Note on Project Elephant

Project Elephant (PE) was launched by the Government of India in the year 1991-92 as a Centrally Sponsored Scheme with following objectives:

- To protect elephants, their habitat & corridors
- to address issues of man-animal conflict
- welfare of domesticated elephants

Financial and technical support are being provided to major elephant bearing States in the country. The Project is being mainly implemented in 13 States / UTs , viz. Andhra pradesh , Arunachal Pradesh , Assam , Jharkhand , Karnataka , Kerala , Meghalaya , Nagaland , Orissa , Tamil Nadu , Uttranchal , Uttar Pradesh and West Bengal. Small support is also being given to Maharashtra and Chattisgarh . Main activities under the Project are as follows:

- Ecological restoration of existing natural habitats and migratory routes of elephants;
- Development of scientific and planned management for conservation of elephant habitats and viable population of Wild Asiatic elephants in India;
- Promotion of measures for mitigation of man elephant conflict in crucial habitats and moderating pressures of human and domestic stock activities in crucial elephant habitats;
- Strengthening of measures for protection of Wild elephants form poachers and unnatural causes of death;
- Research on Elephant management related issues;
- Public education and awareness programmes;
- Eco-develoment
- Veterinary care

OUTLAY /EXPENDITURE DURING 5 YEAR PLANS (In Rs Crores)

			OUTLAY	ALLOTMENT	EXPENDITURE
•	8 TH PLAN(92-97)	_	23.00	20.75	19.51
•	9^{TH} PLAN(97-02)	-	35.00	24.60	30.48
•	10 TH PLAN (02-07)	-	71.00	67.25	63.83
•	11 th Plan	-	81.99		
	2007-08		17.00	17.00	16.76
	2008-09		20.00	20.00	

STATE WISE FUNDS RELEASED UNDER PROJECT ELEPHANT FROM 2002-03 TO 2007-2008

In Rs Lakh

					111 113 L	-anii
STATES	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Assam	116.00	134.10	130.00	40.00	75.00	144.00
Arunachal Pr.	52.00	61.00	59.00	71.50	61.00	54.50
Meghalaya	41.00	64.00	70.00	30.00	61.55	68.39
Nagaland	49.00	42.00	29.00	48.00	52.45	26.60
Tripura	3.00	16.00	17.00	-	-	12.00
Mizoram	5.00	0.00	-	-	-	1.33
Manipur	-	0.00	-	-	-	-
Andhra Pr.	50.00	55.00	48.00	60.00	64.774	60.00
Kerala	111.88	188.28	167.40	170.00	169.40	147.70
Karnataka	93.00	149.66	186.22	168.00	167.82	212.65
Tamilnadu	71.26	117.00	84.00	112.00	153.41	124.978
W. Bengal	86.47	119.95	148.54	181.00	160.89	185.725
Bihar	_	-	-	-	-	-
Jharkhand	45.00	93.00	105.96	75.00	74.446	132.17
Orissa	108.39	116.10	137.96	114.00	153.94	148.50
U.P.	-	-	12.00	-	6.20	55.33
Uttaranchal	107.00	129.00	138.90	137.70	153.12	126.46
M.P	-	-	-	-		-
Chhatisgarh					80.00	83.77
Haryana					50.00	-
						7.0.0
Maharashtra					25.00	56.86
Total	934.27	1285.09	1333.98	1207.20	1509.00	1640.938

Ex gratia payments

Under the PE scheme , amounts released to states and for ex-gratia payments during the 10^{th} Plan and 1^{st} year of 11^{th} Plan are as follows:

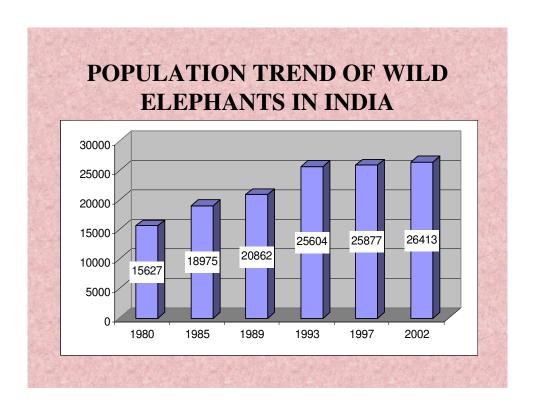
Fund released for Ex-Gratia Payment under Project Elephant

Rs. in Lakh

		_				150 111 23001111
States	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Andhra	2.00	3.00	3.00	6.00	6.00	1.50
Pradesh						
Meghalaya	20.00	12.00	15.00	15.00	27.00	25.00
Uttaranchal		12.00	12.00	6.00		-
Arunachal	7.00	7.00	7.00	7.00	15.00	20.00
Pradesh						
Karnataka	17.00	10.00	20.00	24.00	30.00	15.00
Chattisgarh	-	-	-	-	31.00	25.00
Assam	18.00	23.00	23.00	30.00	40.00	40.00
Kerala	10.00	5.00	8.00	6.00	5.00	10.00
Tamil Nadu	20.00	20.00	23.00	23.00	30.00	10.00
Tripura	-	-	2.00	-	-	1.00
Nagaland	5.00	5.00	6.00	6.00	1.00	2.00
Jharkhand	20.00	20.00	25.00	35.00	-	-
Orissa	30.00	30.00	30.00	35.00	65.00	40.00
West Bengal	15.00	20.00	26.00	27.00	40.00	40.00
UP			1.00		2.70	2.70
Maharashtra						10.00
Total	164.00	167.00	201.00	220.00	292.70	242.20

Enumeration of Elephants:

The all India enumeration of wild population of elephants in the country is carried out at every five year interval . The population trend beginning 1980 is as follows:



Estimation of elephant in the year 2007

The all India enumeration of wild population of elephants in the country is carried out at every five year interval For the current year estimation has been completed in all states except NE states where the exercise will be done in Feb 2008. The comparative figures as below for the states shows that the estimated population of elephants in these states has increased by about one thousand compared to the 2002.

