



Wild Chimpanzee Foundation

Final report

CLUB P.A.N. 2018/2019



An environmental education project of the Wild Chimpanzee Foundation in Guinea



“From knowing comes caring and from caring comes change.”

- Manuel Bustelo -

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ACRONYMS

- Club P.A.N. – People, Animals, Nature
- WCF – Wild Chimpanzee Foundation

1 EXECUTIVE SUMMARY

Club P.A.N. (People, Animals, Nature) was active for its ninth year in Guinea (2018/2019) working with eight schools (Kalinko, Keyla, Gagnakaly, Fello-Kollet, Kounet, Daara, Laffa-Boubé and Kouratongo) in the Moyen-Bafing National Park region with 608 participating children.

14 participants were trained (2 coordinators, 4 teachers and 8 principals) and evaluated in November 2018 during a four days' workshop about environmental education in Labé.

11 conservation education sessions in each of the 8 schools, and pre- and post-evaluations of 80 children (10 per school) were implemented.

Evaluation results show that Club P.A.N. children increased their knowledge by 38% on average, and 99% of the children want to avoid eating bush-meat in the future. Children changed their attitude towards nature into a more positive view in the post-evaluations. Specifically concerning the status of the Moyen-Bafing National Park the result is encouraging, as 99% of the children agree that this park needs full protection after having participated in the Club P.A.N. program.

The parents' day, prepared by the children at the end of the school year **reached 3298 villagers** of whom 80 adults (10 per village) were evaluated, all of them giving positive feedback to the program, mainly mentioning their increase of knowledge through the children, the importance of national parks and forests for their own benefit.

WCF achieved all Club P.A.N. objectives set out during this school year.



Club P.A.N. nature classroom in the Moyen-Bafing National Park region

2 INTRODUCTION

Wild chimpanzees are only found in tropical Africa, where their populations have declined by more than 66% in the last 30 years, from 600,000 to fewer than 200,000 individuals (Butynski 2001). In September 2016, the International Union for Conservation of Nature (IUCN) listed the western chimpanzee (*Pan troglodytes verus*) as critically endangered in their Red List of threatened species. The western chimpanzee has already disappeared from three African countries and is on the verge of extirpation in others. Urgent action is needed!



Wild western chimpanzee from the Moyen-Bafing National Park in Guinea

To assure the protection of chimpanzees, the WCF will continue its important conservation programs, such as increased anti-poaching patrols and other law-enforcement strategies that aim to reduce the impact of bush-meat hunting on local wildlife populations. In addition, public outreach and awareness raising programs play a vital role in changing local attitudes towards the intrinsic value of wildlife. Conservation education is a priority long-term action for the conservation of chimpanzees and other wildlife (Kormos and Boesch, 2003). The WCF created in 2007 nature clubs called “Club P.A.N.” (Personnes, Animaux et Nature / People, Animals & Nature) for primary schools in West Africa (Borchers et al 2013).

3 CLUB P.A.N. GOALS

WCF mission

Ensure the long-term protection of viable populations of wild chimpanzees and their forest habitats throughout tropical Africa.

Global project goals

School children near chimpanzee habitat are discouraged from consuming bush-meat and are proactive in the conservation of chimpanzees and their forested habitat.

Specific project goals

1. Teach children about the local flora and fauna, so that they appreciate the biodiversity that exists in their region.
2. Teach basic knowledge on environmental issues in order to promote care and awareness towards nature conservation.
3. Discourage the trade in illegal bush-meat by reducing the likelihood that the current generation of children will consume or trade bush-meat in the future.
4. Promote the conservation and research activities undertaken within the countries. Encourage local support towards the conservation of chimpanzees and their habitat.

4 STAFF

Club P.A.N. coordinators were Sylvain Daavo, Dylan Deffaux, Mamadou Bobo Balde and Djaka Mady Kaba, they were guiding all principals and teachers. They assisted the teachers and principals on-site with the sessions, conduct the teacher trainings, evaluate the project by quantifying student participation and administered a pre- and post-evaluation. In total, four teachers and eight principals belong to the Club P.A.N. staff during the school year 2018/2019. It depends on the school, if the teacher or principal is animating the Club P.A.N. sessions.



