

Progress report

Monitoring and Capacity Building in Four Madagascar Unprotected Important Bird Areas (IBAs)

Application ID: 15074-1

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Introduction

Fieldwork data collecting for this project was started in September 2014 in respecting the proposed timetable of project in proposal without paying attention first on the respect of fieldwork visit period of project Zicoma for each site.

In addition, I didn't visit some sites that Zicoma team visited during my first fieldwork because of misunderstanding on site name and location, difficulty of access in certain season and question of security. I really want to revisit them and find some rare species and flock of individuals of waterbird there.

Objectives

- Record the actual status on the water bird population, threat and ongoing conservation effort in four target priorities unprotected Important Bird Areas of Madagascar (Tsiribihina delta and Upper Tsiribihina river, Tambohorano wetlands, Bemamba wetland complex, Bombetoka bay and Marovoay wetlands);
- Build capacity of local people around the target wetland IBA on monitoring skill and BirdLife strategy plan (conservation program and policies);
- Outline the changes on the water bird population, threat and ongoing conservation effort at four target IBAs;
- Inform these changes for updating data of partners (BirdLife, Peregrine Fund, Durrell Wildlife, Ramsar, Wetland International, AEWA and others).

Progress on results obtained

Tables below summarizes the result obtained per site

Bombetoka bay and Marovoay wetlands

	Zicoma 1999	Actual (2014-2015)	Changes	Comments
Water bird population (Bombetoka bay and Marovoay wetlands)				
Species richness (A1)	5	4	Decreased	- <i>Tachybaptus pelzelni</i> and <i>Haliaeetus vociferoides</i> were not found during this 2014 visit period - Presence of <i>Threskiornis bernieri</i>
Species richness (A2)	4	2	Decreased	- <i>Haliaeetus vociferoides</i> was missed
Species richness (A3)	3	2	Decreased	- <i>Haliaeetus vociferoides</i> was missed
Species richness (A4i)	3	1	Decreased	No gregarious individual was found during the visits except flamingos but their numbers didn't exceed the threshold
Species (A1, A2, A3 and A4i) diversity	High	Low	Decreased	
Abundances of target species A4i (<i>Egretta dimorpha</i>)	286	27	Decreased	
Abundances of target species A4i (<i>Egretta alba</i>)	700	12	Decreased	
Abundances of target species A4i (<i>Anas bernieri</i>)	85	8	Decreased	
Threats (Bombetoka bay and Marovoay wetlands)				
Degradation of mangrove: collect of mangrove's wood for selling at the town of Mahajanga	Presence	High	Increased	Two big pirogues full of mangroves woods from the Bombetoka bay were observed on seashore of Mahajanga
Destruction of nesting water bird colonies	Presence	Still running	Increased	I didn't see this threat during the visit because of season (non-breeding period) but collect of water bird chicks and eggs is still operational every year according to local guides
Water bird hunting	Presence	Still running	Increased	Some visitors and hunters from the hotels of Mahajanga town passed there sometimes
Development of shrimp farm at Boanamary salt pans	Presence	Still running	Increased	

Overfishing at the Lake Amboromalandy	Presence	Still running	Increased	
Development fish farm at the Lake Amboromalandy	Presence	Still running	Increased	
Development of rice fields at Marovoay	Presence	Still running	Increased	
Destruction for charcoal production	No data	Running	Increased	
Disturbance from collection of crabs	No data	Running	Increased	
Ongoing conservation effort (Bombetoka bay and Marovoay wetlands)				
Conservation actions underway	Classified forest for the Mangrove and islands of Betsiboka (old protection law from the government)	<p>- Association Fanamby (2008-2009): For making Bombetoka-Belemboka as new protected area (in process but not yet definitive) but this project to make this site as definitive protected area was not completed in term because of political strike event 2009.</p> <p>- Project Voronosy (2006-2007): Malagasy Association</p>	With progress on law and administrative documents but there is not yet conservation management in ground	<p>- Conservation status of site is increased in term of law (received formal protection law) but the process to get full protection is not competed.</p> <p>In addition, since there is not organism responsible on implementation of conservation in ground for the site, conservation status of sites is still decreased in term of conservation in ground because there is not</p>

