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# CENTRAL ZOO AUTHORITY

## APPLICATION FOR SMALL GRANT FELLOWSHIP

Please read appendix I for instructions (last page of this document)

Form must be filled in English

Internal Project Number (To be filled in by CZA): .....

### 1. GENERAL INFORMATION

Date 8 . . 12 . . 05 . . . . . of . . . . . application:

Name of the Zoo / organization: ZOOLOGICAL PARK AIZAWL MIZORAM

Contact person/ project leader: DR. VANLAL HRUAIA PACHUAM

### 2. CLASSIFICATION OF PROPOSAL

Improvement of the Zoo	Scientific Management	Ex-situ Conservation	Welfare of animals	of the Any other, please specify
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*Ex-situ Conservation - Captive Breeding of Stump Tailed Macaque.*

### 3. DATE OF INITIATION OF THE PROJECT

1. Feb. 2006.

### 4. DURATION OF THE PROJECT:

1 year.

### 5. LOCATION OF THE PROJECT.

Region /State : Aizawl, Mizoram. (North East India)

Closest main city : Aizawl city, Capital of Mizoram.

## 6. STAFF INVOLVED IN PROJECT (Please include Curriculum Vitae of the individuals) :

1. Name (+title) + Zoo/Organisation : *Dr. Vanlalhruaia Pachuau, B.V.Sc & A.H, NDZWA (IVRI) Veterinary Asst. Surgeon, Aizawl Zoo, Mizoram.*

Period to be spent on the project form 1.2.2006 to 31.1.2007 (day/month/year/) for..12.... hours/week  
Role / Function in the project : *Project leader and Coordinator.*

1. Name (+title) + Zoo/Organisation : *Lalbiakzauva, Veterinary Compounder, Aizawl Zoo*  
Period to be spent on the project form 1.2.2006 to 31.1.2007 (day/month/year/) for..8.... hours/week  
Role / Function in the project : *Project Assistant, Monitoring*

3. Name (+title) + Zoo/Organisation : *Lalrothanga, Animal Keeper, Aizawl Zoo*  
Period to be spent on the project form 1.2.2006 to 31.1.2007 (day/month/year/) for..8.... hours/week  
Role / Function in the project : *Animal Watcher, Helper, Monitoring*

7. PROJECT PROPOSAL : *Detailed study on Captive Breeding behaviour of Stump Tailed Macaque at Aizawl Zoo with reference to type of habitat in enclosure*

## 7 a. Background and history of the project (max. 300 words)

*Aizawl Zoo, Mizoram has been keeping 12 Nos. of stump tailed Macaque in cage or confinement for many years. Their physiology, behaviour and feeding are found normal except breeding among their population. New Zoo has been constructed at the corner of Aizawl City under financial support from CZA. Out of many enclosure, stump tailed macaque enclosure has been constructed with chain link mess. Primates of different variety are shifted from old Zoo to new Zoo and found them that they have well adaptation at their new habitat/enclosure. considering at the present condition, there is likelihood of breeding among themselves and thorough study of their breeding character is highly essential since no such scientific study is taken up at Aizawl zoo, till date.*

**STUMP-TAILED MACAQUE.** (*Macaca arctoides*)

**Local Name :** Zawng mawt

*Also known as the bear macaque, the stump-tailed macaque is dark brown, with a short, nearly hairless tail. The face is also hairless and molted with varying amount of black and red skin. This stocky monkey is the largest and heaviest macaque species in India. It is also one of the country's most endanger primates.*

**Distribution in India :** *Stump-tailed macaque is inhabit in the state of Assam, Arunachal Pradesh, Mizoram, Nagaland, Meghalaya, Manipur and Tripura in North East India.*

**Conservation Status:** *The Species is most severely hit due to the lost of its habitat and poaching despite its being listed under Schedule II of the Wildlife (Protection) Act 1972, IUCN SSC-red data Book place this species in the vulnerable category.*

