

SUPREME COURT OF INDIA

Centre for Environment Law, WWF-I

Vs.

Union of India

(K.S. Radhakrishnan and Chandramauli Kr. Prasad JJ.)

15.04.2013

JUDGMENT

K. S. RADHAKRISHNAN, J.

Application for Intervention is allowed.

1. We have been called upon to decide the necessity of a second home for Asiatic Lion (*Panthera leo persica*), an endangered species, for its long term survival and to protect the species from extinction as issue rooted on eco-centrism, which supports the protection of all wildlife forms, not just those which are of instrumental value to humans but those which have intrinsic worth.

FACTS:

2. The Wildlife Institute of India (for short 'WII'), an autonomous institution under the Ministry of Environment and Forests (for short 'MoEF'), Government of India, through its wildlife Biologists had done considerable research at the Gir Forest in the State of Gujarat since 1986. All those studies were geared to provide data which would help for the better management of the Gir forest and enhance the prospects for the long term conservation of lions at Gir, a single habitat of Asiatic lion in the world. The data collected by the Wildlife Biologists highlighted the necessity of a second natural habitat for its long term conservation. Few of the scientists had identified the Asiatic lions as a prime candidate for a re-introduction project to ensure its long term survival. In October 1993, a Population and Habitat Analysis Workshop was held at Baroda, Gujarat. Various issues came for consideration in that meeting and the necessity of a second home for Asiatic lions was one of the issues deliberated upon in that meeting. Three alternative sites for

re- introduction of Asiatic lions were suggested for an intensive survey, the details of which are given below:

1. Darrah-Jawaharsagar Wildlife Sanctuary (Rajasthan)
2. Sitamata Wildlife Sanctuary (Rajasthan)
3. Kuno Wildlife Sanctuary (Madhya Pradesh)

3. The Research Advisory Committee of WII recognized the need for a prior survey to assess the potential of those sites. Accordingly, a field survey was conducted. Surveys of the three sites were made during winter as well as summer, to assess water availability during the summer and also to ascertain the changes in human impact on the habitat during the seasons. The surveyors concentrated on ascertaining the extent of forest area in and adjoining the chosen protected areas with the aim of establishing the contiguity of the forested habitat. Attempts were also made to establish the relative abundance of wild ungulate prey in the three sites based on direct sightings as well as on indirect evidence. An assessment of the impact on the people and their livestock on habitat quality in all three sites was also made. Of the three sites surveyed, Kuno Wildlife Sanctuary (for short 'Kuno') was found to be the most suitable site for re- introduction in establishing a free ranging population of Asiatic lions. A draft report to that effect was prepared by eminent Scientists like Ravi Chellam, Justus Joshwa, Christy A. Williams and A. J. T. Johnsingh on behalf of WII. The report revealed that the Kuno was a historical distribution range of Asiatic lions. Report also highlighted the necessity of a long term commitment of resources, personnel, the necessity of a comprehensive rehabilitation package, adequate staff and facilities. Committee did not consider the presence of tigers in Kuno to be a major limiting factor, especially since the tigers occur in such low numbers and density. Since lions live in stable social units, report highlighted that it is important to take lions for the translocation also from a single pride. Further, it was also pointed out that genetic consideration would not be a major factor, provided fresh male lions are moved from Gir to Kuno every three to five years and the resident males in Kuno selectively captured for Zoos.

4. State of Madhya Pradesh then undertook a massive rehabilitation package for the villagers settled in and near Kuno so as to push forward the scheme of relocation of Asiatic lions in Kuno. It was noticed that about 1545 families of 24 revenue villages were living inside Kuno and they had to be rehabilitated outside the sanctuary. Since suitable and sufficient revenue land was not available in adjoining areas, it was decided to relocate those villages on degraded protected

forests. Since proposed site of resettlement fell in various blocks of protected forest, the use as a rehabilitation purpose involved a legal obligation to obtain prior sanction from MoEF under Section 2 of the Forest (Conservation) Act, 1980.

5. The Secretary (Forests), Government of Madhya Pradesh, therefore, sent a letter dated 24.7.1996 to MoEF seeking final approval of the Central Government in accordance with the Forest (Conservation) Act, 1980. MoEF, after examining the request of the State of Madhya Pradesh, conveyed its approval under Section 2 of the Forest (Conservation) Act, 1980 for diversion of 3720.9 hectare of forest land for rehabilitation of 18 villages located inside the Kuno, subject to fulfillment of certain conditions. Out of 3720.9 hectare of the 13-forest compartments, 3395.9 hectare forest area of 12 compartments was finally approved by the Government of India for de-notification. Compartment No. P-442 of Umarikaia forest block was left out from the original proposal by Government of India letter dated 1.2.2000 and hence, the released area in first phase had been de-notified after due permission from the Government of India. Forest area of 1263.9 hectare released in the second phase could not be de-notified for want of permission from the Government of India. The Government of India constituted a Monitoring Committee for the effective implementation of the Asiatic Lion Reintroduction Project at Kuno which met on 10.3.2004. The Survey report of WII was discussed in the meeting and it was noticed that Kuno Paipur Sanctuary of M.P. was identified as the project site/and a 20 year project was conceived in three phases as below:

- a. Phase I (1995-2000 A.D.) Village relocation and habitat development.
- b. Phase II (2000-2005) Fencing at the side, translocation, research and monitoring.
- c. Phase III (2005-2015) Eco-development.

It was pointed out in the meeting that, currently, the project was in Phase II and 18 villages had been rehabilitated from Kuno. Further, in the meeting, the Chief Wildlife Warden of Gujarat had, however, opined that there was no commitment on the part of the State of Gujarat for providing lions and the State Government had not agreed for the same. Based on the discussion, the Chairman summed up the consensus which emerged out of the deliberations as follows:

1. A letter from MOS, MoEF should be sent to the Chief Minister of Gujarat, highlighting the project justification with a request to provide lions for translocation to Kuno Palpur Sanctuary.
2. State of Gujarat should be provided with a set of project documents.
3. The Chief Wildlife Warden, MP should prepare a road map with a final detail for translocation of lions from Gir to Kuno.
4. An assessment of prey base in Kuno should be done by WII.
5. No further expenditure should be incurred with a focus on lion; however, funding support for habitat improvement/welfare initiatives for other wild animals can continue.
6. The scheme for rehabilitation of villagers was prepared by the centrally sponsored “Beneficiary-oriented Scheme for Tribal Development”. It was stated in the scheme that a total of more than Rs.1545 lacs would be required for the satisfactory re-location of 1545 families of 24 villages out of the limit of Kuno. Out of 1545 lacs, 1061 lacs had been spent on relocation process. Balance 484 lacs were required to be released for the remaining rehabilitation works. The Chief Wildlife Warden, M.P. had certified the said expenditure.
7. WII, in the meantime, had made a detailed assessment of prey population for lion re-location in Kuno. It was noticed that since re- location of villages from Kuno was complete, Government of M.P. was keen to assess the prey base in the sanctuary so as to plan obtaining lions from Gujarat for re-introduction as early as possible. For the said purpose, the task of evaluating for wild prey base was entrusted to WII. Consequently, the faculty from WII, with the help of 34 forest staff, had undertaken the study of ungulates in Kuno under the guidance of Dr. Raghu Chundawat and carried out the prey assessment exercise from 2.1.2005 to 8.1.2005 and 8.2.2005 to 13.2.2005. A report was filed in June 2006 (July 2006). The Minister of MoEF sent a letter dated 20.7.2006 to the Chief Minister of Gujarat for translocation of two numbers of lions to Kuno. The Chief Minister of Gujarat vide his letter dated 30.4.2006 replied stating that the matter had been placed before the concerned department for further views. But nothing had been transpired in spite of the fact that crores and crores of rupees were spent by the Government of India for re- location of villages, de-notifying the reserve forest and so on which led to the filing of this public interest litigation seeking a direction to

the respondents to implement the re-location programme as recommended by WII, and approved by the Government of India.