		Voronosy was created to protect the species in Bombetoka Bay by changing the attitude of villagers towards the bird and its habitat (Perschke 2006) for protection. This project developed as well captivity breeding of Madagascar Sacred Ibis but finished because of suddenly died of project leader		
Development of ecotourism	No signaled	Mentioned and heard during the visit	Increased	<ul style="list-style-type: none"> - Boat circuit with tourists circulated sometimes - Boats circuits are already launched and developed at website (http://www.mosaïque-malgache.com/circuits/oiseaux/)
Number of trained local people on monitoring skill and BirdLife strategy plan (Bombetoka bay and Marovoay wetlands)				
List & type (number)	No data	3	Increased	
Number of informed partners on changes of IBA status (Bombetoka bay and Marovoay wetlands)				
Number & list	No data	1 (not yet distributed)	Increased	<ul style="list-style-type: none"> - Regional direction of Forest and environment Marovoay - Waiting the result from full data analysis

A1, A2, A3 and A4 are classes of species according to the BirdLife International criteria:

A1: Threatened species listed in IUCN red list

A2: Species with restricted range (according to the five categories of endemic bird area of Madagascar classified by BirdLife International)

A3: Species affiliated to the Biome of West

A4i: Gregarious species with number of individuals over passing the threshold fixed by BirdLife International

Tsiribihina delta and Upper Tsiribihina River

	Zicoma 1999	Actual (2014-2015)	Changes	Comments
Water bird population (Tsiribihina delta and Upper Tsiribihina river)				
Species richness (A1)	5	3	Decreased	<i>Ardeola idae</i> and <i>Haliaeetus vociferoides</i> were not found during this 2014 visit period
Species richness (A2)	4	3	Decreased	<i>Haliaeetus vociferoides</i> was missed
Species richness (A3)	7	6	Decreased	<i>Haliaeetus vociferoides</i> was missed
Species richness (A4i)	6	2	Decreased	No gregarious individuals were found during the visits except <i>Anas bernieri</i> (10 individuals) and <i>Charadrius thoracicus</i> (16 individuals) with numbers exceeding their threshold (respectively total of in large mudflat and salt pans)
Species (A1, A2, A3 and A4i) diversity	High	Low	Decreased	
Abundances of target species A4i (<i>Ardea humbloti</i>)	50	4	Decreased	Probably there is period they are in flock or lack of flock because of disturbance
Abundances of target species A4i (<i>Anas bernieri</i>)	40	10	Decreased	Probably there is period they are in flock or lack of flock because of disturbance
Abundances of target species A4i (<i>Charadrius thoracicus</i>)	47	16	Decreased	Probably there is period they are in flock or lack of flock because of

				disturbance
Abundances of target species A4i (<i>Tringa cinerea</i>)	642	13	Decreased	Probably there is period they are in flock or lack of flock because of disturbance
Abundances of target species A4i (<i>Glareola ocularis</i>)	250	12	Decreased	Probably there is period they are in flock or lack of flock because of disturbance
Abundances of target species A4i (<i>Sterna bengalensis</i>)	3300	28	Decreased	Probably there is period they are in flock or lack of flock because of disturbance
Threats (Tsiribihina delta and Upper Tsiribihina river)				
Exploitation of woods for house building and dry woods for cooking	Presence	High	Increased	
Collect of nestling	Presence	Still running	Increased	
Overfishing at the river	Presence	Still running	Increased	
Hunting of flamingos	Presence	Still running	Increased	
Development of rice fields	Presence	Still running	Increased	
Ongoing conservation effort (Tsiribihina delta and Upper Tsiribihina river)				
Conservation action underway	Managed by regional forest of Belo Tsiribihina (representative of ministry of forest and environment)	- Managed by regional forest of Belo Tsiribihina (representative of ministry of forest and environment) - Durrell Wildlife Conservation trust leads waterbird surveys and monitoring project around there sometimes	No changes	Still managed by the government but threats increased because of lack of conservation action in ground
Development of ecotourism	No signaled	Circuit developed on Tsiribihina river	Increased	Web is developed for tourists circuits passing at Belo Tsiribihina (http://www.mada-diary-tour.com/circuits/tsiribihina-et-tsingy/)
Number of trained local people on monitoring skill and BirdLife strategy plan (Tsiribihina delta and Upper Tsiribihina river)				

