

AMENDMENTS TO APPENDICES I AND II OF THE CONVENTION

Proposals Submitted Pursuant to Resolution on Ranching

A. PROPOSAL

Maintenance of the Tanzanian population of Crocodylus niloticus in Appendix II.

B. PROPONENT

The United Republic of Tanzania.

C. SUPPORTING STATEMENT

1. Taxonomy

11. Class: Reptilia
12. Order: Crocodylia
13. Family: Crocodylidae
14. Species: Crocodylus niloticus Laurenti 1978
15. Common Names: English: Nile crocodile  
French: crocodile du Nil  
Spanish: Cocodrilo del Nilo  
Swahili: Mamba

16. Code Numbers:

2. Biological Data

21. Distribution: The United Republic of Tanzania has two crocodile species namely, the Nile crocodile (Crocodylus niloticus) and the African slender-snouted crocodile (Crocodylus cataphractus). The Nile crocodile occurs almost everywhere in Tanzania where there is permanent fresh water. It occurs in all protected areas i.e. National Parks and Game Reserves. It is harboured by big rivers and lakes as shown in Tables 1(a) and 1(b) respectively.

While the Nile crocodile is common, the African slender-snouted crocodile is uncommon and fully protected in Lake Tanganyika where it occurs.

22. Population: Tello (1985) estimated a total population of 74,000 crocodiles in Tanzania. Hirji (1986) surveyed Lake Rukwa, and with very little evidence he recommended an annual cropping of 10,000 crocodiles. Katalihwa and Lema (1988) made an estimate of 76,000 crocodiles in Tanzania by using information from Tello (1985).

Aerial surveys of crocodile densities were made in the Selous Game Reserve and surrounding Game Controlled and Open Areas in 1988 and 1989 indicating that the population appears not only to be stable but that it is also increasing (Hutton and Katalihwa, 1988; Games and Severre, 1989).

Table 1(a) MAJOR RIVERS HARBOURING THE NILE CROCODILE

<u>Name of River</u>	<u>Approximate length (km)</u>
Grumeti	210
Kagera	395
Kizigo	86
Malagarasi	440
Mara	144
Moyowosi	210
Pangani	364
Ruaha	515
Rufiji	290
Rungwa	310
Ruvu	170
Ruvuma	688
Ugalla	242
TOTAL:	4,064

Table 1(b) MAJOR LAKES HARBOURING THE NILE CROCODILE

<u>Name of Lake</u>	<u>Approximate shoreline length (km.)</u>
Burigi	60
Nyasa (Malawi)	320
Rukwa	366
Tanganyika	598
Victoria	1,436
TOTAL:	2,780

Games and Severre (1990) made a country wide survey of crocodile densities, and in spite of the crocodiles already shot in the wild under the permission of the Conference of the Parties (Res. Conf. 5.21), crocodiles were found in all the natural habitats of the country, and especially in the Game Reserves, and in the National Parks where they are not hunted at all. Games and Severre (1990) came up with an average density of 2.47 crocodiles per kilometer estimating 16,905 crocodiles. With a correction factor of 4.5, Tanzania has a crocodile population of 76,071 crocodiles, again indicating a stable population over time. A report on the survey by Games and Severre (1990) is attached as Appendix I to the proposal.

23. Habitat: The habitat in which crocodiles occur is stable. This is especially true in the National Parks where human activities, apart from those of photographic tourism, are not allowed. The Game Reserves are well protected since human activities, like tourist hunting, are under strict control and entrance into these areas is only possible with the permission of the Director of Wildlife.

### 3. Trade Data

31. National Utilization: Internal trade in crocodile products is non-existent in the country. Crocodile hunting for meat is also not allowed.

A crocodile farm was put up in 1981 at Boko near Bagamoyo, north of Dar es Salaam, as a tourist attraction centre. The farm did not fair well due to lack of expertise and was subsequently abandoned in 1984.