ESTIMATED POPULATION OF WILD ELEPHANTS

REGION	STATE	E	LEPHANT P	OPULATIO	ON
		1993	1997	2002	2007
North-East	Arunachal	2102	1800	1607	-
	Assam	5524	5312	5246	
	Meghalaya	2872	1840	1868	
	Nagaland	178	158	145	-
	Mizoram	15	22	33	-
	Manipur	50	30	12	-
	Tripura	100	70	40	_
	West Bengal (North)	186	250	292	300-
					350
Total for North-East		11027	9482	9243	
East	West Bengal (South)	14	26	36	25
	Jharkhand	550	618	772	624
	Orissa	1750	1800	1841	1862
	Chattisgarh	_	-	-	122
Total for East		2314	2444	2649	2633
North	Uttaranchal (* part of earstwhile UP)	828*	1130*	1582	1346
	U.P.	47	70	85	380
Total for North		875	1200	1667	1726
South	Tamilnadu	2307	2971	3052	3867
	Karnataka	5500	6088	5838	4035
	Kerala	3500	3600	3850	6068
	Andhra Pradesh	46	57	74	28
	Maharashtra	-	-	-	7
Total for South		11353	12716	12814	14005
Islands	Andaman & Nicobar	35	35	40	
Grand Total		25604	25877	26413	
Grand Total minus		14,577	16,395	17462	18663-
NE States					18713

Elephant Reserves:

Sighbhum Elephant Reserve in Jharkhand was the first reserve to be notified in the country in the year 2001 and since then 26 Elephant Reserves (ERs) extending over about 60,000 sq kmt have been formally notified by various State Governments .. Consent for establishment of Baitarini ER & South Orissa ER in Orissa , Lemru & Badalkhod in Chattisgarh and Ganga-Jamuna (Shiwalik) ER in U.P has been accorded by MOEF. The concerned State Governments are yet to notify these ERs. Proposal for creation of Khasi ER in Meghalaya is under consideration of GOI .

Out of 26 ERs, 21 were created during the 10th Plan.

List of Elephant Reserves with area and population as per 2005 census are as follows. In year 2005 for the first time enumeration were done in ERs.

ELEPHANT RESERVES IN INDIA WITH 2005 CENSUS POPULATION

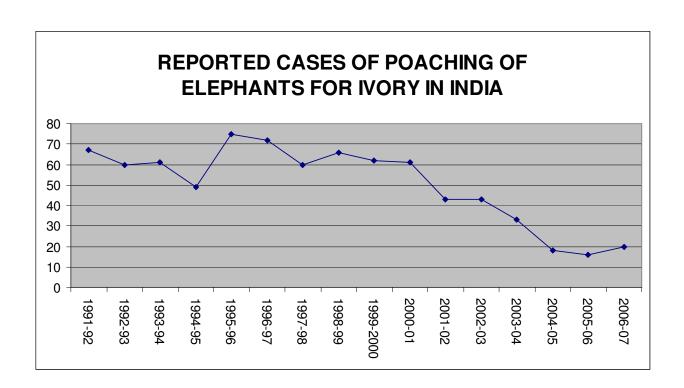
Sl.	Elephant Range	Elephant Reserve	State	Total Area	P.A. in	Populati-
No.				(Sq. Km)	ER (Sq. Km.)	on in 2005
I	Eastern India	1. Mayurjharna ER(24.10.02)	W. Bengal	414	-	96
	(South West Bengal-	2. Singhbhum ER (26.9.01)	Jharkhand	4530	193	371
	Jharkhand-Orissa)	3. Mayurbhanj ER (29.9.01)	Orissa	3214	1309	465
		4. Mahanadi ER (20.7.02) *	Orissa	1038	964	464
		5. Sambalpur ER (27.3.02)♣	Orissa	427	427	284
		6. Baitarni ER#	Orissa	1755	-	108
		7. South Orissa ER#	Orissa	4216	750	138
	8. Lemru #		Chattisgarh	450	-	-
		9.Badalkhol-Tamorpingla-#	Chattisgarh	1048.30	1154.93	-
	Total			15594	3643	1978
II	North Brahamputra	10. Kameng ER (19.6.02)	Arunachal	1892	748	
	(Arunachal – Assam)	11. Sonitpur ER (6.3.03)*	Assam	1420	420	612
	Total			3312	1168	612+
III	South Brahamputra (Assam- Arunachal)	12. Dihing-Patkai ER (17.4.03)	Assam	937	345	295
		13. South Arunachal ER (29-2-08)	Arunachal	1957.50	378.13	129
	Total			1,837+	345	424
IV	Kaziranga (Assam- Nagaland)	14. Kaziranga – Karbi Anglong ER (17.4.03)	Assam	3270	1073	1940
		15. Dhansiri-Lungding ER (19.4.03)	Assam	2740		275
		16. Intanki ER (28.2.05)	Nagaland	202	202	30
	Total			6212	1275	2245
V	Eastern Dooars	17. Chirang-Ripu ER (7.3.03)	Assam	2600	526+	658
	(Assam- W. Bengal)	18. Eastern Dooars ER (28.8.02)	W. Bengal	978	484	300-350
	Total			3578	1010	1008
VI	E. Himalayas	19 Garo Hills ER (31.10.01)	Meghalaya	3,500	402	1047

	(Meghalaya) 20. Khasi Hills ER^		Meghalaya			383
	Total					1430
VII	Nilgiri –Eastern Ghat	21. Mysore ER (25.11.02)	Karnataka,	6724	3103	4452
	(Karnataka- Kerala-	22. Wayanad ER (2.4.02)	Kerala	1200	394	636
	Tamilnadu-Andhra)	23. Nilgiri ER (19.9.03)	Tamilnadu	4663	716	2862
		24. Rayala ER (9.12.03)	Andhra	766	525	12
	Total			13335	4738	7962
VII	South Nilgiri	25. Nilambur ER (2.4.02)	Kerala	1419	90	281
I	(Kerala- Tamilnadu)	26. Coimbatore ER (19.9.03)	Tamilnadu	566	482	329
	Total			1985	572	610
IX	Western Ghat	27. Anamalai ER (19.9.03)	Tamilnadu	1457	300	179
	(Tamilnadu- Kerala)	28. Anamudi ER (2.4.02)	Kerala	3728	780	1726
	Total			5185	1080	1430
X	Periyar	29. Periyar (2.4.02)	Kerala	3742	1058	1100
	(Kerala- Tamilnadu)	30. Srivilliputtur ER(19.9.03)	Tamilnadu	1249	568	638
	Total			4991	1626	1738
XI	Northern India	31. Shivalik ER (28.10.02)	Uttaranchal	5405	1340	1510
	(Uttaranchal-U.P.)	32. Ganga-Jamuna ER#	U.P.	744	-	NA
	Total			6149	1340	1510+
		TOTAL		59,900+	16,700+	21,200+

[#] Approved by Govt. of India, but not yet notified by the State Government.

* Proposal for extension approved by GOI, but not yet notified by the State.