8. The Minister for Tribal Welfare, Forests and Environment, Government of Gujarat vide his D.O. letter dated 18.8.2007 had indicated that it was not possible for the State Government to agree to the proposal for creation of a second home at Kuno in Madhya Pradesh for Asiatic Lions. When the matter came up for consideration before this Court on 30.11.2007 and this Court passed the following order:

“There was a proposal for translocation of some of the Asiatic Lions found in the Gir National Park to a forest in Madhya Pradesh. The State of Gujarat has raised certain objections. The State of Madhya Pradesh wants to file its response..... The proposal is directed to be submitted to the National Board for Wildlife. NBWL may consider the objections of State of Gujarat and response of Madhya Pradesh and submit its recommendation in this court in four months.”

9. NBWL then convened a meeting on 18.2.2008 under the Chairmanship of Hon'ble Minister of State for Forests and Wildlife. The Chief Wildlife Warden, Gujarat informed the Board about the various steps taken by the State Government for providing protection to Lions and their habitat and submitted as follows:

- a) That Kuno Palpur has a population of 6 to 8 tigers and co-existence of large cats of almost equal size was unlikely.
- b) That Lions world over are known to prefer grasslands in sub-topical to near sub-tropical climates with normal temperature during hot period below 42 degree C. (approx) while Kuno is known to have hot climate during summer with temperature exceeding 45 degree C. for a number of days.
- c) The prey base at Kuno is also not adequate enough for the lions.
- d) Lions are increasing in number and geographical distribution in vicinity of Gir in Amreli Bhavnagar districts. This is a natural increase in home range of lions, which is well received by local population. Besides, Gir National Park and Gir-Paniya-Mithiyal Sanctuary and Devalia Interpretation Park, lions have made home in Girnar, grasslands of Savarkundla, Palitana and Mahuva hills and in the coastal region of Jafrabad and Rajula in Amreli districts, Mahuva and Palitana talukas of Bhavnagar district.

e) The Barda Sanctuary area is being effectively prepared as home for lion with vegetation having improved while spotted deer are introduced.

f) The natural expansion of home range being the effective way of establishing natural Meta population that infrequently interact among populations located at different places in Gir region. Thus effectively isolated populations which may still received genetic inputs from the base populations are establishing, providing efficient method of conservation.

g) During the year 2007-2008, Government of Gujarat has launched a special programme for conservation of lion with the Hon'ble Chief Minister of Gujarat announcing a five year action plan package of Rs.40 crore for lion conservation which includes increase in protection force, habitat management, raising awareness to enlist people's participation etc.

10. The Chairman, NBWL then sought the opinion of the Government of Madhya Pradesh on the points raised by the Chief Wildlife Warden, Gujarat.

11. The Additional PCCF (WL), Government of Madhya Pradesh informed that the Kuno was waiting for the release of lions from Gujarat and that the Madhya Pradesh Government had taken all the necessary measures to make Kuno the ideal second home for the lions. Further, it was pointed out that the State had already relocated 24 villages from the sanctuary for the said purpose. Further, it was pointed out that Kuno was suggested as a second home for lions after due scientific studies conducted by WII and the Kuno had posed no threat to the conservation of lions. Further, it was also pointed out that the prey base was in plenty in Kuno and he requested that the lions be translocated to Kuno at the earliest.

12. Dr. Asad Rehmani, Director, Bombay Natural History Society and member of the Standing Committee pointed out that sporadic presence of tiger in Kuno was in no case detrimental to re-introduction of lions. Dr. Divyabhanusinh Chavda, member of the Standing Committee had also emphasized the fact that there was a need to create a second home for lions. Dr. Chavda cited an example of the death of large number of lions in the Serengeti National Park at Tanzania and other areas in Africa due to epidemics. Dr. Chavda cautioned, it could happen at Gir as well. Rest of the members of the Standing Committee also supported the decision for translocation of lions from Gujarat to Kuno. The Standing Committee of NBWL recorded that it was unanimously recommended for translocation of lions from Gujarat to Kuno.

13. The State of Gujarat filed a detailed affidavit before this Court on 4.4.2009 stating that the State had objected to the translocation of lions and that the decision of the Standing Committee was not unanimous. Further, it was also pointed out that there was no sufficient prey base at Kuno so as to receive lions.

14. This Court, after perusing the affidavit filed by the States of Gujarat, Madhya Pradesh as well as MoEF, again passed an order dated 22.4.2009 directing NBWL to have a fresh look on the subject and file a report. It was also ordered that NBWL should hear both the States, if necessary before filing the report. The additional affidavit filed by the State of Gujarat was also placed for consideration before NBWL in its meeting held on 17.7.2009. In that meeting, the Chief Wildlife Warden and the Principal Secretary (Forests) were present on behalf of the State of Gujarat. After detailed discussion, the Standing Committee of NBWL had unanimously decided to have an in-house technical discussion on the subject before taking a final view. The technical discussion was, therefore, held during the 16th meeting of the Standing Committee which was convened on 16.9.2009. In that meeting, the representatives of the Government of Madhya Pradesh (Additional Chief Secretary and Chief Wildlife Warden), Government of Gujarat (Principal Secretary – Forest and Chief Wildlife Warden) along with non-official members of the Standing Committee of National Board of Wildlife were also present during the discussions. The following decisions were taken in the technical discussion held on 16.9.2009:

“TECHNICAL DISCUSSION ON THE ISSUE TRANSLOCATION OF ASIATIC LION FROM GIR TO KUNO PALPUR

It was followed by discussion on Agenda Item No.4

Member Secretary apprised the Committee that during the last meeting it was decided to have detailed technical discussion on the issue of translocation of lions to Madhya Pradesh (M.P.) in Kuno Palpur Sanctuary. Chairman observed that the issue is not mere translocation of lions from Gujarat to M.P. but also the long term viability of survival of the translocated lions. He also pointed out that in past lions have been translocated in M.P. as well as in U.P. unsuccessfully. Further, at present tiger conservation in M.P. also requires focused efforts on the part of the State Government. Under these circumstances any decision for translocation of lions needs to be taken very carefully after judicious consultations.

Dr. Divyabhanusinh Chavda informed that in the previous instances of lion's translocation in both the cases, lions were hunted because they became cattle lifters and caused acute lion-man conflict in the introduced areas as the introduced areas were small and devoid of adequate prey based. However, this is not the present case. At present hunting is legally banned and proposed introduction area is not only having enough prey base but also devoid of human population. CWLW, M.P. also informed that Kuno Palpur Sanctuary could accommodate even 60 lions as there was about 900 sq. Km of buffer area around the Sanctuary. There was enough prey base as per the survey of the State Forest Department. The additional Chief Secretary, Govt of M.P. submitted that the issue was not between the two States but was survival of lions and it needs to be provided an alternative home outside 8th Gujarat State. More than Rs.34.00 crores have already been spent on the project. In case wild lions are not available, zoo bred lions could be introduced in the identified area following soft release as has been proposed in past. Dr. M.K. Ranjitsinh was of the opinion that introduction of zoo bred or captive bred lions in the wild were not correct approach. The only solution was to introduce wild population of lions. Dr. Asad Rahmani also supported these views of Dr Ranjitsinh.

While elaborating the issue of introduction of captive bred lions, Director, WII informed that introduction of such animals in wild is a long drawn process involving 6-12 years. Only filial-2 or filial-3 of the captive bred population could be introduced in wild through soft release and it would require strict monitoring with scientific inputs at all levels supported with strong political, administrative and financial commitments. Member Secretary pointed out that Hon'ble Supreme Court has referred this issue to the Standing Committee with particular reference to additional affidavit filed by Gujarat State Government. Chairman desired that Ministry could prepare a draft response in the matter and get it circulated amongst the members of the Standing Committee and after incorporating their views, a decision on the response to be filed before the Hon'ble Court would be taken. It was also desired that this draft should be circulated within one month among all the members. Chairman also observed that ministry may restart the earlier approved programme of soft release of captive bred lions in Kunopalpur.”