32. Legal International Trade: Reports from the Game Division (1961) have it that prior to 1961 a thriving crocodile skin trade existed in Tanzania mainland. From the early 1980's monitoring of the crocodile skins going into the world market was strengthened. Table 2 depicts the number of trophies exported during the period 1982-1984.

Table 2 Crocodile trophies exported from Tanzania (1982-1984)

<u>Year</u>	<u>Type of trophy</u>	<u>Quantity</u>
1982	Full skin	207
* 1983	Full skin	25
* 1984	Full skin	6

\* Source Annual Reports - CITES - Tanzania.

The Boko crocodile farm which closed down in 1984 produced 19 crocodile skins in 1983 which were exported to Singapore.

Under the CITES provision of Resolution Conf. 5.21, a wild crocodile export quota was granted to Tanzania from 1985 and the type of products and quantities exported are shown in Table 3.

Table 3 Crocodile Trophies Exported from Tanzania

<u>Year</u>	<u>Type of Trophy</u>	<u>Quantity</u>
1985	Full skins	207
1986	Full skins	477
1987	Full skins	1,456
1988	Full skins	1,804
1989	Full skins	1,980
1990	Full skins	1,040
1991	Full skins	all will be exported

\* For reasons beyond control, some skins from tourist hunted trophies for 1989 and 1990 are yet to be exported.

All skins tagged and relevant CITES EXPORT DOCUMENTS were issued. It is, therefore, evident that exports above the annual quotas issued under Resolution Conf. 5.21 were not made.

Tanzania was allocated an annual quota of 1000 crocodiles from the wild and 100 crocodiles for tourist hunting in 1990 and 1991 in addition to those from ranching i.e. 4000 crocodiles in 1990 and 6000 crocodiles in 1991.

33. Illegal Trade: Tanzania has strengthened antipoaching efforts as a measure of enhancing conservation efforts aimed at ensuring that wildlife shall continue to exist and be utilized at sustainable yield levels. It is on account of strong law enforcement that illegal trade of crocodile parts or derivatives has been strictly controlled and is now not known to occur in Tanzania.

34. Potential Trade Threats:

341. Live Specimens: Live specimens have not been exported from Tanzania. However, it would be acceptable to get a live crocodile export quota not only for purposes of getting more foreign exchange, but also to alleviate the incessant problem of crocodiles as a threat to human life, limb and his property.
342. Parts and Derivatives: All exports are made under strict rules and regulations underlined by CITES. Since Tanzania ensures strict control, there are no threats to the crocodile population of the country.

4. Protection Status

41. National: The Wildlife Conservation Act No. 12 of 1974 ensures the protection of all wildlife species including that of the crocodile.

No one is allowed to enter the Game Reserve without permission prior sought and obtained from the Director of Wildlife. Activities pertaining to wildlife utilization, the crocodile inclusive, in Game Reserves are under a strict quota system and adequate supervision by personnel of the Wildlife Division.

Entrance into and exit out of the National Parks is done through defined gates. The National Parks Ordinance permits only non-consumptive tourist activities in National Parks. That crocodiles in National Parks and Game Reserves, which cover 15% of the total national land area, are fully protected is beyond questioning.

Crocodiles are not as abundant in Controlled and Open Areas as in the Game Reserves and National Parks, but the District Game Officers ensure that the crocodiles in their areas of jurisdiction (Controlled and Open Areas) are fully protected. Information on poaching is yet to reveal cases of crocodile poaching.

Issuance of permits to procure crocodile parts or derivatives is under strict control and the following procedure was/is mandatory.

- i) Prior to 1990 the number of people granted crocodile hunting licences was limited by the quota issued under Res. Conf. 5.21.

That as from 1990 a wild crocodiles shooting quota was issued only to crocodile farmers. The crocodile farmer must have acceptable expertise and additional funding, and money accruing from the sales of crocodile skins is ploughed back into the ranch. This was the requirement for submission of a ranching proposal as the basis for granting of a wild crocodile hunting quota.

From 1991, evidence of the existence of crocodile ranch was necessary before a licence to deal in wild crocodile skins was granted. This was the procedure of promoting initial stages of crocodile ranching in Tanzania.

