



REPORT ON ACTIONS TO REDUCE ILLEGAL ACTIVITIES IN KWABRE-TANOE TRANSBORDER FOREST 2017-2021

Throughout the five years of the project, efforts have been mobilized to significantly improve the level of implication of the local communities and efficiency of the community patrols in order to decrease the negative impact of the anthropic activities running in the forest. The approach has been finetuned according to the needs and level of capacity of the actors. At the end of the project a decent level of sensitization has been reached in the core zone of the projects and a reliable data collection system is being implemented.

I. DEVELOPMENT OF PATROLS AND BIOMONITORING TOOL TO MONITOR ILLEGAL ACTIVITIES AND WILDLIFE

A. In Ghana

1. Development of the strategy and methodology

When the project started, WAPCA was already supporting the CREMA to monitor the presence of the endangered primates present in the area. Therefore, the patrols were already ongoing on a regular basis. In 2018, a monitoring protocol which detailed key biodiversity variables on which data was to be collected was developed for the patrols. The data collection however was not standardized, and the chief patrollers would communicate to WAPCA team the information that got back to them orally and that they wrote in a notebook on a regular basis.

To improve the reliability of the data, CyberTracker tool was introduced in 2018 and piloted in 2020 but it presented some challenges such as batteries dying in patrols, patrollers forgetting to save their records on a regular basis. It was redesigned to be more user-friendly, but no reliable database could be created with the data collected this way. Not convinced by the results obtained with that tool, the team chose to pilot the EventBook in 2021, which had been developed for community conservancies in Namibia.

To ensure the patrols are efficient, two types of patrols are carried out by the community patrollers in the Kwabre forest:

- The local patrols, run by the patrollers in their own community twice a week on average.
- The joint patrols, run by a group of patrollers from various communities to patrol a community where illegal activities have been spotted. Most of the time these patrols are on-call patrols.

The Community Resource Monitoring Team counted about 40 members at its peak but was reduced to 25 patrollers for efficiency and reliability purposes.

2. Capacity Building and Equipment provided

During the project patrol trainings started in 2018 with the initiation to the first version of the CyberTracker. After which, several trainings on the use of GPS, updated Cybertracker tool and Event Book were conducted as indicated in the table 1.

Table 1: Capacity building of the patrollers in Ghana

Date	Topic	Location	# trainees (all Male)
2018	Introduction to Cybertracker		22
2020-S1	Use of cybertracker	Kwabre	1
2020-S1	Use of cybertracker	Anwiafutu	1
2020-S1	Use of cybertracker	Ellenda	1
2020-S1	Use of cybertracker	Nawule	1
2020-S1	Use of cybertracker	Takinta	1
12/2021	Introduction and use of EventBook + Cybertracker 2	Kwabre	4
12/2021	Introduction and use of EventBook + Cybertracker 2	Gyegyekrom	3
12/2021	Introduction and use of EventBook + Cybertracker 2	Anwiafutu	3
12/2021	Introduction and use of EventBook + Cybertracker 2	Ellenda	2
12/2021	Introduction and use of EventBook + Cybertracker 2	Nawule	4
12/2021	Introduction and use of EventBook + Cybertracker 2	Takinta	2
12/2021	Introduction and use of EventBook + Cybertracker 2	Atwebanso	3
12/2021	Introduction and use of EventBook + Cybertracker 2	Adusuazo	2
12/2021	Introduction and use of EventBook + Cybertracker 2	Kablasuazo	2
12/2021	Introduction and use of EventBook + Cybertracker 2	Allowuley	1
Total			26

To support the community patrollers in their activities the projects has also provided the equipment detailed in Table 2.

Table 2: Equipment distributed to the patrollers in Ghana

Equipment	Quantity
Uniforms + boots + cutlasses	25
Phones	25
Cybertracker phones	2
EventBook	9 (1 per community + 2 for joint patrols)
Tricycles	2

A boat and life jacket have been procured but the handing over is pending as long as the anchorage location of the boat is not sorted out.

