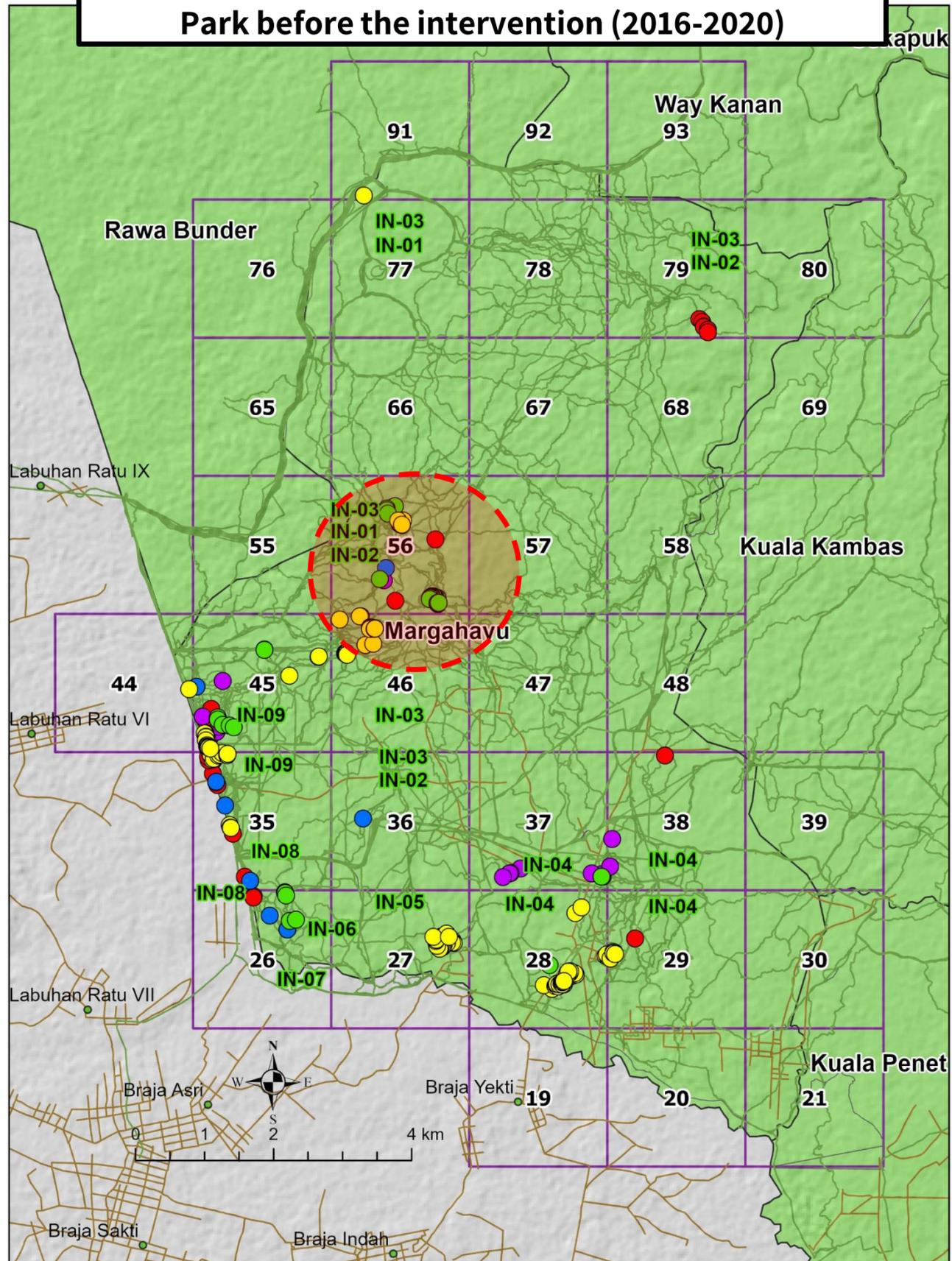
2021

2021

2021

Snares removed by patrols in Way Kambas National Park, 2016-2023 (Sept)

