

AMENDMENTS TO APPENDICES I AND II OF THE CONVENTION

Proposals Submitted Pursuant to Resolution on Ranching

- A. Maintenance of the Madagascar population of Crocodylus niloticus in Appendix II.

B. PROPONENT

The Democratic Republic of Madagascar.

C. SUPPORTING STATEMENT

1. Taxonomy

11. Class: Reptilia
12. Order: Crocodylia
13. Family: Crocodylidae
14. Species: Crocodylus niloticus (Laurenti, 1768)
15. Common Names: English: Nile crocodile
French: crocodile du Nil
Spanish: Cocodrilo del Nilo
malgache: Voay (petit spécimen)
Mamba (grand spécimen)

16. Code Numbers:

2. Biological Data

As this proposal is done pursuant to Resolution Conf. 3.15 on Ranching, the information on populations outside of Madagascar have no interest and are, therefore, excluded from the proposal.

21. Distribution: Various and accurate information shows the occurrence, at the beginning of this century, of large numbers of crocodiles. The range was limited by altitude only.

Intensive hunting and human occurrence have limited the distribution.

At present, crocodile populations can still be found in all rivers, lakes, lagoons and big pools of Madagascar, though greater or smaller in number depending on individual circumstances (list in Annex).

22. Population: The wide distribution of crocodiles throughout the whole country makes accurate estimations of the population difficult. The largest part of the population occurs in the North-West and the West.

Current surveys are trying to evaluate the Malagasy crocodile population and accurately define its limits. However, the annual harvest for finished products on the local market has been on the increase over the last 10 - 15 years, and may be considered as

sustained exploitation, in accordance with the introduction of CITES quotas. If the annual harvest made between 1975 and 1980, about 2,000 specimens, represents 5-10% of the population in the areas where the hunt took place, the total population exploited can be estimated at 20,000 - 30,000 animals. It must be pointed out that these areas represent only a minor part of the regions occupied by crocodiles. As reported by Behra (1988), only a small part of the range of the Nile crocodile is exploited in Madagascar.

It should be noted that the figures shown only provide a general overview of the crocodile population in Madagascar. The results of a survey recently conducted by CITES experts together with local technicians will be published soon. However, such studies will have to be conducted periodically in terms of time and area covered to obtain reliable data.

23. Habitat: In the past, the crocodile occurred on the whole island, in various habitats with permanent water supplies. The crocodile has even been found close to Antananarivo, at an altitude of 1400 m (de Lanessan, pers. comm.). On the high plateau of central Madagascar, lakes and drainage canals are closely related to the cultivation of rice crops and human population, and the crocodiles are not common. In the eastern areas with high levels of rainfall, crocodiles still occur in rivers, lakes, lagoons and Pangalanes Canal. However, most of the population occurs in the extensive system of small lakes, burned forests and rivers of the North-East.

3. Trade Data

31. National Utilization: There are two main utilizations at a national level.

311. Local Handicraft: This industry has existed for many years. If it has increased considerably since the setting up of the quotas, the management programme provides for its stabilization at a sustainable level.

312. Ranching: Two farms presently exist in Madagascar and are in full expansion:

- the first of Mr. de Lanessan is already registered in the CITES Register of Captive Breeding Operations;
- the second, a company called REPTTEL, will be registered shortly.

These two farms have been authorized to capture live crocodiles and to collect eggs from the wild. But those captures and collections are, however, still of little importance due to the capacity of the farms.

Other farm projects are currently subject to studies and several operations have started to apply for funding by banks in the framework of the governmental programme for the launching of small and middle-size enterprises.

32. Legal International Trade: Madagascar has not entered any reservations with regard to the Convention. The only exports which have taken place up to date were made pursuant to CITES rules.

Figures illustrating the export of skins since 1985

Year 1985	155
Year 1986	662
Year 1987	3,651
Year 1988	<u>1,000</u>
Total	5,468

(Quotas from 1985 to 1988 and products of captive breeding operations)

33. Illegal Trade: No evidence of illegal trade has been received up to date.

34. Potential Trade Threats:

341. Live specimens: One of the characteristics of the management programme is the division of the country into regions. Those areas where captures for the farms will take place are those where the crocodiles are considered as undesirable because of certain problems which they create for human populations. Such a collection cannot, therefore, be considered as a real threat, as the areas of interest for crocodiles will be preserved.
342. Protection Status: As previously mentioned, the local trade in finished products has existed for many years without having hampered the population increase. It is expected to be brought back to the level it had before its rapid increase which started when the quotas were set up, and to implement strict controls to ensure that it will not have a detrimental effect.

