



The conservation of the Savannah Chimpanzees of Guinea Bissau and Senegal

Report of a workshop in Béli, Boé sector, Gabu region, Guinea Bissau
14-16th of February 2016

Financed by IUCN-SOS and NAPA, EU, Chimbo Foundation, and JGI

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1. Introduction

Place and dates:

At the initiative of Annemarie Goedmakers (Chimbo Foundation) and Sebastien Regnaut (IUCN¹) a successful workshop has been organised at Casa Daridibó, the field station of the Chimbo program in Guinea-Bissau. Participants from Bissau and Senegal came in on the evening of the 13th of February 2016 and left in the early morning of the 17th. The workshop itself, which included two short field visits, was held on the 14th, 15th and 16th of February 2016.

Participants:

Participants came from two countries and 4 organisations: DGFF², Chimbo Foundation and IBAP³ for Guinea Bissau, and JGI, the Senegalese branch of the Jane Goodall Institute of Spain. Unfortunately Sebastien Regnaut himself could not attend, and there was no participation from Guinea Conakry as originally planned. See annex 1 for the full list of participants.

Objectives of the workshop:

Objectives of the workshop were twofold:

- exchange of experiences and ideas among field staff of programs involved with conservation of the Savannah Chimpanzees of West Africa
- recommendations for an update of the Chimpanzee action plan for West-Africa, to be submitted at the upcoming GRASP⁴-meeting in Liberia in April this year.

2. Sunday 14th of February 2016. Opening and presentations by Chimbo, Daridibó, DGI and DGFF

Dr. Annemarie Goedmakers, President of the Chimbo Foundation and President of the Directive Council of Daridibó, opened the workshop. In her welcoming speech she thanked Sebastien Regnaut for this joint initiative, and she recalled the objectives of the workshop. After a round of presentations of the participants, the agenda was adopted as proposed.

PRESENTATIONS

¹International Union for the Conservation of Nature

²General Directorate for Forests and Fauna

³Institute for Biodiversity and Protected Areas

⁴Great Apes Survival Partnership

2.1 The Boé sector in 1986. Presentation by Piet Wit, Advisor to the Board of Chimbo Foundation. See annex 2

Piet Wit summarised the findings of an agro-ecological survey he and his colleague Coen Reintjes executed in the Boe in 1986. This survey was the start of his interest in the Boe which eventually led to the establishment of the present Chimbo program. The main conclusions for the situation in the 80's:

- Sustainable improvement of the agricultural system will be difficult: Not enough cash can be generated to fund necessary inputs. There are no important nearby markets.
- Boé may support about 12,000 people with the agricultural system of the 1980s.
- The only true richness of the Boe is its biodiversity with which it might be possible to generate income sustainably.

2.2 The present Chimbo program by Annemarie Goedmakers, President of the Chimbo Foundation. See annex 3.

Annemarie starts with a short historic overview. Chimbo was created in 2007, dedicated to the memory of David Goedmakers. Since the beginning, approximately 1.5 million of euros have been collected from private donors, IUCN, WWF, the European Union, etc..

She cites Chimbo's vision:

- the Chimpanzee population of West Africa has the right to live and thrive in its original habitat
- the present threats need to be warded off
- the goal of conservation of West-African Chimpanzees and of their habitat is of global interest and a joint responsibility to be shared between the world community and the local population.

Annemarie specifies as strengths of the Boé :

- the presence of important biodiversity in particular of a large population of Chimpanzees
- the ecosystems are still more or less intact
- an appropriate legal framework for conservation exists, in addition to a traditional respect for Chimpanzees, and the authorities are supportive to the conservation of the Boé sector.

Major weaknesses for Chimpanzee conservation include:

- The population has doubled since 1986, partly because of the immigration from Guinea-Conakry (for animal husbandry and agriculture mainly)
- Improved mobility (bicycles and motorbikes mainly) leading to human presence everywhere
- Illegal exploitation of forests often by outsiders
- Strong military presence (with soldiers of different cultural backgrounds)
- Government quasi-absent
- Negative heritage of PADIB and Banthal Boé ⁵ projects, especially in relation to forest conversion to Cashew plantations
- Hunting (improved guns for hunting) so decrease of biodiversity
- No hospitals
- Concessions for Bauxite-mining have been given out.

