

**DENR Administrative Order**

**No. 98 - 64**

**October 14, 1998**

**SUBJECT : General Rules and Regulations on  
the Establishment of Crocodile  
Farms in the Philippines.**

Consistent with the State's policy of promoting biodiversity conservation and sustainable development and pursuant to the Department's mandate of ensuring equitable sharing of benefits derived from natural resources and in order to promote the socio-economic well-being of rural communities/local folks through the introduction and development of a suitable crocodile farming technology, the following rules and regulations on the establishment of crocodile farms are hereby promulgated for the information and guidance of all concerned.

**SECTION 1.  
BASIC POLICY**

The policy of the State provides that sustainable development of biological resources shall be undertaken primarily to ensure the conservation of biological diversity and that the utilization of which must be consistent with that principle. Further, the State through the DENR encourages and promotes the participation and cooperation of rural communities/local folks in natural resources development, conservation, management and protection and enforcement of laws, rules and regulations for the development of the country's remaining natural resources for the benefit and enjoyment of the present and future generations of Filipinos.

## **SECTION 2. OBJECTIVE**

The establishment of Crocodile Farms has the following objectives:

- 2.1 To promote the crocodile farming industry as the Department's contribution in the upliftment of the socio-economic well-being of local communities.
- 2.2 To develop the local capability on crocodile farming through the transfer of technology generated by the Crocodile Farming Institute particularly on saltwater crocodiles (*Crocodylus porosus*) including skin, processing and marketing of skin derivatives and by-products. The technology is embodied in an Action Plan which forms part of this Order.
- 2.3 To generate support for the conservation of the two species of crocodiles, i.e., *Crocodylus porosus* and *Crocodylus mindorensis*, and for the conduct of researches to further enhance the crocodile rearing technology in the Philippine consistent with the policy of the State on sustainable development of biological resources.

## **SECTION 3. DEFINITION OF TERMS**

- 3.1 **Belly width** - linear measurement taken of skin (after flaying) from the widest portion to include the stomach and proximal 2 rows of hard buttons on flanks;
- 3.2 **CFI** - this stands for Crocodile Farming Institute. This is a government project established in 1986 under the management of DENR whose functions are to conserve the two species of crocodiles i.e., *Crocodylus porosus* and *Crocodylus mindorensis*, and to promote the socio-economic well being of communities through the development and introduction of a suitable rearing technology;

- 3.3 **CITES** - This stands for Convention on International Trade in Endangered Species of Flora and Fauna; this regulates international trade in specimens of species of wild fauna and flora on the basis of a system of permits and certificates, which are issued when certain conditions are met and which have to be presented when consignments of specimens leave or enter a country.
- 3.4 **Cooperator** - any entity (e.g. livestock farmers or livestock cooperatives) under contract agreement with CFI for crocodile rearing;
- 3.5 **Flaying** - The process of removing skin from the carcass;
- 3.6 **Hatchling** - Young crocodiles less than 0.5 m in length;
- 3.7 **Harvest** - Process of obtaining stock reared in farms for slaughter or broodstock purposes;
- 3.8 **Hide** - also raw skin, this includes skin which has been cured for short-term preservation through slating.
- 3.9 **Processing** - procedure by which skin is treated for preservation, tensile strength, fashion until manufacturing stage, and other derivatives are obtained to include hygienic removal and preservation of edible parts for human consumption.

#### **SECTION 4. BASIC CONDITIONS**

The implementation of the development program embodied in the Action Plan will be done in accordance with the following conditions:

- 4.1 CFI shall be the sole source of the crocodile, it being the CITES-approved breeding operator;
- 4.2 Reared crocodiles shall be harvested by CFI only;
- 4.3 Stocks dispersed by CFI shall be reared or grown only by qualified Cooperator;
- 4.4 The CFI technology for rearing crocodile shall be tested in at least 8 farms in Palawan. However, if Palawan cannot accommodate

- the initial target number of 8 farms during the first year, other areas of the country shall be accommodated;
- 4.5 Application shall be opened to livestock farmers and livestock cooperatives who shall be selected based on criteria set in **Annex A** (i.e. their willingness to participate, their financial and managerial capabilities, and on the presence of suitable conditions for farming including availability of food supply for crocodiles);
  - 4.6 An agreement (sample as **Annex B**) of DENR or CFI with each Cooperator shall be executed, whereby CFI shall, among others, provide the hatchlings and technical assistance, while the Cooperator shall provide land; feeds, labor and other expenditures for the rearing and maintenance of the stock;
  - 4.7 Trade of crocodile skins, by-products and derivatives shall be done only through accredited government corporations in accordance with the provisions of the agreement executed with these corporations;
  - 4.8 Skin to be traded shall be in processed or finished state only in order to give added value to the resource. The finished or processed skins are those that are ready for manufacture;
  - 4.9 The national and international rules and regulations on handling and trade shall be strictly followed.

