CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES
OF WILD FAUNA AND FLORA

Fifty-fifth meeting of the Standing Committee
The Hague (Netherlands), 2 June 2007

Interpretation and implementation of the Convention

Species trade and conservation issues

RANCHING OPERATIONS

1. This document has been prepared by the Secretariat.

2. The population of the Nile crocodile (*Crocodylus niloticus*) from Madagascar is included in Appendix II subject to the conditions outlined in Resolution Conf. 11.16 (Ranching and trade in ranched specimens of species transferred from Appendix I to Appendix II). Global crocodile ranching programmes were reviewed at the 22nd meeting of the Animals Committee (Lima, July 2006, see documents AC22 Doc. 12.2 and AC22 Inf. 2) and Madagascar's compliance with the provisions of Resolution Conf. 11.16 was discussed at the 54th meeting of the Standing Committee (SC54, Geneva, October 2006; see document SC54 Doc. 32). In view of concerns that ranching could be used to disguise or launder skins of adult crocodiles harvested from the wild, and the perceived deficiencies in monitoring wild crocodile populations, inspecting ranching operations and controlling exports of crocodile skins, the Standing Committee endorsed the Secretariat's proposal to visit and examine the ranching operations for *C. niloticus* in Madagascar in compliance with paragraphs b) and c) under the section *Regarding monitoring and reporting in relation to species transferred from Appendix I to Appendix II for ranching* of the Resolution. Madagascar agreed to this visit and provided full support to the Secretariat before and during its mission to Madagascar.

3. Resolution Conf. 11.16 recommends that "all Parties prohibit trade in products of ranching operations unless such trade complies with all the terms, conditions and requirements of the approved ranching proposal for the population concerned". These terms, conditions and requirements are mainly laid out in the section *Regarding proposals to transfer populations from Appendix I to Appendix II for ranching* of the Resolution. For Madagascar's population of *C. niloticus*, they were specified in proposal Prop. 10.2, *Maintenance of the Malagasy population of* C. niloticus *in Appendix II pursuant to the Resolution on ranching*, adopted at the 10th meeting of the Conference of the Parties (Harare, 1997). Madagascar should furthermore comply with the Resolution's provisions regarding monitoring and reporting, which recommend that annual reports on all relevant aspects of each approved ranching operation be submitted to the Secretariat.

4. With generous support from the Deutsche Gezellschaft für Technische Zusammenarbeit (GTZ) – Madagascar, the Secretariat undertook a one-week mission to Madagascar from 26 November to 2 December 2006. The Secretariat is grateful to the CITES Authorities of Madagascar for their cooperation and support throughout the mission.

5. It was confirmed during the mission that Madagascar did not fully comply with certain provisions of Resolution Conf. 11.16, and that the controls of the farming operations had been insufficient in recent years to prevent abuses. Since July 2006, several initiatives have been taken to improve the situation with, to the Secretariat's impression, immediate effect, suggesting that a fairly straightforward and normal level of oversight and control of the ranching operations could probably suffice to avoid significant abuse. The Secretariat's mission concluded that the existing Strategy and

Management Plan for Crocodiles in Madagascar, drafted in 2004, should be updated and effectively implemented as soon as possible. It offered a number of suggestions to strengthen the Strategy, and formulated specific recommendations on Madagascar's ranching programme, including a temporary suspension of exports of specimens of *C. niloticus* from one of the operations (see Annex 1). The summary findings of the mission are presented in Annex 2 to this document; this is in English only, except for the executive summary. The findings and recommendations were discussed with the Management and Scientific Authorities of Madagascar at the end of the mission.

Recommendations

6. The Secretariat suggests that the Standing Committee request Madagascar to put into effect the recommendations concerning ranching of *C. niloticus* in Madagascar and compliance with Resolution Conf. 11.16 that are presented in Annex 1 to this document. The Management Authority of Madagascar should, as part of its annual reporting obligations under Resolution Conf. 11.16, provide well-documented information on progress in implementing these recommendations. These reports should be reviewed at the regular meetings of the Standing Committee in 2008 and 2009.

7. It should be noted that the Animals Committee has proposed a revision of Resolution Conf. 11.16 in document CoP14 Doc. 21 for consideration at the 14th meeting of the Conference of the Parties. This concerns particularly a simplification of the reporting by the Parties. In its comments, the Secretariat has generally welcomed this revision which, if adopted, would not discharge Madagascar from the regular reporting to the Standing Committee proposed in paragraph 6 above.

8. The Standing Committee should recommend that Parties only allow the import of specimens of *C. niloticus* from Madagascar that are part of an annual export quota published on the CITES website.

RECOMMENDATIONS CONCERNING RANCHING OF *CROCODYLUS NILOTICUS* IN MADAGASCAR AND COMPLIANCE WITH RESOLUTION CONF. 11.16

Concerning general management of C. niloticus

1. The Management Authority (MA) and the Scientific Authority (SA) of Madagascar, with the support of stakeholders and experts as necessary, should revise, update and implement the *Stratégie et Plan de Gestion des crocodiles de Madagascar* (Ministry of Environment, Waters and Forests of Madagascar, May 2004). The Strategy should lay out:

   a) time-frames for the execution of its different components;

   b) the specific roles and inputs of government agencies and stakeholders;

   c) the resources available to enact the plan; d) resource needs and sources for support; and

   d) measurable indicators of progress or success.

2. Recognizing that many of the issues mentioned below are already contained in its current version, the Strategy and Management Plan should *inter alia* address the following:

   a) the establishment of a National Crocodile Committee to oversee and guide the implementation of the Strategy and the Management Plan, composed of representatives of the MA and SA, the farming industry, the leather manufacturing industry, NGOs qualified in crocodile conservation or the management of crocodile habitat, and donors with an interest in supporting crocodile management programmes;

   b) regional approaches for managing crocodiles that are adapted to local circumstances, for example to deal with problem animals, decide on the collection sites of eggs, identify where the potential exists for sustained wild harvest, involve local people in the management of crocodilians, etc.;

   c) the human/crocodile conflict in the country including systematic, computerized record keeping and follow-up on the reported cases, and the development and evaluation of adequate measures to effectively eliminate problem animals while minimizing possible abuses, such as the killing of wild crocodiles that are not nuisance animals;

   d) an effective control and tagging system for skins, that allows to distinguish skins from captive, ranched and wild origins and that covers the chain of custody from source to export;

   e) enhanced controls over ranching operations (see below);

   f) measures to provide sufficient crocodile skins to the local artisans, improve their technical skills, increase their revenues, and ensure that local handicraft comes from legally obtained skins;

   g) the research and surveys of wild crocodile populations required in compliance with Resolution Conf. 11.16. These studies should be undertaken within two years with the active involvement of the SA. Independent experts, preferably from the IUCN/SSC Crocodile Specialist Group, should be invited to participate in the design and conduct of these research activities, which, as a matter of priority, should concentrate on: a) the conservation status and distribution of *C. niloticus* in Madagascar, and comparisons with previous studies; b) the impact on wild populations of current legal and illegal offtake, including egg collection for ranching programmes, and measures that can ensure sustainable harvests; and c) the occurrence and nature of human/crocodile conflicts in Madagascar, the relationship between locations of current wild harvests and conflict zones, and the effects of different strategies to deal with the conflicts;

h) the development of cost-effective mechanisms for continuous monitoring of wild populations (e.g. Catch Per Unit Effort or monitoring nesting sites and success) and of an associated adaptive management programme that can effectively guide the management of wild crocodiles;

i) the promotion of data collection by the ranching operations and other stakeholders, modelled after databases used by Reptel, and regular analysis of this information to assess indirectly the effects of egg collection, breeding rates, seasonality and successes of breeding, distribution, etc. to complement other (government-run) monitoring programmes for wild crocodile populations;

j) an evaluation of the possibility for a limited harvest of wild non-nuisance crocodiles based on the studies and field work mentioned above and in close consultation with independent experts and the CITES Secretariat, which could ultimately lead to a proposal to include the population of *C. niloticus* of Madagascar in Appendix II without reference to Resolution Conf. 11.16;

k) a regular (for instance annual) revision of Madagascar's crocodile policy to evaluate the sustainability of the wild harvest and its compliance with Article IV regarding specimens that are to be exported, the integration of ranching programmes and captive breeding efforts in the management approaches, and the involvement of local stakeholders through benefit sharing;

l) guidelines and associated activities to make sure that the ranching programme and harvesting of wild crocodiles are primarily beneficial to the conservation of *C. niloticus* in Madagascar and, where applicable, contribute to its maintenance in the wild or promote protection of the species' habitat; and

m) ways to improve the understanding of the socio-economic relevance and structure of the crocodile industry in Madagascar, with monitoring mechanisms to assess market trends and industry developments.

3. The MA should invite external experts between 2007 and 2010, preferably from or associated with the IUCN/SSC Crocodile Specialist Group, to assist in capacity building and training activities concerning the management of *C. niloticus* in Madagascar and the implementation of the Strategy and the Management Plan. Areas where capacity building could be required include: farm monitoring techniques; record keeping; tagging and measuring skins; aging and sexing of animals; determining the annual production of farms; identification of the origin and the age of skins; the number and kind of products that can manufactured from a crocodile skin; counting and monitoring wild crocodile populations; methods and practices to reduce or minimize human/crocodile conflicts; and the development of relevant manuals and identification materials for government agencies and stakeholders.

Concerning crocodile ranching operations

4. Each ranching operation should be inspected regularly, for instance quarterly, during the period from 2007 to 2010.

5. A watertight control system should be put in place to ensure that on the farms, ranched skins (source 'R') cannot be mixed with skins of captive bred or wild origins (source codes 'W' or 'C'). It should include: tight record keeping; slaughter, tagging and packaging in the presence of staff or representatives of the MA and independent experts; and proof of truly collecting eggs from the wild, hatching and raising animals to commercial sizes.

6. The annual export quotas for ranched skins of *C. niloticus* allocated to the farms should reflect their true production capacity for the year. For 2007, these are recommended to be zero for Croco Ranching II (see the following two paragraphs) and 3,000 for Reptel.

7. The MA should suspend the issuance of all CITES export permits (or re-export certificates) for specimens of *C. niloticus* from Croco Ranching II until:

a) the MA, with the assistance of independent experts, has fully inventoried and verified the stocks of live animals and skins in the ranching operation;

b) the MA, with the assistance of independent experts, has verified that the production of the farm corresponds to the numbers, sexes and age structure of the live animals kept on the farm, its infrastructure, husbandry standards, volume of food provided, etc.;

c) an annual export quota for skins of source code 'R' is established by the MA, assisted by independent experts, that is based on the farm's true annual production potential; and

d) the *Stratégie et Plan de Gestion des crocodiles de Madagascar* has entered into effect.

