

ANNUAL PLAN OF OPERATIONS OF

"Kumbhalgarh Wild Life Sanctuary"

For The Year 2007-2008

1. NAME OF SANCTUARY:

KUMBHALGARH, WILD LIFE SANCTUARY, H.Q. SADRI,
DISTRICT- PALI.

2. LEGAL STATUS (DATE OF ISSUE OF INITIAL NOTIFICATION AND FINAL NOTIFICATION :

The forest areas of Aravali hills around Kumbhalgarh Fort and Ranakupur temple was declared as Wild Life Sanctuary in 1971 vide Government of Rajasthan Notification No. F/C (2) Rev./ F/ 7 dated 13th July, 1971 under the provision of Section 5 of the Rajasthan Wild Animals & Birds Protection Act, 1951 (Rajasthan Act No. 13 of 1951), and was repealed under proviso of section 26-A of Wild Life (Protection) Act 1972 by Collector Udaipur, Rajsamand & Pali in their revenue jurisdiction, since the area of Wildlife Sanctuary Kumbhalgarh is confined in revenue limits of these three districts of the state. The details of the notifications are as following:

- (i) Collector, Udaipur wide notification number F.39/1(4)Raj/96/2184, Dated 19th August, 1998.
- (ii) Collector, Rajsamand wide notification number F.12/17(8)Revenue/ 97/1369-1380, Dated 17th August, 1998.

- (iii) Collector, Pali wide notification number F.8/1(L)Revenue/98/3771, Dated 21st August,1998.

The total area of the sanctuary 610.528 Sqm, spread over three districts namely Udaipur, Rajsamand and Pali. District wise & Legal status wise details of area is as follows;

(I) DISTRICT WISE AREA:

(Area in Hectares)

S. No.	District	R.F.	P.F.	Total
1.	Pali	34174.01	289.08	34463.09
2.	Rajsamand	13765.92	745.93	14511.85
3.	Udaipur	5906.75	6171.11	12077.86

(II) LEGAL STATUS WISE AREA:

(Area in Hectares)

S No.	Total Area of Sanctuary	R.F.	P.F.	Unclassified
1.	61052.80	60017.98	1034.82	-

3. Number of Villages within PA:

As many as 24 villages are situated inside the Kumbhalgarh wildlife sanctuary details of which are as following:

Village inside the sanctuary

Range Kumbhalgarh (District: Rajsamand)	Kotra (Pokaria), Roopnagar, Boitara, Nadiya, Miyawa, Charan Beri, Thali, Pada ka Padav,	10
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	Sat palia, Bhagwanpura	
Range Bokhada (District: Udaipur)	Majwara, Kura, Kagarwadra, Sili, Panchbor, Balia, Nani, Paba, Pipalsari, Mal	10
Range Sadri (District: Pali)	Pipala, Korwa	2
Range Desuri (District: Pali)	Kharni Takri, Garasia Colony	2
	TOTAL	24

The social & cultural structure of the society as well as the tradition and custom of the inhabitants of these villages are almost identical. Many villages within the sanctuary are tribal dominated. Bhil, Bhil Meena, Garasia are main tribes. Rajputs, Rebari, Meghwal etc. are also present in good numbers in many villages. Most of villages are purely inhabited by one or two tribes, but few have more than two tribes. Each village has several helmets called "Phalas". These are inhabited by a single or multiple clans.

4. STATUS OF SETTLEMENT OF RIGHTS :

The rights of villagers in the sanctuary area have been settled earlier for the Reserved forests Blocks and later on all these rights have again been allowed as such by the Collector, Udaipur, Rajsamand & Pali in their respective revenue jurisdiction under the provision of Section 19-25 of Wild Life (Protection) Act, 1972 wide notifications mentioned in para 2 above. However, in compliance of orders of Supreme Court of India in IA No 548 and orders dated 11.05.2001 in

respect of I.A. No 617, 619 the villagers are not allowed to exercise existing rights in Sanctuary area.

5. MANAGEMENT PLAN (2003-2004 TO 2012-2013) :

The Management plan of the Sanctuary for the year 2003-2004 to 2012-13 has been prepared as per new guidelines received from GOI and approved by the Chief Wild Life Warden Rajasthan wide order No F () Dev/CWLW/ 1876-81 dated 2nd January,2004.

6. CENSUS (POPULATION FIGURES OF IMPORTANT ANIMALS DURING LAST FIVE CENSUS) :

As per the census conducted during previous years the estimated figure of the important animal species in the sanctuary are as follows:

S. No.	Name of Species	No. of Animals During the Year				
		2002	2003	2004	2005	2007
1.	Leopard	78	81	82	82	87
2.	Bear	135	147	151	162	165
3.	Hyena	133	133	136	119	144
4.	Jackal	295	267	326	300	306
5.	Four Horned Antelope	45	107	111	106	118
6.	Sambar	102	121	127	122	140
7.	Cheetal	*	*	*	*	8
8.	Blue Bull	1243	1007	1001	931	1148
9.	Chinkara	16	16	17	10	18
10.	Wild Boar	258	359	363	223	249
11.	Wolf	33	38	59	47	53
12.	Fox	47	47	66	27	69
13.	Porcupine	75	84	86	69	89
14.	Civet	48	42	44	42	43

15.	Jungle Cat	68	63	64	65	78
16	Grey Jungle Fowl	1042	1364	1457	1430	1561
17.	Aravalli Red Spur Fowl	*	*	*	*	121
18.	Langoor	4742	6568	6774	4894	5579
19.	Mongoose	160	157	171	149	179
20.	Crocodile	16	6	6	13	*
21.	Hare	*	*	266	147	183
22.	Monitor Lizard	*	*	48	14	21
23.	Peafowl	*	*	1230	1736	1810
24.	Eagle	*	*	22	*	16
25.	Owl	*	*	25	*	55
26.	Green Pigeon	*	*	118	327	341
27.	Rattle	*	*	2	1	1
28.	Whitebuild Black Tit	*	*	16	*	*
29.	Saras Crane	*	*	*	52	44
30.	Koot	*	*	*	*	2
31.	Long Billed Vulture	*	*	*	*	41
32.	Shikra	*	*	*	*	11
33.	Caracal	*	*	*	1	*
34.	Python	*	*	*	*	9
35.	Cobra	*	*	*	*	3
36.	Desert Cat	*	*	1	*	*

*Water-hole census was not conducted in the year 2006.

* Not included in the Census of particular year.

7. **ANIMAL FOUND IN THE SANCTUARY :**

The area of wild life sanctuary Kumbhalgarh provides an ideal habitat Herbivores. Carnivores & variety of arboreal & water birds. The major animals found in the Sanctuary are Leopard, Sloth Bear, Striped Hyaena, Jackal, Four Horned

Antelope, Sambar, Blue Bull, Chinakara, Wild Boar, Wolf, Fox, Porcupine, Civet, Wild Cat, Grey Jungle Fowl, Langoor, Mongose, Indian Hare, Crocodile etc. Desert Cat & Whitebuild Black Tit are the species reported first time in 2004 census carried out in Sanctuary area.

Due to heavy biotic interference and cattle pressure of surrounding villages the habitat of sanctuary is getting deteriorated. However few closures out of available funds have been created at different place but they are not enough to bring the desired results. Panther is at present at the apex of the biological pyramid of the Sanctuary. The past glory of Sanctuary can be restored if effective protection is provided, grazing pressure is reduced and few more herbivores are added in the Sanctuary area.

8. **TYPE OF FOREST WITH MAJOR SPECIES :**

The floral constituents of the Kumbhalgarh Wild Life Sanctuary are mostly edapho-climate climax type forests. As per the Champion & Seth's classification the forests of this sanctuary fall under the II category of Tropical Dry Deciduous forests, which can be sub classified as:

Group 5 Tropical Dry deciduous forests

Sub group 5 B - Northern tropical dry deciduous forest.

C₂ - Northern tropical dry mixed deciduous forest.

Following degraded stages of tropical dry deciduous forests exist in the sanctuary.

DS₁ - Dry deciduous scrubs

DS₁ - *Anogeissus pendula* scrub

E₂ - *Boswellia* forests

E₅- *Butea* forest

E₈- Saline Alkaline Scrub savannah

E₉ - Dry Bamboo Brakes

Dhok (*Anogeissus pendula*) is mostly gregarious in the sanctuary area, found mixed with *A. latifolia*, Salar, Godal, Semal, Saijana, Khirni, *Anogeissus seresia*,

Umb, Khair, Ber, Aritha, Kadaya, Jhinjha, Kemda, Ronjh, Timru, Kumtha, Pipal, Bargad, Tambolia, Bahera, Barna, Dhaman, Ghittor, Gugal, Kolai (*Dichrostachys cinerea*), Neem, Shirdia (*Holoptelia integrifolia*), Kalia, Jamun, Sawan, Rohini, Dhak, Ardu, Gular, Imli, Khajur, Agnia (*Bridelia squamosa*), Vilayati Babul etc.. The undergrowth mainly consists of Jharber, Ardusa, Adhasisi, Dasan, Dhaori, Dholekan, Kadda, Gagan, Frangen, Kanter, Maror phali, Negad, Subpan, Sitraival, Thor, Murali etc.