15. The Standing Committee of NBWL then met on 22.12.2009, perused the report of the Technical Committee and made the following observations:

“It is submitted that in view of the above background, the following are the observation of the Standing Committee of National Board for Wildlife on the issue of translocation of lion from Gujarat to Madhya Pradesh:

3.1 The population of Asiatic Lions in India has been restricted to its habitat in the Gir National Park and Gir Sanctuary alone, where they face threats due to man-animal conflict, outbreak of possible epidemic or any natural calamity, etc. Such actions may wipe out the whole population. The need for a second home for the Asiatic Lions was therefore felt and accordingly, based on habitat feasibility studies by the Wildlife Institute of India in various Protected Areas and forests of Gujarat, Rajasthan and Madhya Pradesh, three different sites were finally studied in greater detail out of which Kuno Palpur sanctuary in Morena District of Madhya Pradesh was found most suitable for re-introduction and establishing a second free ranging population of Asiatic Lion outside Gir.

3.2 The contention of the Government of Gujarat that the Lions would not be able to survive in Kuno Palpur due to its extreme climatic conditions is not true. It may be mentioned here that the lions have thrived in extreme climate from the deserts of Palestine and Arabia to the cold coniferous forest in Iran in historical times. They were destroyed not by climate, but by the human action. Lions exist and survive in a variety of habitats with varied prey densities, temperatures and vegetation communities across their range, and while the overall prey densities of Gir are in the higher range of lion densities while that of Kuno are in the medium to low density areas of lions, the natural prey densities in Kuno are significantly higher than the natural prey densities in areas in south Saurashtra outside the Gir where Lions have now taken residence and where the State Government wishes to retain them. It was from these “outlying” Lion populations outside of the Gir that translocation to Kuno Palpur was planned. Therefore, it would be unreasonable to compare Kuno prey densities with that of Gir and then come to a conclusion that Kuno is unsuitable habitat for lions. It is well within the lion range of habitats and prey densities currently.

3.3 The Government of Gujarat, vide para 11 of the additional affidavit, had stated that the wildlife Institute of India has used simple logistic model for projections and predictions, while presenting population growth of wild ungulates. This contention of the Government of Gujarat is not appropriate. In fact, models are abstractions of reality – Simplistic Models have general applications and fewer assumptions. Complex models represent specific

ecosystems more realistically but are extremely data intensive. Data needed for models like the one suggested by the Government of Gujarat is not available for most populations in India and therefore remain there academic exercises. Model outcomes/recommendations should not be followed blindly. In any case, an evaluation of prey densities should be done again prior to the proposed reintroduction of lions and the reintroduction schedule/plan appropriately modified to be in tune with the realized rate of increase by prey populations of Kuno. It is part of the original plan and in any case, as noted above, the natural prey densities in Kuno are higher than in areas where Lions have taken residence outside of Gir in Gujarat and where they live mainly by preying on livestock.

3.4 The Gir lions have passed through two bottle necks on about 1 to 4 thousand years ago and another about 150-200 years ago and are therefore highly inbred. The reintroduction effort does not end with the introduction of a pride of lions into Kuno. A continued program of exchange/supplementation of individual lions between Gir and Kuno is needed at the rate of 2-3 lions per generation. This supplementation needs to continue till the Kuno lion population Gene pool nears that of Gir lions. It is envisaged that such exchanges to last for a minimum duration of 25-30 years but would benefit from continued exchanges over a longer time scale. The Kuno and Gir populations could be managed as a meta-population that would provide demographic as well as genetic benefits to the Gir lion population as well.

3.5 The contention of Government of Gujarat that translocation of Lions made in earlier occasion during early 20th century and during 1956, especially to the Chandraprabha Wildlife Sanctuary in Uttar Pradesh was unsuccessful and therefore the present translocation also would not yield much results is not correct. The reason being that in the previous instances of Lion's translocation, lions were hunted because they became cattle lifters and caused acute lion-man conflict in the introduced areas as the introduced areas were small and devoid of adequate prey base and burdened with human population. However, this is not the present case. At present hunting is legally banned and proposed introduction area is not only having enough prey base but also devoid of human population. Further there are better scientific inputs, full commitment on the part of State Government of Madhya Pradesh and required home work has been done. Therefore, present relocation is not comparable with earlier efforts.

3.6 The issue of poaching is vital. The Government of Gujarat has dealt with it quite well. Poaching will continue to be a threat as long as there is a demand for lion/tiger parts. In the Kuno area also the management have to be much more vigilant with regard to poaching. Further, there is also a need for a collective action by the Central Government, State Governments along with a strong political and bureaucratic commitment as well as full and dedicated support of technocrats and scientists for better and long term conservation of such a species of national pride and what was once India's National Animal.

3.7 The objective of the Government of India is to conserve Asiatic lions for posterity and this effort does not end by mere introduction of a lion pride to Kuno. It would be imperative that Gujarat and Madhya Pradesh work together in designing a Meta- population management plan based on genetic and demographic data of the Asiatic lions to ensure that this objective is met. Without this cooperative approach, lion conservation objective of the Nation/World will not be met.

In view of the aforesaid, it is recommended that the translocation of lions from Gir area to an alternate area, presently to the Kuno-Palpur Sanctuary, is the necessity of the hour essential for conservation of lions for posterity. As mentioned above, the efforts for conservation of lions would not stop by mere translocation efforts, but it would continue through the active involvement of all the stakeholders.”

16. The Standing Committee then authorized the MoEF to file an affidavit to that effect before this Court. Accordingly, an affidavit was filed before this Court by MoEF on 7.1.2010. State of Gujarat also filed a detailed affidavit on 12.11.2010. In its affidavit, the State of Gujarat highlighted the insufficiency of prey base at Kuno and the presence of tigers in the occupied area at Kuno as the major limiting factors. Further, it was also pointed out that the current Asiatic lion population is not a single population confined to one place but consists of meta- population spread over several locations within the Greater Gir Region and that good conservation practices and intensive wild life health care, has lead to epidemic free regime over generations of wildlife including Asiatic Lion in the area.

17. The State of Gujarat took up the stand that, though the issue was discussed by the Standing Committee of NBWL, it had not been placed before the State Board for Wildlife (Gujarat), which is a statutory requirement under the Wild Life (Protection) Act. This Court, therefore, on 27.2.2012, directed the State Board to

consider the issue of lions' translocation and to submit its report. Accordingly, the matter was placed before the State Board. The State Board took the view that there was no threat to Asiatic Lion in the Gir forest from epidemic diseases or other such factors. It was pointed out that the present Asiatic lion population has risen from a broad based and a reasonably good population has been achieved. Further, it was pointed out that previous attempts for translocation from Gujarat were also a failure and since the Greater Gir region being an ideal preservation and conservation for Asiatic lions, there is no necessity of finding out a second home for Asiatic lion at Kuno.

ARGUMENTS:

18. We heard Shri Raj Panjwani, learned senior counsel appearing for the applicant, who submitted that this 20-year project is hanging on fire due to the indifferent attitude of the Gujarat Government. Learned senior counsel submitted that the necessity of re-introduction of Asiatic lion at Kuno has been keenly felt and the scientific world has unanimously advocated for translocation of this endangered species to Kuno for its long term survival and preservation. Learned senior counsel pointed out that NBWL, the expert technical body at more than one occasions has approved and granted technical sanction to go ahead with the project, but could not pick up expected momentum due to the indifferent and defiant attitude of the State of Gujarat.