8. In case the control system mentioned in paragraph 5 above is put in place, and based on the stock of live animals observed on the farm in November 2006, Croco Ranching II could be allowed in 2007 to sell 300 skins of ranched animals for the local internal market.

9. All tags for crocodile skins should be collected by the MA with a view of issuing new ones, which should clearly differentiate between wild harvested, ranched and captive bred skins. The issuance and application of these tags should be closely controlled by the MA so that operations can only purchase tags with the approval of or from the MA on the basis of demonstrated ranch production. The MA should tag the skins or be present when this happens.

10. Before issuing export permits for skins of *C. niloticus*, the MA and an independent expert should verify the number, size and markings of skins to be exported. Once tagged for export, skins should be packed in containers that are sealed under supervision by the MA to prevent any substitution or adding of skins, and to ensure that the skins match those stated on the export permits.

11. At the end of each calendar year, the MA, in the presence of an independent expert, should destroy all tags that were not used.

Concerning trade in skins of C. niloticus *of wild origin*

12. The export of skins of source code 'W' should be limited to those coming from problem animals that were hunted in zones where they have been documented and verified to cause damage. Skins of such individuals should be 2 m or longer and have a belly with of at least 45 cm (skins of smaller sizes cannot be ascertained to have come from problem animals). The size of each such skin should be mentioned in an annex attached to the export permit. The annual export of skins of source code 'W' should be reduced to a maximum of 200.

Concerning annual export quotas for trade in specimens of C. niloticus

13. The Secretariat should be informed before the end of each year about the annual export quotas for trade in specimens of *C. niloticus* from Madagascar so that the Parties can be notified accordingly.

VERIFICATION OF COMPLIANCE WITH RESOLUTION CONF. 11.16 FOR RANCHING OF *CROCODYLUS NILOTICUS* IN MADAGASCAR

SUMMARY FINDINGS

Executive summary

A. Madagascar exports specimens of *C. niloticus* from captive, wild and ranched origins (the latter two under a system of annual quotas). In recent years, exports of ranched skins remained considerably lower than allocated under the annual quota, while the quotas for wild skins were completely exhausted or exceeded.

B. There are two ranching operations for *C. niloticus* in Madagascar, Reptel and Croco Ranching II. Both process and export most skins of wild crocodiles. Additionally, Reptel runs a closed cycle captive breeding programme.

C. The infrastructure, live animals and skins in stock, egg collection, production and trade records, production capacity and overall management of both farms were inspected. Recent levels of export by Croco Ranching II of "ranched" skins were found to be incompatible with its limited capacity for producing such skins, suggesting that the operation has mostly exported wild skins falsely labelled as 'ranched'. Reptel improved recordkeeping and management in recent years, is expanding its infrastructure and has significant potential for producing ranched and captive bred skins and other products.

D. Both ranching operations have been involved in the wild harvest programme for nuisance animals, established under a governmental quota system. The gradual increase of this quota over time has not been justified, and relevant research and management measures proposed in 2005 have yet to be implemented. The current quota appears exaggerated, and the actual policy to deal with human-crocodile conflicts not particularly effective. There is no systematic, computerized record of incidents or localities where problem animals were destroyed and skins obtained. Controls to prevent illegal offtake, over-harvesting, killing of non-nuisance animals, and laundering of illegal skins are insufficient.

E. The regulation of local markets for specimens of *C. niloticus*, which remains sizable, is recognized to be inadequate.

F. Regarding compliance with provisions in Resolution Conf. 11.16 relevant to the ranching of *C. niloticus* in Madagascar, the following was established:

- No comprehensive inventories of wild populations have been undertaken since the late nineties and therefore, the impact of the annual collection of wild eggs for ranching, the harvest of at least 750 wild crocodiles, the species' current status and distribution, and its response to habitat changes, human-induced pressures, and ongoing legal and illegal offtake remain largely unknown. Ranching activities may well be sustainable and beneficial for *C. niloticus* in certain areas, but this needs further study and confirmation. *C. niloticus* remains a widely distributed species, but is often persecuted and may be in decline.

- The controls by the CITES Authorities of the two ranching operations and their exports of *C. niloticus* skins and leatherwear have been deficient in recent years. Most skins exported by Croco Ranchig II were falsely marked as 'ranched', while Reptel occasionally mixed wild skins with ranched skins. Several thousand wild skins may have been laundered in this way, and there is little doubt that many were obtained from illegally killed wild animals.

- No animals from the ranching operations have been returned to the wild, which would not be realistic and is not necessary from a species management point of view.

– The biological viability and economic success of the two ranching operations has been inadequate monitored. This should have shown that in recent years, Croco Ranching II did not have the breeding capacity to produce the number of 'ranched' skins that it declared.

– The sector is probably of great socio-economic importance, but this has not been analysed, preventing the authorities to e.g. determine if additional ranching operations would be viable, what prices local stakeholders should receive, or what taxation levels might be appropriate along the chain of custody.

– The CITES authorities irregularly complied with annual reporting obligations, submitting in 2006 a report covering 2000 to 2006. The reliability and overall quality of the reporting is more of concern than its frequency: certain reported data and statements seemed erroneous or unsubstantiated, while apparent new policy decisions to allow Croco Ranching II to collect live animals for ranching purposes in 2006 were not mentioned.

G. Since July 2006, several initiatives have been taken to improve controls of the two ranching operations with immediate positive effect, suggesting that a fairly straightforward and normal level of oversight and control could probably suffice to avoid significant abuses in future.

H. New population surveys may be undertaken in 2007, building on the studies conducted in the late nineties. The development of permanent, cost-effective population monitoring mechanisms and associated adaptive management programmes to guide the management of wild crocodiles in the country will be equally important.

I. CITES authorities and all the main stakeholders showed great interest in collaborating to improve the management of *C. niloticus* in Madagascar, which was recognized to be an important resource. A strategy and management plan for crocodiles in Madagascar, drafted in May 2004 by the Ministry of Environment, Waters and Forests, remains non-operational to date. Once updated and implemented, it would form a very good basis for future crocodile management and conservation in the country.

Introduction

1. The Secretariat undertook a one-week mission to Madagascar from 26 November to 2 December 2006, conducted by its Senior Scientific Officer and Mr Dietrich Jelden (IUCN/SSC Crocodile Specialist Group; German Management Authority). The mission had the following objectives:

   - To visit and examine the two existing *C. niloticus* ranching operations in Madagascar;

   - To assess compliance by the relevant authorities and stakeholders in Madagascar with the provisions in Resolution Conf. 11.16;

   - To identify remedial measures to improve the management of the ranching programmes in Madagascar, and to agree with relevant authorities on their implementation; and

   - To collect information allowing the Secretariat to report to the Standing Committee and propose an appropriate course of action.

Crocodile trade and management in Madagascar

Trade in specimens of C. niloticus

2. Madagascar uses the source codes 'C', 'R' or 'W' for export permits issued for crocodile skins and other specimens. Madagascar had a quota of 7,600 skins from ranched animals since 1999, and of 500 skins from wild nuisance animals in 2002, 2003 and 2004 (with recorded annual exports of 512, 700 and 500 skins respectively), and of 750 animals in 2005 and 2006 (see Table 1). Trade data from the UNEP World Conservation Monitoring Centre (UNEP-WCMC) on Madagascar's exports of skins of *C. niloticus* since 1992 indicate a steady increase until 2001 (see Table 2). Reported exports then dropped to 6,936 skins in 2002, and then increased slightly in 2003 to 7,300. Reported exports fell further to 4,760 in 2004, of which 2,110 were reportedly captive-bred, 2,150 ranched and 500 from the wild. The export figures reported by UNEP-WCMC do not completely reconcile with those provided by the Direction of Waters and Forests, the CITES Management Authority (MA) for Madagascar.

Table 1 – Export quotas for specimens of *C. niloticus* from Madagascar 1997-2006

Madagascar - Export quotas for specimens of *C. niloticus*					
Year	**Skins, ranched**	**Stuffed specimens from ranched animals**	**Manufactured skin products from ranched specimens**	**Skins, wild-taken**	**Skins from problem animals**
2006	7,600	500	900	750	
2005	7,600	500	900	750	
2004	7,600	500	900		500
2003	7,600	500	900	500	
2002	7,600	500	900	500	
2001	7,600	500	900	500	
2000	7,600	500	900		500
1999	7,600	500	900		200
1998	6,200	200	600		200
1997	4,500				200

Table 2 – Exports of skins of *C. niloticus* from Madagascar 1992-2004

Madagascar – exports of skins of *C. niloticus*													
Year	**92**	**93**	**94**	**95**	**96**	**97**	**98**	**99**	**00**	**01**	**02**	**03**	**04**
No. of skins	1,344	1,909	2,800	2,412	4,589	5,464	6,120	7,207	5,506	9,408	6,936	7,300	4,760

Crocodile management policy

3. A strategy and management plan for crocodiles in Madagascar, *Stratégie et plan de gestion des crocodiles de Madagascar,* was drafted in May 2004 by the Ministry of Environment, Waters and Forests as the result of a collaborative effort between the CITES Management and Scientific Authorities, the ranching operations and the IUCN/SSC Crocodile Specialists Group (CSG). The draft strategy and plan has however not yet been endorsed at ministerial level and remains non operational to date. The mission reviewed the strategy and management plan and concluded that once updated and implemented, it would form a very good basis for future crocodile management and conservation in the country.

Ranching operations

4. There are two ranching operations for *C. niloticus* in Madagascar: Reptel Sarl. (Reptel; Antananarivo) and Croco Ranching II (C.R. II; Antananarivo). They were already active at the time that Madagascar's population of *C. niloticus* was downlisted in 1997. There is no producers' association, but local leather manufacturers and artisans have established an organization. The Scientific Authority (SA) for fauna (the department for animals biology of the University of Antananarivo) participates in controls of the ranching operations and advises on levels of harvest from the wild (eggs for ranching operations and quotas for problem animals) and export. The two ranching operations buy, process and export most if not all the skins of crocodiles of wild origins (source code W') that are part of Madagascar's annual quota for such skins. In addition, Reptel runs a closed-cycle captive breeding programme that produces skins and other specimens of source code 'C'.