## 7 b. Main problem or question (max. 200 words)

*Field studies of the species are extremely rare and whatever studies have been conducted in captivity relates to behavioural studies with special reference to conciliation and reconciliation behaviour. Nothing or very little information exist about their breeding in captivity. Hence the relevant of the proposal according to available literature, gestation period is 178 days (average), when the females gives birth to a single offspring. Female breeds every 2 years, mother feed their infants for 6 months to one year and infants developed complete independence at the age of 9 - 18 months. Females are sexually mature by 4-years and Males by 6 - years.*

7 c. **Aims and objectives of the project (max. 200 words)**

1. To know the exact breeding season, and breeding characters.
2. To know the exact gestation period.
3. To know physiological and physical parameters of new born baby
4. For successful captive breeding of stump tailed macaque in Zoo.
5. To helps ex-situ and in-situ conservation.
6. To increase the population of endanger species of animals
7. To helps in scientific management of zoo animals

7 d. **Methodology and/or proposed activities (max. 300 words)**

*Three/Four person involved in the project shall look after and monitor the project on rotational duty. Every characters and behaviour noticed on animal shall be recorded. Furniture and necessary materials for breeding will be provided for animals. Ordinary and Video Photography will be taken regularly depending upon the characters of animals. All data and important picture recorded will be processed in Computer for references and compilation. Reference is to be collected to facilitate the project, regular reports shall be given to CZA. Any relevant information may be given to other zoos and interested person.*

8. **COLLABORATION (IF ANY) :** Please specify with which institution/organisation will collaboration take place and type of the collaboration & support should also be indicated.

	NAME	LOCATION
NGOs		
Ministries .....		
Universities .....		
Research institutes/or any other : <u>College of Veterinary Science, Selesih Aizawl Mizoram</u>		
Type of the collaboration & support: <u>Technical and Laboratory facilities</u>		

8 a. **Support from host zoo :** (Please specify what suport the host zoo will be providing, it could be in the form of laboratory, equipment, space or personnel).

*Laboratory, Space, Office and Personnel will be available.*

9. **BASIC TIME SCHEDULE:**

Time Schedule for daily operation

- 6:00 - 7:00 a.m. : Feeding of Animals
- 7:00 - 8:00 a.m. : Cleaning of enclosures
- 8:00 - 9:00 a.m. : Breakfast
- 9:00 - 1:00 p.m. : Monitoring of Animals and Data records - Doctor & Compounder
- 1:00 - 2:30 p.m. : Lunch time
- 2:30 - 6:00 p.m. : Monitoring of Animals and Data records - Doctor & watcher
- 6:30 - 9:00 pm : Compilation of data records

10. **OUTPUT**

*Identification and records of exact breeding season, breeding behaviour, gestation period, physical parameters of new born baby and effects of nutrition on breeding are an expected output of this project.*

10 a. Describe which output can be expected from this project (reports, scientific) publications, management plans, educational tools, etc etc.) and how they will be disseminated.

*Scientific reports for publication, reliable data records on breeding applicable to zoo management as well as in and ex-situ conservation will be and expected output from this project. The project reports will be given to CZA and Association of Indian Zoo Veterinarians for publication, or it can be collected from Aizawl Zoo.*

10 b. Describe the (practical) relevance of this project for ex-situ conservation and scientific management of animals in general.

*Detail record of breeding data and knowledge about the physiology of animal particularly the breeding behaviour of Stump Tailed Macaque may help the scientific management of animals at Zoo to increase population as well as conservation and perhaps their reintroduction in the wild*

10 c. Describe how results/output will be evaluated (timelines and benchmarks)

*No research project work has been carried out at Aizawl Zoo till today. Hence no research finding and reports are available at local level and no scientific management are practiced at local level. So, this Project findings and report will be a mile stone and benchmark for Mizoram Zoo in particular for management of captive primate at Zoo level in Mizoram, and it will be the first and ever project work in Mizoram.*

11. **FEASIBILITY** (How well is the execution of the project guaranteed ? Possible risks such as logistics, permits, other finances and how are these risks dealt with).

