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Preface

The transfer of juvenile female elephant "Prakruthi", from Sacrebylu Elephant Camp, Shimoga District, Karnataka, to Sri Dharbaraneswara Swamy Temple, Thirunallar, Karaikal District, Pondicherry, happened in Feb. 2011.

Transfer, in principal, should only happen when wildlife is re-located to superior facilities or to a more natural and protected environment. In this case, the transfer was negative in all its implications of affecting the animal's physical health, mental stability, social isolation and consistent stress.

The investigation highlights that the welfare standards for captive elephants – a scientifically laid procedure for evaluating the ecology and management status of a captive elephant - are not matching the current environment of Prakruthi's incarceration.

The young elephant had been habituated to natural forest and free ranging management of the State Government owned and managed elephant camp in the idyllic setting of vast spaces, backwaters of the River Tunga, companion animals and related family members. Social and kinship ties of elephants have been the subject of much research and study. The values of these components for an elephant's welfare cannot be understated. The elephant was transferred from this environment to a situation which imposed social isolation in a semi-urban environment and performance of un-natural behaviours.

Additionally, a 15 year old male elephant "Ganesh" was received in "exchange" for "Prakruthi" by the Sacrebylu Elephant Camp. The Thirunallar Temple had subjected this young makhna to management practices, which was reported to be depriving him of appropriate diet, exercise, social interaction and freedom of movement, resulting in damage to his physical and psychological health. The conditions of this elephant reveal that the physical environment provided to the animal is unnatural and a lot of improvements to be achieved in term of animal welfare status.

However, one need to consider the advantage of the situation that the elephant Ganesh has, by default, finally found a natural and beneficial environment for manifesting normal behaviour, good health and currently being subject to welfare-friendly practices. Sending him back to Thirunallar Temple will certainly cause issues related to his welfare, given the physical and mental condition that he was in, when brought into Sacrebylu Elephant Camp. Not bringing back elephant Prakruthi from the temple may cause her suffering and hardship.

Acknowledgement

Our colleagues and members of the Captive Elephant Research Team (CERT) provided support and encouragement for this assignment. Supports received from Mr. K. Iyaraj and others are valuable. Federation of Indian Animal Protection Organisations (FIAPO) and Central Zoo Authority (CZA) showed their keen interest in the welfare of elephants Ganesh and Prakruthi and the issues associated to the same. Electronic and print media highlighted the transfer of female elephant calf "Prakruthi"

Executive Summary

Elephant Prakruthi, a seven year old female juvenile, was born in the Sacrebylu Elephant Camp was separated and exchanged for an adolescent makhna elephant named Ganesh of Sri Dharbaraneswara Swamy temple located in Thirunallar, Karaikal district of Pondicherrry.

The living environment, physical and biological, experienced by elephants in captivity may impose deficiencies or inequalities from those experienced by their wild counterparts. It is this difference from the wild that has been used to assess the welfare status of elephant kept in the temple.

The temple elephant was provided with a shed with concrete substrate, elephant stood within the temple premises in the morning and evening; floor was made of concrete, elephant partially exposed to sunlight and area was cleaned when the elephant urinated/defecated in the temple.

Elephant given tap- water for consumption, through plastic pipe twice, during 7am to 1pm, bathed twice, once at 4a.m. and again at 4p.m. and Mean Rating (M-R) for water source was 1.1 showing a deviation of 88% from Expert Rating (E-R).

The elephant was reportedly walked twice (morning and evening) for a distance of 4-5km, M-R for opportunity to walk was 9.0 showing no deviation from E-R. M-R for distance covered while walking was 1.0 with a deviation of 88% from E-R.

The temple elephants was maintained in social isolation and M-R was 0.0 showing complete (100%) deviation from E-R.

In the temple, the elephant was chained by its hind leg to a pillar, chain on the fore-leg had a sharp pointed edge, facing the elephant's leg and a long chain was draped on the elephant's body.

Major activity of the elephant was blessing and collecting money from devotees from 7am to 1pm and from 5pm to 8pm as per observation. The elephant was made to stand in the temple for a total of 9hrs per day. Food provided during work was solely by the public: biscuits, plantain, banana, coconuts etc. and M-R was 2.3 showing a deviation of 71% from E-R

The elephant's foot pads were partially rough on hind legs and smoother in case of forelegs; toe nail cracks, overgrown nail were present, deworming and body measurements were reportedly done and veterinary doctors (two in number) were available. M-R was 7.1 with a deviation of 12% from E-R.

Overall rating for welfare status considering all observed parameters together was 2.6 showing a deviation of 68% from E-R. Twenty two parameters showed deviation of 50% or more from norms prescribed by experts. Among these parameters, complete absence of suitable features (100% deviation) was observed for social interaction, food provisioning type, floor type and opportunity to range-free.

Recommendations

Since elephant Prakurti (renamed Praneshvari at the temple) was born in captivity to a forest camp elephant in Sacrebylu, it would be prudent to send her back to Sacrebylu Elephant Camp as the elephant can experience companionship of known and familiar animals in a natural environment. Providing an environment that promotes species-specific behaviours in the elephant that includes a natural physical environment, presence of elephant companions, opportunity to range free, absence of controlled expression of un-natural behaviours, is integral to the life and health of the animal.

The opinion of this survey is, notwithstanding the extension of the Government order for inexplicable reasons, it is strongly recommended that getting back Prakruthi from Thirunallar Temple and retaining Ganesh at Sacrebylu Elephant Camp will be the appropriate action to take and amends to make for these magnificent but helpless victims of human error.

Keeping in mind WLPA Section 42 - *Certificate of Ownership - -----Provided that before issuing certificate of ownership in respect of any captive animal, the CWLW shall ensure that the applicant has adequate facilities for housing, upkeep and maintenance of the animal. The Chief Wildlife Warden of Karnataka can withhold the Ownership Certificate to the Thirunallar Temple and reclaim Elephant Prakruthi on grounds of inappropriate management and housing conditions.*

The following aspects are not conducive for elephant Prakruthi in the Thirunallar Temple:

- Absence of a natural physical environment with sufficient space to traverse
- Absence of elephant companions
- Unsuitable water-source (through a hose-pipe) which cannot be accessed by the elephant when needed
- Exposure to sunlight without any opportunity to reduce this exposure— through change of location or splashing of water or wallowing
- Continuous and long hours of standing immobile in one place
- Continuous and persistent prodding (by the handler) to perform the same activity (blessing public and accepting money)
- The activity pattern observed within the temple indicated intense human control, as only two activities— 'combined blessing action' and 'standing' dominated.
- Exposure to unsuitable food sources (from the public) and absence of foraging opportunity
- Exposure to wide variety of people— dangerous to both the elephant and the public (on Saturdays it was said the crowd became unmanageable)

In view of the above mentioned conditions and details of every aspect of elephant Prakruthi's status at the temple outlined in this report, it is strongly recommended that both Prakruthi and Ganesh be retained at the Sacrebylu Elephant Camp, bringing to close a controversial and damaging chapter in the lives of both the young male and female elephants.