Export of specimens of C. niloticus *by the ranching operations*

5. In its report to the CITES Secretariat on the activities of the ranching programme for the years 2000 to 2005 *(Rapport sur les activités entreprises dans le cadre des élevages en ranch de* Crocodylus niloticus *année 2000 à 2005)*, available on the CITES website, the MA provided information on the number of ranched skins that each of the farms exported. During the mission, the data were completed and verified for the period 2004-2006, showing some discrepancies with those which had been reported by the MA. In recent years, exports of ranched skins remained considerably lower than allocated under the annual quota (usually well bellow 50 %) while the quotas for wild skins were completely exhausted or exceeded.

Table 3 – Exports of skins of *C. niloticus* by Croco Ranching II and Reptel in 2000-2006

Madagascar – Exports of skins of *C. niloticus* by its two ranching operations										
Ranching operation	**Source of data**	**Origin**	**Year**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
Reptel	MA*	R		3,000	3,284	2,500	2,500	500	1,200	
	Mission Nov 06**	R						1,000	700	1,200
		C						2,160	1,200	1,210
		W						300	400	400
C.R. II	MA*	R		2,360	0	718	2,050	1,650	1,700	
	Mission Nov 06**	R						1,650	2,000	1,850
		W						200	350	300

Madagascar – Exports of skins of *C. niloticus* by its two ranching operations										
Ranching operation	**Source of data**	**Origin**	**Year**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
Totals Reptel + C.R. II	MA*	R		5,360	3,284	3,218	4,550	2,150	2,900	
	Mission Nov 06**	R						2,650	2,700	3,050
		C						2,160	1,200	1,210
		W						500	750	700
		Total R + C + W						5,310	4,650	4,960

* *Data contained in 'Rapport sur les activités entreprises dans le cadre des élevages en ranch de* Crocodylus niloticus *année 2000 à 2005', presented by the MA to the Secretariat in 2006.*

** *Data collected during the present mission, based on an analysis of export permits issued by the MA.*

6. The production of ranched skins has been variable in recent years, fluctuating around 3,500 annually. Combining the figures of the MA with the updates collected during the mission, it was concluded that from 2000 to 2006, Reptel exported 14,184 ranched skins (57 %), and Croco Ranching II 10,628 (43 %). From 2004 to 2006, Croco Ranching II reportedly exported 5,500 skins of ranched origin, nearly double the amount exported by Reptel during this period (2,900 skins). These records are remarkable in view of the mission's findings that over the last five years, Croco Ranching II's potential for producing ranched skins has been far smaller than that of Reptel.

Egg collection by the ranching operations

7. The ranching operations are allowed to collect eggs from the wild in accordance with their hatching capacity. The collection of eggs is subject to a permit that is issued annually by the MA.

8. Reptel has a successful egg collection programme focusing on the Besalampy region and pays local villagers for eggs collected. This has raised awareness about the value of crocodiles and thereby may have promoted interest in their protection in the area. Croco Ranching II has a permit to collect eggs in the Toliara and Mahajunga regions. For many years, the ranch was said to operate an incubation and hatchling facility in northern Madagascar from where stock was periodically transferred to the main facility in Antananarivo. Stock records or inspection reports for this second facility were not available. The owners of Croco Ranching II explained that the facility had been closed earlier in 2006.

9. Over the years, both farms have kept records of their egg collection activities but the data were not standardized. The degree of detail and – presumably – trustworthiness of the records vary widely.

10. According to the MA's report of 2006, 39,646 eggs were collected during the seven-year period from 1999 to 2005, of which 33,032 (83.4 %) by Reptel and 6,614 (16.6 %) by Croco Ranching II (see Table 4). The number of eggs collected by Reptel has not fluctuated significantly during this period, averaging 4,719 eggs per year. In the case of Croco Ranching II, about 1,000 eggs have been collected annually from 1999 to 2004, dropping to 180 eggs in 2005. The significant

difference between the two operations in the amount of eggs that they have collected for ranching purposes is not reflected in the numbers of skins of ranched origins that they claim to have produced.

Table 4 – Eggs of *C. niloticus* collected from the wild by Croco Ranching II and Reptel for ranching purposes

Year	CROCO RANCHING II	REPTEL	Totals
1999	750	4,500	5,250
2000	900	4,957	5,857
2001	962	6,548	7,510
2002	1,400	5,248	6,648
2003	1,300	4,213	5,513
2004	1,122	3,754	4,876
2005	180	3,812	3992
Totals	6,614	33,032	39,646

11. While no information could be found on the past egg collections carried out by Croco Ranching II, Reptel had records on the eggs collected and nests localities over the past decade. Since two years, Reptel started to more systematically monitor the sites where it collected eggs and the hatching success of these eggs on the ranch, including site positioning by GPS, recording hatching successes per nest, identifying causes for poor or good hatching, etc. This information was stored in a detailed computer database which could be accessed and analysed by the mission without problems. These data offer valuable indicators of the effects of egg collection, breeding rates, seasonality of breeding, overall breeding successes, distribution, etc., and could usefully complement other (government-run) monitoring programmes for wild crocodile populations. It is of some concern that Reptel's own records on the number of eggs collected from the wild and brought to the ranching operation are significantly different from the figures reported by the MA to the Secretariat in 2006, as shown in the comparison below:

Year	Number of eggs collected by Reptel as reported by the MA in 2006	Number of eggs collected as recorded by Reptel in 2006
2004	3,754	5,739 (3,163 hatched – 55 %)
2005	3,812	3,653 (2,464 hatched – 67 %)
2006	Data not available	4,354

12. As with other ranching programmes, there was initially a requirement that hatchlings from 5 % of the eggs collected by the ranching operations be returned to the wild after they have attained a size of at least 1.2 m. This has not happened in Madagascar but the authorities requested that the operations supply an equivalent amount of ranched skins to the artisanal market. The purpose was to keep the craftsmen in business without them having to resort to skins of wild specimens. Artisans seem to prefer the smaller skins produced by farms. They swap them against skins of wild specimens that they continue to obtain, thereby defying the policy objective and calling for stricter controls of the internal skin market.

Present and future production capacity of Reptel

13. The production of skins has increased over the last few three years (2004-2005). This can largely be attributed to an improvement of its captive breeding programme due to better hatchability of captive bred eggs and a growth in farm-produced nests from 98 to 114. The farm is extending its holding facilities to accommodate a doubling of the current stock The production is planned to increase further by expanding the current egg collection scheme, further reducing mortality rates, improving the hatchability of eggs collected in the wild and produced on the farm, and by bringing new breeders into egg production (the farm raised already 59 animals close to reproductive size). In 2007, the ranching operation could produce up to 3,000 ranched skins, with gradual increases to be expected in the coming years.

Present and future production capacity of Croco Ranching II

14. In May 2004, an inventory of this ranching operation was undertaken by the CSG. The total number of animals of a size suitable for slaughter during the remaining months of 2004 was 420, with a further two adult animals and approximately 140 yearlings. Taking into consideration the available space in the pens and other facilities, and the numbers of wild eggs collected from 1992 to 1999 (maximum 3,119), the CSG estimated that the ranch could produce up to 1,500 relatively small skins per year. It noted that the export of 1,650 ranched skins in 2004 exceeded the estimated total number of slaughter-size live animals on the farm and the skins it held in stock.

15. This mission found that a minor collection of wild eggs had been undertaken by Croco Ranching II in 2004, of which some 115 animals of 50-70 cm long were still present at the farm. According to the owners, only six animals had been obtained from eggs collected in 2005. In 2006, about 1,700 eggs had been collected. Upon inspection, it was found that many were in a rather bad state, with some already broken and destroyed. Under the conditions observed, the hatching success would probably be less than 50 %. The ranching operation held an estimated 420 and 460 live animals in stock, as well as 304 raw salted skins which were said to have been produced from ranched animals slaughtered in 2006.

16. The mission concluded that the export by Croco Ranching II of 1,650 "ranched" skins in 2004, 2,000 in 2005 and 1,850 in 2006 (see Table 3) could not be reconciled with the farm's capacity for producing ranched skins, thereby confirming CSG's findings of 2004. The very large majority or even all the skins that were exported by Croco Ranching II in recent years probably came from crocodiles hunted in the wild, and not from ranched animals. This conclusion was further supported by examining 150 of the 304 raw skins in stock which revealed that some of the larger skins clearly showed spear holes in the neck part, or had massive scars on the belly typical for skins taken from the wild, unlike well-cared animals raised on farms.

17. On the basis of the preliminary stock inventory undertaken during the mission, Croco Ranching II could produce in 2007 about 250 to 300 skins of 1.20-1.50 m, and 20 skins of 2.00-3.00 m when all individuals of these size classes on the farm would be culled. The production in 2008 from the remaining stock would be no more than some 120 skins of 1.20-1.50 m.

Problem animals and wild populations

18. Both Croco Ranching II and Reptel have been involved for at least 10 years in the wild harvest programme for nuisance animals, established by the Government of Madagascar under a quota system.

19. Crocodile habitat is under threat from human-related activities in Madagascar, and the expansion of people into crocodile habitat increases the conflicts between crocodiles, people and their livestock. Many rural people work close to watercourses and lakes to grow rice, one of the main crops. There are regular reports on people getting attacked or even killed, by crocodiles, and on lose of livestock. The downlisting proposal of 1997 argued that ranching was the only way to help the wild population of crocodiles because people would tolerate crocodiles if they could make some benefit from them, with the exception of destructive animals of which the killing was legally allowed unreservedly. The quota of 200 wild sourced skins, claimed to come from problem or potentially dangerous animals that was agreed to in 1997, therefore seemed justified.

20. In 2003, the CSG supported a survey of human/crocodile conflicts in Madagascar, demonstrating that in comparison with countries on mainland African, there were fewer fatalities in Madagascar. It therefore questioned the necessity for increasing the quota for skins of problem animals from 200 to 500 in 2000, and to 750 in 2005, particularly given the uncertain status of the wild population. The export of wild skins should be in compliance with the provisions of Article IV of the Convention, specifically that levels of export should be non-detrimental to wild populations of *C. niloticus* in Madagascar. It is unclear how these non-detriment findings have been made by the SA.

21. The hunting of problem animals usually follows a letter to the MA from regional forestry offices providing details on the case (locality, number of destructive animals, damage caused, etc.). The MA would then organize the destruction of the animal. The mission found that there is no systematic,

computerized record of these cases or the localities where problem animals were destroyed and skins obtained, although that this seems feasible based on the reports from the local agents.