Club P.A.N. coordinators: Sylvain Daavo, Dylan Deffaux, Mamadou Bobo Balde and Djaka Mady Kaba

5 RESULTS

5.1 Teacher training

All teachers and principals received intense trainings to increase the capacity for environmental education and to guarantee that the sessions and activities would have the utmost impact during the school year. The training was held from 01 to 04/11/2018 in Labé, Guinea. The teacher training was organized by Dylan Deffaux (Club P.A.N. Officer in Guinea) and Julia Riedel (WCF Head of Club P.A.N.). The workshop was opened with a speech from M. Algassimou Diallo from « l'Inspection Régionale de l'Education de Labé ».



Participants of the teacher training workshop in Labé from 1.-4. November 2018 with M. Algassimou Diallo from « l'Inspection Régionale de l'Education de Labé ».



An excursion to a forest site close to the Saala waterfall was organized during the workshop.

After four days of intense training, we evaluated the participants' knowledge by conducting an interview with 18 questions. The results of this evaluation were discussed with the participants (see Table 1) and compared to the results they have received after the last school year training. It is important that teachers and principals prepare themselves well before they animate a Club P.A.N. session. We thank all participants for their motivation and work during the four days of training.

Table 1: Participants at the teacher training workshop in Labé with their function, school and evaluation results after the four days of workshop, from most participants we also can present their last school year workshop evaluation results (from January 2018)

Name	Function	School	Evaluation January 2018 (% of correct responses)	Evaluation November 2018 (% of correct responses)
Mamadou BOBO BALDE	Coordinator	/	89	100
Aboubacar SIDIKI OULARE	Teacher	Gagnakaly	72	100
Fassou KPOULOMOU	Teacher	Kalinko	94	91
Mamadou DIOULDE BALDE	Principal	Fello-Kollet	89	91
Faya II TOLNO	Teacher	Keyla	78	91
Yiba TENKIOMO	Principal	Gagnakaly	72	91
Mamadou DIAWARA	Principal	Kalinko	94	82
Djaka Mady KABA	Coordinator	/		73
Faya Daniel KAMANO	Principal	Keyla	89	73
Ousmane BALDE	Principal	Kounet	61	73
Mamadou Adama BALDE	Teacher	Kourantogo		73
Mamadou SALIOU HAO BAH	Principal	Kouratongo	67	45
Issa Mamadou BALDE	Principal	Laafa-Boube (new)		45
Amadou Bhoye DIALLO	Principal	Daara (new)		45

5.2 Club P.A.N. sessions

The Club P.A.N. sessions involve fact sheets, activities, role playing, songs and games with animal puppets which are based around a chosen theme. We aim to promote positive club spirit through interactive ways of learning and essentially having fun. Each child that participates receives a Club P.A.N. book containing eleven sessions and a T-Shirt which both means a lot to them. All the sessions provide basic knowledge on biology and conservation, some focus on the concepts of sustainable resource use and the need for protected areas; others detail the natural history of various large protected mammals (like chimpanzees & leopards). The Club P.A.N. book can be found here: <http://www.wildchimps.org/projects/club-pan.html>

Club P.A.N. activities started in November 2018 and ended in June 2019. Eight schools in the Moyen-Bafing National Park region (Kalinko, Keyla, Gagnakaly, Fello-Kollet, Kounet, Daara, Laffa-Boubé and Kouratongo) participated with 608 children (212 girls, 396 boys) in outdoor nature classrooms.

Table 2: Number of children that participated in Club P.A.N. during the school year 2018/2019

School	Club P.A.N. children	Girls	Boys	Total
Fello-Kollet	99	35	64	608
Kounet	66	31	35	
Kouratongo	63	22	41	
Gagnakaly	101	40	61	
Kalinko	107	32	75	
Keyla	80	13	67	
Daara	32	10	23	
Laffa-Boubé	60	29	31	
Total		212	396	

Children attended 11 sessions and prepared the parents' day in their school. The topics of the 11 sessions this school year were: our non-living environment, our living environment, biodiversity, endangered species, chimpanzees, the role of animals, conflicts between humans and animals, protected areas, Moyen-Bafing National Park, and human health. The human health session was created by researchers from the Robert Koch-Institute in Berlin, as a response to the Ebola outbreak in West Africa in 2014 and concentrates on good hygienic practices for preventing the transmission of diseases. The last session (Number 11) was an interactive conservation action that the children selected together with their teachers, principals and coordinators for each school separately. Selected conservation actions were for example creation of a school garden in Fello-Kollet, creation of a compost in Daara, planting of fruit trees in the school area in Kouratongo and reforestation close to the village in Keyla and Kalinko.