^ Under consideration



ESTIMATED POPULATION OF CAPTIVE ELEPHANTS-2000

Region	State	Number	Total for Region
North-eastern	Assam	1253-1290	1903-1970
	Arunachal Pradesh	564-580	
	Meghalaya	45-54	
	Nagaland	6	
	Tripura	35- 40	
Eastern	Bihar	76-92	209-240
	Jharkhand	15-20	
	Orissa	8	
	West Bengal	110-120	
Northern	Uttar Pradesh	115-140	271-300
	Uttaranchal	18-22	
	Delhi	31	
	Punjab	17	
	Rajasthan	90	
Western	Gujarat	2	79-92
	Maharashtra	20-26	
	Madhya Pradesh	53-60	
	Goa	2	
	Dadra – Nagar Haveli	2	
Southern	Andhra Pradesh	20-25	860-920
	Karnataka	101-115	
	Kerala	612-635	
	Tamilnadu	127-145	
Islands	Andaman & Nicobar	145	145
Total			3467 – 3667

ELEPHANT HABITAT IN INDIA

REGION	STATE		
		ELEPHA	NT HABITAT
		(S	q. Km.)
		Min.	Max.
North-East	Arunachal	7000	7800
	Assam	17000	20000
	Meghalaya	9000	10000
	Nagaland	1000	1300
	Mizoram	400	600
	Manipur	250	350
	Tripura	1000	1500
	West Bengal (North)	2300	2800
Total for North-East		37,950	44,350
East	West Bengal (South)	1500	1800
	Jharkhand	7500	8500
	Bihar	300	500
	Orissa	12000	15000
Total for East		21,300	25,800
North-West	Uttaranchal	4500	5000
	Uttar Pradesh	500	1000
Total for North-West		5,000	6,000
South	Tamilnadu	10000	12000
	Karnataka	17000	20000
	Kerala	9000	9500
	Andhra Pradesh	800	1300
Total for South		36,800	42,800
Islands	Andaman & Nicobar	300	600
Grand Total		101,350	119,550

PROTECTED AREAS WITH ELEPHANT ERS

State / U.T.	No. of P.As.	Area (Sq.Km.)
Andaman	1	131
Andhra	1	357
Arunachal	7	3281
Assam	6	1987
Jharkhand	2	960
Karnataka	9	4218
Kerala	11	2158
Meghalaya	3	254
Nagaland	1	56
Orissa	10	4579
Tamilnadu	5	2489
Tripura	1	349
Uttaranchal	3	2221
Uttar Pradesh	1	490
West Bengal	5	1050
Total	66	24950

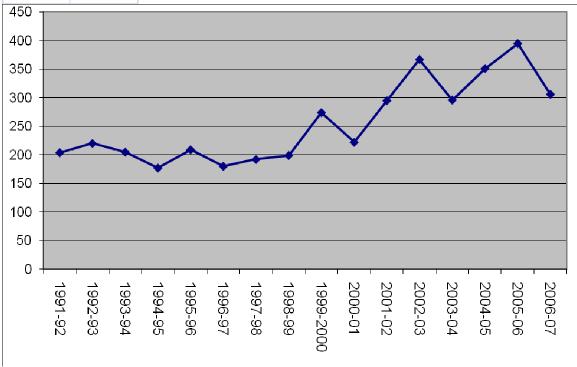
Region-wise distribution of Elephant PAs

Region	Total Elephant	No. of Pas	Total P.A.	%age
	Habitat			
North-East	41000	18	5927	14.46
East	23500	17	6589	28.04
South	39500	26	9222	23.35
North	5500	4	2711	49.30
Islands	500	1	131	26.20
Total	110,000	66	24950	22.68

CASES OF HUMAN DEATHS CAUSED BY ELEPHANTS

States								Numbe	r of Cas	ses						
	1991 -92	1992 -93	1993 -94	1994 -95	1995 -96	1996 -97	1997 -98	1998 -99	1999 -00	2000 -01	2001 -02	2002 -03	2003 -04	2004 -05	2005 -06	2006 -07
A&N	-	-	-	-	-	-	-	-	-	-	3	3	-	-	-	1
Andhra Pradesh	2	3	1	1	7	3	-	3	1	-	-	2	-	-	1	-
Arunachal Pradesh	3	1	-	2	3	1	5	1	1	2	-	-	2	2	0	7
Assam	31	44	52	40	38	24	48	35	46	52	37	57	42	57	67	47
Jharkhand	39	32	21	24	32	27	16	40	70	21	70	94	72	63	91	67
Bihar	-	-	-	-	-	-	-	-	-	-	1	-	1	-		-
Chattisgarh	-	-	-	-	-	-	-	-	-	2	11	21	7	9	16	
Karnataka	45	23	30	32	19	42	32	42	28	30	13	24	31	46	38	34
Kerala	2	6	2	3	6	5	4	-	4	3	13	14	15	10	16	
Maharashtra	-	-	-	-	-	-	-	-	-	-	-	-	1	1	2	6
Meghalaya	3	12	-	4	-	5	4	2	1	2	5	2	2	3	5	1
Mizoram	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
Nagaland	-	-	-	1	7	5	5	3	3	6	3	-	-	1	-	2
Orissa	7	17	21	17	30	6	15	24	34	39	60	41	32	64	42	44
Tamilnadu	5	2	4	3	8	10	6	2	15	18	19	27	22	18	21	24
Tripura	-	-	-	-	-	-	-	-	-	-	1	3	2	1	0	0
Uttaranchal	-	-	9	6	3	-	-	-	4	3	3	4	12	3	9	9
U. P.	-	-	-	-	-	-	-	-	-	-	-	1	1	1	2	1
West Bengal	67	80	65	44	56	52	57	47	67	44	55	74	54	72	85	63
Total	204	220	205	177	209	180	192	199	274	222	295	367	296	351	395	306

1991-92	204
1992-93	220
1993-94	205
1994-95	177
1995-96	209
1996-97	180
1997-98	192
1998-99	199
1999-2000	274
2000-01	222
2001-02	295
2002-03	367
2003-04	296
2004-05	351
2004-05 2005-06	351 395



Euthanasia in Elephants

1. <u>Introduction</u>

Euthanasia is an act of inducing humane death in an animal with minimal pain and distress. (AVMA, 2001). It is responsibility of the veterinarian to ensure that the animal is dealt with highest degree of respect, with an emphasis on making the entire procedure/ operation as painless and distress free as possible. Euthanasia should result in rapid loss of consciousness followed by cardiac or respiratory arrest and the ultimate loss of brain function (AVMA, 2007). It is important that the death of the animal is verified after euthanasia and before disposal of the animal. Death must be confirmed by examining the animal for cessation of vital sings, and consideration given to the animal species and method of euthanasia when determining the criteria for confirming death.

2 .Procedure to be followed for ordering Euthanasia by Chief Wildlife Wardens

It is proposed that Euthanasia of elephants may be carried out only in the specific circumstances when the elephant is in such agony or pain that it is cruel to keep it alive. The animal should not be euthanised without getting the animal examined by a team comprising of at least two veterinarians from the experts' panel below; a member of the Society for Prevention of Cruelty to Animals, wherever applicable; one senior Veterinarian, preferably a Professor in the neighbouring veterinary college / agricultural university / recognized Zoo and a member of the Animal Welfare Board, wherever it is possible.

Panel of veterinarians

College of Veterinary Sciences, Assam

- (i) Dr Apurva Chakraborti, Professor, Deptt of Pathology,
- (ii) Dr KK Sharma, Associate Professor, Deptt of Surgery and Radiology
- (iii) Dr G Mahto, Associate Professor, Deptt of Medicine.