⁵German funded projects for integrated development of the Boe

Chimbo's achievements on its first strategic axis of protection-related activities:

- Collaboration with Daridibó in particular through its Village Vigilance Committees (see Amadu Sane's presentation below)
- Hunting for pet trade of baby chimpanzees has been stopped
- Establishment of a field station for conservation and research: Casa Daridibó
- Support to IBAP on the creation of a National Park of the Boe (PNB). It is to be noted that the PNB covers about 1/3rd of the Boe only and that only part of it will be fully protected.
- Animal surveys and research (see the presentation by Gerko Niezing below):
 - >700 Chimpanzees (IBAP, 2007)
 - large mammals. New records for the country include Chevrotain, Golden Cat, confirmation of presence of Lion, Caracal, Buffalo, Waterbuck, etc. often through the Trail Camera program and student research.
 - inventories of small Mammals, Reptiles and Amphibians
 - > 300 species of birds including 4 new ones for the country
- Botanical research, including studies to the phenology of trees important for Chimpanzees (see Presentation of Esmee Mooi below)
- Awareness raising activities
 - support to the local radio owned by the local NGO⁶ Faabade Boé (solar plant, antenna, radio hardware, training of staff, specific emissions, etc.)
 - environmental education of school children
 - cultural and sportive festivals
 - impact and control of bush fires

On the second strategic axis of guided development and improving lively hoods for the people that assist us in Chimpanzee conservation, Annemarie reports as main achievements:

- Eco-tourism development, including the restoration of a visitors camp owned by the local NGO Fonda Huuwa. Initiatives to bring visiting researchers (> 30 so far, including students and volunteers from countries like The Netherlands, Belgium, Germany, France, Brazil, Portugal, Guinea Bissau and Senegal) and eco-tourists to the Boe.
- Improvement in drinking water facilities
- Creation of cereal banks
- Contributions for an improved environmental and social planning and management of the future bauxite mine
- Student research:
 - study into the importance of bush meat (hunting and food) for the local population
 - forest food and local livelihoods
 - impact of agriculture on biodiversity
- Public health activities (evacuations, Ebola awareness, etc.)

At this moment Chimbo is starting a new EU-funded project around the conservation of natural and cultural values of the Boe. Special attention will be paid to sacred forests that are important elements of the cultural and ecological infrastructure of the Boe.

⁶Non-Governmental Organisation

Discussion:

Fai Dje Djo has a large number of questions:

- Why did Chimbo choose for the Boe? *Answer:* Because of the first visit by Piet and the later visit by Piet, Annemarie and their son David; because in Guinea Bissau all efforts on nature conservation were concentrated in the coastal area, and the Chimpanzee population in the Boé is undoubtedly of global importance.
- Is Chimbo also active across the Corubal River. *Answer:* Yes. We have CVVs in Paramanguel and Djifim that form historically a part of the Boe
- Are we only looking at Chimpanzees? *Answer:* No. We also pay attention to other endangered animals like the Lion. IBAP has chosen the Lion as the symbol for the BNP. Fai regrets this and states that Chimpanzees are more important and more threatened. The others disagree with this observation, especially so for the West-African Lion which is in imminent risk of extinction.
- Fai asks for our opinion about collaboration with the future Bauxite mine. *Answer:* We will use our international network to influence the mining company to apply the ecologically and socially best practices. Fai thinks that the population is very much in favour of the arrival of the mine.
- Fai is concerned about the competition between the Chimpanzees and the people for the use of forest fruits.
- He suggests that Radio Beli shares some of its programs on Chimpanzees and Nature conservation with the radio stations in Bissau to make the city population more aware of what are also their natural values at stake. When Amadu answers that this has not worked so far, Fai suggests making better use of the journalist residing at CheChe.
- How many evacuations have we done so far? *Answer:* about 35. Fai thinks that we should communicate that with the health authorities in Bissau.

2.3 The Daridibó program in the Boe, by Amadu Sane, Coordinator Daridibó . See annex 4

Amadu observes that it was only towards the end of the 20th century/ beginning of the 21st century that the importance of the Boé for conservation of biodiversity was recognised by the authorities. The local organisation Daridibó was created. One of its main achievements is the establishment of 27 CVVs⁷ that patrol their village lands twice each month and report to the Chimbo/Daridibó coordinator.

Discussion:

Lilian (JGI-S) mentions that they also think of establishing CVVs in Senegal. For that reason she likes to know how we explain the importance of Chimpanzees to the local people.

Answer: Amadu and Annemarie mention a number of things:

- the human status of Chimpanzees in the Fula tradition: one does not kill fellow-human beings!
- The legal status of Chimpanzees: fully protected
- the potential for ecotourism
- without Chimpanzees, no projects that support the population like within the Chimbo program
- if the nature is good for Chimpanzees to live in, it is good voor Man as well

⁷ Village Vigilance Committees

2.4 Chimpanzee research with trail Camera's in the Boé. Presentation by Gerco Niezing, Research Coordinator Chimbo. See Annex 5

Gerco gives an overview of the results of our work with Chimpanzees with emphasis on the use of trail cameras. It includes:

- Presence and density estimates
- Behavioural studies, such as with the Max Planck Institute. The typical drumming behaviour has led to much excitement among ethologists
- Identification of possible impacts of bauxite mining on local presence of Chimpanzees near Capebonde, Dinguirai and Vendu Leidi
- A new participatory monitoring system is being developed in which the members of the CVVs participate

The large carnivore survey with trail cameras has provided the first picture of a Lion. At earlier occasions Golden Cat, Caracal and Leopard have been recorded.