3. Biodiversity and illegal activities records

All community patrollers and WAPCA supervisors agree on the fact that illegal activities have reduced compared to the beginning of the project: the monitoring strategy implemented and the commitment of the patrollers have highly contributed to this result. However, when looking at the graphs below from the data collected over the years, this trend does not show.

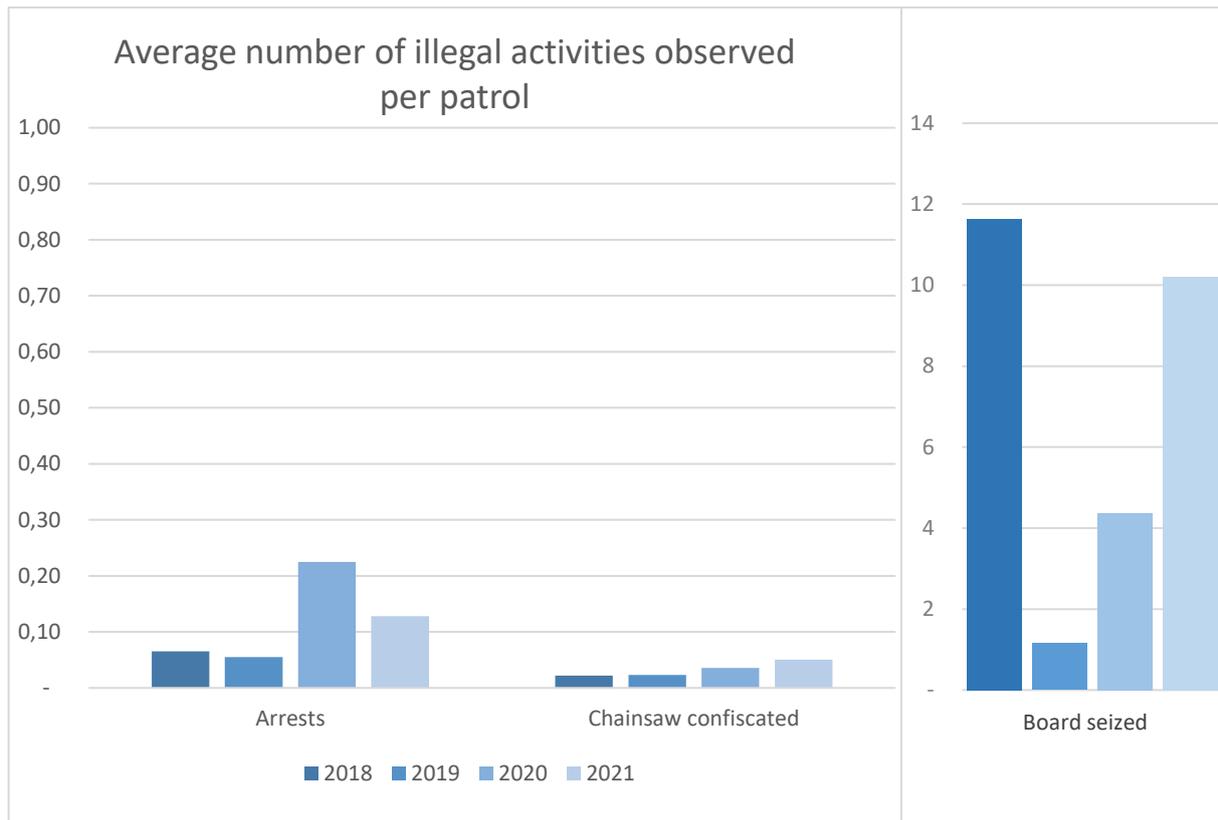
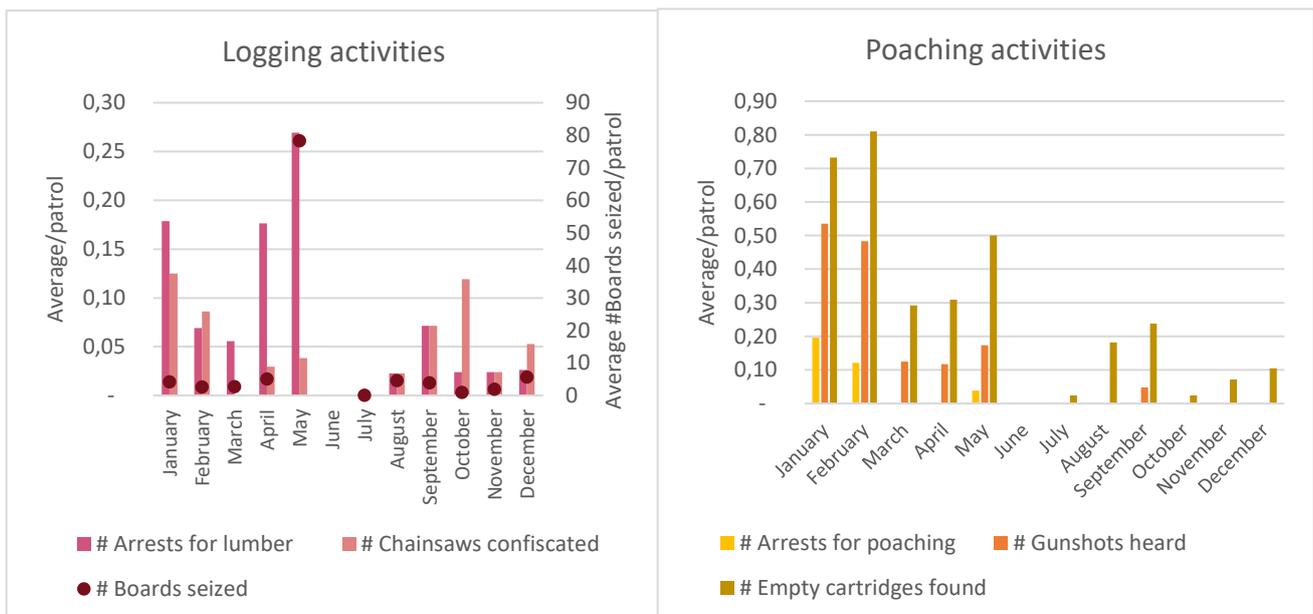