22. The management plan mentioned in paragraph 2 above proposes to deal with the problem animals at a regional scale by establishing hunting quotas per zone, and combat abuses by marking the skins as early as possible. Alternatively, a commercial operator could be allowed to collect (say) 50 skins from identified problem areas which would help to make the operation of finding and destroying problem animals financially viable, and alleviate the conflicts between people and crocodiles in the area. The mission believes that careful consideration should be given to instances where local people kill animals themselves. Compensation schemes or paying for skins from such animals might create incentives to kill large crocodiles and claim that they were a problem.

23. Control or monitoring mechanisms to prevent illegal offtake or over-harvesting appear ineffective. The skins that are used by the local craftsmen for the production of leather goods may partially continue to be obtained from the wild. Although the number of such products offered for sale seems to have diminished over the last decade, the annual offtake of animals for this purpose may still be relatively significant (perhaps several hundreds of smaller sized animals per year). The regulation of local markets for specimens of *C. niloticus* is in any case recognized to be inadequate.

24. Aerial surveys of wild crocodile populations in Madagascar have been conducted in 1987, 1988 and 1997. The MA's report of 2006 states that due to its wide distribution and limited resources, the MA had been unable to monitor the wild populations from 2000 to 2005. However, damages caused by wild crocodiles to people and livestock were significant, leading the MA to conclude that the wild population was increasing. No evidence to support this claim could be found during the mission. Most stakeholders indicated to the contrary that wild populations of *C. niloticus* appeared to decline. The newly appointed SA showed interested in undertaking a new survey of wild populations but stated to lack the necessary technical capacity and to be in need of training and assistance.

Compliance with Resolution Conf. 11.16

25. The evaluation by the Secretariat of the provisions in the operational part of Resolution Conf. 11.16 that are relevant to the ranching of *C. niloticus* in Madagascar is discussed below.

Regarding proposals to transfer populations from Appendix I to Appendix II for ranching

Paragraph b) i)

26. It is difficult to clearly determine whether Madagascar's ranching programme for *C. niloticus* has been or is "primarily beneficial to the conservation of the local population". The collection of eggs for the ranching operations may have had a positive effect on the maintenance of certain wild populations and indirectly on the conservation of crocodile habitat, but this has not been properly ascertained. Although still widespread, *C. niloticus* seems to be persecuted in many parts of the country while anecdotal information suggests that the wild population may have declined in recent years. The collection of eggs and the subsequent cash income to local people has helped to reduce the killing of crocodiles in the Besalampy area, but it seems that poaching has continued as well. Overall, the impact on wild populations of the annual collection of wild eggs and the harvest of at least 750 wild crocodiles remain poorly understood.

27. Based on a study conducted in 1998 under the auspices of the CITES Secretariat, the MA estimated in its report of 2006 that in the zones where egg-collection by the two farms took place, 20,000 to 25,000 eggs were produced by wild crocodiles during each breeding season. The collection by the ranching operations of an average of 5,663 eggs per year would therefore represent an offtake of 22.6 %, and the MA stated that this had no adverse impact on, or harm, the wild population of *C. niloticus*. However, it is unclear how this conclusion was reached. Field surveys of nest sites in the Besalampy region, where Reptel collects crocodile eggs, have been conducted on four occasions between 1996 and 2003, but other than these, no recent field work has taken place to ascertain the breeding rate, breeding success or the evolution of the breeding populations in the collection zones. The mission doubts whether the MA has been involved in these field surveys, or analysed the results thereof. No information or impact studies were found concerning areas where eggs have been or are being collected by Croco Ranching II.

28. According to information given by Reptel, harvesting of eggs has been concentrated over many years on certain river systems in West Madagascar such as Besalampy, Tambohorano, Antsalova and Kiranomena. Reptel's records for the past three years indicate a slight downwards trend in the number of nests that were harvested with the exception of the Besalampy area. In 2004, the CSG reported that the decline in the number of nests found and eggs collected by Reptel in several localities was attributed to forest clearing and burning causing the siltation of smaller lakes and the erosion of nesting areas. The CSG also noted a trend towards egg collection in new areas each successive year to reach the target number of eggs, but this observation could not be confirmed during this mission.

29. Reptel's multiple year records of its egg collection programme could form the basis for calculating a nesting index which indirectly could provide information on the reproductive population in harvested areas, and on population trends. As egg harvesting by Reptel has been an ongoing activity for more than 10 years in the same regions, this could indicate that the wild population can sustain the level of harvest. However, this assumption needs to be confirmed as a mater of priority, and the relevant populations need to be closely monitored to verify the sustainability of the ongoing harvest levels.

Paragraph b) ii)

30. The recommendation that all products (including live specimens) of each operation must be adequately identified and documented to ensure that they can be readily distinguished from products of Appendix-I populations is linked to the labelling of skins and products thereof mentioned in paragraph c) in the same section of Resolution Conf. 11.16. In the opinion of the mission, the MA has undertaken too few on-the-ground controls of the ranching operations to effectively verify the origin of the live specimens, eggs, skins and finished products held in stock on the farms. In terms of documenting the specimens on the ranching operations, Reptel started in 2004 to keep detailed computerized records of all the live specimens and eggs that it kept. The record keeping could be expanded further to include other specimens of *C. niloticus*, for example skins, which should facilitate the monitoring of the ranching operation by the MA and benefit stock management and ranching activities. No detailed records were kept by Croco Ranching II.

31. Apparently, inspection of the ranches is scheduled twice annually to verify stock figures. The ranches forecast tag requirements each year, obtain a letter of authority from the MA and order tags from suppliers in the United States of America which are delivered directly to each producer. There is no apparent supervision of the tagging procedure.

32. Both farms have been involved in the wild harvest programme for nuisance animals. It was therefore expected that detailed records would have been kept by both operations on e.g. the number of skins bought from local hunters, prices paid, skins sizes, the geographic origin or the reason why the crocodiles had been determined to be nuisance animals and had to be killed. However, this was not the case, leaving open the possibility for abuses. This matter needs to be addressed through more rigorous reporting by the ranching operations and regular inspections.

Paragraph b) iii)

33. No comprehensive inventories of wild populations have been undertaken since the late nineties and therefore, the species' current status, distribution, and response to habitat changes, ongoing legal and illegal offtake, human-induced pressures, etc. remain largely unknown. However, population surveys in 1988 and 1998 provide valid data points that could offer base line information on the wild populations, and there are plans to undertake surveys in 2007. These should be conducted in such a manner that their findings can be compared with the earlier surveys. The main issue therefore remains the development of more permanent, cost-effective monitoring mechanisms and of an associated adaptive management programme that can effectively guide the management of wild crocodiles in the country.

Paragraph b) iv)

34. No animals from the ranching operations are or have been returned to the wild. The downlisting proposal adopted in 1997 (see proposal Prop. 10.2) mentioned in this regard:

> *One of the criteria that a proposal to the Secretariat must meet according to Resolution Conf. 3.15 is that breeding must assist conservation of the local population and, if circumstances permit, contribute to increasing the number of crocodiles in the wild. Although restocking must be one of the considerations of ranch breeding, the importance of the problem brought on by the dangers that crocodiles represent for human populations and their livestock is so great that it is difficult to allay man's aversion to the animals. At the moment, restocking would be seen by the public as the introduction of potentially destructive animals into regions where there are people and livestock. That is why there is no restocking project at this time. Before any restocking project in Madagascar, there would have to be an awareness promoting program aimed at the local population. Such activities are planned within the framework of a project for which the Waters and Forests Branch is seeking funding.*

and with regard to compliance with Resolution Conf. 3.15, subsection b. i) (which stated "the operation must be primarily beneficial to the conservation of the local population (i.e. where applicable, contribute to its increase in the wild)"):

> *A study on restocking, an important element to ensure the increase of crocodiles in the wild, is scheduled in the context of a project for which the Waters and Forests Branch is seeking funding.*

35. This mission concluded that the challenges described in the proposal concerning potential restocking and the recommendations regarding the need to educate people before any reintroduction could be envisaged still prevail. The study on restocking mentioned in the proposal has not been executed to date. At this stage, this seems not realistic or necessary from a species management point of view.

Paragraph c)

36. The downlisting proposal adopted in 1997 contained the following information on marking and the type of products to be exported:

> *Breeding products agreed to by the administration body and destined for export for commercial ends have the documents required by CITES (permits and stamps) and the hides are correctly identified with CITES security stamps according to Resolution Conf. 9.22 on the characteristics stated in section 26 of Decree No. 94-700.*

and with regard to the description of the methods to be used to identify the products, the proposal noted:

> *In Madagascar, crocodile breeders export green salted hide (raw hide). They are in compliance with the usual requirements of CITES already mentioned and conform to the documentation required by the administration body.*

37. The mission established that, given the observed production capacity of the two ranching operations, the widespread availability of skins of wild-caught animals, statements by stakeholders, and the size and nature of the skins and animals that were inspected, many thousands of skins have been exported from Madagascar in recent years that were in all likelihood originating from the wild and not 'ranched' as marked and claimed on CITES documents. There is little doubt that many of these skins were obtained from illegally killed animals. Overall, it is clear that the controls on marking in the two ranching operations have been unsatisfactory.

38. Falsely declared 'ranched' skins probably not only include wild skins from larger adults but also skins from younger crocodiles because economically, it is cheaper for the farms to buy an illegal wild skin than to produce a similarly-sized skin in the ranching operation. Skins of 2 m or more in length are not or only very rarely produced in the farms, and must practically all be assumed to have come from

the wild. Also many of the skins used by Malagasy artisans and the finished products derived thereof that are exported or offered for sale to tourists in Madagascar may be of illegal wild origins.

39. The authorities explained that their controls of the ranching operations and exports of skins and leatherwear have been deficient in recent years, and that the local markets remained difficult to monitor. Since July 2006, several initiatives have been taken to improve the situation with, to the team's impression, immediate effect, suggesting that a fairly straightforward and normal level of oversight and control of the ranching operations could probably suffice to avoid significant abuse.