Gerco concludes his presentation with a compilation of videos of Chimpanzees trapped by the trail camera network.

Discussion:

- Fai asks how often we revisit a camera. *Answer:* once a month
- He also likes to know at what distance a camera is triggered. *Answer:* Gerco tested it and found out at about 11 meters.
- Finally he warns that the interest for the conservation of sacred forests where local spirits live, is rapidly disappearing in Moslim communities like in the Boé. Communities no longer recognise the importance of traditional values as their ancestors did.

2.5 Presentation on the visit to the bauxite mine of Sangaredi by Bucari Camara, Chimbo project coordinator. See annex 6

Within the framework of the MISUBAB project (EU-funded), Daridibó organised a fact finding visit to the bauxite mine of Sangaredi in Guinee Conakry. Participants were representatives from the Boé population that will be highly affected by the Bauxite Mine once it becomes operational. Not only the mining operations were observed, also interviews were arranged between the visitors from the Boé and the local population that has been relocated to allow for Bauxite mining.

Discussion:

Lilian stresses the importance of a government to monitor the application of the conditions that it has set to a mining concession. It is however regretted that they rarely intervene when these conditions are not respected. Annemarie observes that for Guinea Bissau there is no transparency as to what specific conditions the government has imposed to the mining company.

2.6 Presentation about the phenology of important fodder trees for Chimpanzees, by Esmee Mooi, student from The Netherlands. See Annex 7

Esmee presents an example of ongoing student research, hers studies the phenology of fodder trees. This research will improve the knowledge about the availability of food resources for Chimpanzees over the year, since tree-fruits are the most important food

source. This will give insight if and when a food shortage during certain times of the year may be expected. The initial list of trees was compiled from research sites in other countries, but these do not necessarily apply in the Boe. A tree like *Sorindeia juglandifolia* for instance is an important food source here, but not mentioned as such elsewhere.

At present 21 species are monitored with 10 individual trees for each species, following a protocol that was developed by PANAF.⁸ Based on these data, a monthly average of the availability of flowers, fruits and leaves is calculated.

Discussion:

- Lilian asks how we know the local names of the fodder plants. *Answer:* a list has been compiled by Joost van Schijndel that is regularly updated with results from other Chimbo-research
- Fai asks which fodder plants are also used by the local population as food plants and wonders if there is not a risk of overexploitation. The government wants to look into this at the national level. Annemarie refers to the research work of Jitske Willemsen and Joost van Schijndel that looked into this.

2.7 Program de Conservation du Chimpanzé de l’Afrique de l’Ouest et Gestion Locale Durable des Ressources Naturelles (Sud-est du Sénégal) by Liliana Pacheco, Director Jane Goodall Institute Senegal and Principal Researcher. See annex 8

JGI⁹-Spain works in Dindéfelo Reserve, a community reserve of 14,000 ha in South-East Senegal on the border with Guinée Conakry. The reserve is part of an extremely important priority area for Chimpanzee conservation. Activities extend into neighbouring Guinée Conakry. The area has an important gallery forest for Chimpanzees along a stream that is fed by Senegal's highest waterfall.

Chimpanzee and other research:

- Started in 2009, with 1 group of 8 chimpanzees monitored (now they are 11). Total estimate is about 40 – 60 individuals of which 3 groups totalling 40 chimpanzees are monitored more closely.
- Phenological research into fodder trees. Some observations :
 - Chimpanzees prefer to eat some fruits before they are really ripe
 - even within the same species, they have preferred trees, *e.g.* with Baobab.
- New research being set up into stress for Chimpanzees because of disturbances by the large numbers of tourists visiting the waterfall.
- Research by the University of Huelva (Spain) into reforestation and agro-forestry practices in a valley that is shared between Senegal and Guinée Conakry
- Nest research: the decay of 400 nests is closely followed
- Behavioural study into right- or left handedness among Chimpanzees
- Bird research: >220 species have been recorded. The results are used to attract birdwatchers.
- Use of new technologies such as Cybertracker and SMART (standardized and recognized by IUCN) using Runbo devices, in conservation work with local communities. Liliana and

⁸The PanAfrican Programme on Chimpanzee research of the Max Planck Institute in Germany

⁹Jane Goodall Institute

Manuel also give some background information about Global Forest Watch, a real-time NASA-based system to check forest damage.

