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BEFORE THE CENTRAL EMPOWERED COMMITTEE
CONSTITUTED BY THE HON'BLE SUPREME COURT IN W.P 202 OF 1995
APPLICATION NO:.....OF 2017

IN THE MATTER OF:

1. **Randhir Bittu Sahgal**
602, Maker Chambers V,
Nariman Point
Mumbai 400 021

2. **Manoj Misra**
178-F, Pocket-4,
Mayur Vihar Phase-I,
Delhi - 110 091

... **APPLICANTS**

VERSUS

1. **Union of India**
Through the Secretary,
Ministry of Environment, Forest and Climate Change
Indira Paryavaran Bhawan
Jor Bagh, Lodi Road
New Delhi 110003

2. **National Tiger Conservation Authority of India**
Through its Member Secretary
B-1 Wing, 7th Floor
Paryavaran Bhawan, CGO Complex
New Delhi 110003

3. **National Board for Wildlife**
Through the Member Secretary
& Additional Director General of Forest (Wildlife)
Indira Paryavaran Bhawan

Jor Bagh, Lodi Road
New Delhi 110003

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4. **National Water Development Agency**
Ministry of Water Resources, Government of India
18-20, Community Centre, Saket
New Delhi 110017
5. **State of Madhya Pradesh**
Through the Chief Secretary
Government of Madhya Pradesh
B-13, Char Imali
Bhopal, Madhya Pradesh-462013
6. **The Chief Wildlife Warden**
Government of Madhya Pradesh
3rd Floor, Pragati Bhawan
Indira Press Complex, MP Nagar
Bhopal, Madhya Pradesh-462011

... **RESPONDENTS**

MOST RESPECTFULLY SHOWETH:

1. The Applicant No 1 is a leading wildlife conservationist. Over the last four decades he has played a critical role in shaping public opinion on issues related to wildlife conservation in general and tiger protection in particular. He has been a member of various statutory bodies such as the National Board for Wildlife, Indian Board for Wildlife, Maharashtra State Board for Wildlife and various Expert Appraisal Committee of the Ministry of Environment and Forest and the Steering Committee of Project Tiger. He is the founder-editor of the India's leading Wildlife Magazine: the Sanctuary Asia, which has been in continuous publication since 1981.
2. Applicant No 2 is a retired Indian Forest Service Officer of the Chhattisgarh Cadre and has served in various Protected Areas in Madhya Pradesh. After

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taking voluntary retirement from the service he has been spearheading citizens movement to save India's river. He has been the co-organiser of the India Rivers Week every year which is an annual gathering of concerned citizens who are saving rivers in India. For the last ten years he has led a citizens campaign called the Yamuna Jiye Abhiyan.

3. The present Application is being filed before this Hon'ble Committee, in order to raise concerns with respect to the approval granted by the Standing Committee of the National Board for Wildlife (NBWL) to the Ken Betwa River Linking Project involving the state of Madhya Pradesh and Uttar Pradesh. The Approval granted by the Standing Committee of the National Board for Wildlife is in violation of the provisions of the Wildlife (Protection) Act, 1972, the Precautionary Principle, the Public Trust Doctrine as well as the Species Best Interest standard. It reflects non-application of mind by the members of the Standing Committee as well as other statutory authorities. The project if allowed to proceed will cause irreversible loss to an extremely fragile ecosystem which is also habitat to critically endangered species of flora and fauna. The proposal should have been subject to the most careful scrutiny by the National Board for Wildlife.
4. That the Standing Committee of the National Board in their 39th Meeting dated 23.08.2016 granted approval to the Ken-Betwa River Link Project Authority (KBLPA) (hereinafter called as 'Project Proponent') represented by National Water Development Agency, Ministry of Water Resources, Government of India for the proposed Ken-Betwa Link Project Phase 1 in the states of Uttar Pradesh and Madhya Pradesh which involves the diversion of forest land, destruction of wildlife habitat in the Critical Tiger Habitat of the Panna National Park and Tiger Reserve as well as the change in the flow of water and construction within the Ken Gharial

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Sanctuary which comes under the administrative control of Panna Tiger Reserve.

A copy of the approval granted during the 39th Meeting of the Standing Committee of the National Board for Wildlife is hereto annexed and marked as **Annexure A-1**.

5. The Applicant No.1 has also perused the Judgment of the Hon'ble Supreme Court in the matter of **In Re Networking of Rivers, (2012) 4 SCC 51**. The Hon'ble Supreme Court specifically had highlighted the following:

"The Court can hardly take unto itself tasks of making of a policy decision or planning for the country or determining economic factors or other crucial aspects like need for acquisition and construction of river linking channels under that program. The Court is not equipped to take such expert decisions and they essentially should be left for the Central Government and the concerned State. Such an attempt by the Court may amount to the Court sitting in judgment over the opinions of the experts in the respective fields, without any tools and expertise at its disposal."

6. That there was no direction from the Hon'ble Supreme Court to any of the Statutory bodies i.e. the State Board for Wildlife, The National Board for Wildlife, National Tiger Conservation Authority, Forest Department, MOEF&CC as well as the Expert Appraisal Committee or the Forest Advisory Committee to grant the requisite approval. Applicant, would like to cite the case of Orissa Mining Corporation versus Union of India, wherein despite the Hon'ble Supreme Court granting Forest Clearance to the mining project of Ms Sterlite, the Ministry of Environment and Forest refused to grant the Final Stage II Forest Clearance. In the present instance, the Environment, Forest and Wildlife clearance was never considered by the Hon'ble Supreme Court and hence deserve to be

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considered strictly on the merit. This is also in view of the specific observation of the Hon'ble Supreme Court that the Court cannot deal with planning of interlinking in view of it being a complex issue.

7. However, despite the Hon'ble Court emphasising on its limitation with respect to the technical issues and issuing no direction to the Statutory authorities, i.e the State Board for Wildlife as well as the National Board for Wildlife have failed to objectively evaluate the project in terms of merits and have only focused on some limited mitigation measures, without considering the alternatives and even the statutory bar on change in the flow of water into or outside the National Park or Sanctuary or use of destruction of wildlife for a purpose which is not specifically for the improvement of wildlife or its management.
8. The whole project has been approved by the Standing Committee of National Board for Wildlife on the ground that there is effective mitigation measure in place to deal with the damage that will be caused due to diversion of land of the Critical Tiger Habitat and National Park will be effectively mitigated due to the mitigation plan in place. It is submitted that an effective mitigation plan is possible only if the studies were done comprehensively and objectively. The various reports point out to glaring deficiencies in the EIA Reports. Even more glaring is that even the recommendation of the Site Visit Team which was accepted by the Ministry of Water Resources, formed part of the final approval. Thus the approval granted is in violation of the precautionary principle
9. That the Applicant herein are those concerned about rivers, wildlife and the ecological security of India, but this application is limited to wildlife aspects only.

PRELIMINARY GROUNDS FOR CHALLENGE

10. That the Hon'ble Supreme Court in **Bombay DyingMgf Ltd Versus Bombay Environmental Action Group, (2006) 3 SCC 434**, had laid down the broad parameters for challenging the executive decision of the Government. The relevant paragraph reads as follows:

"197. A matter involving environmental challenges may have to be considered by a superior court depending upon the fact as to whether the impugned action is a legislative action or an executive action. In case of an executive action, the court can look into and consider several factors, namely,

- (i). Whether the discretion conferred upon the statutory authority had been properly exercised;
- (ii). Whether exercise of such discretion is in consonance with the provisions of the Act;
- (iii). Whether while taking such action, the executive government had taken into consideration the purport and object of the Act;
- (iv). Whether the same subserved other relevant factors which would affect the public in large;
- (v). Whether the principles of sustainable development which have become part of our constitutional law have been taken into consideration; and
- (vi). Whether in arriving at such a decision, both substantive due process and procedural due process had been complied with."

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or divert the habitat of any wild animal by any act whatsoever or divert, stop or enhance the flow of water into or outside the National Park, except under and in accordance with a permit granted by the Chief Wildlife Warden, and no such permit shall be granted unless the State Government being satisfied in consultation with the National Board that such removal of wildlife from the National Park or the change in the flow of water into or outside the National Park is necessary for the improvement and better management of wildlife therein, authorises the issue of such permit."

Similarly, Section 29 of the Wildlife (Protection) Act, 1972 states as follows:

"[(6) No person shall destroy, exploit or remove any wildlife including forest produce from a Sanctuary or destroy or damage or divert the habitat of any wild animal by any act whatsoever or divert, stop or enhance the flow of water into or outside the Sanctuary, except under and in accordance with a permit granted by the Chief wildlife Warden, and no such permit shall be granted unless the State Government being satisfied in consultation with the Board that such removal of wildlife from the Sanctuary or the change in the flow of water into or outside the Sanctuary is necessary for the improvement and better management of wildlife therein, authorises the issue of such permit."

15. That a plain reading of the above provision makes it clear the following legal proposition:

- (a) That change in the flow of water into or outside of the national park or destruction of wildlife is permitted only with the approval of the National Board for wildlife and in case of Sanctuaries with the approval of the State Board for wildlife;

(b) That destruction of wildlife and the change in the flow of water into and outside the National Park or Sanctuary, is permitted only if it is for the improvement and better management of wildlife.

16. Thus, the condition precedent for any change in the flow or water into and outside the National Park or Sanctuary or destruction of wildlife and its habitat is that any such activity should be for the 'improvement and better management' of the wildlife. The Ministry of Environment and Forests has been processing diversion proposals in National Parks and Sanctuaries in accordance with notification F. No. 6-10/2011 WL dated December 2012 document titled: "Guidance document for taking up non forestry activities in wildlife habitats". The document clarifies the procedure for seeking wildlife clearance as per the Wildlife (Protection) Act 1972. A copy of the document is hereto annexed and marked as **Annexure A-2.**

17. That a bare perusal of the guidance document clearly reveals that it selectively refers to the provisions of the Wildlife (Protection) Act, 1972 and does not refer to the statutory bar on use of land of the National Park or changing the flow of water, unless the same is for the improvement and better management of wildlife. It is submitted that such an omission, deliberate or otherwise, defeats the purpose of declaring an area as a National Park or Protected Area. The relevant part of the Guidance Document of the Ministry of Environment and Forest reads as follows:

"3.2. Activities inside National Parks:

Section 35(6) of the Wildlife (Protection) Act, 1972 provides that the recommendation of the **National Board for Wildlife** (a Board chaired by the Prime Minister) is essential for any use or diversion of the habitat of any wild animal, or produce including water, etc. in a National Park.

This provision is also applicable with respect to National Park in view of Section 35 (8) of the Act.

In the circumstances, any activity proposed within the boundaries of a National Park or Wildlife Sanctuary shall require the recommendation of the Standing Committee of NBWL, and the approval of the Hon'ble Supreme Court."

18. That it is clear that there is no reference to the word 'improvement and better management' in the Guidance Document. As such, it is contrary to the provisions of the Wildlife (Protection) Act, 1972. It is submitted that a project or activity which qualifies as an exemption under Section 35 (6) or Section 29 must be explicitly for the purpose of improvement and better management of wildlife. The Guidance document infact refers to the power of the National Board for Wildlife to approve 'any activity'. It is submitted that the Wildlife (Protection) Act, 1972, nowhere allows any activity, but only those activities which are for the improvement and better management of wild animals and their habitat. The Guidelines therefore are clearly contrary to the statutory law. It is a settled law, that Guidelines framed for the implementation of a law, cannot prescribe a procedure which is contrary to the provisions of the Statute.

The National Board for Wildlife and the Ministry of Environment and Forests cannot act except in accordance with what is provided in the Statute. The Hon'ble Supreme Court in **State of Uttar Pradesh versus Singhara Singh** (1963 AIR 368) had held as follow:

"..... if a statute has conferred a power to do an act and has laid down the method in which that power has to be exercised, it necessarily prohibits the doing of the act in any other manner than that which has been prescribed. The principle behind the rule is

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that if this were not so, the statutory provision might as well not have been enacted."

19. The fact that the proposed project is not for the improvement and better management of wildlife is clear from various documents as well as studies undertaken. The Applicants would like to rely on these documents in order to prove that that proposed project can by no stretch of imagination be termed as a project for the improvement and betterment of wildlife.

I. Statement of Sreenivasa Murthy Field Director, Panna Tiger Reserve as submitted to the State Board for Wildlife. The relevant part of the Statement reads as follows:

- a. There are no positive impacts accruing to the Panna Tiger Reserve because of the project.
- b. Stopping and enhancing of 3,371 MCM water will be stored in the upstream of the Ken River. 1600 MCM water will be released downstream up to Barrirapur. Besides, another 1405 MCM to meet out downstream irrigation requirements through left and right out downstream irrigation requirements through left and right canals. All these considerations of water storage/enhancing upstream the dam and diverting the water to other uses downstream is purely based on meeting out the Command Area water requirements. No ecological considerations were reflected either in the DPR of the proposed project or in the comprehensive EIA the project proponent submitted.
- c. Direct destruction of 58.03 km² of habitat of CTH of Panna Tiger Reserve due to submergence and loss of another 105.23 km² due to fragmentation totalling to the loss of 163.26 km² of CTH equalling 28.34% of CTH of Panna Tiger Reserve.

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- d. This will lead to big threat to the Tiger Reintroduction Project which proved a big success after the debacle in 2009.
 - e. Loss of breeding space of tigers and fragmentation of the South West and Southern tiger corridors of this source population.
 - f. Village relocation efforts till now create inviolate spaces for tiger conservation will be lost. Till now 13 villages of Panna Tiger Reserve were relocated of which 8 along the river bank creating extra spaces for tigers to breed and proliferate. These efforts of Government of India and Government of Madhya Pradesh will be lost.
 - g. Unique habitats of highly endangered species including vultures, Mahseer fish and Gangetic Gharial will be lost.
 - h. Riverine grasslands and unique Gangau wetland will be lost which is the habitat for migratory birds including Rudy Shelduck, Bar headed geese, Painted Storks, Black Storks, Open Bill Storks, Black and White Ibis, Common Stilt, Comb ducks, Spoon bills, Teals, Cormorants and Fish eagles.
 - i. Habitation of more than 6200 people (project staff and workforce to be utilised for dam construction) at the site of the dam for more than a decade and related biotic pressure on to the CTH, of Panna Tiger Reserve.
 - j. Proposed felling and logging of more than 32,900 trees from the CTH of Panna Tiger Reserve.
 - k. Thus, the above project violates every other aspect of removing, wildlife including forest produce from CTH of Panna Tiger Reserve which is a National Park and divert, stop or enhance the flow of

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water into or outside of CTH of Panna Tiger Reserve which is a National Park violating all the provisions of Section 35(6) (35 (6)) of The (Protection) Act 1972 and will totally stop water flow to Ken Gharial Wildlife Sanctuary violating all provisions of Section 29 of The Wildlife (Protection) Act 1972.

- I. All these violations will occur if the project is implemented without any perceived and actual improvement in the management of wildlife there in. In reality this project wishes to come into existence by killing one Tiger Reserve and one Wildlife Sanctuary which are abodes for highly endangered tiger and Gangetic Gharial.

A copy of the Statement is hereto annexed and marked as **Annexure A-**

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II. Statement of Alok Kumar, Field Director, Panna Tiger Reserve Successor of Srineevasa Murthy as submitted to the State Board for Wildlife. The relevant part of the statement reads as follows:

- a. Direct loss of CTH area of Panna Tiger Reserve to the tune of 58.03 km² amounting to 10.07%.
- b. Indirect loss of CTH area of Panna Tiger Reserve to the tune of 105.23 km² de to fragmentation and loss of connectivity.
- c. Loss of breeding space of at least 2 tigers and fragmentation of the South West and South Western tiger corridors of this source population.
- d. Approx. 50% of the existing unique habitat of highly endangered vulture species will be lost.

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e. Because of this proposed project, direct destruction of 58.03 km² of wildlife habitats will be done including removal of about 11 lakh trees.

f. Stoppage and diversion of the monsoon flow of water in the Ken River.

A copy of the Statement is hereto annexed and marked as **Annexure A-4.**

III. Statement of the Chief Wildlife Warden, Ravi Srivastava submitted to the State Board for Wildlife.

The Chief Wildlife Warden, is the Statutory Authority under the Wild Life (Protection) Act, 1972 to initiate a proposal under section 29 and 35 (6) of the Act. The following were the comments of the Chief Wildlife Warden:

- a. In achieving this target of social welfare, there will be partial loss of forests including prime tiger and vulture habitats. Mitigation efforts are envisaged for many of the adverse effects. Yet, there will be some irreplaceable losses.
- b. Loss of part of forest and prime habitat of tiger and vulture is inevitable.

A Copy of the above statement is hereto annexed and marked as **Annexure A-5.**

20. That from the above statements it is clear that the proposed project is not related to improvement or better management of wildlife, rather it will entail large scale destruction of wildlife habitat which is irreversible in nature. It is submitted, that the Chief Wildlife Warden, under the provisions of the Wild Life (Protection) Act, 1972 could not have initiated the proposal at all and it should have been shelved at the preliminary stage itself. By not doing so, the Chief Wildlife Warden has failed to not

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21. The Applicant would like to draw the attention of this Hon'ble Tribunal to the proceedings before the State Board for Wildlife and the Standing Committee of the National Board for Wildlife in and consideration by the National Tiger Conservation Authority order to show the impropriety in the grant of approval. The Applicant reiterates that this is without prejudice to the preliminary objection raised by the Applicant.

CONSIDERATION BY NATIONAL TIGER CONSERVATION AUTHORITY

22. That as per letter dated 08.08.2014 by the National Water Development Agency, Ministry of Water Resources to the Additional Director General (Wildlife) asking for issuance of wildlife clearance, a Secretary level meeting of Ministry of Water Resources and Ministry of Environment and Forests & Climate Change was held on 01.07.2013. As a follow up to that meeting, National Tiger Conservation Authority vide letter no. I-6/95-PT (Vol.II) dated 18.12.2013 constituted a four member committee with members: Shri D.K. Sharma, Superintendent Engineer, NWDA; Shri O.P. Khushwan, Superintendent Engineer, NWDA; Dr. K. Ramesh, Scientist, WII; Shri. R. Srinivas Murthy, Field Director, Panna Tiger Reserve with Terms of Reference (TOR) as mentioned below:

"to ascertain feasibility of adding new areas to the tiger reserve in lieu of the area proposed for Ken-Betwa link project and falling under submergence vis-à-vis space use pattern of reintroduced tiger habitats of Panna Tiger Reserve"

A copy of the letter is hereto annexed and marked as Annexure A-6.

23. That the content of the TOR clearly suggests the following:

- (a) That non-avoidance to the project was pre-planned. Both the Ministry of Forests and Environment & Climate Change and Ministry of Water Resources had long decided that it was inevitable to damage and

Even for only on mitigation as it is not a pre-planned conclusion.

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destroy Panna Tiger Reserve for the Ken-Betwa river link. Therefore, no attempt was made by either statutory authority to protect the tiger reserve from the disastrous impact of the river link project.

(b) That NTCA wasn't given any opportunity to undertake an independent study assessing the impact of the project on the ecology of Panna Tiger Reserve; instead, it was given a limited mandate to recommend ways to compensate the loss.

not to study impact but to compensate loss

24. That it is pertinent to note that Section 38-O of the Wildlife (Protection) Act 1972 grants various powers to the National Tiger Conservation Authority, specifically clause b reads as:

"evaluate and access various aspects of sustainable ecology and disallow any ecologically unsustainable land uses such as, mining, industry and other projects within tiger reserves".

A plain reading of the above provision makes it clear that NTCA has been granted the statutory power to refuse permission to any project that is not sustainable from an ecological point of view and since KBLP in every sense falls in the category of such projects, it should have been shelved at the proposal stage itself. However, the limited TOR did not let the NTCA to exercise its independent powers and disallow the project. Therefore, the act of granting the limited TOR to the NTCA is not in consonance with the provisions of Section 38-O (b) of the Wildlife (Protection) Act 1972.

TOR #8/38(O) to NTCA.

25. That the mandate given to the NTCA Committee was limited is clear from the fact that one of the members of the committee, R. Srineevasa Murthy, the then Field Director Panna Tiger Reserve had made a separate written submission; such that he did not agree with the recommendations presented in the report. The relevant part of his submissions reads as:

"As such the mandate of the committee was limited and not all the information was placed before the committee. Now the undersigned has got the full DPR of the project along with the Comprehensive Environmental Impact Assessment Report to process the case for proposal for Wildlife Clearance in National Park/Sanctuary. After going through the proposal in detail and in the light of information that I got exposed to, now I am fully convinced that the recommendations part of the above committee is inappropriate and incorrect and not based on the full facts.

The project if approved based on the recommendations of the above committee based on incomplete information will lead the death of Panna Tiger Reserve. Whooping 28.34% of the Panna Tiger Reserve will be affected due to project besides the disturbances due to construction (including the blasting for stone quarry within the CTH) lasting for more than a decade.

Hence the undersigned does not concur with the alternatives areas suggested in the report. Hence it is requested that where ever the above report is to be used this note of my disagreement be appended".

The copy of the relevant portion of the disagreement note is hereto annexed and marked as **Annexure A-7**.

26. It is further submitted that the Report of the NTCA committee cannot be termed as a Report of the Authority in view of the fact that it comprised of members who were not members of the NTCA, rather the committee had member from the representatives of the user Agency i.e NWDA. Thus, it cannot be termed as an independent report by the NTCA.

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27. A perusal of the Report, however, reveals that though the entire thrust of the report is to only consider alternative areas in lieu of the area to be submerged, it nevertheless, did point out the irreversibility of the damage to be caused. The relevant part reads as follows:

(a) loss of tiger habitat:

"The project indicates the submergence of 41.41 sq km forest and 16.62 sq.km revenue land of PTR. However, there are certain variations in terms of non-forest areas that are also wildlife habitats, which will be affected by the proposed project. Additionally, the entire Kishangargh Range (Core/CTH) with an area of 56.23 sq km and Bhusor and Palkoha circle of Chandranagar Range with an area of 49 sq km will likely become disconnected from rest of the CTH area.

At the proposed maximum FRL level, maximum extent of the area would be submerged all the way to Ghairighat where Ken enters Panna TR, affecting tiger and vulture habitats significantly."

(b) loss to the vulture habitat:

"Ken Valley within the Panna TR constitutes a Unique Habitat of highly endangered Vulture Populations. One more important Biodiversity consideration of this project will be loss of irreplaceable and unique Vulture habitat of Ken River Valley situated just in the CTH of Panna Tiger Reserve. Panna TR represents seven out of nine species of vulture species of Indian region.

Ken River makes a long and big gorge of more than 30 km on the both the banks of the river above the Daudhan Dam site and both the rocky cliff banks offer excellent habitat for highly endangered Schedule I species of vultures namely, Long billed Vulture, Egyptian Vulture, Red Headed Vulture and two types of migratory Griffon

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(Eurasian and Himalayan and Cinereous) vultures. Recent vulture population estimates (2010-2013) done in PPP mode between 2010 and 2014 put the vulture population of the Panna TR around 1000 and Panna TR supports very good population of Peregrine Falcon which is a co-predator of vultures (This raptor preys on chicks of vultures) and lives along the cliff-nesting vultures".

28. NTCA committee itself admits the near impossibility to compensate the loss to the unique wildlife habitat and biodiversity values within Panna Tiger Reserve. The relevant portion of the report reads as follows:

"The proposed area for the project encompasses primary riverine vegetation, which is unique in the Vindyan hill range and offers life support system for variety of biodiversity elements, including important population of endangered vultures and fish species. Therefore, additional area with similar ecological values and integrity could not be found within the reserve limit and that most of the other available area contiguous to PTR is already under notified buffer area. Therefore, it was not possible to suggest specific exact area. However, the team visited some of the buffer area, but since these areas are already in the buffer notification, these could not be considered as additional area in lieu of the proposed loss".

29. The NTCA Report nowhere examines the possibility of avoiding the diversion of the critical habitat, though, it is statutorily required to do so under the provisions of the Wildlife (Protection) Act, 1972. The copy of the report is hereto annexed and marked as **Annexure A-8**.

30. The State Board for Wildlife met in rapid succession in order to approve the project. As per Section 7 of The Wildlife (Protection) Act 1972,

"the Board shall meet at least twice a year at such a place as the State Government may direct".

In the case of State Board for Wildlife, the 11th Meeting was held on 28.07.2014 followed by the 12th Meeting dated 11.08.2015 where the Ken-Betwa River link was first presented. This was followed by the 13th Meeting dated 22.09.2015 where the project was recommended to the Standing Committee of the National Board for Wildlife. Lastly, the 14th Meeting was held on 18.04.2016. Therefore, 2 meetings within 2 months for a single year!

31. Moreover in this context, it is pertinent to note the views of two Board members Dr. M.K. Ranjitsinh and Belinda Wright as per their written statement dated 22.09.2015.

"Indeed the State seems to be so keen to clear the project that, that the 13th Meeting is taking place 42 days after the 12th Meeting, when normally the Board meets only once a year, and minutes which were circulated to us only 4 days ago, appear to be final with no opportunity for the members to make amendments as is the normal procedure."

Copy of the written statement dated 22-09-2015 is hereto annexed and marked as **Annexure A-9**.

32. That the State Board for Wildlife considered the proposal for diversion of forest land within Panna Tiger Reserve for the KBL project. In accordance with the Guidance Document for proposals in wildlife area, the relevant

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form was filled by the Field Director of the Panna Tiger Reserve. It is pertinent to point out that the two forms were filled up by the Field Director: One by Sreenivasa Murthy and the second by Alok Kumar, the successor to the Mr. Sreenivasa Murthy. Mr. Murthy had taken a strong unequivocal stand against the project, highlighting the fact that the diversion of land will be contrary to the provisions of the Wildlife (Protection) Act, 1972 and at the same time would undermine the efforts that have gone made to reintroduce the Tiger in Panna. The words used by Mr. Murthy is that the project will kill one National Park and Sanctuary. It was specifically concluded by Mr. Murthy as follows:

"The undersigned do not recommend this project".

Based on the response given by Mr. Murthy, the project ought to have been rejected at this stage only. However, Mr. Murthy was replaced by Mr. Alok Kumar, his successor, who concluded as follows:

"Decision in favour or against the project would require a holistic overview by a competent body. Such a decision may best be taken at the appropriate level."

That despite this inconclusive statement, the Filed Director, nevertheless held that:

"As per the information mentioned in point 10 & 11, 163.26 km² of area that comes around 28.34% of the CTH will be affected due to the project. Due to this heavy ecological loss it is very difficult for the field director of Panna Tiger Reserve to recommend the project."

That despite these serious concerns, the State Board for Wildlife considered the project.

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That despite these serious concerns, the State Board for Wildlife considered the project.

33. It is also pertinent to point out that under the provisions of the Wildlife (Protection) Act, 1972, the duties of the State Board does not extend to consideration of proposals with respect to National Parks or Tiger Reserves. It is limited only to Sanctuaries under Section 29 of the Wildlife (Protection) Act, 1972. The project was considered by the State Board for Wildlife in accordance with the Procedure prescribed in the Guidance Document for taking up Non Forestry activities in Wildlife Habitat dated December, 2012. Para 4.5 states as follows: "The Chief Wildlife warden, after giving his specific comments on the proposal, shall forward 15 copies of the same to the Government of India, through the Forest Secretary after obtaining the recommendation of the State Board for Wildlife on the proposal". It is submitted that the Wildlife (Protection) Act, 1972 nowhere contemplates such a procedure.

12th MEETING OF THE STATE BOARD FOR WILDLIFE DATED 11.08.2015

34. The proposal with regard to Ken-Betwa link project was considered by the State Board for Wildlife in its 12th Meeting dated 11.08.2015. It is pertinent to note that from the minutes it is clear that the Board acknowledged the following loss to the Panna Tiger Reserve due to the proposed project (i) loss to the tiger habitat (ii) loss to the vulture habitat and (iii) loss to the Ken Gharial Sanctuary and that despite these grave concerns, it recommended the project. The relevant part is reproduced as follows:

(a) Loss to the Tiger Habitat:

"The NTCA Committee submitted a report titled 'Report on the Ken-Betwa River Link Project w.r.t, impact on Tiger Habitat in Panna Tiger

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Reserve' dated 08.08.2014, in which it was mentioned that due to the project, 41.41 km² of forest area and 16.62 km² of non-forest area within the critical tiger habitat and 20.80 km² of forest area and 11.17 km² non forest area within the buffer habitat, thereby a total of 90 km² of area will come under submergence. Additionally, within the critical tiger habitat, Kishangarh Range of area measuring 56.23 km² and Bhusor and Palkoha of Chandrangar range of area measuring 49 km² will become disconnected from rest of the critical tiger habitat in Panna Tiger Reserve. The committee also highlighted that maximum extent of area would be submerged all the way to Gharighat where Ken enters PTR, thereby significantly affecting tiger and vulture habitat."

(b) Loss to the Vulture Habitat:

"PTR offers a unique habitat for the vultures. There are around 86 nesting sites of Long Build vulture and Egyptian Vulture on the high rock cliffs of Ken river which are proposed to come under submergence at maximum FRL (288 mt)".

(c) Impact on the Ken-Gharial Sanctuary:

"Due to the existence of Barriarpur and Gangau barrage on Ken River, it is only in the rainy season when an adequate flow of water is maintained in the Ken River within the Ken Gharial Sanctuary which is situated in the downstream of the above barrages".

35. That it is submitted that the Board was well aware of the fact the project entailed serious irreversible damage to the ecology of Panna National Park and Tiger Reserve and that the Board should have declined to entertain the proposal and rejected it in this meeting itself. However, the Board carried the project forward to its next meeting dated 22.09.2015. The

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copy of the minutes of the 12th Meeting is hereto annexed and marked as
Annexure A-10.