Paragraph d)

40. The provisions in subparagraphs i) to v) partially overlap those in paragraphs b) and c) in the same section of Resolution Conf. 11.16. The mission noted the following deficiencies in the implementation of these provisions:

a) Lack of recent studies to understand the impact on wild populations of the harvesting of eggs and 'nuisance' animals from the wild, and limited or no follow-up in this regard on measures proposed in studies conducted in 1998 under the auspices of the CITES Secretariat [subparagraph i)];

b) Inadequate monitoring of the biological viability and economic success of the accredited ranching operations, with little or no verification of hatching and rearing at the farms, husbandry standards, production capacity, marking of products, etc. which should have shown that for the last four to six years, one of the farms did not have the breeding capacity to produce the number of 'ranched' skins that it declared, while the other seems to have occasionally mixed wild skins with ranched skins [subparagraph ii)];

c) No good understanding of the current socio-economic importance of the sector, which is probably significant, preventing the authorities for instance to determine if additional ranching operations would be viable or desirable, what prices local stakeholders should receive, or what taxation levels might be appropriate along the chain of custody [subparagraph ii)];

d) Limited attention for or controls of the conditions in which the animals are kept, particularly the food requirements and husbandry standards [subparagraph iii)];

e) Little recent information – and due to lack of field studies and other surveys no documented evidence – to demonstrate that ranching might benefit wild populations of *C. niloticus* and its habitats in Madagascar, and no guidance on the potential for reintroductions or other ways to enhance the conservation of *C. niloticus* in Madagascar [subparagraph iv)]; and

f) Irregular compliance by the MA with the annual reporting obligations, preventing an assessment whether the general criteria under which the downlisting proposal was accepted in 1997 continue to be met [subparagraph v)].

Paragraph g)

41. Paragraph g) of Resolution Conf. 11.16 provides that Madagascar should limit the manner of exploitation of wild populations of *C. niloticus* to those techniques described in its downlisting proposal and not, for example, later initiate new short-term programmes for taking wild animals without notifying the Secretariat. Madagascar has duly notified the Secretariat about any increase in the number of wild problem animals that it allowed to take, although that the reasons for these increases have been questioned. The mission established that in 2006, the collection of wild crocodile hatchlings by Croco Ranching II has been authorized, which seems a new technique that was not described in the proposal in 1997 and of which the Secretariat had not been informed.

42. The proposal explained that, following a review of the national crocodile management policy, it had been decided to suspend the commercial hunting of crocodiles. However, provisions were made for exceptional hunts for killing of destructive or dangerous wild animals. Madagascar was allowed an annual export quota of 200 skins of wild problem animals per year in 1997. Madagascar increased

this to 500 skins from 2000 to 2004, and to 750 skins in 2005 and 2006. These annual quotas were each time notified to the Secretariat before the end of the previous year.

43. The Secretariat required information from the Malagasy CITES authorities in 2000 concerning the basis for concluding that 500 nuisance crocodiles should be removed from the wild for export, noting that the increase may impact on the viability of the wild populations and ranching programmes as nuisance animals are almost always mature individuals. It also noted that the provisions of Article IV continued to apply for trade in these nuisance specimens. Madagascar replied that the increase had been discussed with the CSG during a mission in December 2000.

44. The MA justified the increase to 750 skins in 2005 by writing to the Secretariat that, on the basis of meetings that had been held with the SA and experts, *C. niloticus* had been categorized as "a priority species for establishing and justifying quotas". It listed the following management measures, although it did not clarify whether, how or when they would be implemented:

    a) *Promotion of egg collection whereby local people obtain a benefit that motivates them to tolerate large adult animals; because not all eggs are discovered or collected, the populations can continue to breed.*

    b) *For establishing quotas, the population levels need to be monitored in each zone; investigations have to be undertaken in all problem areas to establish appropriate hunting quotas for nuisance animals; and a study is being undertaken to inform about the establishment of quotas for nuisance animals.*

    c) *Annual monitoring of the stocks of animals in each of the ranching operations at the end of hatching season.*

45. All measures mentioned above continue to be pertinent, but the mission found that not a single one had been implemented since the quota had been increased from 500 to 750 skins. The study on quotas for wild nuisance animals, alluded at in the letter of the MA in 2005, has clearly not been undertaken.

46. The MA stated in its report of 2006 that from 2000 to 2005, no collection of live animals had been undertaken for the ranching operations. The downlisting proposal noted in this regard:

    In 1994 and 1995, the administration body authorized the gathering of newly hatched crocs as follows: for the Société CROCORANCHING II (815 and 967 respectively) […].This capturing was authorized only in the Ambilobe Region in 1994 and 1995 (CROCORANCHING II) […]. This capturing was exceptional and was intended to help Malagasy businesses to get started in areas where operators do not have the financial means to install incubators.

47. A study conducted in 1998 under the auspices on the Secretariat stated that "Hatchling collection for the ranches will no longer be permitted under the current agreement with CITES", recommending that enforcing this stipulation would help to stop one metre "hatchlings" appearing on farms. The management plan mentioned in paragraph 3 above also proposes that the collection from the wild be limited to eggs for ranching operations and the removal of animals that pose genuine problems.

48. It is however unclear if Madagascar still adheres to these policies. The mission received copies of an application in March 2006 by Croco Ranching II for the collection of 2,250 young crocodiles from the wild during the season 2005/2006. This request was referring to a permit for the collection of 2,500 eggs and the difficulties that had been encountered to reach this target – only 180 eggs had been obtained by the farm. It can be deduced from further correspondence that the application for the collection of wild hatchlings had been approved for a three-month period. In September 2006, Croco Ranching II wrote to the MA that by 30 March 2006, the operation hade been able to collect about 386 young crocodiles instead of the 2,200 that it had wanted. The poor collecting rate was claimed to be linked to the dangers and difficulties in gathering young animals, the logistical problems, and the limited period during which harvesting had been allowed. It is not known if Croco Ranching II eventually obtained a prolongation of its collection permit.

Regarding monitoring and reporting in relation to species transfer populations from Appendix I to Appendix II for ranching

49. The Conference of the Parties recommends that each Party that has made a successful proposal to transfer a population of a species from Appendix I to Appendix II for ranching purposes should submit to the Secretariat annual reports on all relevant aspects of the approved ranching operation. This matter was extensively discussed at the 54th meeting of the Standing Committee. Madagascar submitted a report to the Secretariat in May 2006 that covers the period 2000-2005.

50. The mission found data that seem to contradict some of the figures presented in Madagascar's report of 2006, while certain claims in that report seem to have been made without proper research basis. New policy developments were missing or only superficially touched upon. Not so much the frequency of the reporting as its reliability, overall quality and comprehensiveness could be questioned.

Production parameters for ranching of *C. niloticus* in Madagascar, 2001-05

Parameter	2001	2002	2003	2004	2005
No. of farms/ranches	2	2	2	2	2
No. of captive breeding stock	170	182	212	154	154
No. of captive-bred clutches produced	No data	No data	No data	98 (2620 eggs)*	108 (3369 eggs)*
Slaughter stock (> 1 year)	11,202*	13,544*	16,895*	No data	No data
Wild clutches collected	130*	120*	105*	137 (3164 eggs)*	86 (2464 eggs)*
Wild eggs hatched	3596*	2871*	2870*		
Farm eggs hatched	No data	5248 *	4021*	2620*	3369*
% production from wild eggs		35.4 %*	36.4 %*	53 %*	42 %*
Hatchling mortality (%)	21.4**	24.4**	No data	6,5 %*	7,9 %*
Rearing mortality (%)	0.6**	17.6**	No data	No data	No data
Skins exported (separated according to source C, R, W)	4322 C 4191 R	3206 C 2723 R	2700 C 3900 R	2650 R 2610 C 500 W	2700 R 1200 C 750 W
Articles exported	804	934	2460		

* *Data for Reptel only*
** *Data for Croco Ranching II only*

Farm investigation sheet for Croco Ranching II (inspection date: 27/11/06)

Pen sizes	Estimated number of live *C. niloticus*	Size class	Estimated age
1 pen (10 x 20 m)	60–70	1.20–1.50 m	3–4 years
1 pen (20 x 8 m)	7	2–3 m	10–15 years
1 pen (20 x 15 m)	20	2–2.20 m	5–8 years
1 pen (20 x 20 m)	2 adult breeders	2.5–3 m	> 15 years
1 pen (25 x 25 m)	100–120	1.20–1.40	4–5 years
1 pen (20 x 30 m)	110–120	1.20–1.40	4–5 years
10 darkened indoor hatchling pens ('dark environmental chambers')	9 pens: 115 1 pen: 6	9 pens: 50–70 cm 1 pen: 0–40 cm	9 pens: 2 years 1 pen: yearlings
Total	**420–460 animals**		

Other housing facilities
- There were four larger pens (each measuring about 20 x 30 m) and a heated winter shed with 13 small pens available but all were empty at the time of the inspection and seemed not to have been used recently.
- The egg incubator room was filled with 19 boxes which contained altogether 1,756 recently collected eggs from the west coast area of Madagascar, which would roughly correspond to 40 to 45 harvested nests. Many entirely spoiled and rotten eggs were seen which had not been removed. In addition, 29 recently hatched baby crocodiles were found in the same room.
- Overall, the breeding conditions could be significantly improved from a hygienic point of view and also with regard to hatchling care.

Additional Information	
Numbers produced through breeding	None on this farm
Skins tagged	None
Tags on stock	None. However information was received that blue tags were used for ranched specimens and yellow ones for specimen taken from the wild.
Hatching success	According to the owner, this would be around 70 %, which appears optimistic
Rearing mortality in the first year	Claimed to be around 10-20 %
Reporting on production and trade	None
Skins in stock and tanning status	In total, 304 raw salted skins were identified, of which 150 were inspected closely, including measurement of total length. Except for about 10 larger skins with many scars on the belly and holes in the neck part, no direct indication was given that these skins possibly did not originate from the ranch.