Club P.A.N. sessions in outdoor nature class room of Kalinko



Interactive conservation action (session 11), photo on the left shows the plants for the reforestation in Kalinko and the photo on the right shows a cleaning-up of the village Laffa-Boubé

5.3 Parents' days

To increase the effect of the Club P.A.N. program, it was decided to involve also the parents and villagers; therefore, parents' days were created at the end of each school year. During these events the children presented what they have learnt in form of songs, theatre, games and poems to their families and villagers. Each school organized its own parents' day, and a total of eight events took place in April 2019, attended by 3298 participants.

Table 3: Number of participants at the parents' days during the school year 2018/2019

School	Number of participants	Parents' day date
Laffa-Boubé	418	01/04/2019
Daara	298	02/04/2019
Kouratongo	476	03/04/2019
Kounet	233	05/04/2019
Fello-Kollet	503	06/04/2019
Gagnakaly	445	10/04/2019
Keyla	397	11/04/2019
Kalinko	528	13/04/2019
Total	3298	



Participants at the Club P.A.N. parents' days in the Moyen-Bafing region

5.4 Evaluations

Pre- and post-evaluations of 80 Club P.A.N. children (10 children per school) in personal interviews were done in November 2018 (pre-evaluation) and April/May 2019 (post-evaluation) by our two local coordinators Mamadou Bobo Balde and Djaka Mady Kaba.



Evaluations of children and parents are done by our local coordinators in interview form

After having participated in Club P.A.N: results show the children increased their knowledge by 38% on average (Wilcoxon Exact Test: $T+=21$, $N=6$, $P<0.05$), (Figure 1). Replies to some of the knowledge questions show that children increased their knowledge up to 60% (Wilcoxon Exact Test: $T+=1176$, $N=48$ (32 ties), $P<0.0001$), for example the question 1: “Please explain what a national park is!” In the pre-evaluations, before the Club P.A.N. program had started, most of the children could not explain what a national park is (just 5%). After the program in the post-evaluation interviews, many of them (65%) were able to do so (Figure 1).

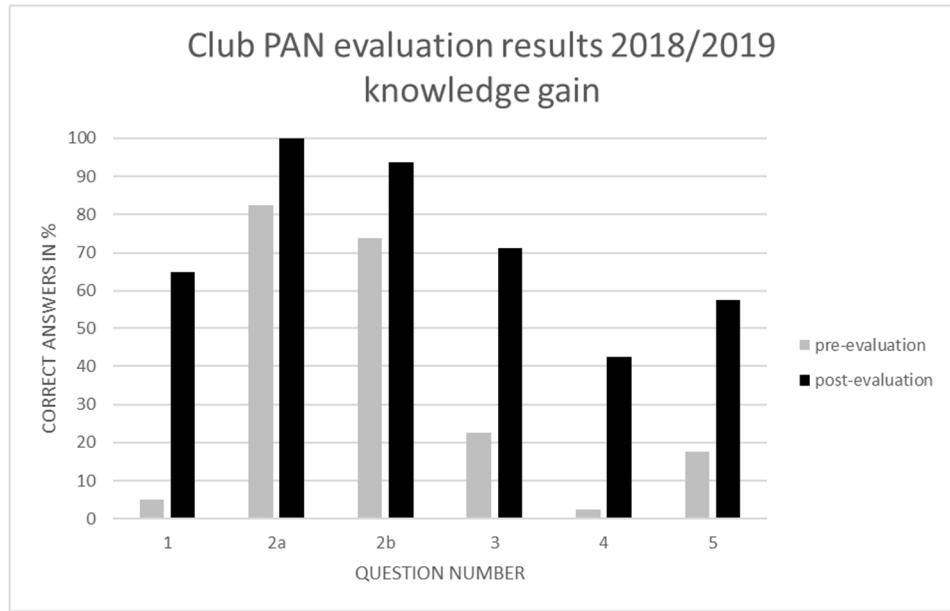


Figure 1: Correct answers in percent to knowledge questions during pre- and post-evaluations show the knowledge gain after the Club P.A.N. program in Guinea