Centre for studies on Elephants, Kerala

- (iv) Dr KC Panickar, Professor
- (v) Dr Jacob Cherian, Professor
- (vi) Dr PC Alex, Professor

IVRI, Izzatnagar, UP

(vii) Dr Dharmeshwar Das, Joint Director cum Dean

3. Euthanasia in elephants

The use of injectable euthanasia agents is the most rapid and reliable method of performing euthanasia. It is the most desirable method when it can be performed without causing fear or distress in the animal (AVMA, 2007). Following should be considered while administering the euthanasia agent (Anon, 2005).

- 1. Procedure is appropriate for the species
- 2. Proper route, dose, and concentration of the agent is ensured
- 3. Whether the procedure would result in fear behavior, pain, struggling, or vocalizations
- 4. Unconsciousness is rapidly achieved following administration of euthanizing agent
- 5. Personnel carrying out the procedure has appropriate technical skills
- 6. The agent is economical.

It is important to ensure that all the procedures involved in the entire operation are carried out following proper review and in the most efficient, ethical and professional manner. The procedure for use of euthanasia in elephants can be narrowed down to two methods; the details are provided as follows:

3.1 Procedure 1

Euthanasia in elephants can be primarily carried out as a 2-stage process involving heavy sedation or anesthesia followed by intravenous injectable pharmaceutical (lethal agent). This procedure is being followed by the BIAZA and has been recommended by American Association of Zoo Veterinaries and Debra Bourne, Senior Veterinary Editor, Wildlife Information Network, London, UK.

It includes administration of sufficient sedative or anesthetic agent (Xylazine hydrochloride/ Etorphine hydrochloride) to induce recumbency and unconsciousness. Once the animal is recumbent, 40-60 mg/kg of potassium chloride can be administered intravenously, to induce cardiac arrest (BIAZA, 2006; AAZV 2006 and AVMA 2007).

3.1.1Choice of drug

Etorphine (narcotic) is the drug of choice for immobilizing free ranging wild elephants for full recumbent anesthesia. In addition, carfentanil (narcotic) as well as sedative/ hypnotics such as xylazine hydrochloride also have been used successfully (Kock et al., 1993). In captive elephant an effective and humane method involves the administration of a recumbency-inducing does of xylazine hydrochloride followed by the intravenous administration of potassium chloride at 44-60 mg/kg body weight. It is important that the death of the animal is verified after euthanasia and before disposal of the animal, since an animal in deep narcosis following administration of an injectable may appear dead, but might eventually recover.

Potassium chloride is an acceptable euthanasia substance only when administered to deeply anesthetized animal intravenously or intracardially. The potassium ions are cardio toxic and rapid intravenous or intracardiac administration causes cardiac arrest. Residual tissue concentration of general anesthetics after anesthetic induction has not been documented. Though no scavenger toxicosis have been reported with potassium chloride in combination with a general anesthetic, proper carcass disposal should always be attempted to prevent possible toxicosis by consumption of a carcass contaminated with general anesthetics (AVMA, 2007). The advantage of using potassium chloride is that it can be easily acquired, transported and mixed in the field.

3.1.2Procedure 2

Euthanasia may also be achieved using barbiturate overdose AAZV, 2006. Barbituric acid derivatives usually Sodium pentobarbital in combination with local anesthetic agents is an effective euthanasia agent. It induces rapid euthanasia when given intravenously/ intracardially and leads to death by severely depressing the medullary respiratory and vasomotor center, when administered at high doses. Superficial veins used for venous access include the auricular, cephalic (proximal, medial foreleg) or saphenous (lower, medial hind leg) vessels. Because auscultation of the heart is frequently difficult in large elephants, cardiac monitoring and

determination of death can be determined by the palpation or through ultrasound imaging of the superficial arteries. (AAZV, 2007)

A primary advantage of barbituric is the speed of action as well as it induces euthanasia smoothly with minimal discomfort to the animals. As these drugs have to necessarily administered intravenously, each animal needs to be restrained prior to administration of drug and requires trained personnel. These drugs also tend to persist in the carcass and may cause sedation or even death of the animal that consume the body. Animals euthanized with any barbiturate must therefore be properly disposed off because of the potential for secondary toxicity to potential scavengers.

4. Guidance document on euthanasia

A number of guidance documents on euthanasia prepared by various national and international agencies are available. (See Box)

- 1. American association of Zoo Veterinarian (AAZV), 2006 Guidelines on Euthanasia of nondomestic animals. 111 pp.
- 2. British and Irish Association of Zoos and Aquariums (BIAZA), 2006. Management Guidelines for the Welfare of Zoo Animals (Elephants) 2nd ed. (Incorporating BIAZA's Policy statement and policy document on the management of elephants). 114 p. http://wildlife1.wildlifeinformation.org/000ADOBES/Elephant/D307 BIAZelephant.pdf
- 3. The American Veterinary Medical Association (AVMA), 2007. Guidelines on Euthanasia (Formerly the Report of the AVMA Panel on Euthanasia) 39 pp. http://www.avma.org/issues/animal_welfare/euthanasia.pdf
- 4. IUCN (2002). Guidelines for the Placement of Confiscated Animals. Prepared by the IUCN/SSC Re-introduction Specialist Group. IUCN, Gland, Switzerland and ERWDA, Abu Dhabi, UAE. 24 pp. http://www.iucnsscrsg.org/images/EnglishConfGlines.pdf
- 5. CPCSEA Guidelines for Laboratory Animal Facility. Issued by the Committee for the purpose of control and supervision of experiments on animals, Tamil Nadu, India. 36 pp. http://envfor.ni c.in/divisions/awd/cpcsea_laboratory.pdf

References

Anonymous. (2005)). Humane euthanasia of animals.

http://www.agrosecurity.uga.edu/annexes/Annex/Annex05_Euthanasia.p

(Accessed December 2007)

Debra Bourne. Euthanasia of Elephants (Disease Investigation & Management- Treatment and Care). http://wildlife1.wildlifeinformation.org/S/00Man/VeterinaryTechniques/ElelndTech/Ele_Euth.htm (Accessed on December 2007)

Kock, R.A., P. Morkel, and M. D. Kock. (1993). Current immobilization procedures used in elephants. In: Flower, M.E. Editor: Zoo and Wild Animal Medicine: Current Therapy. Ed 3, Philadelphia. WB Saunders, pp 436-441.

Guidelines for care and management of captive elephants

Ministry of Environment & Forests Project Elephant No 9-5/2003-PE dated 8-1-08

To

The CWLW (All States/UTs)

Sub - Guidelines for care and management of captive elephants

Asian elephant has been accorded highest protection by listing them in Schedule I of the Wildlife (Protection) Act 1972 , Ministry is quite concerned about its protection , care and management . It may be recalled that Ministry had constituted an expert committee under the Chairmanship of Mr S C Dey , EX ADG (WL) in the year 2003 to study the status of elephants in India . The Committee submitted its report in 2004. The Committee also has given several recommendations for care and general welfare of captive elephants. Ministry vide letter no 9-5/03-PE dated 1.6.2005 had requested all CWLWs for action on following points:

- 1. Need for framing special rule / guidelines for management & care of captive elephants on lines of Kerala.
- 2. Need for improving training facility for mahouts & elephants.
- 3. Need for improving working condition of mahouts including wages / salary.
- 4. Need for better vet care for captive elephants.