4. Protection Status

41. National: The crocodile was considered as a pest; since a decision made by the government to initiate national exploitation of the crocodile, it has been classified as game by Decree No. 88/243 of 15 June 1988, and hunting is strictly controlled and is not permitted from 1 May to the first Sunday in October of the same year.
42. International: Madagascar signed the Convention of Washington without reservation and implements its regulations strictly.
43. Additional Protection Needs: The legal status of the crocodile, on a national and international basis, does not require any additional measures to provide efficient protection. The only additional protection which might be useful in Madagascar would be the tightening of its enforcement measures which will follow the ranching developments, this will increase the value of resources.

5. Information on Similar Species:

Not applicable as this proposal is made pursuant to Resolution Conf. 3.15.

6. Comments from Countries of Origin:

Not applicable as the proposal refers to the Malagasy population only. It is noted, however, that the Zimbabwe population of Crocodylus niloticus is already listed in Appendix II.

7. Additional Remarks:

71. Details of the Proposal: Crocodylus niloticus is a dangerous animal in Madagascar. Not only does it attack cattle, but also humans and death cases are far from rare. Therefore, the public attitude towards it is very negative and its protection is difficult.

As in other African countries, the best way to save the species would be through moderate exploitation. In effect, only its use as a source of income may change the general attitude towards this species which, although now classed as game on a national level, is still considered as dangerous and useless by the majority of human populations.

The organization of the ranching system which will follow the approval of this proposal will also make possible the capture of problem animals for the farms. In addition, the number of animals which survive the two first years of their life is much higher in the farms than in the wild. Eventually, it will be possible to re-introduce crocodiles raised in these farms back into the wild, in areas with low human population density and where crocodiles are still rare.

72. Development Plan:

721. Egg Collection:

- a) Egg collections will mainly take place in rivers, lakes, lagoons and large pools where crocodiles are abundant.
- b) Collection areas will be determined each year by the Direction des Eaux et Forêts, the CITES Management Authority.
- c) A collection system will only take place with written authorization from the Direction des Eaux et Forêts (Service de la Protection de la Nature).
- e) Collection areas, will wherever possible be subject to night inventories each year, in addition to information collected through nest counts during egg collection.
- f) One of the conditions that must be adhered to for the granting of licences is that, on request, up to 5% of the number of collected eggs be made available to the Management Authority as one year old animals.

722. Problem Animals:

- a) Problem animals are defined as those located close to human centres and which represent a potential danger to human populations or cattle.

As far as possible they will be captured by farmers and placed on the farms. If in practice this proves impossible, they will be destroyed by the local authorities of Eaux et Forêts, once permission has been granted by the Director

The decision to declare an animal as a problem animal is the responsibility of the Management Authority and each case will be studied individually.

- b) Captured problem animals of no interest to the farmers (i.e., excess of males) could be slaughtered and their skins exported once permission has been granted by the Direction des Eaux et des Forêts.

However, the farmer might be asked to keep the animal for up to one year in the farm in case another farm is interested in taking it.

- c) Each animal captured will be individually marked and a register including the origin and the characteristics of each animal will be kept on the farm as well as at the Direction des Eaux et des Forêts.
- d) If necessary, priority will be given to the capture of those animals considered the most dangerous. Thus the destruction of breeding animals because the farms in construction are not yet ready to take them will be avoided.
- e) If hunting is authorized in certain areas in order to control the animal density, only those animals of more than 2 metres long will be captured.

No skins of more than 45 cm (belly skin width) will be exported a part from those exceptions of slaughtered problem animals.

In any case, the export of wild skins is limited to a maximum of 1,000 per year.

73. Feasibility at the Biological Level:

731. Incubation and Rearing: Zimbabwe for example, has been conducting a ranching programme for several years on Crocodylus niloticus, therefore, the feasibility of such an operation no longer needs to be proven. This experiment, as well as numerous publications on the captive breeding of Crocodylus niloticus will serve as a basis for the Madagascar programme.

732. Interest for the Wild Populations: It is evident that due to the high hatching mortality in the wild egg collection is insignificant if the evolution of the population is followed as provided.

The obligation on the part of the farmers to provide the Management Authority with part of the animals allows for the option of re-introduction.