88% of the participating children wish to use a basket instead of a plastic bag for their shopping on the market (Wilcoxon Exact Test: $T+=706$, $N=38$ (42 ties), $P<0.0001$), (Figure 2). And, 99% of the participating children want to avoid eating bushmeat (Wilcoxon Exact Test: $T+=406$, $N=28$ (52 ties), $P<0.0001$), (Figure 2).

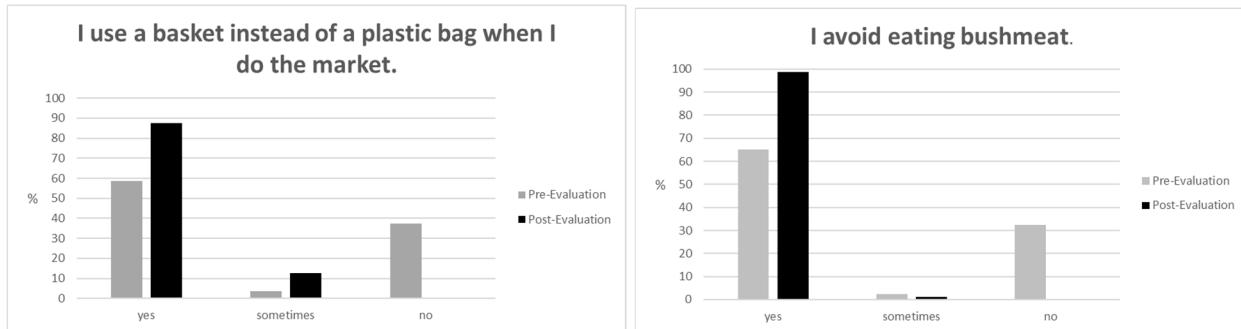


Figure 2: Answers in percent to the statements “I use a basket instead of a plastic bag when I do the market” (Figure left) and “I avoid eating bushmeat” (Figure right) during pre- and post-evaluations

Change of attitude towards nature into a more positive view in the post-evaluations. For example, 58% of the Club P.A.N. children disagree with the statement “We should turn the forest into plantations to feed ourselves” (Wilcoxon Exact Test: $T+=572$, $N=37$ (43 ties), $P<0.001$), (Figure 3), whereas in the pre-evaluations 66% of the children totally agreed that forests can be turned into plantations. We received similar results also for the statement: “The Moyen-Bafing National Park should be made available to local residents by the government, to create plantations”, 56% of the children did not agree at all after they had participated in the Club P.A.N. whereas 73% had totally agreed to this statement in the pre-evaluations (Wilcoxon Exact Test: $T+=532.5$, $N=33$ (47 ties), $P<0.0001$), (Figure 3).

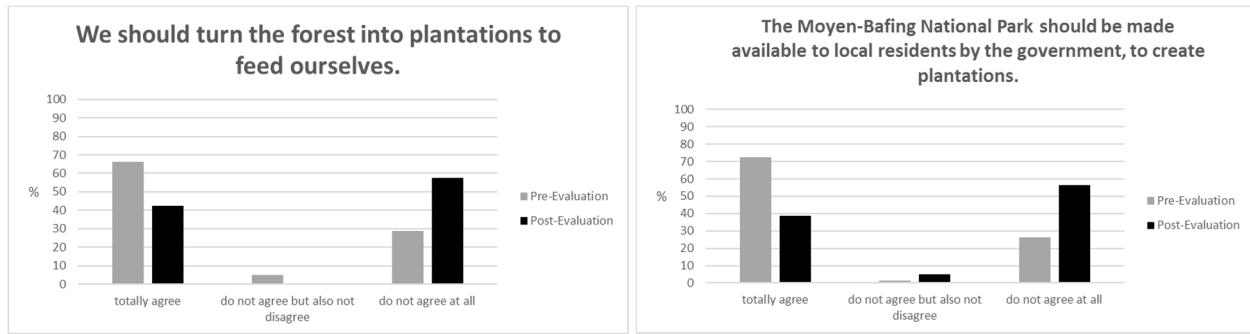


Figure 3: Answers in percent to the statements: “We should turn the forest into plantations to feed ourselves” (Figure left) and “The Moyen-Bafing National Park should be made available to local residents by the government, to create plantations” (Figure right) during pre- and post-evaluations in Guinea