Snares removed by patrols in Way Kambas National Park before the intervention (2016-2020)

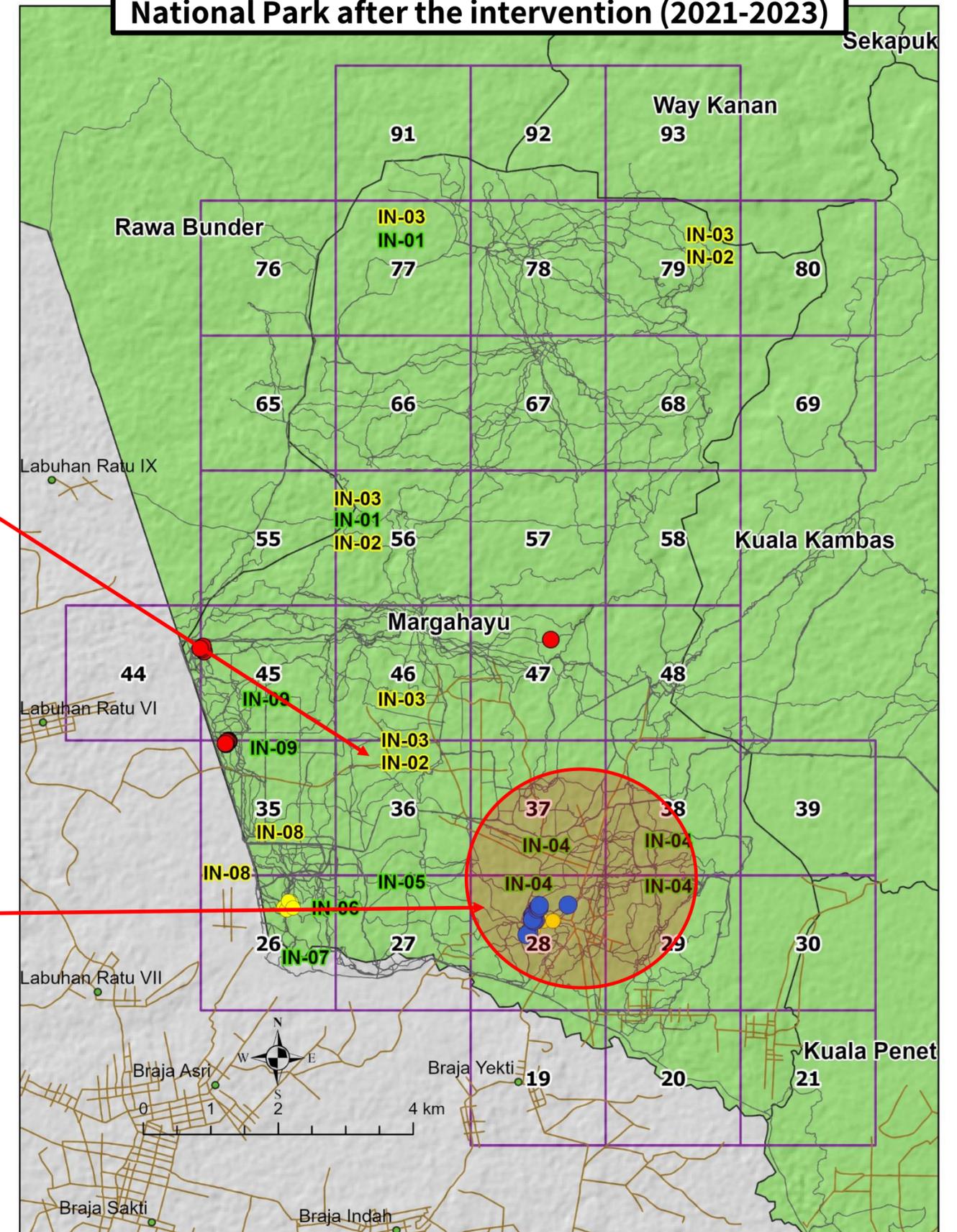


Intervened hunters