List & type (number)	No data	3	Increased	Improvement of local capacity on water bird survey and monitoring
Number of informed partners on changes of IBA status (Tsiribihina delta and Upper Tsiribihina river)				
Number & list	No data	0 (Not yet distributed)	Increased	Waiting the result of full data analysis

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Tambohorano wetlands

	Zicoma 1999	Actual (2014-2015)	Changes	Comments
Water bird population (Tambohorano wetlands)				
Species richness (A1)	4	5	Increased	All the four A1 species (zicoma 1999) were found + <i>Threskiornis bernieri</i> which is recently listed as Endangered species
Species richness (A2)	5	6	Increased	<i>Threskiornis bernieri</i> (additional species)
Species richness (A3)	5	6	Increased	<i>Threskiornis bernieri</i> (additional species)
Species richness (A4i)	4	2	Decreased	Number of <i>Sterna bengalensis</i> and <i>Sterna dougallii</i> were not over passed the threshold
Species (A1, A2, A3 and A4i) diversity	High	Low	Decreased	<i>Threskiornis bernieri</i> (additional species)
Abundances of target species A4i (<i>Anas bernieri</i>)	67	12	Increased	Few and scattered populations were found
Abundances of target species A4i (<i>Charadrius thoracicus</i>)	61	16	Increased	Concentrated on open salt marshes around mangroves

Abundances of target species A4i (<i>Sterna bengalensis</i>)	3200	139	Decreased	Few populations were found
Abundances of target species A4i (<i>Sterna dougallii</i>)	883	73	Decreased	Probably the flocks were spreading somewhere else
Threats (Tambohorano wetlands)				
Overfishing and transforming marshes to rice fields on lakes	Presence	Still running	Increased	Lakes are very disturbed by fishermen and rice cultivators
Collecting eggs and nestling of nesting colonial water bird (terns and herons)	No data	Presence	Increased	People takes eggs and nestling of Terns nesting on rocks of island and herons nesting on mangroves
Fishing and collect of crabs around island and mangrove	No data	Running	Increased	
Hunting water bird on lakes	Mentioned	Still running	Increased	
Development of plants invasive	Presence	Still running	Increased	
Collecting mangroves' woods for building	Not data	Running	Increased	
Ongoing conservation effort (Tambohorano wetlands)				
Conservation action underway	No data	- Only some conservation research projects passed sometimes around island of Nosy vao, Lake Mandozo, and marine conservation research - Still no conservation action in ground was or is currently running	No change but threats on habitat and biodiversity continued to run and seems to be increased in some points	
Development of ecotourism	No data	No information		
Number of trained local people on monitoring skill and BirdLife strategy plan (Tambohorano wetlands)				
List & type (number)	No data	3	Increased	
Number of informed partners on changes of IBA status (Tambohorano wetlands)				
Number & list	No data	0 (results are not yet shared)	Will increase	