Major problems and threats:

- Slash and Burn Agriculture. Lack of larger trees for nest building. Sometimes chimpanzees build nests close to the surface
- Gold mining both by companies with official mining concessions and by illegal artisanal miners (“orpaillage”), usually with no respect for ecology, social and cultural values or legislative requirements. Pollution by mercury and cyanide.
- Large scale commercialisation of *Saba senegalensis* fruits deprives Chimpanzees of an important component of their diet.
- Cross-border collaboration with Guinee Conakry is difficult because of frequent changes of local authorities, informal payments required, etc. It would add another 60,000 ha to the conservation site. One JGI-field site further down in Guinea Conakry had to be abandoned because of Ebola
- Trail camera's last only one year
- General poverty of the people living in the area

Protection :

- A team of 10 eco-guards has been created in one village, as a pilot.
- Assistance to reduce Chimpanzee-Man conflicts. Experiments have been tested to compensate the local people when they agree not to harvest *Saba senegalensis* fruits in Chimpanzee territory.

Education and development:

- At the field station several courses are given: a/o on primatology, on new technologies, training of eco-guards, etc.
- The local population is assisted with provision of good water
- Schools may receive some support from JGI
- Development of ecotourism

2.8 Conservação do Chimpanze. Presentation by Fai Dje Djo, Director Fauna. See annex 9

After a general introduction of Guinea Bissau and the degradation of its habitats, Fai refers to the first Chimpanzee surveys of the country, dating from 1940 onwards. In 1998 Feron concluded that the Chimpanzees of Guinea Bissau were on the decline. The actual distribution of Chimpanzees goes from the South-West to the South-East with a particularly abundant population in the forest-savannah mosaics of the Boe. He then enumerates a number of national plans and actions needed to be developed and implement to conserve the Chimpanzees of his country. These include:

- a monitoring plan
- an awareness plan
- a plan to control the illegal trade in pet animals and to deal with confiscated animals.
- an ecotourism plan
- lobbying with politicians to prioritise Chimpanzee conservation and to integrate conservation and development.

2. Monday 15th of February 2016. Field visit to a sacred forest near Pataqui and afternoon discussions.

3.1 Field visit to a sacred forest on the territory of Pataqui

The morning of the 15th participants left for the village of Pataqui where they were joined by 4 of the 5 members of the local CVV. The objectives of the visit were to visit a complex of a sacred forest, savannah and dry forest and to demonstrate the work with the CVVs on protection and monitoring with trail cameras and of course also to provoke discussions among field workers.

The afternoon session started with a round of observations on the morning program:

- about the place visited
 - similar landscape as in Senegal, also for fodder trees much comparison
 - many traces of wildlife were seen of different species including Chimpanzees, Warthog and Red River Hog, Duikers, Waterbuck, Civet and a latrine by (probably) Hyena on which a trail camera was set.
 - Nests were observed in different stages of decay. JGI offers to share their document on nest decay with us. Counts of nest numbers may reveal information about Group size.
 - What are the criteria to place cameras? *Answer:* they will be installed at places where we expect a better chance of catching wildlife such as animal tracks or drumming trees. Other criteria include special habitats like sacred forests or presence of fodder trees, waterholes, etc.
 - What are the trends in Chimpanzee numbers, we cannot say at this moment. We are developing a long-term monitoring system with CVV-input.
- about working with CVVs
 - we were very well received by the CVV, including provision of breakfast before taking off for the field. The CVV looked very motivated and enthusiastic.
 - CVVs are good guides and have a keen eye on animals, but seem not to always to give accurate information (*e.g.* they seem to see a lot of Chimpanzees while Chimbo's teams see them really rarely)
 - more training is needed for CVV members before they can handle trail cameras
 - Women were not well integrated in this CVV. Annemarie observes that women in general seem to see Chimpanzees more easily than men do.
 - good, relevant and interesting background information by the President of the CVV/ owner of the sacred forest about the site
 - It is difficult for local people to estimate distances in our way. Maybe it is better to do it on a time basis (*i.e.* half an hour walking instead of 2 km distance). "The local people have a GPS in their head, we in our hand".
 - CVVs should have a key to be able to remove the cameras in case of a risk (fire!)
 - Patrol forms should have been made also for this trip. Annemarie challenged this as this was not a normal way of patrolling
 - How do CVVs decide where to go to? *Answer:* They do not necessarily go every time to the same place. They have a number of preferred sites to visit depending on their knowledge about food availability, recent observations, etc. It is important to have them going to the field. They are our eyes in the field!