- ii) Wild crocodile hunters are supervised in the field by Wildlife Division personnel. Shooting and discarding of crocodiles of low standards in skin quality and length is thus avoided.
  - iii) All crocodile skins are inspected and issued with certificates of ownership by respective Regional Game Officers.
  - iv) Crocodile skins are tagged and respective export documents issued as directed by CITES.
  - v) All skins are checked at the points of export which are normally international airports.
43. Additional Protection Needs: Provided that CITES remains intact and that neighbouring countries signatories to it observe strictly the provisions of CITES with respect to protection and sustainable utilization of the Nile crocodile products, no additional protection of the crocodiles in Tanzania is needed.

5. Information on Similar Species

The slender-snouted crocodile (Crocodylus cataphractus) is endemic to Lake Tanganyika and its status is not known. In the light of this, ranching activities of this species will not be allowed.

6. Comments from Countries of Origin

At a CITES seminar held in Brussels, Belgium in June 1984, 25 African countries including the United Republic of Tanzania requested for a down-listing of the Nile crocodile from Appendix I to Appendix II. This concern was for the very reason that the Nile crocodile is not endangered per se; that while it might be endangered in certain countries, it was a consensus that all the population or part thereof can sustain the down-listing.

At the fifth meeting of the Conference of the Parties, Malawi presented a proposal requesting that the down-listed populations be utilized on a quota system for 9 countries. This proposal was accepted.

In the last 6 years Tanzania was granted permission to use the Nile crocodile by the Conference of the Parties, under a quota system, thereby avoiding over-exploiting the crocodile population.

With time, it has become increasingly evident that many African crocodile producing countries share the consensus that the Nile crocodile should be on Appendix II for purposes of earning foreign exchange and creating employment for dealers and workers to justify the needs for continued government spending on its conservation. It is strongly felt that this can be done through harvesting which simultaneously curbs destruction inflicted on human life and property; this concept finds justification in the factual evidence that the Nile crocodile is still abundant in many parts of Africa.

## 7. The Ranching Proposal

71. Background: The Policy of the Government of the United Republic of Tanzania with respect to conservation of wildlife, stipulates that wildlife no longer serves only as an ecological component in the ecosystem but also that time has now come to sustainably utilize these resources for they are, among other uses, a potential source of foreign exchange. The Nile crocodile is in as much as no exception to this approach now that Tanzanians are becoming aware of economic returns resulting from wildlife utilization that ever before.

The appointment of a new Wildlife Administration from 1989, the updating of the Wildlife Conservation Act in the light of the recent economic and industrial development, the strengthening of the Law Enforcement Unit including the crackdown on poachers from 1989 to date, and the ban on illegal harvests of wild crocodiles are but some of the major measures that have been taken to protect wildlife, the crocodile inclusive, in the country.

Legal trade under Resolution Conf. 5.21 has had no significant effects to the population. The recent survey done by Games and Severre (1990) has estimated a population of 76,071 crocodiles indicating that the population has been stable for the last 8 years. In fact the crocodiles are increasing in numbers. In the light of stability and growth of the crocodile population, the loss of human life and destruction of his property is inevitable.

While the Wildlife Regulations provide for full protection of the Nile crocodile, the policy advocates the wise and sustainable utilization of the same, through ranching for purposes of instilling into the people of Tanzania the value of the resource and, in turn, ensure the continued survival of the species in the wild.

72. Proposal Outline: Tanzania proposes to continue with crocodile ranching operations under Resolution Conf. 3.15. Ranching in this context, and hereinafter, means crocodile rearing based on collection of eggs from the wild.

### 721. Egg Collection:

- i) Already there are four farms operating at an annual quota of collecting a total of 7000 eggs. More Tanzanians have shown interest in crocodile ranching and it is estimated that an annual quota of 28,000 eggs will suffice the requirements of all companies for the next three years.
- ii) Collection will be undertaken from September to possibly January, a time believed to be the peak of the nesting season. The eggs shall be collected from rivers including the Rufiji and its tributaries like Luwegu, Kilombero, Mbarang'andu and Mgeta, the Ruaha; Ruvu, Pangani; Rungwa; Ugalla; Ruvuma; Malagarasi and Moyowosi. Personnel from the Wildlife Department shall accompany the egg collectors to the respective sites to ensure that all regulations are adhered to.