Farm investigation sheet for Reptel (inspection date: 28/11/06)

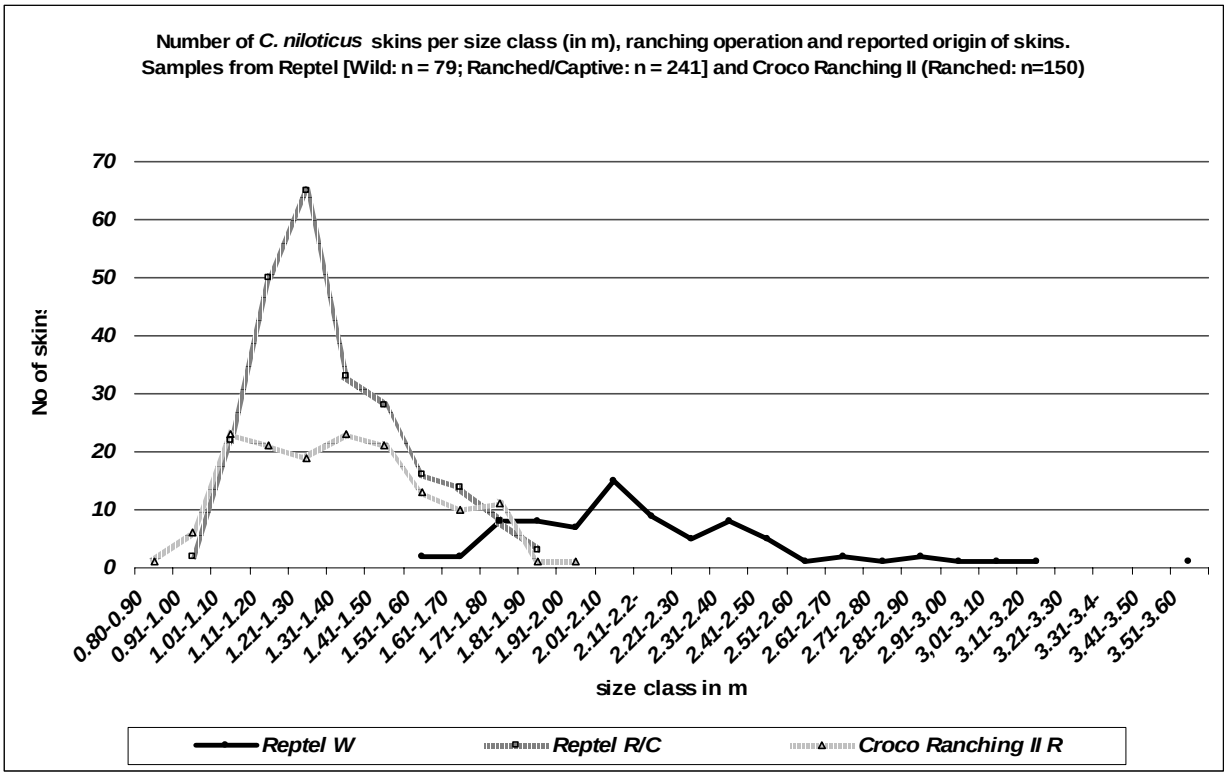
Pen size	Estimated number of live *C. niloticus*	Size class	Estimated age
Hatchery	150	25–30 cm	New born
6 pens all concrete each 20 x 20 m	4,464	60–80 cm	1–2 years
5 pens with concrete pool and earth surrounding	5,071	80–120 cm	2–3 years
1 pen in natural setting with future breeders	59 (42 females)	2.50–3.30 m	10–15 years
Large breeding enclosure ('Le Lac')	151 (124 females)		
Total	**9,895 animals**		

Other housing facilities
- In total three large indoor rearing facilities (BAT I – III) for hatchlings, each with 500 m² surfaces and with two levels; newly constructed but had currently not in use.
- All animals are kept together, irrespective of their farmed or ranched origin, as long as they do correspond with regard to their size.
- Butchering and skinning facilities are excellent and well equipped to meet current standards.

Additional Information	
Incubator	There are two standard equipped and well-designed incubators on the farm. Both had been in use at the end of the farm breeding season and the egg collection period in the wild.
Numbers of breeding animals	125 females and 27 males.
Numbers produced through breeding	In 2006, there were 114 nests on the farm which produced 4,357 viable eggs. In addition, in 2006 104 nests with 4,354 eggs were collected.
Skins tagged	None
Tags on stock	None

Additional Information	
Hatching success	2004: 5,739 eggs collected - 3,163 hatched (55 %); 2005: 3,653 eggs collected - 2,464 hatched (67 %) 2006: 4,354 eggs collected; hatching success expected to be 70 %
Rearing mortality in the first year	Not known.
Reporting on production and trade	A readily retrievable report on actual production and trade was submitted to the review team
Skins in stock and tanning status	About 480 untanned salted skins were observed of which some 80 were measured and reported by representatives from the Ministry of Environment to be of wild origin. Most of the wild skins were about 2 m long. However, some larger skins originating from reproductive animals were seen of which the largest measured 3.50 m long.

Results of measurements of skins held on the ranching operations (Reptel: 320 skins measured; Croco Ranching II: 150 skins measured)



Exports of crocodilian skins of Reptel and Croco Ranching II in 2004, 2005 and 2006

Year	Company	Destination	Quantity	Purpose	Source	Permit	Date
2006							
	C.R. II	Japan	350	T	R	275C EA04	28.10.06
	Rept.	Japan	100	T	R	261C EA04	26.4.06
			100	T	W	261C EA04	26.4.06
	Rept.	France	500	T	R	340C EA05	29.5.06
	Rept.	Japan	100	T	W	430C EA 06	20.6.06
			100	T	R	430C EA 06	20.6.06
	C.R. II	Japan	300	T	R	380C EA 06	10.6.06
	C.R. II	Japan	350	T	R	415C EA 06	20.6.06
	C.R. II	Japan	350	T	R	465C EA 07	14.7.06
	Rept.	France	500	T	R	510C EA 08	14.8.06

Year	Company	Destination	Quantity	Purpose	Source	Permit	Date
	C.R.II	Japan	500	T	R	590C EA 10	31.10.06
	Rept.	France	500	T	C	682C EA 10	26.10.06
	Rept.	Japan	100	T	W	600C EA 10	2.10.06
			100	T	C	600C EA 10	2.10.06
	C.R.II	Japan	150	T	W	648C EA 10	18.10.06
	Rept.	Japan	100	T	C	683C EA 10	26.10.06
			100	T	W	683C EA 10	26.10.06
	C.R. II	Japan	150	T	W	649C EA 06	1.6.06
	Rept.	France	10	T	C	293C EA 05	11.5.06
	Rept.	France	500	T	C	163C EA 03	23.3.06
2005							
	C.R. II	Japan	300	T	R	384C EA06	23.6.05
	C.R.II	Japan	350	T	R	482C EA07	19.7.05
	C.R.II	Japan	300	T	R	489C EA08	31.8.06
	C.R. II	Japan	300	T	R	590C EA 10	13.10.05
	C.R. II	Japan	300	T	R	720C EA 11	25.11.05
	Rept.	Japan	100	T	W	710C EA 11	16.11.05
		Japan	100	T	R		
	Rept.	France	500	T	R	709C EA 11	11.11.05
	C.R. II	Japan	300	T	R	820C EA 12	15.12.05
	Rept.	Japan	100	T	W	867C EA12	27.12.05
		Japan	100	T	R		
	C.R. II	Japan	150	T	R	864C EA 12	26.12.05
	Rept.	Japan	100	T	W	385C EA 06	24.6.05
			100	T	C		
	Rept.	Japan	100	T	W	533C EA 09	26.9.05
		Japan	100	T	C		
	C.R. II	Japan	150	T	W	601C EA 10	20.10.05
	C.R. II	Japan	150	T	W	837C EA 12	19.12.05
	C.R. II	Japan	50	T	W	869C EA 12	28.12.05
	Rept.	France	500	T	C	432C EA 07	20.7.05
	Rept.	France	500	T	C	575C EA 10	7.10.05
2004							
	Rept.	France	500	T	R	722C EA12	17.12.04
	C.R.II	Japan	300	T	R	398C EA07	15.7.04
	C.R.II	Japan	300	T	R	464C EA08	18.8.04
	C.R. II	France	250	T	R	508C EA 09	15.9.04
	C.R. II	Japan	300	T	R	606C EA 11	8.11.04
	C.R. II	Japan	200	T	R	701C EA 12	13.12.04
	C.R. II	Japan	300	T	R	700C EA 12	13.12.04
	Rept.	Japan	100	T	W	724C EA 12	17.12.04
		Japan	100	T	C		
	Rept.	Japan	60	T	W	560C EA10	15.10.04
		Japan	160	T	C		
	C.R. II	Japan	200	T	W	633C EA 11	17.9.04
	Rept.	Japan	140	T	W	362C EA 07	15.7.04
			300	T	C		
	Rept.	France	100	T	C	572C EA 10	20.10.04
	Rept.	France	850	T	C	490C EA 09	6.9.04
	Rept.	France	100	T	C	307C EA 06	10.6.04
	Rept.	Italy	500	T	C	306C EA 06	10.6.04
	Rept.	France	500	T	R	722C EA 12	17.12.04
	Rept.	France	500	T	C	674C EA 12	1.12.04

Annex B
(French only / únicamente en francés / aeulement en français)

STRATEGIE ET PLAN DE GESTION DES CROCODILES A MADAGASCAR

Présentés par le Ministre de l'Environnement, des Eaux et Forêts

18 Mai 2004

Ministère de l'Environnement, des Eaux et Forêts
Direction Générale des Eaux et Forêts
Antananarivo, Madagascar

1. INTRODUCTION

Le Crocodile du Nil, *Crocodylus niloticus*, est un reptile, de loin le plus grand prédateur du pays. Peu d'études sur son écologie spécifique ont été menées mais on peut considérer que comme ses congénères du continent africain il joue un rôle écologique important.

Présent avant l'arrivé des hommes sur l'île il a été vénéré par certaines tribus, en particulier de l'ouest, et est toujours sacré dans le nord. Le crocodile est quoi qu'il en soit généralement craint des populations humaines avec lesquelles il entre en conflit, sur les zones les plus peuplées en particulier.

Cette espèce a été en particulier largement exploitée à Madagascar depuis la fin des années 1940. Des dizaines de milliers d'animaux ont été abattus dans des régions relativement facile d'accès où les populations ont été réduites à de très faibles densités. L'extension des populations humaines a d'autre part rendu cette diminution des densités inévitable dans certaines zones.

Madagascar a disposé en 1985 d'un quota annuel d'exportation de 1000 peaux provenant de chasse dans la nature. Celui-ci fût par la suite considéré dangereux pour la survie de l'espèce et ne valorisant pas la ressource de façon intéressante, et fût supprimé en 1989.

En reconnaissance de son statut international de conservation, le crocodile a été classé dans la catégorie des animaux gibier de la législation nationale en 1989. En anticipation des conflits humain/crocodiles, une orientation particulière a été donnée dès cette date vers la valorisation économique plus poussée pour rendre aux populations de crocodiles une valeur économique directe. Depuis 1989 la Direction des Eaux et Forêts a fait la promotion de l'élevage en ranch et a défini des règles pour le développement de cet élevage.