- Trail-camera results should be fed back to the CVVs, e.g. at the meeting of the Central Committee.
- other exchanges
 - Faeces research for Chimpanzees should be done when one is 100% sure it is of Chimpanzees, i.e. found under a nest, or actually observed while defecating. This is how it is done in Senegal
 - A photo-library is available in Senegal to identify traces of Chimpanzees and distinguish them from those of other animals like Baboons. JGI is offering to share this with others like Chimbo. JPI's field teams use this imaged protocol for local patrols' reports, to make their reports as accurate as possible JGI would like to get some more background information about the PANAF protocol developed by MPI¹⁰
 - more Camera Traps needed with other CVVs, as well as more collaboration with IBAP-Chimbo and CVVs
 - SMART/Cybertracker use for these groups is only recommended in a very simple form with information about the patrol, human activities, fauna and control, observations of animals (number, gender, health etc.), as well as geo-referenced photos. Without a SMART follow-up it makes little sense to introduce it now. In Senegal even Niokolo Koba did not want to introduce it while they have the staff with the educational background to use it properly!

3.2 Group work on problems and challenges in conservation of the West African Savannah Chimpanzee

Participants were divided into 3 groups to identify problems and challenges in Chimpanzee conservation in the areas where they work. Group 1 was composed of people able to communicate in Criollo, Group 2 were all men and Group 3 were all women. The outcome of the discussions in the different groups are in annex 10.

The following gross-list of topics to be addressed by the reviewed Regional Action Plan was established:

- Management plans for land- and water use from village level to national level, taking into consideration the needs for the conservation of Chimpanzees.
- Good governance i.e. integration of Chimpanzee conservation considerations in all sectoral plans, e.g. not just for the Ministry of Environment but also for mining, transport, public health, education, etc.
- Biodiversity monitoring, national surveys on chimpanzees,
- Strengthen connectivity of ecosystems, e.g. promote the respect for sacred forests and legalise their protection
- Strengthen community involvement in conservation of Chimpanzees
- Promote exchange and collaboration among conservation organisations in the region
- Education and awareness raising at all levels from local to international
- Conflicts human-chimpanzees in general and in particular:
 - **impact of bush-fires, an issue typical for savannah-chimpanzees**
 - collection and commercialisation of fruits that are also eaten by chimpanzees,

¹⁰Max Planck Institute, Leipzig, Germany

- conversion of Chimpanzee habitat for agriculture (*e.g.* cashew plantations) and the need for land use planning
- Chimpanzees and Public Health issues
- Manage and control human population growth, especially
 - with regard to immigration into important Chimpanzee areas
 - education of women and birth control
- Mining for Bauxite (Guinea Bissau) and for Gold (Senegal). This leads a/o to:
 - increase in human-Chimpanzee conflicts,
 - increase in occurrence of diseases, pollution/waste, etc.
 - new infrastructure attracts people. Immigration leads to increase in poaching and issues with water but also to conflicts between groups of people whereby the men may leave but the women may stay behind
 - often disrespect of environmental plans
- Poaching control (pet trade, bush-meat)
- Develop responsible tourism as an alternative source of income
- Develop solutions to deal with confiscated animals

2. Tuesday 16th of February 2016. Formulation of recommendations for review of the Action Plan for West-African Chimpanzees and field visits .

4.1 Overview of references to the Chimpanzee situation in Senegal and Guinea Bissau from the current action plan, by Annemarie Goedmakers:

Annemarie Goedmakers presented a summary of all relevant information and recommendations concerning Senegal and Guinea Bissau in the current survey and action plan (KORMOS AND AL., 2003). The presentation is copied in annex 11. Herewith some highlights of her presentation.

For Senegal in 2003:

- 200-400 chimpanzees
- Threats :
 - habitat destruction,
 - hunting,
 - competition with humans for resources
 - and capture of young chimpanzees
- Priorities :
 - survey of regions hosting chimpanzees
 - revise current legislation (2003!)
 - educational activities for the population
 - solutions to decrease competition between human and chimpanzees (especially about access to water, and fruits of *Saba Senegalensis*)
 - collaboration with the government of Guinea-Conakry on protection of chimpanzees crossing the borders.

For Guinea-Bissau :

- 600-1000 chimpanzees
- Threats :
 - habitat destruction,
 - hunting
 - and capture of young chimpanzees
 - Priority areas : Cufada National Park, Boé sector, Cantanhez forest, Tombali Basin, Cumbija and Cacine rivers
- Priorities
 - Survey on chimpanzees population
 - National strategy for chimpanzees conservation
 - Investigate feasibility of cross-border protected area (with Guinea-Conakry)
 - Protection of Cantanhez forest, Tombali basin, Cumbija and Cacine rivers
 - Encourage eco-tourism in protected areas
 - Send orphaned chimpanzees to sanctuaries
 - Further surveys on chimpanzees in open woodlands
 - Further studies on chimpanzees culture in Guinea-Bissau

For West Africa in general :

Priorities to work on:

- Logging : impact on chimpanzees
- Agriculture and chimpanzees survival
- Chimpanzees and crop raiding
- Hunting for Bush-meat
- Orphaned chimpanzees and study of viability of rehabilitation
- Infectious diseases and Chimpanzees
- Policy recommendations for chimpanzees protection
- Recommendations to census chimpanzee populations in forests

Exceptionally Important Priority Areas

Fouta Djallon:

- Surveys and monitoring
- Education and awareness about chimpanzees and other primates
- Study on bushmeat and pet trade in Guinea-Bissau and Guinea-Conakry
- Improve management plan for the Boé

Manding Plateau

- National/sub-national program of environmental education
- Researches on threats to guide conservation policy
- Researches on chimpanzees behavior and ecology
- Investigate competition with humans (ex : *Saba senegalensis* fruit)
- Actions aimed at Bafing Biosphere in Mali

Very Important Priority Area

Guinea-Conakry/Guinea-Bissau coastal

- Further surveys needed
- Creation of a National Park advised

4.2 Contributions and recommendations for the revision of the current action plan for Chimpanzees in West Africa

This section is following the outline of the current Action Plan for West African Chimpanzees. Suggestions are given for adaptations in the texts and recommendations for actions that according to the participants of the workshop are needed.

Suggestions and recommendations for review of 2003 Action Plan for West African Chimpanzees, for Senegal:

There are likely over 500 chimpanzees in Senegal. The number in the 2003 plan probably was underestimated. The species is on the decline because of increased habitat destruction.

Threats:

- Gold mining with its increase in infrastructure, pollution, immigration, etc.
- Habitat fragmentation and destruction
- Hunting: not so much an issue, most is subsistence hunting, but we have to stay alert. Disturbance for Chimpanzees of hunting other animals
- Competition for space, water and food between chimpanzees and humans remains a problem
- Trade of young chimpanzees is rarely observed
- Construction of Sambangalou dam will flood a large area of Chimpanzee habitat

Priority areas all in Manding Plateau:

- Niokolo Koba – was already protected in 2003
- Diarha river – Janice Carter used to work here
- Dindéfellou – national reserve since 2010, JG Es active
- Pays Bassari – really broad, includes Dindéfellou
- Tomboronkoto – Jill Pruetz works here
- Fongolembi – Jane Goodall Institute Spain active
- Linguekoto
- Dakateli area should be added (JGI-Spain active there)
- Kayan is a PANAF site, but perhaps not (yet) a priority area

Priority Actions for Chimpanzee conservation in Senegal :

- Improve communication and exchange of experiences between conservation organisations and research teams (Jane Goodall is the only one working on conservation)
- Conduct a national survey (including Niokolo koba) and set up a data base with results of surveys (local, regional or national) since 2003
- Continue to promote educational activities to raise the awareness of the plight of chimpanzees in Senegal, make it formal part of national education (Janice Carter had a program, JGI-Spain does some local work).
- Evaluate if any legislative changes occurred since 2003, revise legislation concerning chimpanzees if necessary; but also focus on land management (e.g. gold mining, Sambangalou Dam), environmental control, etc.
- Continue to explore solutions to the competition between humans and chimpanzees over access to water and wild food sources such as *Saba senegalensis*. JGI-Spain has done

zoning for *S. senegalensis* collection; they saw a stabilization/decrease in this problem during their time.

- Collaborate with the Guinea government on the protection of chimpanzee populations migrating across the Senegal-Guinea border which is still an issue; JGI-Spain is working on it.
- Study the biodiversity offsets of the Sambangalou Dam for Senegal and Guinea; investigate the impacts of its construction and realization, and how to mitigate this threat. International pressure may be required.
- **Urgent** : conduct environmental impact studies of gold mining and take appropriate action to minimise these impacts
- Establish more natural reserves in chimpanzee habitat a/o to mitigate (mining) problems.

Suggestions and recommendations for review of 2003 Action Plan for West African Chimpanzees, for Guinea-Bissau:

Figure of 600 – 1000 chimpanzees needs urgent updating; 1000 is the minimum. List with surveys to be added (e.g. 710 Chimpanzees in the Boe according to Silva, 2007)

Threats:

- Habitat destruction and fragmentation (due to agriculture, bush-fires, etc.)
- Mining: habitat, attracting newcomers and all sorts of adventurers, pollution
- Hunting: especially in Cantanhez for pet trade. Hunting in general creates disturbances even when other species than Chimpanzees are hunted. Snare hunting is rare but a serious threat to chimpanzees.
- Population growth; especially immigration may be a problem as immigrants do not necessarily respect local customs that respect nature
- Increased mobility and improved access to chimpanzee habitat (bicycles, motorcycles etc.)