9. STAFF POSITION :

S. No.	Name of Post	Sanctioned Strength	Posted	Vacant
1.	A.C.F.	1	1	-
2.	Range Officer	5	4	1
3.	Forester	9	6	3
4.	Asstt. Forester	10	6	4
5.	Forest Guard	35	22	13
6.	L.D.C.	1	1	-
7.	Driver	2	1	1
8.	Chowkidar	1	1	-
9.	Class IV	-	-	-
10.	Cattle Guards	18	18	-

10. WILD LIFE TRAINED STAFF :

One Forester posted in the sanctuary has specialized training in Wildlife management from WII, Dehradun. Rest of the staff posted in the Sanctuary is not specially trained in the Wild Life Management. However all the staff personnels are trained in Wild Life Management by the Department during their induction training,.

11. ENTRY FEE CHARGED :

Since Oct., 1999 entry fee is being charged from the visitors as per the orders issued by State Govt. The details of entry fee charged is as following :

S. No.	Particulars	Entry Fee (In Rs.)
1.	Indian Citizen	10.00
2.	Non Indian Citizen	80.00
3.	Students (Indian)	2.00
4.	Bus	100.00
5.	Gypsy / Car / Mini Bus	65.00
6.	Two Wheeler	10.00
7.	Tonga / Auto Drive / Horse	20.00
8.	Cycle Rickshaw	5.00
9.	Cycle	3.00

12. NUMBER OF TOURIST / VISITORS VISITING THE SANCTUARY ANNUALLY AND FACILITIES AVAILABLE FOR TOURISTS:

The details of visitors visited the Sanctuary during the year 2006-2007 and entry fee realized is as following:

Visitors				Revenue realized				
Indians	Students	Foreigners	Total	Entry Fee	Vehicles	Filming	RH & Others	Total
1	2	3	4	5	6	7	8	9
2251	484	1068	3803	108918	38845	1806	18995	165574

The following Forest Rest houses & private boarding & Lodging places exists inside and around the Sanctuary, where visitors can stay, and enjoy watching Wild life besides picturesque Aravalli hill ranges:

S. No.	Name of Rest House	Place	No. of Suits
1.	Forest Rest House	Roopanmata	2
2.	Forest Rest House	Thandi Beri	2
3.	Forest Rest House	Sumer	3
4.	Forest Rest House	Sadri	2
5.	Forest Rest House	Ranakankar	3
6.	R.T.D.C.	Ranakpur	16
7.	Temple Cottage's	Ranakpur	12
8.	Temple Lodge	Ranakpur	500
9.	Temple Lodge	Sumer	50
10.	Temple Lodge	Muchalla Mahaveer	50
11.	Temple Rest House	(Bijapur) Rata Mahaveer	3
12.	Temple Lodge	Rata Mahaveer (Bijapur)	30
13.	Hotel Odhi	Kumbharlgarh	12

13. SHOOTING OF FILMS / DOCUMENTARIES CARRIED OUT DURING LAST FIVE YEARS :

During last 5 years no shooting of films/ documentary have been done in the Sanctuary. However, film shooting is carried out at Kumbhalgarh Fort, which is surrounded all around by the Sanctuary. Kumbhalgarh Wildlife sanctuary has many attractive site suited for film shooting.

14. POSTAL ADDRESS :

Assistant Conservator of Forests,
Wildlife Sanctuary Kumbhalgarh,
H.Q.Sadri
Distt. Pali (Rajasthan)

15. FUNDS PROVIDED UNDER STATE PLAN DURING THE LAST FIVE YEARS :

During last 5 years the funds provided under state plan for development in the Sanctuary are as follows :-

S. No.	Year	Name of Scheme	Amount (Rs. In lac)	Actual Expenditure (Rs. In lac)
1.	2002-2003	State Plan: Maint	2.44	2.44
2.	2003-2004	State Plan: Maint	0.70	0.70
		Raj. Forestry & Bio. Project: Adv. Closure & SMC measures	41.73	41.73
		Forestry Development Project: Maint	0.26	0.26
3.	2004-2005	State Plan: Maint	2.50	2.50
		State Plan:Boundary Pillars, Firelines & Maint of Teerthankar Trail	1.467	1.467
		C.S.S (75% : 25%) : Guzzler (1 No.)	1.00	1.00
		Raj. Forestry & Bio. Project: New Works (1250 Hac)	165.413	165.413
		Committed Works 03-04 (100 Hac)		
		Biodiversity Reserve Closure		
		SMC Structures (13 No)		
		Anicut (1 nos)		
4.	2005-2006	State Plan: Maint	5.25	5.25
		Integrated Forest Mgt. C.S.S (75% : 25%)		
		:Boundary Pillars,	1.08	1.08
		Maint of Teerthankar Trail	0.50	0.50
		Raj. Forestry & Bio. Project: New Works (750 Hac)	91.23	91.23
		Committed Works 03-04 & 04-05 (1750 Hac)	97.77	97.77

		Biodiversity Reserve Closure	21.00	21.00
		SMC Structures (17 No)	7.09	7.09
		Building (1 No)	4.40	4.40
		Maintenance of Fire Lines (12.5 kms)	1.00	1.00
		Infrastructure Development	14.72	14.72
		Integrated Forest Mgt. C.S.S (75% : 25%)	1.45	1.45
		:Creation of Fire Lines (18 kms)		
		Integrated Forest Mgt. C.S.S (75% : 25%)	0.76	0.76
		:Maintenance of Fire Lines (9.5 kms)		
5.	2006-2007	State Plan: RFBP Maintenance (450 Hect.)	8.23	8.23
		Twelfth Finance Commission		
		:Boundary Pillars (412 Nos.)	4.967	4.967
		Integrated Forest Mgt. C.S.S (75% : 25%)		
		Creation of Fire Lines (33.75 Kms)	2.70	2.70
		Maint of Teerthankar Trail	0.20	0.20
		Raj. Forestry & Bio. Project:		
		New Works (450 Hac)	41.94	41.94
		Committed Works 03-04 & 04-05 (1350 Hac)	67.61	67.61
		Ecotourism & Heritage Conservation	1.00	1.00
		SMC Structures (20 Nos)	7.87	7.87
		Anicut Type III (1 No)	5.44	5.44
		Maintenance of Fire Lines (15.5 kms)	1.25	1.25
		Infrastructure Development (5 Nos.)	6.50	6.50

16. FUNDS PROVIDED FOR SANCTUARY UNDER OTHER SCHEME :

Details of funds provided under various schemes during the year 2006-2007 are given below:

S. No.	Name of Scheme	Amount (Rs. In lac)	Actual Expenditure (Rs. In lac)
1.	Compensatory Afforestation: Forestry Works (New Works): 150 Ha.	19.02	19.02

2.	Central Sponsored Scheme (Annexure- F)	28.99	28.28
3.	National Rural Employment Guarantee Programme	45.60	25.67
4.	Funds provided by MLA	4.25	4.25

17. STATUS OF SURVEY AND DEMARCACTION OF THE BOUNDARIES :

The Sanctuary comprises of 35 forest blocks which fall within the limits of Pali, Udaipur and Rajsamand district. The area of forest blocks in the Sanctuary limit have been surveyed and the boundaries demarcated by boundary Pillars / other natural features by the forest settlement officer. There are 35 forest blocks in the Sanctuary with total area of 610.528 Sq. Km. The district wise forest area under Sanctuary has been given in para 2 of this plan.

18. NUMBER OF NATURAL / UNNATURAL DEATH INCLUDING POACHING / ACCIDENTAL DETAILS W.R.T. SCHEDULED ANIMALS REPORTED :

Two cases of unnatural death of Bluebull and one case of accidental death of a Langoor was reported from the Sanctuary area during the year 2006-2007. All three cases were dealt as per the provisions of Wildlife Protection Act. No Case of natural death with respect to scheduled animals was reported from the sanctuary area.

19. FIRE INCIDENTS IN THE SANCTUARY :

Kumbhalgarh Sanctuary is quite prone to fire hazards. Due to deciduous nature of forest leaf fall occurs in December and January. The leaf litter and dried trees makes the Sanctuary susceptible for fire hazard during summer period. February

to June is peak period for occurrence of fire. The details of fire incidences during the year 2005-2006 are as follows :

S. No.	Name of Range	Name of Forest Block	No. of Fire Incidence	Area Effected (In Hectares)
1.	Kumbhalgarh	Kotra	3	60.00
		Dhana	6	220.50
2.	Sadri	Sadari	2	120.00
		Latara	1	50.00
3.	Bokhara	Bhanpura	1	130.00

20. TYPE AND NUMBER OF WEAPONS AND HOW THEY ARE PUT TO USE :

There are three Twelve Bore D.B.B.L. Guns and one revolver provided for the self defence of staff during protection.