Finally, the economic value of the crocodile can only have a favourable impact on the attitude of the human populations vis-à-vis this animal.

74. Industry Management:

741. Farm Viability: The granting of a licence to a farm will depend on the Direction des Eaux et des Forêts. The Management Authority must be assured that the farmer or his employees have sufficient experience to ensure the welfare of the farm stock.

The authorities will also request details on the findings which must be sufficient to ensure that the farm will be maintained without income for the three to four years of its existence.

After the initial acceptance of the project, technical data will be requested, such as specifications of basic design, expected food supplies, as well as the various stages of development of the farm, including all other data required to conduct an independent analysis of the financial and biological feasibility of the project.

742. Controls:

- a) Sale and/or capture and/or transport and/or rearing of live crocodiles within the country will be subject to the authorization granted by the Direction des Eaux et Forêts. The same applies for egg and skin collection. The authorization will be checked by the staff of Eaux et Forêts, Gendarmerie Nationale, Sécurité Nationale and any other authority at the rank of officer or agent of judicial police.
- b) It is obligatory for the farmer to maintain a register indicating acquisitions, deaths, egg layings and hatching successes. Each month a report will have to be presented to the Management Authority.
- c) It is also obligatory for the farmer to maintain a register indicating the situation of the crocodiles in each pond; a report on the situation must be submitted to the Management Authority every month.

743. Stock and Skin Identification: In addition to the identification and marking of each captured animal, each farm will receive, if necessary self-locking tags with serial numbers, similar to those used for export under CITES quotas.

One of the conditions for the granting of permission to slaughter an animal will be that all skins be marked as soon as possible. Controls may be carried out by the authorities of Eaux et Forêts.

Registers including the total length of the skins, their belly-skin width, sex, slaughtering date and origin together with the tag number must be submitted to the Direction des Eaux et Forêts. This kind of register must also accompany the skins when exported and thus allow for the detection of any significant discrepancies between the number of animals introduced in a farm and the number and size of the animals slaughtered.

All these data will be made available for inspection by CITES representatives if they so wish.

8. Additional Information

81. Training and Extension Services: At the beginning, the assistance of a crocodile expert will be requested to lead a vast training programme for both officers in charge of controls, farmers, exporters and tanners, to advise them in the breeding of crocodiles on farms and ranches and in skin tanning.

9. Conformity with the Requirements of Resolution Conf. 3.15 and 6.22 of the Conference of the Parties

91. Paragraph b i) of Conf. 3.15: The proposal is made in order to reduce the number of problem crocodiles destroyed and thus to create the possibility for re-introduction.

The development of this natural resource will lead to the protection of the habitat and to a change in its perception by the public. Thus, there is no doubt that such a programme can only be considered as beneficial to conservation.

92. Paragraph b ii) of Conf. 3.15: Identification methods will include, as described above, reports on skin characteristics (size, origin), as well as specific self-locking tagging. It will, therefore, not be possible to mistake those skins with others.

93. Paragraph c i) of Conf. 3.15: Similar operations to those envisaged have been in operation in Zimbabwe for more than 20 years. The follow-up on these populations has shown that if such takings have an impact, it is a positive one, as the wild populations have increased. As the same species is involved, there is no doubt that such operations are of interest to Madagascar.

94. Paragraph c ii) of Conf. 3.15: Countries with less favourable economic conditions (in particular more expensive manpower) have shown the economic success of such operations. This can also be said at a biological level, especially in Zimbabwe.

95. Paragraph c iii) of Conf. 3.15: The slaughtering of the crocodiles will be conducted as humanely as possible avoiding senseless stress and suffering.

96. Paragraph c iv) of Conf. 3.15: As already stated, the operations will aim, amongst other things, to preserve certain areas in increasing their value, and even, if they are situated far from human populations in increasing crocodile density.

97. Paragraph c v) of Conf. 3.15: Green skins produced will be marked under a system of the kind used in Florida and Zimbabwe: unremovable, indelible and thus avoiding mistakes to when predicting the origin.

In addition, any export will be accompanied with a document indicating the specifications of the exported stock.

98. Paragraph c vi) of Conf. 3.15: Assurance has been given that the Direction des Eaux et Forêts will control the operations as strictly as possible, ensuring that the criteria be met.