- iii) All the harvest areas will be surveyed annually from the air and by night counts for purposes of records on population trends.
- iv) Marked clutches will be stored in cold boxes and transported for incubation at the ranches.
- v) Ranches must have their ranching proposals approved by the Wildlife Department before they can commence their operations.

722. Incubation of Eggs:

- i) Eggs in cold boxes will be taken by air or smooth roads to incubation sites.
- ii) Eggs will be marked on collection, making it easier to take note of the hatching success for each clutch.
- iii) Temperatures shall be kept stable during the period of incubation. It is therefore mandatory that all ranches operate incubation rooms equipped with temperature monitoring devices including air conditioners and heaters.
- iv) Hatchlings will be left in pens in the incubation rooms for a minimum of 7 days following which they will be taken to rearing pens which will be maintained under hygienic conditions.

723. Breeding Stock:

- i) Each ranch shall be required to maintain a breeding stock of 50 crocodiles to ensure self-sufficiency in egg production.
- ii) Review of the size of the breeding stock shall be done after three years.
- iii) Crocodiles designated "pests" will be captured by ranch operators and returned to the wild and when not suitable they will have to be shot.

724. Restocking:

- i) Permits to collect eggs will be issued to registered ranches on the express understanding that crocodiles in the order of 5% of the eggs collected shall be released to the wild in the form of adult female crocodiles with a length of not less than 1.2 metre.
- ii) Restocking will be carried out under the supervision of the Wildlife Department and is subject to review every three years.

725. Monitoring of the Industry:

7251. Criteria for Ranching and Control: Local and foreign applicants for crocodile ranching must certify that they have financial capability and that they shall

operate within premises of the Wildlife Conservation Act No. 12 of 1974 and those of the National Investment Code.

- i) Their proposal must state clearly their source of water, food, storage facilities and electricity.
- ii) The company must undertake a good feasibility study and have access to full time expertise.

7252. Identification of stocks and products:

- i) Breeding animals will be marked differently on a ranch to ranch basis.
- ii) Crocodiles will be kept in pens of age class groupings.
- iii) Skins will be tagged and exported under the rules stipulated by CITES (Res. Conf. 5.16). Tags will bear the name of the ranch and year of export. The sex of the animal, name of the ranch, skin belly width, date, and the consignees and their addresses shall be shown on the packing list.

7253. Records: All ranches must provide the Wildlife Department with comprehensive quarterly reports. The Wildlife Department will inspect the ranches at any time for scrutiny and comparison of notes.

7254. Research Information: The Wildlife Department will include crocodiles in the priority of research projects to facilitate acquisition of information on crocodile behaviour, population status and trends. Information from the ranching operations will shed more light on precise nesting period, egg laying and other biological and economic factors related to ranching.

73. Criteria Regarding Resolution Conf. 3.15:

- 731. Paragraph (b) (i): The return of adult crocodiles of 1.2m in length to the tune of 5% of the collected eggs will ensure the continued survival of the species. This also will enable the operations to be beneficial to the local population. Secondary to this benefit is that the ranch owners and the nation will get more money from the exports. The workers in the ranch will also get employment which will instil into them the value of conservation and in return such an "awareness" shall help in promoting the availability of potential information on poachers.
- 732. Paragraph (b) (ii): Skins for export will be tagged in such a manner that distinction from those coming out of the wild will be possible. Documentation comparable to tagging will be done and checked at the ranch and at points of international exit.