**WRITTEN STATEMENT OF THE MEMBERS OF THE M.P. STATE WILDLIFE
BOARD: 13th MEETING DATED 22.09.2015**

36. That the two Hon'ble members of the Board: M.K. Ranjitsinh and Belinda Wright in their written submissions dated 22.09.2015 highlighted the various irregularities in Board's consideration to the project in the 12th Meeting and the faulty EIA report submitted by the project proponent and raised strong objections to the project itself. The issues raised in the written statements are reproduced as follows:

(a) Manipulation of the Minutes of the 12th Meeting:

"A number of decisions and opinions were expressed in the 12th Meeting, which have deliberately not been included in the minutes. Since the Agricultural Finance Corporation of India Ltd., Mumbai, was found incompetent on numerous counts, a fresh EIA was to be prepared by another competent agency, but this is not reflected in the minutes and the same agency is submitting an EIA report, which is simply a rehash of the previous one. It is factually misleading, technically incompetent, obsolete and inaccurate. One of the undersigned had categorically mentioned that the basic issue of the project components that required land from two Protected Areas has not been addressed, and indeed now contradicts the DPR. This includes not only the areas of Panna Tiger Reserve that would be submerged but also land required for the canal, power houses, project housing and mining, that have been suppressed in the EIA Report. The fact that the area would be bisected by submergence and would be ecologically segregated from the rest of the Park and rendered infructuous, that the actual area of the Panna National Park affected would be over 200 km², that the project would in effect 'dissect and disembowel' the Park, and lastly that the State and the nation will have to decide whether to have

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the Project or the Park, not both. All this is not mentioned, as also the plea taken by one of us that since this was a Wildlife Board, its advice may be taken in letter and spirit and if the Honourable Chairman of the Board, in his capacity as the Chief Minister of the State finds the project to be more important, he may overrule the opinion of the Board and opt for Ken-Betwa Link Project. But the State Wildlife Board whose mandate it is to safeguard the interests of wildlife in the State, should not be subverted to be a project clearance body. The Chairman had assured the Board that both the EIA agency and the User Agency would make presentations at the next meeting and that the biodiversity issues of Panna would be considered. None of these discussions finds a mention in the minutes."

(b) Hasty recommendation to the project by the State Board:

"Indeed the State seems to be so keen to clear the Project, that the 13th Meeting of the Board is taking place 42 days after the 12th Meeting, when normally the Board meets only once a year, and the minutes which were circulated to us only four days ago, appear to be final with no opportunity for the members to make amendments as is the normal procedure. The 13th Meeting has a single point agenda, and what is more both the then Field Director of Panna Tiger Reserve and the Chief Wildlife Warden had not supported the Project in the proposal placed before the 12th Meeting. The current Field Director also says that 'due to the heavy ecological loss it is very difficult... to recommend the Project', but he has left the decision to 'a competent body'. The same Chief Wildlife Warden has endorsed his opinion. It is clear that both the officers have had to face some 'arm-twisting'."

(c) Contradictions between the DPR and the new EIA Report:

"There are contradictions between the proposed project DPR and the new EIA, inter alia, the new EIA version omits the second barrage to be constructed within the Ken Gharial Sanctuary, below Bariarpur presumably because we had raised the issue of the adverse effect on the Ken-Gharial Sanctuary in the 12th Meeting, but still remains in the DPR."

(d) Concealment of material facts in the EIA Report:

"The new EIA version also hides the real and total land requirements and usage of the Park premises. This new version of the EIA, therefore, is not in consonance with the MoEF circular No. 327/2015-FC of 14.08.2015, which categorically states that project proposals must be complete in every respect. The new EIA is not only incomplete, but it deliberately hides facts with mala-fide motives and does not adequately document how the Project will affect Panna Tiger Reserve and National Park and Ken Gharial Wildlife Sanctuary."

(e) Ignorance to basic ecological realities in the EIA Report:

"The survey which has been conducted and on which the new version of the EIA is still based upon, is of 2007-2008. The new version still speaks absurdities such as sal forest in Panna and of barasingha, Manipur brow-antlered deer and slow loris in this forest, although none of these species occur there. But it has revised the number of trees to be submerged from 32,900 to 13.96 lakh (including 11.21 lakh trees within the National Park), which is an increase of over 42 times, i.e. more than 4100% of the previous absurd figure. But even here, the tree numbers have been verified

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by the DFO Chhatarpur. Why not the Field Director of Panna? The new EIA version goes on to say that 'the area under submergence is neither a home nor an important habitat for wildlife including birds and hence the impacts of the project on REET species may not pose any threat except loss of habitat... There are no known breeding grounds for any of the REET within the project area' (page 240). This is a blatant untruth, because 2 out of Panna's 6 breeding tigress reside in the proposed submergence area and a total of 11 tigers 83 tigresses, 2 male tigers and 6 cubs) use the area that will be effected by the project. This is one-third of Panna's present tiger population. In any case, riverine tracts are always a favoured tiger habitat and breeding sites, especially in hot deciduous forests."

(f) Self-Contradictions in the EIA Report:

"The new EIA version itself mentions that 'as a result of submergence all terrestrial organisms will get severely affected... all the animals will be forced to migrate and migrations may expose them to various types of threats' (page 401). It also mentions that a 'Field survey by a WII team clearly indicated that compensatory area that is ecologically similar (large tract of riverine forest) is not available to be included in the PTR area' (page 183). But then the document contradicts itself and says 'there is a loss of 7.8% of the core area of the PTR which can be complemented by habitat improvement of added buffer area. Hence, there is no threat to wildlife' (page 240). The same self-contradiction and subterfuge is evident on the crucial issue of mining for the purpose of the Project. It is mentioned that quarrying will be carried out within the PA both upstream and downstream, but then it also says 'Adequate

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care had been taken not to locate quarries and burrow area in Panna Tiger Reserves' (page 228-230). Which of the two is correct? The document further states 'Locations of rock quarries, sand quarries and burrow areas are shown in sketches 10.1 and 10.3 and 2.4' (page 371). But no sketches or land requirements for the quarries have been provided".

(g) Absence of a detailed hydrological study for the Ken-Betwa Link:

"The whole project is based on the premise of siphoning off surplus water of the Ken River to the Betwa River. But does Ken have water to spare after maintaining its minimum ecological flow downstream-its 'AVIRAL DHARA?' The undersigned are of the considered opinion that the Ken does not have water to spare after maintaining its minimum ecological flow, but has any long term detailed study of the Ken been done by a reputed expert agency and has its minimum ecological flow in different seasons been determined as yet? If not, should that not be done first before the launching of the Link Project? The e-flow study conducted by the project proponent is not only inadequate but is biased and misleading. It does not even take into account that the Barriarpur barrage which was commissioned to irrigate 229,360 ha. only has water to irrigate 66,000 to 86,000 ha. So how is the Ken River deemed to have 'surplus water'? Also, has an EIA been done on the impact upon the Ken-Gharial Sanctuary? The Project aims to provide 6 lakh ha. of irrigation and drinking water to 14 lakh people. But thereafter will there be enough water in the Ken River to sustain the livelihood of the people who are living on the 272 km

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length of the Ken River downstream of the Daudhan dam? Are we robbing Peter to pay Paul?"

13TH MEETING OF THE STATE BOARD FOR WILDLIFE DATED 22.09.2015

37. That the members had reiterated their concerns in the 13th Meeting itself which are mentioned in the minutes itself. The relevant part reads as follows:

"Honourable member of the Board, Dr. M.K. Ranjitsinh raised the issue that a number of important decisions and opinions expressed in the 12th meeting of the MP SBWL were not incorporated in the minutes of the meeting. In relation to the Ken-Betwa project, he also expressed concerns such as: maintenance of minimum ecological flow in the Ken river after building of the dam, ensuring sufficient water for the Gharials, mud released during excavation, muck of stone quarries, time required for the dam construction and the location of the worker colony."

"Honourable members of the Board, Belinda Wright and Surendra Tiwari raised questions with respect to the harvesting of estimated 13 lakh trees and its consequent impact on the ecology of the tiger reserve."

The copy of the minutes of the 13th Meeting is hereto annexed and marked as **Annexure A-11.**

38. From the above it is clear that the State Board was well aware of the fact that the proposed project was not backed by any detailed scientific analysis, that the environment impact assessment being faulty on various

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counts does not qualify as being a reliable impact study in the true sense of the term, and that the project would cause irreversible damage to the fragile ecology of the tiger reserve. However, despite the facts of the case at its disposal and strong objections raised by the Board members, the Board did not question the project proponent even once and instead circumvented its own procedure to recommend the project. This act of the Board is indeed incomprehensible and clearly qualifies as non-application of one's mind.

PROCEEDINGS BEFORE THE STANDING COMMITTEE OF THE NATIONAL BOARD FOR WILDLIFE:

39. The proposal with regard to Ken Betwa link project was considered by the Standing Committee of the National Board for Wildlife in its 37th Meeting dated 26.02.2016. It is pertinent to point out that nowhere in the minutes is there any mention of either any benefit or improvement of wildlife and its habitat which is a precondition for consideration of project / activities under section 35 (6) of the Wild Life (Protection) Act, 1972. The perusal of the minutes of the meeting highlights the fact that only two broad issues were discussed (i) the negative impact and destruction on the critical tiger habitat of the Panna Tiger Reserve; and (ii) the benefits to humans due to the project as a result of the irrigation component. The relevant part of the minutes reads as follows:

(a) Impact on Wildlife:

"IGF (WL) briefed the Standing Committee on the proposal. He mentioned that the proposal would link Ken and Betwa rivers. He stated that the proposal would result in direct loss of 58.03 sq km (10.07 %) of Critical Tiger Habitat (CTH) of Panna Tiger Reserve due to submergence, 50% loss of existing unique habitat of highly endangered Vulture spp., indirect loss of 105.23 sq km of CTH due

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to fragmentation and loss of connectivity, displacement of 10 villages etc. NTCA informed that the proposal is being examined under section 38(O) (b) of Wild Life (Protection) Act, 1972 (amended) and it will take some time for finalizing the comments as the proposal involves alienation of large area of CTH. Chair permitted a presentation on the project by the project proponent."

(b) Benefits of the Project:

"The representative of user agency, Special Secretary, Ministry of Water Resources, made a power point presentation on Phase - I of the project, and its importance in the region of water deficit area of Bundelkhand region. He stated that project would ensure availability of water to draught prone areas in the both the states of Uttar Pradesh and Madhya Pradesh. Further, he mentioned that the project would provide annual irrigation to about 6.0 lakh hectares of land and drinking water facility to 13.42 lakh people in both the states of Madhya Pradesh and Uttar Pradesh."

40. That it is submitted that in view of the fact that that the project did not entail any direct benefit for wildlife, rather it involved destruction of wildlife habitat that too a critical tiger habitat, the Standing Committee of the National Board for Wildlife should have declined to entertain the proposal and rejected it at the threshold itself. However, in blatant violation of the provision of the Wildlife (Protection) Act, 1972, the Standing Committee considered the project and constituted a committee to conduct a site visit and submit a report. The relevant part of the minutes of the meeting reads as follows:

"After discussions, considering the impact of the project on habitat and wildlife of Panna Tiger Reserve, the Standing Committee

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decided that a Committee comprising of Dr. R. Sukumar, Dr. H S Singh, a representative each from NTCA, WII, State Government and User Agency would conduct a site visit and submit the report in a month for further consideration. This visit can be clubbed with the consideration of NTCA of the project in accordance with the mandate of NTCA in Wild Life (Protection) Act, 1972." A copy of the minutes of the meeting is hereto annexed and marked as **Annexure A-12.**

SITE INSPECTION REPORT on Ken – Betwa Link Canal Project (KBLCP): Phase I in Madhya Pradesh by the Committee of the Standing Committee of NBWL:

41. The committee comprising of two members of a National Board for Wildlife representative of NTCA, Wildlife Institute of India, and NWDA conducted the site inspection from 9th to 11th of April, 2016. It is important to point out that the committee in its reports has clearly stated that the project is 'primarily an irrigation and poverty alleviation project'. Thus, there is no mention that this project has been conceived for the benefit of wildlife. Rather, as revealed in the site inspection report, the impact will be directly to the contrary: it will cause irreparable loss of a very critical wildlife habitat which cannot be compensated in any manner. The following paragraphs from the report substantiate this point:

"KBLCP; primarily an irrigation and poverty alleviation project, was conceived in 1994/95 and subsequently, a joint project of National Water Development Agency (NWDA), Ministry of Water Resources, Central Water Commission (CWC) and other agencies was developed to realize the project objectives and components

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In this project, 10 villages (including four villages located within PTR) will go under submergence, which means that 1913 families with 8339 persons will be dislocated. The total submergence area indicated in the Detail Project Report (DPR) under Daudhan dam project is 90.00 sq. km; of this 58.03 sq. km area falls within the Panna Tiger Reserve, including 41.41 sq. km of forest area and remaining 16.62 sq. km being revenue area within the reserve.

The proposed project will cause significant impacts on biodiversity, specifically in the riverine habitats, both the upstream portion where submergence will take place and downstream where flow regimes will be affected. In addition to the tiger, which has been recovering following concerted efforts over the last six years, significant nesting habitats of vultures are also likely to be affected by the project. It is evident that Panna Tiger Reserve is emerging as an important source population of tiger in the entire landscape and the proposed project will certainly cause habitat loss and fragmentation to the entire tiger population in the landscape

...

The cliffs and gorges at both sides of the Ken River not only offer some spectacular scenery but also a unique habitat for a variety of wildlife species

....

Tiger and several species of vultures are Endangered species in the area, as per the IUCN category of threatened species. Apart from these, PTR is also home to other threatened species, which are listed in Schedule I of the Wildlife (Protection) Act 1972. Key species include Leopard, Rusty spotted cat, Sloth bear, Wild dog,

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Wolf, Chinkara, Chausingha (Four-horned antelope), Mugger crocodile, Gharial (long snouted), Mahasheer fish (Tor tor) and several species of raptors. Among many other creatures, Striped Hyena, Jungle cat, Civets, Jackal, Fox, Nilgai, Chital, Sambar, Wild Pig, and two primate species (Common langur and Rhesus monkey) are also found in the area.

Given that significant a portion of the riverine habitats will be submerged and flow regime changed, the major impacts would be on the riverine species and the unique habitats. This is possibly the biggest loss with respect to this project.

The entire forest area under the proposed submergence both within and outside PTR is tiger habitat, while the non-forest area is potential tiger habitat. Thus, about 90 sq. km. area of tiger habitat, including potential habitat will have to be considered as submergence zone. The areas that are not forests but open areas are also wildlife habitats (except the village areas but this will also become wildlife habitat if village relocation programs are taken up) and that some of these areas are now part of the buffer zone. Although the project document mentions only 41.41 sq km of forest area for NPV purposes, the entire area of submergence (excluding villages outside the core area) and the area required for operational establishment and other infrastructure will have to be taken into account as total loss for practical purposes. Additionally, the connectivity with Kishangargh Range (Core/Critical Tiger Habitat) with an area of 56.23 sq km and Bhusor and Palkoha circle of Chandranagar Range with an area of 49 sq km will be affected or compromised in the submergence zone

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Re-introduction programme of tiger in Panna Tiger Reserve is one of the most successful among such projects in the world. It is an important learning experience for replicating similar projects elsewhere

....
There is obviously concern that since the recovery of the tiger has been achieved after much hardship and investment, the proposed Ken-Betwa link project may take away some of the success. However, if this needs to be addressed, using the available science, a landscape approach to tiger conservation within a meta-population framework needs to be formalized and implemented, in addition to other compensatory strategies.

The team could see evidence of vulture nesting/perching sites in a large part of the reserve. Of the 40 nesting/perching sites officially recorded for vultures in PTR, about 17% of the sites are likely to be affected by submergence, mainly those of long-billed vulture. However, the extent of the impacts require verification since the nesting period coincides with the winter season when the water level is expected to be much lower than the proposed maximum, and there is species-specific behavioural response when there is a choice of higher elevation sites for nesting as it provides better visibility for resource procurement. Also, the vulture habitat in the submergence area is one of the largest concentrations. In the absence of such knowledge, we should use the precautionary principle to consider about 20-25% loss that the project may cause on vulture nesting/perching sites in PTR.

Panna Tiger Reserve has largely been valued with respect to the requirement of the tiger, a flagship species. The importance of

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other key wildlife such as Sloth bear, Leopard, Rusty spotted cat, Hyena, Sambar, Chital, Four-horned antelope and Chinkara are largely ignored under the shadow of tiger, although tiger conservation may support the conservation of its associated fauna. Ken River along with its tributary is a lifeline of the Park. Ken river basin is full of gorges, caves, rock crevices which are normally occupied by wild mammals for breeding and resting. During hot days in summer, these gorges, caves, rock crevices are major shelters for some of the animals listed above. Loss of breeding sites will be irreversible after submergence of these critical and specialized habitats, specifically in the major submergence zone.

Site of the Daudhan dam is within the core area of the reserve. The proposed dam falls in a major category and construction work may continue for several years, perhaps even a decade. The blasting of stone quarries, use of heavy machinery, movement of heavy vehicles and presence of over 500 workers (at a time as per NWDA) are some of the major concerns. The high engineering activities with presence of a large number of labourers at the construction site as well as at two proposed canal/tunnel sites within the heart of a critical tiger habitat (CTH) of the reserve may exert tremendous biotic pressure and disturbance that would keep away species sensitive to such activities.

Total counting of trees in the proposed submergence area has not been done but a sample survey by forest department has estimated that about 7.2 lakh trees above 20 cm girth at breast height would be submerged in the National Park Area and this number may go up to about 12 lakh stems when young poles and established saplings are accounted. Equally high number of trees will be cut or lost in the

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forest areas outside the National Park. Thus considerable quantity of carbon stored as biomass would be released once the dam is constructed, in addition to loss of vegetation diversity.

The NWDA has replied to the above concerns raised by the experts and has filed written response to EAC. The Committee of the Standing Committee, NBWL cannot examine all these issues due to limited scope of the committee's mandate. However, it is noted that the hydrological studies of the project have been carried out by two leading organisations in the field in the country: (i) National Institute of Hydrology, Roorkee and (ii) Central Water Commission (Hydrology Division). In addition, leading experts from IITs have also been involved. However, some of the concerns expressed appear relevant. The Committee of NBWL has covered the relevant points related to wildlife and their habitats. This is a big project with multifarious impacts. The committee is not professionally qualified to assess some of the issues related to hydrology, surplus water in the river, impact on Yamuna and Ganga and social-economic issues pertaining to people living downstream of Ken River, as mentioned above.

42. That from the above site inspection report it is clear that the committee was unanimous in its conclusion that there will be irreversible damage to the flora and fauna of the area of this critical area and was categorical in concluding as follows:

"No Development Project should destroy the ecology of remnant fragile ecosystems and an important tiger habitat in the country. In an ideal situation, it would be best to avoid such projects in such wilderness areas with protected area status and specifically when it runs the risk of providing justification or unhealthy precedence for

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more such developmental projects within Protected Areas that will not be in the interest of wildlife and the overall well-being of the society in the long-term.

The committee is not sure that the present proposal is indeed the best possible option for addressing livelihood and development of the region using water resources from the river Ken, as its independent members (i.e. excluding the project proponents - NWDA) do not have required expertise in matters relating to hydrology. Ideally, a team of independent experts on surface water hydrology, drawn from leading scientific institutions, should be requested to examine the hydrological aspects of the Ken-Betwa river link, as this involves submergence of a significant habitat of core area of a Tiger Reserve, hitherto considered as sacrosanct for conservation and a "no-go" area for development."

43. That on the issue of irreversible damage, the committee concluded as follows:

"It is not possible to compensate the loss entirely because a large proportion of submergence area falls in a riverine habitat, which is unique and cannot be replicated elsewhere."

A copy of the Site Inspection Report is hereto annexed and marked as **Annexure A-13.**

44. That the views of the member of the Site inspection committee was considered by the Standing Committee of the National Board for Wildlife in the 38th meeting of the Standing Committee of NBWL. The minutes of the meeting reflects complete non consideration of the serious issues raised by the site inspection committee. The cryptic minutes of the meeting shows non application of mind to issues which ought to have been

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considered by the Standing Committee. The sole focus of the committee was on grant of approval and without even basic discussion on the irreparable nature of damage granted 'in principle' approval to the project. It is interesting that this 'in principle' approval was granted without even an examination of the site inspection report. This is clear from the following sentence in the minutes of the meeting.

"After discussions, the Standing Committee considered the importance of the project for meeting the irrigation need of Bundelkhand region and the feasibility of linking the two rivers as explained and agreed that the proposal can be agreed in principle."

The fact that Site Inspection report was still not presented in the 38th Meeting are clear from the following sentence in the minutes of the meeting.

"The Committee requested the site inspection team to place the report in the next meeting for further consideration."

A copy of the minutes is hereto annexed and marked as **Annexure A-14**.

45. That the proposal was further considered in the 39th meeting of the National Board for Wildlife dated 23.08.2016. A perusal of the minutes of the meeting clearly reveals that the entire thrust of the meeting was on granting approval to the project without considering the irreversible nature of damage that will be caused to the wildlife and the habitat of endangered species which have been revived due to a lot of conservation effort in the last one decade. The serious issue as pointed out by the site inspection committee was not even discussed. The project was finally recommended for approval by the Standing Committee of the National Board for Wildlife.

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46. It is pertinent to point out that the Standing Committee's entire conduct was contrary to the provision of the Wild Life (Protection) Act, 1972. It has no jurisdiction to approve any activity in a national park which is not for further improvement and better management of wildlife. The National Board for Wildlife is not a recommendatory body rather it is a decision-making body. However, being a statutory body and a creature of a statutory law, it cannot act beyond what the law prescribes. The action of granting approval for an activity which will cause irreversible damage is beyond the statutory power of the Standing Committee of the National Board for Wildlife. A national park is included as a 'protected area' under the provisions of Wild Life (Protection) Act, 1972. Once an area is declared a protected area it is to be treated as 'No Go' area so far as activities which are detrimental to wildlife conservation. If activities which have negative impact on wildlife are allowed, the whole purpose of declaring the same as protected area is defeated. The State Board for Wildlife, the National Board for Wildlife, The National Tiger Conservation Authority never considered this crucial limitation and prohibition contained in the Wild Life (Protection) Act, 1972. It rather proceeded with a singular approach of granting approval irrespective of its impact on wildlife.
47. That from a larger issue of equity and injustice, it is an accepted fact that the area proposed for diversion was declared as critical tiger habitat, in view of its significance for tiger population. Existing villages were relocated in view of the importance of the area for long term protection of tiger. However, all of these facts were ignored by the authorities while recommending approval for the project. Given the fact that this area is a critical tiger habitat which is statutorily recognized under the Wildlife (Protection) Act, 1972, under no circumstances should this area be considered for any activity which is detrimental for Wildlife.

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48. **LACK OF EFFECTIVE MITIGATION PLAN:** The basic premise of the approval granted by the Standing Committee of the National Board for Wildlife is that an effective mitigation plan has been put in place. The Applicant however would like to submit that for developing an effective mitigation plan, there is first a requirement to undertake a thorough study on the likely impact due to the proposed project, only then can a mitigation plan be put in place. The Environment Impact Assessment Report based on which the likely impacts are ascertained cannot be termed as a scientific document which meets the requirement of Precautionary Principle. The Applicants are referring to concerns in the EIA Report which were considered by the NBWL and are not going into the overall merits of the EIA Report which the Applicant craves leave to question if Environmental Clearance is granted by the Ministry of Environment, Forest and Climate Change. There are serious inadequacy of EIA-EMP and also the falsehoods in the EIA-EMP using the following quote of the NBWL committee report:

"The Environmental Impact Assessment (EIA) for this project clearly recognizes these major impacts on biodiversity values, although there are several factual errors in the species inventory as provided in the appendices. In fact, much of the criticism about the EIA of this project stems from factual errors in the appendices. Further, current Environment Management Plan (EMP) considers only about 10 km radius from the project site and 1km on either side of canal and this is clearly inadequate to address the ecological impacts of the project. In this context, investigating the project impact and benefits from the landscape context is not only relevant, but is imperative to address the concerns of all stakeholders and for providing realistic options for conservation of the area."

The report also says:

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"Given that significant a portion of the riverine habitats will be submerged and flow regime changed, the major impacts would be on the riverine species and the unique habitats. This is possibly the biggest loss with respect to this project." However, there is no mention of this in the EIA.

49. The report says about impact on Vultures habitat: "It is also not clear if there are species-specific preferences among vultures for nesting along the gorge of the River Ken. In the absence of such knowledge, we should use the precautionary principle to consider about 20-25% loss that the project may cause on vulture nesting/perching sites in PTR. This figure lies in between the widely varying estimates from 3% to 50% loss of vulture nesting sites given by different sources. There is thus a need for gaining further knowledge on the breeding biology and dispersal of vultures, and accordingly, suitable recovery actions would be required, in the event of the project being implemented." This again highlights that we do not really know the impact, and that further studies are required.
50. Similarly, for impact of project on habitat of other species the report says: "Ken River along with its tributary is a lifeline of the Park. Ken river basin is full of gorges, caves, rock crevices which are normally occupied by wild mammals for breeding and resting. During hot days in summer, these gorges, caves, rock crevices are major shelters for some of the animals listed above. Loss of breeding and resting sites will be irreversibly lost after submergence of these critical and specialized habitats, specifically in the major submergence zone." This again emphasises impacts, but there is no study about the nature or kind of or extent of impacts on different species.

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51. The report further says about the impact of project on Ken River and downstream areas and makes an important alternative proposal:

"As in other dams in dry regions, the Ken River downstream of the proposed dam will be dry without much flow during the year. Calculations of perennial water requirement (ecological flow) downstream to maintain the river ecology while regulating the river flow are absent. As a result, the downstream villages may suffer due to paucity of water and poor recharge of the ground water. Although the need to maintain environmental flow has been mentioned in all recent dam projects, it is not practically happening in most of the cases. It is thus a very important and significant concern in this case also. In the semi-arid region, the relative loss of estimated benefits due to reduction of some height of the proposed dam may not be much compared to the ecological and environmental damage. With a relatively lower height, excess water during the monsoon can be allowed to flow through canals for filling ponds, small reservoirs and lakes between Ken and Betwa rivers. If necessary, ponds may be deepened or water reservoirs created to store the entire excess water of Ken for this purpose. This needs examination by a group of hydrology/irrigation experts in the background of the experience with existing dams in semi-arid regions."

It is clear that the downstream impacts have not been adequately assessed and needs to be done before any further decision are taken. The alternative suggested has also not been studied.

52. The report further says, before giving its recommendations:

"Ideally, a team of independent experts on surface water hydrology, drawn from leading scientific institutions, should be

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requested to examine the hydrological aspects of the Ken-Betwa river link, as this involves submergence of a significant habitat of core area of a Tiger Reserve, hitherto considered as sacrosanct for conservation and a "no-go" area for development... If there is no other option and the present proposal is the best possible option..."

However, no such examination by "a team of independent experts on surface water hydrology" has happened. It is important to emphasise that in order to take an informed decision about the Panna Tiger Reserve, we need to first know what will be the impact of the project on Panna Tiger Reserve. Unfortunately, without this information being available the project was approved with unseemly haste.

53. The recommendation section of the Report of the Site Inspection Team starts with preface: "the proposal may be considered only and only under the following conditions." Moreover, the NBWL minutes clearly state that the project proponent has accepted the conditions. Here, the third recommendation is noteworthy: "The Ken River has a course of 55 km through the National Park. A major part of the Ken River in the park and its tributary along with its unique habitats of caves, gorges, rock crevices along both banks of the river will go under submergence at full-proposed level of water. To maintain some scope of breeding and resting sites, and to save some critical habitat for wildlife, it is necessary to keep a part of the river without submergence even during the peak height of water. The proposed maximum FRL is likely to submerge the area even beyond Ghairighat and this would significantly affect the habitat and connectivity, and thus, options should be explored to keep the water level below the Ghairighat, specifically below the road crossing the river. Thus, enough length of the river should be left without submergence during full level of water. This is possible only by reducing the height of dam by a figure that

has to be worked out (a suggested figure of 10 m is only an approximation and the concern is really on the functional aspect of the submergence). This may help in saving some breeding sites of wildlife, especially vultures and will reduce negative impacts on the ecology." The proposal of reduction in height of the project is one of the mandatory ones of the report, but there has been no credible action about this recommendation.

54. Similarly on fifth recommendation there is no action: "There are certain proposed structures such as powerhouses close to the dam and these may be re-examined and avoided in order to minimize disturbance, since power generation is not the primary objective of the project and will exert continued disturbance to the area".
55. Recommendation No 7 is significant: "Water flow downstream should be regulated in line with the natural flow regime and, in the lean period, 100% of the existing flow regime should be maintained while in the non-lean period, the prescribed minimum by hydrology and aquatic biodiversity experts should be ensured. Break in release of daily minimum water should be considered as destruction of habitat. The minimum flow of water in the Ken River may save crocodiles (mugger and gharial) and it will also maintain the health of river till it joins the Yamuna. A provision of e-flow has already been made in the EIA and EMP of the project to save the wildlife including mugger and gharial, and to maintain the river regime d/s of the dam, but the quantity may be prescribed under some agreement so that the provisions are not ignored as happens in the case of other dams."

This stipulation is not being implemented as of now. The environmental flows now recommended are not 100% in lean season, nor based on assessment by any independent aquatic biodiversity experts.

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56. On Section 2 of the Report: It says: "As per the decision taken at the 38th meeting of Standing Committee of National Board for Wildlife on 10th May 2016, a meeting was held on 11th July 2016 at Ministry of Environment, Forest and Climate Change, New Delhi, to further discuss aspects of the hydrology of the proposed Ken- Betwa river linking project with two co-opted experts in irrigation/hydrology." The report mentions only one name by way of co-opted expert. However, the one expert that the report mentions is A B Pandya, cannot be considered an independent expert. He as staff of CWC and NWDA all his life, has been supporter of the project and cannot be considered an independent expert. The inclusion of him by the committee was clearly inappropriate and suffers from Bias both personal and institutional.