99. Paragraph a of Conf. 6.22: As mentioned above, any operations related to ranching will be controlled and registered. Thus, all data will be forwarded to the Secretariat:

- i) Status and evolution of the populations
- ii) Number of animals taken each year (eggs and young)
- iii) Estimate of the percentage of the total population taken
- iv) Number of animals released and all data collected further to such releases
- v) Mortality rates in captivity and reasons of such mortality
- vi) Production, sale and export of products
- vii) Conservation programme and scientific experiments in relation with ranching and wild populations

910. Paragraph b of Conf. 6.22: The decision to visit and control any ranching operation, if necessary, is left to the CITES Standing Committee.

911. Paragraph c of Conf. 6.22: After consultation with the Management Authority of Madagascar, and if the Standing Committee considers it necessary, it would be in a position to ask the Depository Government to prepare a proposal to transfer the population concerned back to Appendix I.

10. Références

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LISTE DES PRINCIPAUX COURS D'EAU DE MADAGASCAR ET LONGUEUR.

Versant Ouest

Menarandra	199,500 Km
Ihinta	155,500
Onilahy	374,500
Fierenana	138,000
Mangoky	575,500
Maharivo	191,000
Morondava	152,300
Tsiribihina	451,300
Manambolo	258,500
Manambaho	200,300
Ranobe	200,100
Sambao	152,400
Ikopa	365,000
Betsiboka	438,500
Mahajamba	344,500
Sofia	335,400
Sambirano	115,500
Mahavavy	152,400
Loza	225,000
Mandrare	243,000

Versant Est

Bemarivo	125,500 Km
Antanambalana	165,500
Mananara	126,500
Soamiarina	142,500
Maningory	231,000
Onibe	123,500
Ivondro	144,500
Rianila	153,500
Mangoro	274,500
Sakaleona	117,500
Mananjary	205,500
Namorona	144,000
Faraony	121,500
Matitanana	114,500
Manampatrana	163,500
Mananara	321,500
Manambovo	155,500

LISTE DES LACS, LAGUNES ET GRANDS ETANGS DE PLUS DE 100 Ha OUVIT LE CROCODILE NILOTICUS

Province Antsiranana

- Ampahana (Antalaha) 371 Ha de superficie
- Ampasimbato Sambava 186 Ha
- Andramoty Sambava 136 Ha
- Andohabe et Ankidihiy 628 Ha
- Betavo Sambava 235 Ha
- Ihosy Sambava 272 Ha
- Antsatritohana Antsiranana II 101 Ha
- Tanavo (Lac sacré) Antsiranana II 149 Ha
- Anketraka Vohémar 248 Ha
- Antserasera Vohémar 299 Ha
- Sahaka Vohémar 1.000 Ha
- Amparihibe Nosy-Be 138 Ha

Province Fianarantsoa

- Bevola Manara 256 Ha de superficie
- Tampolo Mankara 517 Ha
- Ivakoana Maakara 288 Ha
- Eria Vangaidrano 171 Ha
- Masianaka Vangaindrano 1.329 Ha
- Ambalavontsa Mananjary 386 Ha
- Andranobe Mananjary 316 Ha
- Andranomavo Mananjary 168 Ha
- Manampana Mananjary 114 Ha
- Alanapotsy 1.098 Ha
- Analanolona 256 Ha

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Province de Mahajanga

22

- Andranopongy Antsohihy 286 Ha de superficie
- Befanantonana Antsohihy 146 Ha
- Masiloka Analalava 233 Ha
- Anketraka Bealanana 12.438 Ha
- Ankitrobaka et Natsaboimadio Bealanana 742 Ha
- Ankotoa Bealanana 105 Ha
- Andraiforo Mampikony 102 Ha
- Bevary Mampikony 245 Ha
- Marojobo Mampikony 135 Ha
- Mahohambanja Mampikony 159 Ha
- Sinja Mampikony 117 Ha
- Ambalafary Mandritsara 375 Ha
- Ambohobory Port-Bergé 104 Ha
- Amparihibe Port-Bergé 821 Ha
- Amparihikely Port-Bergé 115 Ha
- Antanambalavy Port-Bergé 293 Ha
- Bemakemba Port-Bergé 263 Ha
- Marevario Port-Bergé 324 Ha
- Matsaborilava du Semarivo Port-Bergé 281 Ha
- Tseny Port-Bergé 641 Ha
- Andranovorimakoa Antsalova 155 Ha
- Ankerika Antsalova 309 Ha
- Ankotrofotsy Antsalova 251 Ha
- Antsamaky Antsalova 131 Ha
- Antsohaly Fenoarivo Antsalova 932 Ha
- Antsatobato Antsalova 156 Ha
- Befotaka Antsalova 386 Ha
- Bemamba Ouest Antsalova 1.586 Ha
- Lac de Jamo Antsalova 389 Ha
- Kakobo Antsalova 109 Ha
- Masama Antsalova 385 Ha
- Ifasiadolo Antsalova 720 Ha
- Nosy Lava Antsalova 224 Ha
- Sariaka Antsalova 245 Ha
- Soamalipo Antsalova 486 Ha
- Tanandava Antsalova 326 Ha