21. TYPE AND NUMBER OF VEHICLES AND HOW THEY ARE PUT TO USE AND WHETHER PURCHASED FROM CENTRAL/ STATE FUNDS :

S. No.	Name of Vehicle	No. of Vehicles	Purchased from Central / State Fund	How they are put to use
1.	Jeep (Bolero)	1	C.S.S	Used by the incharge (ACF) of the Sanctuary for protection & inspection.
2.	Jeep (Mahindra)	1	State Plan	Used for protection & and patrolling of Sanctuary area .
3.	Motor	2	Rajasthan Forestry &	Used by the Range

	Cycle		Biodiversity Project / State Plan.	Officers for protection and inspection purpose.
4.	Motor Cycle	5	C.S.S	Used by the Range Officers/ Foresters for protection and inspection purpose.
5.	Canter	1	State Plan	Used for protection & and patrolling of Sanctuary area .

22. NUMBER OF VARIOUS TYPE OF WIRELESS SETS (FIXED / MOBILE / HAND SETS) AND HOW THEY ARE PUT TO USE :

There are 23 Fixed sets,3 Mobile sets and 27 Hand sets available with the staff of WLS for communication purpose, the details of which are as follows:

S. No.	Type of Sets	No. of Sets	Use Place
1.	Mobile Set	1	Fixed in Jeep Of Sanctuary I/C
2.	Mobile Set	1	Fixed in Jeep
2.	Mobile Set	1	Fixed in Canter
3.	Hand Set	1	A.C.F. Sadri
4.	Hand Set	1	Range Officer Bokhara
5.	Hand Set	1	Range Officer Sadri
6.	Hand Set	1	Range Officer Desuri
7.	Hand Set	1	Range Officer Flying Squad.
8.	Hand Set	1	Range Officer Kumbhalgarh
9.	Hand Set	6	Foresters & Guards of range Kumbhalgarh
10.	Hand Set	5	Foresters & Guards of range Sadri
11.	Hand Set	5	Foresters & Guards of range Desuri
12.	Hand Set	5	Foresters & Guards of range Bokhara

13.	Fixed Set	1	ACF Office Sadri
14.	Fixed Set	5	Range Office Sadri and Out posts
15.	Fixed Set	5	Range Office Bokhara and Out posts
16.	Fixed Set	5	Range Office Desuri and Out posts
17.	Fixed Set	7	Range Office Kumbhalgarh and Out posts

23. NO. OF BEATS / SECTION / RANGES :

For the management of Sanctuary the whole area has been divided in the following units :

S. No.	Name of Range	No. of Sections	No. of Beats
1.	Range Bokhara	3	11
2.	Range Sadari	5	5
3.	Range Desuri	5	5
4.	Range Kumbhalgarh	3	13
	Total	16	35

24. HOW OFTEN THE VEHICLES ARE REQUISITIONED BY THE DISTRICT ADMINISTRATION :

Although the vehicles of Wildlife are requisitioned by district administration, but later they on production of Election Commission's and Ministry of Environment & Forests directions in this regard, they are exempted.

25. MAJOR PROBLEMS IN THE AREA :

The major problems of the P.A. are enlisted below:

1. Heavy Biotic pressure from villages situated on the periphery of the sanctuary.
2. Inadequate intelligence information network.
3. Insufficient staff for protection.
4. Lack of awareness about eco-tourism concept & insufficient

interpretation facilities.

5. Lack of essential facilities like availability of drinking water for tourists in the sanctuary area.
6. Higher age group and poor education background of the staff with limited training and technical exposures.
7. Changes in the existing land use pattern in the near vicinity of the sanctuary.
8. Inadequate moisture conservation in the sanctuary area.
9. Lack of scientific information and database.
10. Lack of amenities for staff personals involved in management of Kumbhalgarh Wild Life Sanctuary.

26. TENURE OF LAST 5 INCUMENTS / INCHARGE OF SANCTUARY :

During last 5 years the following officers have worked as a incharge of the Sanctuary.

S.No.	Name of Officer	Rank	Duration
1.	Sh. V.K Salwan	A.C.F	-
2.	Sh. J.S Nathawat	A.C.F	-
3.	Sh. C.P Singh	A.C.F	-
4.	Sh. Lalit Singh Ranawat	A.C.F.	20 June, 1994 to August 2000
5.	Sh. Bhopal Singh Rathore	A.C.F.	1 August 2000 to 31 January,2007
6.	Sh. Kumar Swami Gupta	A.C.F	1 February,2007 to till date

27. ANY OTHER RELEVANT INFORMATION:

Kumbhalgarh Sanctuary makes an ecotone between hilly forests of Aravallis and Thar desert situated in the west. Kumbhalgarh hills acting like a barrier, checking eastward extension of desert. Famous Kumbhalgarh Fort is situated atop of a hill,

is an attraction for tourists. This area is full of historic events. Fort wall is the second largest wall of the world after Great Wall of China.

Kumbhalgarh wildlife Sanctuary has a varied habitat. Diversified fauna and flora is present over here. The Sloth Bear, Leopard, Hyena, Jungle Cat, Four-horned Antelope, Chinkara, Crocodile, Grey Jungle Fowl etc. are important faunal species present in this sanctuary. Kumbhalgarh hills form catchment of many rivers and nallahs. Run off of Kumbhalgarh catchment is drained out by 78 nallahs and ultimately these nallahs join 16 rivers mainly Kot, Sumer, Sukri, Maghai, Lunawa, Mithadi, Jawai, Bhatund, Sai, Satpalia etc. As many as 23 dams including Latada, Sadra, Sonwa, Jawai, Prithvisagar, Sai, Mithdi, Nalwania, Seli, Rajpura, Hariom Sagar, Hemawas, Mandigarh etc. have been constructed on these rivers, originating from Kumbhalgarh hills. These not only provides drinking water to human and bovine population of Pali, Jalore and Jodhpur district but also irrigates 80,000 hectares agricultural land present in these districts.

As many as 24 villages are situated inside the sanctuary whereas 138 villages are on the periphery. Inhabitants of these villages collect MFP from sanctuary area to sustain their livelihood.

Many historical and religious places like Kumbhalgarh Fort, Ranakpur Jain Temple, Muchala Mahavir Jain Temple, Parashram Mahadev Temple etc. are situated inside the sanctuary, which further increase the significance of this sanctuary.

28. DETAILS OF WORKS DONE UNDER C.S.S. IN 2006-2007.

Attached as **Annexure - F.**

WORKS PROPOSED FOR THE YEAR 2007-2008

The details of works proposed for the year 2007-2008 are as follows:

1. **MAINTENANCE OF ASSETS: CREATED DURING PREVIOUS YEARS:**

Kumbhalgarh wildlife Sanctuary has good population of Chowsingha (Four horned Antelope) and Chinkara (Indian Gazella) along with rich floral & faunal diversity of Aravalli hill ranges. Combining together these factors establish the Sanctuary to invite special attention for maintenance of assets created during past (recurring expenditure) as per guidelines issued by Ministry of Environment & Forests along with their letter Number 21-1/2006-WL-1 dated 4th April, 2006. Assets created during previous years under CSS & other development schemes are in urgent need of maintenance and essential repairs to utilize them in welfare of wild animals. Following works are proposed during the plan period:

- (i) Desilting and raising of height of two Anicuts namely sumer & Parashuram Kund is proposed to ascertain the availability of water throughout the year in wildlife dominated areas & especially Indian Wolf inhabiting areas of the Sanctuary. Besides this one open well at Choti Ohdhi to ensure yearlong availability of water to Gray Jungle Fowl & Aravalli Red Spur Fowl needs immediate repairs. Financial assistance of Rs. 5.50 lac is required for the purpose.
- (ii) Repair and maintenance of ACF Head Quarter at Sadri, RFO Quarter at Sadri & Kumbhalgarh, Forester Quarter at Kumbhalgarh & three existing Forest Guard Chowkies at Sadri (Sadri range), Gawar (Kumbhalgarh range), Umarwas (Kumbhalgarh range) of WLS is proposed to ascertain stay facilities to staff personnels involved in protection duties. These existing quarters are in urgent need of repairs as well facilities like toilets, drinking water & electricity/ solar connections. Financial assistance of Rs. 4.70 lac is required for the purpose.

- (iii) Maintenance of 67 Km long existing fire lines in Kumbhalgarh, Sadri, Desuri & Bokhara ranges of WLS to protect the biodiversity of area from fire hazards with an financial outlay of Rs. 5.36 lac .
- (iv) Maintenance and repairs of 20 Km long existing nature trails in parts namely (i) Areth to Thandiberi & (ii) Ranakankar to Malgarh in Kumbhalgarh range of WLS is essential to promote eco-tourism and access to the Sanctuary area. Financial assistance of Rs. 4.00 lac is required for the purpose.
- (v) In order to ascertain the effective protection and to deal with the miscreants the repair and maintenance of Wireless network including purchase of accessories and batteries is essential. This will require a financial assistance of Rs.0.50 lac .
- (vi) Running & maintenance of motor vehicles used in management of Sanctuary will require a financial assistance of Rs.0.75 lac .