*The Project to be carried out at Aizawl Zoo is guaranteed by Zoo Director and Chief Wildlife Warden, Gov't of Mizoram. Permission is obtained from Zoo Director and necessary assistant may also be available from Department.*

12. **FINANCIAL ASPECTS ( please include budget overview (in Rs.) in an appendix.**

(See appendix - I)

12 a. **Other financial sources applied for and/or guaranteed**

- In case pf Forest Dept./Corporation/Trust : please also mention the details
- Indicate if source is applied for or already guaranteed.

2. Name Department / Institute : Self  
 Address : .....  
 Amount applied for quaranteed :  
 Rs. ....

3. Name Department / Institute :  
 Address : .....  
 Amount applied for quaranteed :  
 Rs. ....

11. **DECLARATION**


The information submitted in this application is true, to the best of my knowledge. Should any significant developments arise after this application is made, I shall notify the Member Secretary, Central Zoo Authority.

28/09/05

Small Grants Fellowship - Central Zoo Authority


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**SIGNATURE**


  
(LIANKIMALAILUNG IFS)  
Director/Curator/  
Officer-in-charge of the Zoo  
(Supervisor of the Research)

Officer-in-charge of Forests (Wildlife)  
Wildlife Division  
Aizawl, Mizoram:

Signature :  
Date : 08/12/05  
Seal

  
(DR. VANLALHRUI PACHUAU)  
Research Project Leader  
Veterinary Asst. Surgeon  
Aizawl Zoo, Mizoram

Signature : 08/12/05  
Date :

  
(L.R. THANGAI IFS)  
Chief Wildlife Warden/  
Municipal Commissioner/  
Owner/Zoo Operator  
08/12/05  
Chief Wildlife Warden  
Deptt. of Environment & Forest  
Mizoram : Aizawl

Signature :  
Date :

**Include with the proposal :**

- \* A curriculum vitae of the applicant and individuals involved in the project. (See appendix - II)
- \* Background information about the zoo involved (max. 1 page) (See Appendix - III)
- \* Budget overview (See Appendix - I)

Brief Background Information : (See Appendix - III)

Appendix -I

Detailed Budget Requirement for Small Grant Fellowship

<u>Sl/No</u>	<u>Items of works</u>	<u>Amount</u>
1.	Preparation of site for Breeding of Stump Tailed Macaque	- Rs. 10,000 . 00
2.	Providing of Furniture, Toys etc	- Rs. 10,000 . 00
3.	Procurement of food Items	- Rs. 12,000 . 00
4.	Purchase of Veterinary Medicines etc.	- Rs. 10,000 . 00
5.	Provision of Hide for animal observation.	- Rs. 10,000 . 00
6.	Purchased of wooden furniture ( Table, chair, etc. )	- Rs. 4,000 . 00
7.	Purchase of Emergency light, Umbrella etc.	- Rs. 4,000 . 00
8.	Purchase of Computer, Printer and accessories	- Rs. 40,000 . 00
9.	Purchase of Video Camera 3ccd	- Rs. 36,000 . 00
10.	Salary and Wages of attendant @ 2000/head for 2 person	- Rs. 24,000 . 00
11.	Transportation charge for 3-Persons (Between Aizawl City - Zoo Site ) Distance - 17 Kms. @ Rs. 50/- per head per Day for 365 days	- Rs 20,000 . 00
12.	Purchase of Stationery Items	- Rs. 10,000 . 00
13.	Miscl. Expenditure and Contingency	- Rs. 10,000 . 00

**TOTAL - Rs.2,00,000.00**  
**(Rupees Two lakhs) only**

*Vanlalhrui*  
8.12.05

(DR.VANLALHRUIAIA PACHUAU)  
Veterinary Assistant Surgeon  
Zoological Park, Aizawl : Mizoram