All 80 interviewed children liked participating in Club P.A.N. and all of them were able to remember something important about nature, chimpanzees and conservation. Club P.A.N. evaluation results from past years are published by Borchers et al., 2013 in a peer-reviewed journal. Borchers et al. (2013) found that participation in Club P.A.N. significantly increased environmental knowledge and positively influenced attitudes towards nature.

We evaluated 80 adults (10 per village, average age 42.7 years) after the parents' days in interview form (40 males, 40 females). From these 80 adults, 64 were parents with an average of 1.3 Club P.A.N. children at home, plus 16 villagers that joined the parents' days, but these had no Club P.A.N. child living in their household. Parents and villagers were selected by chance depending if they had time after the celebrations. All interviewed adults gave positive feedback to the program; it was mentioned that the children increased their knowledge, learned the French language, and that they received T-Shirts and school materials such as books.

The father M'Ballou Tounkara from the village of Kalinko answered to the question "What did the Club P.A.N. bring to your children?": "the nature clubs provided our child with the motivation to study and to learn about things that not even we as parents know."

All (100%) of the children had talked to their parents at home about Club P.A.N. and all parents were able to report something the household had learned from Club P.A.N. such as the importance of forests and national parks, or about important hygienic practices.

The father Yakouba Toure from the village of Gagnakaly answered to the question " What did you pick up from your children, when they talked about Club P.A.N. at home?": "my children advised me to wash my hands with soap before we eat."

The father Sagnourou Keita from Keyla answered to the question "Which message do you take home from this parents' day?": "the message of the children is clear to me and I understand. I accept the creation of the Moyen-Bafing National Park because he has a big importance for our future."

To the question “Which other activities are important to protect the nature in your region?” parents mainly answered with; reforestation, stop wildfires and stop deforestation. For example, the mother Kadé Diallo from Kalinko answered: “we must increase awareness; train eco-guards in villages, and support communities in their daily activities.”

6 CONCLUSION & OUTLOOK

Thanks to the support of our sponsors and partners, the WCF’s environmental education program Club P.A.N. was active during the school year 2018/2019 in eight schools in Guinea with a total of 608 children participating and 3298 participants during the parents’ day celebrations.

The evaluation results showed that Club P.A.N. was able to increase the knowledge of the children, not only about the local flora and fauna, but also about biological facts and global environmental issues. Furthermore, we were successful in changing attitudes and were able to create a fun and dynamic learning environment that the children enjoyed.

One of WCF’s strengths is the motivation of our local team, always reactive and creative when it comes to bringing people together for the sake of chimpanzee conservation. With the start of each school year, new children are joining the nature clubs, and since long-term conservation education programs have been shown as an efficient medium to change local attitudes (Borchers et al. 2013), the WCF will continue nature clubs for another school year (2019/2020).

7 REFERENCES

Borchers C., Boesch C., Riedel J., Guilahoux H., Ouattara D. & Randler C. 2013. Environmental Education in Côte d’Ivoire/West Africa: Extra-Curricular Primary School Teaching Shows Positive Impact on Environmental Knowledge and Attitudes, International Journal of Science Education, Part B: Communication and Public Engagement.

Butynski T.M. 2001. Africa’s Great Apes. In Great Apes and Humans: The Ethics of Coexistence (Becks B., Stoinski T.S., Hutchins M., Maple T.L., Norton B., Rowan A., Stevens E.F., Arluke A., editors). Washington D.C.: Smithsonian Institutions Press. pp 3-56.

Kormos R., Boesch C., Bakarr M.I., Butynski T.M. 2003. West African Chimpanzees – Status Survey and Conservation Action Plan. IUCN/SSC Primate Specialist Group, Gland, Switzerland

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Club P.A.N. group games