57. Though in issue of bias, there is no requirement to prove actual bias since even a reasonable likelihood of bias is enough, in the present instance there is proof of bias. From the proceeding it is clear that Mr Pandya has misled the committee. For example, the report says: "As per the reservoir operation plan prepared by NWDA, the maximum reservoir level of El 0.283 is achieved only between 20th and 31st of July of a year and drops down by 10m to El. 271.81 by the end of October of the year. Therefore, the area is available to the wildlife for as much as 10 months in a year." Now even if we accept this (which we do not since it is not correct in fact), the reservoir would be full between July 20 and Oct 31. This is a period of about 3.5 months and not two months. That will leave hardly 8.5 months when the reservoir may be below 271.82 m, and not 10 months.

58. The report makes it clear, the most important objective of the water storage is to provide irrigation during Rabi. However, Rabi season sowing in Budelkhand for irrigated crops happens till mid Nov (see for example:

[http://nraa.gov.in/pdf/Bundelkhand_Rabi\(2011\).pdf](http://nraa.gov.in/pdf/Bundelkhand_Rabi(2011).pdf)), the full crop season extends to Jan-Feb, depending on the crop and variety. So to say that by Oct 31 the reservoir would be depleted to 271 m is grossly misleading.

59. Further, there is a statement in this section that says: "The transfer is actually within Chambal basin of which the rivers form a part and is not happening in a conventional sense of connection of two pipeline networks." This is totally wrong, the Ken or the Betwa basins are not in Chambal basin, they are in lower Yamuna basin, as is also true of the Upper Betwa region. It is clear that this exercise of ascertaining if the 10 m reduction in height is feasible or not has not been done properly and since this is one of the conditions of the NBWL-SC committee, this exercise must be done properly in consultation with independent experts.

GROUND:

60. The approval granted by the Standing Committee of the National Board for Wildlife is illegal, improper and arbitrary in view of the following among other ground which the Applicants may take at the time of hearing of the case :

A. Because, the Wildlife (Protection) Act, 1972 does not provide for destruction of wildlife and its habitat or change in the flow of water, into or outside a Sanctuary or National Park, unless the same is for the improvement and better management of wildlife. Admittedly, the proposed project is not for the improvement and better management of Wildlife and hence impermissible under the provisions of the Act.

B. Because, the National Board for Wildlife as well as the Standing Committee has no power to grant approval for any destruction of

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wildlife and its habitat or change in the flow of water unless it is for the improvement and better management of wildlife.

- C. Because, no direction was given by the Hon'ble Supreme Court to any of the Statutory Authorities for not considering the issue on merits and taking an objective direction. The manner in which the statutory authorities viz the Chief Wildlife Warden, the National Tiger Conservation Authority and the National Board for Wildlife approved the project was a clear instance of acting under dictation. The approval granted is liable to be quashed on this ground.
- D. Because, the National Board for Wildlife as well as the State Board for Wildlife acted beyond jurisdiction. It is well settled that there can be no exercise of power unless such power exist in law. If the power does not exist, the purported exercise of power would be bad in law and the action would be illegal and void. Likewise, where the source of power exists, exercise of it is referable only to that source and not to some other source [**State of Gujarat Vs Patil Raghav Natha, (1969) 2 SCC 187, Ahmadabad St. Xavier College Society V State of Gujarat, (1974) 1 SCC 717**].
- E. Because, both the State Board for Wildlife and the National Board for Wildlife exceeded its jurisdiction. It is a settled law that an authority must exercise the power within the limits of the Statute and if it exceeds those limits, the action will be held ultra vires. [**V. Sudeer v. Bar Council of India, (1999) 3 SCC 176, Indira Kumari Vs Raksha Mantralaya 1991 Supp (2) SCC 149**]
- F. Because, the action of the National Board for Wildlife is arbitrary and based on irrelevant consideration. It is a settled law that where the Statute requires an authority to exercise power, such authority

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must be satisfied about existence of grounds mentioned in the Statute.

- G. Because, the mitigation measures as finalised by the NBWL is not based on any study or assessment of the likely impact due to the proposed project. The studies on wildlife so far as the Environmental Impact Assessment are concerned are admittedly deficient. Such studies cannot be the basis of knowing the actual impact on the Panna National Park and Critical Tiger Habitat. Unless scientific studies are conducted in an independent and objective manner, it is not possible to predict the impact or develop mitigation measures.
- H. Because, the proposed project as held by various authorities, will cause irreversible damage to wildlife and its habitat which is not permissible under the provisions of the Wildlife (Protection) Act, 1972.
- I. Because, the Chief Wildlife Warden, being the Statutory Authority under the provisions of the Wildlife (Protection) Act, 1972, and the National Tiger Conservation Authority in exercise of its power under Section, 38 (O) (b) ought to have acted independently and should have rejected the project at the threshold stage itself. It is a settled law, that a body entrusted with a statutory discretion must address itself independently to the matter for consideration. It cannot lawfully accept instructions, from or mechanically adopt the view of, another body as to the manner of exercising its discretion in a particular case, unless the other body has been specifically empowered to issue such directions. This has been highlighted by the Hon'ble Supreme Court in **Rambharosa Singh Versus State of Bihar, AIR, 1953 Pat 370, Purtabpore Co Ltd v. Cane**

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Commr, of Bihar (1969) 1 SCC 308. ChandrikaJhaVs State of Bihar (1984) 2 SCC 41, Anirdudhsinji Karansinji Jadeja V. State of Gujarat (1995) 5 SCC 302.

J. Because, despite the proposed project having an impact on Ken Gharial Sanctuary, no assessment was done in terms of Section 29 of the Wildlife (Protection) Act, 1972 despite the fact that there will be a change in the flow of water into the sanctuary. The Ken Gharial Sanctuary, though effected was not considered at all.

K. Because, the Hon'ble Supreme Court in **Essar Oil versus Halar Utkarash Samiti and ors, (2004) 2 SCC 392**, while interpreting Section 29 and 35(6) had held that State Government is itself statutorily restrained from directing the grant of a permit in respect of the destruction, exploitation or removal of wildlife from the sanctuary unless it is satisfied that "such destruction, exploitation or removal Is necessary for the improvement and better management of wildlife therein.

L. Because, in **Essar Oil versus HalarSamiti,(2004) 2 SCC 392**, it was further held that Section 29 bars anyone from completely, irreparably and irreversibly putting an end to wildlife or to the habitat in a sanctuary. The Hon'ble Court further held:

"The State must, while directing the grant of a permit in any case, see that the habitat of the wildlife is at least sustained and that the damage to the habitat does not result in the destruction of the wildlife."

That is the underlying assumption and is the implicit major premise which is contained in the definition of the word "sanctuary" in Section 2(26) and

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the declaration under Section 18 of the Wild Life (Protection) Act, 1972 - that it is an area which is of particular ecological, faunal, floral, geomorphological, natural or zoological significance which is demarcated for protecting, propagating or developing wildlife.

M. Because, the proposed project will defeat the purpose of declaration of the area as a National Park which is a 'Protected Area' and where any activity which is not directly for the improvement and better management of wildlife is not allowed.

N. Law is well settled that when the statute requires doing a certain thing in a certain way, the thing must be done in that way or not at all. Other methods or mode of performance are impliedly and necessarily forbidden. The aforesaid settled legal proposition is based on a legal maxim "Expressio unius est exclusion alterius", meaning thereby that if a statute provides for a thing to be done in a particular manner, then it has to be done in that manner and in no other manner and following other course is not permissible. **Taylor v. Taylor, (1876) 1 Ch.D.426; Nazir Ahmed v. King Emperor, AIR 1936 PC 253; Indian Bank's Association v. Devkala Consultancy Service, AIR 2004 SC 2615.**

O. Because the Hon'ble Supreme Court in its directives in **Lafarge Umiam Mining Private Ltd. V. Union of India (2011) 7 SCC 338** has declared that "Time has come for this Court to declare and we hereby declare that the National Forest Policy, 1988 which lays down far-reaching principles must necessarily govern the grant of permissions under Section 2 of the Forest (Conservation) Act, 1980 as the same provides the road map to ecological protection and improvement under the Environment (Protection)

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Act, 1986. The principles/ guidelines mentioned in the National Forest Policy, 1988 should be read as part of the provisions of the Environment (Protection) Act, 1986 read together with the Forest (Conservation) Act, 1980. This direction is required to be given because there is no machinery even today established for implementation of the said National Forest Policy, 1988 read with the Forest (Conservation) Act, 1980".

- P. Because, the National Forest Policy states the following, among others, about corridors: In para 3.3

"For the conservation of total biological diversity, the network of national parks, sanctuaries, biosphere reserves and other protected areas should be strengthened and extended adequately".

- Q. Because the order granted Stage I approval is in violation of the doctrine of public trust as well as the species best interest standard as enunciated by the Hon'ble Supreme Court in **Centre for Environmental Law, WWF-India v. Union of India, (2013) 8 SCC 234**.

- R. Because, in **T.N. Godavaram v. Union of India (2012) 3 SCC 277** wherein it has been held that environmental justice could be achieved only if we drift away from the principle of anthropocentric to eco-centric. It is further stated that principles like sustainable development, polluter pays principle, inter-generational equity have their roots in anthropocentric principles. 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 centered, nature centered where nature includes both humans and non-humans.

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- S. Because, in **Center for Environmental Law, WWF India v. Union of India & Ors. (2013) 8 SCC 234** it has been held to the effect that Article 21 of the Constitution of India protects not only human rights but also casts an obligation on human beings to protect and preserve a species from becoming extinct. Conservation and protection of environment is an inseparable part of right to life.
- T. Because, the action on the part of the Standing Committee of the National Board for Wildlife reveals clear non application of mind to relevant consideration. Once it has been concluded that the nature of damage will be irreversible, and is not specifically for the improvement of the wildlife or its better management, the project could not have been approved by the Standing Committee under any circumstances.

PRAYER:

In view of the above facts and circumstances it is respectfully prayed that this Hon'ble Committee may be pleased to recommend to the Hon'ble Supreme Court as follows:

- (i). That the approval granted by the Standing Committee of the National Board for Wildlife is illegal and contrary to the provisions of the Wild Life (Protection) Act, 1972.
- (ii). That since the siting itself is illegal and is not permissible in view of the restriction contained in the Wildlife (Protection) Act, 1972, no Environment and Forest Clearance should be granted to the proposed project under present alignment.
- (iii). Declare the Guidelines titled "Guidance document for taking up non forestry activities in wildlife habitats" dated December 2012 framed by the Ministry of Environment and Forest for activities in National Parks and Sanctuaries as illegal and in violation of the Wildlife (Protection) Act, 1972.
- (iv). Direct that any proposal for proposed project should be considered only after independent, objective and scientific studies in order to predict the likely impact and develop effective mitigation measures if the studies prove that the impact is not irreversible in nature.

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(v): Make any such recommendation in consonance with the other prayers as
the committee may deem fit and proper in facts and circumstances of the
case.

APPLICANT NO: 1

APPLICANT NO: 2

THROUGH

RITWICK DUTTA

RAHUL CHOUDHARY

ADVOCATES

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Mob: +91 9312407881

New Delhi

Date: __02.2017

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BEFORE THE CENTRAL EMPOWERED COMMITTEE
CONSTITUTED BY THE HON'BLE SUPREME COURT IN W. P. 202 OF 1995

APPLICATION NO. ____ OF 2017

IN THE MATTER OF:

Randhir Bittu Sahgal & Anr.

Applicant

Versus

Union of India & Ors

Respondents

AFFIDAVIT

I, Manoj Kumar Misra, S/o Late Shri Ramesh Kumar Misra, aged about 61 years, R/o 178-F, Pocket -4, Mayur Vihar Phase-I, Delhi 110091 Presently At New Delhi, do hereby solemnly affirm and state as under:

1. That I am the Applicant No. 2 in the above titled Application and am conversant with the facts and circumstances described in the present case and as such, I am competent to swear this affidavit.
2. That the contents of the accompanying Application are true and correct and nothing material has been concealed therefrom.

DEPONENT

VERIFICATION

Verified on this ____ of February, 2017 that the contents of the above mentioned affidavit are true and correct and nothing material has been concealed therefrom.

ATTESTED

NOTARY PUBLIC

DEPONENT

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Minutes of 39th Meeting of the Standing Committee of NBWL held on 23rd August 2016.

Government of India
Ministry of Environment, Forest and Climate Change
(Wildlife Division)

6th Floor, Vayu Wing
Indira Paryavaran Bhawan
Jor Bag Road, Aliganj
New Delhi-110003

F.No.6-109/2016 WL(39th Meeting)
Dated:19th September 2016

To
All Members,
Standing Committee of NBWL.

Sub: Minutes of 39th Meeting of Standing Committee of NBWL.

Sir/Madam,

Kindly find enclosed copy of the minutes of the 39th Meeting of the Standing Committee of National Board for Wildlife held on 23rd August 2016 at 11.00 AM in "Teesta", 1st Floor, Vayu Block, Indira Paryavaran Bhawan, Jor Bagh, New Delhi-110003 under the chairmanship of Hon'ble Minister of State (Independent Charge) for Environment, Forest and Climate Change.

Yours faithfully,

(Rajasekhar Ratti)
Scientist 'C'/Deputy Director (WL)

Encl: As above

Distribution:

1. Secretary, MoEF & CC
2. Director General of Forests & Special Secretary, MoEF & CC.
3. Member Secretary, NTCA, New Delhi.
4. Additional Director General of Forests (FC), MoEF&CC.
5. Additional Director General of Forests (WL), MoEF&CC.
6. Director, Wildlife Institute of India, Dehradun.
7. Director, GEER Foundation, Gandhinagar, Gujarat.
8. Prof. R.Sukumar, Central for Ecological Sciences, Indian Institute of Science, Bangalore.
9. Dr. H.S. Singh, Gandhi Nagar, Gujarat.
10. Pr. Secretary (Forests), Government of Andhra Pradesh, Hyderabad.

Copy to:

1. PS to Hon'ble MOS (I/C) E&F.
2. PPS to DGF&SS, MoEF&CC.
3. PPS to Addl.DGF(WL) and Member Secretary, Standing Committee (NBWL).
4. PPS to IGF(WL)/PS to DIG(WL)/PS to JD(WL).

to the communities which in turn would be helpful for conservation of fish resources and habitats with the help of communities there.

After discussions, the Standing Committee decided to recommend the proposal along with the conditions stipulated by State Chief Wildlife Warden – including waste and sewage management and environmental monitoring.

38.2.1.2 Realignment of core zone of Buxa Tiger Reserve, West Bengal.

The Member Secretary briefed the Committee on the proposal. He mentioned that the proposal was deferred earlier due to non-receipt of endorsement of State Government.

The Chief Wildlife Warden, West Bengal stated that overall boundary of the Tiger Reserve has not been altered. Some areas of core area of the TR have been proposed to be re-designated as buffer while some areas of buffer have been proposed to be added in the core zone, based on the scientific and objective criteria following the due process of the law. The Core and Critical Tiger Habitat of the TR has been consolidated in this process. In the process, the core area of the TR has increased by 26.87 sq km. NTCA has recommended the proposal.

After discussions, the Standing Committee decided to recommend the proposal.

38.2.1.3 Proposal for Wildlife Clearance in respect to Ken-Betwa Link Project-Phase I, Panna Tiger Reserve, Madhya Pradesh.

The Member Secretary briefed the Committee on the proposal that while NTCA had to examine the proposal under the Wild Life (Protection) Act and SC NBWL also discussed and was of opinion that the project site must be visited to understand the proposal, a combined site inspection was undertaken by NTCA, WII and two members of the Standing Committee. The observations were discussed in the 38th meeting wherein while agreeing in principle, it was decided that in view of the differing opinions on the height of the water impounding structures and resulting impacts, to discuss further the hydrological and related implications of the projects with irrigation and engineering experts. Accordingly deliberations were organized and after the meeting of the group with experts, a report incorporating views of the Hydrology expert on height of the dam, viability of the project and planning concerns, the project relevance with respect to climate

change, phases of the project, impact on cave/cliff dwelling species and consolidation of the Greater Panna Land Scape for ensuring viability of the tiger population. NTCA was requested to present their views to the Committee on the said combined report. Presenting the findings of the group, Director WII indicated that the group was convinced that lowering the dam height by 10 m will result in non-availability of water for linking because due to nature of the valley, water storage is available only in top few meters, thereby reduction of 32% in water storage. Further, as effective submergence in upstream of the dam is only for July end to October, the habitat and corridors across the river area available most of the time. Similar case for only about 3% of the area of the identified vulture habitat. WII clarified that phase II does not have any component impacting wildlife and connecting systems of both the rivers would ensure water availability away from the dam site also to the wildlife.

AIG (NTCA) presented the major concerns of Tiger Habitat, management issues and recommendations of NTCA, as examined under the Section 38 (O) (b) of WLPA. The major concerns of direct loss of tiger habitat of 105 sq.km, loss of vulture nesting sites and disturbances were presented. NTCA recommended to integrate Nauradehi WLS, Rani Durgavati WLS and Ranipur WLS (UP) in the Panna Tiger Reserve and rehabilitation of people affected at the cost to the user agency. The areas of Chhatarpur and South Panna Division shall be notified as the buffer of the PTR due their historical tiger presence. The management based on a landscape level plan consisting delineation of tiger dispersal routes, vulture recovery programme was proposed based on a tripartite MoU between the state of MP, NTCA and the Ministry of Water Resources (MoWR) to safe guard the land scape. No new mining leases shall be allowed in the delineated tiger dispersal routes and existing mining leases shall only be extended if concretely justified interest following due process of law. Members agreed that recent data of dispersal routed could be used for the plan. While inclusion of the proposed areas for integration could be feasible and may be attempted as it would require interstate and public deliberations. Chief Wildlife Warden suggested that as the main objective is addressing drought in Bundelkhand region, any installation of power generation within the tiger reserve should not be permitted. Further, the reservoir would not be opened to commercial fisheries as it is to be located in the middle of critical tiger habitat.

The representative of user agency, Special Secretary, MoWR expressed consent of the Ministry of Water Resources to the conditions as prescribed by site inspection team in the

combined report. In response to the Committee's query on the need of the Hydro Power Generation, he explained that all the power generating facilities shall be established outside the TR and the operations shall have minimal disturbance on the TR. He also assured that no fishing will be allowed at the dam site.

After discussions, the Standing Committee agreed to recommend the proposal with the conditions prescribed by the Site Inspection team and NTCA, as agreed by MoWR and that the resultant reservoir area shall be retained as core area with minimum activities for management purpose under close consultation with the Tiger Reserve management. The landscape based plan for the area will be finalized with NTCA in lead, assisted by WII, State forest department and project proponents.

The effort to integrate the said three wildlife sanctuaries within the PTR will be undertaken simultaneously and the management objective of these areas will be in context of treatment of the area as a part of tiger landscape. Requirement of all extant statutes related to environment and forests including EC and FC shall be met as applicable.

38.2.1.4 Setting up 5.25 MTPA-Development of Floating storage and Re-gassification Unit (FSRU) facilities for import of LNG within the existing deep water port at Kakinada, Andhra Pradesh. The proposed site is 2.5 kms away from the boundary limits of Coringa Wildlife Sanctuary.

The Member Secretary briefed the Committee on the proposal and mentioned that according to Terms of Reference (TOR) for EC, the impact on Marine Life would be assessed. Since the proposal is 2 kms from Coringa WLS, Impact Mitigation and Wildlife Conservation Plan is required to be submitted. The report on the impacts and other aspects is still awaited.

After discussions, the Standing Committee deferred the proposal.

38.2.1.5 Proposal for use of 11.2680 ha land of Block No. 25 in Marine Sanctuary for Laying for 2504 m. long and 45 m wide Waste Water Pipeline by Tata Chemicals Limited (TCL), Gujarat.

The Member Secretary briefed the Committee on the proposal and stated that in the 38th meeting, the Standing Committee flagged the condition of providing 5% of the project cost

True copy

73,,
Government of India
Ministry of Environment and Forests
Wildlife Division

Paryavaran Bhawan,
CGO Complex, Lodhi Road,
New Delhi-110003

F. No. 6-10/2011 WL

Dated: December 2012

Sub: Guidance document for taking up non forestry activities in wildlife habitats.

Reference is invited to this Ministry's letter of even no. dated 15th March 2011 regarding the above mentioned subject. In this context, the undersigned is directed to mention that the matter has been discussed in great detail in the Ministry of Environment and Forests and the old guidelines have been reviewed in light of the existing provisions of laws and rules. It has been highlighted in the review that unless there is a clear legal delineation of elephant habitats and corridors, the implementation of the guidelines with respect to Elephant Reserves and corridors becomes very difficult. Therefore, the Wildlife Department is to work out a process by which these habitats acquire legal status. In the meanwhile, the revised guidelines, annexed to this letter, will be used as guidance for NBWL clearance for non-forestry activities are to be taken up in wildlife area.

2. It is clarified that while project proponents may simultaneously apply for Environment, Forest and NBWL clearances, in order to complete the formalities without undue delay, no rights will vest in or accrue to them unless all clearances are obtained. In other words, project proponents cannot rely upon the concept of *fait accompli*, if they have already received any of the clearances. The Environmental, Forest and NBWL clearances will all be processed on their respective merits, and the clearance of one aspect will not confer any right upon the project proponent. Complete clearance is obtained only when all the requisite clearances have been obtained by the Project Proponent. This approach would protect the integrity of the flora and fauna of the country, as well as bring in clarity and transparency in the issue of Environmental, Forest and NBWL clearance.

3. This is in supersession of the orders of even no. dated 15th March 2011, and any communication related to this document thereafter.

4. This issues with the approval of Hon'ble Minister of State (Independent Charge) for Environment and Forests.

(Vivek Saxena)

Deputy Inspector General of Forests (WL)

Encl: Revised guidelines

Distribution:

1. The Secretary, all Ministries/Departments of Government of India, New Delhi
2. The Chief Secretary, all States/Union Territories
3. The Pr. Chief Conservator of Forests, all States/Union Territories
4. The Chief Wildlife Warden, all States/Union Territories.

Copy to:

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1. PS to Hon'ble MEF
2. PPS to Secretary (E&F), MoEF
3. PPS to DGF & SS, MoEF
4. PPS to Addl. DGF(WL)/PPS to Addl. DGF(FC)/PPS to Member Secretary, NTCA
5. PPS to JS (I.A Division)/ PPS to IGF (WL)/PPS to IGF& Director, PE/PPS to IGF (FC)
6. The NIC Cell- with a request to kindly upload the same on the official website of the Ministry.

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GUIDELINES FOR TAKING NON-FORESTRY ACTIVITIES IN WILDLIFE HABITATS

1. General Policy:

National Parks, Sanctuaries and Conservation Reserves are notified under the Wildlife Protection Act, 1972 as dedicated areas rich in, and representing the unique biodiversity of a place. Such protected areas are considered very important for conservation of biodiversity, and for ensuring the healthy populations of its floral and faunal components, for the present and future generations alike. However, the rising human population and its growing demands for socio-economic development put increasing stress on forests including protected areas both directly and indirectly. This calls for a balance that has to be struck between development and conservation implying that any activity involving use or diversion of any part of a notified protected area may be considered only under **most exceptional** circumstances, taking fully into account its impending impact on the biodiversity of the area, and consequently on the management of the Protected Area. A critical part of this balanced approach is to spell out the feasibility of mitigation to address the impacts without compromising the management objectives of the Protected Area. The activities to be taken up in the identified wildlife habitats also need to comply with the orders of the Hon'ble Supreme Court in addition to the statutory requirements as provided in the Wild Life (Protection) Act, 1972.

2. Scope:

Measures to protect the wildlife and biodiversity in general include *inter alia*, notification of suitable wildlife habitats as Protected Areas (National Parks, sanctuaries etc.) under the Wild Life (Protection) Act (WLPA), 1972. Recommendations of the National Board for Wildlife (NBWL) are prescribed in the Act for regulating any activity inside such areas. Hon'ble Supreme Court through a number of orders has further made it essential to seek the recommendations of this advisory body for regulating activities in the adjoining areas to the Protected Areas. Protection of other forests is ensured through the Forest (Conservation) Act 1980 wherein, recommendations of the Forest Advisory Committee are prescribed for this purpose. Protected areas cover generally the known habitats of wildlife including important flagship species. Tiger Reserves represent specifically notified areas under the WLPA focusing on conservation of the charismatic big cat under the **Project Tiger** in view of the specially threatened status of this national animal. With a view to

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ensuring conservation of elephants, the national heritage animal, 'Project Elephant' is operational. Technical and financial assistance is provided by the Central Government for conservation of elephants in the designated elephant habitats in the country. But presently such habitats are not legal entities. Though many existing elephant habitats are part of the existing Protected Areas, a proposal for enabling notification of such important habitats as elephant reserves under appropriate legal provisions is also under consideration of the government in the Ministry of Environment and Forests. It is expected that once the legal provisions for declaration of elephant reserves is in place, such areas will also be included under the regulatory regime under Wild Life (Protection) Act 1972 as proper legal entities.

These guidelines prescribe the process of obtaining recommendations of the Standing Committee of NBWL under the Wild Life (Protection) Act 1972 with respect to the areas, for which this process is mandatory under the law, and also in compliance to relevant Hon'ble Supreme Court orders. These guidelines replace the guidelines dated 15.03.2011 issued earlier in this regard, along with all amendments made therein.

3. Activities inside Protected Areas:

The process of consideration of any proposal for use of areas inside the protected areas, as a mandatory requirement under the present statutes, involves consideration and recommendation of the National Board for Wildlife. However, as the Standing Committee of National Board for Wildlife has been delegated the powers of the National Board for Wildlife, such cases are to be referred to the Standing Committee of National Board for Wildlife for consideration and recommendation. Details of such situations where such reference is warranted are described below:

3.1 Activities inside Wildlife Sanctuaries:

Section 29 of the Wild Life (Protection) Act, 1972 provides for the seeking the recommendation of the State Board for Wildlife (*a Board chaired by the State Chief Minister*) for any diversion of land or produce including water, etc. from a Sanctuary.

As per the proviso under Section 33 (a), no construction of commercial tourist lodges, hotels, zoos and safari parks can be undertaken inside a sanctuary except with prior approval of the Standing Committee of NBWL.

Further, in view of the directions dated 9th May 2002 of Hon'ble Supreme Court in Writ Petition (Civil) No. 337/1995, all such proposals in respect of a

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Sanctuary or a National Park also require Supreme Court's approval based on the recommendation of the **Standing Committee of National Board for Wildlife** (*a Committee chaired by the Minister in charge of the Ministry of Environment and Forests*).

3.2 Activities inside National Parks:

Section 35 (6) of the Wild Life (Protection) Act, 1972 provides that the recommendation of the **National Board for Wildlife** (*a Board chaired by the Prime Minister*) is essential for any use or diversion of the habitat of any wild animal, or produce including water, etc. in a National Park.

This proviso is also applicable with respect to National Parks in view of Section 35(8) of the Act.

In the circumstances, any activity proposed within the boundaries of a National Park or Wildlife Sanctuary shall require the recommendation of the Standing Committee of NBWL, and the approval of the Hon'ble Supreme Court.

Section 33 (8) of the Wild Life Protection Act, 1972 provides that no construction of commercial tourist lodges, hotels, zoos and safari parks can be undertaken inside a National Park except with prior approval of the Standing Committee of NBWL.

3.3 Activities inside a Tiger Reserve:

A Tiger Reserve notified under the provisions 38V (1) of WLPA may include an existing Protected Area or other forests (as the buffer areas). The Tiger Reserve, once notified gets conferred protection on par with a Wildlife Sanctuary under section 38V (2). Further section 38W makes it mandatory to obtain approval of Standing Committee of NBWL for any activity including alteration of boundaries of Tiger Reserves. Therefore, any proposal involving any area under the notified Tiger Reserve will also be governed by the relevant provisions applicable to the Wildlife Sanctuaries and therefore, will be referred to the Standing Committee of NBWL for consideration.

3.4 Activities inside Conservation Reserves:

The Ministry of Law and Justice has opined that activities to be taken up inside a Conservation Reserve can also be dealt with in the Standing Committee of NBWL. Therefore, the procedure indicated under para 4 below needs to be followed for planning and executing any activity inside Conservation Reserve also.

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3.5 Activities in areas other than Protected Areas:

In addition to the notified protected areas as described above, the consideration of the Standing Committee of NBWL has been prescribed in certain circumstances, which are listed below:

3.5.1 Activities within 10 Kms from boundaries of National Parks and Wildlife Sanctuaries:

In pursuance to the order of Hon'ble Supreme Court dated 4th December 2006 in Writ Petition (Civil) No. 460/2004, in case any project requiring Environmental Clearance, is located within the eco-sensitive zone around a Wildlife Sanctuary or National Park or in absence of delineation of such a zone, within a distance of 10 kms from its boundaries, the User agency/Project Proponent is required to obtain recommendations of the Standing Committee of NBWL.

3.5.2 Activities within areas connecting the Tiger Reserves, notified by NTCA for controlling the land use as per section 38 O (g):

Section 38 O (g) of the Wild Life Protection Act, 1972 entrusts the responsibility to NTCA to ensure that areas connecting Tiger habitats are not diverted for ecologically unsustainable habitats except in public interest and with the approval of NBWL. Proposals for any activities in such areas duly notified by NTCA, and recommended by it in accordance with these provisions, to be covered under such regulation will be permitted only after seeking recommendations of the Standing Committee of NBWL. Violation of this provision is required to be dealt with by the NTCA.

4. PROCEDURE TO BE FOLLOWED FOR CONSIDERATION OF PROPOSALS BY THE STANDING COMMITTEE OF NATIONAL BOARD FOR WILDLIFE:

4.1 The User Agency/Project Proponent is required to submit the proposal in the prescribed proforma that has been prescribed by the Ministry of Environment and Forests, and is available on the website of the Ministry (<http://moef.nic.in/modules/others> to be filled in) (Annexure-1).

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4.2 The prescribed proforma has five parts and each part is required to be filled in by the User Agency; concerned Divisional Forest Officer/Park Manager; Concerned Chief Conservator of Forests; Concerned Chief Wildlife Warden and the Forest Secretary.