Figure 1: Occurrence of illegal activities from 2018 to 2021 in the Kwabre forest

This can be explained by the lack of reliability of the information received before the Event Book. In the coming years, this new tool should enable the CREMA to get a proper idea of the trends regarding the illegal activities' occurrences on their territory.

In 2021, we can observe that the second half of the year has witnessed less illegal activities than the first semester (see Figures 2).



Figures 2: Illegal activities occurrence in 2021 in the Kwabre forest

The data collected regarding the wildlife encounters is also more detailed and reliable now that the Event Book is used by the community patrollers (see Figure 3).

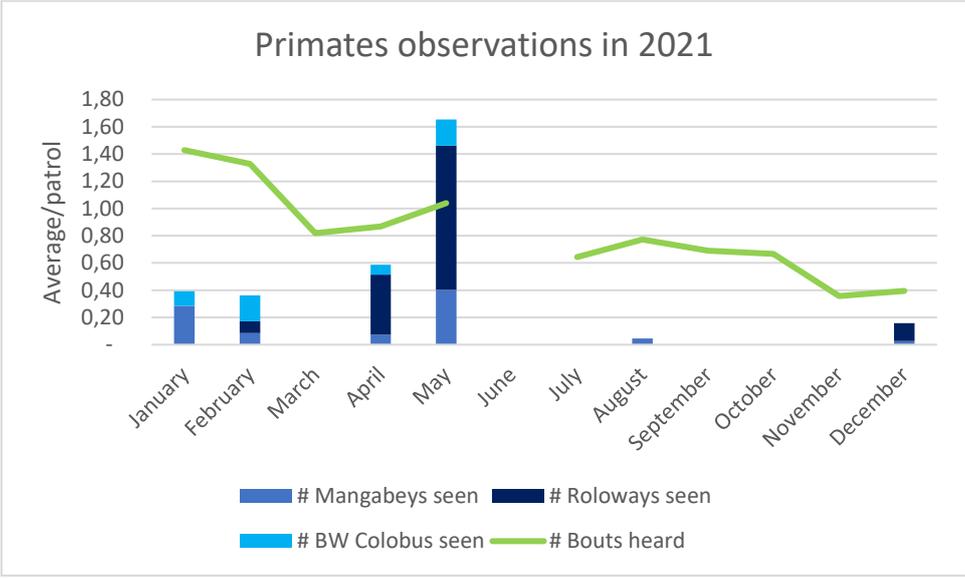


Figure 3: Wildlife occurrence in 2021 in the Kwabre forest

In the same line as before, in a couple of years, analysis of this data will help determine the general movement of the species of interest from one area of the forest to another and to see trends of population appear. These data shall nevertheless be completed by regular ecological surveys for better accuracy.

B. In Ivory Coast

1. Development of the strategy and methodology

Although the CSRS has been present in the FMTE for a long time and has been supporting the FAIVG since its creation in 2006, the analysis of the data collected during the biomonitoring sessions and the patrols was improvable.

From 2017 to 2020, the patrols were conducted on a day without a GPS. The patrollers were using the paths of least resistance in the forest to record anthropic activities and fauna. Considering the area covered by the FMTE, this strategy had a limited impact. In 2020, the CSRS and FAIVG agreed to change the strategy of patrols and biomonitoring to make the work of the patrollers and bio monitors more efficient.

Table 3: List of trainings conducted with the patrollers

Date	Topic	# trainees (all Male)
10/2020	Use of GPS and compass. Introduction to Cybertracker to collect data	15
02/2021	First aid	14
11/2021	Introduction to Event Book as a communication tool with the FAIVG members	15

Patrols would now be run on three days in a row, sleeping in the forest, and with GPS support to reach deeper in the forest (see patrollers capacity building sessions in Table 3). Camping equipment

was thus provided to the patrollers (Table 4) and all 17 male patrollers have been trained on GPS use, Cybertracker and transect method to improve data collection quality and reliability.

Table 4: Equipment distributed to support patrols in Ivory Coast

Equipment	Quantity
Uniforms + boots + cutlasses	15
Flashlights	30
GPS	3
Tablets	3
Boat	1
Life jackets	8

For the biomonitoring, the line transect method centred on points is now implemented. The sampling scheme consists of 99 transect points spaced consecutively by 700 metres (Figure 4). These transect points cover the entire surface of the forest. Three teams of five people each survey three transect points each month. Once in the field, each team splits into two sub-groups. While one subgroup surveys the transect in one direction from the central point for 500 metres, the other subgroup also surveys 500 metres in the opposite direction to minimise double counting. A 15-minute listening break is observed by the subgroup every 200 metres to listen for animal calls. During the survey, human activities are also recorded.