## **SECTION 5.**

### **PRE-DISPERSAL PROCEDURES**

#### 5.1 Public Notification and Invitation

A public notification shall be made in local/national dailies regarding the selection of potential participants in the farming of *C. porosus*. The invitation to participate in the project shall be limited initially to interested applicants from Palawan. If appropriate, more participants may be invited. The applicants must submit to CFI a letter of intent to rear crocodile.

## 5.2 Orientation Program and Application

A one-day orientation meeting shall be scheduled and conducted at the CFI to formally inform interested applicants on the basic concepts, requirements (both financial and physical) and strategies of farming crocodiles. The criteria for final selection of cooperators and the contract scheme shall likewise be presented during the orientation program. After the orientation, the interested applicants shall be asked to sign application forms to rear crocodile.

## 5.3 Submission of Requirements and Screening of Applicants

The qualified applicant shall be required to submit the following for evaluation:

- 5.3.1 Letter of intent to rear crocodiles;
- 5.3.2 Proposal with guidance from the brochure provided by CFI;
- 5.3.3 Barangay clearance specifying the social acceptance of farming at the local site;
- 5.3.4 Location map of proposed area for farming;

An on-site inspection of the proposed site for farming shall be carried out to assess the location's suitability, taking into consideration the site's accessibility, social acceptability of the project and availability of food and water supply.

- 5.3.5 Financial statement and other requirements as may be necessary;
- 5.3.6 Structural Plan as prescribed under Annexes C and D.**

#### 5.4 Final Selection of Cooperators

Initially, eight (8) applicants shall be selected as Cooperators by a Screening Committee composed of CFI technical staff.

The qualifying score for applicants shall be 80% with qualifiers ranked according to their scores. In case of ties, they shall be broken by drawing lots.

#### 5.5 Seminar-Training of Selected Cooperators

Selected cooperators together with one of their staff shall be required to undergo a 2-week seminar-training on the basic concept and techniques of crocodile rearing. Provided that, prior to the training, the cooperators-trainees shall be required to sign a waiver for possible injury or death while on training.

Travel and boarding expenses shall be shouldered by the Cooperator. CFI shall provide accommodation during the training.

After training, a certificate of completion shall be awarded to each participant.

#### 5.6 Signing of the Contract Agreement

A Contract Agreement shall be executed by and among Department of Environment and Natural Resources (DENR) as “*Owner*”, Natural Resources Development Corporation (NRDC) or any DENR-designated and government-owned and/or controlled corporation as “*Partner*” and the selected applicant as “*Cooperator*”.

## **SECTION 6. DISPERSAL OF HATCHLINGS**

### **6.1 Dispersal Scheme**

Eight (8) farms shall be initially identified in Palawan and each farm shall be stocked with 100 hatchling, making a total of 800 hatchling during the first year. A similar number shall be dispersed in the subsequent 2 years of implementation. As more hatchlings are produced, additional farms may be established with increasing stock size levels. The assumption and projection related to financial analysis of 100 head stocking density and the cash flow statements are provided in **Annex E** for the information and reference of Cooperators.

The hatchling that shall be dispersed to farms are approximately 8 to 10 months of age. The hatchlings shall be dispersed in 3 batches. The first batch shall be ready for harvest and marketing by end of third year; the second batch by the end of the 4th year and the third batch by the end of the 5th year.

6.2 Hatchlings to be dispersed by CFI shall be implanted with microchip transponders by authorized CFI personnel. This technique shall ensure that all crocodiles traded or marketed are those of CFI origins;

6.3 Hatchlings shall also be marked with animal tags. Identification sheet shall accompany each batch of hatchlings (**Annex F**). A representative from the Technical Extension Team (TET) as discussed under Section 8.1 shall accompany and assist in the actual delivery and transport of the hatchlings. Said TET representative shall also monitor the health conditions of the hatchlings for a period of five (5) days from receipt of these by the Cooperators. Mortalities from stress, trauma, or mishandling during the said period shall be replaced by CFI upon certification by

concerned TET representative. All mortalities and replacements shall be properly recorded following the format provided in **Annex G**.

- 6.4 Addition and losses shall be recorded by the MET using the form provided for the purpose (**Annex G**). A separate form (**Annex H**), shall be used to record the mortalities, if any. All of which shall be included in the report prepared by the MET.

## **SECTION 7. MAINTENANCE OF CROCODILES IN THE FARM**

The Cooperator is tasked to take full responsibility of maintaining the crocodiles in the farm, subject to the following conditions, to wit:

- 7.1 Daily feed intake equivalent to 5-10% of the body weight per week,
- 7.2 The CFI shall develop a How-To Manual in the maintenance of Crocodiles for dissemination to and guidance by the Cooperators to his workers. This How-To Manual shall consider, among others, the following: food requirements, feeding frequency, sanitation and hygiene, air and water temperature requirements, diseases screening and monitoring, record keeping, etc. as prescribed in **Annex G**.