4.3 The proforma also seeks information in detail on the biodiversity of the area in question; maps of the area, other activities already in place; possible impacts of the proposal, etc.

4.4 The User agency is required to submit Part-I and Part-II of the proforma duly filled in to the concerned Forest Officer, who in turn, forwards the same to the Chief Wildlife Warden through the Chief Conservator of Forest.

4.5 The Chief Wildlife Warden, after giving his specific comments on the proposal, shall forward 15 copies of the same to the Government of India, through the Forest Secretary after obtaining the recommendation of the State Board for Wildlife on the proposal.

4.6 The proposal so received from the State Chief Wildlife Warden will be placed before the Standing Committee of NBWL, chaired by Minister of State (I/C) Environment and Forests. The meeting of the Standing Committee is convened once in 2-3 months.

4.7 In cases where the area proposed for diversion is large and/or the impact of the project on wildlife is considered to be serious, site inspections may be conducted by the members of the Committee or further studies/ surveys may be conducted by experts on the instructions of the Standing Committee of NBWL.

4.8 The site inspection reports are generally considered in the next meeting of the Standing Committee to enable the Committee to make its recommendation.

4.9 After the Standing Committee of NBWL recommends the proposal, the User Agency/State Government is required to approach Hon'ble Supreme Court for final clearance in view of the Court orders dated 13.11.2000.

[Note: Hon'ble Supreme Court vide their order dated 13.11.2000 had directed that there shall be no dereservation/denotification of National Parks and Sanctuaries without approval of the Supreme Court. Therefore, to take up any such activity, a clearance from Hon'ble Court is mandatory.]

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4.10 In case of Border Roads, proposals of the Ministry of Defense, a simplified proforma for simultaneous clearance under the Forest (Conservation) Act, 1980 and wildlife clearance is being adopted under 'A Single Window System'.

5. PROPOSALS FOR SURVEY WORK TO BE CARRIED OUT INSIDE NATIONAL PARKS AND WILDLIFE SANCTUARIES:

In case any kind of survey work and/or Environment Impact Assessment (EIA) studies, that is a prelude to future diversion of land, are to be taken up in areas involving a wildlife habitat, then also the entire procedure, as prescribed in paragraph 4 above would need to be followed.

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ANNEXURE-1

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FORMS

(All documents to be submitted in triplicate and signed in Blue ink)

PART I

82.11.14

Proposal for Investigation and Survey in the National Park / Sanctuary
(Details to be provided by the Applicant)

1. Name of the Organization
2. Aims and Objectives of the Proposed Project
3. Location and Map (1:50,000 scale) of the area duly authenticated by the competent authority to be investigated/ surveyed
4. Whether investigation/survey requires clearing of vegetation
5. If yes, please specify the extent (in Ha.)
6. Opinion of the Officer In Charge of the NP/ WLS (Attach signed copy)
7. Opinion of the Chief Wildlife Warden (Attach signed copy). The following be included in the opinion:
 - i) Brief history of the protected area
 - ii) Current status of wildlife
 - iii) Current status of pressures on protected areas.
 - iv) Projected impacts of projects on wildlife, habitat management and access/ use of resource by various stakeholders.
 - v) Contiguous wildlife areas which would benefit wildlife if added to national park/sanctuary.
 - vi) Other areas in the State which have been recommended by State Government, Wildlife Institute of India, BNHS, SACON, IISC, IUCN or other expert body for inclusion in protected area network.

Signed

Signed

Signed

Project Head
Name
Organization

The Officer In Charge of the NP/ WLS
Office Seal

The CWLW
Office Seal

PART II

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(To be filled in by the Applicant).

1 Project details:

- (i) Copy of the Investigation and Survey report.

(The report should include the dates of survey and the names of the investigators, surveyors and all officials of the concerned NP/ WLS who remained present during the period)

- (ii) Self contained and factual project report for which NP/WLS area is required

(Enclose copy of the Project Appraisal document)

- (iii) Map (duly authenticated by the Divisional / District Head of the Department dealing with Forests and Wildlife) on a scale of 1: 50,000 showing the boundaries of the NP/WLS, delineating the area in question in red color).

- (iv) Self contained and factual report of at least two alternatives considered by the project authorities along with technical and financial justification for opting national park/ sanctuary area.

- (v) Copy of the Bio diversity Impact Assessment report in case the proposal involves diversion of more than 50 ha. NP/WLS area.

2 Location of the project/scheme

- (i) State/Union Territory
(ii) District
(iii) Name of the National Park/ Sanctuary

3 Details of the area required (in Hectares only)

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(Provide break up of the land use under the project, e.g., construction of dam, submergence, housing for staff, road etc)

4 Details of displacement of people, if any, due to the project

- (i) Total number of families involved in displacement
- (ii) Number of scheduled caste/Scheduled tribe families involved in displacement
- (iii) Detailed rehabilitation plan

5 Any other information relevant to the proposal but not covered in any of the columns above.

Signed by

Project Head

Name

Organization

Date of submission to the Head of the National Park / Sanctuary

PART III

(To be completed by the Officer -in- Charge of the National Park/
Sanctuary completed and submitted to the Chief Wild Life Warden or
officer authorized by him in this behalf within 30 days of the receipt of
PART - II)

- 1 Date of receipt of the PART - II
- 2 Total Area (Ha.) of national park/sanctuary
- 3 Total area (Ha.) diverted from the NP/WLS so far for development purposes
- 4 List the past projects and the area (Ha.) diverted

Name of Project	Area Diverted	Year of Diversion
-----------------	---------------	-------------------

- 5 Positive impact(s) due to the diversion of area for the projects referred
to in column 4 above

Name of the Project(s)	Positive Impact	Scientific Basis of Assessment
------------------------	-----------------	--------------------------------

(Attach separate sheet, if required)

- 6 Negative impact/s due to the diversion of area for the projects referred
to in column 4 above

Name of the Project(s)	Negative Impact	Scientific Basis of Assessment
------------------------	-----------------	--------------------------------

(Attach separate sheet, if required)

- 7 Management Plan Period

Attach copy of the Management Plan/Management Scheme/ Recommendation of
Chief Wildlife Warden

- 8 List Management actions taken/ proposed to be taken in the whole Block/
Zone in which the proposed area is located.

- 9 Type of forest in which the proposed area falls.

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- 10 Location of the proposed area w.r.t. the critical/intensive wildlife management areas/ wildlife habitats (attach Map to scale).
 - 11 List the likely POSITIVE AND NEGATIVE impact/s of the proposed project giving scientific and technical justification for each impact.
 - 12 Provide COMPREHENSIVE details of the impact of the proposal in terms of Sections 29 and/or section 35 (6) of the Wild Life (Protection) Act, 1972 as the case may be.
 - 13 Whether the project authorities have ever committed violation of the Wild Life (Protection) Act, 1972 or Forest Conservation Act, 1980. If yes, provide the EXHAUSTIVE details of the offence and the present status of the case.

(Concealing or misrepresenting the facts will lead to rejection of the case in addition to any other penalty as prescribed under Law)
 - 14 Have you examined the Project Appraisal document and the alternatives as provided in PART - II?
 - 15 Have you examined the Bio diversity Impact Assessment Report?
 - 16 If Yes, please give your comments on the recommendations given in the report?
 - 17 Dates and duration of your field visits to the proposed site.
 - 18 Do you agree that the present proposal of diversion of NP/WLS area is the best or the only option and is viable.
 - 19 Any other information that you would like to bring to the notice of the State Board for Wildlife, National Board for Wildlife or its Standing Committee that may be relevant and assist in decision making.
 - 20 Do you recommend the project.

(Please provide full justification to support your recommendations)

Signed by

The Officer In Charge of the NP/ WLS

Official Seal

Date of submission to the Chief Wild Life Warden or any other officer authorized by him in this regard

PART IV

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(To be completed by the Chief Wildlife Warden within 15 days of the receipt of
PART - II and Part- III)

- 1 Date of RECEIPT of PART- II and Part- III by the Chief Wild Life Warden or the officer authorized by him in this regard
- 2 Do you agree with the information and recommendations provided by the Officer - in - Charge in PART - III?
- 3 If not, please provide the reasons
- 4 Have you visited the site yourself and held discussions with the applicant?
- 5(a). Do you agree that the present proposal for permitting use of NP/WLS area is the best option or the only option, and is viable?
- 5(b) Whether the proposal sub-judice? If yes, give details.
- 6 Please provide specific comments w.r.t. Section 29 of the Wild Life (Protection) Act, 1972
- 7 Any other information that you would like to bring to the notice of the State Board for Wildlife, National Board for Wildlife or its Standing Committee that may be relevant and assist in decision making
- 8 Do you recommend the project?
(Please provide full justification to support your recommendations)
- 9 Conditions, if any, to be ensured in the interest of protection and conservation of wildlife for allowing use of the area?

Signed by
The Chief Wildlife Warden
Name
State
Official Seal
Date of submission to the State Government

PART IV

88.

(To be completed by the Department in Charge of Forestry and Wild Life in consultation with the State Board for Wild Life within 30 days of the receipt of PART - II, PART- III and PART- IV)

- 1 Date of RECEIPT of PART- II, PART- III and PART - IV by the Department
- 2 Do you agree with the recommendation(s) of the Chief Wildlife Warden
- 3 If not, please provide the reasons.
- 4 Did you provide PART- II, PART- III and PART - IV to the members of the State Board for Wild Life?
- 5 Attach copy of the opinion of the State Board for Wild Life
- 6 Give details of the recommendations of the State Government

Signed by

The Principal Secretary

Name

State

Official Seal

Date of submission to the Central Government

(19)

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PART-IV

(To be completed by the Chief Wild Life Warden within 15 days of the receipt of PART -II and III)

(Sub:-Permission for Ken-Betwa Link Project Phase-I inside Panna Tiger Reserve)

- 1: Date of RECEIPT of PART II and III by the Chief Wild Life Warden or the Officer authorized by him in the regard. - 14-09-2015
2. Do you agree with the information and recommendations provided by the Officer-in-Charge in PART-III - Yes.
3. If not, please provide the reasons - NA
4. Have you visited the site yourself and held discussions with the applicant - Yes.
5. Do you agree that the present proposal for permitting use of NP/WLS area is the best option or only option and is viable- Not applicable, since other options have not been put up by the project proponent.
6. Please provide specific comments w.r.t. Section 29 of the Wild Life (Protection) Act 1972.-

The project will involve destruction of wildlife habitat due to submergence. Hence, Section 29 [and Section 35 (6) as the area is National Park] of the Wild Life (Protection) Act 1972 is attracted.

7. Any other information that you would bring to the notice of the State Board, National Board or its Committee that may be relevant and assist in decision making.- No
8. Do you recommend the project -

The Ken-Betwa link project contemplates providing irrigation to more than 5 lakh ha. and drinking water facilities to a large population in Bundelkhand region of Madhya Pradesh and Uttar Pradesh. In achieving this target of social welfare, there will be partial loss of forests including prime tiger and vulture habitats. Mitigation efforts are envisaged for many of the adverse effects. Yet, there will be some irreplaceable losses.

Loss of part of forest and prime habitat of tiger and vulture is inevitable. Accordingly, NTCA after detailed study, recommended addition of additional forest areas as satellite cores. The State government is of the opinion that adequate mitigation measures by increasing the area under Critical Tiger Habitat, relocation of villages from these newly added areas, increase in extent of grasslands due to more added open spaces on account of receding water from the reservoir etc and maintenance of ecological flow downstream in Ken river, will help not only in the improvement of the habitat, but also the number of wild animals of the area. Besides, provision of irrigation and drinking water facilities will be added benefits of the project.

Weighing the pros and cons of the Ken-Berwa river linking project on Panna Tiger Reserve and the technical opinion of the expert committee constituted by the National Tiger Conservation Authority, I agree with the opinion of Field Director, Panna Tiger Reserve, as mentioned in Part - III.

9. Conditions, if any, to be ensured in the interest of Wild Life for allowing use of the area. -

As recommended by the State Wildlife Board.

Signed by

18.9.15

Name - Ravi Srivastava

The Chief Wild Life Warden

State - M.P. **Ravi Srivastava**
Principal Chief Conservator of Forest

Office Seal (Wildlife) & Chief Wildlife Warden,
Madhya Pradesh

Date of submission to the State Government



राष्ट्रीय जल विकास अभिकरण
(जल संसाधन मंत्रालय, भारत सरकार)
National Water Development Agency
(Ministry of Water Resources, Government of India)



NWDA/NWDA/SE-II/152/21/2013/12106

Date: August 8, 2014

To,

Additional Director General,
WILD LIFE,
Paryawaran Bhawan,
CGO Complex, Lodhi Road,
Jor Bagh, New Delhi

C/o ADG (WL)

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08/08/2014

Subject: Wild life clearance in respect of Ken -Betwa Link Project-Phase I reg.

Sir,

Under the provisions of National Perspective Plan for Water Resources Development formulated by the Ministry of Water Resources, planning, investigation and preparation of Detailed Project Report (DPR) for Ken-Betwa Interlinking Project was taken up by National Water Development Agency (NWDA) of this Ministry after signing of a tripartite Memorandum of Understanding amongst the States of Uttar Pradesh, Madhya Pradesh and Union Govt. in the presence of Hon'ble Prime Minister on 25th August, 2005.

The Ken-Betwa Project Phase - I envisages construction of Daudhan dam on Ken river in Chhattarpur district, Madhya Pradesh involving a total submergence of 9000 ha Area. Out of this, 5803 ha area comes in Panna Tiger Reserve which includes 4141 ha of forest area, the latter being 7.63% of the total area of Panna Tiger Reserve. The Ken-Betwa Project, Phase-I will provide irrigation to about 6.35 lakh hectare annually alongwith drinking water supply to about 13.5 lakh population in 7 drought prone districts of Bundelkhand region of M.P & U.P., besides generation of 78 MW of power.

After obtaining permission from National Board of Wildlife (NBWL) in October, 2006. Detailed survey and investigation work in Panna Tiger Reserve area for preparation of DPR of this project was carried out by NWDA.

Permission of site clearance for carrying out survey and investigation works and collection of environmental and socio-economic data for preparation of comprehensive Environment Impact Assessment (EIA) studies report and management plans as per provision of EIA Notification, 1994 was given by MoEF vide its letter dated 13th June, 2006.

Discussed with officers of NWDA & MoEF to finalise the project. The project is being implemented in the form of a joint venture between NWDA & MoEF. The project is being implemented in the form of a joint venture between NWDA & MoEF. The project is being implemented in the form of a joint venture between NWDA & MoEF.

18-20, सामुदायिक केन्द्र, साकेत, नई दिल्ली-110017 / 18-20, Community Centre, Saket, New Delhi-110017

दूरभाष / Phone : 011-26519164, 26852735 फैक्स / Fax : 011-26960841, 26513846

Website : www.nwda.gov.in

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Based on the above clearances and suggested Terms of Reference (ToR) by MoEF in January, 2007 the detailed survey and investigation work in Panna Tiger Reserve area for preparation of DPR and EIA studies of Ken-Betwa Phase-I Project were completed by NWDA.

The Detailed Project Report (DPR) of Ken-Betwa Project, Phase-I was completed by NWDA during April, 2010 and circulated to concerned State Governments. The Governments of Madhya Pradesh and Uttar Pradesh and the Union Government have given their consent and approval for its implementation. Ken-Betwa Project has been declared as a National Project by the government of India in the year 2008 and subsequently been included as a part of Prime Minister's package for development of drought prone Bundelkhand region. Salient features of Ken-Betwa Link Project- Phase I are given at Annex-I.

The modified comprehensive Environmental Impact Assessment (EIA) studies report of the Project has been prepared as per the further additional Terms of Reference (ToR) approved by Environmental Appraisal Committee (EAC) of MoE&F in its 45th meeting held on 20-21 December, 2010 at Jaipur.

However, due to one reason or the other, the environment, wild life and forest clearance to the Project has not been accorded so far.

Environmental clearance of the Ken-Betwa project-Phase-I - In order to discuss the issues pertaining to grant of forest, environment and wildlife clearance to Ken-Betwa Link Project-Phase I, a Secretary level meeting of Ministry of Water Resources and Ministry of Environment and Forest was held on July 1, 2013. As a follow up of that meeting, National Tiger Conservation Authority vide letter no. I-6/95-PT (Vol. II) dated 18th December, 2013 constituted a four member Committee to ascertain feasibility of adding new areas to the tiger reserve in lieu of the area proposed for Ken-Betwa project and falling under submergence vis-à-vis space use pattern of reintroduced tiger habitats of Panna Tiger Reserve. The draft report of the Committee has since been received and their main observations on this issue are as under:

(i) In lieu of the area that will be submerged and habitat fragmentation caused by the project, it is suggested that some of the protected areas in the landscape such as Nauradehi WLS and Rani Durgawati WLS in Madhya Pradesh, and Ranipur WLS and Mahavir Swami WLS in Uttar Pradesh are brought under the ambit of Tiger Reserve, in the form of core areas, satellite cores and dispersal routes.

(ii) It is recommended that a committee/board involving State Forest Department, National Tiger Conservation Authority, Wildlife Institute of India and the project proponents including NWDA is set-up for joint monitoring of the project during construction and operational phases so as to ensure minimal negative impacts to wildlife species and habitats, and to ensure that (a) overall biological value is not

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compromised, (b) protection measures are enhanced and (c) human-wildlife conflict concerns are addressed. Such a strategy and concerted efforts would be required to make structural interventions as may be required and develop the project as model for integrated conservation and development actions benefiting all stakeholders.

The above suggestions made by the four member Committee to assess the feasibility of compensatory arrangements for Ken-Betwa River Link Project in Panna Tiger Reserve, Madhya Pradesh seems to be practical and workable. The report is going to be finalised by the Wild Life Institute and submitted it to the National tiger Conservation Authority. Separately we would be requesting the NTCA to prepare the Integrated Landscape Plan for this Project in collaboration of Wildlife Institute of India. You are also aware that the National Board for Wildlife is meeting on the 12th of August, 2014.

It is also to inform that NWDA has already submitted Forest clearance application online to the MoEF on 7th August 2014. MoEF has allotted Unique Proposal No. FP/MP/IRRIG /6383/2014.

So, it is requested to consider wildlife clearance of this project and issue wildlife clearance at the earliest please. Desired details and annexures/maps required for wildlife clearance is enclosed for necessary action at your end.

Your kind cooperation in this regard will be highly appreciated.

Yours faithfully,

(R.K. Jain) 8/8/2014
Chief Engineer (HQ)

PTR/Seno/DM/2014/1765

Panna. 09.10.2014

To,

The Member Secretary,
National Tiger Conservation Authority,
Ministry of Environment, Forest and Climate Change,
Government of India, NBCC Place (1st Floor),
Pragati Vihar, Bhisma Pitamah Margh
Lodi Road, New Delhi.

Sub: Report on Ken-Betwa link project W.r.t impact on tiger habitat in panna Tiger reserve, Madhya Pradesh-reg.,

Ref: NTCA's Ir, no. F. NO. 1-6/95-PT (Vol II) dated 18th Dec 2013 and Committee's report No. WII/NTCA/KR/KBLP/2013-2014/04 dt 8th Aug 2014.

With reference to above the it is informed that the mandate given to the above committee was "to ascertain feasibility of adding new areas to the tiger reserve in lieu of the area proposed for Ken-Betwa link project and falling under submergence vis-a-vis space use pattern of reintroduced tiger habitats of Panna Tiger Reserve" is of limited nature. The undersigned was also made a member of the said committee. While the committee's work was in progress I was very doubtful about the ability of the committee members to go through the process to suggest alternative sites with very limited information at hand.

Now the undersigned has got the full DPR of the project along with the Comprehensive Environmental Impact Assessment Report to process the case for proposal for

wildlife Clearance in National Park/Sanctuary. After Going through the proposal in detail and in the light of information that I got exposed to now I am Tully convinced that the recommendations part of the above committee is inappropriate and incorrect. The committee should have gone through the EAI before it sent the above report to you which it has not done. The project if approved based on the recommendation of the above committee based on incomplete information will lead the death of Panna Tiger Reserve Whooping 28.17% of the Panna Tiger Reserve will be affected due to project beside the disturbances due to construction (including the blasting for stone quarry within the CTH) lasting for more than a decade. Hence the undersigned dose not concur with the alternatives areas suggested in the report. Hence it is requested that where ever the above report is to be used this note of my disagreement be appended. The detailed report why the undersigned do not concur with the committee's report is with this letter. This for your kind information and necessary action at your end.

Yours faithfully

Sd/-
(R.Sreenivasa Murthy, IFS)
CCF and Filed Director,
Panna Tiger Reserve, Panna (Madhya Pradesh)

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Field Director, Panna Tiger Reserve's Disagreement Note to NTCA Committee's Report dated 8th August 2014 to find out a new areas in lieu of proposed Ken-Betwa River Link (RL) Project

NTCA's vide its Ir no. F. No. 1-6/95-PT (Vol II) dated 18th Dec 2013 formed a four member committee "to ascertain feasibility of adding new areas to the tiger reserve in lieu of the area proposed for Ken-Betwa link project and falling under submergence vis-a-vis space use pattern of reintroduced tiger habitats of Panna Tiger Reserve". As such the mandate of the committee was limited and not all the information was placed before the committee. Now the undersigned has got the full DPR of the project along with the Comprehensive Environmental Impact Assessment Report to process the case for proposal for Wildlife Clearance in National Park/Sanctuary. After going through the proposal in detail and in the light of information that I got exposed to, now I am fully convinced that the recommendations part of the above committee is inappropriate and incorrect and not based on the full facts. The project if approved based on the recommendations of the above committee based on incomplete information will lead the death of Panna Tiger Reserve. Whooping 28.17% of the Panna Tiger Reserve will be affected due to project besides the disturbances due to construction (including the blasting for stone quarry within the CTH) lasting for more than a decade. Hence the

undersigned does not concur with the alternatives areas suggested in the report. Hence it is requested that where ever the above report is to be used this note of my disagreement be appended. The detailed Disagreement note of the Field Director, Panna Tiger Reserve on biodiversity conservation issues due to the proposed RL project is as follows:

1. Direct and associated losses of CTH area of Panna Tiger Reserve (PTR):

The proposed Dudhan Dam is to be located in the heart of Critical Tiger Habitat (CTH) of panna Tiger Reserve which is a National Park as well. This dam will impound water of Ken River resulting in submergence of 90 sq km area of which 64% area lies within the CTH of Panna TR. Though DPR in mention the submergence of 41.41 sq km of forest of the Panna Tiger Reserve (PTR) the latest correspondence has added another 16.62 sq. km of CTH area of PTR will be detached (entire kishangarh ranga of 53.23 sq.km and 49 'sq.km of Bhusor and Plakoha Circles of Chandrangar range) form the PTR due to Construction of proposed Daudhan reservoir as well as quarrying activity for dam construction. The reservoir will fragment and disconnect the south western tiger corridor of Panna Tiger Reserve.

The details of loss of tiger habitat due to proposed reservoir, quarrying activity and bifurcation of compact tiger habitat is tabled below:

Sn.	Details	Area in Sq. km
1.	Total Area of CTH of Panna TR	576.00
2.	Direct loss of Habitat in CHT	
2.1	Forest Area	41.41
2.2	Non Forest Area	16.62
3.	Direct loss of Habitat in Buffer	
3.1	Forest Area	29.41
3.2	Non Forest Area	
3.3	Compensatory Afforestation area (Newly added)	05.00
4.	Indirect Loss of Habitat in CTH	
4.1	Area to be fragmented from larger compact CHT	56.23

KEN - BETWA LINK PROJECT

WRITTEN STATEMENT OF MEMBERS OF THE M.P STATE

WILDLIFE BOARD: 13TH MEETING

The undersigned members of the Board wish to place on record our opinion, reservations and findings with regard to the Ken-Betwa Link Project. We are making our submission in writing, partly since there may not be time to place all our findings orally before the Board at the 13th Meeting scheduled for the 22nd September, and also because having seen the minutes of the previous 12th Meeting on the same subject, in which even the major issues raised and the assurances by the Chairman have not been reflected and the minutes have been manipulated to facilitate the clearance of this Project, we feel it appropriate that our view points and facts be placed on record in writing.

Our objections to the proposal placed before the 13th Meeting are twofold: firstly, procedural, keeping in view what transpired in the previous 12th Meeting on this subject and thereafter, and secondly, on the substance and intrinsic merits and drawbacks of the Project itself.

Firstly, we would like to address the procedural aspects. A number of decisions and opinions were expressed in the 12th Meeting, which have, deliberately not been included in the minutes. Since the Agriculture Finance Corporation of India Ltd., Mumbai, was found to be incompetent on numerous counts, a fresh FIA was to be prepared by another competent and independent agency, but this is not

reflected in the minutes and the same agency is submitting an E1A report, which is simply a rehash of the previous one. It is factually misleading, technically incompetent, obsolete and inaccurate. One of the undersigned had categorically mentioned that the basic issue of the project components that require land from two Protected Areas has not been addressed, and indeed now contradicts the DPR. This includes not only the areas of Panna Tiger Reserve that would be submerged but also land required for the canal, power houses, project housing and mining, that have been suppressed in the E1A Report. The fact that the area would be bisected by submergence and would be ecologically- segregated from the rest of the Park and rendered infructuous. that the actual area of the Panna National Park affected would be over 200 sq km. that the project would in effect "dissect and disembowel" the Park, and lastly that the State and the nation will have to decide whether to have the Project or the Park, not both. All this is not mentioned, as also the plea taken by one of us that since this was a Wildlife Board, its advice may be taken in letter and spirit and if the Honourable Chairman of the Board, in his capacity as the Chief Minister of State finds the Project to be more important, he may overrule the opinion of the Board and opt for the Ken-Betwa Link Project. But the State Wildlife Board, whose mandate it is to safeguard the interests of wildlife in the State, should not be subverted to be a project clearance body. The Chairman had assured the Board that both the H1A agency and the User Agency would make presentations at the next meeting and that the biodiversity issues of Panna would be considered. None of these discussions find a mention in the minutes.

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Indeed, the State seems to be so keen to clear the Project, that the 13th Meeting of the Board is taking place 42 days after the 12th Meeting, when normally the Board meets only once a year, and the minutes which were circulated to us only four days ago, appear to be final with no opportunity for the members to make amendments as is the normal procedure. The 13th Meeting has a single point agenda, and what is more both the then Field Director of Panna Tiger Reserve and the Chief Wildlife Warden had not supported the Project in the proposal placed before the 12 Meeting. The current Field Director also says that "due to the heavy ecological loss it is very difficult... to recommend the Project", but he has left the decision to "a competent body". The same Chief Wildlife Warden has endorsed his opinion. It is clear that both the officers have had to face some "arm-twisting".

As regards the second and more important dimension, our misgivings on the success of the Project and the deliberate obfuscations and lack of transparency on the ecological impact upon Panna Tiger Reserve and National Park, the Ken Gharial Wildlife Sanctuary and upon Ken river per se and on the livelihoods of the people dependent upon it, we will summarise our findings below.

The second EIA, which like the previous one is in the public domain although it has not been circulated to us, is not a new EIA but a rehash of the old one to make it more acceptable. But in the process some glaring shortcomings have been exposed. There are contradictions between the Project DPR and the new EIA, inter alia, the new EIA version omits the second barrage to be constructed within the Ken Gharial Wildlife Sanctuary, below Bariarpur presumably because we had raised the issue of the adverse affect on

the- Ken Sanctuary in the 12th Meeting, but it still remains in the DPR. The new' EIA version also hides the real and total land requirements and usage of the Park premises. This new version of the EIA, therefore, is not in consonance with the MoEF Circular No. 327/2015-FC of 14.08.2015, which categorically states that project proposals must be complete in every respect. The new' EIA version is not only incomplete, but it deliberately hides facts with malafide motives and does not adequately document how the Project will affect Panna Tiger Reserve and National Park and Ken Gharial Wildlife Sanctuary.

The survey which has been conducted and on which the new' version of the EIA is still based upon, is of 2007-2008. The new version still speaks absurdities such as sal forest in Panna and of barasingha, Manipur brow-antlered deer and slow loris in this forest, although none of these species occur there. But it has revised the number of trees to be submerged from 32,900 to 13.96 lakh (including 11.21 lakh trees within the National Park), which is an increase of over 42 times, i.e. more than 4,100 % of the previous absurd figure. But even here, the tree numbers have been verified by the DFO Chhatarpur. Why not by the Field Director of Panna?

The new EIA version goes on to say that "the area under submergence is neither a home nor an important habitat for wildlife including birds and hence the impacts of the project on REET species may not pose any threat except loss of habitat.... There are no known breeding grounds for any of the REET within the project area" (page 240. This is a blatant untruth, because 2 out of Panna's 6 breeding tigress reside in the proposed submergence area and a total of 11 tigers (3 tigresses, 2 male tigers and 6 cubs)

use the area that will be effected by the project. This is one-third of Panna's present tiger population. In

any case, riverine tracts are always a favoured tiger habitat and breeding sites, especially in hot deciduous forests. The new EIA version itself mentions that "As a result of submergence all terrestrial organisms will get severely affected.... all the animals will be forced to migrate and migrations may expose them to various types of threats" (page 401). It also mentions that a "Field survey by a WII team clearly indicated that compensatory area that is ecologically similar (large tract of riverine forest) is not available to be included in the PTR area" (page 183). But then the document contradicts itself and says "There is a loss of 7.8% of the core area of the PTR which can be complemented by habitat improvement of added buffer area. Hence there is no threat to wildlife" (page 240).

The same self-contradiction and subterfuge is evident on the crucial issue of mining for the purpose of the Project. It is mentioned that quarrying will be carried out within the PA both upstream and downstream, but then it also says "Adequate care had been taken not to locate quarries and burrow area in Panna Tiger Reserve areas" (pages 228-230). Which of the two is correct? The document further states "Locations of rock quarries, sand quarries and burrow areas are shown in sketches 10.1 and 10.3 and 2.4." (page 371) but no sketches or land requirements for the quarries have been provided.