Introduction

Elephants, acquired through various sources, are maintained across temples in India under varying captive conditions. This practice is age-old, a tradition that may not have created suitable living conditions in the recent past for its elephants (Lair, 1997; Gokula and Vardharajan, 1996). Elephant Prakruthi, a seven year old female juvenile, was born in the Sacrebylu Elephant Camp of a mother named Gange. The elephant from Sacrebylu Forest Camp in Karnataka was shifted to Sri Dharbaraneswara Swamy temple located in Thirunallar, Karaikal district of Pondicherrry in February 2011 (see appendix 1 for details appeared in print media).

The Order was effected as per the Govt. order No.FEE:249: FWL: 2010 dated 20.01.2011 and Letter No. C1: CWL: GL-3340: 2010-11 dated 25.01.2011 of the PCCF (WL), Bangalore. This transfer was in direct contravention of the following directive and order that had been issued in 1999 and 2000 by CZA and the Government of Karnataka respectively, which reflected the State's welfare concerns for elephants in captivity (see appendix II for details). Letter No. 24-3/99-CZA dated 28-07-1999 by Central Zoo Authority (CZA) constituted by the Central to the Principal Secretary, Forest Ecology and Environment, State of Government, issued Karnataka requesting to stop the transfer of elephants to temples in view of the poor track record and on the ground, the elephants in temples and private institutions are chained, underfed and due care is not being taken. Government Order vide Notification No G.O. No APJ223 / FWL / 99 dated 28-06-2000 from the State of Karnataka (appendix-II) banning the transfer of elephants religious institutions, individuals and other institutions within and outside the State of Karnataka. This move from a forest based camp to a temple environment imposed a change of living conditions for the elephant, its suitability needing a review (see appendix III for letter of appeal from animal welfare NGO to the authorities to get back Elephant Prakruthi).

Elephant Prakruthi was separated and exchanged for an adolescent makhna elephant named Ganesh, belonging to the same temple and the temple had subjected this young makhna to different management practices, thereby depriving him of appropriate diet, exercise, social interaction and freedom of movement, resulting in damage to his physical and psychological health (see appendix IV for figures reflecting his health conditions).

Methods

Captive conditions experienced by the female elephant in the temple were observed and relevant data collected to:

• Assess the welfare status of the elephant in terms of prevailing physical, biological and psychological parameters

Comparison of living conditions between two management regimes

A study to assess the welfare status of elephants maintained across management regimes throughout India was carried out. Among the regimes surveyed were forest camps and temples, and following is the summarized information of existing conditions in both these regimes.

Forest camps

- Forest was the shelter for 89% (n= 296) of elephants, with free-ranging allowed for some duration; 10% were kept in forest areas, but tied to trees and 1% were confined in enclosures with vegetation (Figure 1a)
- Rivers/streams were the water source for 62% (n= 335) elephants; ponds/lakes/tanks/tap water was available for 8%
- 97% (n = 229) elephants were provided opportunity to walk
- 81% (n= 341) elephants were given opportunity to interact; Mean duration of interaction was 13.5hrs (SE= 0.6, n= 278); Mean group size was 6 (SE= 0.4, n= 288)
- 88% (n= 268) elephants were chained as well as allowed to range-free; Mean chaining duration was 11.0hrs (SE= 0.5, n=105)
- 13% (n= 273) exhibited stereotypic behaviour
- 59% (n= 305) elephants were used for work; Work type ranged across patrolling/ fodder collection, tourist rides, as koonkie, for weed removal, timber related work, gathering palm fruits
- 95% (n= 313) were provided foraging opportunity in the forest as well as given stall feed
- 14% (n= 59) male elephants had sired offspring; Mean calf birth per female was 2 (SE= 0.3, n= 80)

Temples

- Fifty three percentage of elephants (n= 143) were kept in confined space and open with no shelter, 34% in closed type shelters with roof; 81% (n= 145) elephants were exposed to concrete/stone floors (Figure 1b)
- Rivers/streams, along with other sources, formed the water source for 55% (n=151)
- 74% (n =133) elephants were provided opportunity to walk
- Of 129 elephants, 82% were allowed to interact; Mean duration was 5.4hrs (SE= 0.6, n= 93); Mean group size was 5 (SE= 1.0, n= 35)
- Of 144 elephants, 6% were chained and also allowed to range-free, no free-ranging for the rest; Mean chaining duration was 17.5hrs (SE= 0.4, n=127)
- 62% (n= 66) exhibited stereotypic behaviour





Figure 1: a, Sacrebylu Elephant Camp environment showing natural shade and floor.

b, Thirunallar temple environment with concrete floor and roofed shelter.

- 96% (n= 153) elephants were used for work; Work type involved standing in temple premises/blessing public/performing temple related rituals
- Both stall feed and foraging opportunity was provided for only 5% (n= 149) elephants
- Oestrus cycles were reported for 38% (n=29) elephants; 15% (n=16) were exposed to males; 52% male elephants (n=31) were reproductively active or experienced musth

Overall captive conditions for elephants differ between the two regimes: forest camps and temples.

Change of location

The elephant was shifted from Sacrebylu, in the Western Ghats, Karnataka to an eastern coastal town experiencing tropical maritime climate. Wild elephants' ability to survive in a wide range of habitats can be noticed from their historical distribution ranging from Tigris-Euphrates to Yangtze (Sukumar, 2000). This, however, does not imply that drastic and sudden movement across several hundreds of kilometers is suitable for elephants. Pinter-Wollman et al., (2009) reported the higher death rates among adult male and female translocated African elephants in the wild.

While captive elephants do not have to depend completely on forage, the animal is forced to experience sudden change in weather conditions with likely concurrent changes in daily schedules and husbandry methods when moved to a distant location. Sacrebylu climate — close to the Western Ghats, maximum summer temperatures vary between 20-35°C, maximum winter temperatures between 15-27°C, average rainfall 180cm. Karaikal climate — with annual average rainfall of 120cms, mean annual temperature of 30°C, small daily variation of temperature and humid weather.