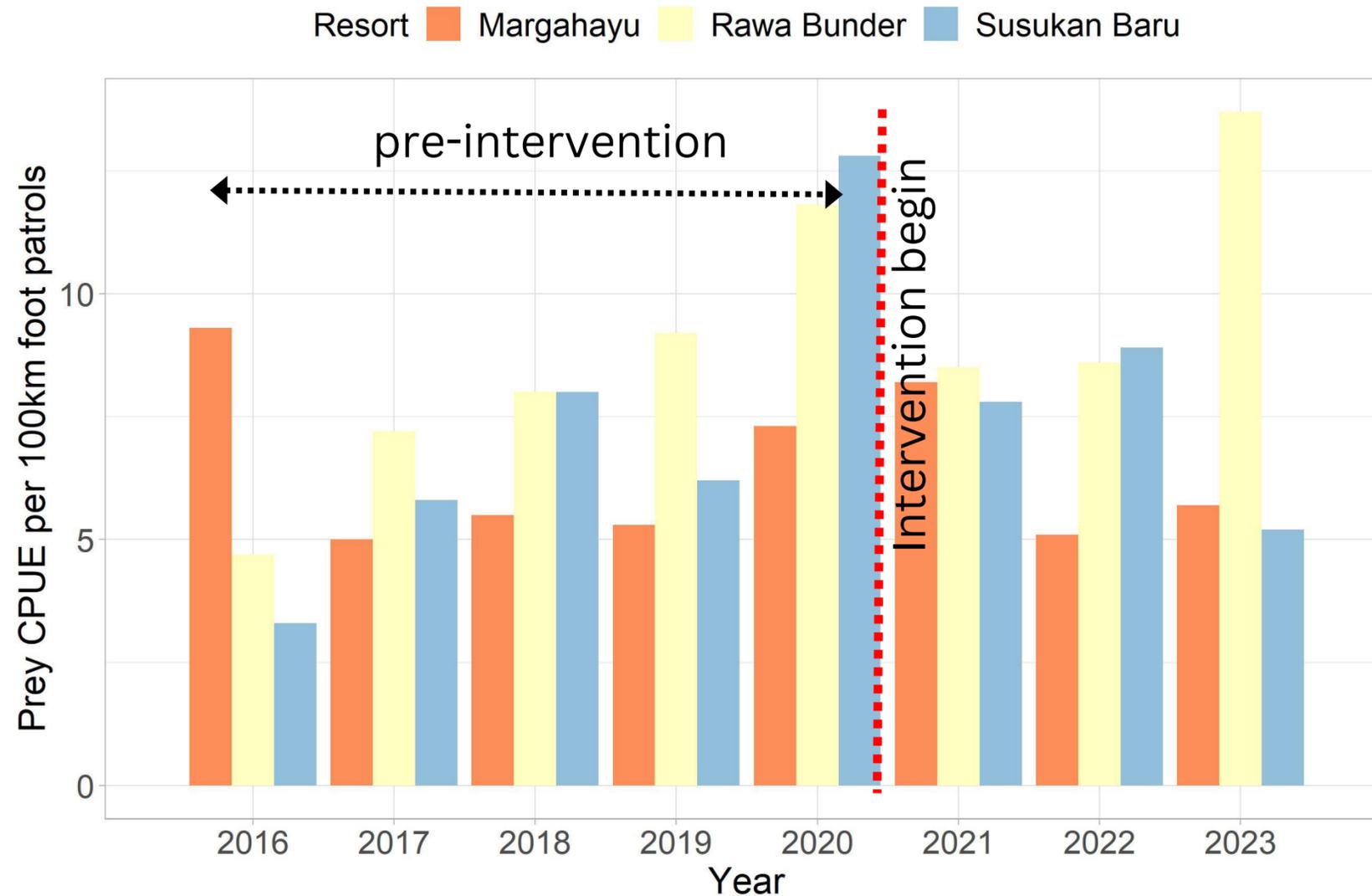
Hunters who have not been intervened

Snares removed by patrols in Way Kambas National Park after the intervention (2021-2023)