19. Ms. Vibha Datta Makhija, learned counsel appearing for the State of Madhya Pradesh, highlighted the steps taken by the State of Madhya Pradesh for pushing the project forward. Learned counsel referred to the various counter affidavits filed by the State of Madhya Pradesh for completing the first phase of the project. Necessary sanction has already been obtained to declare Kuno as Sanctuary under the Wildlife Protection Act. MoEF has already granted its approval under Section 2 of the Forest (Conservation) Act for diversion of 3395.9 hectare of forest land for the rehabilitation of eighteen villages located inside Kuno, subject to fulfillment of certain conditions. The area at Kuno was increased to 1268.861 Sq. Km in April 2002 by creating a separate Kuno Wildlife Division. For the above purpose, a total amount of Rs.1545 lakh had been granted by the Government of India and utilized by the State Government. Learned counsel also pointed out that altogether 24 villages and 1543 families were relocated outside Kuno by the year 2002-2003 and the lands abandoned by them have been developed into grass lands.

20. Learned counsel also pointed out that prey density at Kuno has far exceeded the prey density at Gir. Reference was made to the Prey Density Survey conducted

during 2004-2005 by Mr. Fiaz A. Khudsar and Mr. Raman in the year 2008. Firstly, it was pointed out that WII had also conducted an independent study in the year 2012, which also supported the stand taken by the State of Madhya Pradesh that there is sufficient prey base to receive sufficient numbers of lions. Over and above, adequate training has also been given to the forest staff, guards etc. for receiving the lions and for their upkeep and monitoring.

21. Shri P. K. Malhotra, learned Additional Solicitor General, submitted that the population of Asiatic lion is increasing at Gir, but there are conceivable threats to their survival; man-made, natural calamity as well as outbreak of epidemic, which may wipe out the entire population, due to their small population base and limited geographical area of spread. It is under such circumstances, the need for a second home for lions was felt, for which Kuno was found to be the most suitable habitat. However, it was pointed out that the lions could be translocated only if sufficient number of ungulates is available and after taking effective measures, such as, control of poaching, grassland management, water management, building rubble wall around the division etc. Learned senior counsel made reference to the study conducted by the experts of WII and Wildlife Trust of India of the programme of re-introduction of Cheetah in Kuno, on import from Namibia. Referring to the correspondence between the Ministry of State (External Affairs) and Chief Minister of Madhya Pradesh, it was pointed out that subsequent re-introduction of lions is in no way expected to affect the cheetah population, which would have established in the area, by that time.

22. Shri P. S. Narasimha, learned senior counsel and learned Amicus Curiae apprised the court of the extreme urgency for the protection of the Asiatic lion which has been included in the Red List published by the International Union for Conservation of Nature (IUCN) as critically endangered species, endorsed by NBWL in various meetings. NBWL, being the highest scientific statutory body, it commands respect and its opinion is worthy of acceptance by the MoEF and all the State Governments. Learned senior counsel also referred to Article 48 and Article 51-A of the Constitution of India and submitted that the State has a duty to protect and improve environment and safeguard the forests and wildlife in the country, a duty cast upon all the States in the Union of India. Reference was also made to the conservatism in Bio-Diversity and the Eco-centric principle, which have been universally accepted. Learned senior counsel also referred to the National Wildlife Action Plan 2002-2016, and submitted that translocation of Asiatic lions has been treated as a priority project after having found that an alternative home for Asiatic lion is vital for its survival. Learned senior counsel also submitted that the National Forest Policy and the Scheme of 2009 and NWAP (2002-2016) and the plans have

legislative force as decided in *Lafarge Umiam Mining Private Limited, T.N. Godavarman Thirumulpad v. Union of India and others* (2011) 7 SCC 338 case and can be enforced through Courts.

23. Shri Shyam Divan, learned senior counsel appearing for the State of Gujarat, refuted all those contentions and reiterated that there is no necessity of finding out a second home for Asiatic lions, since the population of Asiatic lion has been properly protected in Greater Gir forest and also in few other sanctuaries near Gir Forest. Shri Divan submitted that the population of Asiatic lion has gone up reasonably since broader conservation methods have been adopted by the State of Gujarat and that at present, there is no immediate threat to the Asiatic lions calling for emergency measures, like translocation or reintroduction. Learned senior counsel further pointed out that past experience shows that such translocation of lions ended in failure and possibility of such recurrence cannot be ruled out, since Kuno is not well set to accept or preserve an endangered species like Asiatic lion; which is a success story at Gir.

24. Shri Divan also submitted that, so far, no acceptable translocation plan has been prepared or implemented for a successful translocation of an endangered species like Asiatic lion and the same has been taken note of and commented upon the State Wildlife Board, Gujarat in its meeting held on 16.3.2012. Shri Divan also submitted that the prey-base studies are totally inadequate and not a single study has been conducted or report placed before this Court to show that the benchmark of 480,000 kgs. of wild ungulates biomass has been attained at Kuno. Shri Divan also referred to the note dated 8.7.2012 submitted by Dr. Ravi Chellam and contended that no reliable information was furnished to support the view regarding adequacy of prey base at Kuno. Shri Divan also referred to Section 12 of the Wild Life (Protection) Act and submitted that the translocation should be to 'an alternative suitable habitat'. Kuno, according to the learned senior counsel, is not a 'suitable habitat', not only due to inadequacy of prey- base, but also due to factors like presence of tigers, large scale poaching, unfavourable climate condition, lack of expertise, human-animal conflict etc.

25. Learned senior counsel also referred to the issues raised by the petitioner through this PIL and contended that it would not stand the tests laid in *Lafarge* case (supra), especially when the State Board of Wild Life has stated cogent reasons why translocation of lions to Kuno, at present, is not advisable, which is fully justified by the objections and independent scientific material. Such decision, according to the learned senior counsel, is not amenable to judicial review and,

even otherwise, no grounds are made out for issuing a Writ of Mandamus directing translocation of Asiatic lion from Gir to Kuno.

Legal Framework

26. We will first deal with the constitutional and the legal framework on which we have to examine the various issues which have come up for consideration in this case. The subject “Protection of wild animals and birds” falls under List III, Entry 17B of Seventh Schedule. The Parliament passed The Wild Life (Protection) Act 53 of 1972 to provide for the protection of wild animals and birds with a view to ensuring the ecological and environmental security of the country. The Parliament vide Constitution (42nd Amendment) Act, 1976 inserted Article 48A w.e.f. 03.01.1977 in Part IV of the Constitution placing responsibility on the State “to endeavour to protect and improve the environment and to safeguard the forests and wild life of the country.” Article 51A was also introduced in Part IVA by the above-mentioned amendment stating that “it shall be the duty of every citizen of India to protect and improve the natural environment including forests, lakes, rivers and wildlife and to have compassion for living creatures”.

27. By Act 23 of 1982, Section 12(bb) was inserted in the Wild Life (Protection) Act w.e.f. 21.05.1982 which authorised the Chief Wild Life Warden to grant a special permit for the purpose of scientific management which would include translocation of any wild animal to an alternative suitable habitat or population management of wild life without killing or poisoning or destroying any wild animals.

28. The Parliament later vide Act 16 of 2003 inserted Section 5A w.e.f. 22.09.2003 authorizing the Central Government to constitute the National Board for Wild Life (in short ‘NBWL’). By the same Amendment Act, Section 5C was also introduced eliciting functions of the National Board. Section 5B was also introduced by the aforesaid amendment authorizing the National Board to constitute a Standing Committee for the purpose of exercising such powers and performing such duties as may be delegated to the Committee by the National Board. NBWL is, therefore, the top most scientific body established to frame policies and advise the Central and State Governments on the ways and means of promoting wild life conservation and to review the progress in the field of wild life conservation in the country and suggesting measures for improvement thereto. The Central and the State Governments cannot brush aside its opinion without any cogent or acceptable reasons. Legislation in its wisdom has conferred a duty on NBWL to provide conservation and development of wild life and forests.

29. This Court in *Sansar Chand v. State of Rajasthan*, (2010) 10 SCC 604 held that all efforts must be made to implement the spirit and provisions of the Wild Life (Protection) Act, 1972; the provisions of which are salutary and are necessary to be implemented to maintain ecological chain and balance. The Stockholm Declaration, the Declaration of United Nations, Conventions on Human Environment signed in the year 1972, to which India is the signatory, have laid down the foundation of sustainable development and urged the nations to work together for the protection of the environment. Conventions on Biological Diversity, signed in the year 1962 at Rio Summit, recognized for the first time in International Law that the conservation of biological diversity is “a common concern of human kind” and is an integral part of the development process.