Assessing welfare status of the elephant through a rating system

The living environment, physical and biological, experienced by elephants in captivity may impose deficiencies or inequalities from those experienced by their wild counterparts. It is this difference from the wild that has been used to assess the welfare status of captive elephants. A range of captive features, both physical and biological, were observed and compared with those observed for wild elephants. These features include the physical environment as well as the social, reproductive and health aspects of the elephants. The benchmark was: the greater the difference between captive and wild variables, the poorer the welfare of the captive animal. In addition, veterinary care and health parameters were considered, as any captive situation cannot do without these two important features. Observed parameters were rated according to their suitability to elephants.

The rating method

A rating scale from zero (unsuitable conditions) to ten (suitable conditions) was used to assess the welfare status of captive elephants. Experts (both wild and captive elephant specialists, wildlife veterinary experts, managers from protected areas, those having both wild and captive elephants and other wildlife, members of welfare organisations and elephant handlers) were invited to assess the welfare based on welfare parameters and their significance through an exclusive workshop conducted on the subject (Varma, 2008; Varma, et al., 2008; Varma and

Prasad, 2008). Experts rated a total of 114 welfare parameters covering major aspects of captivity:

- The experts, based on their concept of the importance of a particular parameter to an elephant, developed rating for each parameter. For example mean expert rating of 8.0 (SE= 0.5, n=29; n= number of responses) for a parameter 'floor' and 9.0 (SE=0.4, n=31) was arrived for 'source of water' from the ratings suggested by each expert.
- A mean rating for each parameter, across all the participating experts, has been used as the Experts' Rating (E-R) which represents the importance attached to a parameter.
- Elephants were visited on the ground; data for each parameter was collected by direct observations or with the interviews of people associated with the animal. Ratings were assigned to each parameter for each elephant and Mean Rating (M-R) was calculated for a given parameter by averaging across the observed elephants. Thus the Mean Rating (M-R) denotes welfare status of existing conditions on the ground for the particular parameter.
- For example, if an elephant is exposed only to natural flooring, the animal receives a M-R of 8 and for entirely unnatural flooring the value is 0; if an animal is exposed to both natural and unnatural flooring, the value is 4 (as 8+0/2= 8/2= 4). If an elephant is exposed to a natural water source, such as a river, it receives a value of 9; if the source of water is large lakes or reservoirs, it gets 4.5. A value of 3.5 is assigned for small water bodies like tanks and ponds. Tap water (running) gets 2.5 and if only buckets, pots, and tankers are in use, then the allocated value is 0.5.
- In this investigation, variables which represent a common feature of the captive condition have been grouped to form a parameter. For example, the variables shelter type, shelter size, floor type in the shelter; all represent different aspects of the physical space provided to the elephant. Hence, they are grouped together to form the parameter "Shelter" and each constituent variable is a sub-parameter. In this investigation, the E-R for a parameter (say, shelter) represents the mean of E-Rs across all related sub-parameters. M-R is also based on similar lines.
- E-R and M-R for each of the regimes represent the average across related parameters observed for the regime. For instance, E-R / M-R for a parameter "shelter" represents the average of related parameters (termed sub-parameters) such as type, flooring, size, and shade availability.
- Results have been presented comparing E-R and M-R as a means of comparing the extent of deviation present in the parameters observed. The difference between E-R and M-R (expressed as percentage) indicates deviations from the prescribed norm.
- The same rating logic has been applied to the set of observed features for handlers, viz., comparison of mean rating for each of the observed variables (M-R) with those prescribed by the expert team (E-R). Greater deviation implies poorer professional experience or socio-economic status
- N* refers to number of parameters observed

Results

Source

This is important in terms of acquisition: whether captive born or wild caught or shifted across locations. Change of locations may include altered management regimes and daily routines. It will also involve breakage of established bonds, if any, in the elephant's previous location— which could be a source of stress for the animal.

• The elephant was shifted from a forest based camp to a temple environment in a semi-urban setting (Figure 2)

M-R was 1.5 with a deviation of 75% from E-R.

Shelter

In the wild, available forests with varied vegetation and topography form the physical space for elephants. Their home-



Figure 2: Darbaraneshwara temple with semi-urban environment

ranges vary from 250-1000km² (Sukumar, 2006), implying resources accessed across such vast distances. Exposure to hard substrates may lead to foot problems which can prove to be serious if ignored (Subramaniam et al., 2010). Captivity is represented by absence of space, presence of unsuitable space and unvarying topography.

- The temple elephant was provided with a shed with concrete substrate
- Elephant stood within the temple premises in the morning and evening; floor was made of concrete, elephant partially exposed to sunlight (Figure 3)
- Area was cleaned when the elephant urinated/defecated in the temple



Figure 3: Shelter within the temple premises

M-R for shelter was 1.6 (SE= 0.8, N*= 5) showing a deviation of 81% from E-R. Figure 3a and 3b depict

comparative ratings and percent deviation respectively for shelter parameters.

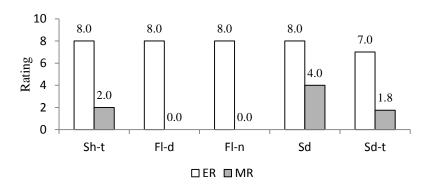


Figure 3a: Comparison of E-R and M-R for 'shelter' parameters

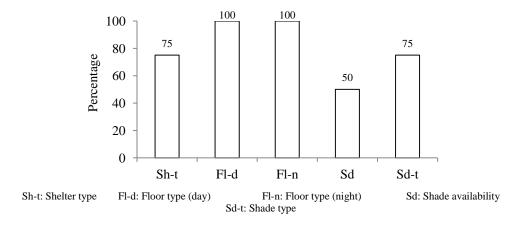


Figure 3b: Percentage deviation from E-R for 'shelter' parameters

Water

Weissenbock (2004) points out the use of water and dust by elephants as an aid in thermoregulation. In captivity, availability and access to water are provided and controlled by people, a feature over which the elephant has no control.

- Elephant given tap- water for consumption, through plastic pipe twice, during 7am to 1pm
- Bathed twice, once at 4a.m. and again at 4p.m.

M-R for water source was 1.1 showing a deviation of 88% from E-R.

M-R for bath frequency was 7.0 with no deviation from E-R.

Opportunity to walk

Walking forms a major activity for wild elephants as they forage across varied landscape. Captive elephants are limited in their opportunity to walk either due to work schedule or due to husbandry decisions. Limited exercise can lead to obesity and /or foot problems (Olson, et al., 1994).