733. Paragraph (c) (i): Crocodile ranching is yet to show a significant impact on wild population. The population in areas from which eggs will be collected shall be subjected to regular aerial and night count surveys. The percentage returned to the wild will serve as a restocking mechanism.
734. Paragraph (c) (ii): Continuous research, including proper record keeping by ranch owners, will be done on all aspects pertaining to the biology and husbandry of the animals. Assessment on the economics of ranch operations will also be done.
735. Paragraph (c) (iii): Stress to the animals will be minimized during the course of the operation including egg collection, incubation feeding and slaughtering.
736. Paragraph (c) (iv): It is made clear in section 72. of this document that the wild population will benefit from the ranching operation. The Scientific and Management Authorities will monitor the operation on a regular basis.
737. Paragraph (c) (v): Tagging and documentary checks will be used to identify the products.
738. Paragraph (c) (vi): Assurance is given in here that the operation will be subjected to close monitoring by the Management and Scientific Authorities as a means of ensuring that the criteria stipulated in this document and by CITES will continue to be met. Annual reports shall provide details on the performance of the operations and status of the wild population. All records will be kept at the disposal of the CITES Secretariat for scrutiny.

#### 8. Addendum to the Ranching Proposal

The United Republic of Tanzania requests the Conference of the Parties to recognize the following:

- i) that the stable and growing crocodile population, aforementioned herein, continues to be a hazard to human life, limb and property;
- ii) that in view of the crocodile population growth resulting from strengthened law enforcement and a ban in trade, and in view of the human population increase spreading to areas until now uninhabited, there is great need to control the growth of the crocodile population. Man will not stand aside and observe continued destruction of his life and property at the expense of support for a trade ban of an already healthy crocodile population. In fact a close look at the level of population growth is necessary, for man will resort in "poaching" in the pretext of defense;
- iii) that control on wild crocodiles is still necessary but it will not be within the ethics of economics to throw the products away. The Wildlife Department intends to procure skins from its protection actions and collect revenues which will be ploughed back into the areas of crocodile conservation thereby strengthening conservation efforts and ensuring the continued survival of the crocodile;

- iv) the United Republic of Tanzania has enjoyed a quota of 100 crocodiles for tourist hunting purposes. Tourist hunting has proved over time to be useful in conservation as poachers keep out of the hunting areas during the hunting season. The hunted crocodile, therefore, serves to conserve those individuals left in the wild.

In view of 8 (i)-(iv) above, the United Republic of Tanzania requests support in crocodile conservation by issuance of an annual quota of 1900 crocodiles from the wild for control, and hence trade, and 100 crocodiles for tourist hunting purposes.

#### 9. References

- CITES, 1987. A Conservation Tool. A Guide to Amending the Appendices to the Convention on International Trade in Endangered Species of Wild Fauna and Flora. Prepared for the Conference of the Parties Ottawa, Canada 12-24 July 1987.
- Game Division, 1961. Annual Report, Dar es Salaam.
- Games, I. and Severre, E.L.M. 1989. A survey of crocodile densities in the Selous Game Reserve and Adjacent Game Controlled Areas, Tanzania. September 1989. Report to the Director of Wildlife, Tanzania and the CITES Nile Crocodile Project.
- Games, I. and Severre, E.L.M. 1990. A survey of crocodile densities in Tanzania. October 1990. Report to the Director of Wildlife, Tanzania.
- Hirju, K. N. 1986. Counting Crocodiles in Lake Rukwa. Interim report, Wildlife Division, Dar es Salaam.
- Hutton, J. M. and Katalihwa, M. 1988. The Status and Distribution of Crocodiles in the Region of the Selous Game Reserve, Tanzania, 1988. Report to the Director of Wildlife, Tanzania.
- Katalihwa, M. and Lema, R. 1988. The Status and Management of the Nile Crocodile in Tanzania. In Hutton J. M. et. al.: Proceedings, of the SADCC Workshop on Management and Utilization of Crocodiles in the SADCC Region of Africa. pp. 33-38.
- Tello, J. L. 1984. CITES Nile Crocodile Survey in CITES working documents and Appendices 1987 pp. 67-83.
- Wildlife Division, 1987. An Annual Report of the Wildlife Division, Dar es Salaam.