Appendix - II

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**CURRICULUM VITAE OF INDIVIDUAL/ PERSONS INVOLVE IN THE PROJECT**

**NAME OF APPLICANT :-** Dr. Vanlalhraia Pachuau, Veterinary Asst. Surgeon.

**QUALIFICATION :-** (1) B.V.Sc & A.H ( C.V. Sc. Khanapara Guwahati, AAU.  
(2) N.D.Z.W.A (National Diploma in ZOO And Wild Animal Health Care and management) from : I.V.R.I, U.P

- EXPERIENCE**
1. Working as Veterinary Assistant Surgeon in five (5) villages during April 1995 -December 2001. under A.H & Vety Department, Gov't. of Mizoram.
  2. Working as Veterinary Assistant Surgeon at Zoological Park Aizawl, Mizoram from December 2001 to till today.
  3. Wild Sambar Transquilisation from Chawngte Village area at about 310 KM and safely transported to Aizawl Zoological Park. ( This is the longest Animal transportation in Mizoram)
  4. Sambar transquilisation from Thenzawl village and shifting to Aizawl Zoo for improved breeding.
  5. Hand rearing of two orphan bear cubs during 1996 - 1998
  6. Shifting of all zoo animal from State Mini Zoo (Old Zoo) to new zoo in Mizoram by physically and chemically.

**TRAINING AND MEETING ATTENDED :-**

1. Chemical Restraint and Disease Investigation Procedure at Guwahati, Organised by Wildlife Institute of India and Central Zoo Authority during 4.3.2002 -7.3.2002.
2. Demonstration cum training on implantation of Microchips on Domestic Elephant at Doom Dooma Assam, organised by Project Elephant, Gov't. of India during 30 - 31.August.2003.
3. Implantation of Microchips on Domestic Elephant at Orang National Park, Assam on 24 -25.April. 2004.
4. Participated in Congress and Workshop on Quaratine. Restraint and translocation of Wild Animal at Lucknow, U.P on 4-5 February. 2004. Organised by Asian Congress of Wildlife Veterinarians.
5. Participated in Meeting and Conference on Association of Indian Zoo and wildlife Veterinarian at Lucknow, on 5-6 February. 2004.
6. Zoo Management Training at Nehru Zoological Park, Hyderabad on June.2003.
7. Attended meeting of Indian Zoo Veterinarian on Wildlife Health and Husbandry constraint at Guwahati during 26-27. October 2005 . Also attended conference of Association of Indian Zoo and Wildlife Veterinarian at Guwahati, Assam.

**OTHERS**

1. Life and Founder member in Association of Indian Zoo and Wildlife Veterinarian.
  2. Member in Wildlife Rehabilitator and Exchange Network (WREN)
- st.b



## Appendix - II

**CURRICULUM VITAE OF THE PERSONS INVOLVED IN THE PROJECT**

**NAME** :- **Lalbiakzauva**

**QUALIFICATION** :- **H.S.L.C**

**DESIGNATION** :- **Veterinary Compounder / VFA**

**EXPERIANCE** :-  
1) 10 years in Veterinary service at different villages in Mizoram.  
2) Had good knowledge of in Veterinary Science.  
3) 4½ years service in Zoo, trained in Zoo Management and has good Knowledge in animal tranquilisation.  
4) Had experience in long distance animal transportation.

**NAME** :- **P.C Lalrothanga**

**QUALIFICATION** :- **H.S.L.C**

**DESIGNATION** :- **Animal Feeder/Keeper.**

**EXPERIENCE** :-  
1) 20 Years in animal feeding / animal keeping at Zoo.  
2) State Wildlife Awardee (2004), due to his efficiency in Animal keeping at Zoo.  
3) Trained in animal keeping  
4) One of the most efficient Staff in Zoo management