- Ambaho Besalampy 300 Ha
- Ambanjambo Besalampy 229 Ha
- Amparihy Besalampy 297 Ha
- Antsamaky Besalampy 146 Ha
- Bekadradraky Besalampy 120 Ha
- Marovoaibe Besalampy 252 Ha
- Marovoaikely Besalampy 249 Ha
- Sahapy Besalampy 476 Ha
- Ambonarabe Maintirano 117 Ha
- Berevo Maintirano 101 Ha
- Bevoay Maintirano 105 Ha
- Mandrozo Maintirano 1.471 Ha
- Bekitrobaka Morafenobe 106 Ha
- Mahebo Morafenobe 107 Ha
- Mangarika Morafenobe 187 Ha
- Befatika Soalala 128 Ha
- Sariaka Soalala 130 Ha
- Ambanja Ambato-Boëni 909 Ha
- Amboanto Ambato-Boëni 241 Ha
- Andolobe Ambato-Boëni 243 Ha
- Belango Ambato-Boëni 244 Ha
- Bemakamba Ambato-Boëni 141 Ha
- Masary Ambato-Boëni 342 Ha
- Marovoaikely Ambato-Boëni 122 Ha
- Marovovo Ambato-Boëni 103 Ha
- Menarano Ambato-Boëni 118 Ha
- Amparihibe Sud Maevatanana 1.247 Ha
- Amparihimandriana Maevatanana 297 Ha
- Bekopoly Maevatanana 412 Ha
- Bondrony et Matsiabe de Maevatanana 502 Ha
- Bongo Maevatanana 100 Ha
- Kamotro Maevatanana 507 Ha
- Kapingo Maevatanana 130 Ha
- Kamado Maevatanana 334 Ha
- Mangabe Maevatanana 154 Ha
- Marosakoa Maevatanana 103 Ha

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Province de Mahajanga (suite)

- Maroakora Mahajanga II 128 Ha
- Morafeno Mahajanga II 119 Ha
- Amboromalandy Marovonay 650 Ha
- Antsiketraka Mitsinjo 117 Ha
- Katondra Mitsinjo 505 Ha
- Kinkony Mitsinjo 13.900 Ha
- Mahazoarivo Mitsinjo 342 Ha
- Mitsinjo (Mitsinjo) 567 Ha
- Tsiambara Mitsinjo 137 Ha
- Tsiandahatra Mitsinjo 128 Ha

Province de Toamasina

- Alaotra Ambatondrazaka 22.000 Ha
- Antsomanga Ambatondrazaka 574 Ha
- Mahajery Moramanga 2.016 Ha
- Ampitabe et Malotrandro Brickaville 1.148 Ha
- Ankarama Brickaville 101 Ha
- Doanivato Brickaville 125 Ha
- Loakangady Brickaville 134 Ha
- Rasoabe Brickaville 2.000 Ha
- Rasoamasay Brickaville 636 Ha
- Maroloha Vatomandry 125 Ha
- Vangoana Vatomandry 103 Ha
- Varanta Vatomandry 180 Ha

Province d'Antananarivo

- Andranofotsy Anjozorobe 140 Ha
- Ankarakaro Anjozorobe 268 Ha
- Itasy Miarinarivo 3.500 Ha

- Ambodivato Andilamena 110 Ha
- Maromandia Andilamena 125 Ha
- Tampolo Fenoarivo 137 Ha
- Andranobe Mahanoro 290 Ha
- Ihosy Mahanoro 1.189 Ha
- Andovolalina Toamasina II 160 Ha
- Nosive et Variha Toamasina II 3.411 Ha
- Sarobakina et Siankingitra Toamasina II 880 Ha