2. ENSURING WATER FACILITIES IN SANCTUARY AREA:

Kumbhalgarh Sanctuary makes an ecotone between hilly forests of Aravallis and Thar Desert, situated in the West. The hilly area of Sanctuary besides acting as barrier for checking eastward extension of desert, forms catchment for many rivers and Nallahs. Run off from the hills of Sanctuary is drained out by 78 Nallahs and ultimately these Nallahs join 16 rivers. As many as 23 dams have been constructed on these rivers, originating from Kumbhalgarh hills. The hills have rugged topography and steep slopes, resulting into rapid surface runoff of rain water. As a combined effect of these factor the area of Sanctuary is vulnerable of soil erosion and less of water conservation. Limited availability of water causes acute shortage of drinking water for wild animals during summer month. To improve the water availability and to conserve the soil following action are proposed:

- (i) Construction of 2 Anicuts is proposed at Roopanmata (Beejapur block), and Rangberi (Dhana block) in WLS, on Nallahs having moderate gradient to store water for the yearlong use by wild animals as well to

increase the water regime in downstream. Financial outlay of Rs. 12.50 has been kept for the purpose.

- (ii) Construction of 4 Silt Detection Structures is proposed at Kaneria ki Nal (Sewari block), Peepla (Sewari block), Malni mawa (Beejapur block) and Sadra (Latada block) in WLS in upstream of Nallahas to arrest the fertile soil and to avoid silting of anicuts. Financial assistance of Rs. 4.00 lac is required for the purpose.
- (iii) Construction of 5000 Cumtr Kuccha checkdams in Sadri, Roopnagar, Dhana, Latada forest blocks and in Desuri Range of WLS are proposed with an object to check speed of surface runoff and to check soil erosion with financial outlay of Rs.5.25 lacs.
- (iv) Construction of 12 Gabion Structures in Sewari, Beejapur, Dhana & Latada forest blocks of WLS in upstreams of Nallahas are proposed with an object to prevent soil erosion. Financial assistance of Rs. 3.00 lac is required for the purpose.
- (v) To ensure availability of drinking water for wild animals especially during summer months i.e from April to June on water points in WLS, water is to be transported either by camels & camel carts in Kumbhalgarh range, or by tractor tankers in Desuri range. . Financial outlay of Rs. 0.50 lac is required to transport the water during pinch period.
- (vi) Existing one Canter in WLS is of old model and completed the norms of running as per GOR rules and to be codemned during the year. It requires heavy cost on maintenance. Hence to ensure effective protection & regular patrolling of sensitive areas of WLS a new Canter is proposed to be purchased with and outlay of Rs. 6.00 Lacs.

3. PROTECTION:

Heavy biotic pressure and excessive grazing during past has resulted into reduced regeneration of many important plant species and squeezed area for movement of wild animals. Although after declaration of Sanctuary many initiatives have been taken during the previous years to enhance regeneration of few important species, resulting into increased number of wild animals, but the efforts should be further

intensified by providing effective protection to floral & faunal constituents of the sanctuary. Grazing, poaching, collection of fuel wood, fire incidences due to negligence of dwellers and graziers and encroachment are severe threats that management of Sanctuary has to face. To safe guard against these threats following activities are proposed:

- (i) Although the Maps of Area has been prepared at par with revenue maps in the year 2004-2005 but their copies are limited, because of limited availability of financial resources. More copies of these maps are required to be prepared and provided to the level of forest guards so that checking of boundaries could be ensured at the grass root level during patrolling with an outlay of Rs. 0.30 lac.
- (ii) Three new Forest Guard Chowkies at Bagar in Bokhara range, Danbarli & Sewari in Sadri range and one Forester Quarter at Bokhara in Bokhara range of WLS is to be constructed during the annual plan period with financial outlay of Rs. 13.75 lac.
- (iii) Purchase of four motorcycles for park managers to have constant vigilance over the activities of visitors and graziers as well to supervise the development activities of the park is proposed with financial outlay of Rs. 1.72 lac.
- (iv) For effective management and protection of Sanctuary, timely communication is most essential. Looking to the vastness of the area present number of wireless sets are inadequate. Besides this few existing sets have become obsolete, since they are very old. To ensure quick communication and to deal with any adverse situation Four hand sets are proposed to be purchased during the annual plan period with financial outlay of Rs. 0.60 lac.
- (v) To facilitate survey and demarcation, essential survey equipments including GPS are to be purchased during the plan period with financial outlay of Rs. 0.35 lac.
- (vi) Networks of informers should be developed in villages having suspected persons and at public places like Bus Stand and Railway Station & get information about the miscreants. These informers should be rewarded on

providing correct information although secretly. Financial outlay of 0.20 lac has been kept for the purpose.

- (vii) Staff personals involved in management of Sanctuary are to be rewarded suitably for their outstanding contribution in the field of protection and development of sanctuary. Financial outlay of 0.35 lac has been kept for the purpose.
- (viii) Cattle kill or loss to human life in villages adjoining to P.A boundary by carnivores of Sanctuary should be compensated in accordance with provisions & procedure laid down in this regard. Financial outlay of 0.15 lac has been kept for the purpose.
- (ix) Basic amenities like drinking water, toilets etc. are to be provided to the field staff which remains involved day & night in protection and welfare of Sanctuary resources. Financial outlay of 2.00 lac has been kept for the purpose.

4. AMELIORATION OF HABITAT :

Few pockets of Kumbhalgarh Wildlife Sanctuary in buffer zone has depleted habitat because of excessive biotic pressure mainly due to grazing. This has resulted into low prey density having adverse impact on carnivore population. Sufficient prey base is required for growth and sustainability of large predators like panther. Villages situated around the Sanctuary and cattle population is the main source of biotic interference, which has resulted degradation of the habitat and development of obnoxious weeds like Lantana. To augment the situation following activities are proposed:

- (i) 150 Hect. area will be selected on periphery of core area in Sadri, Joba (an ideal habitat for Indian Wolf) & Dhana forest block of Sanctuary and intensive measures including creation of effective fencing digging of V-ditches, contours trenches, contour dykes (depending on slope) and measures to develop good quality of grasses, regeneration & improvement in fodder yielding trees for wild animals will be taken up. Financial assistance of Rs. 15.00 lac is required for the purpose.

- (ii) 150 hectares of Lantana infested area in forest block Sadri, Dhana, Kotra & Magga of WLS will be opened up to make the habitat more conducive for development & propagation of better species and in turn the wild life. Financial outlay of 13.83 lac has been kept for the purpose.
- (iii) To reduce the possibility of man-animal conflict, rule out the possibility of encroachments as well to provide effective protection and ensure propagation of wild animals, the delineation of susceptible areas of Sanctuary from adjoining villages by creating Pucca stone wall fencing is essential. Construction of 3500 Rmtr Pucca stone wall fencing in Kumbhalgarh, Desuri, Sadri and Bokhara ranges of WLS is proposed to be constructed during the annual plan period with financial outlay of Rs. 63.00 lac.

5. CONSERVATION OF BIO-DIVERSITY :

The area of Kumbhalgarh wild life Sanctuary has rich floral and faunal diversity of Aravalli hill ranges. These hills are inhabited by number of medicinal plants, tree species and faunal associates. However, because of deciduous nature of forest the whole area is vulnerable to fire incidences. A single uncontrolled fire may adversely affect the ecosystem, including the wildlife. The forest fires are mostly experienced during summer months i.e. from March to June. The fires are mostly of accidental type, caused sometime due to negligence of villagers visiting the Sanctuary along with cattle herds, using Sanctuary routes as a shortest one or visiting the places of historical importance & pilgrimage situated within the limits of Sanctuary. Major adverse impact of forest fire in the Sanctuary is on Bamboo clumps and grasslands which forms ideal habitat for wild animals of the sanctuary.

To prevent forest fires and damage caused by it and ultimately to conserve the rich biodiversity of Sanctuary following measures are proposed to be adopted:

- (i) Creation of 62 kms. long new fire lines in Kumbhalgarh, Desuri, Sadri and Bokhara ranges of WLS are proposed during the annual plan period with financial outlay of Rs. 4.96 lac.

6. **TOURISM PROMOTION & ECOTOURISM INITIATIVES :**

Kumbhalgarh wildlife Sanctuary has good scope of tourism since it has good floral and faunal diversity along with many historical and religious places situated within its boundaries. The world famous Kumbhalgarh fort and Ranakpur temple are worth seeing. Besides these, Sanctuary is a natural home for number of wild animals and more than 200 species of terrestrial, arboreal & water birds. Although a sizeable number of tourists both in country and foreigners visits the Sanctuary every year, but still there is a need to generate awareness and tourist facilities in the area to enhance the number of visitors. It is essential that the management of Sanctuary should provide infrastructural facilities for promotion of tourism and ecotourism in the area like nature trails, view points, park literature, signages, camping places & camping equipments etc. however while promoting tourism basic principles of wildlife conservation will be given priority. Following initiatives are proposed for promotion of tourism and eco-tourism in the area:

- (i) Foremost necessity for promotion of tourism in Sanctuary area is to provide appropriate facilities to the tourist at places of stay. Five forest rest houses are existing in the Sanctuary; however looking to the requirement of the tourist the facilities available in these rest houses are inadequate. It is proposed to develop such facilities in three of these rest houses at Sumer, Sadri and Ranakankar during the plan period with financial outlay of Rs 2.50 lac .
- (ii) Existing three ohdhis (Old Shooting boxes) namely Ratadia Ohdhi, Choti Ohdhi & Palar Ohdhi within the limits of WLS are to be developed as ecotourism sites to view the Wildlife and to enjoy the scenic beauty of Aravalli hill ranges for promotion of ecotourism in range Kumbhalgarh of WLS during the annual plan period with financial outlay of Rs 3.00 lac.
- (iii) 3 Km. long new nature trails is to be developed in range Desuri of the Sanctuary (in Indian Wolf dominating areas) to view wildlife and admire the nature from close quarter. Financial outlay of 1.50 lac has been kept for the purpose.
- (iv) The tourism presently is restricted to wild life viewing and visit of historical buildings in the Sanctuary area. On the other hand the Sanctuary

area is having thick groves along with water bodies. It is proposed to develop two such areas as 'Nature View Point' in range Kumbhalgarh and range Bokhara of WLS during the annual plan period with financial outlay of Rs 3.00 lac.