5. Need for enforcing the legal provisions particularly for ownership and prevention of cruelty.

However, Ministry has not received any feedback from any of the State / UT of the action initiated on above.

The matter was discussed in detail with CWLWs of the States having major population of captive elephant and it was decided that till states formulate their own Rules , Central government should consider issuing a guideline laying down norms for transportation , housing , feed , vets care and other norms for the states to follow . Accordingly a detailed guidelines for the care and management of captive elephants is being circulated . It is requested to ensure its implementation in letter and spirit.

Encl. As above

Yours faithfully (A N Prasad)

IGF &

Director (PE)

Copy to - IGF (WL) / MS , CZA/ Director , WII , Dehradun for information and necessary action.

Guidelines for care and management of captive elephants

Ownership certificate

- 1.All States / UTs would carry out a fresh survey of the captive elephants in their territory within a period of six months and report the number to the Ministry. All the captive elephants shall be microchipped for which chips have been provided in adequate numbers to the states /UTs. Fresh ownership certificate should be issued in the form annexed for a period of five years and should be renewed every five years in case there is no violation of the norms to be followed.
- 2.Illegal elephants i.e those which have not been declared under the declaration of the Wild life Stock Rules 2003 or are found without valid documents will be confiscated.
- 3.It would be mandatory for the owners to declare in writing in advance to the nearest Divisional Forest Officer or to the authorized officer by the state government of the pregnancy of the female elephants in order to get fresh ownership certificate of the calf . The certificate would be issued to the calves of the legal cows only after physically ascertaining that they are genuine offspring or after getting the DNA test done.

Transportation of elephants

- 1.For transportation of elephants , necessary permission from CWLW or any officer authorized by the government in this behalf shall be obtained as per section 48 A of the WP Act 1972.
- 2.A valid health certificate from a veterinary doctor to the effect that the elephant is fit to travel by raid or rail, as the case may be, and is not showing any sign of infectious or contagious disease shall be obtained.
- 3. In the absence of such certificate, CWLW shall not give permission for transport.

- 4.Permission, if any, should be given for transport to a particular destination and for a fixed period. It would be incumbent for the owner to bring back the elephant to the place of residence within this period.
- 5.Before the issue of transport permit, CWLW or the authority issuing the permit would obtain no objection from the CWLW of the state where it is to be transported about the availability of the adequate housing facility at the place where it is to be kept.
- 6.It will be mandatory for the owner to inform the CWLW of the state within 30 days where it has been transported .
- 7.Except for return journey, no permission for the further onward transport of the elephant to other states will be given by the CWLW of the state where it is in transit.
- 8.In case any captive elephant is found in any state without valid transport certificate, it is laible for confiscation.
- 9.CWLWs may consider banning of captive elephants entry in Municipal limits under sec 40 (2).

Norms and Standards for Transportation

- (d) The elephant shall be properly fed and given water before loading;
- (e) Necessary arrangements shall be made for feeding and watering the elephant en route;
- (f) No elephant shall be made to walk for more than three hours at a stretch;
- (g) While transporting elephants by walk during nights, two prominent reflectors shall be placed at the front and hind portion of the elephant;
- (h) No elephant shall be made to walk more than 30 kms a day and any transportation for more than 50 kms shall be carried out in a vehicle;
- (i) Trucks with length less than 12 feet shall not be used for carrying elephants except calves (height below of and 1.59 m)
- (j) One truck shall not be used to carry more than two weaned calves (height below 1.50 m) or one elephant with one unweaned calf or one adult/sub-adult elephant (height above 1.51 m);
- (k) At least 12 hour rest should be allowed to elephants for every 12 hours of journey by trucks.
- (1) Cow elephants in advanced stage of pregnancy shall not be transported by trucks;
- (m) While transporting elephants by rail, an ordinary goods wagon should not carry more than three adult elephants or six calves on broad gauge, or not mort ha two elephants or three calves on meter gauge, or not more than one adult elephant or two calves on narrow gauge;
- (n) While transporting elephants by truck or train, care shall be taken to maintain constant speed avoiding jerks and sudden stops and reducing affects of shocks and jolts to the minimum;
- (o) Each truck or wagon carrying elephant should have at least two attendant mahouts;
- (p) Sedatives, if necessary, shall be used to control nervous or temperamental elephants only as prescribed by the veterinary doctor.
- (q) Vehicle breakdown is one of the most common problem contributing to unsuccessful translocation. Therefore it should be ensured that vehicle is in order and a trained mechanic with tool must accompany the vehicle. Vehicle must have drainage facility to keep it dry and must have a water storage facility.

Housing of Elephants

- (a) The owner shall provide a stable (tethering place) in a clean and healthy environment with sufficient shade to keep elephants during its rest period;
- (b) Each elephant must be ensured a minimum floor area as specified below:-
- (i) Weaned Calf (height below 1.50 m)

5m x 2.5m

(ii) Sub-adult elephant (height 1.50 m to 2.25 m)

7m x 3.5m

(iii) Adult elephant (height above 2.25 m) and

Cow elephant with unweaned calf

9m x 6m

- (c) In the case of covered sheds, the height of the structure shall not be less than 5.5m;
- (d) Corrugated iron sheets or asbestos when used for roofing of elephant stables shall be covered with cooling materials like gunny bags, grass, cadjan leaves etc.

Care of Elephant

- (a) The mahout shall ensure that the elephant gets a thorough bath every day;
- (b) If the elephant is found sick, injured, unduly stressed or pregnant the mahout shall report the condition to the owner, who in turn shall consult a Veterinary Doctor for providing treatment expeditiously;
- (c) Routine examination including parasitic checks shall be carried out regularly and preventive medicines including vaccination be administered at such intervals as may be prescribed by the Veterinary Doctor;
- (d) The owner shall arrange for medical check-up of the mahout responsible for upkeep of the elephant at least once in two years to ensure that they do not have any diseases, which may infect the elephant;
- (e) The organizers of festivals where elephants are used shall submit in writing the programmes with details to the station house officer and the Range Officer having jurisdiction over the area, who in turn shall ensure the implementation of the provisions in these rules;
- (f) The owner shall inform within 24 hours, to the Chief Wildlife Warden or the nearest forest officer, the cases of attack of anthrax, rinderpest, hemorrhagic scepticemia, surra or any other contagious diseases and shall follow the instructions issued by the authorities regarding the treatment of the animal or disposal of the carcass. The Chief Wildlife Warden or an officer authorized by him shall ensure proper veterinary assistance and advice;
- (g) The owner shall obtain prior permission of the Chief Wildlife Warden or the officer authorized by him before undertaking distortions, sterilization, vasectomy, tubectomy or any other population control measures for the elephant and shall ensure the assistance of a competent veterinary doctor for these measures;
- (h) The elephant showing symptoms of musth shall be got examined by a Veterinary Doctor;
- (i) No drugs or intoxicants shall be used to suppress musth except on a written prescription by a Veterinary Doctor;
- (j) The owner of the elephant shall ensure that in case of musth, the elephant is secured properly and does not become a hazard to the public at large;
- (k) An elephant in musth shall not be put to any work;