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Province de Toliary

- Ambavarano Tolagnaro 339 Ha
- Andranany Tolagnaro 250 Ha
- Andriambe Tolagnaro 698 Ha
- Anony Tolagnaro 2.262 Ha
- Antorendrika Tolagnaro 160 Ha
- Erambe Tolagnaro 115 Ha
- Manarivo Tolagnaro 143 Ha
- Ranofotsy Tolagnaro 458 Ha
- Andranomena-Sud Belo/Tsiribihina 770 Ha
- Andranomena-Nord Belo/Tsiribihina 544 Ha
- Andranomena III Belo/Tsiribihina 104 Ha
- Andranomiely Belo/Tsiribihina 228 Ha
- Andranomiely et Betamboro Belo/Tsiribihina 192 Ha
- Nima Belo/Tsiribihina 1.547 Ha
- Ibohoka Belo/Tsiribihina 302 Ha
- Komanaomby Belo/Tsiribihina 1.810 Ha
- Mikoboka Belo/Tsiribihina 253 Ha
- Sariaka Belo/Tsiribihina 428 Ha
- Tsitampolia Belo/Tsiribihina 154 Ha
- Ambovomenasarotra Manja 114 Ha
- Andrambita Manja 135 Ha
- Ankazomena Manja 218 Ha
- Ankoronadabo Manja 102 Ha
- Iakavia Beroroa 113 Ha
- Sakadoma Manja 108 Ha
- Ambala Miandrivazo 262 Ha
- Andemaka Miandrivazo 206 Ha
- Andranomazava Miandrivazo 159 Ha
- Andranovorimikiboka Miandrivazo 143 Ha
- Ankazomanga Miandrivazo 123 Ha
- Ankilimamarivo Miandrivazo 148 Ha
- Antabaka Miandrivazo 264 Ha
- Antsoba Miandrivazo 102 Ha
- Bofo Miandrivazo 243 Ha
- Bokarano Miandrivazo 294 Ha
- Mangotoka Miandrivazo 136 Ha
- Maombe Miandrivazo 120 Ha
- Iotry Tongobory 176 Ha
- Ampanihy Morombe 227 Ha
- Andabotretetra Morombe 196 Ha
- Anasaka Morombe 152 Ha
- Andranolava Morombe 103 Ha
- Ankilimasy Morombe 112 Ha
- Ihotry Morombe entre 951 et 865 Ha (superficie valable)
- Kiliolio Morombe 412 Ha
- Mamonty Morombe 653 Ha
- Saronanala Morombe 228 Ha

PROJET D'UNE POLITIQUE DE GESTION DES
CROCODILES A MADAGASCAR
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Considérant que le crocodile (*Crocodylus niloticus*) constitue un capital biologique et scientifique non négligeable et qu'il représente aussi une ressource monétaire, qu'il convient d'exploiter rationnellement, Madagascar adopte la politique de gestion suivante concernant cette espèce :

- 1)- Le crocodile est classé dans la catégorie gibier. Sa chasse sera réglementée conformément à cette classification.
- 2)- L'inventaire de la faune "crocodile " sera à continuer ainsi que son étude.
- 3)- Son exploitation sera conforme à un plan directeur d'aménagement, dont l'objectif est d'assurer un rendement soutenu.
- 4)- Les techniciens nationaux forestiers seront formés de la façon à pouvoir concrétiser cette politique de gestion, tant du point de vue Etude et Recherche sur le crocodile, que du point de vue vulgarisation et encadrement des activités connexes (farming, ranching, tannage ...).

(4) PLAN D'AMENAGEMENT DU CROCODILE (CROCO-
DYLUS NILOTICUS) DE MADAGASCAR

Conformément à la politique de gestion des crocodiles de la RDM, le plan d'aménagement suivant sera appliqué pour une période de cinq années (1988 - 1992).

1. Inventaire

1.1 - Un inventaire du cheptel crocodile sera à intensifier au cours de l'année 1. Cet inventaire devrait permettre :

- un dénombrement plus précis de cette espèce,
- l'acquisition des données concernant sa répartition géographique.

1.2 - Cette opération sera à confier à un expert à qui sera associé des techniciens nationaux. Le financement sera assuré par une subvention étrangère et un apport national.

2. Etude

Une étude qui sera confiée à un expert qui travaillera en collaboration avec des nationaux, portera sur les objectifs suivants (Année 1) :

- habitat
- comportement
- reproduction
- identification éventuelle d'un équilibre présence humaine - nombre de crocodiles.