• The elephant was reportedly walked twice (morning and evening) for a distance of 4-5km

M-R for opportunity to walk was 9.0 showing no deviation from E-R.

M-R for distance covered while walking was 1.0 with a deviation of 88% from E-R.

Social interaction

Sukumar (2006) states the group size of female elephants may vary from 5 to 20, with a multitiered social system. A social unit is essential for calves to learn what to eat and how to eat it. Young female elephants learn to care for calves, which not only increase calf survival, it provides an opportunity for caring for young (Poole and Moss, 2008). Female reproductive behaviour, such as oestrus behaviours and selection of mate, may include a period of learning in the presence of older, mature females in the herd. Social isolation, in the context of absence of elephant companions and dependence on human care-takers, can be psychologically stressful (Bradshaw, 2007).

• The temple elephants was maintained in social isolation

M-R was 0.0 showing complete (100%) deviation from E-R.

Chaining

In captivity, chaining is practiced as a tool to control elephants. This practice not only restricts movement (thereby impeding expression of species-typical behaviours) but could also lead to abrasion induced injuries of the skin (Kurt and Garai, 2007). Chained elephants showed increased frequency of stereotypy as opposed to penned elephants (Gruber, et al., 2000).

- In the temple, the elephant was chained by its hind leg to a pillar
- Chain on the fore-leg had a sharp pointed edge, facing the elephant's leg (Figure 4)
- A long chain was draped on the elephant's body
- No free-ranging opportunity was provided

M-R was 0.0 (SE= 0.0, N*=4) with 100% deviation from E-R.



Figure 4: showing sharp pointed edge of the chain facing the elephant's leg

Observed behaviour

Occurrence of stereotypy has been associated with absence of opportunities to express species-specific behaviours (Mason, 2006). Kurt and Garai (2001) studied the ontogeny of "weaving" (forward and backward movements, with trunk swaying, head nodding) in young captive elephants. They reported the occurrence of such stereotypical behaviours among socially isolated and fettered young elephants.

• The elephant showed forward and backward movement, along with trunk swaying, when tied in the temple

M-R was 0.0 showing 1090% deviation from E-R.

Work

When elephants are used for work, their work schedule forms a major factor in determining the activities or opportunities existing for elephants to express species-typical behaviours. Exposure to hard surfaces at the place of work can have a deleterious effect resulting in foot/leg problems.



Figure 5: showing blessing(a), collecting money (b)

- Major activity of the elephant was blessing and collecting money from devotees from 7am to 1pm and from 5pm to 8pm as per observation (Figure 5a and b)
- The elephant was made to stand in the temple for a total of 9hrs per day
- At its place in the temple, i.e., the right corner at the entrance (north corner) facing south sunlight fell directly on the back of elephant during both morning and evening hours
- Water was provided through a pipe during work hours
- Food provided during work was solely by the public: biscuits, plantain, banana, coconuts etc.

M-R was 2.3 (SE= 1.6, N*= 7) showing a deviation of 71% from E-R. Figure 6a and 6b depict comparative ratings and percent deviation respectively for work parameters.

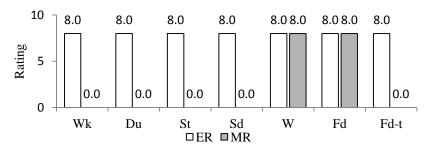


Figure 6a: Comparison between E-R and M-R for 'work' parameters

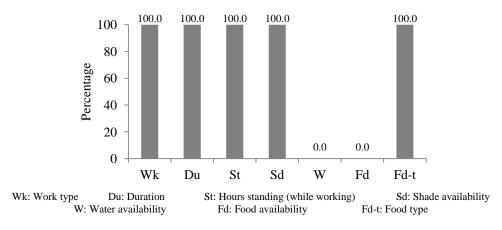


Figure 6b: Percentage deviation from E-R for 'work' parameters

Food

Wild elephants have been observed to feed on a wide variety of plants and plant parts. This variety is difficult to achieve when the elephant is subjected solely to stall-feed. In addition, precooked food is provided that do not have enough roughage and may lead to food contamination.

- The elephant was not given opportunity to forage
- Only stall-feed was given
- Food types were rice, coconut leaves, plantain, banana, biscuits, coconut

M-R for food provisioning type was 0.0 with 100% deviation from E-R. M-R for food types (number of items) was 3.0 with a deviation of 67% from E-R.

Health status and veterinary care

Captive elephants are exposed to a number of factors that may predispose them to disease/injury: hard substrates, insufficient exercise, and exposure to exotic species (people/domestic animals). Around 15% of captive elephants in southern India were found to be sero-positive for tuberculosis (Abraham, pers.comm).

- The elephant's foot pads were partially rough on hind legs (Figure 7) and smoother in case of forelegs; toe nail cracks, overgrown nail were present
- Deworming and body measurements were reportedly done
- Veterinary doctors (two in number) were available

Figure7: showing water imprints of hind legs

M-R was 7.1 (SE= 1.5, $N^*=4$) with a deviation of 12% from E-R. Figure 8 and 9 depict comparative ratings and percent deviation respectively for health and veterinary care parameters.

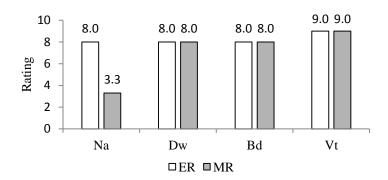


Figure 8: Comparison of E-R and M-R for health and veterinary parameters

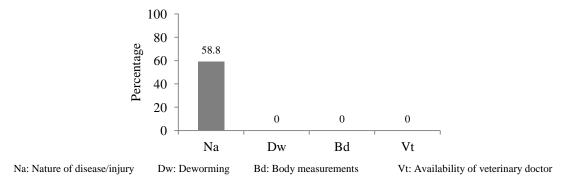
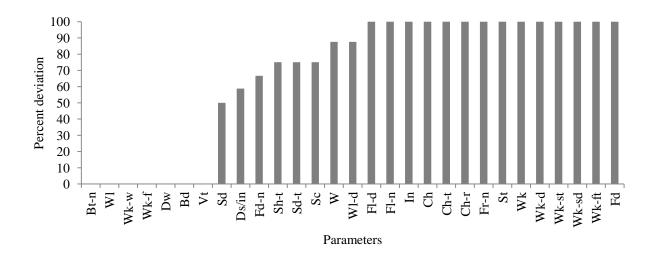


Figure 9: Percent deviation from E-R for health and veterinary parameters

Overall rating

Rating for welfare status considering all observed parameters together was 2.6 (SE= 0.6, N*= 29) showing a deviation of 68% from E-R. Figure 10, shows the distribution of percent deviation (from E-R) across all observed parameters. Of 29 parameters, 22 showed deviation of 50% or more from norms prescribed by experts. Among these parameters, complete absence of suitable features (100% deviation) was observed for the following: social interaction, food provisioning type, floor type and opportunity to range-free.