- (1) No owner shall put to work, any elephants having pregnancy of 12 months or above, or any cow elephant having a sucking calf of age below 6 months, or any elephant of height below 5 feet;
- (m) No owner shall permit the use of nylon ropes or chains/hobbles with spikes or sharp edges for trying the elephants;
- (n) Weight of the chains and hobbles shall commensurate with age and health of the elephant;
- (o) No owner shall permit any type of harness which may expose the back or other sensitive organs of the elephant to pain and injury;
- (p) No owner shall permit his elephant to be trained by a trainer who is not approved by the Chief Wildlife warden or the officer authorized by him for the purpose;
- (q) The owner shall report within 24 hours, to the Chief Wildlife Warden or to the officer authorized by him, the death of an elephant and the tusks, if any, shall be declared within one week to the Chief Wildlife Warden for obtaining Ownership Certificate;
- (r) The owner shall get the postmortem examination of the elephant done by a veterinary doctor and shall submit the report to the Chief Wildlife Warden or the officer authorized by him within 15 days of the death.

Feeding of Elephants

- (a) The owner or the person who is managing the elephant on contract or the person who has taken the elephant for own purpose shall ensure timely supply of wholesome feed with variety in required quantity to each elephant. Green fodder shall be supplemented by ration as prescribed by veterinary doctor;
- (b) The minimum feed supply for elephant shall be as follow:

Height of Elephant

Below 1.59 m (weaned calf)

1.50 m to 1.80 m

Not less than 100 kg

Not less than 150 kg

Not less than 200 kg

Not less than 200 kg

Not less than 250 kg

(or 5% of its body weight)

- (c) Supply of sufficient quantity of succulent food to the elephant shall be ensured during hot climate;
- (d) The owner or contactor or hirer of the elephant shall provide sufficient potable drinking water to the elephant, preferably from a river or any other soure of running water.

Work Load of Elephant

(a) The scale of load including gears, riders and materials for the elephant shall be as follow:

Height of elephant Load

Below 1.50 m Not to be used for carrying load.

1.50 m to 1.80 m Not exceeding 150 kg (to carry only fodder

and trainer)

1.81 m to 2.25 m Not exceeding 200 kg

2.26 m to 2.55 m Above 2.55 m Not exceeding 300 kg Not exceeding 400 kg

- (b) The load scale shall be reduced by 50% in hilly or other difficult terrain;
- (c) The elephants of height below 2.10 m shall not be deployed for logging operations;
- (d) The elephants of height from 2.10 m to 2.25 m shall not be used for dragging timber logs exceeding 750 kg in weight;
- (e) The elephants of height above 2.25 m shall not be engaged for dragging logs exceeding 1000 kg in weight;
- (f) Ill-designed logging harness such as exposing elephants back bone and chest to extreme strain and injuries, using tusks and jaws regularly for dragging timber logs, timber hauling over steep areas or rocky areas etc. shall not be done.

Retirement of Elephants

- (a) An elephant shall normally be allowed to retire from its work on attaining an age of 65 years;
- (b) Healthy elephants above 65 years of age shall be allowed to be put to light work under proper health certificate from the veterinary doctor.

Records to be kept

- (a) Every owner shall maintain the following records and registers in respect of the elephant in the form given in appendix-II and such records and registers shall be produced before the officers authorized by Government in this behalf for inspection at such time as may be called for.
- (i) Vaccination record.
- (ii) Disease and treatment record.
- (iii) Movement register.
- (iv) Feeding register.
- (v) Work register.

Cutting Tusks

- (a) The owner of the tusker shall apply for permission of the Chief Wildlife Warden or the officer authorized by him in this behalf, for cutting or shaping the tusk through a letter sent by registered post, including the location where it will be done and the name of the competent person who would perform the operation at least one month in advance;
- (b) The Chief Wildlife Warden shall issue the permission within three weeks to carry out the operation in the presence of an officer not below the rank of Forest Range Officer or Forest Veterinary Officer or Assistant Forest Veterinary Officer as instructed by the Chief Wildlife Warden;
- (c) The authorized officer shall report to the Chief Wildlife Warden, the details of the cut portion such as, length and weight of the tusk;
- (d) In case permission is not granted, the owner shall be intimated of the reason for rejecting the request in writing;

(e) The Chief Wildlife Warden, based on a written request with the details shall issue permit to the owner for keeping the cut tusks in accordance with the provisions of the Act.

Acts which are tantamount to cruelty to elephants:- The following acts shall be considered as acts of cruelty to elephant and is prohibited:-

- (a) beating, kicking, over-driving, over-loading, torturing or treating any elephant so as to subject to it to unnecessary pain or suffering, or being an owner permitting, any elephant to be so treated;
- (b) employing in any work or labour or for any purpose, any elephant which by reason of its age or disease, informity, wound, sore or other cause, if unfit to be so employed, or being owner permitting any such elephant to be employed;
- (c) willfully and unreasonably administering any injurious drug or injurious substance to an elephant or uses drugs or intoxicants to control elephants particularly to suppress musth without proper veterinary advice;
- (d) conveying or carrying whether in or upon any vehicle or not, an elephant, in such a manner or position as to subject it to unnecessary pain or suffering or cause accident;
- (e) keeping or confining an elephant, in any cage or receptacle, which does not measure the specification given in rule 4;
- (f) keeping for unreasonable time, an elephant chained or tethered upon an unreasonable short or unreasonably heavy chain or cord;
- (g) using an elephant for drawing any vehicle or carrying any load, more than nine hours a day or for more than five hours continuously without a break or rest for the elephant or exposes the elephant to hot climatic conditions without ensuring enough succulent food and electrolytes;
- (h) failing to provide an elephant, with sufficient food, drinking water or shelter;
- (i) abandoning an elephant in circumstances, which will render it to suffer pain by reason of starvation or thirst;
- (j) offering for sale any elephant, which is suffering from pain by reason of mutilation, starvation, thirst, over-crowding or other ill treatment;
- (k) not providing adequate veterinary care to a sick, injured or pregnant elephant;
- (l) cutting the tusks of a bull elephant too short so as to expose horn cord/pulp;
- (m) forcibly weaning away an elephant calf below 2 years of age from its mother;
- (n) using heavy chains and hobbles with spikes or sharp edges or barbed wires for tying elephants:
- (o) using "peti" (belly band) on cow elephants in advanced stage of pregnancy;
- (p) using pad and Nundah of improper size on working elephant exposing its spinal cord to injuries;
- (q) marching a sick, injured to or pregnant elephant or a young calf over a very long distances or for a long duration at a stretch;
- (r) marching an elephant over tarred roads or otherwise, during hottest period of the day and for a long duration at a stretch without rest for religious or any other purpose;
- (s) transporting elephants on trucks of inadequate size or trucks with uneven floor, or tying them in an improper manner-subjecting them to severe jerks during jouney by truck:

- (t) transporting elephants in trucks for over 12 hours at astretch;
- (u) transporting elephants through any conveyance without making arrangement for adequate fodder and drinking water during the journey;
- (v) carrying load on an elephant without proper pad;
- (w) making an elephant carry load unevenly balanced on its back;
- (x) making the elephant to stand in scorching sun for long duration, or put the ceremonial gears or decoration for unreasonably long duration, or bursts crackers from or near the elephants for ceremonial purpose;
- (y) using an elephant in such a manner so as to cause any injury, over-stress or strain to the elephant for tourism purpose;
- (z) using an elephant for sports and games such as tug-of-war, foot ball etc. in such a manner so as to cause over stress or strain to the elephant.

APPENDIX II FORM FOR CERTIFICATE OF FITNESS TO TRAVEL ELEPHANTS

(This certificate should be completed and signed by a Veterinary Doctor)
Date and Time of Examination
Number of Elephants
Name of Elephants
Age/Sex
Number of Cages
1. That, at the request of (consignor)
above mentioned elephants in their traveling cages not more than 12 hours before their
departure.

2. That each elephant appeared to be in a fit condition to travel from the signs of infections or contagious diseases.

- 3. That no cow elephant appeared to be under advanced stage of pregnancy.
- 4. That the elephants were adequately fed and watered for the purpose of the journey.
- 5. That the elephants have been vaccinated.
 - Type of vaccine/s (a)
 - (b) Date of vaccination/s Signed Address

Oualifications

Place: Date:

APPENDIX III FORMS OF RECORDS AND REGISTERS TO BE KEPT 1. Vaccination Record

- (a) Name of the Elephant:
- (b) Sex:
- (c) Age:

Date of		Name of	Due date f	or	Signatur	e of the
Vaccination Vaccination	on	Disease	next Vacc		_	ry Surgeon
						,
		2. Disease	and Treatment	Record		
	of the Elepl	hant:				
(b) Sex:						
(c) Age:						
Date of	History	Description	Diagnosis Trea	atment	Prevention	Signature of
Treatment		by Veterinary			Measure	Veterinary
		Surgeon				Surgeon
(a) Na (b) Se	nme of the I		Iovement Registe	er		
	x:		Iovement Registe	er		
(b) Se	x: ge		Iovement Registe			Signature of the Mahout
(b) Se (c) Ag	x: ge	Elephant:	_		t	_
(b) Se (c) Ag	Place	to Move Ending	Tiı 	me Endii	t	_
(b) Se (c) Ag Date	Place Starting	to Move Ending 4.	Starting	me Endii	t	_
(b) Se (c) Ag Date	Place Starting	to Move Ending 4.	Starting	me Endii	t	_
(b) Se (c) Ag Date	Place Starting ame of the Hax:	to Move Ending 4.	Starting	me Endii	t	_
(a) Na (b) Se (c) Ag (d) Ra	Place Starting ame of the Hax:	Elephant: to Move Ending 4. Elephant:	Starting	me Endii	t	_

(c) Age:(d) Admissible of	quantum of work:		
Date and Weather	Type of Work	Duration	Signature of Mahout
		From – To	

(a) Name of the Elephant:(b) Sex:

CONSTITUTION OF STEERING COMMITTEE

No. 2-7/98- PE Government of India Ministry of Environment & Forests Project Elephant

Paryavaran Bhavan, CGO Complex, Lodhi Road, New Delhi. Phone/Fax No. 24360957 E-mail: gajendra@nic.in Dated: 26.12.2005

OFFICE MEMORANDUM

Subject: Constitution of the Steering Committee of Project Elephant

In supersession of this Ministry's Office Memorandum No 5-4/00 P.E dated 18.2.2002 the Steering Committee of Project Elephant is reconstituted as helow:

1.	Union Minister of Environment & Forests :	Chairman
2.	Secretary (Environment & Forests) :	Vice Chairma
3.	Director General of Forests & Special Secretary:	Member
4.	Additional Director General of Forests(Wildlife):	Member
5.	Joint Secretary & Financial Adviser :	Member
6.	Dr. Ajay Desai :	Member
7.	Sh.M.K. Appayya :	Member
8.	Dr. K.C. Panicker :	Member
9	Sh. Subimal Roy :	Member
10.	Dr. S.Vincent :	Member
11.	Sh. Bhupendranath Talukdar	Member
12.	Sh.P.K. Ghosh :	Member
13.	IGF & Director (Project Elephant)	Member Secr

- In addition, Director, Wildlife Institute of India, Director, Zoological Survey of India, Director, Botanical Survey of India, Commissioner (Animal Husbandry), Ministry of Agriculture, Chief Wildlife Wardens or Principal Chief Conservators of Forests of States having Project Elephant would be permanent invitees for the meetings.
- The term of the Steering Committee of Project Elephant will be for a duration of three years from the date of issue of this order.

The Committee will review the implementation of Project Elephant and provide suitable guidance from time to time for which the committee may meet as and when necessary.

Travelling allowance and Daily allowance will be payable to non-official members of the Committee as admissible to Grade I officers of the Government of India.

6,00

(R.B.LAL)
INSPECTOR GENERAL OF FORESTS (WILDLIFE)

Copy forwarded for information and necessary action to:

- 1. PS to Minister (E&F)
- 2. PS to Secretary (E&F)
- 3. All members of the Steering Committee
- All the State Governments/UTs Chief Secretaries and Forest secretaries
- 5. Planning Commission
- PAO, Ministry of Environment & Forests
- 7. Director of Public Relations, Ministry of Environment & Forests
- 8. Principal Chief Conservator of Forests of all States and UTs
- 9. Chief Wildlife Warden of all States and UTs.

(R.B.LALT

INSPECTOR GENERAL OF FORESTS (WILDLIFE)

MINUTES OF THE 11TH STEERING COMMITTEE MEETING OF PROJECT ELEPHANT

The 11th meeting of the Steering Committee of Project Elephant was held on 24th December 2007 in Paryavaran Bhawan, New Delhi under the Chairmanship of Hon'ble Minister of State for Environment and Forests.

List of participants is annexed.

Hon'ble Minister of State for Environment and Forests welcomed all the participants in the meeting and briefly highlighted the progress and major activities made under the project since the last meeting. He cautioned that though the population of elephants is on the rise, the shrinkage of their habitats and discontinuity between vital corridors is a matter of great concern for all of us. If not addressed properly, it can have serious repercussions on the long-term conservation of wild elephants. It was also stressed upon by him that human-elephant conflict is on the rise at many places creating hardships to fringe area communities. We need to develop appropriate strategies for addressing this as well. These two issues require our immediate attention and prioritized action.