30. The Parliament enacted the Biological Diversity Act in the year 2002 followed by the National Biodiversity Rules in the year 2004. The main objective of the Act is the conservation of biological diversity, sustainable use of its components and fair and equitable sharing of the benefits arising out of the utilization of genetic resources. Bio- diversity and biological diversity includes all the organisms found on our planet i.e. plants, animals and micro-organisms, the genes they contain and the different eco-systems of which they form a part. The rapid deterioration of the ecology due to human interference is aiding the rapid disappearance of several wild animal species. Poaching and the wildlife trade, habitat loss, human-animal conflict, epidemic etc. are also some of the reasons which threaten and endanger some of the species.

31. India is known for its rich heritage of biological diversity and has so far documented over 91,200 species of animals. In India’s bio-graphic regions, 45,500 species of plants are documented as per IUCN Red List 2008. India has many critically threatened animal species. IUCN has noticed today the only living representative of lions once found throughout much of south-west Asia occurred in India’s Gir forest which has been noticed as a critically endangered species in IUCN Red List. The IUCN adopted a resolution of 1963 by which a multi-lateral treaty was drafted as the Washington Convention also known as the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), 1973. CITES entered into force on 1st July, 1975, which aims to ensure that international trade in specimens of wild animals and plants does not threaten the survival of the species in the wild, and it accords varying degrees of protection to more than 33,000 species of animals and plants. Appendix 1 of CITES refers to 1200 species which are threatened with extinction. Asiatic lion is listed in Appendix 1 recognizing that species is threatened with extinction.

32. We notice for achieving the objectives of various conventions including Convention on Biological Diversity (CBD) and also for proper implementation of IUCN, CITES etc., and the provisions of the Wild Life (Protection) Act, Bio-diversity Act, Forest Conservation Act etc. in the light of Articles 48A and 51A(g), the Government of India has laid down various policies and action plans such as the National Forest Policy (NFP) 1988, National Environment Policy (NEP) 2006, National Bio-diversity Action Plan (NBAP) 2008, National Action Plan on Climate Change (NAPCC) 2008 and the Integrated development of wild life habitats and centrally sponsored scheme framed in the year 2009 and integrated development of National Wild- life Action Plan (NWAP) 2002-2016. In Lafarge case (supra) this Court held that National Forest Policy 1988 be read together with the Forest (Conservation) Act, 1980. In our view, the integrated Development of Wile Life habitat under the Centrally Sponsored Scheme of 2009 and the NWAP (2002-2016) have to be read along with the provisions of the Wile Life (Conservation) Act.

33. The Prime Minister of India on 1.1.2002, in the XXI Meeting of the Indian Board for Wildlife, released the 'National Wildlife Action Plan (2002-2016)' (in short NWAP 2002-2016). NWAP has highlighted that the wildlife encompasses all uncultivated flora and undomesticated fauna and every species has the right to live and every threatened species must be protected to prevent its extinction. It was noticed with the mounting agricultural, industrial and demographic pressures, wilderness areas, which are the richest repositories of wildlife and biodiversity have either shrunk or disappeared and their continued existence is crucial for the long term survival of the biodiversity and the ecosystems supporting them. NWAP, inter alia, highlighted the necessity to protect the long term ecological security of India and to identify and protect natural ecosystems from over-exploitation, contamination and degradation. NWAP has also urged the necessity to give primacy to in situ conservation which is a sheet anchor of wildlife conservation. Ex situ measures in zoological parks and gene banks may supplement this objective, without depleting scarce wild resources. NWAP also highlighted the ecological requirements for the survival of threatened, rare and endangered species together with their community associations of flora and fauna. It also highlighted the imperative necessity to have alternative homes for highly endangered species like the Great Indian Bustard, Bengal Florican, Asiatic Lion, Wild Buffalo, Dugong, the Manipur Brow Antlered Deer and the like. It was also noticed that where in situ conservation efforts are unlikely to succeed, ex situ captive breeding and rehabilitation measures may be necessary, in tandem with the preparation of their wild habitats to receive back captive populations, especially in respect of lesser-

known species where status and distribution of wild animals are not fully known. NWAP also highlighted the necessity of taking the following actions:

1. To identify all endangered species of flora and fauna, study their needs and survey their environs and habitats to establish the current level of security and the nature of threats. Conduct periodic reviews of flora and fauna species status, and correlate the same with the IUCN Red Data List every three years.
2. Invest special care and resources to protect habitats that harbour highly endangered species especially those having single population and a high degree of endemism.
3. Initiate action to prevent the “genetic swamping” of wild species.
4. To undertake a programme of ex situ captive breeding and rehabilitation in the wild for critically endangered species in accordance with IUCN guidelines, after developing requisite techniques and capabilities in this regard.
5. To publish flora and fauna species status papers periodically, which should be translated into local languages.
6. To declare identified areas around Protected Areas and corridors as ecologically fragile under the Environment (Protection) Act, 1986, wherever necessary.

NWAP also highlighted the priority projects and to initiate a time-bound plan to identify and conduct status surveys of all endangered species covering all groups of rare and threatened species of flora and fauna and to provide protection to the environs and habitats of all rare and threatened species of flora and fauna under the priority projects. 2.2 of Para 3 of NWAP read as follows:

“2.2 Identify suitable alternative homes for single isolated populations of species such as Jerdon’s Courser, Asiatic Lion, Manipur Deer, Wroughton’s Free Tailed Bat and the like, and manage the same as Protected Areas effectively.”

34. NWAP also states that the same is the responsibility of MoEF, State Governments, Scientific Institutions and NGOs. The necessity to take immediate steps for preventing the entry of domestic and feral species that may lead to genetic swamping, has also been highlighted. The importance to safeguard genetically pure populations from future genetic contamination and where genetic swamping has occurred, to phase out such swamping, was also highlighted. NWAP, in chapter IV, has highlighted the necessity to the restoration and management of degraded habitats outside the protected areas.

35. MoEF noticed that the fragmented nature of wildlife rich areas, increased human pressure, habitat degradation, proliferation of invasive species, man-animal conflicts, poaching, impacts of changing climate etc. are some of the challenges that has to be addressed at a war footing. The necessity for ensuring better protection of wildlife outside the protected areas and initiating recovery programmes for saving critically endangered species and habitats has also been high-lighted. Keeping that in view, a comprehensive Centrally Sponsored Scheme titled 'Integrated Development of Wildlife Habitats' has been made operational on 30.7.2009 which was in addition to the erstwhile Centrally Sponsored Scheme – 'Assistance for the Development of National Parks and Sanctuaries'. The scheme incorporated additional components and activities for implementing the provisions of the Wildlife (Protection) Act, 1972, the National Wildlife Action Plan (2002-2016), recommendations of the Tiger Task Force, 2005 and the National Forest Commission, 2006 and the necessities felt from time to time for the conservation of wildlife and biodiversity in the country. The scheme was formulated during the 11th year plan.

36. India has a network of 99 national parks, 515 wildlife sanctuaries, 43 conservation reserves and 4 community reserves in different bio- geographic zones. Many important habitats, still exists outside those areas, which requires special attention from the point of view of conservation. The Centrally Sponsored Scheme also specifically refers to the recovery programmes for saving critically endangered species and habitats. Due to variety of reasons, several species and their habitats have become critically endangered. Snow leopard, Great Indian Bustard, Kashmir Stag, Gangetic Dolphin, Nilgiri Tahr, Malabar Civet, marine turtles, etc are few examples.