All parameters related to chaining and most associated with work (except two parameters—food and water) also showed complete deviation from E-R. Of a potential 90 parameters, 29 were observed, accounting for 32% of the parameters. This is partly due to the complete absence of certain features: social interaction, free-ranging opportunity and food provisioning type. Each of these parameters include several related parameters which could have been rated had they existed.



Sc: Source Sh-t: Shelter type Fl-d: Floor (day) Fl-n: Floor (night) Sd: Shade availability Sd-t: Shade type W: Water source Wl: Opportunity to walk Wl-d: Distance covered (walk) In: Opportunity for interaction Ch: Chained or not Ch-r: Chaining region Fr-n: Free-ranging (night) St: Stereotypy Wk: Work type Wk-d: Work duration Wk-st: Standing hours (working) Wk-sd: Shade availability (working) Wk-w: Water availability (working) Wk-f: Food availability (working) Wk-ft: Food type (working) Fd; Food provisioning type Fd-n: Number of food items Ds/in: Nature of disease/injury Dw: Deworming Bd: Body measurements Vt: Veterinary doctor availability

Figure 10: Distribution of percent deviation from E-R for observed parameters

Observed activity pattern of elephant in the temple

The elephant was observed for a period of 6hrs over two days using scan sampling method at 5minute intervals. Table 1 gives the frequency of occurrence of each type of activity.

Table 1: Frequency of occurrence of different activities over a 6hr period

Activity	Number
Blessing	5
Collecting money	0
Eating	0
Standing	14
Mahout-elephant interaction	2
Moving front and back (standing in one place+ moving)	4
Walking	1
Combined activity (for water consumption): walking + drinking water + standing	1
Combined blessing activity (at least two types with blessing mandatory): Blessing + collecting money and/ or eating offered food	42
Elephant-public interaction: moving trunk towards public without overt command	2
from mahout	
Urinating + defecating	2
Standing + walking	3
Chaining + (walking/standing)	2

There are two aspects to be considered:

- a. The non-natural behaviour of blessing
- b. Human control of the observed activity

Grouping single activities together (such as only blessing or only walking or only standing), it can be seen that such activities account for 32% of the total (n= 79). Among single activities (n= 25), "standing" accounted for 56% followed by "blessing" (20%). Among combined activities (n= 54), blessing (with collecting money and/or food) accounted for 78% of the activities. The ratio of single activity (all single activities considered together) to the combined action of blessing (blessing with collecting money or food) was 1: 1.7 (Table 2). Walking (either solely walking or along with other activities) formed only 9% of the total (n= 79).

Table 2: Ratio of single activities to combined blessing activity

```
Total single activity: Combined blessing activity :: 1:1.7
Standing only: Combined blessing activity :: 1:3
Blessing only: Combined blessing activity :: 1:8.4
Mahout-elephant interaction: Combined blessing activity :: 1:21
Moving front and back (standing in one place+ moving): Combined blessing activity :: 1:10.5
Walking: Combined blessing activity :: 1:42
```

The limited duration of sampling notwithstanding, it can be seen that the activities "standing" and "Combined blessing activity" dominated, accounting for 71% of all observed activities (n=79). In a time-activity study on captive elephants by Varma, et al., (2008), it was found that there was no instance of "blessing" among Forest camp elephants. The combined activity of standing and blessing* accounted for 18% and 17% respectively for temples and mutts. In their study, the action of collecting money and putting food in mouth was not included with blessing.

Discussion

Captive conditions for the elephant in this temple were characterized by two main features—absence of opportunity for species-specific behaviours and imposition of human control on all aspects of the elephant's life. Species-typical behaviours can be expressed when such opportunities are provided in an appropriate environment: presence of companion elephants in a location with sufficient physical space (with varied vegetation), presence of water-bodies, absence (or limited) human intervention. A study by Gokula and Varadharajan (1996) highlighted the poor conditions existing for elephants in temples as such locations appeared to emphasize human priorities rather than elephant behaviour.

Following aspects were not conducive for the elephant in this temple:

- Absence of a natural physical environment with sufficient space to traverse
- Absence of elephant companions

^{*} Blessing was defined as: elephant with handler, raises trunk on command from handler, touches head of stranger; drops trunk to normal position

- Unsuitable water-source (through a hose-pipe) which cannot be accessed by the elephant when needed
- Exposure to sunlight without any opportunity to reduce this exposure—through change of location or splashing of water or wallowing
- Continuous and long hours of standing immobile in one place
- Continuous and persistent prodding (by the handler) to perform the same activity (blessing public and accepting money)
- The activity pattern observed within the temple indicated intense human control, as only two activities— 'combined blessing action' and 'standing' dominated.
- Exposure to unsuitable food sources (from the public) and absence of foraging opportunity
- Exposure to wide variety of people— dangerous to both the elephant and the public (on Saturdays it was said the crowd became unmanageable)