- (v) Camping equipments should be provided at Sanctuary headquarter so as to facilitate out door camping facilities to the Eco-tourists with financial outlay of Rs 0.50 lac.
- (vi) Publicity has to play a vital role in establishment of Sanctuary on the tourist map of the state. To publicize rich natural heritage of Sanctuary, coloured information brochures & folders are to be brought out. Important trees of biotop should be labeled and signages having features and paintings of animals & birds should be put up at places, where there is high probability to sight them. Financial outlay of 1.00 lac has been kept for the purpose.

7. ECO-DEVELOPMENT:

As many as 24 villages are situated inside the Sanctuary whereas 138 villages are on the periphery. More than 1.97 lacs cattle and 2.50 lacs inhabitants of these villages have resource dependency on WLS. Since livelihood of large population living in villages on periphery of Sanctuary depend on forest resources of Sanctuary hence development of adjoining forest areas will not only help in uplifting the economic status of people, but also build confidence between park management and stakeholders. Eco development works will reduce the dependency of local population on Sanctuary resources. Soil & moisture conservation works in Sanctuary area will help in increasing the water regime and ground water recharge in surrounding villages. The eco-development has two main thrust i.e. (1) Improvement of Sanctuary management & (ii) involvement of local people in development activities so that negative impact on Sanctuary could be minimized. Following eco-development works are proposed in the villages situated in outskirts of Sanctuary during the plan period.

- (i) Entry point activities as envisaged by the Ecodevelopment committees (EDC's) so as to bring the villagers at common platform to inculcate the

feeling of belongingness to the Sanctuary resources. Two EDC's namely Umarwas and Gwar of range Kumbhalgarh are selected, for which a provision of Rs. 5.50 lac has been kept during the plan period.

- (ii) To reduce the quantity of wood consumption in cremation of bodies, it is proposed to construct 4 improved crematoriums in four villages namely Areth, Vardara, Kotra and Udawad during the plan period, with financial outlay of Rs. 1.60 lac.
- (iii) Fuel wood is the major source to cook the food in families residing inside and within 5 km from the periphery of the sanctuary. The conventional Chullahs consume large quantity of wood. To reduce the consumption of fuel wood it is proposed to promote improved smokeless Chullahs in 600 houses of 15 villages in and around the sanctuary. Such Chullahs will be installed in houses, those are lacking LPG connections. This will require financial outlay of Rs. 2.70 lac.

8. MIS / EDUCATION / RESEARCH / MONITORING / CENSUES & TRAINING :

For scientific management Sanctuary well defined MIS, generation of awareness, educating the people living around Sanctuary about importance & benefits of sanctuary, research regarding wildlife habitat monitoring & evaluation of ongoing development activities, population estimation of wild animals within & outside PA and training to park managers with regard to recent advances in wildlife management are the essential components. Following strategic consideration are proposed during the annual plan period:

- (i) Present, is the age of information technology. Repeated processing of data and information transmission takes a considerable time to reach its destination. Besides this, upkeep of records pertaining to land, encroachments, poaching, monitoring & evaluation of development programmes etc. is required at the Sanctuary level. To facilitate processing of information faster, it is proposed to equip the Sanctuary incharge with one computer and accessories preferably a laptop, with financial outlay of Rs. 0.75 lac.

- (ii) Awareness about conservation & protection of natural resources will be generated among the villages, school children and city inhabitants by organizing exhibition, puppets shows, video film shows and by organizing ecotracking programmes to the Sanctuary areas with financial outlay of Rs. 1.00 lac.
- (iii) Wildlife census plays a vital role in scientific management of Sanctuary area. The census is not only a powerful tool to evaluate the management practices in past but also provides a vision for future management practices to be adopted in welfare of Wild Animals of Sanctuary. An outlay of Rs. 0.50 lac has been kept for the census operations to be carried out during the year 2007-08.
- (iv) Wild Life management now-a-days has emerged as a science and scientific management of Sanctuary area has become most essential element to conserve and rehabilitate the rich biodiversity present in the Sanctuary areas. The staff is expected to digest the recent advances in the field of wildlife management & protection of PA. This generates the need for regular refresher courses and training to the staff involved in management of PA. Financial outlay of Rs. 0.60 lac has been proposed during the annual plan period for the purpose.
- (v) It is very essential to educate the villagers and city inhabitants living in and around the Sanctuary area, towards wildlife protection and conservation. Educational inputs will include understanding for protecting the natural forests, importance of establishment of Sanctuary & role of Forest Department in its development and protection. This will also help local communities to understand relationship with existing resources. Indigenous methods like development & dissemination of pamphlets & posters as well meetings at village level platforms will be adopted to educate the people during the annual plan period with financial outlay of Rs. 0.50 lac.
- (vi) Impact of management prescriptions applied in the field needs proper monitoring to measure the success of various interventions to help in making necessary checks for future management. Financial outlay of Rs.

0.30 lac has been proposed for conducting the monitoring studies during the annual plan period.

9. OTHERS :

Offices of the Range Officers and Sanctuary incharge need few facilities to carry out their day to day operation. It is need of time that these offices should be furnished with bare minimum furniture and other office equipments. To equip the offices of five Range Officers and PA incharge a provision of Rs. 0.50 Lac is kept during the plan period.

Abstract of works proposed & their priority wise details along with relevant paragraphs of Management Plan is enclosed at “ANNEXURE-D”.

Assistant Conservator of Forest
Kumbhalgarh Wildlife Sanctuary
Sadri, Distt. Pali (Raj.)

Dy. Chief Wild Life Warden
Udaipur (Raj.)

**SUMMARY OF WORKS PROPOSED
FOR THE YEAR 2007-2008
KUMBHALGARH Wildlife Sanctuary
(Priority wise details of Works Proposed)**

S. No.	Item of Work	Quantity	Total Amount required (in Lac rupees)
1	*MAINTENANCE OF P.A ASSETS :		
(a)	Maintenance of Water Resources	3 Nos.	5.50
(b)	Maintenance of Forest Guard Chowkies/ Forester Quarter	7 Nos.	4.70
(c)	Maintenance of Fire lines	67 km.	5.36
(d)	Maintenance of Nature Trails	20 Kms	4.00
(e)	Maintenance of Wireless Network	L.S.	0.50
(f)	Running & Maintenance of Motor Vehicles	L.S.	0.75
2	ENSURING WATER FACILITIES IN SANCTUARY AREA :		
(a)	Construction of New Anicuts	2 Nos	12.50
(b)	Construction of Silt Detection Structure	4 Nos.	4.00
(c)	Construction of Kuchha Check Dams	5000 Cumtr	5.25
(d)	Construction of Gabion Structures	12 Nos.	3.00
(e)	Ensuring Drinking water supply at water points by Camels/Camel carts/ water Tankers	L.S.	0.50
(f)	Canter	1 No.	6.00
3	PROTECTION		
(a)	Survey and Demarcation including Preparation of Beat maps	L.S.	0.30
(b)	Buildings		
	(i) Forest Guard Chowkies	3 Nos.	9.75
	(ii) Forester Quarter	1 No	4.00
(c)	Motorcycle	4 No	1.72
(d)	Wireless Sets	4 hand sets	0.60
(e)	Survey equipments	L.S.	0.35
(f)	Secret Information System	L.S.	0.20
(g)	Reward to Staff	L.S.	0.35
(h)	Compensation for Cattle Kill & Loss to human life	L.S.	0.15
(i)	Basic amenities to field staff	L.S.	2.00
4	AMELIORATION OF HABITAT		
(a)	Habitat Improvement	150 Hact	15.00
(b)	Opening up of Lantana infested area	150 Hact	13.83
(c)	Pucca stone wall fencing	3500 RM	63.00
5	CONSERVATION OF BIO-DIVERSITY		
(a)	Creation of New Fire Lines	62 kms	4.96
6	TOURISM PROMOTION & ECOTOURISM INITIATIVES		
(a)	Development of Tourism facilities at existing forest rest houses	L.S.	2.50