The whole project is based on the premise of siphoning off the surplus water of the Ken River to the Betwa River. But does the Ken have water to spare after maintaining its minimum ecological flow - its "AVIRAL DHARA"? The undersigned are of the considered opinion that the Ken does not have water to spare after maintaining its minimum ecological flow, but has any long-term detailed study of the Ken been done by a reputed expert agency and has its minimum ecological flow in different seasons been determined as yet? If not, should that not be done first before the launching of the Link Project? Also, has an EIA been done on the impact upon the Ken Gharial Wildlife Sanctuary? The Project aims to provide 6 lakh ha. of irrigation and drinking water to 14 lakh people. But thereafter will there be enough water in the Ken to sustain the livelihood of the people who are living on the 272 km length of the Ken River downstream of the Daudhan dam? Are we robbing Peter to pay Paul?

There are numerous other lacunae in the proposed Project and many issues that it does not address or glosses over. We feel that a proper cost-benefit analysis of the project and indeed of its viability, has not been done and that both versions of the EIA are totally inadequate and indeed, misleading.

We would, therefore most earnestly request the following-

- (i) A hydrologic survey by a reputed, impartial and expert agency be commissioned to determine the requirement of the minimum seasonal ecological flow or "Aviral dhara" of the Ken River and the needs of the people, both current and

future, living upon its banks, to determine how much water can be spared to siphon off to the Betwa. Only then would the real viability of the project be ascertained. The e-flow study conducted by the project proponent is not only inadequate but it is biased and misleading. It does not even take into account that the Bariarpur barrage which was commissioned to irrigate 229,360 ha., only has water to irrigate from 66,000 to 86,000 ha. So how is the Ken River deemed to have "surplus water"?

- (ii) Simultaneously, a reliable, balanced and comprehensive EIA be conducted by a reputed and responsible expert agency, which will do an unbiased study on the impact of the proposed project on both the Panna Tiger Reserve and the Ken Gharial Wildlife Sanctuary and on the livelihood of the fisherfolk and others living downstream. The EIA should take into account the Landscape Management Plan now being prepared by the WII and suggest remedial measures and costs involved. This EIA must also take into account the irrecoverable loss that would occur to the biodiversity of Panna Tiger Reserve and of Ken Gharial Wildlife Sanctuary, especially to their critically endangered species

- (iii) Although there is a Phase II, which is presumably closely linked with Phase I, the project proponent does not give any details and hence there is no information as to how it will impact Panna Tiger Reserve and Ken Gharial Wildlife Sanctuary. It is essential that the project proponent should reveal the impact of Phase II on these two Protected Areas

so that a holistic view of both Project Phases can be taken at this initial stage, or at least give in writing that Phase II will have no impact whatsoever on Panna Tiger Reserve and Ken Gharial Wildlife Sanctuary.

- (iv) The State Wildlife Board is a statutory body created under the Wild Life (Protection) Act, 1972 to advise the State "in the selection and management of areas to be declared as protected areas" and in "the protection of wildlife". It is not envisaged as nor should it be misused as a project clearance committee. It is evident that all the facts have not been placed before the Board and its Chairman for a judicious decision to be taken. Most of the inconvenient facts have been hidden. We would, therefore, most earnestly request you to let this Wildlife Board give its advice to the State freely and transparently as the law purports it to do so. If it advises against the Ken-Betwa Link Project and, in your capacity as the Chief Minister of the State you feel that the Project is required for the welfare of the State, and that the conservation interests of the Park have to be sacrificed for the larger interests of the people of the State, then you Sir, have every authority to decide so. But kindly do not allow the manipulation of the Board to facilitate the clearance of a project, without a genuine environmental impact analysis and the assessment of the viability of the project.

- (v) Lastly, we request that since all that we have said above cannot be reflected in the minutes, this written note may

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kindly be annexed to the minutes of this meeting and the minutes may allude to the same.

Sd/-
Dr. M. K. Ranjitsinh
22nd September 2015

Sd/-
Ms. Belinda Wright

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Agenda No. 14

12th Meeting of State Board for Wildlife dated 11.08.2015

Permission under The Wild Life (Protection) Act 1972 for diversion of Panna Tiger Reserve for Ken-Betwa Link Project Phase 1

1. Description of the Project

- 1.1. Ken-Betwa River Linking project is a multipurpose project, this project has two phases. The first phase entails construction of Daudhan dam, 2 power houses, 2 tunnels, link canal etc. For this purpose a tripartite MOU was signed between the Ministry of Water Resources, Government of Delhi, Chief Minister of Madhya Pradesh and Uttar Pradesh in the presence of Hon'ble Prime Minister on 22.08.2005. Under this project, it is proposed to divert the surplus water of River Ken to the regions in the upper Betwa basin.
- 1.2. The proposed multipurpose project is proposed inside Panna Tiger Reserve. Keeping in mind the water availability in Ken River, topography of the region, the project entails construction of a 1.5 km long, 77 metres high Daudhan dam along with a workers colony. According to the proposed project, the project will lead to irrigation of 3.23 hectares of Madhya Pradesh command area and 2.52 hectares of Uttar Pradesh command area. As per this project, the drought prone and un-irrigated lands of Tikamgarh, Chhatarpur districts of Madhya Pradesh will get irrigation benefits and Jhansi and Hamirpur districts of Uttar Pradesh will get irrigation and drinking water benefits. Districts en-route of the link canal will also get drinking water benefits. During the course of this project, employment will be provided to the local people. This will enhance their living standard and economic status and also reduce the dependence on forests for livelihood purposes.

2. NTCA Committee Report

2.1. In order to assess the impact of the Ken-Betwa River Link Project on the tiger habitat within PTR, the National Tiger Conservation Authority vide letter F. No. 1-6/95-PT (Vol.II) dated 18th December 2013, constituted a four members committee. The members of the committee were:

- (1) Shri. D.K. Sharma, SE, NWDA, New Delhi
- (2) Shri. O.P. Singh Kushwah, SE, NWDA, New Delhi
- (3) Dr. K. Ramesh, Scientist, Wildlife Institute of India, Dehradun
- (4) Shri. R. Sreenivasa Murthy, CCF&FD, Panna Tiger Reserve.

The TOT granted to the committee was to assess the feasibility of adding new areas to the tiger reserve in lieu of the area proposed for Ken-Betwa project.

- 2.2. The NTCA Committee report submitted a report titled Report on the Ken-Betwa River Link Project w.r.t, impact on Tiger Habitat in Panna Tiger Reserve dated 08.08.2014, in which it was mentioned that due to the project, 41.41 km² of forest area and 16.62 km² of non-forest area within the critical tiger habitat and 20.80 km² of forest area and 11.17 non forest area within the buffer habitat, thereby a total of 90 km² of area will come under submergence. Additionally, within the critical tiger habitat, Kishangarh Range of area measuring 56.23 km² and Bhutor and Palkoha of Chandrangar range of area measuring 49 km² will become disconnected from rest of the critical tiger habitat in Panna Tiger Reserve.

The committee also highlighted that maximum extent of area would be submerged all the way to Gharighat where Ken enters PTR, thereby significantly affecting tiger and vulture habitat.

2.3. In order to mitigate the adverse effects of habitat fragmentation caused by the proposed project, it is suggested that Nauredhi WLS and Rani Durgawati WLS in Madhya Pradesh, and Ranipur WLS and Mahavir Swami WLS in Uttar Pradesh are brought under the ambit of the Tiger Reserve in the form of core areas, satellite cores and dispersal routes. Further, the NTCA constituted expert committee has not recommended the possibility of adding exiting buffer to core due to the fact that at the time of notifying areas as buffer, the consent of the locals was sought only after assuring them that these areas would not be brought under core and that these areas would be managed keeping in mind the requirements of the wildlife and the locals.

2.4. In case the proposed project is permitted, then a joint monitoring committee involving members from the State Forest Department, NTCA, WII and NWDA will be set up so as to ensure that construction and execution activities of the project will have minimal negative impacts on the wildlife and their habitat, protection measures are strengthened and concerns of human-wildlife conflict are addressed.

2.5. The Field Director Panna Tiger Reserve in his written statement expressed his personal views as divergent from the other members of the committee. As per the views of the PTR FD, the following concerns need to be kept in mind while issuing the wildlife clearance to the proposed project:

1. The information provided in the EIA report is incomplete and involves factual errors. The report mentions presence of sal forests and wildlife that doesn't exist in PTR.
2. Submergence due to proposed project, will possibly lead to the fragmentation of the south-western tiger corridors of PTR
3. The proposed project will adversely affect the vulture nesting sites
4. Quarrying of sand and stone for dam construction in the proposed submergence zone will create disturbance for the wildlife
5. Given that the construction activity will continue for a long time (8 years), the presence of labourers will have an adverse effect on PTR. Moreover, long term presence of large number of labourers will create pressure on PTR forest to fulfil firewood and other related needs.
6. The minimum environmental flow of water should be maintained in the rest of the downstream Ken River as it is important for the survival of the wildlife in PTR and Ken-Ghrial Sanctuary.
7. The extent of critical tiger habitat within PTR is only 576 km² which is not very large. Moreover, in fragile ecosystems, wildlife is too sensitive to loss of habitat and disturbance.

3. Mitigating the adverse effects of the project

3.1. As per the NTCA report, the key adverse effect of the proposed project is the fragmentation of the PTR due to submergence. In reference to the area to be submerged due to the proposed reservoir, the figures presented by the NWDA on the extent of submergence in different months, point out that in the month of December at 259 mt FRL, the extent of submergence will be 57%. Further, in the month of February at 245 mt FRL, the extent of submergence will only be 36%.

Therefore, this way the proposed area will be under submergence only for a few months and not the entire year.

In downstream of the proposed dam site, especially downstream of the Gangau dam, the present wildlife traffic path will remain unaffected by the proposed project. Moreover, it is relevant to note here that the presence of 4-5 km wide corridor between the eastern and western divisions of the PTR will ensure continuous wildlife traffic. Therefore, it is not true that the proposed reservoir will lead to the separation between the south-western divisions and the eastern division of the PTR.

3.2. In order to compensate for the loss of the tiger habitat, the NTCA had proposed 'satellite cores' in order to compensate for the loss of tiger habitat in PTR due to the proposed project. The satellite cores will compensate the submergence loss to PTR and to convert these satellite cores into effective cores, it is important to make the present corridor effective that connects satellite cores to the park. Present corridor is fragmented and its conversion into an effective corridor will require adequate afforestation, development of water source and solutions for removal of barriers such as road/rail networks. It is also important to ensure habitat development in the proposed satellite cores.

It is the view of the department that in comparison to the proposal involving development of habitat in the proposed satellite cores, what would be more effective from the point of view tiger conservation is the addition of buffer zone (lying at the boundary of the PTR) to the core zone, followed by development of the consequent continuous core. Therefore, in place of developing satellite cores proposed by the NTCA, it will be more useful to add 60 km² forest area within buffer zone (lying adjacent to the core zone) into the core area. It is proposed that all compartments lying adjacent to the submergence area within the south western divisions of the PTR are added to the core, so as to ensure adequate conservation of the submergence zone and the wildlife that may thrive in it in future. Similarly, it is proposed that a few forest areas within the eastern division of the PTR are added to the core. Lastly it is expected that given that the proposed project entails irrigation benefits, there should not be any local opposition to the proposal of integrating buffer to the core.

3.3. PTR offers a unique habitat for the vultures. There are around 86 nesting sites of Long Build vulture and Egyptian Vulture on the high rock cliffs of Ken river which are proposed to come under submergence at maximum FRL (288 mt). In response to submergence of the existing vulture nests, it will be possible to create vulture nests elsewhere. Though there exist alternate suitable nesting sites, the technical knowledge available with the board with respect to nesting behaviour of vultures is rather limited.

It is therefore proposed that it is important to get a technical research done by BNHS on the impact of the project on vulture habitat and establishment of the alternate nesting sites, so as to ensure monitoring of the affected vultures in the new habitats and taking adequate steps for their conservation.

3.4. Due to the existence of Barriarpur and Gangau barrage on Ken River, it is only in the rainy season when an adequate flow of water is maintained in the Ken River within the Ken Gharial Sanctuary which is situated in the downstream of the above barrages.

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Under the proposed project, minimum ecological flow of water will be ensured in the Ken river which will not only lead to continuous flow of water throughout the year to the Ken-Gharial Sanctuary, but also, lead to an improvement in the habitat of the Gharial's. Lastly, this will also increase the water availability in the PTR which lies adjacent to the Ken-Gharial Sanctuary."

3.5. In the month of December close to 40% of the submerged area and in the February, close to 60% of the submerged area will be open for pasture land. In these open pastures, there is a possibility of availability of suitable habitat for herbivores such as Chital and wild boar. This is a positive impact of the Ken-Betwa Phase 1 on the PTR. It is relevant to note in case of Pench and Satpuda Tiger Reserve, post clearance of water from the Pench and Tawa reservoir, following rich growth of grass, there was increase in the population of reservoirs.

4.0. Proposed ken-Betwa project is critical for the development of the dry north/western part. The proposed project will lead to a partial loss of PTR habitat, such that it might not be able to completely compensate for the damage to the natural environment.

Following the extinction of tigers from the PTR, it was after great efforts by the State government that tigers were re-introduced in PTR. The partial loss of CTH in PTR can be compensated by integrating the equivalent forest area in the buffer to the core and strengthening of the existing tiger corridors.

For agenda 14 which seeks permission under The Wild Life (Protection) Act 1972 from the State Board for diversion within Panna Tiger Reserve for the Ken-Betwa Link project Phase1, the Board recommended the project on the mandatory conditions that to compensate for the partial submergence of PTR, equivalent forest area from the buffer will be added to the core. Further, during the construction and execution stage of the project, it is important to take precautions and consider the research by expert committees. The Board further recommends that in lieu of the affected forest area, compensatory afforestation should be given importance in the buffer area and the tiger corridor. Also, for utilization of NPV amount for the improvement of the natural habitat in the tiger corridor.

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Agenda No. 03

13th Meeting of State Board for Wildlife dated 22.09.2015

Permission under The Wild Life (Protection) Act 1972 for diversion of Panna Tiger Reserve for Ken-Betwa Link Project Phase 1.

1. Honourable member of the Board, Dr. MK Ranjitsinh raised the issue that a number of important decisions and opinions expressed in the 12th meeting of the MP SBWL were not incorporated in the minutes of the meeting. In relation to the Ken-Betwa project, he also expressed concerns such as: maintenance of minimum ecological flow in the Ken river after building of the dam, ensuring sufficient water for the Gharials, mud released during excavation, muck of stone quarries, time required for the dam construction and the location of the worker colony. On this matter, the Principal/Special Secretary, Water Resources Department and Director General, NBWL gave a satisfactory reply to every question/concern raised.
2. On the matter of integrating the buffer area lying adjacent to the core of the PTR, in lieu of the area submerged due to the Ken-Betwa Project honourable member of the Board, H.S. Pabla gave the following recommendations for developing these areas:
 - i. Development of forests in the buffer areas (lying adjacent to the core in PTR) which are proposed to be added to the PTR so as to ensure availability of a natural habitat for the tigers and other wildlife.
 - ii. Rehabilitation and resettlement of displaced villages lying in the core of PTR and the buffer (which is proposed to be added to the core) in accordance with the local R&R policy. For villages which cannot be rehabilitated, their boundary should be demarcated through chain link fencing to minimise human-wildlife conflict.
3. Honourable members of the Board, Bellinda Wrights and Surendra Tiwari raised questions with respect to the harvesting of estimated 13 lakh trees and its. On this matter Senior Special Secretary gave a satisfactory answer in relation to compensatory afforestation to be undertaken by the forest department on the area twice of that is proposed to come under submergence and improvement of forests.
4. Honourable member Deepankar Ghosh in relation to the impact of the proposed project on the tiger habitat; requested that in relation to the proposed project, the Board should take a decision such that its impact on the natural habitat of the tigers and wildlife is minimal.
5. Honourable member Kagheshwar Nayak expressed his opinion in the matter of comparing PTR with Panch National Park and was of the view that a conclusion cannot be drawn that water availability due to the building of dam will lead to an increase in the wildlife population.

For agenda 14 which seeks permission under The Wild Life (Protection) Act 1972 from the State Board for diversion within Panna Tiger Reserve for the Ken-Betwa Link project Phase1, the Board recommended the project to the National Wildlife Board on the following conditions:

- i. In lieu of the core are to be submerged, forest areas (within) are to be added to the core
- ii. Rehabilitation at project of the villages lying in the forest areas that are to be added to the core
- iii. Strengthening of the tiger corridor through Landscape Management Planning by the Wildlife Institute of India
- iv. It is proposed to expedite completion of dam construction and to keep workers out of PTR during the construction phase
- v. Apart from quarrying which is required for dam construction, all other construction material is to be sourced from outside
- vi. In order to mitigate the impact on the vulture habitat, it is proposed that the research is done by the BNHS at project cost
- vii. Ensuring minimum ecological flow in the rest of the downstream Ken River.

114 *Annexure A-12*

Minutes of 37th Meeting of Standing Committee of NBWL held on

26th February 2016

Government of India
Ministry of Environment, Forest and Climate Change
(Wildlife Division)

6th Floor, Vayu Wing
Indira Paryavaran Bhawan
Jor Bag Road, Aliganj

F.No.C-14/2016 WL(37th Meeting)
Dated: 15th March 2016

To

All Members,
Standing Committee of NBWL,

Sub: Minutes of 37th Meeting of Standing Committee of NBWL.

Sir/Madam,

Kindly find enclosed copy of the minutes of the 37th Meeting of the Standing Committee of National Board for Wildlife held on 20th February 2016 at 3.00 pm in Teesta", 1st Floor, Vayu Block, Indira Paryavaran Bhawan, Jor Bagh, New Delhi-110003 under the chairmanship of Hon'ble Minister of State (Independent Charge) for Environment, Forests and Climate Change.

Yours faithfully,
(Rajasekhar Ratti)
Scientist 'C'/Deputy Director (WL)

Encl: As above

Distribution:

1. Secretary, MoEF & CC
2. Director General of Forest & Special Secretary, MoEF & CC,
3. Member Secretary, NTCA New Delhi,
4. Addl. Director General of Forest (WL), MoEF & CC.
5. Director, Wildlife Institute of India, Dehradun.
6. Director, GEER Foundation, Gandhinagar, Gujarat,
7. Prof. R.Sukumar Central for Ecological Sciences, India Institute of Science, Bangalore.
8. Dr. H.S. Singh, Gandhi Nagar Gujarat.
9. Pr. Secretary (Forests) Government of Andhra Pradesh, Hyderabad.

Copy to:

1. PS to Hon'ble MOS.(I/C) E&F.
2. PPS to DGF&SS.
3. PPS to Addl.DGF(WL) and Member Secretary, Standing Committee- (NBWL).
4. PPS to IGF(WL)/PS o DIG(WL)/PS to JD(-WL)

Chair suggested that augmentation of water sources should be made with small structural modifications in existing/abandoned /old structures. This would improve the overall water table in and near the forests. Examples could be as follows as proposed by Shri Ravindra Joshi of Maharashtra.

- Utilization of old structures / old stop dams
- Artificial water pools in nallahs and small rivers (DOH)
- Conversion of unutilized old low level bridges into check dams
- With minor modifications to existing/proposed structures of culverts and small bridges
- Construction of check dams with nallah deepening

37.5.3 Realignment of core zone of Buxa Tiger Reserve.

IGF (WL) briefed the Standing Committee on the proposal. He mentioned that the proposal was forwarded by CWLW, West Bengal but the comments of the State Govt. have not been received. He stated that NTCA has recommended the proposal under sec 38(O) (b) of Wildlife (Protection) Act, 1972(amended).

After discussions, the Standing Committee opined that the proposal may be agreed to after receiving the views/recommendation of the State Govt. In case there is no reduction of any part of the existing Tiger Reserve and only addition, it can be approved.

37.5.4 Proposal for Wildlife Clearance in respect to Ken- Betwa Link Project- Phase I reg. Madhya Pradesh.

IGF(WL) briefed the Standing Committee on the proposal. He mentioned that the proposal would link Ken and Betwa rivers. He stated that the proposal would result in direct loss of 58.03 sq km (10.07 %) of Critical Tiger Habitat (CTH) of Panna Tiger Reserve due to submergence, 50% loss of existing unique habitat of highly endangered Vulture spp., indirect loss of 105.23 sq km of CTH due to fragmentation and loss of connectivity, displacement of 10 villages etc. NTCA informed that the proposal is being examined under sec 38(O) (b) of Wildlife (Protection) Act, 1972(amended) and it will take some time for finalizing the comments as the proposal involves alienation of large area of CTH. Chair permitted a presentation on the project by the project proponents.

The representative of user agency, Special Secretary, Ministry of Water Resources, made a power point presentation on 'Phase -I of the project, and its importance in the region of water deficit area of Bundelkhand region. He stated that project would ensure availability of water to draught prone areas in the both the states of Uttar Pradesh and Madhya Pradesh. Further, he mentioned that the project would provide annual irrigation to about 6.0 lakh hectares of land

and drinking water facility to 13.42 lakh people in both the states of Madhya Pradesh and Uttar Pradesh.

Dr.R.Sukumar, member expressed his concern on the impact of the project, in view of its huge submergence, habitat loss and impact on Ghariyal Sanctuary etc.

After discussions, considering the impact of the project on habitat and wildlife of Panna Tiger Reserve, the Standing Committee decided that a Committee comprising of Dr.R.Sukumar, Dr. H S Singh, a representative each from NTCA, WII, State Government and User Agency would conduct a site visit and submit the report in a month for further consideration. This visit can be clubbed with the consideration of NTCA of the project in accordance with the mandate of NTCA in Wild Life (Protection) Act, 1972.

37.5.5 Diversion of 39.604 ha of forestland from Indravati Tiger Reserve for construction of air strip in district Bijapur, Chattisgarh.

IGF (WL) briefed the Standing Committee on the proposal. He mentioned that the proposed involves construction of an air strip in the buffer area of Indravati Tiger Reserve. Further, NTCA had given its concurrence to the proposal under section 38 (O) (b) of The Wild Life (Protection) Act, 1972(amended).

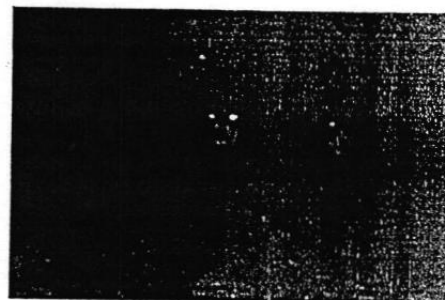
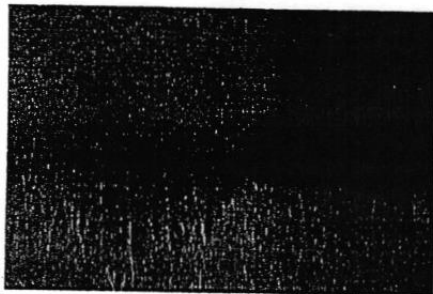
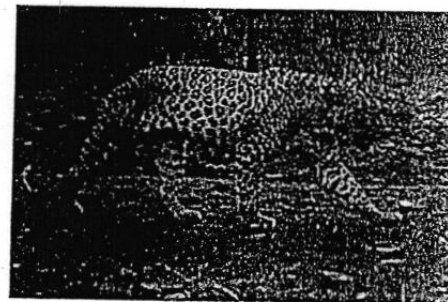
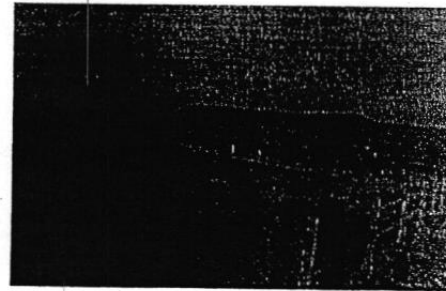
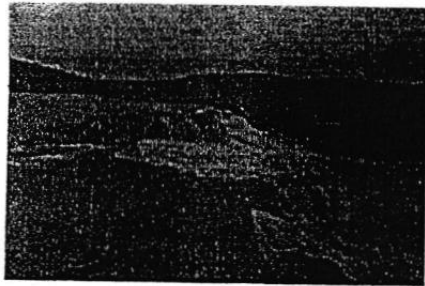
The representative of CWLW of Chattisgarh explained the importance and requirement of the project in view of left wing extremism in the region. After discussions, considering the strategic importance of the proposal, the Standing Committee agreed to recommend the proposal with conditions prescribed by NTCA as given below:

1. *Saplings numbering 1, 22,000 will be planted to compensate trees removed for the project. Plantation of the above saplings will be taken up in buffer area of the Indravati Tiger Reserve for benefit of wildlife. Out of 1,22,000 saplings to be planted, 72,000 saplings of fruit bearing and other indigenous species will be planted at a spacing of 3m X 3m over area of 66 ha. Further 50,000 Dendrocalamus strictus bamboo saplings will be planted over an area of 125 ha at a spacing of 5m X 5m.*
2. *A study shall be entrusted to Wildlife Institute of India to work out measures to reduce the effect of disturbance to wild animals and accident by vehicles as the Air strip will be located close to forest area and National Highway No.63.*
3. *To distract animals from coming at the Air strip/habitation, development of habitat like creation of water bodies, deepening of old water bodies, development of grassland, eradication of weeds and fire protection will be taken up in the buffer ranges of Bijapur and Kutru.*

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NBWL Standing Committee Report on Ken-Betwa Link Project w.r.t. impacts on Wildlife

**Site Inspection Report on
Ken - Betwa Link Canal Project (KBLCP): Phase I
in Madhya Pradesh by
the Committee of the Standing Committee of NBWL**



August 2016

**Site Inspection Report on Ken-Betwa Link Canal Project (KBLCP): Phase I
in Madhya Pradesh by the Committee of the Standing Committee of NBWL**

1.1. Background

A proposal for construction of a dam across Ken River, as a part of the Ken-Betwa Link Canal Project (KBLCP) in Panna Tiger Reserve (PTR) in Madhya Pradesh, was discussed at the 37th meeting (on 26th February 2016) of the Standing Committee of National Board for Wild Life (NBWL). The Madhya Pradesh State Board for Wild Life had recommended and forwarded the proposal for a decision by the NBWL. After a brief discussion, considering the impact of the project on habitat and wildlife of Panna Tiger Reserve, the Standing Committee decided that a Committee comprising of Dr. R. Sukumar, Dr. H. S. Singh, and a representative each from National Tiger Conservation Authority (NTCA), Wildlife Institute of India (WII), State Government, and User Agency would conduct a site visit and submit a report for further consideration. It was also mentioned that the field visit could be clubbed with the consideration of NTCA of the project in accordance with the mandate of NTCA in Wild Life (Protection) Act, 1972. Subsequently, the Ministry of Environment, Forests and Climate Change, Government of India communicated vide letter no. F. No. 6-14/2016 WL (37th meeting) dated 15th March 2016 that the report was to be submitted within a month after the site inspection.

In order to look into the issues concerning wildlife species and their habitats with respect to this project, the following members of the committee conducted field inspections from 9th to 11th April, 2016.

- (i) Dr. H. S. Singh, Member, NBWL
- (ii) Dr. R. Sukumar, Member, NBWL
- (iii) Mr. Shahbaz Ahmad, APCCF (WL), MPFD, Bhopal
- (iv) Dr. Debabrata Swain, IG (WL), Nagpur, NTCA
- (v) Dr. K. Ramesh, Scientist, WII, Dehradun
- (vi) Mr. R. K. Jain, Chief Engineer, NWDA, New Delhi

Mr. Vivek Jain, Field Director, PTR and Shri O.P.S. Kushwaha, Superintendent Engineer, NWDA (National Water Development Agency) joined the team for field inspections and discussions. The officers and field staff of PTR and NWDA, and officers of Madhya Pradesh Irrigation Department also participated in the field visits and discussions. Following the decision taken by Standing Committee of NBWL at the 38th meeting held on 10th May 2016, the report of a consultative meeting held on 11th July 2016 involving a hydrology expert has been appended in this report (Section 2).

1.2. Field visits

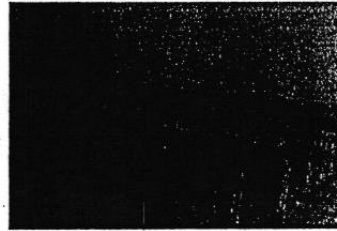
The Field Director, Mr. Vivek Jain, and officers of the NWDA organized the field visits and meetings. The committee members visited PTR and adjoining areas in Madhya Pradesh, the proposed Daudhan dam site, villages coming under submergence and proposed for translocation, the roosting/nesting sites of vultures along the Ken River, and Ken Gharial Wildlife Sanctuary during 09-11 April 2016. The site inspection was carried out by way of (a) field visits to specific sites that are key to this project in relation to impacts on wildlife (09-04-2016 & 11-04-2016), (b) better understanding of the issue from the presentations made by the NWDA (Mr. R. K. Jain), Field Director of PTR (Mr. Vivek Jain) and WII (Dr. K. Ramesh) (10-04-2016), (c) engaging in discussions with interested people, including local residents at Panna and villagers whose lands would go under submergence, who had expressed a stake and concern about the project (10-04-2016), and (d) studying the available documentations and related scientific literatures (pre-and post-field visits).

1.3. Background of the project

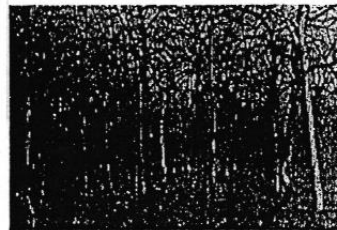
Water is the most critical resource for all life forms and much of people's livelihood and development trajectories are founded on the manner in which the water resources are harnessed and managed. While India supports nearly 17% of the world's population, the available waters constitute only 4% of the global water resources. Water distribution and related development indicators are biased towards certain regions and, thus, there is constant demand for water for various purposes across the country. The National Water Policy in 2002 suggested linking of rivers for appropriate water management strategy, but after addressing significant challenges linked to ecological and socio-political implications.