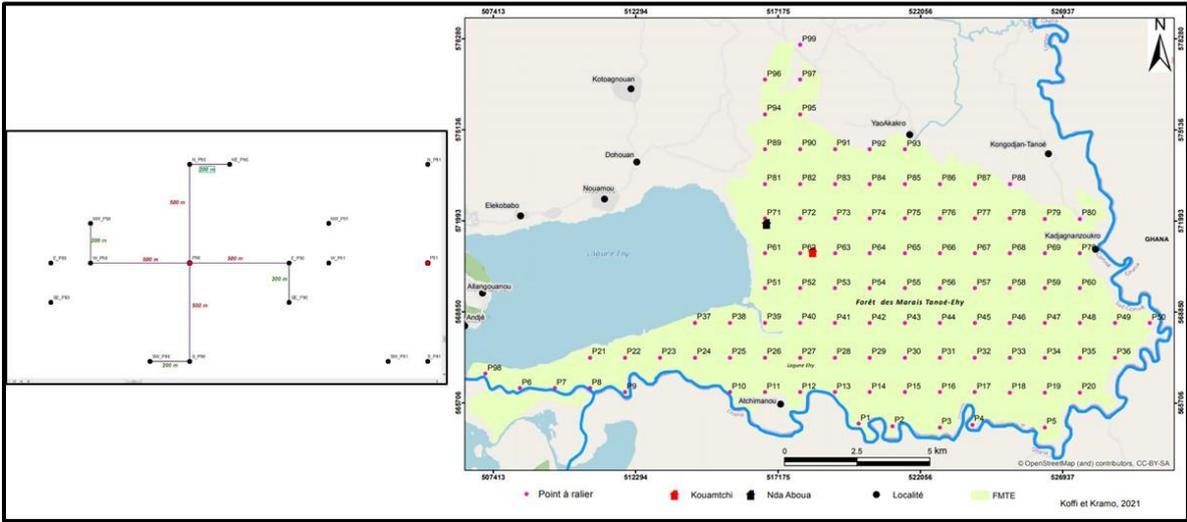


Figure 4: Sample methodology in the FMTE (CSRS)

Since 2021, the analysis of the data is made according to the index of abundance (number of occurrences divided by number of kilometres patrolled) and a spatial distribution analysis is conducted with the software ArcGIS to map the wildlife and illegal activities encounters.

2. Biodiversity and illegal activities records

From 2017 to 2020 most of the activities appear to present a general decrease in occurrence (at the exception of the snares). It seems like the efforts of the patrollers on the edges of the forest had

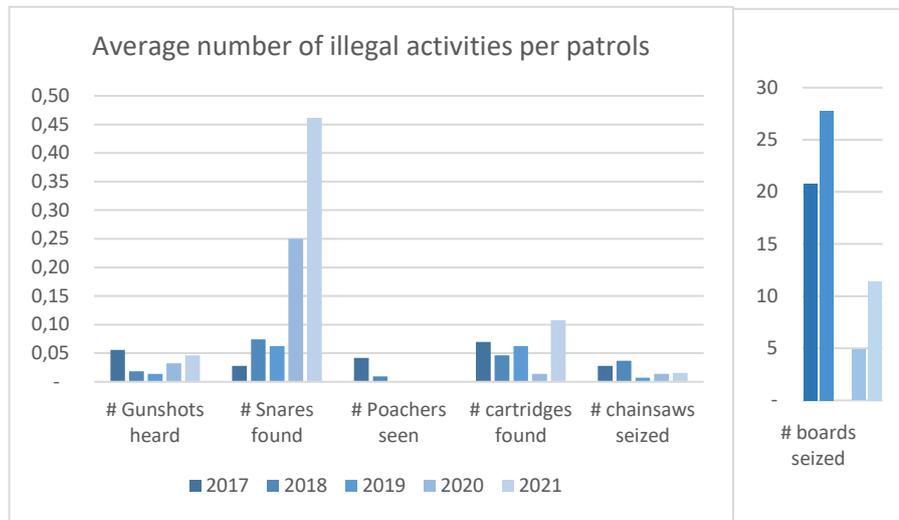


Figure 5: Occurrence of illegal activities between 2017 and 2021 in the FMTE

an impact on the reduction of the illegal activities. However, in 2021, with the new protocol the figures have risen again meaning that the new areas reached in the forest with the patrols are facing threats that were not accounted for before. It underlines the need to boost the patrols all over the forest area.