Reference

- 1. Bradshaw, G. A., (2007) Elephants in Circuses: Analysis of Practice, Policy, and Future, Policy paper, Animals and Society Institute, U.S.A.
- 2. Gokula, V. and Vardharajan, M. (1996) Status of temple elephant management in Tamil Nadu, southern India, Gajah **15**: 37-40
- 3. Gruber, T.M., Friend, T.H., Gardner, J.M., Packard, J.M., Beaver, B. and Bushong, D. 2000. Variation in stereotypic behaviour related to restraint in circus elephants. Zoo Biology 19: 209-221
- 4. Kurt, F. and Garai, M.E. (2001). Stereotypies in captive Asian elephants a symptom of social isolation. Recent research on Elephants and Rhinos, Scientific Progress reports, Vienna, p: 57-63
- 5. Kurt, F. and Garai, M.E. (2007). The Asian elephant in captivity—a field study. Foundation books, Cambridge University press, New Delhi.
- 6. Lair, R.C. (1997) Gone Astray The Care and Management of the Asian Elephant in Domesticity. FAO Regional Office for Asia and the Pacific, Bangkok, Thailand
- 7. Mason, G. (2006) Stereotypic behaviour in captive animals: fundamentals and implications for welfare and beyond, in: Stereotypic animal behaviour: fundamentals and applications to welfare (Mason, G. and Rushen, J. eds.,) 2nd edition, pp:325-355
- 8. Olson, D., Keele, M. and Tuttle, D. (1994). Husbandry and management, In: Medical management of the elephant (Mikota, S.K., Sargent, E.L. and Ranglack, G.S. eds.), Indira Publishing House, U.S.A., p:27-31
- 9. Pinter-Wollman, N., Isbell L.A., and Hart L.A. (2009) Assessing translocation outcome: Comparing behavioral and physiological aspects of translocated and resident African elephants (*Loxodonta africana*), **142** 1116–1124
- 10. Poole, J.H. and Moss, C.J. (2008). Elephant sociality and complexity The scientific evidence. In: Elephants and ethics toward a morality of coexistence (Eds: Wemmer, C and Christen, C. A) The John Hopkins University Press, Baltimore. (Accessed online: http://www.elephantvoices.org/index.php
 - topic=tools&topic2=tools/documents/2_Poole_Moss_Final_7_12_06.pdf)

- 11. Subramaniam, K.S., Prabhakar, T.G. and Jayathangaraj, M.G. (2010) Common foot ailments in captive Asian elephants of south India, Central Zoo Authority funded project, Tamil Nadu Veterinary And Animal Sciences University, Department Of Wildlife Science, Madras Veterinary College, Chennai 600 007
- 12. Sukumar, R. (2000). Asian Elephant (Elephas maximus). In: Reading, R.P. and Miller, B. (eds.). Endangered Animals: a reference guide to conflicting issues. Greenwood Press, Westport, Connecticut, London, pp.34-39.
- 13. Sukumar, R. (2006). A brief review of the status, distribution and biology of wild Asian elephants *Elephas maximas*. International Zoo Yearbook 40: 1-8
- 14. Varma, S. 2008. Identifying and defining welfare parameters for captive elephants and their mahouts in India, In: Welfare and management of elephants in Captivity: Proceedings of a Workshop on Welfare Parameters and their Significance for Captive Elephants and their Mahouts in India. (S. Varma and D. Prasad, eds.), pp. 7-16. Ministry of Environment and Forests (MoEF), Government of India, Compassion Unlimited Plus Action (CUPA) and Asian Nature Conservation Foundation (ANCF), Bangalore, India.
- 15. Varma, S. and Prasad, D. (2008) Welfare and management of elephants in captivity—insights and recommendations, In: Welfare and management of elephants in Captivity: Proceedings of a Workshop on Welfare Parameters and their Significance for Captive Elephants and their Mahouts in India. (S. Varma and D. Prasad, eds.), pp. 54-64. Ministry of Environment and Forests (MoEF), Government of India, Compassion Unlimited Plus Action (CUPA) and Asian Nature Conservation Foundation (ANCF), Bangalore, India.
- 16. Varma, S., Rao, S., Ganguly, S and Bhat, H. (2008). Identification of an effective and robust model of elephant keeping and keeper welfare; Insights based on the activity budget of elephants in captivity and mahout-elephant interaction in Karnataka. Elephants in Captivity: CUPA/ANCF- Technical Report 3c. Compassion Unlimited Plus Action (CUPA) and Asian Nature Conservation Foundation (ANCF), Bangalore, India.
- 17. Varma, S., Sujatha S.R., van de Brand, J., Ganguly, S. and Shiela R., (2008) Draft concept note on welfare parameters and their significance for captive elephants and their mahouts in India, In: Welfare and management of elephants in Captivity: Proceedings of a Workshop on Welfare Parameters and their Significance for Captive Elephants and their Mahouts in India. (S. Varma and D. Prasad, eds.), pp. 17-53. Ministry of Environment and Forests (MoEF), Government of India, Compassion Unlimited Plus Action (CUPA) and Asian Nature Conservation Foundation (ANCF), Bangalore, India.
- 18. Weissenböck, N.M. (2006) How do elephants deal with various climate conditions? Previous results, recent data and new hypotheses. Proceedings International Elephant Conservation & Research Symposium. 217-224.

APPENDIX-I

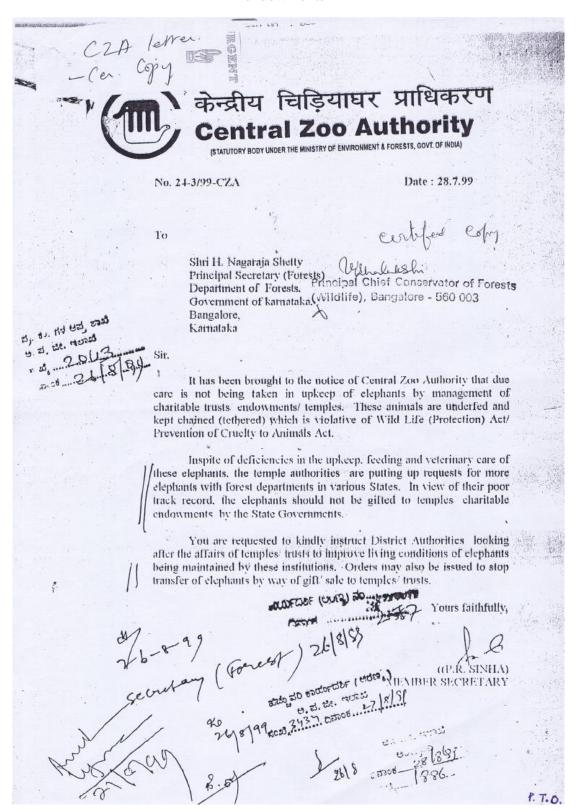
Electronic and print media reports on the transfer of female elephant calf "Prakruthi"

Karnataka female calf in exchange for Tirunallar temple elephant



APPENDIX-II

Government orders imposing restriction/ban on transfer of elephants to temples and charitable endowments



PROCEEDINGS OF GOVT.OF KARNATAKA

Sub: Banning of providing Elephants to Charitable Institutions, Private Persons and other Organisation in the form of donation, gift or sale – Regarding

Read: 1. Letter No.CI:CWL:CR-14:1997-98 dated 31 July 1999 of the Principal Chief Conservator of Forests (Wild Life).
 2. The Central Zoo Authority's letter no. CZA dated 24th March 1999.