Before taking up the discussion of Agenda Items , Director (PE) informed that in the 10th Plan Ministry had sponsored three research projects , out of which two have been completed and requested the permission of the Chair to allow two small presentations by the Principal Investigators of the two completed Research Projects . The permission was given by the Chair and the two PIs namely – Dr K K Sharma from , AAU , Gauwhati and Dr B C Patra from CRRI , Cuttack were introduced.

Agenda Item No. 1

Confirmation of the minutes of the 10th meeting of the Steering Committee.

The minutes of the 10th meeting of the Steering Committee were confirmed.

Agenda Item No. 2

Action taken on the recommendations made in the 10th meeting.

(i) Insurance for crop damages

The Hon'ble Minister informed that Ministry of Agriculture has communicated their inability to include the crop damage under the Agriculture Insurance Scheme but he will take up the matter with Ministry of Finance as the insurance companies are controlled by them. Some of the CWLWs also expressed that they had taken up the matter at state level also but the Companies are not willing. CWLW, Uttrakahnd said that one of the private Comapany is willing but the premium demand is very high and requested Ministry's support for the same. It was decided that other states should also explore this and subject to fund availability, Ministry would consider the request.

(ii) Declaration of elephant reserves

As far as declaration of two ERs in Orissa is concerned, Director (PE) informed that Secretary (E&F) through DO has requested Chief Secretary, Orissa to reconsider the decision. CWLW, Orissa expressed some reservation on the extent of Reserve. It was clarified that Secretary has clearly written that in case state wants to rationalize the boundary, Ministry is willing to consider. It was decided to pursue the matter with the state.

Agenda Item No. 3

ALL INDIA ESTIMATION OF ELEPHANTS (2007)

Hon'ble Minister expressed that though estimation for the current year will take place in NE States in Feb 2008, the trends for the last three censuses are showing a decline in population and thus needs attention of the states. Director (PE) explained the current population trends received from the respective states and said though the Region wise population is showing stable trend, States showing sharp decline in population like Karnataka and Uttarakhand must examine and find reasons why the migratory population are staying back in adjoining states. Mr Subimal Roy, Member suggested that rather than numbers, states should give range along with other details like sex ratio, tuskers populations etc. It was explained by Director (PE) that in respect of most of the states such details are available. The Committee accepted the population estimates reported by the states.

Agenda item No. 4

Agenda items suggested by members of the Steering Committee.

Shri B N Talukdar

Since shri Talukdar was not present, the agenda was not deliberated in detail. CWLW, Assam, however, raised the issue that decision to allow sale and purchase of captive elephants was taken long time back in the steering committee and there is need to allow the same. He also wanted one time relaxation for those who could not declare their elephants in 2003 to declare the same. It was explained by Director (PE) that the matter is under consideration of the Ministry, however Ministry is receiving representation also from various sources on the likely abuse once sale – purchase is reopened and therefore members can suggest safeguards. It was suggested by Director (PE) that till it is allowed, CWLWs can consider providing gainful employment to owners of captive elephants in eco tourism as initiated by CWLW, Assam.

Shri P K Ghosh

Since Shri Ghosh was not present, it was decided to send him the comments received from CWLW, Uttarakhand for his perusal.

Shri K C Panicker

The need for training to mahouts and vets was well appreciated , however Director (PE) informed that Vets training is being conducted every year in Assam and Kerala . As far as mahouts training is concerned , CWLWs of these two states would be requested to arrange the same for which facility is available in the states. Director (PE) also informed that for specialized treatment of elephants , ministry is pursuing the matter with two vets colleges – one each in Kerala and Assam to declare them as centre of excellence so that adequate infrastructure and capacity is built in these Centres.

Shri M K Appayya

The proposal of Mr Appayya to involve non – officials members more effectively in the implementation of the scheme was reiterated by Dr Panicker in the meeting. It was explained by Director (PE) that till now their services was being taken on need based approach, however Ministry has received guidelines from Planning Commission to involve experts, non – officials in the Planning and monitoring of the schemes. It was agreed to involve them in the process.

Dr K K Sharma from , AAU gave a presentation on main findings of the study done on health care and management protocol for captive elephants and submitted the Report to the Hon'ble Minister. The report was appreciated by all present and it was decided to get the Report widely circulated for implementation.

Dr B C Patra fron CRRI, Cuttack also gave a presentation on the main findings of the research project given to them for development of long awned rice varieties and paddy storage structure. It was decided to carry out extension services under eco-development activities and also to approach Ministry of Agriculture for extension services.

The meeting ended with Vote of thanks from the chair.

Major achievements for the year 2007-08

Creation of elephant rehabilitation centre(s)

Approval and funding provided for creation of one new elephant rehabilitation centre at Kalesar in Haryana and for upgradation of two existing elephant camps at Kappukadu in Kerala and Dhenkanal in Orissa for keeping seized / abandoned elephants.

New Elephant Reserve

Govt of Arunachal Pradesh notified the "Southern Arunachal Elephant Reserve "having an area of 1957.5 sq km . Kamlang WLS (128.15~sq~km) and Namdhapa NP (250.00~sq~km) forms part of the ER

Permission for more Elephant Reserves (ER)

Permission of central government accorded for creation of two more Reserves in Chattisgarh namely – Lemru ER and Badalkhol - Tomarpingla ER bringing the no of proposed ERs to 6.

Estimation of elephant population

All India Elephant census done every 5 years – every census has shown increasing trend and figures for last three census are as follows:

Year Estimated Number

Year	Estimated
1993	25,604
1997	25,877
2002	26.413

For 2007, census complete except NE states. The population for these states in 2002 was 17,422, in 2007 the number is between 18663-18713 thus showing increase by more than 1,000. Census in NE States completed in February 2008 and results are being analyzed.

New Guidelines

Guidelines issued for upkeep and maintenance of captive elephants and for euthanasia of elephants .

Centre(s) of excellence for elephant health care

College of Veterinary Sciences, AAU, Guwahati and Centre for studies on elephants, Kerala Agriculture University, Thrissur declared as centre of excellence for North East and Southern states respectively for elephant treatment.

STUDIES/RESEARCH

During the 10th Plan following research / studies were sanctioned and completed under the PE Scheme:

- 1. Anatomical studies on the Asian elephants of Assam Assam Agriculture University (AAU), PI- Dr Munmun Sharma period 2003-04 to Mar 20008. Cost Rs 4 lakh.
- 2. Preparation of health care and management protocol for the captive elephants of NE India AAU , PI Dr K K Sharma period 2003-04 to Sept 2007. Cost Rs 4.50 lakh.
- 3. Development of long awned rice varieties and paddy storage structure CRRI , ICAR , Cuttack , PI Dr B C Patra period 2003-04 to Sept 2007. Cost Rs 7.12 lakh .