(b)	Development of sites for Eco Tourism	3 Nos.	3.00
(c)	Development of Nature Trails	3 kms	1.50
(d)	Creation of nature View Points	2 Nos.	3.00
(e)	Camping Equipments	L.S.	0.50
(f)	Publicity, Brochure & Signage	L.S.	1.00
7	<u>ECO-DEVELOPMENT</u>		
(a)	Entry Points Activity	L.S.	5.50
(b)	Improved Crematorium	4 No	1.60
(c)	Improved Chullahas	600 No	2.70
8	<u>MIS / EDUCATION / RESEARCH / MONITORING / CENSUS & TRAINING</u>		
(a)	Computer & Accessories	1 No.	0.75
(b)	Awareness Programme	L.S.	1.00
(c)	Census	L.S.	0.50
(d)	Training	L.S.	0.60
(e)	Development & Procurement of Education Material	L.S.	0.50
(f)	Monitoring Studies	L.S.	0.30
9	<u>OTHERS</u>		
(a)	Office Equipments	L.S.	0.50
	TOTAL		193.72

[Rupees One Hundred Ninety Three Lac & Seventy Two Thousand Only]

* *Kumbhalgarh wildlife Sanctuary has good population of Chowsingha (Four horned Antelope) and Chinkara (Indian Gazella) along with rich floral & faunal diversity of Aravalli hill ranges. Combining together these factors establish the Sanctuary to invite special attention for maintenance of assets created during past (recurring expenditure) as per guidelines issued by Ministry of Environment & Forests along with their letter Number 21-1/2006-WL-1 dated 4th April, 2006.*

** Forecast for financial outlay of item of works is based on labour rate Rs 73/- per day.

Assistant Conservator of Forest
Kumbhalgarh Wildlife Sanctuary
Sadri, Distt. Pali (Raj.)

Dy. Chief Wild Life Warden
Udaipur (Raj.)

**DETAILS OF ITEM OF WORKS PROPOSED
FOR THE YEAR 2007-2008
KUMBHALGARH Wildlife Sanctuary
(Priority wise details of Works Proposed)**

S. No	Item of Work	Para of Management Plan which specifies the item	Quantity	Rate per Unit	Total Amount required	Location	Side specific Justification
1	<u>Maintenance of P.A Assets:</u>						
(a)	Maintenance of Water Sources	6.12.2 (ii) 6.12.2 (viii)	3 No	L.S.	5.50	1. Anicut Sumer (2.00 lac) 2. Anicut Parashram Kund (2.50 lac) 3. Open Well Choti Ohdhi (1.00 lac)	To improve the water availability for wild animals.
(b)	Maintenance of ACF Quarter/ R.O Quarter/ Forest Guard Chowkies/ Forester Quarter	6.9.1	7 No	L.S.	4.70	1. ACF Quarter (1.00 lac) 2.RFO Qtr. Sadri (0.75 lac) 3. RFO Qtr. Kumbhalgarh (0.75 lac) 4. Forester Qtr. Kumbhalgarh (0.60 lac) 5. Guard Chowki Sadri (0.60 lac) 6. Guard Chowki Gwar (0.50 lac) 7. Guard Chowki Umarwas (0.50 lac)	To provide amenities to staff personnels involved in protection duties.
(c)	Maintenance of Fire Lines	6.4.3 (i)	67 Km.	8.00 per Rmtr.	5.36	1. KumbhalgarhRange; 30Km 2. Sadri Range; 15 Km 3. Desuri Range; 12 Km 4. Bokhara Range; 10 Km	To protect the sanctuary area from fire hazards and thus to ensure conservation of bio-diversity.

(d)	Maintenance of Nature Trails	6.14.1 (i) 6.15.2 (iv)	20 Km.	20000/- Per Km	4.00	1. Kumbhalgarh Range; (i) Areth to Thandiberi; 15 Km. (ii) Ranakankar to Malgarh; 5 Km	To promote Eco-tourism & ensure effective protection.
(e)	Maintenance of Wireless Network	6.9.2.2	L.S.	-	0.50	For whole Sanctuary	To ensure round the clock protection & to deal with offenders.
(f)	Running & Maintenance of Motor Vehicles	6.2.1 (iv)	L.S.	-	0.75	For whole Sanctuary	To ensure effective protection.
2	Ensuring Water Facilities in Sanctuary area :						
(a)	Construction of New Anicuts	6.12.2(x) 6.11.1(iv)	2 No	L.S	12.50	1. Roopanmata Block Beejapur: (7.50 lac) 2. Rangberi Block Dhana: (5.00 lac)	To improve the water availability for wild animals.
(b)	Construction of Silt Detection Structure	6.12.2(ix) 6.11.1(iv)	4 No	1.00	4.00	1. Kaneria ki Nal (Block Sewari) 2. Peepla (Block Sewari) 3. Malni Mawa (Block Beejapur) 4. Sadra (Block Latada)	To improve the water availability for wild animals.
(c)	Construction of Kuchha Check Dams	6.11.1(iii) 6.13.1(iv)	5000 Cumtr	105.00 Per Cumtr	5.25	1. Forest Block Sadri 2. Forest Block Roopnagar 3. Forest Block Dhana 4. Forest Block Latada 5. Range Desuri	To check soil erosion & improve the water availability in downstream.
(d)	Construction of Gabion Structures	6.11.1(i) 6.12.2(ix)	12 Nos.	0.25	3.00	1. Forest Block Sewari 2. Forest Block Beejapur 3. Forest Block Dhana 4. Forest Block Latada	To check soil erosion & improve the water availability in downstream.
(e)	Ensuring Drinking water supply at water points by Camels/Camel carts/ water Tankers	6.12.2	L.S.	-	0.50	For whole Sanctuary	To ensure the drinking water availability for wild animals during summer months.
(f)	Canter	6.12.2	1 No.	6.00	6.00	For whole Sanctuary Area	To transport the water during drought and pinch period.

3. Protection							
(a)	Survey and Demarcation including preparation of beat maps	6.5.2(iv) 6.7	L.S.	-	0.30	For whole Sanctuary Area	To facilitate the staff personals about the sanctuary boundaries.
(b)	Buildings (i) Forest Guard Chowkies (ii) Forester Quarter	6.9.1	3 No	3.25	9.75	1. Balabera (Range Bokhara) 2. Bagar (Range Bokhara) 3. Dan Barli (Range Sadri) 4. Sewari (Range Sadri) 1. Bokhara (Range Bokhara)	Residential buildings for Forest Guards & Forester
(c)	Motorcycle	6.2.1.(ii)	4 No	0.43 Each	1.72	For whole Sanctuary Area	To increase mobility of park managers.
(d)	Wireless Sets	6.9.3(iii)	4 Hand Set	-	0.60	For whole Sanctuary Area	For effective and quick communication about the sanctuary management activities and to deal with any adverse situation .
(e)	Survey equipments	6.5.2(v)	L.S.	-	0.35	For whole Sanctuary Area	To verify the Sanctuary boundaries.
(f)	Secret Information System	6.2.1 (iii) (d)	L.S	-	0.20	For whole Sanctuary Area	To get information about miscreants.
(g)	Reward to Staff	6.2.1(iv)(j)	L.S.	-	0.35	For whole Sanctuary Area	To motivate staff personals for protection of park.
(h)	Compensation for cattle kill & Loss to human life	6.8.2 6.2.1 (iii-g)	L.S	-	0.15	For whole Sanctuary Area	To generate confidence among villagers about P.A and management.
(g)	Basic amenities to field staff	10.3	L.S.	-	2.00	For whole Sanctuary Area	Providing amenities to staff personals involved in protection.

4. Amelioration of Habitat							
(a)	Habitat Improvement	6.13.1 6.10.1(v)	150 Hectare	10000/- per Hact	15.00	Forest Block Sadri: 50 Hac. Forest Block Joba: 50 Hac. Forest Block Dhana: 50 Hac.	To improve the food availability for Herbivores and thus to develop a prey base for carnivores.
(b)	Opening up of Lantana infested area	6.21(xii)	150 Hact	9220/- per Hact	13.83	1. Forest Block Sadri: 20 Hectare 2. Forest Block Dhana : 50 Hectare 3. Forest Block Kotra : 30 Hectare 4. Forest Block Magga : 50 Hectare	To remove the obnoxious weeds and thus to ameliorate the habitat.
(c)	Construction of Pucca stone wall fencing	6.1.3.4 6.13.1(vii)	3500 RM	1800/- per Rmtr	63.00	1. Girasiya Colony to Ghanerao (Range Desuri): 500mtrs. 2. Kalatook to Mahaveerji (Range Desuri): 1000mtrs. 3. Ranakpur Chowki to Sagat Matta (Range Sadri): 1000mtrs. 4. Jaya to Toran Peepli (Range Kumbhalgarh): 500mtrs. 5. Oglat Chowki to Foota Dewal (Range Kumbhalgarh): 500mtrs.	Suitable fencing will be created around the villages to check encroachment and grazing & to reduce chances of man-animal conflict.
5. Conservation of Bio-diversity							
(a)	Creation of New Fire Lines	6.4.3(x)	62kms	8000/- per km.	4.96	1. Range Kumbhalgarh; 30Km 2. Range Desuri; 12 Km 3. Range Sadri; 10 Km 4. Range Bokhara; 10 Km	To protect the sanctuary area from fire hazards and thus to ensure conservation of bio-diversity.