37. The scope of the Centrally Sponsored scheme was examined in T. N. Godavarman Thirumulpad v. Union of India and others (2012) 3 SCC 277 (Wilde Buffalo case) and this Court directed implementation of that scheme in the State of Chhattisgarh. The centrally sponsored scheme, as already indicated, specifically

refers to the Asiatic lions as a critically endangered species and highlighted the necessity for a recovery programme to ensure the long term conservation of lions. NWAP 2002-2016 and the Centrally Sponsored Scheme 2009 relating to integrated development of wildlife habitats are schemes which have statutory status and as held in Lafarge case (supra) and have to be implemented in their letter and spirit. While giving effect to the various provisions of the Wildlife Protection Act, the Centrally Sponsored Scheme 2009, the NWAP 2002-2016 our approach should be eco-centric and not anthropocentric.

ANTHROPOCENTRIC VS. ECO-CENTRIC

38. We may point out that has been wide ranging discussions and deliberations on the international platforms and conferences for re- building of certain principles laid down in the earlier conventions on the Principles of Sustainable Development. The United Nations Commission on Environment and Development defined the ‘sustainable development’ as follows:

“Sustainable development is the development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” (World Commission on Economic Development [WCED], 1987 : 43)

39. Sustainable development, it has been argued by various eminent environmentalists, clearly postulates an anthropocentric bias, least concerned with the rights of other species which live on this earth. Anthropocentrism is always human interest focussed thinking that non-human has only instrumental value to humans, in other words, humans take precedence and human responsibilities to non-human are based benefits to humans. Eco-centrism is nature-centred, where humans are part of nature and non-humans have intrinsic value. In other words, human interest does not take automatic precedence and humans have obligations to non-humans independently of human interest. Eco-centrism is, therefore, life-centred, nature-centred where nature includes both humans and non-humans.

40. We re-iterate that while examining the necessity of a second home for the Asiatic lions, our approach should be eco-centric and not anthropocentric and we must apply the “species best interest standard”, that is the best interest of the Asiatic lions. We must focus our attention to safeguard the interest of species, as species has equal rights to exist on this earth. Asiatic Lion has become critically endangered because of human intervention. The specie originally existed in North Africa and South-West Asia formerly stretched across the coastal forests of

northern Africa and from northern Greece across south-west Asia to eastern India. Today the only living representatives of the lions once found throughout much of South-West Asia occur in India's Gir Forest. Asiatic lion currently exists as a single sub-population and is thus vulnerable to extinction from unpredictable events, such as an epidemic or large forest fire etc. and we are committed to safeguard this endangered species because this species has a right to live on this earth, just like human beings.

41. Article 21 of the Constitution of India protects not only the human rights but also casts an obligation on human beings to protect and preserve a specie becoming extinct, conservation and protection of environment is an inseparable part of right to life. In *M. C. Mehta v. Kamal Nath and Others* (1997) 1 SCC 388, this Court enunciated the doctrine of “public trust”, the thrust of that theory is that certain common properties such as rivers, seashores, forests and the air are held by the Government in trusteeship for the free and unimpeded use of the general public. The resources like air, sea, waters and the forests have such a great importance to the people as a whole, that it would be totally unjustified to make them a subject of private ownership. The State, as a custodian of the natural resources, has a duty to maintain them not merely for the benefit of the public, but for the best interest of flora and fauna, wildlife and so on. The doctrine of ‘public trust’ has to be addressed in that perspective.

42. We, as human beings, have a duty to prevent the species from going extinct and have to advocate for an effective species protection regimes. NWAP 2002-2016 and the Centrally Sponsored Scheme 2009 indicate that there are many animal species which are close enough to extinction and some of the other species have already disappeared from this earth. No species can survive on the brink of extinction indefinitely and that the continued existence of any species depends upon various factors like human-animal conflict, epidemics, forest fire and other natural calamities etc.

43. The Wildlife Biologists of WII, after conducting a research on Gir Forests, noticed the necessity for long term conservation of Asiatic lion in Gir and also highlighted the necessity of a second natural habitat for its long term conservation. Population and Habitat Analysis Workshop held at Baroda in October, 1993 also highlighted that fact. NBWL, as already indicted, has taken a consistent view in all its meetings about the necessity of a second habitat for Asiatic lion, an endangered species. Asiatic lion, it has been noticed, has been restricted to only one single habitat, i.e. the Gir National Forest and its surrounding areas and an outbreak of possible epidemic or natural calamity might wipe off the entire species. A smaller

population with limited genetic strength are more vulnerable to diseases and other catastrophes in comparison to large and widespread population. Threat, therefore, is real and has proved by the outbreak of canine distemper in the lions of Serengeti NP, Tanzania in 1994. 85% of the Serengeti lion population, it was noticed, had Canine Distemper Virus antibodies and at least 30% of the Serengeti and Mara lions died due to the infection. Compared with Gir, the lion population in the 40,000 sq. km. Serengeti-Mara ecosystem is large with about 2500 lions. It was felt that if an epidemic of this scale were to affect the lions in Gir, it would be very difficult to save them from extinction, given the much smaller area of the Gir forests and the smaller lion population. The possibility of the disease spreading to the pockets of habitat such as Girnar, Mityala, Rajula, Kodinar and the surrounding areas, cannot be ruled out.

44. We have already indicated that there is uniformity in the views expressed by the Bio-Scientists of WII, NBWL, MoEF and other experts that to have a second home for the endangered species like Asiatic lion is of vital importance. A detailed study has been conducted to find out the most suitable habitat for its re-introduction and Kuno Wildlife Sanctuary (for short 'Kuno') in Madhya Pradaesh, as already indicated, has been found to be the most ideal habitat.

Ownership and Possession of wild Animals

45. No state, organisation or person can claim ownership or possession over wild animals in the forest. Wild Animal is defined under the Wild Life (Protection) Act, 1972 under Section 2(36) to mean any animal specified in schedules I to IV and found wild in nature. 'Wild Life' has been defined under Section 2(37) to include any animal, bees, butterflies, crustacean, fish and moths, and or land vegetation which forms part of any habitat. Section 9 prohibits hunting of wild animals, specified in Schedule I, II, III and IV except as provided under Section 11 and Section

12. Section 40 of the Act obliges a person to make a declaration and Section 41 enables the Chief Wild Life Warden to make an enquiry and preparation of inventories and Section 42 deals with the issue of certificates and confers, no ownership of the wild animals to a particular state or others. Animals in the wild are properties of the nation for which no state can claim ownership and the state's duty is to protect the wild life and conserve it, for ensuring the ecological and environmental security of the country.

46. Several migratory birds, mammals, and animals in wild cross national and international borders created by man and every nation have a duty and obligation to ensure their protection. No nation or organisation can claim ownership or possession over them, the Convention on the conservation of migratory species of wild animals held at Bonn, 1979, supports this principle and the convention recognises that wild animals in their innumerable forms are irreplaceable part of the earth; natural system and must be conserved for the good of the mankind. It has recognised that the states are and must be the protectors of the migratory species of wild animals that live within or pass through their national jurisdictional boundaries. Convention highlights that conservation and effective management of migratory species of wild animals require the concerted action of all states within the national jurisdictional boundaries of which such species spend any part of their life cycle. India is also a signatory to that convention.

47. State of Gujarat has taken up the stand that it has got its own conservation programme in respect of Asiatic lion. Due the effective conservation programme carried out by the State of Gujarat at Gir, it was pointed out, that the number of Asiatic lions in the wildlife has increased, the range of these lions has increased, the statutorily protected habitat has increased, so also the area occupied by these lions has increased. The State has maintained the stand that there is no present or immediate danger to the Asiatic lions warranting any emergency measures.

48. State Board for Wildlife, Gujarat (SBWL, Gujarat), which has been constituted by the State Government under Section 6 of the Wildlife Protection Act, 1972, convened a meeting on 16.3.2012 to discuss the issue relating to translocation of Asiatic lion from Gujarat to Madhya Pradesh. SBWL, Gujarat and took the view that that the issue of giving or not giving lions to Kuno is not an issue of conflict between States, but it is a collective Indian cultural approach in the interest of long term conservation of lions as part of our family. SBWL further maintained the stand that Asiatic Lion being a “family member” is beyond and higher than the “scientific reasoning”. SBWL, therefore, did not agree with the proposal for translocation of lion from Gujarat to Kuno, a stand endorsed by the State of Gujarat.