3. Formation

3.1 - Des techniciens nationaux seront formés localement par le biais de séminaire sur les thèmes suivants :

- technique d'inventaire
- collecte des œufs et conduite du ranching ou du farming
- techniques de tannage.

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3.2 - Des voyages d'études à l'extérieur seront organisés pour des techniciens cadres forestiers, pour affinage de leur connaissance pour les thèmes sus énumérés.

3.3 - Les exploitants, les tanneurs et artisans locaux seront formés dans les techniques de tannage et de la fabrication des produits finis.

3.4 - Ces formations seront dispensées annuellement. Les dépenses y afférentes seront couvertes conjointement par des subventions étrangères et par un fonds local.

4. Exploitation de la faune "crocodile"

4.1 - Selon l'importance et la répartition géographique du crocodile, Madagascar sera divisé en "unité écologique".

4.2 - Il y aurait trois types d'unité écologique :

- type 1 : région densément peuplée où le crocodile présente un réel danger pour la population humaine.
- type 2 : région moyennement peuplée où le crocodile peut être maintenu à un nombre compatible avec la population humaine.
- type 3 : région où il y a peu ou pas d'habitants.

4.3 - Dans les régions types 1, aucune action de multiplication de la faune "crocodile" sauvage ne sera entreprise. On pourrait y promouvoir par contre le "farming".

- Dans les régions type 2, les géniteurs (taille plus 2m50) seront épargnés de la chasse et le taux d'accroissement du nombre de crocodiles sera rigoureusement contrôlé. On pourrait y développer le "ranching" dont les oeufs seront collectés à partir du cheptel sauvage, tributant ainsi à la maîtrise du taux d'accroissement.
- Dans les régions type 3, la chasse sera réglementée telle façon que les géniteurs restent et puissent assurer un taux d'accroissement numérique valable de la population au sein de l'unité.

Le "ranching" est à promouvoir aussi dans ces régions.

4.4 - La délivrance de permis de chasse par le Ministère de l'Administration des Eaux et Forêts se conformera à

deux preceptes suivants :

- limitation du nombre de crocodiles à abattre en fonction de l'unité écologique cible et du cheptel crocodile qui y a été dénombré,
- une rotation spatiale des unités à exploiter.

5. Concordance avec les mesures édictées par la CITES

5.1 - La ventilation du quota d'exportation sera à effect après prise de connaissance par le Gouvernement malagasy son quota dans le cadre de la CITES.

5.2 - Chaque exportateur est tenu de rédiger un rapport annuel selon le formulaire préconisé par la CITES et qui sera à remettre à la DEF.

5.3 - Les tanneurs de peau de crocodile devront posséder une licence et sont astreints à l'établissement d'un rapport annuel selon le formulaire préconisé par la CITES et qui sera à remettre à la DEF.

Il en est de même pour les artisans travaillant les peaux de crocodile ainsi que les commerçants concernés.

6. Des positions diverses

6.1 - Les réglementations internationales, nationales, le plan d'aménagement relatives à la gestion et exploitation du crocodile (*crocodylus niloticus*) seront diffusées par tous les moyens médiatiques disponibles au pays.

6.2 - Ce plan d'aménagement est flexible et peut être changé en fonction des données recueillies ultérieurement, mais suivra toujours les grandes lignes de la politique de gestion de crocodile à Madagascar.

Antananarivo, le 05 Mai 1989

REPUBLIKA DEMOKRATIKANY
ANTANANARIVO
MINISTRENY
INDUSTRIANY, MINISTRENY
MAMONDRONJANY, MINISTRENY
MAMONDRONJANY (MAMONDRONJANY) MAMONDRONJANY
DIREKTSIONY DES EAUX ET FORETS
B.P. 243 - ANTANANARIVO

Le Directeur des Eaux et Forêts,

à

Monsieur LE SECRETAIRE GENERAL

DE LA CITES

6, rue du Maupas

Case postale 78

CH-1000 Lausanne 9, SUISSE

N° 1961 -MPAEF/DEF/SPN/FFE
P.22/01

O B J E T : - Amendement au sujet crocodile.

REFERENCE : - Votre n°22/MG/JB/lb du 17 Avril 1989.

Comme suite aux remarques et commentaires que vous avez formulés dans votre lettre citée en référence, concernant la proposition de Madagascar relative à l'élevage en ranch du crocodile, j'ai l'honneur de vous communiquer les explications et renseignements complémentaires demandés.