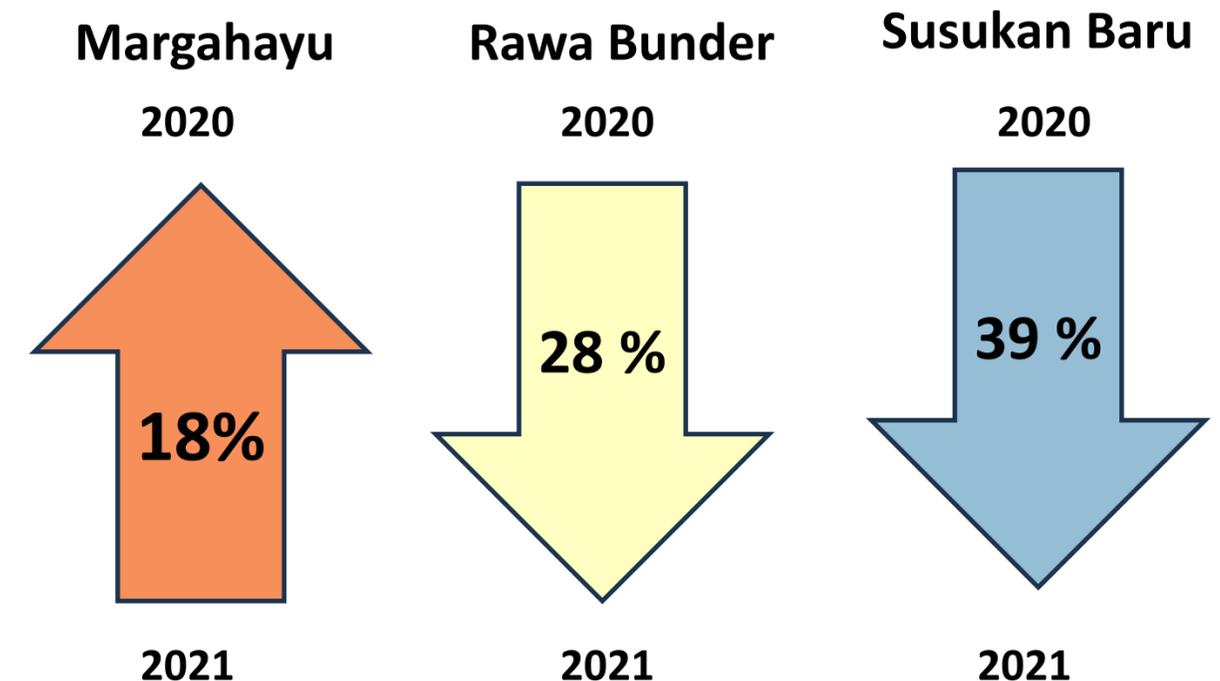


ASSESSMENT

Wild prey detection before and after the intervention