Priority Areas in Guinea Bissau:

- Lagoas de Cufada National Park was already national park in 2003, but about one third of its area has since been destroyed for construction of a harbour for bauxite transport. This has also eroded local population's respect for the NP's integrity.
- Of the Tombali, Cumbija and Cacine rivers basin, only Cantanhez forest is now a national park. There is still hunting and other problems; effective protection is lacking.
- Boé Sector is set to have one third declared a NP along its northern part where the Rio Fefine flows into the Rio Corubal. The NP will have three zones; only one relatively small core zone is to be fully protected. The Boé Sector is threatened by bauxite mining along its Southern border with Guinea Conakry.
- The whole of the Boé is important chimpanzee habitat: Chimbo Foundation works on community based protection in the whole sector.
- National Parks are to be connected with ecological corridors with protected status to ensure connectivity. The plans look good but are not yet fully implemented

Priority Actions for Guinea Bissau:

- Chimpanzee surveys and monitoring: So far surveys have been conducted for Boé; for Cantanhez and Cufada IBAP should be contacted. For Boé, a long-term monitoring system is being set-up.

- Overall national strategy for protection is developed by government organizations (IBAP and DGFF) but work is still needed on implementation
- Promote good governance. Share the responsibility for conservation of Chimpanzees across sectors and include customs, army, police, the mining department, etc.
- Promote cross-boundary conservation with focus on Chimpanzee protection between the two Guineas. A project was funded by the EU on the feasibility of a transnational protected area (Guinea-Bissau/Guinea-Conakry) but no conclusive results yet.
- Conservation action outside protected areas is needed to enhance connectivity and to protect important Chimpanzee communities outside these areas, *e.g.* Cantanhez is now protected but conservation concerns remain notably for the surrounding area. A similar situation exists in the Boé where the National Park will cover one third of the area only.
- Develop viable options for eco-tourism. Possibilities exist in Cantanhez with ecotourism and in the Boé with eco-volunteers. Political instability and public health issues (*e.g.* Ebola) have been major setbacks to develop ecotourism
- Studies of chimpanzee conservation in open woodlands started in the Boé. Chimbo executed a number of studies, some as part of the PANAF program of the Max Planck Institute of Leipzig, Germany
- Studies are needed to better understand the different chimpanzee cultures in Guinea-Bissau, *e.g.* "palm nesting" in Cantanhez and "tree drumming" in the Boé
- More work is needed on the specifics of the conservation of savannah-chimpanzees (bush-fires, slash and burn agriculture, etc.)
- Bauxite mining needs to be responsible. Monitoring of the development of the future mine is required (this includes the construction of a deep sea port at Buba, and a planned railroad)
- Be alert on the possible construction of a dam in the Corubal River at Saltinho, East of Buba
- Be vigilant as for illegal logging. Chinese merchants with the complicity of local colleagues have devastated large areas in Guinea-Bissau (not in the Boé though)
- Strengthen the protection and the respect of sacred forest as they are important components of the ecological backbone of the country
- No orphaned chimpanzees from Guinea-Bissau have been sent to sanctuaries. It is to be noted that this is an animal welfare issue, not conservation. But the problem of confiscated animals needs to be addressed.

Suggestions and recommendations for review of 2003 Action Plan for West African Chimpanzees, for West Africa as a whole:

Threats and action recommendations for West Africa

- Criteria shouldn't be only about number of chimpanzees but also on the type of ecosystem (savannah ≠ forests), and specialized chimpanzees may require a special status
- Illegal Chinese logging has been important in Guinea-Bissau, thankfully not in Boé. No massive logging in Senegal.
- Agriculture and Chimpanzee Survival
- Chimpanzees and Crop Raiding
- Bushmeat Hunting as a Threat to Chimpanzees is not (currently) an issue in Guinea-Bissau and Senegal.
- Orphan Chimpanzees: Experiences and Prospects for Viability in Chimpanzee Rehabilitation are still limited

- Infectious Diseases: A Common Threat to Chimpanzees and Humans. The recent ebola scare may have reduced bushmeat consumption of chimpanzees.
- Policy Recommendations for Chimpanzee Protection
- Recommendations for Censusing Chimpanzee Populations in Forests; but we also need special attention to Savannah chimpanzees such as found in Senegal and Boé

Priority areas in Senegal and Guinea Bissau

- Criteria should not only be on number of Chimpanzees, but also on ecosystem types where they occur. Savannah Chimpanzees deserve more attention than is actually paid to them.
- Also Chimpanzees with special cultural characteristics may require special status.