49. Approach made by SWBL and the State of Gujarat is an anthropocentric approach, not eco-centric though the State of Gujarat can be justifiably proud of the fact that it has preserved an endangered specie becoming extinct. We are, however, concerned with a fundamental issue whether the Asiatic lions should have a second home. The cardinal issue is not whether the Asiatic lion is a “family member” or is part of the “Indian culture and civilization”, or the pride of a State

but the preservation of an endangered species for which we have to apply the “species best interest standard”. Our approach should not be human-centric or family-centric but eco-centric. “Scientific reasoning” for its re-location has to supersede the family bond or pride of the people and we have to look at the species best interest especially in a situation where the specie is found to be a critically endangered one and the necessity of a second home has been keenly felt. We, therefore, find it difficult to agree with the reasoning of SBWL, Gujarat and the State of Gujarat that the Asiatic lion is a family member and hence be not parted with.

50. The views of NBWL constituted by the Central Government in exercise of its powers conferred under Section 5A of the Wildlife Protection Act, have to prevail over the views expressed by SBWL. The duties conferred on the National Board under Section 5C of the Act and on the State Board under Section 8 of the Act are entirely different. NBWL has a duty to promote conservation and development of wildlife and frame policies and advise the Central Government and the State Governments on the ways and importance of promoting wildlife conservation. It has to carry out/make assessment of various projects and activities on wildlife or its habitat. NBWL has also to review from time to time the progress in the field of wildlife conservation in the country and suggest measures for improving thereto. Those functions have not been conferred on the State Board. The State Board has been conferred with a duty to advise the State Government the selection and management of areas to be declared as protected areas and advise the State Government in formation of their policies for protection and conservation of the wildlife and specify plans etc. Statutorily, therefore, it is the duty of NBWL to promote conservation and development of wildlife with a view to ensuring ecological and environmental security in the country. We are, therefore, of the view that the various decisions taken by NBWL that Asiatic lion should have a second home to save it from extinction, due to catastrophes like epidemic, large forest fire etc, which could result in extinction, is justified. This Court, sitting in the jurisdiction, is not justified in taking a contrary view from that of NBWL.

HISTORICAL HABITAT – RE-INTRODUCTION

51. No specie can survive on the brink of extinction indefinitely and the probabilities associated with a critically endangered specie make their extinction a matter of time. Convention biology is the science that studies bio-diversity and the dynamics of extinction. Eco-system approach to protecting endangered species emphasises on recovery, and complement and support eco-system based conservation approach. Reintroduction of an animal or plant into the habitat from

where it has become extinct is also known as ex-situ conservation. India has successfully achieved certain re-introduction programmes, for example, the Rhino from Kaziranga, re-introduction of Gangetic gharial in the rivers of Uttar Pradesh, Rajasthan etc. Re-introduction of an organism is the intentional movement of an organism into a part of its native range from which it has disappeared or become extirpated in historic times as a result of human activities or natural catastrophe.

52. Kuno, as already stated, was proved to be a historical habitat of Asiatic Lions. After survey of the potential status for re-introduction of Asiatic lion, a final report has been submitted by WII, which was published on 31.1.1995 Kuno Wildlife Sanctuary (Madhya Pradesh) emerged as the most suitable habitat for re-introduction of the Asiatic lion. The Council of Ministers approved the project on 28.2.1996. Between 1996 and 2001, 24 villages with about 1547 families had been translocated from the sanctuary by the Madhya Pradesh Forest Department. Government of Madhya Pradesh had also demarcated 1280 sq. kms. Kuno Wildlife Division, encompassing the Sironi, Agra and Morawan forest ranges around the sanctuary. Government of India vide its order dated 21.1.1997 ordered diversion of 3720.9 hectares of forest land, including 18 villages were protected under Section 2 of the Forest Conservation Act. A 20-years Project envisaged by the Government of India was also approved by NBWL in its meeting held on 10.3.2004. The Government of Madhya Pradesh took up a massive re-location of villages and giving them alternative sites. A male over 18 years of age was considered to be a family and each family was given 2 hectares of cultivate land, in addition to 500 sq. mtrs. Land was also given for house construction. Financial assistance to the tune of Rs.1,00,000/- in the form of housing material was also given. Government of India has spent a sum of Rs.15 crores for the said purpose.

53. We also notice that all possible steps have been taken by the State of Madhya Pradesh, MoEF and the Union of India making Kuno Wildlife Sanctuary fit for re-introduction of Asiatic lion, with the approval of NWLB.

PREY DENSITY:

54. WII was requested to assess the availability of prey density in the year 2005. With the assistance of various staff, 17 transects totalling 461 km were surveyed over an area of 280 sq. kms. The density of catchable wild prey (chital, sambar, nilgai, wild pig) by lions was 13 animals/sq. km. There were about 2500 cattle, left behind by the translocated people which were considered to be the buffer prey for lions to tide over the likely problem of drought periodically killing wild ungulates. WII noticed that with the implementation of the recommendations such as the

control of poaching, grassland management, building rubble wall around the Division and water augmentation, a substantial rise (ca. 20 animals/Sq. km) in the wild prey base for lions by the end of 2007. A detailed report on the assessment of prey population was submitted by WII in July 2006.

55. State of Gujarat had raised serious objection with regard to prey density at Kuno. Various studies have been conducted with regard to prey density. Reports and studies conducted by the Government of Madhya Pradesh revealed that the prey density at Kuno has far exceeded the estimated prey density as recommended by Prof. Chellam in his 1993 report. The data collected regarding prey density by Mr. Fiaz A. Khudsar and Mr. Raman in the year 2008 shows the following picture:

Species	Mr. F.A. Khudsar year 2004	Mr. F. A. Khudsar year 2006	Mr. Raman, WII in 2011	WII in 2011
All prey (excluding feral cattle)	17.35	24.6	49.477	N.A.
All prey (including feral cattle)	63.97	67.406	85.91	23

We notice that Mr. Khudsar collected his data regarding prey base density April-May 2004 and May 2005, that report was published in 2008. However, the census carried out by Mr. Rehman (WPO) was in March 2008. Census was carried out as per All India Tiger Census procedure. For the said purpose, the officials and staff of Government of India was trained by the scientists of WII in 2008, from 19-21 January. The Staff/officials of working plan was later trained for one week from 18-23 February, 2008 in Game Guard Training School, Bandhavgarh and then census was carried out from 2.3.2008 to 8.3.2008 under the supervision and guidance of Dr. Quarnar Qureshi, Scientist WII. We, therefore, find that the census carried out by Shri Raman (WPO) is latest in point of time. The actual comparative statement between density estimation of Shri Raman WPO, 2008 and Shri F.A. Khudsar is as follows:

Species	Mr. F.A. Khudsar year 2004	Mr. F.A. Khudsar year 2006	Shri Raman WII in 2011	WII in 2011
Chital	6.6	12.5	18.834	35.87
Sambar	0.3	0.78	1.634	N.A.
Nilgai	0.77	1.61	5.603	N.A.
Four horned	0.02	0.0	0.0	N.A.
Antelope				
Chinkara	3.6	6.52	1.983	N.A.
Wild Pig	0.79	3.19	3.534	N.A.
Feral Cattle	0.0	39.37	17.929	N.A.

In order to get latest figure of prey base, an exercise of prey base estimation was done in Kuno in the month of June 2012 by the team of expert independent scientists and various officers of M.P. In June 2012, WII was requested to conduct a survey to assess the latest status of prey base in Kuno. An exercise was carried out jointly by the independent members i.e. scientists/experts from WII, WWF India and the personnel of Kuno Wildlife Division to determine the accurate prey base. The following was the methodology taken up by them.