6. Tourism Promotion & Eco-tourism Initiatives							
(a)	Development of Tourism facilities at existing rest houses.	6.14.4(i) 6.15.2(a-iv)	L.S.	-	2.50	1. Sumer Rest House (1.50 lac) 2. Sadri Rest House (0.50 lac) 3. Ranakankar Rest House (0.50 lac)	To promote the tourism in sanctuary area.
(b)	Development of sites for Eco Tourism	6.14.4(vii) 6.15.2(a-i)	3 Nos.	1.00 lac each	3.00	Range Kumbhalgarh: (i) Ratadia Ohdhi (ii) Choti Ohdhi (iii) Palar Ohdhi	To promote the Eco-tourism in sanctuary area.
(c)	Development of Nature Trails	6.14.4(a) 6.15.2(a-iv)	3 kms	0.50 per Km	1.50	Range Desuri	To promote the Eco-tourism in sanctuary area.
(d)	Creation of Nature View Points	6.14.4(vii) 6.15.2	2 Nos.	1.50	3.00	Range Kumbhalgarh Range Bokhara	To promote the Eco-tourism in sanctuary area.
(e)	Camping Equipments	6.15.2(b-i)	L.S.	-	0.50	For whole Sanctuary Area	To promote the Eco-tourism in sanctuary area.
(f)	Publicity, Brochure & Signage	6.14.4(xi) 6.15.2(c&d)	L.S.	-	1.00	For whole Sanctuary Area.	To generate awareness among in habitants and tourists about safety measures during their visits to sanctuary.
7. Eco-Development							
(a)	Entry Points Activity	6.3.2 8.3	L.S.	-	5.50	1. Umarwas 2. Gwar	To generate community participation / belongingness in sanctuary management.
(b)	Improved Crematorium	6.3.2(ii) 8.4(d-i)	4 No	@ 0.40	1.60	1. Areth 2. Vardara 3. Kotra 4. Udawad	To reduce consumption of fuelwood and thus to reduce dependency on sanctuary resources.

(c)	Improved Chullahas	6.3.2.(ii) 8.4(d-ii)	600 No	@ 450/- each	2.70	Rajpura, Mandigarh, Jaton ka Guda, Desuri, Sumer, Sevantri, Umrwas, Manawato ka Guda, Thrabad, Ganwar, Kelwara, Areth, Vardara, Kotra, Udawad	To reduce consumption of fuelwood and thus to reduce dependency on sanctuary resources.
8.	MIS / Education / Research / Monitoring / Census & Training						
(a)	Computer & Accessories	6.4.2(i) 6.17	1 No.	-	0.75	For whole Sanctuary Area	To generate awareness among the people about benefits of PA resources and need for its conservation.
(b)	Awareness Programme	6.4.2(i) 6.17	L.S.	-	1.00	For whole Sanctuary Area	To generate awareness among the people about benefits of PA resources and need for its conservation.
(c)	Census	6.18.2	L.S.	-	0.50	For whole Sanctuary Area	Estimation of wild animals for scientific management of park.
(d)	Training	6.2.1.(iv-f) 6.19 9.3	L.S.	-	0.60	For whole Sanctuary Area	To keep staff updated with recent advances in wildlife management.
(e)	Development & Procurement of Education Material	6.4.3(ii) 6.17	L.S.	-	0.50	For whole Sanctuary Area	To educate the people about benefits of PA resources and practices detrimental to the health of sanctuary.
	Monitoring Studies	9.2	L.S.	-	0.30	For whole Sanctuary Area	To measure the success of management interventions.

9. Others							
(a)	Office Equipments	-	L.S.	-	0.50	For whole Sanctuary Area	To increase efficiency of staff personals involved in park management.
	TOTAL				193.72		

[Rupees One Hundred Ninety Three Lac & Seventy Two Thousand Only]

- * *Kumbhalgarh wildlife Sanctuary has good population of Chowsingha (Four horned Antelope) and Chinkara (Indian Gazella) along with rich floral & faunal diversity of Aravalli hill ranges. Combining together these factors establish the Sanctuary to invite special attention for maintenance of assets created during past (recurring expenditure) as per guidelines issued by Ministry of Environment & Forests along with their letter Number 21-1/2006-WL-1 dated 4th April, 2006.*
- * Forecast for financial outlay of item of works is based on labour rate Rs 73/- per day.

Assistant Conservator of Forest
Kumbhalgarh Wildlife Sanctuary
Sadri, Distt. Pali (Raj.)

Dy. Chief Wild Life Warden
Udaipur (Raj.)

**FOR WIRELESS SETS / COMPUTERS / VEHICLES / FIRE ARMS
ETC.**

Item of Work	Total Requirement of the W.L.S./Park	Already Available with the W.L.S. / Park	Where and to What use the Existing have been put to	Remarks
1	2	3	4	5
Vehicle (Motor Cycles)	Twenty	Seven	For Protection & Management of Sanctuary	To increase the mobility of park managers and to ensure effective protection Four motorcycles are required.
Vehicle Canter	ONE	One	For Protection of Sanctuary	Existing canter in Sanctuary is very old (1990 model) and needs heavy maintenance and hence requires replacement.
Wireless Sets	25 Fix sets 3 Mobile sets 35 Hand sets	23 Fix sets 3 Mobile sets 27 Hand sets	For communication purpose	Four Hand Sets are required to strengthen the communication system.
Computer & Accessories	Five	One	For collection, processing of datas and disseminating the information	One computer preferably a laptop is required for Sanctuary incharge office

Assistant Conservator of Forest
Kumbhalgarh Wildlife Sanctuary
Udaipur (Raj.)

Dy. Chief Wild Life Warden
Udaipur (Raj.)

KUMBHALGARH WILDLIFE SANCTUARY

REVALIDATION REQUIREMENT

SANCTIONED WORKS OF ANNUAL PLAN OF OPERATION FOR THE YEAR 2006-07 WHICH COULD NOT BE CARRIED OUT EITHER BECAUSE OF DELAYED RELEASE OF SECOND INSTALLMENT OR THE EXPENDITURE COMMITTED IS LESS THAN THE ESTIMATED AMOUNT:

Details Of Savings

(Amount in Lacs)

S.No.	Item Of Works	Sanctioned Amount	Expenditure incurred	Savings (Amount to be revalidated)	Reasons
1.	Purchase of Motorcycles (4 Nos.)	2.00	1.68	0.32	On account of actual expenditure incurred on proposed items.
2.	Secret Information System	0.20	0.00	0.20	Secret information system could not be initialized due to delayed release of second installment.
3.	Compensation to Cattle kill & loss to human life	0.15	0.00	0.15	No case of cattle kill or loss to human life by wild animals was reported around the P.A.
4.	Habitat Improvement	3.00	2.99	0.01	On account of actual expenditure incurred on proposed items.
5.	Training to Staff	0.60	0.57	0.03	On account of actual expenditure incurred on proposed items.
	TOTAL	5.95	5.24	0.71	

Savings of the year 2006-07 of Rs. 0.71 lac are to be adjusted towards the sanction of proposed item of works for the year 2007-2008.

Assistant Conservator of Forest
Kumbhalgarh Wildlife Sanctuary
Udaipur (Raj.)

Dy. Chief Wild Life Warden
Udaipur (Raj.)

KUMBHALGARH WILDLIFE SANCTUARY

FORM GFR 19-A

[See Government of India's Decision (1) below Rule 150]

Form of Utilization Certificate

S. No.	Letter No.and Date	Amount (in lac Rs)	
1	Govt. of India 13000820/WL Dated 04.08.2006 StateGovt.F11(36)Forest/2002 Dated 29.08-2006 <u>Second Installment</u> Govt. of India 13000820/WL Dated 09.02.2007 StateGovt.F11(36)Forest/2002 Dated 24.03.2007	18.00 10.99	Certified that out of Rs. 28.99 Lacs of grants in-aid sanctioned during the year 2006-2007 in favour of Kumbhalgarh Wild Life Sanctuary under this Ministry/ Department Letter No. given in the margin and Rs. Nil on account of unspent balance of the previous year, a sum of Rs. 28.28 Lacs has been utilised for the purpose of executing the work for which it was sanctioned and that the balance of Rs. 0.71 Lacs remaining unutilised at the end of financial year 2006-07. Remaining amount of Rs. 0.71 Lacs will be utilized during the year 2007-2008.
	TOTAL	28.99	

[G.I. M.F., O.M. No. F.14(1) - E.11(A) - 73, dated the 23rd April , 1975.]

- (i) Certified that I have satisfied myself that the condition on which the grants-in-aid was sanctioned have been duly fulfilled / are being fulfilled and that I have exercised the following checks to see that the money was actually utilised for the purpose for which it was sanctioned.

Kinds of checks exercised:

1. Physical verification of works by senior Officers, Dy. Chief Wildlife Warden, Astd Conservator of Forests for their quality and quantity.