## **SECTION 8 MONITORING**

- 8.1 A Technical Extension Team (TET) from the Research Division of CFI shall be created to provide technical assistance to Cooperators and undertake quarterly farm visits to:

- 8.1.1 monitor health condition of the animals;
- 8.1.2 collect data on growth development/measurements of the dispersed crocodiles;
- 8.1.3 conduct inventory of crocodiles in the farms following the format provided in **Annex “G”**; and,
- 8.1.4 determine progress of rearing activities.

8.2 A Monitoring and Evaluation Team (MET) shall likewise be created to:

- 8.2.1 Monitoring and evaluate the general progress of the farms and rearing activities thereat, as well as the compliance by Cooperators to the terms and conditions of the Contract Agreement they entered into with CFI and to other applicable provisions of this Order.

The MET shall be composed of representatives from CFI (Extension Coordinator and TET), and a representative each from the concerned LGU, PENRO or CENRO, local NGO, and Cooperators’ representative, the latter to be selected by the Cooperators themselves. The funds to operationalize the MET, shall come from the respective offices of the members.

## **SECTION 9. HARVESTING OF CROCODILES**

9.1 Harvest of crocodiles shall be done by batches in such a way that the 1st batch of crocodiles dispersed shall be the first to be harvested. Harvesting shall be done within the last quarter of the third year, reckoned from the date the crocodiles were dispersed and received by the Cooperator. The TET shall determine the exact date to harvest the crocodiles;

9.2 Harvesting shall be done by authorized CFI personnel only. CFI reserves the right to select future breeders from the harvest for the

restocking at CFI so as to promote sustainability of crocodile farming. In such case, the Cooperators shall be compensated for the crocodiles taken by CFI based on the prevailing market price of the crocodile.

A 10% premium shall be added on the share of the Cooperator for each crocodile chosen and taken by CFI as breeder;

9.3 Upon harvest, the microchip transponders implanted on the crocodiles shall be verified/cross-checked and tallied with the CFI identification sheet.

## **SECTION 10. PROCESSING**

10.1 Animals for slaughter shall be brought to the DENR-accredited dressing plant or at CFI. The crocodiles shall be flayed properly and preserved by salting evenly until the tanning process is done. The skin shall be tagged according to CITES regulations.

10.2 CFI maintains 2 options in the processing of skin. The first option calls for the participation of the government corporation that shall take charge of processing or tanning until the disposal and marketing of the processed skin. The second option allows CFI to facilitate the processing of the skin and turning over the responsibility of marketing the processed skin to concerned government agencies and corporations, the mechanism of any of the said options shall be elaborated.

10.3 Major tanners in the Philippines shall be tapped to complete the processing of salted skins into a good quality leather ready for manufacturing into finished products.

## **SECTION 11. MARKETING**

- 11.1 The salted raw hide of crocodile including its derivatives and by-products shall be deposited for disposal proceedings by CFI to the Corporation, likewise referring either to the Natural Resources Development Corporation (NRDC) or any DENR-designated and government-owned and/or controlled corporation;
- 11.2 The Corporation shall be tasked to dispose of the raw and/or processed skin including its derivatives and by-products through public bidding.
- 11.3 Once the price of the products has been established, the Corporation shall advance the Cooperator's share so that he can be compensated immediately for his farming efforts. Compensation scheme further includes a 10% premium price over harvested crocodiles chosen as breeders for use of CFI.

## **SECTION 12. RESEARCH**

The Research Division of CFI shall conduct research on crocodiles at the farms. They may coordinate with the MET. Priority research areas include growth and development, feed consumption and feed conversion rate, and health and diseases. The assistance of the Cooperators shall be tapped during the conduct of research, especially in terms of recording necessary data (e.g. **Annex G**) and other aspects that would enhance their capability to rear and manage crocodiles in captivity.

Rearing methods and technological innovations that would be generated during the farming stage shall be properly documented and integrated with the research results for the final packaging of technology on farming *C. porosus*. The analysis of data shall be done by CFI and results shall be published (e.g. scientific journals, bulletin).

**SECTION 13.  
PROFIT SHARING**

Once the price of the products has been established and after the cost of hatchlings, transport and freight, microchip transponders and other related expenses have been deducted from the total sales, a profit sharing scheme shall be adopted to wit:

- 13.1 The sharing shall be set after the cost of hatchlings, transport/freight and handling expenses have been deducted from the total sale.
- 13.2 The Cooperator shall receive 60% of the net sales, excluding a 10% premium price over harvested crocodiles chosen as breeders. In addition, the Cooperator also gets the profits and other incentives from sales of crocodiles allotted for the mortality allowances.
- 13.3 The remaining 40% shall go to NRDC or any DENR-designated and government-owned and/or controlled corporation. However, the corporation shall commit, through a MOA with DENR, to allocate a substantial amount from the proceeds to finance and ensure the sustainability of CFI projects including that of crocodile conservation and monitoring the implementation of this Order.

**SECTION 14.  
EFFECTIVITY**

This Order takes effect immediately and amends, supersedes or revokes all Orders, Circulars and Memoranda inconsistent herewith.

**(Sgd.) ANTONIO H. CERILLES**  
Secretary