Government of India has proposed about 30 river linking projects, 16 in the peninsula and 14 in the Himalaya. Of these, the Ken-Betwa Link Canal Project (KBLCP), covering the states of Madhya Pradesh and Uttar Pradesh, has been accorded priority and initial processes have already been taken up. However, this project falls within the core area of Panna Tiger Reserve, Madhya Pradesh, with significant implications causing wildlife habitat loss from submergence and consequent fragmentation. The functional impacts of the project are also likely to be far reaching, beyond the conventional expectation around the immediate project site. Also, the riverine habitats are specialized habitats and the loss of such habitats could amount to loss of unique species that depend on them closely. In addition to the prevailing legal protection and socioeconomic considerations, it is important to take cognizance of the National Water Policy which underscores integrated perspective to govern the planning and management of water resources, accounting for the local, regional, and national contexts as well as environmental considerations.

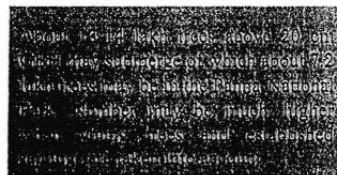
KBLCP, primarily an irrigation and poverty alleviation project, was conceived in 1994/95 and subsequently, a joint project of National Water Development Agency (NDWA), Ministry of Water Resources, Central Water Commission (CWC) and other agencies was developed to realize the project objectives and components. It envisages diversion of surplus water of Ken basin to Betwa basin while proposing to irrigate and provide drinking water en route and the command area. The project involves construction of a large dam at Dhaudan village and a 2-km tunnel inside the Panna Tiger Reserve's core area in Chhatarpur district (Figure 1a & b). The project also envisages utilizing water from Daudhan dam through Ken-Betwa link canal to create irrigation facilities in Chhatarpur and Tikamgarh districts of Madhya Pradesh, and Jhansi District of Uttar Pradesh.



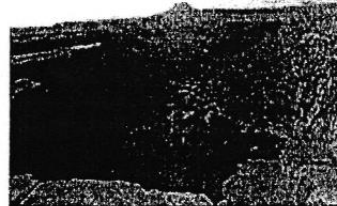
Existing Gangau Weir



Dense dry deciduous forest in PTR



Rock crevices along Ken river that act as shelters and breeding ground



Gorge and water pool in drought year during summer in Ken River- typical of the river

The link canal will provide irrigation en route and drinking water supply towns/villages en route for 13.42 lakh population. The remaining water will be diverted to Betwa River upstream of existing Parichha weir. The water diverted to Betwa River will be utilised in the drought prone and water scarce areas for providing irrigation to about 1.00 lakh ha in the Betwa basin in the districts of Madhya Pradesh on substitution basis. Besides these, water will be released downstream from the dam, which will be utilized through Bariarpur for stabilising existing irrigation of about 2.52 lakh ha in Banda district of Uttar Pradesh. Additionally, water will also be released from the dam for provided irrigation to 3.23 lakh ha of un-irrigated area annually through Left Bank Canal (LBC) of ex-KMPP project of Madhya Pradesh and Right Bank Canal (RBC) off-taking from Bariarpur pick-up weir in Panna and Chhatarpur districts of Madhya Pradesh. Details of water flow are provided by NWDA in Annexure 1.

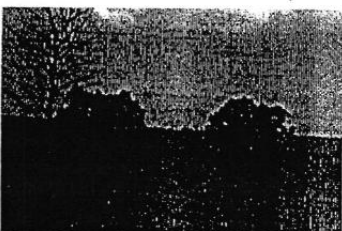
In this project, 10 villages (including four villages located within PTR) will go under submergence, which means that 1913 families with 8339 persons will be dislocated. The total submergence area indicated in the Detail Project Report (DPR) under Daudhan dam project is 90.00 sq. km; of this 58.03 sq. km area falls within the Panna Tiger Reserve, including 41.41 sq. km of forest area and remaining 16.62 sq. km being revenue area within the reserve. The remaining 31.97 sq. km submergence area is outside the Panna Tiger Reserve; of which 11.17 sq. km is forest area of Chhatarpur division and remaining area is revenue land. Besides construction of a dam, two power houses, one at the body of the dam and second at the exit of the lower level tunnel of 1.1 km will be constructed; 2 km long upper level tunnel will also be constructed within Panna Tiger Reserve. From the exit of the tunnel, Ken-Betwa link canal of 221 km length will be constructed.



Cultivated fields under proposed submergence

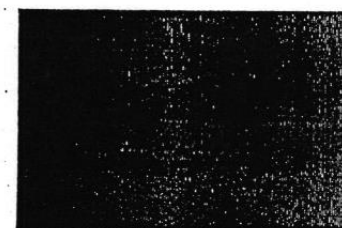


Submergence area	
Forest area	58.03 ha
Revenue area	31.97 ha
Total submergence	90.00 ha
Within Panna Tiger Reserve	58.03 ha
Outside Panna Tiger Reserve	31.97 ha
Forest area	41.41 ha
Revenue area	16.62 ha
Total	90.00 ha



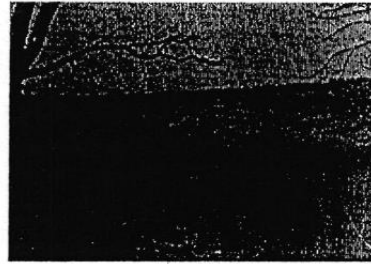
Riverine vegetation, grassland and tiger habitat under proposed submergence

Overview of cost-benefits from Ken-Betwa Link Project	
1. Irrigation	13.42 lakh population
2. Hydropower	73 MW
3. Drinking water	13.42 lakh population
4. Dislocated families	1913 families
5. Total cost (Rs.)	17,700 crore
6. Benefit-cost ratio	1.66
7. Villages affected	10/14 in PTR and 4/6 outside PTR
8. People affected	1913 families and 8339 persons
9. People benefited	13.42 million in 100 villages

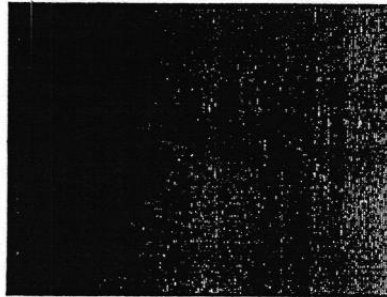


Vultures feeding in Panna Tiger Reserve

The proposed project will cause significant impacts on biodiversity, specifically in the riverine habitats, both the upstream portion where submergence will take place and downstream where flow regimes will be affected. In addition to the tiger, which has been recovering following concerted efforts over the last six years, significant nesting habitats of vultures are also likely to be affected by the project. It is evident that Panna Tiger Reserve is emerging as an important source population of tiger in the entire landscape and the proposed project will certainly cause habitat loss and fragmentation to the entire tiger population in the landscape. The Environmental Impact Assessment (EIA) for this project clearly recognizes these major impacts on biodiversity values, although there are several factual errors in the species inventory as provided in the appendices. In fact, much of the criticism about the EIA of this project stems from factual errors in the appendices. Further, current Environment Management Plan (EMP) considers only about 10 km radius from the project site and 1km on either side of canal and this is clearly inadequate to address the ecological impacts of the project. In this context, investigating the project impact and benefits from the landscape context is not only relevant, but is imperative to address the concerns of all stakeholders and for providing realistic options for conservation of the area.



A view of Ken Gharial Sanctuary in summer in a drought year



Rock cliff-vulture nesting sites along the Ken River

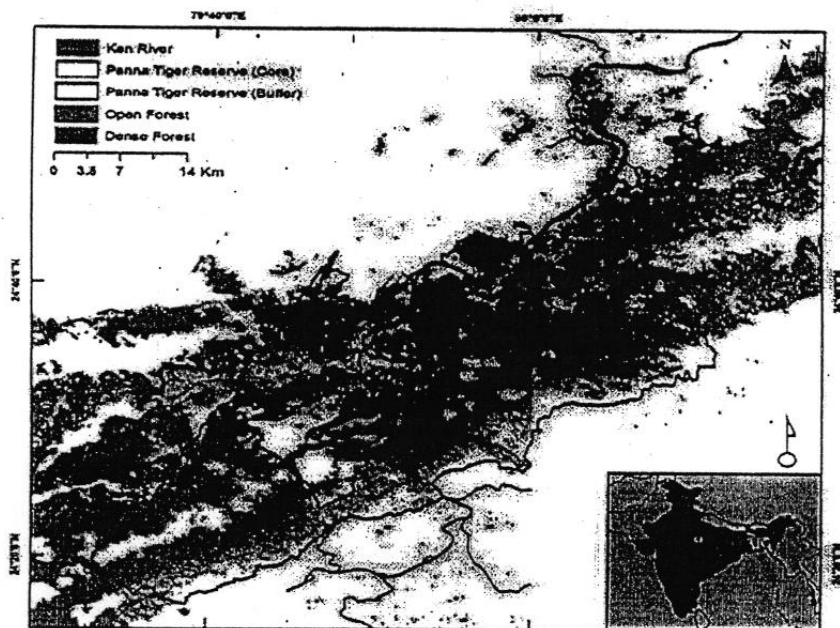


Figure 1a: Location of proposed Dhaudan Dam (red line) in Panna Tiger Reserve, Madhya Pradesh, showing core, buffer and adjoining areas (with forest cover).



Figure 1b: Location of proposed Daudhan Dam (red line) in Panna Tiger Reserve, Madhya Pradesh, showing core area boundary and forest cover.

1.4. Panna Tiger Reserve

Situated in the semi-arid region of the Vindhyan mountain range, Panna Tiger Reserve is spread over the Panna and Chhatarpur districts in the northern part of Madhya Pradesh. The terrain here consists of extensive plateaus, rocky cliffs, gorges, caves and rock crevices. The caves, rock crevices, gorges and rock cliffs are critical habitats for breeding and resting of the key species such as tiger, leopard, hyena, sloth bear and several species of vultures.

Panna National Park was formed in 1981. In 1994, this park was declared as India's 22nd Tiger Reserve of the country. The core area of the Tiger Reserve is only 576 sq. km, which is too small to sustain a source population of the tiger in the long-term. Unlike other Tiger Reserves, it has a high degree of isolation having no functional corridor connection with other tiger areas. Due to its small size and its isolation from other Tiger Reserves, the risk of population extinction of tiger from the reserve is very high, unless the conservation effort is approached in the landscape context.

The forests along Ken and its tributary form a significant part of the catchment area of the river. Ken Gharial Sanctuary and adjoining forests of the National Park offer certain habitat. This river is one of 16 important perennial rivers of Madhya Pradesh. It is considered as the lifeline of the region in terms of quality of water. It is considered as the least polluted of the Yamuna's tributaries.

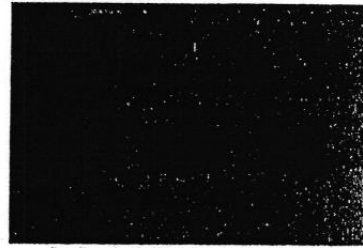
The cliffs and gorges at both sides of the Ken River not only offer some spectacular scenery but also a unique habitat for a variety of wildlife species.

The area supports dry deciduous forests with poor presence of shade-providing trees in summer. This Tiger Reserve in Bundelkhand represents an important dry deciduous forest, which is very fragile. Preservation of such remnant patches of forests in the Vindhyan hills spread over four states is also our responsibility. Urban visitors or others with incomplete understanding of the nature of forests in semi-arid environments underestimate the value of the forest in summer due to its dryness. PTR forms the northern most tip of the natural teak (*Tectona grandis*) forests and the eastern most tip of the natural Dhav or Kardhari (*Anogeissus pendula*) forests of the subcontinent. Fruit bearing trees such as mahuwa (*Madhuca indica*), bidi patta (*Diospyros melanoxylon*), ber (*Ziziphus* sp.) and jamun (*Syzgium cumini*) trees along the river are common and they supply food to sloth bear and ungulates. The park supports dry and short grass habitat with extensive open woodlands. Majority of the area is covered with moderately dense forests leaving enough scope for growth of grasses. Along the major seasonal streams and the Ken river valley, lush vegetation can be seen in monsoon and pre-winter. Tree species such as *Acacia* sp., *Diospyros* sp., *Anogeissus* sp. dominate the dry steep slopes of the plateaus. These habitats make for a heterogeneous landscape.

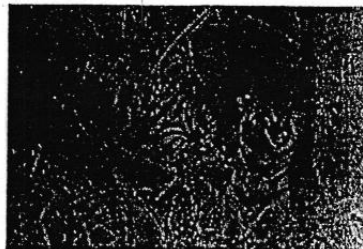
1.5. Threatened species

Tiger and several species of vultures (see section on vultures below) are Endangered species in the area, as per the IUCN category of threatened species. Apart from these, PTR is also home to other threatened species, which are listed in Schedule I of the Wildlife (Protection) Act 1972. Key species include Leopard, Rusty spotted cat, Sloth bear, Wild dog, Wolf, Chinkara, Chausingha (Four-horned antelope), Mugger crocodile, Gharial (long snouted), Mahasheer fish (*Tor tor*) and several species of raptors. Among many other creatures, Striped Hyena, Jungle cat, Civets, Jackal, Fox, Nilgai, Chital, Sambar, Wild Pig, and two primate species (Common langur and Rhesus monkey) are also found in the area.

Given that significant a portion of the riverine habitats will be submerged and flow regime changed, the major impacts would be on the riverine species and the unique habitats. This is possibly the biggest loss with respect to this project.



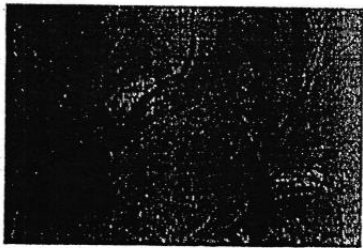
Sambar, the largest deer in the dry deciduous mixed forests of PTR



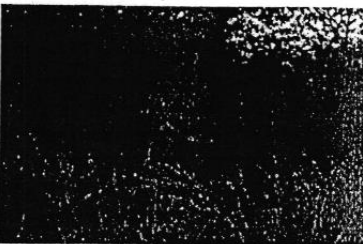
Tigers resting amidst grasses near Ken River bed



Ratel



White-backed vultures in PTR



Nilgai in PTR

1.6. Observations and Discussion

1.6.1 Water and Livelihood

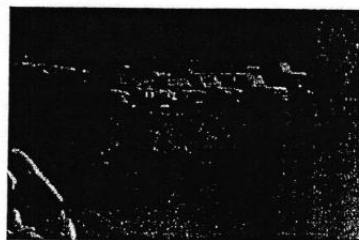
This project is founded on construction of a dam at Dhaudan village inside the Panna Tiger Reserve's core area in Chhatarpur district. Figures 2 & 3 provide a sketch of Ken-Betwa river link project and location of Dhaudan dam in the Panna Tiger Reserve, along with submergence area. It is to be noted that the proposed dam is located 2.5 km upstream of the existing Gangau dam/weir and the water flow in the lean season is very low upstream and downstream, as seen during the visit. Therefore, harvesting of water is primarily to be done during the monsoon period and the stored water would be periodically shared for irrigation and drinking in the proposed region. Certainly, this project looks to address the serious water-related issues in the Bundelkhand region where there is regular drought, and people from Madhya Pradesh as well as Uttar Pradesh are key beneficiaries of this proposed project. The project is likely to offer drinking water supply for 13.42 lakh population and help irrigate a total of 6.75 lakh hectares of land in Madhya Pradesh (4.23 lakh ha) and Uttar Pradesh (2.52 lakh ha). If the projected estimates are realistic, they are likely to change the face of the entire Bundelkhand region in terms of socio-economic status of people. Given that the region is poverty ridden, the realized benefit of the project cannot be ignored and that there would certainly be a need to strike a balance between wildlife conservation and people's livelihood considerations.

1.6.2. Habitat and Fragmentation

The entire forest area under the proposed submergence both within and outside PTR is tiger habitat, while the non-forest area is potential tiger habitat. Thus, about 90 sq. km. area of tiger habitat, including potential habitat will have to be considered as submergence zone. The areas that are not forests but open areas are also wildlife habitats (except the village areas but this will also become wildlife habitat if village relocation programs are taken up) and that some of these areas are now part of the buffer zone. Although the project document mentions only 41.41 sq km of forest area for NPV purposes, the entire area of submergence (excluding villages outside the core area) and the area required for operational establishment and other infrastructure will have to be taken into account as total loss for practical purposes. Additionally, the connectivity with Kishangargh Range (Core/Critical Tiger Habitat) with an area of 56.23 sq km and Bhusor and Palkoha circle of Chandranagar Range with an area of 49 sq km will be affected or compromised in the submergence zone.

1.6.3. Tiger Population and Habitat Quality

Tiger population in Panna Tiger Reserve has always been linked to active management efforts; earlier through village relocation efforts providing for increase in habitat area available for wildlife and, recently, through tiger reintroduction program after the population became functionally extinct in 2009 (Figure 4). Presently, the total tiger population in the reserve is >35 individuals, with major concentration/movement being in the eastern part of the reserve both in present (Figure 5) and historic (Figure 6) periods, although there are individual tigers (Figure 7) and leopards (Figure 8) that occupy the western part of the reserve, including the riverine habitats that are likely to be submerged by the proposed project. Strikingly, a large proportion of buffer (53%) area is not suitable for tiger at present, indicating poor habitat quality, while intact habitat is available largely in the eastern portion of tiger reserve (Figure 9). Re-introduction programme of tiger in Panna Tiger Reserve is one of the most successful among such projects in the world. It is an important learning experience for replicating similar projects elsewhere.



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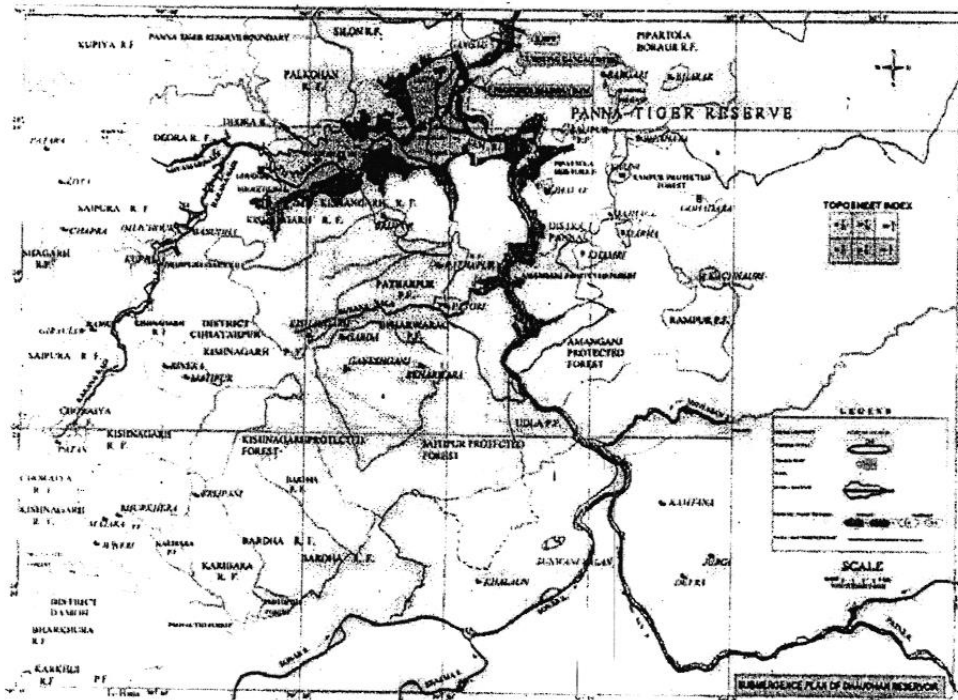
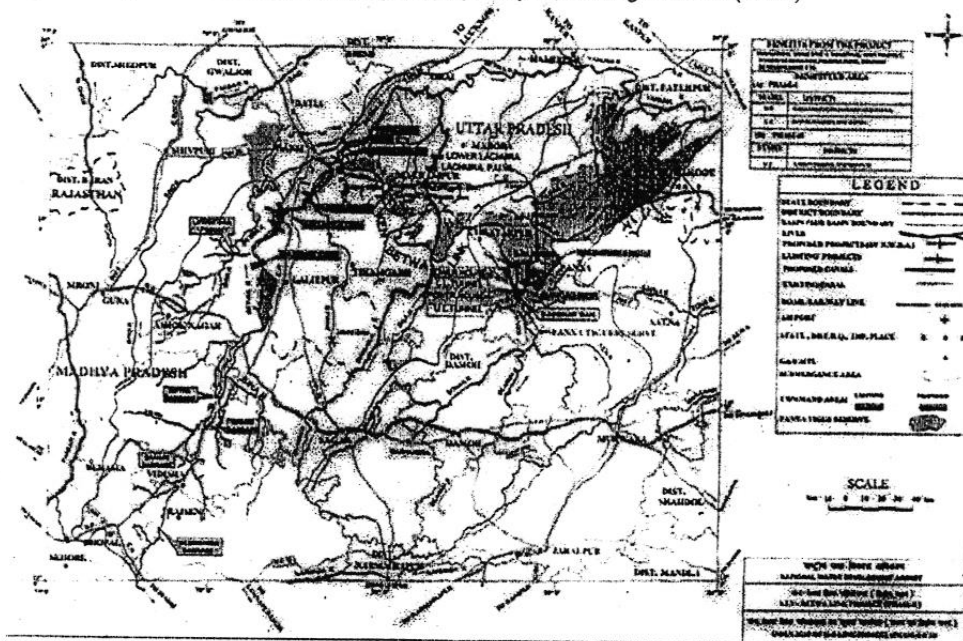


Figure 2: Map of submergence (as per DPR) of proposed Dhaudan Dam (above)

Figure 3: Map of Ken-Betwa river link project's proposed plan, showing link canal (below)



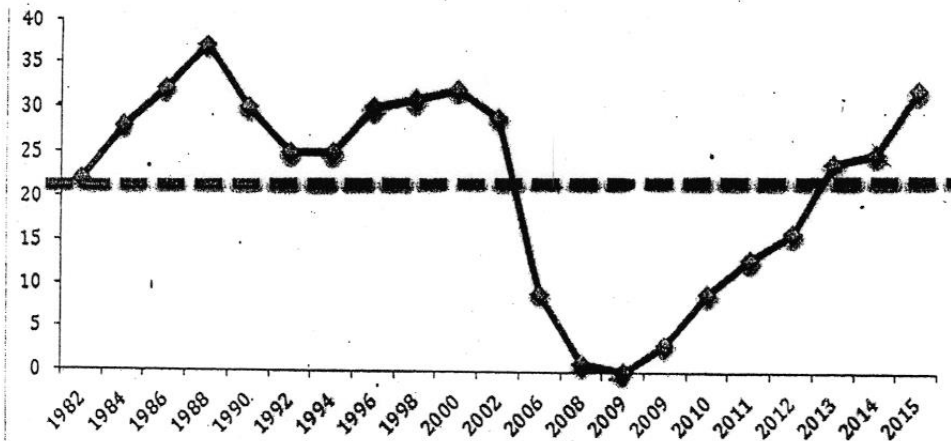
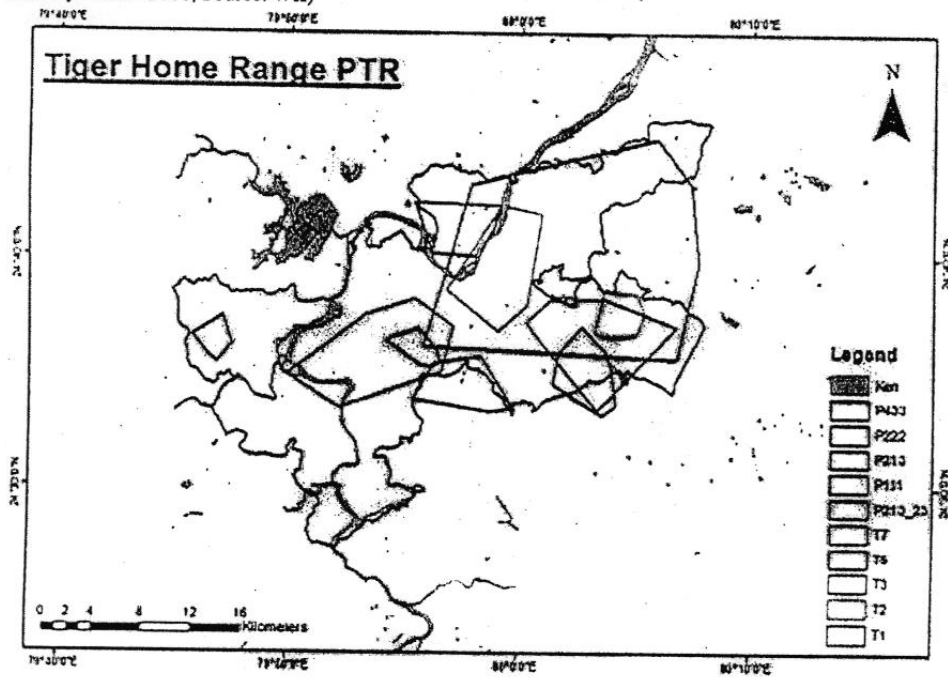


Figure 4: Tiger population trends in Panna Tiger Reserve during 1982-2015 (Source: MPFD/WII)



Figure 5: Home range of radio-collared tigers in Panna Tiger Reserve after tiger reintroduction (data of January-March 2016, Source: WII)



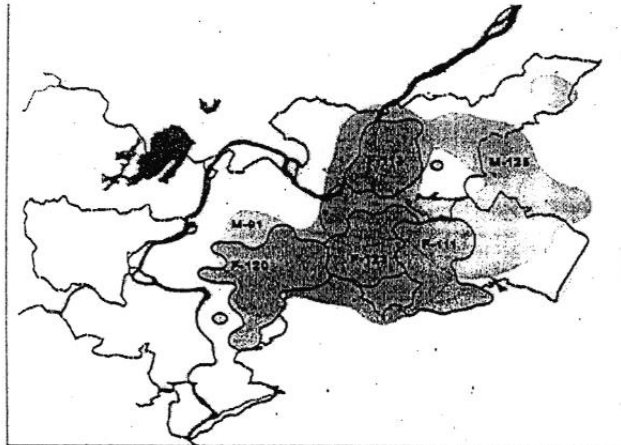
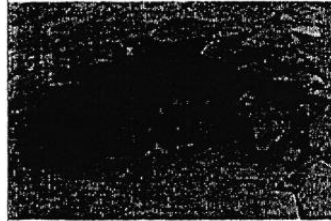


Figure 6: Home range of radio- collared tigers in Panna Tiger Reserve before reintroduction (data of 2001-2002,Source: Chundawat et al. 2016)



Tiger Capture in Camera Trap, PTR

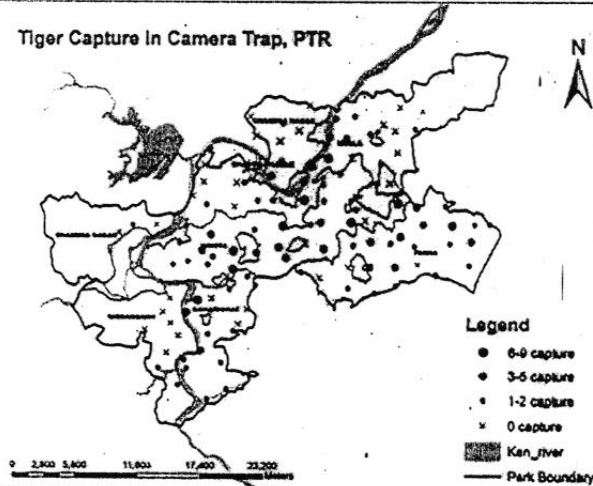


Figure 7: Capture of tigers in camera traps during 2015-2016 (Source: WII/PTR)

Leopard Capture in Camera Trap, PTR

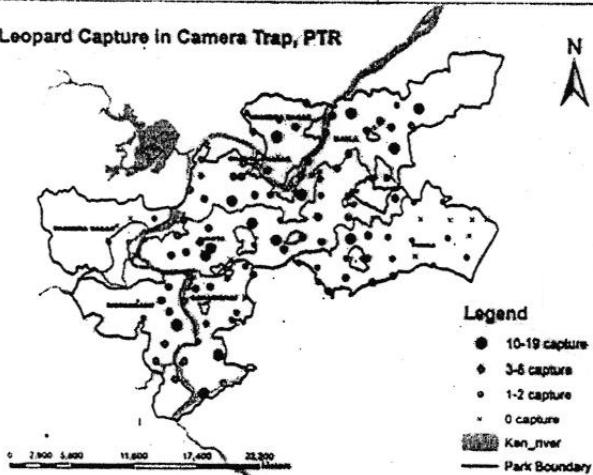


Figure 8: Capture of leopards in camera traps during 2015-2016 (Source: WII/PTR)

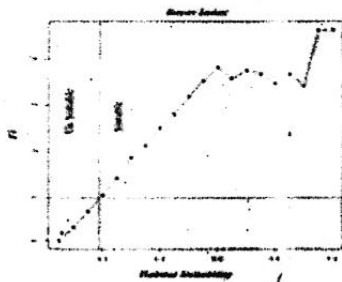
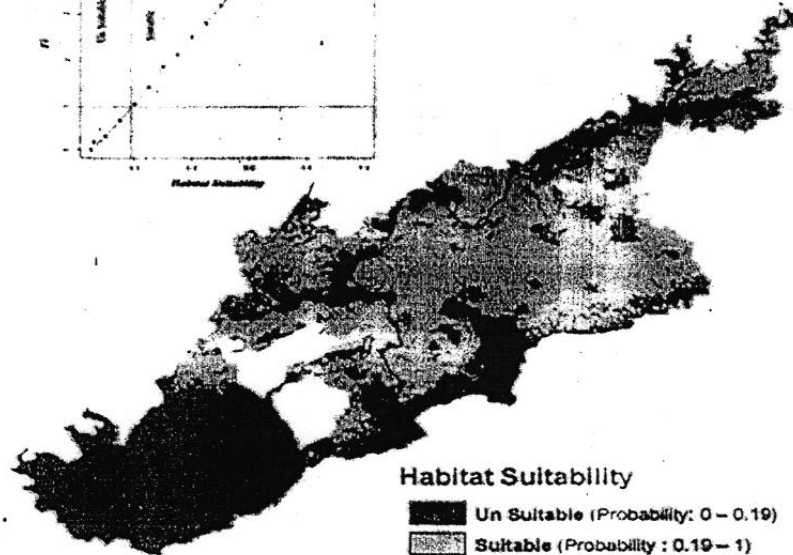


Figure 9: Map of habitat suitability for tiger in Panna Tiger Reserve, based on micro-habitat selection by reintroduced tigers (Source: WII)



Tiger population in Panna Tiger Reserve has always existed at low density (2-3 tiger/100 sq. km), possibly due to the dry deciduous and highly seasonal habitat with limited resource base. However, the reserve soon began to recover, following the village relocation program and protection measures. The tiger population peaked during early 2000, with over 6 tigers/100 sq. km. Although Panna Tiger Reserve may never reach very high tiger density as compared to other high-density areas in the country, it certainly represents one of the important tiger populations in the dry-deciduous central Indian landscape. Between 2005 and 2008, the tiger population in Panna declined rapidly and became locally extinct in 2009. The studies/investigations in the recent decade reported that one or combined factors such as poaching, biological reasons such as male-biased sex ratio with consequences on female stress levels, disturbance and limitation of protected area size could be reasons for extinction of the tiger from the area [Reports of the Special Investigation Team constituted by National Tiger Conservation Authority (NTCA 2009), Expert Committee Team constituted by the Madhya Pradesh State Government (Panwar et al. 2009) and recent publications (Chundawat et al. 2016, Reddy et al. 2016)]. In short, PTR in the present form is unlikely to sustain a viable tiger population in the long-term. However, the extent of forests on either side of PTR constitute a larger landscape area and tigers disperse occasionally over long distances by negotiating human-dominated areas, reflecting the need for a landscape approach for tiger conservation in this area (Ramesh et al. 2016).