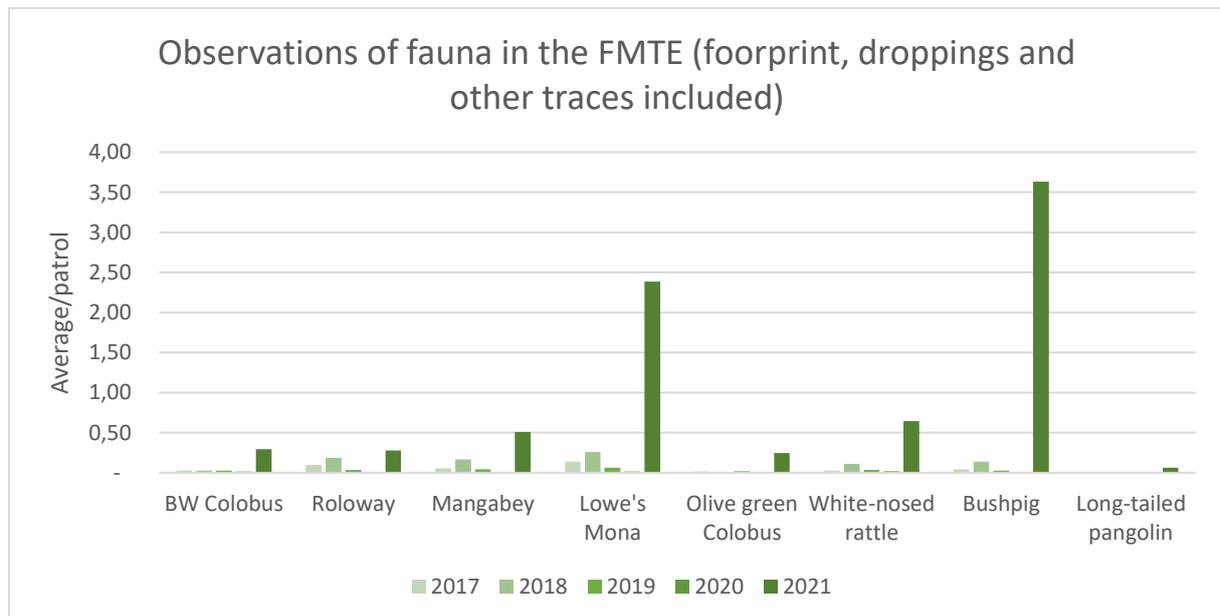


Figure 6: Observations of wildlife between 2017 and 2021 in the FMTE

On the opposite, by accessing new areas, deeper in the forest the amounts of wildlife observations has drastically increased in 2021.

Now that the new system of patrols is in place and functioning, the coming years shall enable the local stakeholders to better monitor trends in wildlife and anthropic activities observations.

II. ENVIRONMENTAL SENSITIZATION

A. In Ghana

1. Sensitization strategy

WAPCA and the CREMA developed a multimethodology approach to spread information on conservation and the importance of protecting the Kwabre forest and its biodiversity. Conservation ambassadors were identified in the CREMA. They support WAPCA's effort and join forces with various stakeholders (including the Wildlife Division and their private sector partners) to educate the youth and the members of the CREMA in general.

The diverse activities range from community engagement meetings to radio programs, drama and movie theatre and the celebration of the Mangabey awareness day.

2. Main events and educational programs conducted

Mangabay awareness celebration happens on the 1st and 2nd of August. This event is organized around a football tournament, and it is the opportunity for the CREMA to sensitize the youth through various media (puppet shows, marches, conservation quiz, Mangabey songs, arts and crafts and drama theatre).

Radio programs air monthly since September 2020. The radio stations (West FM, Abiamo FM, etc) estimated that each program reaches approximately 10,000 people. Each month one or two subjects are selected and after the discussions time is left for questions and comments from the audience. Since this activity started the feedbacks of the public are positive and their intervention promising. It was also a way for WAPCA to raise awareness on the project conducted with the CREMA and the achievements reached.

The table below presents the main events and educational programs conducted during the project.

Table 5: Main sensitization events organized in Ghana

Date	Event	Facilitators
08/2018	Mangabey Awareness Day (Nawule, Anwiafutu)	WAPCA, Conservation ambassadors,
08/2019	Mangabey Awareness Day (Nawule, Anwiafutu)	WAPCA, Conservation ambassadors,
09/2020	Radio : Wildlife Division activities and laws	WAPCA, Wildlife Division
10/2020	Radio: The CREMA, a tool for community resource management and development	WAPCA, CREMA Chairman, Wildlife Division
11/2020	Radio: Socio-economic impact of illegal logging and mining activities in the surrounding communities	WAPCA, Wildlife Division, Environmental Protection Agency, Community Chief
12/2020	Radio: Econobio project – Cocoa and coconut value chains development	WAPCA, SFC, YGL, Chair of processor group
01/2021	Radio: Importance of biodiversity conservation (Primates in Kwabre)	WAPCA, Conservation ambassadors
02/2021	Radio: Illegal logging and poaching, the main threats to Wildlife Conservation	WAPCA, Wildlife Division, Patrollers
03/2021	Radio: Fighting deforestation, our collective responsibility	WAPCA, CREMA Chairman