Le programme de gestion des crocodiles de Madagascar s'est fait avec l'implication des populations locales et a son intérêt qui a été reconnu au niveau international en tant que modèle original de création durable de lien entre le secteur privé, les populations rurales et le gouvernement pour la gestion d'une ressource naturelle. Ainsi Madagascar s'est vu octroyer la possibilité d'exportation des peaux produites dans le cadre de l'élevage en ranch.

Reconnaissant l'existence de crocodiles pouvant présenter une menace directe sur certaines populations humaines, les pays Parties à la CITES ont octroyé à Madagascar à partir de 1992 un quota d'exportation d'animaux pour valoriser les animaux devant être abattus pour protéger la vie humaine. Ce quota est passé de 100 par an en 1992, à 200 entre 1996 et 1999. 500 peaux par an ont par la suite été exportées mais cela s'est fait sans une approbation formelle des Parties à la CITES.

Aucune donnée n'a pu être fournie à ce jour sur l'impact de ces prélèvements et Madagascar est sensé depuis 1998 fournir un plan de gestion pour justifier de l'utilisation durable de ses populations de crocodiles dans le cadre de la CITES qui a été ratifié par Madagascar en 1975.

C'est à cet effet que la Direction des Eaux et Forêt a organisé une revue de la situation en considérant les rôles des différents acteurs dans le programme d'élevage en ranch et l'intégration

du règlement des problèmes populations humaines/crocodiles par la gestion d'abattage d'animaux spécifiquement dangereux.

2. POLITIQUE

La stratégie de gestion des crocodiles s'insère dans la politique globale de gestion et de conservation de la nature à Madagascar, en particulier dans la Stratégie Nationale pour l'Environnement mais aussi dans la Stratégie de Réduction de la Pauvreté.

En effet cette espèce unique dans la grande île mérite d'être préservée au titre de la stratégie de conservation de la biodiversité mais surtout parce qu'elle peut-être gérée dans le cadre des orientations politiques de valorisation des ressources naturelles en générant des revenus à des niveaux locaux où il n'existe que peu d'opportunités.

3. PROBLÉMATIQUE

Le crocodile est un animal qui est perçu comme dangereux dans son ensemble par la population malgache, perception qui est exacerbée par des problèmes de dangers immédiats dans certaines zones. Le crocodile n'en est pas moins une espèce faisant partie du patrimoine de Madagascar, qui plus est une espèce utile d'un point de vue commerciale. Il mériterait ainsi largement d'être préservé et valorisé au mieux. On manque jusqu'à ce jour d'un programme de gestion permettant cette valorisation liée à la préservation.

Il apparaît indispensable qu'un programme de gestion puisse de plus servir la promotion politique de la gestion en ce sens qu'il règlerait les conflits humains / crocodiles.

Les accords ratifiés par Madagascar sont à satisfaire. Politique et législation nationales sont ainsi à mettre en conformité avec ces accords, ceux de la CITES en particulier.

4. STRATÉGIE

La stratégie globale de gestion des crocodiles de Madagascar est de répartir les bénéfices et les coûts des crocodiles entre les différents acteurs pour assurer que l'ensemble des valeurs écologiques et économiques perdurent dans un cadre acceptable par les populations humaines.

Ainsi:

RECONNAISSANT que Madagascar possède des populations de crocodiles importantes et significatives au niveau international qui ne sont pas menacées d'extinction immédiate;

CONSCIENT que l'abondance actuelle et à venir des crocodiles à Madagascar est une conséquence directe des mesures législatives nationales et internationales mais surtout de la mise en place d'une approche de gestion pour la conservation et l'utilisation durable de la ressource;

ACCEPTANT que le plan de gestion actuel des crocodiles de Madagascar doit prendre en compte et influencer les considérations socio-économiques conflictuelles telles que:

a) Les crocodiles sont de gros et dangereux prédateurs pour les populations humaines et les animaux d'élevage,

b) L'existence de crocodiles dans certaines zones peut être un obstacle au développement d'autres activités économiques,

c) Les crocodiles et les produits qui en sont dérivés ont une valeur économique significative,

d) Des investissements conséquents ont déjà été réalisés pour développer avec succès une industrie bénéficiant et pouvant bénéficier encore plus aux populations rurales;

SE REPOSANT SUR les activités respectives des autorités administratives et d'une autorité scientifique et en particulier celles de suivi administratif et technique et d'évaluation scientifique de l'impact non préjudiciable des prélèvements;

REAFFIRMANT le besoin d'adopter une politique sur les crocodiles pour diriger la gestion future en accord avec les obligations nationales et internationales,

La stratégie de gestion pourra être décomposée selon les points suivants:

a) Répartir les intérêts des différents acteurs pour assurer que les différents bénéfices obtenus des crocodiles perdurent et que la stratégie de gestion soit politiquement acceptable.

b) Poursuivre la conservation et la gestion technique et scientifique des populations de crocodiles sauvages dans l'ensemble de l'île pour maintenir des densités acceptables suivant les conditions locales.

c) Réduire les conflits entre les crocodiles et les populations humaines par un zoning et une gestion appropriés des populations de crocodiles.

d) Promouvoir la conservation des crocodiles par leur utilisation durable en accord avec la gestion des populations.

e) Poursuivre l'augmentation de la valeur des crocodiles sauvages pour les populations humaines et en particulier, pour les communautés locales par l'éducation et l'augmentation des activités économiques liées aux crocodiles.

f) Poursuivre la dynamisation de la coopération entre les opérateurs privés et les communautés de base afin d'atteindre les objectifs de conservation et d'utilisation durable de la politique et du plan de gestion.

g) Mettre à jour la législation pour servir les objectifs stratégiques de gestion et rechercher les moyens d'intervention les plus appropriés.

h) Créer des liens avec les scientifiques et gestionnaires d'autres pays de l'aire de distribution du crocodile du Nil et les organisations spécialisées pour promouvoir conjointement des politiques et des programmes d'utilisation durable de l'espèce.

5. OUTIL DE MISE EN ŒUVRE

5.1 Législation

La gestion des crocodiles restera soumise aux législations de base en vigueur pour les parcs nationaux et la gestion de la faune, mais le Ministère de l'Environnement, des Eaux et Forêts (MINENVEF) évaluera l'état de développement du programme de gestion et identifiera périodiquement les besoins de contrôle appropriés par rapports aux objectifs de gestion.

5.2 Administration

Le MINENVEF désignera un responsable en charge du dossier crocodile et mettra a disposition le staff administratif pour gérer les opérations relatives aux crocodiles. Ce responsable, directement responsable vis à vis du Directeur Général des Eaux et Forêts, travaillera en étroite collaboration avec l'Autorité scientifique, le représentant du Groupe des Spécialistes de Crocodiles (SSC-UICN). Ce groupe est désigné sous le terme comité « crocodiles ». Ses responsabilités sont décrites à la section 6.4.

5.3 Utilisation

Dans les zones appropriées, le Directeur Général des Eaux et Forêts (DGEF) autorisera l'utilisation des crocodiles suivant un plan de gestion évolutif approuvé par l'Autorité scientifique.

L'utilisation est restreinte à la collecte des œufs pour le ranching, à l'abattage des animaux clairement à problème, et à l'artisanat local.

5.4 Contrôle

La DGEF est responsable du suivi des élevages et de l'abattage des animaux à problème sur les terres sous son autorité. Les bureaux des services forestiers locaux pourront autoriser la capture et l'abattage d'un nombre limité de crocodiles adultes par des chasseurs locaux, suivant un système de quota par zones préalablement défini pour l'ensemble du territoire et approuvé par le DGEF et l'autorité scientifique. Les bureaux des Eaux et Forêts garderont des notes relatives aux activités et à la présence des crocodiles.

Les éventuels abattages non commerciaux d'animaux dangereux qui restent autorisés suivant la législation en vigueur seront répertoriés par les services forestiers locaux.

5.5 Suivi

Le suivi des crocodiles dans chaque zone de gestion sera coordonné par l'Autorité scientifique CITES de Madagascar qui rendra compte au MINENVEF. Des inventaires seront conduits suivant les lignes directrices de la section 6.4.1. Le comité crocodiles sollicitera les spécialistes internationaux expérimentés si besoin est, en particulier pour la mise en place de leurs programmes scientifiques et techniques de suivi.

5.6 Fonctionnement et développement du programme

Les opérateurs privés pourront être sollicités pour contribuer au programme de gestion suivant un plan préparé par le comité crocodiles, autant que possible annuellement, qui leur sera soumis par le DGEF pour approbation. Une attention particulière sera portée à la formation de cadres nationaux et des responsables des services forestiers locaux dans les zones de prévalence des crocodiles. Des fonds pourront être sollicités auprès de sources extérieures pour des formations, des études spécifiques ou l'amélioration de la gestion du programme dans son ensemble.

6. MODALITÉ DE MISE EN ŒUVRE

6.1 Gestion par zones

6.1.1 Critères pour le zoning

Le principe de l'exploitation par zones consiste à reconnaître que les populations de crocodiles n'ont pas les mêmes densités et ne sont pas au même niveau de conflit avec les populations humaines selon les régions ou les zones spécifiques de ces régions.

Madagascar sera ainsi considéré divisé en zones suivant les critères suivants:

a) le statut de conservation des zones

b) les tailles des populations existantes et potentielles dans la zone

c) l'importance des zones pour la reproduction des crocodiles

d) l'impact potentiel des crocodiles sur les populations humaines résidentes et les impacts attendus des activités humaines sur les crocodiles.

6.1.2 Zones proposées pour la gestion

La répartition par zone sera évolutive et sera réévaluée suivant l'état des connaissances sur les populations sauvages et de l'évolution du programme de gestion. Pour les besoins de la gestion et de la conservation des crocodiles, Madagascar est divisé en quatre types de zones:

a) Les rivières de la Mahavavy et de l'Ankarana hors aire protégée.

b) Les zones de Besalampy (Maningoza et Sambao) et d'Antsalova.

c) Les terres sous contrat de gestion ou les terres privées.

d) Les autres terres publiques.

Remarque: les Aires Protégées ont leurs populations de crocodiles protégées par principe. Leur gestion est du ressort de l'ANGAP (Association Nationale pour la Gestion des Aires Protégées). Un accord se doit quoi qu'il en soit d'être établi entre le MINENVEF et l'ANGAP afin qu'il soit convenu que l'ANGAP respecte les provisions du présent plan de gestion dans les zones sous son contrôle.