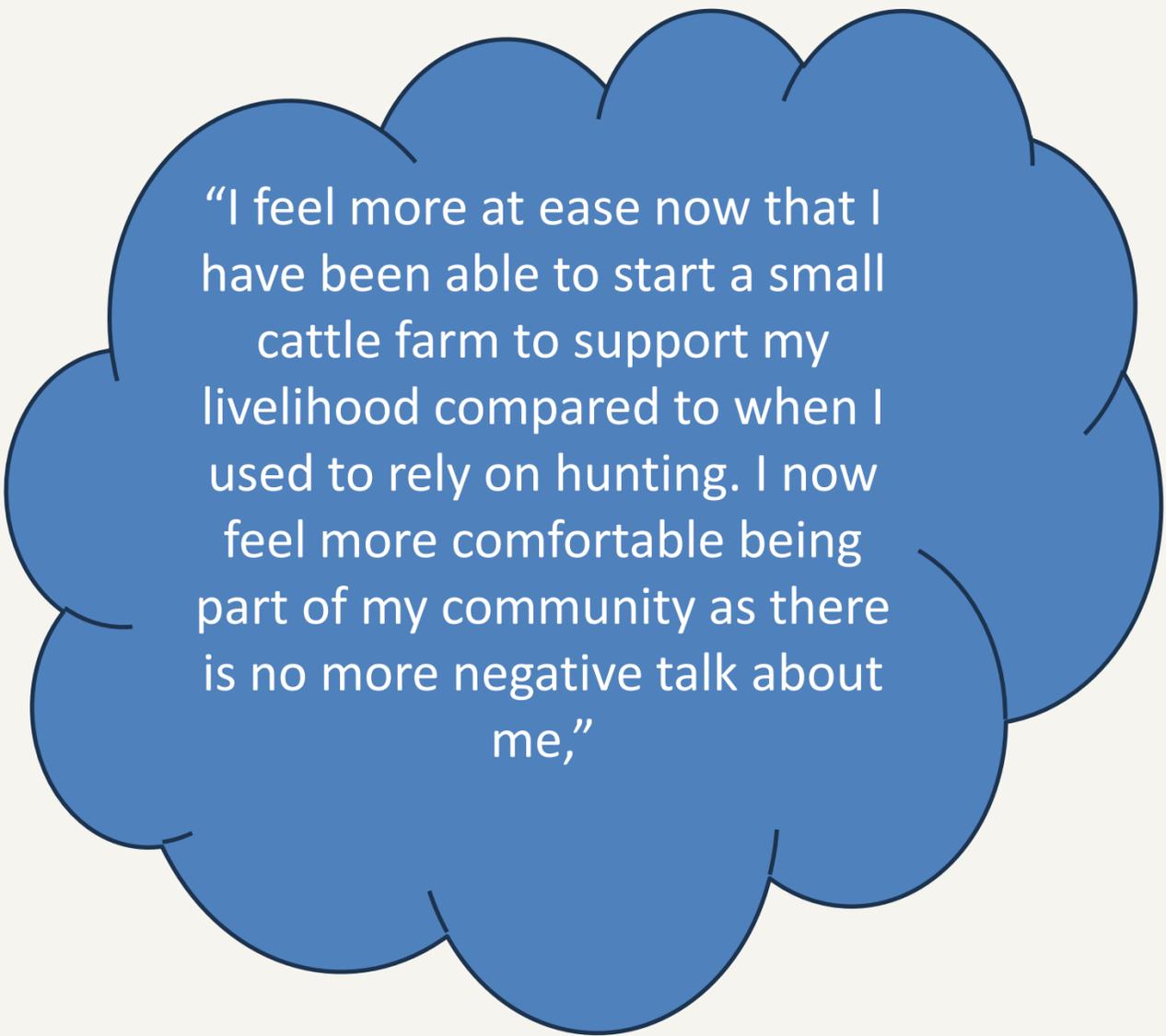


Wild prey detected by patrols in Way Kambas National Park, 2016-2023 (Sept)