“(ii) Prey base density estimation: The methodology of exercise was – Distance sampling on systematic line transect method as developed by Buckland et al., 2011. Fixed line transects distributed across Kuno WLS, were sampled. All the line transects were walked three times. All ungulates and other prey species observed along with their group size were recorded. The total sampling effort was 208.5 km and 144 man-days.

(iii) Analysis:- The density of prey species which include Chital, Sambhar, Nilgai, Wildpig, Chinkara, Langur, Peafowl and Feral Cattle was estimated using the software DISTANCE 6.0. The analysis of the collected data was done by Dr. Jhala and researchers working under him.

(iv) Population Density:- As a result of exercise done for estimation of prey-base, density estimates of Chital, Sambhar, Nilgai, Wildpig, Chinkara, Lungur, Peafowl and Feral Cattle were calculated. Population density of prey species in Kuno WLS was found as follows:

Species	Population Density / Sq. km.	Standard Error
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Chital	51.59	8.84	Sambhar	3.59	1.01	Nilgai	2.32	0.59
Wild Pig	4.68	1.54	Chinkara	0.99	0.35	Langur	17.2	4.6
Peafowl	6.44	2.34	Feral Cattle	1.83	0.77			

State of Madhya Pradesh has also taken up the stand that the prey base in Kuno is more than the existing prey base in Gir. A chart comparing the same as also been produced before us, which is as follows: 2012 Scenario:-

Species	Av. Wt.	Gir N.P.	Kuno WLS	Density	Biomass
		per sq. (kg)	per sq. (kg)	Km.	Km.
Chital	47	50.8	2387.60	51.59	2424.7
Sambar	134	2.00	268.00	3.59	481.06

Nilgai	125	0.58	72.50	2.32	290	Four horned	21	0.42	8.82	-	-
antelope						Chinkara	20	2.40	48.00	0.99	19.8
						Wild Pig	32	0.00	0.00	4.68	149.76
						Common Langur	09	0.00	0.00	17.2	154.8
Total including	56.2	2785	80.37	3520.12		Langur					
						Total excluding					
	63.17	3365.32				langur feral					
						cattle					

State of Madhya Pradesh, therefore, maintained the stand that, in 2012 scenario, the biomass per sq/km in Kuno Wildlife Sanctuary excluding feral cattle and langur (3365.32 kg per sq/km) is more than the biomass in Gir PA (2785 kg per sq/km).

56. State of Gujarat filed an application on 2.7.2012 on the basis of the above estimation of prey base and sought a direction to the parties to take a fresh survey on prey base. Shri Ravi Chellam in his written note on 8.7.2012 made some remarks on prey-base stating that prey density estimation seems to be inadequate in terms of design, data-collection, protocols, and analytical methods, when compared with the internationally accepted standards. Shri Chellam suggested that prey studies have to be conducted at least twelve months covering all seasons and habitat.

57. State of Gujarat has also raised various other objections stating that the past track record would indicate that State of Madhya Pradesh is not taking any effective steps to control poaching which is also a threat if lions are translocated to Kuno. To meet that contention, the State of Madhya Pradesh stated that the Tiger Authority of India in its report – Tiger Meets, July 2011 – has assessed the performance of the State of Madhya Pradesh as outstanding, which would indicate that they had taken effective steps against poaching of animals at Kuno. We notice that poaching of wild animals is of great concern which calls for attention by all State Governments, so as to protect the endangered species from extinction. It is a matter which has to be dealt with effectively and poaches, if caught, should be brought to justice.

Cheetah to Kuno

58. We notice that while the matter was being heard, a decision has been made by MoEF to import African Cheetahs from Namibia to India and to introduce the same at Kuno. Amicus Curiae filed I.A. No. 3452 of 2012. This Court granted a stay on 8.5.2012 of the decision of MoEF to import the Cheetahs from Namibia to India for introducing them to Kuno. Serious objections have been raised by the Amicus Curiae Shri P.S. Narasimha against the introduction of foreign species at

Kuno. Learned Amicus Curiae pointed out that the decision to introduce African Cheetahs into the same proposed habitat chosen for re-introduction of Asiatic lion has not been either placed before the Standing Committee of NBWL, nor has there been a consistent decision. Learned Amicus Curiae pointed out that IUCN Guidelines on translocation clearly differentiated between introduction and re-introduction. The guidelines critically warned against the introduction of African or imported species which never existed in India. It is not a case of international movement of organism into a part of its native range. Learned Amicus Curiae pointed that NWAP 2002-2016, which is a National Policy document, does not envisage re-introduction of a foreign species to India. The Police only mentioned re-introduction or finding an alternative home for species like Asiatic lion.

59. MoEF, in our view, has not conducted any detailed study before passing the order of introducing foreign cheetah to Kuno. Kuno is not a historical habitat for African cheetahs, no materials have been placed before us to establish that fact. A detailed scientific study has to be done before introducing a foreign species to India, which has not been done in the instant case. NBWL, which is Statutory Board established for the purpose under the Wildlife Protection Act was also not consulted.

60. We may indicate that our top priority is to protect Asiatic lions, an endangered species and to provide a second home. Various steps have been taken for the last few decades, but nothing transpired so far. Crores of rupees have been spent by the Government of India and the State of Madhya Pradesh for re-introduction of Asiatic lion to Kuno. At this stage, in our view, the decision taken by MoEF for introduction of African cheetahs first to Kuno and then Asiatic lion, is arbitrary an illegal and clear violation of the statutory requirements provided under the Wildlife Protection Act. The order of MoEF to introduce African Cheetahs into Kuno cannot stand in the eye of Law and the same is quashed.

61. MoEF's decision for re-introduction of Asiatic lion from Gir to Kuno is that of utmost importance so as to preserve the Asiatic lion, an endangered species which cannot be delayed. Re-introduction of Asiatic lion, needless to say, should be in accordance with the guidelines issued by IUCN and with the active participation of experts in the field of re-introduction of endangered species. MoEF is therefore directed to take urgent steps for re-introduction of Asiatic lion from Gir forests to Kuno. MoEF has to constitute an Expert Committee consisting of senior officials of MoEF, Chief Wildlife Wardens of the States of Madhya Pradesh and Gujarat. Technical experts should also be the members of the Committee, which will include the Secretary General and Chief Executive Officer of WWF. Dr. Y.S.

Jhala, senior scientist with Wildlife Institute of India, Dr. Ravi Chellam, senior scientist, Dr. A.J.T. Johnsingh, since all of them had done lot of research in that area and have national and international exposure. Any other expert can also be co-opted as the members of the Committee. Needless to say, the number of lions to be re-introduced would depend upon the density of prey base and other related factors, which the Committee will assess.

62. I.A. is allowed as mentioned above. The order be carried out in its letter and spirit and within a period of 6 months from today. We record our deep appreciation for the assistance rendered by all the senior counsel and learned amicus curiae Shri P.S. Narasimha and also Dr. Ravi Chellam who was present in the Court throughout and made valuable suggestions with regard to the various environmental and scientific issues.

63. We are also inclined to highlight the necessity of an exclusive parliamentary legislation for the preservation and protection of endangered species so as to carry out the recovery programmes before many of the species become extinct and to give the following directions:

(a) NWAP (2002-2016) has already identified species like the Great Indian Bustard, Bengal Florican, Dugong, the Manipur Brow Antlered Deer, over and above Asiatic Lion and Wild Buffalo as endangered species and hence we are, therefore, inclined to give a direction to the Government of India and the MoEF to take urgent steps for the preservation of those endangered species as well as to initiate recovery programmes.

(b) The Government of India and the MoEF are directed to identify, as already highlighted by NWAP, all endangered species of flora and fauna, study their needs and survey their environs and habitats to establish the current level of security and the nature of threats. They should also conduct periodic reviews of flora and fauna species status, and correlate the same with the IUCN Red Data List every three years.

(c) Courts and environmentalists should pay more attention for implementing the recovery programmes and the same be carried out with imagination and commitment.