Preamble:

In Letter at reference (1), the Principal Chief Conservator of Forests (Wild Life) has informed that the practice of giving Elephants to temples and Mutts is found only in Karnataka State and not any where else in the Country. In view of this it has not been possible to meet the requests made for these from within the state and outside. Besides the number of trained elephants available in the Forest Department being less and the number of baby elephants being far less, in case these baby elephants are sold, it would not be possible to get hard work carried out by the remaining trained elephants in the Forest Camp. In view of this it is proposed to ban the transfer of elephants to Temples and Mutt.

In Letter at reference No.(2) above, the Central Zoo Authority also as stated that the elephants transferred by sale to the Religious Institutions are not being looked after well and are being subjected to cruelty and therefore transfer of elephants by way of donation, gift or by sale to Temples, Religious Institutions to be stopped and the need for issue of a Govt.Order.

The Govt. has carefully examined the above proposal.

G.O. No.APJ223/FWL/99 Bangalore dated 28 June 2000

As proposed in the Preamble, as there is shortage of trained elephants and baby elephants in the Forest Department and as there is need for trained elephants in Govt. work, the Govt. has ordered with immediate effect the ban on transfer of elephants to Religious Institutions and Private Individuals and to other Institutions by way of donation, gift or sale on requests within the State and outside.

On behalf of the Karnataka Government and in their name

(K.T. Vijayaraja Urs)

APPENDIX-III

Letters of appeal from FIAPO and CUPA to the authorities to get back Elephant Prakruthi



To:

Shri Yediyurappa Hon'ble Chief Minister, Karnataka Room No.323, 3rd FLOOR, Vidhana Soudha, Bangalore -560001 Email: cm@kar.nic.in.

Subject: Appeal to use the powers vested in your Government and your good offices to get back 6 year old elephant baby Prakruti, to her life and family at the Sakrebyle Elephant Camp. Shimoga from Saneeshwara Temple in Tirunallar, Karaikal, Pondicherry.

Dear Sir,

We are writing from the Federation of Indian Animal Protection Organisations (FIAPO)— India's largest umbrella body of organisations concerned with the protection and welfare of all animals, with hundreds of members and colleagues across every state.

We recently learned that an elephant named Prakruti, a 6 year old elephant calf, was transferred from the Sakrebyle Elephant Camp at Shimoga (Karnataka) to the Saneeshwara Temple in Tirunallar (Karaikal district) in Pondicherry, in exchange for Ganeshan, a 17 year old male (makna).

Sir, we would like to bring to your kind notice that this transfer violates a government order G.O. No. AP J 223/FWL/99 Bangalore dated 28 June 2000 which restrains the practice of elephant transfer to religious institutions, based on sound principles and directives of the Chief Wildlife Warden and the Central Ministry, with reference to multiple health and welfare issues that elephants face in such institutions.

The 2000 Order was "relaxed" in order to effect the transfer, setting a potentially dangerous precedent for the future. The spirit of the 2000 Order was in the best traditions of conservation and protection that Government of Karnataka has always extended towards wildlife and environment.

The Hon'ble HC of Karnataka stopped a similar transfer 5 years ago when the then Chief Minister, tried to send an elephant calf named Kapila from Nagerhole Camp in exchange to the same temple.

Our experience and studies show that elephants suffer greatly when they are taken out of forest areas, and kept in crowd infested and unnatural environments. Religious institutions have neither facilities nor proper upkeep. In the absence of knowledge of elephant keeping, mahouts use cruel and abusive methods of control. Wrong food, lack of exercise, isolation for a lifetime and abuse are common to all the temple elephants. Methods of control and training are absent. All the elephants, including the 17 year old "Ganesha" from the above temple, show typical signs of severe psychological distress, such as swaying, stereotypical behavior, head-bobbing or weaving — behaviour which is not found in healthy elephants in the wild.

Elephants need to walk 12-15 kms. daily, graze and forage in the forest to remain healthy, live with other elephants and socialize, have physical and psychological stimulation to live a normal life which is natural to them.

We appeal to you to use the powers vested in your Government and your good offices to get back Prakruti, the elephant, to her life and family at the Forest Camp. Elephant being declared a heritage animal, Protection and Conservation of each and every one of them is our responsibility and FIAPO is willing to extend any support required

We thank you for your kind attention to this important matter.

Looking forward to your positive reply,

I Chinny Kenshina

Dr. S. Chinny Krishna

Chairman, Federation of Indian Animal Protection Organisations

Co-Founder, Blue Cross of India

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Compassion Unlimited Plus Action

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CUPA Animal Care Clinic: No.4(Old No.39/1), New Devegowda Road, Thimmaiah Garden, Ist Main, R.T. Nagar, Bangalore-560 032. Tel:080-22947312/22947313

Fax: 080-22947315/22293771 e-mail: cupablr@qmail.com website: www.cupabangalore.org

Recognised by Animal Welfare Board of India, Chennai,

Associated with RSPCA, U.K. WSPA, U.K.

Chief Patron (Late) Mr. Dan Ginsberg Sparrows Song Foundation, USA

Patron Mrs. H.E. Flynn TRUSTEES Founder (Late) Miss Crystal Rogers

Hon. President Suparna Baksi Ganguly Hon. Secretary Dr. Shiela N. Rao

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Sudeshna B-Lahiri CUPA-US Trust, 14612, VintageLane, Addison, TX-75001, USA Shri Jairam Ramesh Hon'ble Minister of Environment Ministry of Environment & Forests Paryavaran Bhavan, CGO Complex, Lodhi Road New Delhi - 110 003

Respected Minister,

Sub: Return of elephant calf to home state of Karnataka

I am writing to you on behalf of Compassion Unlimited Plus Action, which is a non-governmental charitable trust working for the welfare and protection of animals. In the course of our work we have collected information, published reports and researched on the conditions of elephants in captivity in all management regimes including religious institutions in India.

14.02. 2011

The Govt. of Karnataka has always shown positive and deep interest in the welfare of elephants in the state. To this effect, the Forest Dept. managed elephant camps are the best in the country. To further protect the interest and welfare of elephants, the Govt. of Karnataka, in 2000, passed an Order refraining transfer of Forest Department elephants to any private individual or institutions. The order copy is enclosed for your kind information.

The current transfer of calf to Pondicherry Temple is against the directives and policies of the Karnataka Government.