Following extinction of the tiger in Panna, the population of the species has been revived based on reintroduction efforts and the tiger has recovered rapidly to over 35 individuals, with a few more individuals having dispersed into the broader landscape. The conservation efforts in Panna marks one of the commendable tiger recovery efforts among all tiger range countries. This success has come about through substantial human efforts, technical inputs and fiscal resources. In Phase I of the project, in addition to regular allocation of funds to PTR, over Rs 4 crore has been spent in the program, involving a dedicated team of staff for monitoring and support from Wildlife Institute of India and National Tiger Conservation Authority. There is obvious concern that since the recovery

of the tiger has been achieved after much hardship and investment, the proposed Ken-Betwa link project may take away some of the success. However, if this needs to be addressed, using the available science, a landscape approach to tiger conservation within a meta-population framework needs to be formalized and implemented, in addition to other compensatory strategies.

1.6.4. Vulture Population and Habitat

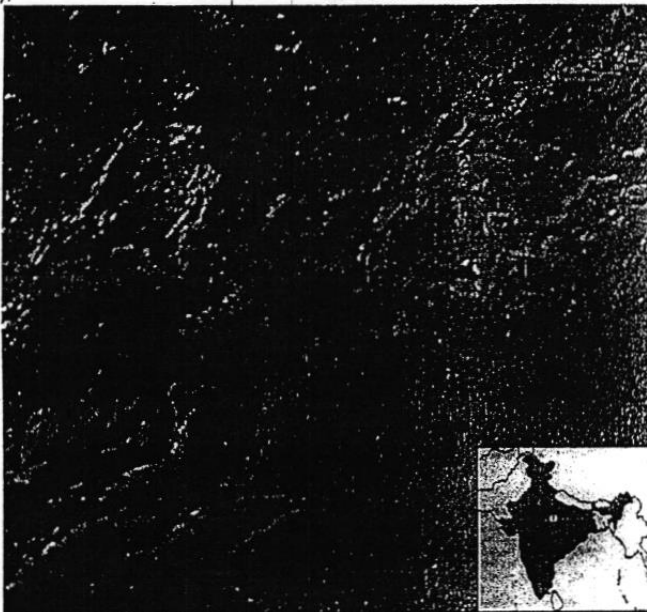
Panna Tiger Reserve represents a complex terrain with steep escarpments and gorges, which are ideal for vultures to rest and nest. The total population of all vultures is roughly estimated to be anywhere between 1000 and 1500 individuals. It is also significant in the broader global context given the significant decline of vulture populations globally, and of 92% decline in long-billed and white-backed vultures in India between about 1990 and 2000-02 (Prakash et al. 2003). Indeed, the population of the white-backed vulture continued to decline to only 0.1% of the earlier numbers by 2007 while other vulture species too experienced declines (Prakash et al. 2012).

In PTR, seven species of vultures have been reported. Of these, (1) King Vulture or Red-headed Vulture (*Sarcogyps calvus*), (2) White-rumped or White-backed Vulture (*Gyps bengalensis*), (3) Long-billed or Indian Vulture (*Gyps indicus*) and (4) Egyptian or Scavenger Vulture (*Neophron percnopterus*) are resident breeders and their population estimates are about 150, 250, 950 and 170, respectively (Figure below showing in pink colour nest/ roost sites of vultures in Panna). Three other species, (5) Eurasian Griffon (*Gyps fulvus*),

(6) Himalayan Griffon (*Gyps himalayensis*) and (7) Cinereous Vulture (*Aegypius monachus*) are migratory, winter visitors, with variable numbers. In terms of breeding behavior, Long-billed Vulture and Egyptian Vulture nest on cliffs, while Red-headed Vulture and White-backed Vulture nest on trees. The primary breeding season is from November/December to April/May, with incubation period of about 45 days. The migratory species are not expected to breed here.

The team could see evidence of vulture nesting/perching sites in a large part of the reserve. Of the 40

nesting/perching sites officially recorded for vultures in PTR, about 17% of the sites are likely to be affected by submergence, mainly those of long-billed vulture. However, the extent of the impacts require verification since the nesting period coincides with the winter season when the water level is expected to be much lower than the proposed maximum, and there is species-specific behavioural response when there is a choice of higher elevation sites for nesting as it provides better visibility for resource procurement. Also, the vulture habitat in the submergence area is one of the largest



concentrations. It is also not clear if there are species-specific preferences among vultures for nesting along the gorge of the River Ken. In the absence of such knowledge, we should use the precautionary principle to consider about 20-25% loss that the project may cause on vulture nesting/perching sites in PTR. This figure lies in-between the widely varying estimates from 3% to 50% loss of vulture nesting sites given by different sources. There is thus a need for gaining further knowledge on the breeding biology and dispersal of vultures, and accordingly, suitable recovery actions would be required, in the event of the project being implemented.

1.6.5. Loss of breeding and shelter sites for other species

Panna Tiger Reserve has largely been valued with respect to the requirement of the tiger, a flagship species. The importance of other key wildlife such as Sloth bear, Leopard, Rusty spotted cat, Hyena, Sambar, Chital, Four-horned antelope and Chinkara are largely ignored under the shadow of tiger, although tiger conservation may support the conservation of its associated fauna. Ken River along with its tributary is a lifeline of the Park. Ken river basin is full of gorges, caves, rock crevices which are normally occupied by wild mammals for breeding and resting. During hot days in summer, these gorges, caves, rock crevices are major shelters for some of the animals listed above. Loss of breeding sites will be irreversible after submergence of these critical and specialized habitats, specifically in the major submergence zone.

1.6.6. Impact of canal on mammals and reptiles in the region

The 221 km long proposed link canal passes through four districts, namely, Chhatrapur and Tikamgarh districts in MP, and Mahoba and Jhansi districts in UP. If adequate passages are not provided, the linear structure will block movement of wildlife from one side to the other. Some small wild creatures cannot cross even a minor canal. In India, wildlife conservation is still largely focused on a few charismatic species and Protected Areas but majority of the wildlife in remote villages are ignored. Ravines, scrub forests, wastelands and other lands in villages in Bundelkhand support a variety of wildlife such as Wolf, Hyena, Leopard, Jungle cat, Jackal, Foxes, Pangolin, Ratel, Civets and Reptiles. Every village in the region has some of these animals. Numbers of Jackal, Jungle cat, Wolf, Hyena, small mammals, and reptiles are typically higher in the vicinity of villages than in Protected Areas. At night, when people are confined to their houses, most of these nocturnal animals come out from their hiding sites and move in the villages to hunt rodents and small animals, or to collect food from carcasses in agricultural and scrub lands. With progress of network of canals and high-speed roads, their habitats are fragmented and movement of wildlife is blocked. As a result, these species have started disappearing from some areas. In some areas, some of the wildlife has disappeared due to network of canals. In the background of this fact, it is necessary to construct under-ground canal, or to lay large diameter pipelines or provide over passages of adequate width for maintaining the movement of animals at night. Thus, adequate passages should be provided across the canals at intervals and a certain percent of the canal should also be covered where feasible to allow movement of wildlife at night.

1.6.7. Disturbance to wildlife during construction phase

Site of the Daudhan dam is within the core area of the reserve. The proposed dam falls in a major category and construction work may continue for several years, perhaps even a decade. The blasting of stone quarries, use of heavy machinery, movement of heavy vehicles and presence of over 500 workers (at a time as per NWDA) are some of the major concerns. The high engineering activities with presence of a large number of labourers at the construction site as well as at two proposed canal/tunnel sites within the heart of a critical tiger habitat (CTH) of the reserve may exert tremendous biotic pressure and disturbance that would keep away species sensitive to such activities.

1.6.8 Irrigation dams and flow of rivers in semi-arid regions

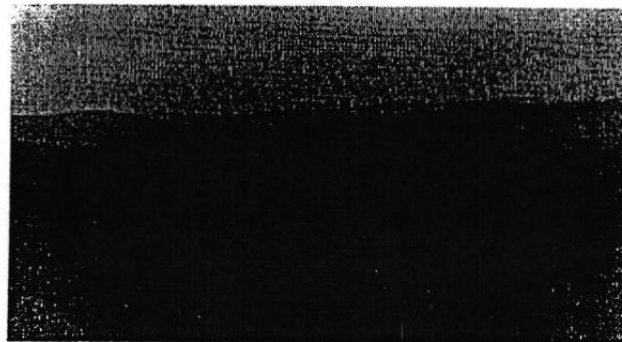
Most of the dams in arid and semi- arid regions are functioning much below their projected capacities. With increasing demand and crisis of shortage of water, the water harvesting and its utilisation in the upper catchment area may be much higher than the estimate. During a drought year, water in the dam may be much below its capacity even during the peak monsoon. As in other dams in dry regions, the Ken River downstream of the proposed dam will be dry without much flow during the year. Calculations of perennial water requirement (ecological flow) downstream to maintain the river ecology while regulating the river flow are absent. As a result, the downstream villages may suffer due to paucity of water and poor recharge of the ground water. Although the need to maintain environmental flow has been mentioned in all recent dam projects, it is not practically happening in most of the cases. It is thus a very important and significant concern in this case also. In the semi-arid region, the relative loss of estimated benefits due to reduction of some height of the proposed dam may not be much compared to the ecological and environmental damage. With a relatively lower height, excess water during the monsoon can be allowed to flow through canals for filling ponds, small reservoirs and lakes between Ken and Betwa rivers. If necessary, ponds may be deepened or water reservoirs created to store the entire excess water of Ken for this purpose. This needs examination by a group of hydrology/irrigation experts in the background of the experience with existing dams in semi-arid regions.

1.6.9. Damage to existing Gangau weir

Gangau weir is located 2.5 km downstream from the proposed Daudhan dam site. A large part of Gangau weir it is already silted, thus reducing the storage capacity of the weir. This committee was informed that there is a major crack in the dam structure and this may be further damaged or even break up during the monsoon. The water yield downstream of Ken River is due to release of stored water within thick layer of sandy soil in the river. If it is damaged, the loss of soil for cultivation and damage to downstream villages may be very serious. Unfortunately, the administration has not taken any action for repairing till the day of the committee's visit. The repairing of the weir is urgently needed to avoid a disaster downstream.

1.6.10. Number of trees to be submerged

Total counting of trees in the proposed submergence area has not been done but a sample survey by forest department has estimated that about 7.2 lakh trees above 20 cm girth at breast height would submerge in the National Park Area and this number may go up to about 12 lakh stems when young poles and established sapling are accounted. Equally high number of trees will be cut or lost in the forest areas outside the National Park. Thus considerable quantity of carbon stored as biomass would be released once the dam is constructed, in addition to loss of vegetation diversity.



Anogeissus forest under proposed submergence

1.7. Important issues raised by the experts, public representatives and people

Eminent wildlife conservationists, environmental experts, scientists, hydrologists and retired senior bureaucrats who had served at high levels of the Government of India, NGOs, public representatives and local people have raised their concerns about KBLCP and asked for its re-examination. The important concerns raised in their letters/articles/presentations are as follows.

- (i) Loss of Critical Tiger Habitat, threat to Tiger Reserve and Tiger Re-introduction Project, fragmentation of habitat through severing of existing corridors, loss of breeding areas and threat to endangered species – over a dozen species listed in Schedule I of the Wildlife Protection Act 1972.
- (ii) Negative impact of the project on one of the best vulture areas in the country and its breeding sites.
- (iii) Major flaws in the EIA report, inadequate assessment of impact on the Tiger Reserve and environment, unprofessional approach, presentation of wrong facts in the report and EIA consultants not having basic understanding of ecological issues and bias of the EIA agency.
- (iv) Inadequate information in the EIA about the ecological values of the remnant dry-deciduous forests of the region and threatened species – endangered and vulnerable species therein.
- (v) Ignoring the assessment of downstream river, fisheries, livelihoods of people living at both banks of Ken River, change in character of the river, and its impact on Yamuna and Ganga rivers.
- (vi) Creation of a myth by manipulation of water availability figures about surplus water in Ken River to meet the deficit of a larger river Betwa, which has about double the discharge rate of Ken.
- (vii) Negative impact of the project on the health of Ken river which is perhaps one of a few remaining rivers in the country whose water can be drunk without any pre-treatment.
- (viii) Absence of cumulative impact assessment in both river basins.
- (ix) Impact of a long canal connecting the two rivers on migration and movement of wildlife.
- (x) Inadequate public hearing and no EIA report in Hindi which local people could understand.
- (xi) Alternatives to the dam for meeting water needs of the region not assessed.
- (xii) Impact of future climate change on water resources, and impact of project on adaptation capacity of the area and people not considered.
- (xiii) As assessed by a civil society committee in the past, more adverse impacts on the environment and the people than benefits from KBLCP.
- (xiv) Absence of credible submergence figures.

The NWDA has replied to the above concerns raised by the experts¹ and has filed written response to EAC. The Committee of the Standing Committee, NBWL cannot examine all these issues due to limited scope of the committee's mandate. However, it is noted that the hydrological studies of the project have been carried out by two leading organisations in the field in the country: (i) National Institute of Hydrology, Roorkee and (ii) Central Water Commission (Hydrology Division). In addition, leading experts from IITs have also been involved. However, some of the concerns expressed appear relevant. The Committee of NBWL has covered the relevant points related to wildlife and their habitats. This is a big project with multifarious impacts. The committee is not

professionally qualified to assess some of the issues related to hydrology, surplus water in the river, impact on Yamuna and Ganga and social-economic issues pertaining to people living downstream of Ken River, as mentioned above.

On the other side, the government is rightly concerned with irrigation facilities and drinking water to villagers in the parched area of Bundelkhand. The Hon'ble Supreme Court has already appreciated the river linking project in their verdict in 2012 and directed the government to expedite this project to address issues of water scarcity in this region (Writ Petition (Civil) No. 512 of 2002 and Writ Petition No. 668 of 2002. Judgment on 27th February 2012 by 3-member bench of Supreme Court of India).

1.8. Recommendations

No developmental project should destroy the ecology of remnant fragile ecosystems and an important tiger habitat in the country. In an ideal situation, it would be best to avoid such projects in such wilderness areas with protected area status and specifically when it runs the risk of providing justification or unhealthy precedence for more such developmental projects within Protected Areas that will not be in the interest of wildlife and the overall well-being of the society in the long-term. However, given that wildlife conservation cannot be implemented based on exclusionary principles apparently undermining people's livelihoods and survival, it may be a compulsion to consider a balanced approach and explore options to maximise conservation benefits, if some loss cannot be avoided. It is also a fact that public demand for supply of water in scarcity and drought prone area of Bundelkhand for irrigation and drinking water cannot be denied. In the background of the issues raised by eminent experts and other stakeholders, the best possible approach may be explored to address the developmental and conservation need in a balanced manner.

The committee is not sure that the present proposal is indeed the best possible option for addressing livelihood and development of the region using water resources from the river Ken, as its independent members (i.e. excluding the project proponents - NWDA) do not have required expertise in matters relating to hydrology. Ideally, a team of independent experts on surface water hydrology, drawn from leading scientific institutions, should be requested to examine the hydrological aspects of the Ken-Betwa river link, as this involves submergence of a significant habitat of core area of a Tiger Reserve, hitherto considered as sacrosanct for conservation and a "no-go" area for development.

If there is no other option and the present proposal is the best possible option, the proposal may be considered only and only under the following conditions.

- (i) It is not possible to compensate the loss entirely because a large proportion of submergence area falls in a riverine habitat, which is unique and cannot be replicated elsewhere. The next best option is (a) to consolidate the Tiger Reserve by adding similar extent of the submergence area (i.e. 90 km²) from adjoining territorial forests and buffer areas, (b) to consider procuring similar extent of revenue area to be added to Panna Tiger Reserve, either as a part of the core or corridor with other habitats or satellite core areas and (c) consider the entire landscape as one conservation unit allowing for development and livelihood needs, since there is hardly any connectivity to other source areas and Panna landscape has to be managed to as a single viable landscape (Greater Panna Landscape) in the interest of long-term conservation. For this, there is a clear need for Landscape Management Plan and Strategic Actions, so as to address conservation of various terrestrial and aquatic components of biodiversity.
- (ii) We must emphasize here that it is insufficient to compensate for the loss of forestland, both within the Tiger Reserve and outside, merely through declaring adjacent territorial forest areas

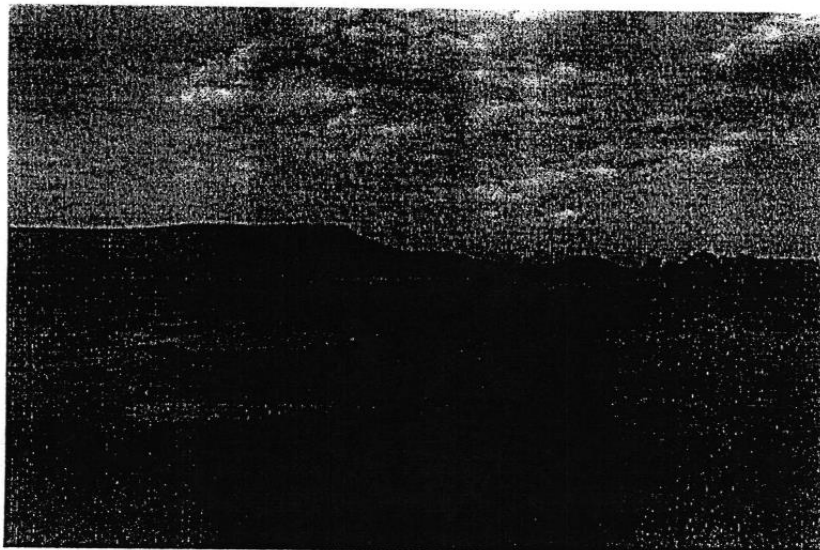
under the jurisdiction of the MP Forest Department as "core" or "buffer" areas to the existing PTR. Such territorial forests are already available for use by tigers and other wildlife. Therefore it is essential to compensate the loss of "forest land" through addition of revenue lands/non-forest lands that can be purchased by the project proponents and the government. Ideally, the project proponents and the government should consider compensating the loss of forestland through purchase and transfer to PTR of 6221 hectares (4141 ha forest to be cleared within PTR and 2080 ha of forest cleared outside PTR). The precise details can be worked out through negotiations between the government and the project proponents. The next question is, where should such lands be acquired? Although the tigers mostly use the forests of PTR to the east of Ken River, it is really to the west of Ken river that habitat has to be consolidated if the Greater Panna Landscape for sustaining a viable tiger population is to be achieved. Presently, there are several large tracts of private lands to the west of Ken River that render this area unsuitable for use by tiger. The project proponents and government should ideally purchase such lands through a completely voluntary process from landowners in a transparent manner. In general, most land owners in this region seem to be willing to part with their lands provided suitable compensation is paid. One more point needs to be made about the legal status of 2779 hectares of revenue lands (1662 ha within PTR and 1117 ha outside PTR) that will go under submergence in 10 villages that will be compensated for by the project proponents and the government. The committee must mention here that the local villagers with whom they interacted seem more than willing to part with their lands for suitable compensation; in fact, all villagers virtually demanded that they be compensated and allowed to move. The status of such revenue lands should revert to "forest land" under the control of the Forest Department. This will allow wildlife to use this land unhindered even when it is not under submergence during the lean season.

- (iii) The Ken River has a course of 55 km through the National Park. A major part of the Ken River in the park and its tributary along with its unique habitats of caves, gorges, rock crevices along both banks of the river will go under submergence at full-proposed level of water. To maintain some scope of breeding and resting sites, and to save some critical habitat for wildlife, it is necessary to keep a part of the river without submergence even during the peak height of water. The proposed maximum FRL is likely to submerge the area even beyond Ghairighat and this would significantly affect the habitat and connectivity, and thus, options should be explored to keep the water level below the Ghairighat, specifically below the road crossing the river. Thus, enough length of the river should be left without submergence during full level of water. This is possible only by reducing the height of dam by a figure that has to be worked out (a suggested figure of 10 m is only an approximation and the concern is really on the functional aspect of the submergence). This may help in saving some breeding sites of wildlife, especially vultures and will reduce negative impacts on the ecology. *The NWDA has a different view on the matter and contended that the FRL of Daudhan dam at 288 m was fixed considering the requirement of water for transfer from Ken to Betwa river including filling of Tanks/ Ponds en route of link canal, requirement of UP and MP through Bariyarpur Pickup weir and requirement of MP through LBC off taking from the lower level tunnel. The reduction in dam height, causing reduction in storage, will not fulfil these requirements.* The response of the remaining members of the committee is as follows: in drought-prone areas, dams are not filled in the dry period when water is most needed as argued in section 6.8 above. In the background of these facts, this aspect of height reduction of the Dhaudan dam may be examined in the interest of conserving the Park. Water supply from the dam and also adequate flow in the river during monsoon to recharge the ground water from the dam to the site where it meets the Yamuna should be ensured. Some water should also be spared for PTR management including fire management.

- (iv) Structural interventions such as animal passages may be considered at strategic places, specifically immediately below the dam area and in other places, where such connectivity options need to be created or strengthened to minimize the effects of habitat fragmentation. This has to be carried out in consultation with Field Director of Panna Tiger Reserve, Madhya Pradesh, as well as other tiger experts/institutions including Wildlife Institute of India and National Tiger Conservation Authority.
- (v) There are certain proposed structures such as powerhouses close to the dam and these may be re-examined and avoided in order to minimize disturbance, since power generation is not the primary objective of the project and will exert continued disturbance to the area.
- (vi) There is going to be significant secondary impacts caused by transportation and construction activities. Technological integration is required in terms of establishing ropeway for transportation of material and people, and such infrastructure may subsequently be added to management of the reserve and the proposed project during construction and post-construction phases for monitoring and management purposes.
- (vii) Water flow downstream should be regulated in line with the natural flow regime and, in the lean period, 100% of the existing flow regime should be maintained while in the non-lean period, the prescribed minimum by hydrology and aquatic biodiversity experts should be ensured. Break in release of daily minimum water should be considered as destruction of habitat. The minimum flow of water in the Ken River may save crocodiles (mugger and gharial) and it will also maintain the health of river till it joins the Yamuna. *A provision of e-flow has already been made in the EIA and EMP of the project to save the wildlife including mugger and gharial, and to maintain the river regime d/s of the dam (see Annexure 2), but the quantity may be prescribed under some agreement so that the provisions are not ignored as happens in the case of other dams.*
- (viii) Provision should be made by the project to strengthen and improve habitat management, enforcement, and monitoring activities in the core as well as in buffer areas, as there is risk of increased human activities due to this project. Further, support should be provided for buffer management and community activities, including eco-development and skill development programs, for local villagers. Alternative activities for local communities involved in extractive activities inside PTR should be implemented. In the long-term interest of tiger conservation, it is important to consider and implement landscape level conservation, which is administratively/legally effective by some sort of Landscape Management Authority/Council/Society and should be brought under the purview of tiger reserve management.
- (ix) Given that species such as tiger, vultures and gharial are the key flagship species that are likely to be impacted by this project, there is certainly a need to institute Species Recovery Program in the landscape context and this should be executed after scientifically assessing the population status, response to such disturbance and habitat loss, and long-term viability options.
- (x) Adequate exclusive passages to the wildlife across the canal at strategic sites at certain interval are necessary. Under-ground canal, or laying of large diameter pipelines or over bridge passage should be provided in adequate length for maintaining the movement of animals at night.
- (xi) It is highly recommended that a dedicated team involving State Forest Department, National Tiger Conservation Authority, Wildlife Institute of India and the project proponent including NDWA should oversee this project during and post construction phases, and should provide regular management inputs for ensuring the conditions proposed herewith.

- (xii) The project proposes fishing in the dam. Such activities may invite continuous disturbance and could be counter-productive to conservation management of the area. Fishing in the dam should not be allowed. The NWDA agreed that the fishing in the dam in the post project scenario will be reviewed in consultation with PTR authorities to ensure that there will be no violation of the Wild Life Protection Act, 1972 and the directions of the National Tiger Conservation Authority on the same.
- (xiii) The villages in Chhatrapur, Panna, Banda and Chitrakoot in the potential command area of Ken River are amongst the key stakeholders of Ken water. The concerns of these people should be addressed to avoid resentment and potential protest if people in these districts suffer due to water scarcity on one hand, and water is diverted from Ken River to Betwa River on other. Thus, the first priority should be for environmental flow to address the interest of people living at both side of ken River and then water supply to meet the requirement to the villages in these districts.
- (xiv) The low height of Gangau weir has created an outstanding wetland, gifted with a rich aquatic flora, fish and other fauna. Due to cracks in the existing structure, the dam may be completely damaged during heavy rains. It should be repaired immediately without delay to avoid a disaster. The NWDA assured the committee that appropriate action will be taken in a timely manner.
- (xv) To protect the small landscape of PTR and its surrounding areas and also to reduce sedimentation in the reservoir and maintain water flow in the Ken River, there should be no destructive activities, including mining in the Ecologically Sensitive Zone and catchment area of the river. New industrial development or mining or expansion of the existing mining in and around the landscape would seriously compromise the scope for tiger's survival in Panna Tiger Reserve.

The recommendations and conditions mentioned by the MP State Board for Wildlife and EIA/EPM will be additional to the above.



Upstream of Gangau Weir (existing submergence zone)

Report
of meeting of the special committee of NBWL-Standing Committee
to discuss the proposed Ken-Betwa River Link project ;

2.1. Background

As per the decision taken at the 38th meeting of Standing Committee of National Board for Wildlife on 10th May 2016, a meeting was held on 11th July 2016 at Ministry of Environment, Forest and Climate Change, New Delhi, to further discuss aspects of the hydrology of the proposed Ken-Betwa river linking project with two co-opted experts in irrigation/hydrology, as well as the need to consolidate the wildlife habitat as emphasized by NBWL experts.

During the course of discussions, Prof. R. Sukumar (Member, NBWL), Dr. V.B. Mathur (Director, WII), Shri H.S. Negi (IG, NTCA) and other members raised a few queries regarding the project planning and alternatives available. Shri A. B. Pandya (Former Chairman, Central Water Commission, New Delhi), co-opted expert on irrigation and hydrology, replied as follows (Points 2.2 to 2.5).

2.2. *Whether the dam height can be reduced without affecting the benefits from the project in context of reducing the submergence of the forest areas*

It was clarified by Shri Pandya that the effective submergence for the upstream end of the reservoir lasts for a period of about 2 months only leaving as much as 10 months for the wild life to use the corridors across the river. As per the reservoir operation plan prepared by NWDA, the maximum reservoir level of El 0.283 is achieved only between 20th and 31st of July of a year and drops down by 10m to El. 271.81 by the end of October of the year. Therefore, the area is available to the wildlife for as much as 10 months in a year. On the other hand, due to nature of the valley, the storage is available in the top few meters only. The top 10 m reduction from an overall height of the dam of 77 m (13 % reduction in height) will entail a loss of 847.22 MCM of water (32% of live storage) which is critically required for the success of Rabi irrigation and last irrigation (in the event of early withdrawal of monsoon) for saving the Kharif crops. For ensuring the economic benefits of agriculture, the importance of Rabi crop is the greatest as the returns are almost fully assured due to stable weather as against the monsoon season. In view of this, the reduction of the full reservoir level will substantially reduce the benefits and deny the aspirations of the beneficiaries.

The Ken river is purely monsoon fed and receives the substantial flows during July to September period only. Even though the yearly yield of the river is adequate for the areas downstream, unless the water is stored, the same will not be available when it is critically needed in the rabi and summer seasons for agriculture and drinking consumption. Thus, the reduction of the capacity will negate the benefits of an equitable and well spread out water availability regime being aspired by Bundelkhand region.

2.3. *Viability of the project and the planning concerns involved while arriving at the present proposals*

As to the question of the soundness of planning of the project, it was brought out by Shri Pandya that the project is the only sustainable water resource for the Bundelkhand region. The region is characterised by low depth rock strata and other hard strata, which does not allow substantial ground water reserves. Also, apart from the Betwa, the Ken is the only major source of water in the region. Even in the Ken river, the rock strata is available at low depths and therefore, the runoff water in the river quickly flows away downstream without providing benefits of base flows. There are no other alternative sites on Ken river which can provide substantial storage without submergence of large tracts of land. The reservoir provides storage of 3.15 MCM per hectare of area submerged, whereas for small structures such as check dams, the same may hardly be 0.5 MCM per hectare of

land submerged. Also, the longevity of such small structures will be very meagre compared to a well-planned large reservoir.