04/2021	Radio: Animal welfare and conservation – Farming and wildlife coexistence	WAPCA, Wildlife Division, Conservation ambassadors
05/2021	Radio: Conservation farming and agroforestry	WAPCA, Wildlife Division, Ministry of Food and Agriculture representative (MoFA)
06/2021	Radio: Global warming and its effects	WAPCA, Wildlife Division, MoFA
07/2021	Radio: Transborder projects	WAPCA, Wildlife Division, Patrollers
08/2021	Radio: Mangabey Awareness Day celebration	WAPCA, Conservation ambassadors

B. In Ivory Coast

1. Sensitization strategy

Since 2017, the CSRS strategy in terms of sensitization has been organized around three main activities:

- Sensitization of the youth through programs in schools where the importance of the FMTE is discussed and tree planting activities organized.
- Radio programs on “Radio Noé” which are broadcasted in the various villages located around the FMTE and during which were presented the fauna and flora as well as the history of the forest, and the importance of protecting the forest for economic, cultural and ecological reasons. These programs were translated in local languages to ensure good understanding of the message.
- Movie projections in the communities to reach a large audience and sensitize on different subjects (wildlife, illegal mining, poaching etc.).

2. Main events and educational programs conducted

The table below presents the main events and educational programs conducted by CSRS during the project.

Table 6: Main sensitization events organized in Ivory Coast

Date	Event	#Male reached	# Female reached	#Youth reached	Total #people sensitized
2018	Sensitization in Nouamou primary school			850	850
2018	Sensitization in Noé primary school			900	900
2019	3 Radio programs facilitated by CSRS and executives members of FAIVG				5000
2019	Sensitization in Nouamou primary school			850	850
2020	Movie show: FMTE wildlife and impacts of illegal mining on water streams	347	162	343	852
2021	Movie show: biodiversity in the FMTE, threats of illegal mining, logging and poaching	262	208	763	1225
Total					> 8000

III. DEVELOPMENT OF A COMMON STRATEGY TO REDUCE ILLEGAL ACTIVITIES PRESSURE ALONGSIDE THE TANOË RIVER

In 2018 WAPCA and the CSRS started to develop a partnership between the Ankasa-Tano CREMA and the Fatières des Associations Inter Villageoises de Gestion (FAIVG). The goal was to organize transborder patrols with patrollers from both Ivorian and Ghanaian side present. This would allow to reduce the anthropic pressure alongside the Tanoë river since both structures are collaborating.

However, it was clear that a formal document laying out this common strategy and presenting the functioning of these transborder patrols, their frequency, instituting a Steering Committee to facilitate the communication and organization of transborder activities, and presenting the benefit sharing mechanisms implemented while on duty was needed.

Therefore, a Transboundary Management Plan has been developed with the participation of all relevant stakeholders. This plan has been signed in January 2022 and implementation of the transborder patrol shall start again as soon as the terrestrial borders open again.

To facilitate joint actions between the Ghanaian and Ivorian stakeholders and patrols two satellite phones have been supplied. It should facilitate communication between both teams despite the network difficulties in the forest.

Even though the data collected so far are not sufficient to show a significant reduction of illegal activities threatening the forest nor an increase of wildlife population, there has been a tremendous work done during the project to set the basis that will enable both the CREMA and the FAIVG to ensure that it will be the case in the future. Indeed, the methodology and pressure of patrols have improved, the data collection is more reliable and the tools adapted to their users. Data collected is now also available at the community and CREMA level giving recognition to the patrollers and information to the executives of the CREMA and FAIVG for decision making on natural resources management. A common approach joining forces on both side of the Tanoë river has been developed, given a frame to and actions shall be implemented soon.

In parallel, the sensitization effort has been constant, all stakeholders found efficient ways to connect with the local people, share information with them and bring a higher level on consciousness on sustainable production, conservation and the link between the two.

All these actions participated in the recognition of the Forêt des Marais Tanoë-Ehy (FMTE) as a Voluntary Reserve by both the local people and the Ivorian government.