Lessons learned

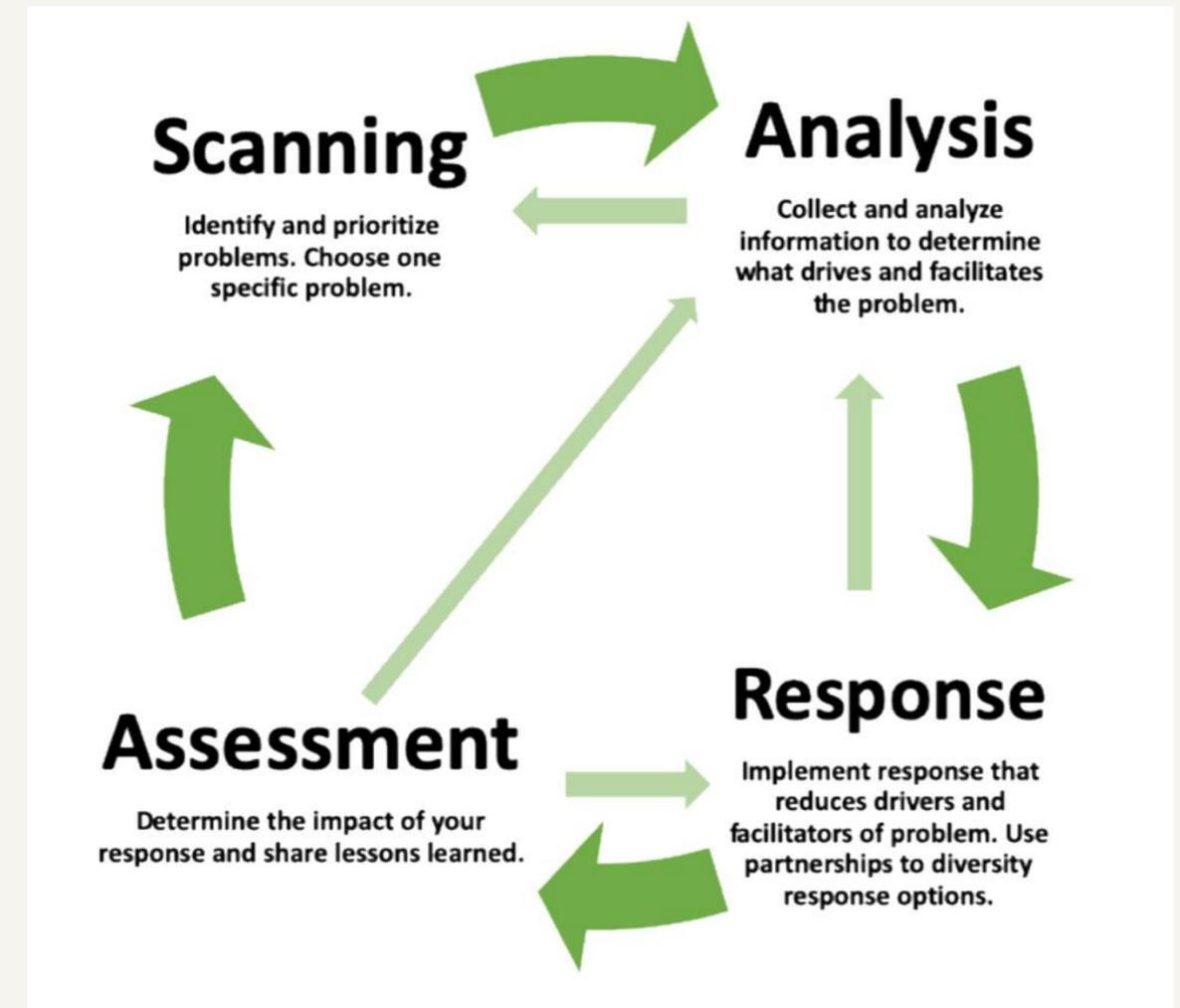
- “Relationships build trust, and trust create impact”
- Through continuous visits and care for the offenders, we gather more information. For example, we have currently identified 22 poachers using snares (3 active, 14 inactive, 5 unknown) and 55 poachers with rifles (10 active),
- We must consistently consider sustainable livelihood support to prevent poachers from becoming active again.
- And yes it takes time...



“I feel more at ease now that I have been able to start a small cattle farm to support my livelihood compared to when I used to rely on hunting. I now feel more comfortable being part of my community as there is no more negative talk about me,”

Problem Analysis for Wildlife Protection in 55 Steps

A.M. Lemieux
R.S.A. Pickles
D. Weekers
2022



Questions