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Bemamba wetland complex

	Zicoma 1999	Actual (2014-2015)	Changes	Comments
Water bird population (Bemamba wetland complex)				
Species richness (A1)	8	4	Decreased	Four species were not seen: <i>Phoenicopterus minor</i> , <i>Circus maillardi</i> , <i>Amauornis olivieri</i> , and <i>Philepitta schlegeli</i>
Species richness (A2)	6	4	Decreased	<i>Amauornis olivieri</i> , and <i>Philepitta schlegeli</i> are missing
Species richness (A3)	11	9	Decreased	<i>Amauornis olivieri</i> , and <i>Philepitta schlegeli</i> are missing
Species richness (A4i)	5	1	Decreased	Only <i>Anas bernieri</i> over passed the threshold, other species are not
Species (A1, A2, A3 and A4i) diversity	High	Less	Decreased	
Abundances of target species A4i (<i>Ardea humbloti</i>)	50	16	Decreased	Few individuals are left and scattered
Abundances of target species A4i (<i>Egretta ardesiaca</i>)	2000	43	Decreased	Probably dispersed somewhere else
Abundances of target species A4i (<i>Casmerodius albus</i>)	500	38	Decreased	Probably dispersed somewhere else
Abundances of target species A4i (<i>Plegadis falcinellus</i>)	1265	27	Decreased	Probably dispersed somewhere else
Abundances of target species A4i (<i>Anas bernieri</i>)	30	8	Decreased	Probably still abundant but dispersed
Abundances of target species A4i (<i>Chlidonias hybrida</i>)	600	13	Decreased	Probably dispersed somewhere else
Threats (Bemamba wetland complex)				

Transforming marshes to rice fields	Presence	Still running	Increased	
Development of invasive plants	Mentioned	Still developing	Increased	
Overfishing	Mentioned	Running		
Forests cutting and firing	Mentioned	Still running		
Sedimentation in lake	Presence	Still running		
Ongoing conservation effort (Bemamba wetland complex)				
Conservation action underway	Classified as hunting reserve since 1972	Same status - No conservation in ground nor effective management was carried out at the site - Some research conservation projects passed sometimes such as monitoring wetland bird carried by the team of Durrell wildlife trust and Peregrine fund	No changed but threats increased	
Development of ecotourism	No data			
Number of trained local people on monitoring skill and BirdLife strategy plan (Bemamba wetland complex)				
List & type (number)				
Number of informed partners on changes of IBA status (Bemamba wetland complex)				
Number & list	No data	0 (intending to share)	Will be Increased later	

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Photos

Exploitation of Mangrove woods from Bombetoka bay to sell to Mahajanga for houses and fences building:

Examples of trained local guides for Bird survey from Marovoay and Mataitromby (Bombetoka bay):



Pirogues with full of mangrove woods

Example of member of local conservation team built by Fanamby association at Mataitromby (Bombetoka bay):

Types of fishing practiced at Lake and fish treatment (drying) at Mangrove camp:



Fishing net;

Treating fish before drying

Collected fish

Drying fish

Photo examples of some project's target species:



Threskiornis bernieri



Ardea humbloti



Anas bernieri

Discussion

Date of fieldwork visit of each study site needs to be the same as project Zicoma 1999's visit, does period of visit affect result? Yes in reason of comparing or checking changes in IBA status, and not really affected because time period has always its effects on data collecting.

Number of sub-sites visited at each study site should be comparable so I have to visit exactly the same sub sites that Zicoma team visited before. But as these sites may changes in time, sites effects on result could be minimal or not. I think better its ideal to get results from some comparable number of sub sites as Zicoma team visited before.

I need further time to inquiry exact information on on-going conservation work running at some sites less documented such as Bamamba and Tambohorano. They may receive conservation action or further conservation research activities / projects but less documented. I propose to contact other NGO or organizations that interested or still working around these sites.

I missed to take some photos of some species and threats events at some sites, so it's worth to come back to those sites. Threatened forest bird species listed in Zicoma 1999 of each target species are not well explored during my first assessment.

Conclusion

We got results that we need to complete and fully understand them for sorting out concrete outputs of proposed project. I personally requests times

Requests

I request to come back to some sites for:

- obtaining comparable length of fieldwork visit period and numbers of visited sub sites with previous visits (Zicoma 1999 and others references) in order to reduce the effects of these two factors on checking the changes on IBA status
- Gathering further information about previous and current on-going conservation actions running at some study sites before by increasing our approach with other organization and NGO working or interested to work at such sites before.
- Getting further data and photos to fully compete and understand my actual data and scientifically running better data analysis providing long-lasting results and conclusions.