Date: 17th May, 2007

Dy. Chief Wildlife Warden
Udaipur (Raj.)

ALONG WITH UTILISATION CERTIFICATE ITEM WISE EXPENDITURE STATEMENT

WILDLIFE SANCTUARY KUMBHALGARH**Works carried out under CSS year 2006-2007**

S. No.	Item of Work	Sanctioned			Achievement			Deviation, if any (give reasons)
		Amount (Rs. in Lacs)	Quantity	Location	Quantity	Amount (Rs. in Lacs)	Current Status	
1	2	3	4	5	6	7	8	9
1	Maintenance of Water Sources	2.00	1 Nos	Anicut Gulbera	1 No	2.00	Physical & Financial Targets Achieved as proposed.	--
2	Maintenance of Forest Guard Chowki / Forester Quarter	1.00	2 Nos	Sadri Range-1 Bokhara Range-1	2 Nos	1.00	Physical & Financial Targets Achieved as proposed.	--
3	Maintenance of Fire Lines	1.84	23 Km	Kumbhalgarh Range-5 Km Sadri Range-6 Km Desuri Range-6 Km Bokhara Range-6 Km	23 Km	1.84	Physical & Financial Targets Achieved as proposed.	--
4	Maintenance of Nature Trail	2.00	10 Km	Kumbhalgarh Range: Ranakankar to Malgarh: 5 Km Areth to Hathi Badla: 5 Km	10 Km	2.00	Physical & Financial Targets Achieved as proposed.	--
5	Maintenance of Wireless Network	0.50	LS	For whole Sanctuary Area	LS	0.50	Physical & Financial Targets Achieved as proposed.	--
6	Running & Maintenance of Motor Vehicles	0.75	LS	For whole Sanctuary Area	LS	0.75	Physical & Financial Targets Achieved as proposed.	--
7	Ensuring drinking water supply at water points by camel / camel cart / water tanker	1.00	LS	For whole Sanctuary Area	LS	1.00	Physical & Financial Targets Achieved as proposed.	--
8	Purchase of Motor Cycle	2.00	4 Nos	For whole Sanctuary Area	4 Nos	1.68	Physical Targets Achieved as proposed.	Savings of 0.32 Lacs.on account of actual expenditure incurred on proposed items.
9	Purchase of Wireless sets	1.60	4 Fix & 2 Hand Set	For whole Sanctuary Area	4 Fix & 2 Hand Set	1.60	Physical & Financial Targets Achieved as proposed.	--
10	Purchase of Survey Equipments	0.50	LS	For whole Sanctuary Area	LS	0.50	Physical & Financial Targets Achieved as proposed.	--
11	Secret Information System	0.20	LS	For whole Sanctuary Area	--	0.00	--	Secret information system could not be initialized due to delayed release of

								second installment.
12	Reward to Staff	0.25	LS	For whole Sanctuary Area	LS	0.25	Physical & Financial Targets Achieved as proposed.	--
13	Compensation to cattle kill & loss to human life	0.15	LS	For whole Sanctuary Area	--	0.00	--	No case of cattle kill or loss to human life by wild animals was reported around the P.A.
14	Habitat improvement	3.00	30 Hac	Forest Block Joba Desuri Range	30 Hac	2.99	Physical & Financial Targets Achieved as proposed.	Savings of 0.01 Lacs.on account of actual expenditure incurred on proposed items.
15	Opening up of Lantana infested area	1.85	20 Hac	Forest Block Sadri-10Hac Forest Block Dhana-10Hac	20 Hac	1.85	Physical & Financial Targets Achieved as proposed.	--
16	Construction of Pucca Stone wall fencing	4.00	400 RM	Girasiya Colony to Ghanerao:Range Desuri	400 RM	4.00	Physical & Financial Targets Achieved as proposed.	--
17	Creation of New Fire Line	2.00	25 Km	Kumbhalgarh Range-7.15 Km Sadri Range-7.15 Km Desuri Range-7.15 Km Bokhara Range-3.55 Km	25 Km	2.00	Physical & Financial Targets Achieved as proposed.	--
18	Camping Equipments	0.75	LS	For whole Sanctuary Area	LS	0.75	Physical & Financial Targets Achieved as proposed.	--
19	Entry Point Activity	2.00	LS	Water Reservoir (Nadi) 2 Nos : Salpara ki Chapar & Meera ka Pagalia	2 Nos.	2.00	Physical & Financial Targets Achieved as proposed.	--
20	Awareness Programme	0.50	LS	For whole Sanctuary Area	LS	0.50	Physical & Financial Targets Achieved as proposed.	--
21	Census	0.50	LS	For whole Sanctuary Area	LS	0.50	Physical & Financial Targets Achieved as proposed.	--
22	Training to Staff in wildlife management	0.60	LS	For whole Sanctuary Area	LS	0.57	Physical & Financial Targets Achieved as proposed.	Savings of 0.03 Lacs.on account of actual expenditure incurred on proposed items.
	Total	28.99				28.28	Savings of Rs. 0.71 lac to be revalidated.	

Deputy Chief Wildlife Warden
UDAIPUR

ANNUAL REPORT (2006 – 2007)**KUMBHALGARH WILDLIFE SANCTUARY****1. Status of Protected Area :**

Area	Date of Notification	Section under which notification	Settlement proceeding completed or not
610.52 Sq.Km	13.7.1971	Raj. Wildlife Animals & Birds Protection Act, 1951	Completed

The management plan of the Sanctuary has been prepared for the period of ten years i.e from year 2003–2004 to 2012–2013 as per guidelines issued by GOI and has been approved by Chief Wild Life Warden wide order No.F()Dev./CWLW/1876-81 Dated 2nd January, 2004. Settlement proceedings are over. The area of the Sanctuary is a part of watershed for many rivers forming lifeline for sizeable population of Western Rajasthan. There are 24 villages situated within the Sanctuary and 138 villages within zone of influence of Sanctuary. The inhabitants of these villages have resource dependency on wildlife Sanctuary to earn their livelihood by rearing their cattle, collecting fuelwood and MFP's. Area is prone to grazing because of high cattle population in villages around sanctuary area, which has an adverse impact on habitat of wild animals.

Types of area under sanctuary:

Total Area	R.F.	P.F.	Govt. Land Other Than Forests Land	Pvt. Land	Waterbodies
610.528 Sq.km.	600.1798 Sq.Km.	10.3482. Sq.Km.	Nil	Nil	--

2. No special management programme carried out and animals were also not translocated in the P.A. No culling were carried out.
3. Census Report is enclosed on Page No 4 of APO.
4. **No scheduled animal is killed during the year.**
5. **Nil**

6. Budget utilization for the year 2006 – 2007:

Scheme	Works Done	Expenditure
State Plan	RFBP Maintenance (450 Hect.)	8.23
	Twelfth Finance Commission: Boundary Pillars (412 Nos.)	4.967
	Integrated Forest Mgt. C.S.S (75% : 25%)	
	Creation of Fire Lines (33.75 Kms)	2.70
	Maint of Teerthankar Trail	0.20
	Raj. Forestry & Bio. Project:	
	New Works (450 Hac)	41.94
	Committed Works 03-04 & 04-05 (1350 Hac)	67.61
	Ecotourism & Heritage Conservation	1.00
	SMC Structures (20 Nos)	7.87
	Anicut Type III (1 No)	5.44
	Maintenance of Fire Lines (15.5 kms)	1.25
	Infrastructure Development (5 Nos.)	6.50
Compensatory Afforestation	Forestry Works (New Works): 150 Ha	19.02
Central Sponsored Scheme	As per Annexure- F	28.28
National Rural Employment Guarantee Programme	Developments of closure, Soil & Moisture conservation Works	25.67
Funds provided by MLA	Maintenance of Eco-trail	4.25

7. Measures taken to strengthen Wildlife Wing:

Patrolling in sanctuary area was made effective. Wireless setts are provided at every strategic point of sanctuary. Flying Squad is regularly visiting the area to check and prevent Wildlife and Forest Offence cases.

8. No. of officers trained in Wildlife management:

Nil

9. Officers posted out and in the P.A.

Astt, Conservator of Forests Shri Bhopal Singh Rathore was transferred from P.A in January.2007 and at his place Shri Kumar Swami Gupta has joined w.e.f. 1st February,2007 .

10. Wildlife Education Campaign organized:

Nature & Education Camps for school children of rural and urban area were organised in the Sanctuary to develop awareness about natural resources i.e

Forests and Wildlife. Besides this awareness among people living around the sanctuary area has also been developed by organising regular meetings on village platforms with the villagers living in & around the Sanctuary regarding importance of Sanctuary and Do's & Dont's to be observed in Sanctuary area.

11. Cases of crop raiding:
NIL

12. Outstanding contribution made towards Wildlife Conservation:
Awareness drive through "Pad Yatras" across the sanctuary of inhabitants from rural and urban area were organised during the year, which has received overwhelming response from all segments of society. Ten One day duration residential nature awareness camps for more than 600 School children from rural areas were organized. Participants were imparted knowledge pertaining to nature, wildlife identification and management.

**Dy. Chief Wild Life Warden
Udaipur (Raj.)**