As Schedule 1 animal and a precious resource of State, this transfer of elephant calf to temple will set a very negative and dangerous precedent by encouraging religious institutions in all States to exchange their animals by appealing to the State Government. The State Forest Department may be accused of discriminatory attitude, if they do not comply. The entire goal of wildlife preservation and protection has danger of regressing into harmful practices for wildlife

Whenever and wherever elephants have to leave the forest, they suffer greatly. Experts and scientists are of the opinion that due to various limitations, temples cannot function effectively for the benefit or conservation of wild animals, especially elephants that require special habitat and care.

The transfer of healthy female calf named Prakruthi (from Sakrebyle Elephant Camp), to the Saneeshwara Temple in Pondicherry, as an "exchange" is counter productive and will bring much hardship to this elephant. Prakruthi is replacing

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Copy sent to:

- 1) Shri Jairam Ramesh, Environment Minister, Ministry of Environment & Forests, Paryavaran Bhavan, CGO Complex, Lodhi Road, New Delhi 110 003 Email: jairam@sansad.nic.in, jairam54@gmail.com, Fax no: 011- 2436 2222
- Shri A.N. Prasad, Director (Project Elephant), Government of India, Ministry of Environment & Forests, Paryawaran Bhawan, CGO Complex, Lodi Road, New Delhi - 110 003, E-Mail:gajendra@nic.in, Phone 011-24360549, Fax 011- 24360678
- Shri V. H Vijayashankar, Forest Minister, Government of Karnataka, Vidhana Soudha, Bengaluru
- 4)Shri J. Krishna Palemar, Karnataka Environment minister, Government Of Karnataka, Vikas Soudha, (141, 142), Bengalooru, 080-22034010/22034009
- 4) The Secretary to Government (Environment and Ecology), Department of Forest Environment & Ecology Room No. 708, Gate 2, Multi Storied Building Dr. Ambedkar Veedhi, Bangalore 560 001, Tel: +91 80 22254377, 22092445, Email: secveny-fee@karnataka.gov.in
- Shri B K Singh, PCCF and Chief Wildlife Warden
 Karnataka Forest Department, Aranya Bhavan, 18th Cross, Malleswaram, Bangalore-560003.
 pccfkar@gmail.com, Fax no: 080-23341484, 9449863501

the present elephant "Ganesha" which had been in the temple for many years and is currently in a pitiable condition.

Currently, the Forest Departments have no control or regulations governing the maintenance and upkeep of elephants in temples and other institutions. Yet they have to comply with the law by giving permissions to inappropriate institutions to keep elephants. The gesture of a personal donation to a private temple using state wildlife resources, will open the floodgates of demand by religious institutions to take back their sick, old and damaged elephants that were misused and abused in the temple environment and replace them with young, healthy elephants.

The Task Force Report for Wild & Captive Elephants, August 2011, published by the Ministry of Environment & Forests, Govt. of India, clearly indicates that elephants in captivity should be gradually phased out from private and institutional holding due to the negative living conditions.

We appeal to you to get back Elephant Prakruthi to her home state of Karnataka in the forest environment of Sakrebyle Camp.

Thanking you, Yours sincerely,

Suparna Baksi Ganguly Co-Founder Trustee & (Hon.) President

FOR KIND INFORMATION TO:

Shri V. H Vijayashankar, Forest Minister, Government of Karnataka, Vidhana Soudha, Bengaluru

Shri A.K.Srivastava IFS, IG of Forests & Director (PE), Government of India, Rm. No.106, Ministry of Environment & Forests, Paryawaran Bhawan, CGO Complex, Lodi Road, New Delhi - 110 003,

Shri Kaushik Mukherjee IAS, Secretary to Government (Environment and Ecology), Department of Forest Environment & Ecology Room No. 708, Gate 2, Multi Storied Building, Dr. Ambedkar Veedhi, Bangalore - 560 001

Shri B.K.Singh IFS, PCCF and Chief Wildlife Warden Karnataka Forest Department, Aranya Bhavan, 18th Cross, Malleswaram, Bangalore-560003.

Enclo: 1. Copy of Government of Karnataka G.O. No.AP J223/FWL/99 Bangalore dt. 28 June 2000

- 2. CZA letter No. 24-3/99-CZA dt. 28.7.99
- 3. Newspaper cuttings ref. above elephant calf transfer

Appendix IV

Temple Elephant "Ganesh" belonging to the Sri Dharbaranyeswaraswamy Devasthanam, Sri Saneeswarabaghawan Temple, Thirunallar Taluk, Karaikal District, Puducherry was sent to Karnataka in exchange for elephant Prakruthi.



Elephant Ganesh with his mahout Munawarpasha, in Sacrebylu Elephant Camp, forest environment. Limping back to normalcy, after years of forced living in an artificial and damaging environment, he had lost the basic instinct of foraging and feeding on natural fodder and came in a severely malnourished state.



Elephant Ganesh was painfully thin with damaged foot pads. His skin is sagging and dry due to inadequate exposure to water and he has aged prematurely at the temple. Picture shows his status after 6 months of being in the Forest Camp where he is gradually putting on weight.

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Compassion Unlimited Plus Action (CUPA) is a non-profit public charitable trust registered in 1991 that works for the welfare of all animals. Since 1994, CUPA has worked in close collaboration with government departments and agencies on various projects. CUPA's mission is to protect animals from abuse and violence and do what

may be required to alleviate their suffering at the hands of humans. CUPA does not differentiate among pet, stray or wild animals, since all of them require assistance and relief from cruelty, neglect and harm. The organisation's objective has been to design services and facilities which are employed fully in the realisation of these goals.



Federation of Indian Animal Protection Organisations (FIAPO) is an umbrella body of animal protection groups from across the country. The key mandate of the federation is to propel animal welfare as a mainstream social change movement in the country. It campaigns on issues such as animals used

in experimentation, animals in captivity and farm animals.



Asian Nature Conservation Foundation (ANCF) is a non-profit public charitable trust set up to meet the need for an informed decision-making framework to stem the rapidly declining natural landscape and biological diversity of India and other countries of tropical Asia. The Foundation undertakes activities independently and

in coordination with governmental agencies, research institutions, conservation NGOs and individuals from India and abroad, in all matters relating to conservation of natural resources and biodiversity, endangered flora and fauna, wildlife habitats and environment including forests and wetlands. It participates and disseminates the procured information, knowledge and inferences in professional, academic and public fora.

Photo credits: Figure 1a: Surendra Varma, all other photographs Ramesh Belagere





Prakruthi, female elephant part of Sacrebylu Elephant Camp Shimoga, which holds 18 elephants of different age class living in semi-natural conditions, was transferred to a temple in Karaikkal, Pondichery. This investigation compares her life and welfare status in forest camp and the temple.