Exceptionally Important Priority Areas

- Fouta Djallon; Boé is northernmost extension, more collaboration needed with Guinea
- Manding Plateau; more collaboration needed between Senegal and Mali

Very Important Priority Areas

- Guinea-Guinea-Bissau Coastal; important corridors connecting Cufada-Cantanhez and Guinea Conakry are established

Priority action for Chimpanzee conservation in West Africa:

- Increase communication and exchange of experiences between conservation organizations (NGO and State), both nationally and across borders. In particular encourage local experts in conservation - especially field staff - to exchange experiences by traveling to sites in neighbouring countries, thereby creating a sense of African ownership for Chimpanzees
- Attention for education and involvement of women in conservation. This targets the broader aspects of agricultural impacts on Chimpanzees and their habitat, and may slow down population growth
- Increase cooperation between NGOs, government and private sector for chimpanzees conservation accross borders
- Bushmeat hunting (not currently an issue in Guinea-Bissau but could become one with the immigration)
- Moreover than censuring chimpanzees in forests, we should pay a special attention to the savannah
- Chimpanzees sanctuaries : the need would be decreased by an increased attention on anti-pet trade policies and implementation
- Monitoring of chimpanzees and their habitat
- Education and awareness (continuous) - national, international, children, adults etc.
- Exchange between National Parks staff to have sort of a mutual peer - evaluation of parks (IUCN program) + promote National Parks to the green list of IUCN
- Review present situation of legislation

Actions recommended by this workshop for the Boé-part of Fouta Djallon

- Conduct further surveys and monitoring in Boé in Guinea-Bissau.
- Establish and expand an education and awareness campaign about Chimpanzees and other primates in both Guinea and Guinea-Bissau.

- A study of the bush-meat and pet trade in chimpanzees in Guinea-Bissau and Guinea Conakry is still urgently needed.
 - Bullets are provided to hunters by market women from larger cities that are selling bush meat on the market or directly to restaurants
 - There are rumours that it is possible to eat chimpanzee meat in Bissau.
- Formulate a management plan for the Boé that takes into consideration the establishment of the national park, existing threats (*e.g.* the mining concessions) and preservation of special sites (sacred forests in particular).

Actions recommended by this workshop for Manding Plateau

- Urgently conduct environmental assessments on impacts of gold mining and make action plan to mitigate problems.
- Develop a national or sub-national program of environmental education including village-level programs on chimpanzee ecology and conservation.
- Carry out research on threats to chimpanzee survival in order to help guide conservation policy.
- Conduct basic research on chimpanzee behavior and ecology.
- Investigate chimpanzee-human competition over natural resources, especially with regard to the role of *senegalensis* fruit in the local economy, trends in demography, crop-raiding by chimpanzees, and habitat destruction.
- Actions aimed at Bafing Biosphere Reserve in Mali.

Actions recommended by the workshop for Guinea-Guinea-Bissau Coastal Area

- Conduct further chimpanzee surveys of the entire area.
- Improve implementation and enforcement of protected status.

4.3 Afternoon: Field visits to Bandjandam and to Ronde Hill

One group visited Ronde Hill where a Bauxite mining concession has been granted. At the village of Munhini, where the Headquarters of the mine is planned, a short discussion was held with the President of the CVV of that village. Issues discussed included:

- Changes in hydrology and water quality so good water for people and Chimpanzees may no longer be available
- Impacts of roads and traffic
- Influx of people, bringing disrespect of traditional values, bars, prostitution, etc.
- No involvement of people about necessary compensations. So far none at all for loss of natural values and ridiculously low compensation for humans. The field staff of Bauxite Angola in place has not received any salary for 25 months.
- International pressure is needed, targeting both the mining companies and the end users/consumers of the Aluminium chain

The second group visited the Bandjandam Forest on the territory of Beli, where a group of Black and White Colobus resides. Besides these monkeys, a Bushbuck and many animal tracks were observed.

- Annex 1: List of Participants
- Annex 2: The Boé sector in 1986. Presentation by Piet Wit
- Annex 3: Current Program of Chimbo. Presentation by Annemarie Goedmakers
- Annex 4: The Daridibó Program in the Boe by Amadu Sane
- Annex 5: Chimpanzee research with trail Camera's in the Boe. Presentation by Gerco Niezing
- Annex 6: Presentation on the visit to the bauxite mine of Sangaredi by Bucari Camara
- Annex 7: Presentation about the phenology of important fodder trees for Chimpanzees, by Esmee Mooi
- Annex 8: Program de Conservation du Chimpanzé de l'Afrique de l'Ouest et Gestion Locale Durable des Ressources Naturelles (Sud-est du Sénégal) by Liliana Pacheco
- Annex 9: Conservação do Chimpanze. Presentation by Fai Dje Djo, Director Fauna
- Annex 10: Outcome of Group discussions on problems and challenges for Chimpanzee Conservation in Senegal and in Guinea Bissau
- Annex 11: Overview of references to the Chimpanzee situation in Senegal and Guinea Bissau from the current action plan, by Annemarie Goedmakers