1.- Problème du marché local

Il convient de signaler que l'estimation citée en page 2, par 2.2. du document, et le chiffre cité dans le rapport BEHRA - HUTTON ne sont pas contradictoires. En effet :

- cette mission a estimé, pendant la période 1975-1980 à environ 2 000 espèces de prélèvement à partir de la faune sauvage ;
- la même mission avance le chiffre de 6 000 pour la période 1987-1988.

Certes, il y a une augmentation de la demande, mais les mesures qui ont été déjà prises au cours de la saison de chasse qui vient de s'ouvrir à Madagascar a limité à 4 000 le nombre de têtes de crocodiles à prélever dans la nature (dont 1.000 pour l'exportation).

2.- Information au sujet des deux ranchs

Ferme Société REPTEL à Marovoay Gare MLA Moramanga
Faritany Toamasina

- Infrastructure : 2.800 m2 (enclos, plan d'eau, berges...)
 - 3 bassins de croissance accélérée.
 - 6 bassins de croissance
 - 13 bassins de reproduction.

- Stock actuel : 1001 crocodiles
- Origine du cheptel : 10 provenant de l'élevage de M. De LANEISSAN
les autres sauvages.
- Personnel : 2 cadres
1 technicien
10 ouvriers.
- Financement total : 137.540.000 FMG
- Naissance : 450 par an.

Ferme de Monsieur De LANEISSAN à Mahitsy, Faritany
d'Antananarivo

- Infrastructure : 2.500 m2 (plan d'eau, berges, allées...) 9 bassins
- Stock actuel : 533 crocodiles
- Origine du cheptel : de la capture sauvage
- Personnel : 2 cadres
6 ouvriers
- Naissance : 300 par an.

3.- Renseignements au sujet du programme de gestion

Nous estimons que notre plan de gestion est suffisamment explicite au stade actuel de la situation de la gestion de notre faune crocodile.

Monsieur BEHRA, lors de ses deux derniers séjours à Madagascar a participé activement à l'élaboration de ce projet de gestion. Nous regrettons que vos remarques ne font pas saillir les points sur lesquels vous souhaitez disposer de plus amples renseignements.

Au demeurant, il convient de signaler que les quatre grandes lignes de la politique de gestion ont été étayées dans le plan d'aménagement.

Dans la mesure où des projets concrétiseraient ce plan les activités prévues dans ce projet détailleront davantage ce plan.

4.- Chasse pour l'exportation

Nous ne comprenons pas l'impératif de ne plus recourir à la chasse pour notre quota d'exportation. En effet, comme nous l'expliquerons plus loin, nous soutenons notre projet de maintien de

quota annuel (exportation), tout en promouvant la pratique du ranchi

5.- Nous n'envisagerons pas, dans notre requête, la dissociation de la pratique du farming et du ranching, avec celle du système de quota annuel basé sur le prélèvement dans la nature, et ceci, pour les raisons suivantes :

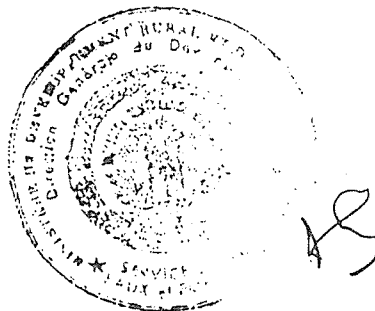
- a) - quelques résultats encourageants ont été obtenus à partir des deux fermes précitées (reproduction en captivité) ;
- b) - des opérateurs motivés ont déjà préparé des dossiers de faisabilité techniques et financiers auprès de notre département (Ferme et ranch) ;
- c) - pour être vraiment opérationnels sur le plan exploitation, d'ici quatre années, les opérateurs doivent se mettre à l'oeuvre dès maintenant, même à une échelle modeste au début.

Nous espérons qu'un projet, pour lequel nous solliciterons éventuellement l'assistance d'un organisme international, pourrait nous aider au lancement de ces activités au niveau des opérateurs.

En conclusion, nous maintenons la proposition au titre de l'élevage en ranch tout en maintenant le système de quota d'exportation annuel au titre des années 1990, 1991 et 1992. Telle a été du reste la ligne directrice de l'assistance de M. BEHRA lors de ses missions à Madagascar.

En espérant une assistance de votre part,

Veuillez agréer, Monsieur Le Secrétaire Général, mes salutations distinguées.



Philémon RANDRIAMANTANANTSI