6.1.3 Objectif de gestion par zone

Les objectifs de gestion dans ces zones sont:

a) Les rivières de la Mahavavy et de l'Ankarana hors aire protégée. Maintenir l'évolution naturelle des populations et porter une attention particulière à la prévention d'abattages illégaux de crocodiles sur ces zones. Les prélèvements n'y sont pas permis et les réductions de densités de crocodiles ne seraient autorisées qu'en cas de décès humain et les abattages d'animaux seraient alors restreints à l'élimination d'individus spécifiques.

b) Les zones de Besalampy (Maningoza et Sambao) et d'Antsalova. Maintenir l'évolution naturelle des populations et porter une attention particulière à la prévention d'abattages illégaux de crocodiles sur ces zones. Les collectes d'œufs de crocodiles y seront encouragées suivant les législations en vigueur et les plans de gestion spécifiques mis en place. Les autres utilisations commerciales n'y sont pas permises et les réductions de densités de crocodiles ne seraient autorisées qu'en cas de décès humain et les abattages d'animaux seraient alors restreints à l'élimination d'individus spécifiques.

c) Les terres sous contrats de gestion ou les terres privées. Les densités de crocodiles pourraient être augmentées, maintenues ou diminuées à des niveaux acceptables suivant les conditions locales et la collecte des œufs de crocodiles peut y être autorisée. Les décisions d'utilisations seront le fait des gestionnaires de ces zones (en effet un groupement ou une communauté locale gérant une zone où des abattages seraient autorisés pourrait préférer gérer les populations de crocodiles pour la production optimales d'œufs). Toute décision de gestion sur ces zones ne pourra cependant être mise en œuvre qu'avec l'approbation des autorités des Eaux et Forêts.

d) Les autres terres publiques. Les densités de crocodiles pourraient être augmentées, maintenues ou diminuées à des niveaux acceptables suivant les conditions locales et la collecte des œufs de crocodiles peut y être autorisée. Suivant l'évolution de l'état des connaissances sur les problèmes directs causés par les crocodiles aux populations humaines des localisations particulières seront identifiées sur cette zone pour diriger spécifiquement les abattages de crocodiles présentant des dangers immédiats pour les populations humaines.

6.2 Le ranching des crocodiles

6.2.1 La définition du ranching et du farming suit celle de la CITES excepté que le ranching n'inclut que la collecte des œufs.

6.2.2 Tous les éleveurs en ranch seront requis de fournir des rapports trimestriels sur leurs stocks au MINENVEF.

6.2.3 Tous les permis pour la collecte des œufs sauvages de crocodiles sont validés uniquement par le service en charge des crocodiles du MINENVEF.

6.2.4 Tous les ranchs et établissements maintenant des crocodiles en captivité se verront obligés d'être en possession d'un agrément. Son maintien dépendra de la soumission des informations requises par le MINENVEF.

6.3 Collecte, Contrôle et Exportation des crocodiles présentant des dangers immédiats

6.3.1 Le nombre total des crocodiles autorisés à être abattu à vocation commerciale sera égal au quota annuel d'exportation de la CITES.

6.3.2 Le service en charge des crocodiles du MINENVEF déterminera un quota d'abattage par zone et émettra des autorisations relatives à ces quotas qui seront transmises aux services locaux des Eaux et Forêts (le nombre étant déterminé principalement par le nombre d'incidents dus aux crocodiles les années précédentes). Les autorisations d'abattage par zones spécifiques de terrain seront référencées de numéros de séries (1 – 500) et de l'année. Les fiches accompagnant chaque peau auront la forme suivante:

N° de série xxx/200x	Date d'abattage	Lieu d'abattage	Chasseur	Intermédiaire	Transporteur	Acheteur

6.3.3 Les services forestiers locaux préviendront les chasseurs locaux, les intermédiaires et les commerçants des conditions d'attribution des quotas et des besoins de référencement des peaux.

6.3.4 Les peaux de chaque crocodile abattu seront étiquetées le plus tôt possible. La localisation du lieu de capture, le chasseur et la date seront identifiés sur la fiche accompagnant la peau. La fiche sera signée par le responsable local des Eaux et Forêts et transmise au transporteur ou au propriétaire suivant de la peau.

6.3.5 Aucune peau ne devrait être transportée sans autorisation et fiches d'accompagnement.

6.3.6 Les propriétaire de ranch reconnus seront autorisés a acheter, stocker et exporter des peaux sauvages et ceux-ci achèteront uniquement des peaux légalement autorisées.

6.3.7 Les artisans formellement agréés pourront être autorisés à bénéficier d'une partie du quota des peaux sauvages. Ils achèteront uniquement des peaux légalement autorisées et ne pourront exporter ces peaux que sous la forme de produits finis.

6.3.8 Le permis d'exportation des peaux ne sera délivré que suite à la présentation des autorisations d'abattage et à la vérification des fiches d'accompagnement correspondantes.

6.3.9 Les exportateurs de peaux de crocodiles sauvages ou de produits transformés contribueront (à hauteur de 5 %) de leurs revenus par ces peaux à l'établissement des inventaires et à la gestion des populations sauvages de crocodiles. Cette contribution sera versée au MINENVEF qui l'attribuera spécifiquement et intégralement à la gestion des crocodiles.

6.4 Responsabilités du comité crocodiles

6.4.1 Suivi des populations de crocodiles

6.4.1.1 Le suivi de la collecte des œufs sera effectué annuellement

6.4.1.2 Le suivi des nids sur les zones prioritaires de collecte d'œufs sera conduit au moins tous les deux ans

6.4.1.3 Le détail des informations sur chaque crocodile abattu sera tenu par les bureaux régionaux des Eaux et Forêts et remis annuellement au comité crocodiles avec copie directement transmise au service en charge des crocodiles du MINENVEF

6.4.1.4 Les rapports relatifs aux attaques des crocodiles sur les humains seront compilés et analysés chaque année par le comité crocodiles

6.4.1.5 Il sera demandé à toutes les organisations œuvrant dans la conservation et travaillant dans des zones où se trouvent des crocodiles ainsi qu'aux autorités et populations locales de faire état des incidents survenant à cause des crocodiles

6.4.1.6 Des inventaires aériens de zones présélectionnées seront réalisés tous les cinq ans

6.4.1.7 Des inventaires nocturnes seront réalisés autant que possible

6.4.1.8 Les résultats des inventaires seront compilés, archivés par un responsable des crocodiles au sein de l'autorité scientifique, mais aussi transmis aux acteurs concernés par le comité crocodiles

6.4.2 Crocodiles posant des problèmes immédiats et abattages

6.4.2.1 Compiler et analyser les informations sur les attaques et les accidents

6.4.2.2 Répartir les quotas annuels suivant les zones à problème en fonction des nombres d'attaques et allouer les autorisations de terrain en conséquence aux services locaux des Eaux et Forêts

6.4.2.3 Organiser la diffusion sur le terrain des informations nécessaires pour la compréhension du programme par les agents de terrain des services des Eaux et Forêts et la diffusion des informations par ceux-ci

6.4.2.4 Effectuer l'édition, le contrôle et la compilation des informations de terrain

6.4.2.5 Inspecter les stocks de peaux sauvages détenues par les ranchs et vérifier les registres de peaux

6.4.2.6 Superviser l'application des étiquettes d'exportation CITES

6.4.3 Crocodiles de ranch

6.4.3.1 Emettre les agréments pour les ranchs et les établissements similaires si toutes les conditions sont conformes au cahier des charges pour l'élevage en ranch

6.4.3.2 Compiler les rapports trimestriels des ranchs qui détaillent:

	Stock d'origine	Additions	Mortalité	Abattage	Stock final
Nouveaux nés					
Année 1					
Année 2					
Années 3 & 4 +					
Reproducteurs					

6.4.3.2 Préparer un résumé annuel de la collecte des œufs, de l'incubation et des éclosions suivant le format

	Nb. couvées	Localisation	Nb. d'œufs	Nb. d'œufs rejetés	Nb. incubés	Nb. éclos	Nb. ajouté au stock
Ranching							
Farming							

6.4.3.2 Conserver les données détaillées de la localisation de chaque nid sauvage collectée et du nombre d'œufs contenu dans chaque nid

6.4.3.2 Inspecter tous les ranchs en activité tous les 6 mois, contrôler les stocks et évaluer l'état de nourrissage et sanitaire, etc.

6.4.3.2 Définir en collaboration avec les spécialistes de l'élevage de cette espèce les standards acceptables pour la production et évaluer les résultats des ranchs

6.4.3.2 Compiler les données dans un rapport annuel pour le MINENVEF, la CITES et les autres parties prenantes.

6.4.4 Supervision de l'artisanat

Les données collectées depuis quelques années amènent à penser que l'artisanat pourrait avoir un impact très limité sur les populations sauvages étant donné le peu de renouvellement des stocks constaté sur les étalages.

Le comité crocodiles assurera néanmoins:

6.4.4.1 La promotion de l'information pour les acheteurs au sujet de l'intérêt d'acheter des produits acquis dans le cadre du programme de gestion et permettant un suivi;

6.4.4.2 La compilation des données provenant des facturiers des artisans et si besoin est la vérification de la validité des informations recueillies;

6.4.4.3 La promotion de la fabrication d'articles produits à partir de peaux provenant de l'élevage en ranch; et

6.4.4.4 Au cas où une augmentation notable des ventes serait constatée ou qu'il soit estimé que l'artisanat a un impact négatif notable sur les populations sauvages de crocodiles, la proposition d'un programme de gestion de l'artisanat plus approprié sera effectuée.

6.4.5 Conformité avec le système d'étiquetage universel

Le comité crocodiles supervisera l'application de trois types d'étiquettes, à savoir:

a) Etiquettes CITES pour les peaux de ranch (déjà en place)

b) Etiquettes CITES pour l'exportation des peaux sauvages (séries de nombres différents) avec fiche d'accompagnement complétée qui doit être rendue pour chaque étiquette d'export remise

c) En cas d'achats de peaux par les artisans, ces peaux seront étiquetées par l'élevage pour le suivi et afin de déterminer la correspondance éventuelle de produits finis aux étiquettes.

Le comité par le biais des responsables de la DGEF habilités supervisera à la suite également l'émission des permis CITES pour les peaux correctement étiquetées.

6.4.6 Amélioration et développement du programme

Le comité crocodiles recherchera les moyens de parfaire sa formation, de transmettre les informations techniques aux agents de terrain, d'améliorer son système de compilation de données, de pouvoir effectuer les inventaires requis et sa capacité d'assistance pour résoudre les conflits causés par les crocodiles.