Bundelkhand as a region has been suffering from severe water availability crisis and consequent economic and social ill effects only. The provision of water to areas of about 60,000 hectares directly from the link canal and firming up of irrigation in 5,75,000 Hectares extending over Uttar Pradesh and Madhya Pradesh will provide the much needed succour at the cost of submergence of 9000 hectares (each submerged hectare of reservoir-area will revitalise 70.56 hectares in beneficiary area).

As far as transfer of 600 MCM of water from Ken to Betwa is concerned, it is clarified that this is provided to create additional irrigation facilities in upper Betwa region and providing a "win-win" situations to populations in UP and MP. The transfer is actually within Chambal basin of which the rivers form a part and is not happening in a conventional sense of connection of two pipeline networks. The canal carrying the water will also provide irrigation of 60,000 hectares en route to those areas which are currently in the news for severe water crisis and economic migration of people.

The entire project has been planned on a scientific basis taking the historical data of rainfall and river flows and also accounting for all the pre-existing requirements of water at various points of time in a year. Thus, the project will not deprive any of the existing uses but having the backup of storage, will enable the system to respond with much greater flexibility to the water demands at different points of time during a hydrologic year.

As per the norms, the project has been provided with 75% dependability i.e. out of a random sample of 100 years, the project will be able to provide adequate or surplus water in 75 random years and only 25 years distributed randomly within the sample of 100 years will experience some shortfall. However, with the sustained availability of water on an average, the local population will be able to develop enough resilience in long term to sustain in such years. The drinking water demands have been provided at 90% dependability and provide much greater assurance against the water shortages. Such examples can be seen elsewhere like Sardar Sarovar project where about 70% of drinking water demands have been sustained through the project even in the second year of consequent droughts. Hence, it is seen that the planning of the project is based on sound principles of water management practice and there can be no apprehensions about the same.

There are no alternatives available in the command area for storage of such volume of water even when we consider the micro and medium interventions. Thus, there are no other alternatives available for removing the water shortages in Bundelkhand region.

2.4. Relevance of the project in context of future impacts of climate change

It was clarified by Shri Pandya that as per the common consensus, the main effect of the climate change in the monsoon fed areas of the country will be increased skewness of the rainfall distribution within the season and across the years. However, the averages may not change much in the short run. The project is an excellent insurance against such effects as it will be able to absorb the short term intense inflows generated out of such events and thereby allow the beneficiary areas to enjoy the benefits of a sustained and stable water source. He emphasised that the real resilience against the climate change in such context can be provided by the strategically placed reservoirs. Daudhan dam is an optimum example of such situation as demonstrated in respect of efficiency of land use for storage and benefits to the areas that face water deficit.

2.5. Distinction between Phase I and Phase II of the project

It was clarified that the division in phases has been made from the water management points of view only and the dam and appurtenant works will not undergo any change. The projects to be constructed in phase II are largely low height barrages and are located in upper Betwa region, which is distinct from the Ken basin. The nomenclature has been provided from the water

management point of view only and no further impact to the wildlife will be generated by Phase II as envisaged now.

2.6. Impacts on cave/cliff dwelling species in the submergence zone

The submergence area is typical habitat of many cave-dwelling species, either full or part (breeding season) of their life and therefore, even if the submergence takes place for a short period of time, the populations of these species could be adversely impacted. This is perhaps true for all projects involving submergence during entire or part of the year, and the only way to mitigate the impacts is to secure the habitat and provide conservation management for these species in other available habitats. If needed, species recovery programme for certain species may have to be considered. Species such as Mugger Crocodile in the upstream of the Dhaudan Dam would most likely be impacted and, thus, there may be need for conservation action downstream. Many wildlife species tend to coincide with the breeding season in a manner that the young ones are born by the time the monsoon arrives, so that essential forage is available for herbivores and protein supplement is available in the form of insects for omnivores. Another point is that the slopes upstream of Ken River is largely sheer cliff at 90-degree angle and essentially limits habitat choice for most species. Thus, the species that use slope bottoms and cliffs are expected to be affected. There is detailed information in the main report on the impacts of Vultures but, in the context of submergence, it must be noted that only two species of vultures in Panna Tiger Reserve are cliff nesters and most of their breeding activity takes place post-monsoon, from winter to summer. However, there is still gap in the knowledge as to (a) how far the vultures range for forage, (b) do they have more than one nest site and (c) what are the possible sites that potentially offer long-viability for their conservation. Therefore, the mitigation strategy should take the form of adaptive management and conservation inputs should closely follow new scientific findings.

2.7. Consolidation of the Greater Panna Landscape for ensuring viability of the tiger population

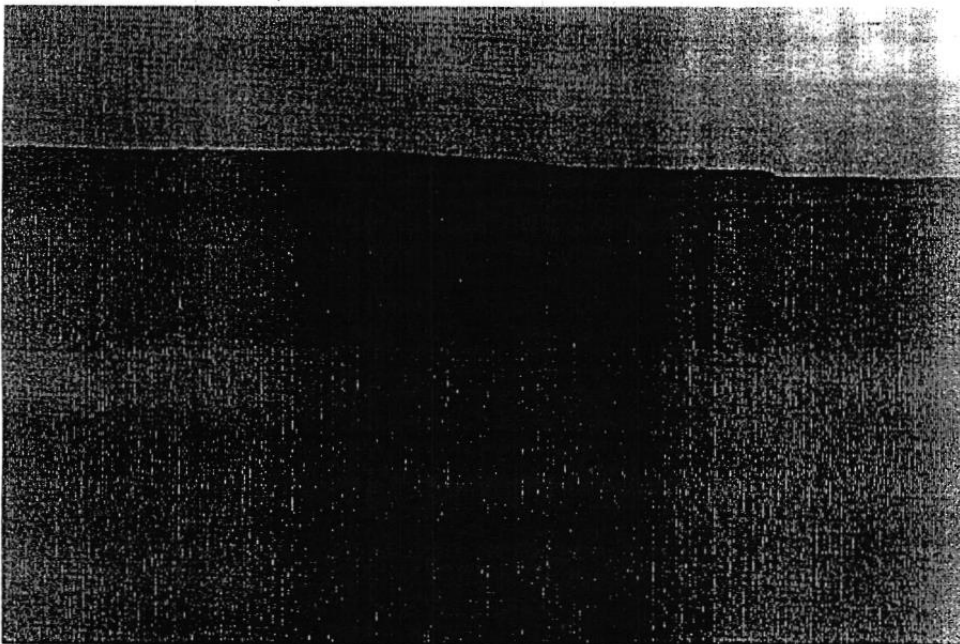
The wildlife experts of the NBWL who attended the meeting, namely, Prof. R. Sukumar and Dr. V.B. Mathur (Director, WII) once again emphasized the need to consolidate the greater Panna landscape in order to ensure the long-term viability of the tiger population and associated wildlife of the region (see Recommendations in Final Report of NBWL-SC dated May 2016, pages 17 and 18). The consolidation was necessary because of the significant forest area and the unique wildlife habitat in the Ken river gorge that will be submerged by the Daudhan dam, as well the potential for fragmentation of the habitat. The recent experience with functional extinction of the tiger in Panna and the need for successful reintroduction has shown that Panna in its present isolated form may not constitute a viable habitat for the low-density tiger population.

They further emphasized that this consolidation has to occur in the region immediately adjoining the Panna Tiger Reserve, along with establishing satellite cores and corridors with adequate protection for effective dispersal and individual survival in the landscape. While the Madhya Pradesh government's offer to declare additional areas in buffer areas to the east of the Ken River as part of the Tiger Reserve was welcome but insufficient to ensure consolidation of habitat for viability of the tiger population. These forests were already available to wildlife, even if sparsely used at present due to anthropogenic pressures. **Habitat has to be consolidated in forests to the west of the Ken River that were in a more fragmented state.** Monitoring of reintroduced tigers through radio-telemetry and camera trapping method have showed that >4 tigers have crossed the Ken River and moved to the forests of the northwest, and more tigers are likely to do so as their population continues to increase. Daudhan Dam would submerge part of the home range of at least one collared tigress and few other un-collared tigers. It is noted that 4141 hectares of forestland within Panna Tiger Reserve and 2080 hectares of forestland from territorial forest divisions outside Panna Tiger Reserve would be submerged at full reservoir level. There has

been no concrete proposal from the project proponents for compensating this wildlife habitat. Purchase of private lands through a transparent and voluntary process to the west of the Ken River for addition to Panna TR, especially in corridor areas, would be necessary to achieve meaningful habitat consolidation.

It was further pointed out that steps have to be taken to protect the corridor to the north of proposed Daudhan Dam. This northern corridor was one of two main passages that tigers would use in moving between forests to the east and the west of the Ken River. During the construction phase and beyond there could be disturbances that may render the passage non-functional. The second corridor lies at Ghairighat, at the tail end of the reservoir created by Daudhan Dam; this would be submerged for 2-3 months in a year but would allow passage for animals the rest of the year.

It is beyond the scope of this committee to get into site-specific management recommendations to consolidate the habitat over the Greater Panna Landscape and to protect corridors. There is already a proposal pending to develop Landscape Management Plan, wherein the site-specific proposal has been visualized. Therefore, specific details will have to be worked out by the project proponents along with the Government of Madhya Pradesh and wildlife experts (such as from Wildlife Institute of India) who are knowledgeable about the Panna region. Reference can be made to Standing Committee of National Board for Wildlife for final approval of the management plan so that management/conservation actions can be put in place adaptively.



A view of Panna's woodlands and grasslands

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Gangau Weir (2 km downstream of proposed Daudhan Dam)

**Annexure 1: Total water utilization of the project has been assessed to be 4079.62 MCM
(Source: NWDA)**

S.No.	Utilization	Quantity in MCM
1	Irrigation of Command Area	
1a	Madhya Pradesh	1405.63
1b	Uttar Pradesh	1600.00
2	Irrigation through Link Canal	
2a	Madhya Pradesh	277.12
2b	Uttar Pradesh	88.87
3	Drinking water	49.00
4	Diversion to Paricha Wier (including transmission loss)	659.00
	Total	4079.00

Annexure 2: Minimum environmental flow in Ken River after the dam (Source: NWDA)

Month	Flows in to River for Irrigation through BPUW		Proposed Environmental Total Flows		
	MCMs	MCMs	Flows (EFs) MCMs/day	MCMs	MCMs/day
June	23.86	17.63	.588	41.49	1.383
July	236.07	123.60	4.120	359.67	11.60
August	226.76	257.49	8.583	484.25	15.62
September	245.90	36.17	1.206	282.07	9.40
October	171.84	4.81	0.160	176.65	5.70
November	254.18	7.70	0.257	261.88	8.73
December	265.31	7.70	0.257	273.01	8.81
January	269.17	7.70	0.257	276.87	8.64
February	144.89	7.70	0.257	152.59	5.45
March	50.00	7.70	0.257	57.70	1.86
April	0	7.70	0.257	7.70	0.257
May	0	7.70	0.257	0.00	0.257
Total	1887.98	493.61		2381.58	

MCMs: Million Cubic Meters

Annexure 3: Population estimate of prey species in Panna Tiger Reserve (Number per km ² : N/km ² (Year 2015/16, Source: WII/PTR)	
Sambar	12.5 (2.2 SE)
Chital	5.0 (1.5 SE)
Nilgai	9.3 (1.6 SE)
Wild pig	3.7 (1.4 SE)
Langur	20.6 (6.0 SE)
Cattle	21.1 (7.3 SE)
Area of Panna Tiger Reserve: 576 km ²	

Annexure 4: Schedule of field activities

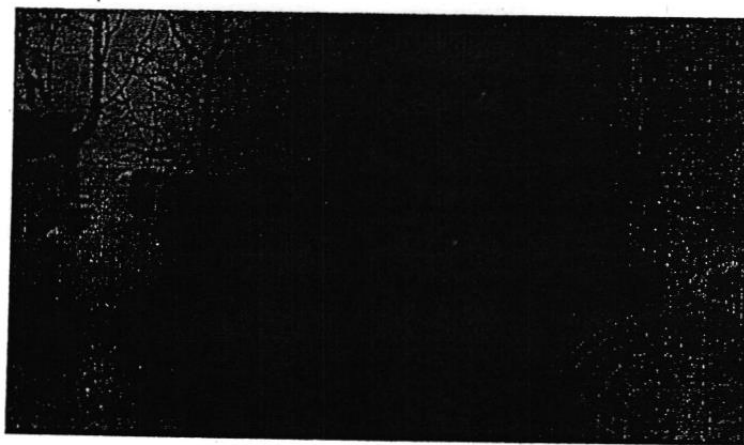
08 April 2016: Arrival of committee members and halt at Madla.

09 April 2016: Preliminary discussions, visit to dam site, submergence area including villages to be relocated, vulture roost/nest sites, and core area of the reserve. The team also interacted with the villagers who are in the submergence zone.

10 April 2016: Presentations by National Water Development Agency (Mr. R. K. Jain); Field Director of PTR (Mr. Vivek Jain) and Wildlife Institute of India (Dr. K. Ramesh).

Detailed discussions were held amongst the members, seeking clarifications and suggesting options. Meeting with other stakeholders who expressed concern or positive views on the project.

11 April 2016: Visit to downstream area, site of existing barrage and canal, and Ken Gharial Sanctuary, and assessed the flow pattern in the downstream.



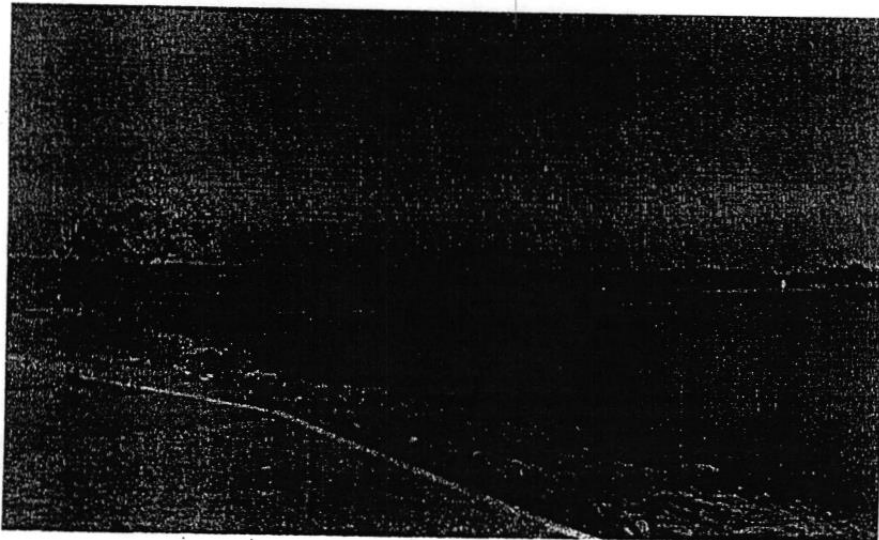
Inspection at Daudhan Dam site



Interaction with villagers in the submergence zone

Annexure 5: List of participants in field inspections and discussions

1. Dr. H. S. Singh, Member, NBWL
2. Dr. R. Sukumar, Member, NBWL
3. Dr. Shahbaz Ahmad, APCCF(WL), Representative of MPFD, Bhopal
4. Dr. Debabrata Swain, IG (WL), Nagpur, Representative of NTCA
5. Dr. K. Ramesh, Scientist, WII, Representative of WII, Dehradun
6. Mr. R. K. Jain, Chief Engineer, Representative of NWDA, New Delhi
7. Mr. Vivek Jain, Field Director, Panna Tiger Reserve
8. Mr. R. K. Mishra, Joint Director, Panna Tiger Reserve
9. Mr. O.P.S. Kushwah, SE, NWDA, New Delhi
10. Mr. A.S. Nayak, Ex. Engineer, NWDA, New Delhi
11. Mr. Ram Gopal Soni, NWDA, New Delhi
12. Mr. C. L. Garg, SE, Irrigation, Chhatrapur, Madhya Pradesh
13. Mr. K. V. Gupta, AD, Panna Tiger Reserve
14. Mr. Hemant Yadav, AD, Panna Tiger Reserve
15. Mr. A. K. Singh, Superintendent, Ken Gharial Sanctuary
16. Mr. D. K. Nayak, RFO, Chandranagar
17. Mr. Ram Singh Patel, RFO, Kishangarh



Barrage across Ken River from where two canals emerge - one for UP and the other for MP

Annexure 6: List of some of the wildlife and environment experts, civil society, NGO and public representatives who submitted representation against the proposed dam

Mr. Ramswamy R. Iyer, Former Secretary, Gol

Mr. E.A.S. Sarma, Former Secretary, Gol

Mr. Himanshu Thakkar, South Asia Network on Dams, River and People, New Delhi

Mr. Manoj Misra, Convener, Yamuna Jiye Abhiyan, New Delhi

Dr. Brij Gopal, Centre for Inland Waters in South Asia & Pragya Education and Environment Trust

Ms J Van Gruisen and Dr. R. S. Chundawat, Madla, Panna

Mr. Keshav Prasad Singh, Member of District Panchayat, District Panna

Ms. Divya Rani Singh, Mohan Niwas Palace, Panna

Dr. A. J. T. Johnsingh, Ex-Dean, WII, Dehradun and Member, National Tiger Conservation Authority

Mr. Tarun Nair, Conservation Biologist, Bangalore

* The list is not exhaustive and there may be other concerns, which NWDA will have to address.

Minutes of 37th Meeting of Standing Committee of NBWL held on10th May 2016

Government of India
Ministry of Environment, Forest and Climate Change
(Wildlife Division)

6th Floor, Vayu Wing
Indira Paryavaran Bhawan
Jor Bag Road, Aliganj

F.No.C-14/2016 WL(37th Meeting)
Dated: 2nd June 2016

To

All Members,
Standing Committee of NBWL,

Sub: Minutes of 37th Meeting of Standing Committee of NBWL.

Sir/Madam,

Kindly find enclosed copy of the minutes of the 38th Meeting of the Standing Committee of National Board for Wildlife held on 10th May 2016 at 2.00 pm in the room no 63 of Parliament House, under the chairmanship of Hon'ble Minister of State (Independent Charge) for Environment, Forests and Climate Change.

Yours faithfully,

(Rajasekhar Ratti)
Scientist 'C'/Deputy Director (WL)

Encl: As above

Distribution:

1. Secretary, MoEF-& CC
2. Director General of Forest & Special Secretary, MoEF & CC,
3. Member Secretary, NTCA New Delhi,
4. Addl. Director General of Forest (WL), MoEF & CC.
5. Director, Wildlife Institute of India, Dehradun.
6. Director, GEER Foundation, Gandhinagar, Gujarat,
7. Prof. R. Sukumar Central for Ecological Sciences, India Institute of Science, Bangalore.
8. Dr. H.S. Singh, Gandhi Nagar Gujarat:
9. Pr. Secretary (Forests) Government of Andhra Pradesh, Hyderabad.

Copy to:

1. PS to Hon'ble MOS. (I/C) E&F.
2. PPS to DGF&SS.
3. PPS to Addl. DGF(WL) and Member Secretary, Standing Committee- (NBWL).
4. PPS to IGF(WL)/PS o DIG(WL)/PS to JD(-WL)

34.4.2.12. Proposal for renewal of existing lime stone mining lease no.24/87¹ in village Pipakhedi, Tehsil Ramganj Mandi District Kota near Darrah Wildlife Sanctuary, Rajasthan by M/s Zahoor Ahmed, Abdul Majid. The proposed mining lease 8.5 km away from Darrah Wildlife Sanctuary.

34.4.2.13. Proposal of Ms Associated Stone industries (Kotah) limited for expansion and renewal of Kotah Stone production in mining lease no.1/89 situated in tehsil Ramganjmandi, District Kota, Rajasthan.

The Member Secretary briefed the Committee that the proposals were deferred as the locations of the projects are linked to the Mukundra Tiger Reserve, and the proposal of ESZ of Mukundra Tiger Reserve / Mukundra National Park was not yet finalized because of the need of reconciliation on a few points of NTCA with the state. A discussion between NTCA and the state has been conducted and the revised ESZ proposal is yet to be received from state.

After discussion, the Standing Committee decided to defer the proposals.

31.4.2.11. Proposal for Jakhol Sankri Hydroelectric project (51 MW), Uttarakhand by M/s Satluj Jal Vidhut Nigam Ltd.

The Member Secretary briefed the Committee that the proposal was deferred as the proposals of ESZ were not received from state. The Chief Wildlife Warden informed that the ESZ proposals are to be approved at the state level and will be sent once decisions are taken thereon.

After discussion, the Standing Committee decided to defer the proposal.

37.5.4: Proposal for Wildlife Clearance in respect to Ken - Betwa Link Project-Phase I in Panna Tiger Reserve, Madhya Pradesh.

The Member Secretary briefed the Committee that the project being within Panna Tiger Reserve, NTCA has been appraising the project and a combined site visit was conducted along with members of the Standing Committee in accordance with the decision of the Standing Committee in its 37th meeting. The member Dr.H.S.Singh and Dr.K. Ramesh, representative of WII presented their observations in the site visit undertaken and the issues which have so far been considered for finalizing the report of the group. The team elaborated on need of addition of some non forest areas critical to the continuity of the tiger habitat remaining after the project is commissioned, and also reduction of dam height for salvaging some of the ecologically valuable nesting sites of vultures and critical tiger habitat from submergence. The Special Secretary,

Ministry of Water Resources presented the concerns of draught region of Bundelkhand and the quantity of the water requirement of the project. He opined that while many of the suggestions put up by the site inspection team can be complied with, the reduction in dam height could not serve the purpose of the project.

After discussions, the Standing Committee considered the importance of the project for meeting the irrigation need of Bundelkhand region and the feasibility of linking the two rivers as explained and agreed that the proposal can be agreed in principle. As a careful balance of needs of the locality and maintaining integrity of the habitat of tiger, vultures and other values is to be the aim, it was agreed that the matter be discussed in detail by the group consisting of the experts of the site inspection team, Member Secretary NTCA and two irrigation / hydrology experts – one from Uttar Pradesh and one from Madhya Pradesh, to be nominated by the Water Resource Ministry within next few days on all the observations and any other issue. NTCA would also seek the view point of project proponents in this regard and provide their comments for consideration of the Standing Committee. The Committee requested the site inspection team to place the report in the next meeting for further examination.

It was agreed to consider the matter in the next meeting where outcomes of the deliberations will be presented for finalizing the recommendations.

37.5.9. Proposal for construction project of M/s Vihang Enterprises at Bhaidarpada survey no.220/1, 220/2, 220/3, 220/4, 220/5B, 221/1, 221/11, 217/29, 217/30/1, 217/30/4, 217/33, 217/34/195/1, 195/1, 219/1, 219/2 & 219/3 at village Bhayandarpada, Thane, Maharashtra.

The Member Secretary briefed the Committee on the proposal that the Committee deferred the proposal in its 37th meeting as the proposed development is located within the ESZ of NP, the information on EC, compliance of approved development plan and local body to be verified.

IGF (WL) informed the Committee that a copy of a report submitted by the Chief Wild Life Warden to the state government was received in the ministry, which was not clear. The location of the project given therein also needs to be confirmed as the polygon provided by the state for Decision Support system indicates a different location. Comments of the state government are awaited.

BEFORE CENTRAL EMPOWERED COMMITTEE
CONSTITUTED BY THE HON'BLE SUPREME COURT OF INDIA IN W.P. NO
202 OF 1995

149

Appeal/Application No. _____ of 2017

In re:

Randhir Bittu Sahgal & Anr. Applicant

VERSUS
Union of India & ors. Defendant/Respondent

KNOW ALL to whom these present shall come that I/We
Applicant the above named
Mahaj Hising
do hereby appoint (herein after
called the advocate/s) to be my/our Advocate in the above noted case authorized
him :-

**Ritwick Dutta, Rahul Choudhary, Advocates, N-71, LGF, Greater Kailash-I,
New Delhi- 110048**

To act, appear and plead in the above-noted case in this Court or in any other Court in which the same may be tried or heard and also in the appellate Court including High Court subject to payment of fees separately for each Court by me/ us. To sign, file verify and present pleadings, appeals cross objections or petitions for execution review, revision, withdrawal, compromise or other petitions or affidavits or other documents as may be deemed necessary or proper for the prosecution of the said case in all its stages.

To file and take back documents to admit and/or deny the documents of opposite party.

To withdraw or compromise the said case or submit to arbitration any differences or disputes that may arise touching or in any manner relating to the said case. To take execution proceedings. The deposit, draw and receive money, cheques, cash and grant receipts thereof and to do all other acts and things which may be necessary to be done for the progress and in the course of the prosecution of the said case. To appoint and instruct any other Legal Practitioner, authorizing him to exercise the power and authority hereby conferred upon the Advocate whenever he may think it to do so and to sign the Power of Attorney on our behalf.

And I/We the undersigned do hereby agree to ratify and confirm all acts done by the Advocate or his substitute in the matter as my/our own acts, as if done by me/us to all intents and purposes.

And I/We undertake that I / we or my /our duly authorized agent would appear in the Court on all hearings and will inform the Advocates for appearance when the case is called.

And I /we undersigned do hereby agree not to hold the advocate or his substitute responsible for the result of the said case. The adjournment costs whenever ordered by the Court shall be of the Advocate, which he shall receive and retain himself.

And I /we the undersigned do hereby agree that in the event of the whole or part of the fee agreed by me/us to be paid to the Advocate remaining unpaid he shall be entitled to withdraw from the prosecution of the said case until the same is paid up. The fee settled is only for the above case and above Court. I/We hereby agree that once the fee is paid. I /we will not be entitled for the refund of the same in any case whatsoever. If the case lasts for more than three years, the advocate shall be entitled for additional fee equivalent to half of the agreed fee for every addition three years or part thereof.

IN WITNESS WHEREOF I/We do hereunto set my /our hand to these presents the contents of which have been understood by me/us on this _____ day of _____ 2017.

Accepted subject to the terms of fees.

(Advocate)

Annex A-4

BEFORE THE CENTRAL EMPOWERED COMMITTEE 120
CONSTITUTED BY THE HON'BLE SUPREME COURT IN W. P 202 OF 1995

APPLICATION NO. OF 2017

IN THE MATTER OF :-

Randhir Bittu Sahgal & Anr.

... Applicant

Versus

Union of India and Ors.

... Respondents

S NO.	PARTICULARS	PAGE NO.
1	Application For Urgent Listing	1 - 3

2. copy of The News Article dated 15/9/2017 4 - 5

THROUGH

RITWICK DUTTA RAHUL CHOUDHARY

COUNSEL FOR THE APPLICANT

N-71 Lower Ground Floor Greater Kailash-1

New Delhi- 110048

Mobile No. 9810044660

NEW DELHI:-

DATED:- 09.2017

BEFORE THE CENTRAL EMPOWERED COMMITTEE
CONSTITUTED BY THE HON'BLE SUPREME COURT IN W.P 202 OF 1995

APPLICATION NO: OF 2017

IN THE MATTER OF

Randhir Bittu Sahgal & Anr

Applicants

Versus

Union of India and Others

Respondents

APPLICATION FOR URGENT LISTING

MOST RESPECTFULLY SHOWETH:

1. That the above titled Application has been filed before this Hon'ble Committee challenging the approval granted by the Standing Committee of the National Board for Wildlife (SC NBWL) to the Ken Betwa River Linking Project involving the state of Madhya Pradesh and Uttar Pradesh.
2. That it is submitted that the said application was submitted on 23.02.2017. However, it is submitted that till date, the Applicants have not received any acknowledgment of the filing of the same nor has the Application been numbered. Further, it is submitted that neither has the matter been listed for admission nor has any hearing taken place before this Hon'ble Committee.
3. That it is pertinent to note that the Wild life Clearance granted to the project in question is linked to other clearances including Forest and Environmental Clearances to be obtained by the project proponent with respect to the project in question. However, it is submitted that substantial developments have taken place with regard to the procedure

for grant of Environmental Clearance and Forest Clearance. Further, it is submitted that there have been media and news reports of the statement given by the Minister for Water Resources, River Development & Ganga Rejuvenation, Mr. Nitin Gadkari whereby he has stated that the Government would begin work on the project in question within the next 3 months. A copy of the news article dated 5.09.2017 is annexed herewith as **ANNEXURE A-15.**

4. That it is submitted that if the above titled application is not heard on merits by this Hon'ble Committee and a decision made therein, grave prejudice would be caused to the environment. Further, it would also result in a fait accompli situation and the above titled Application would be rendered infructuous.
5. That therefore, it is submitted that this Hon'ble Committee may list this matter for urgent hearing as early as possible, so that the matter may be heard and decided on merits.

PRAYER

In light of the above facts and circumstances, this Hon'ble Committee may be pleased to pass the following orders:

- i. List the above titled matter for urgent hearing.
- ii. Pass any other orders as this Hon'ble Committee may deem fit in the facts and circumstances of the present case.

APPLICANT NO: 2

THROUGH

RITWICK DUTTA RAHUL CHOUDHARY

ADVOCATES

COUNSEL FOR APPLICANTS

N-71, LGF, GREATER KAILASH-I

153
BEFORE THE CENTRAL EMPOWERED COMMITTEE

CONSTITUTED BY THE HON'BLE SUPREME COURT IN W.P. 202 OF 1995

APPLICATION NO: OF 2017

IN THE MATTER OF

Randhir Bittu Sahgal & Anr

Applicants

Versus

Union of India and Others

Respondents

AFFIDAVIT

I, Manoj Kumar Misra, S/o Late Shri Ramesh Kumar Mishra, resident of 178-F, Pocket-4, Mayur Vihar Phase-I, Delhi - 110 091 aged about 62 years, do hereby solemnly affirm and declare as under:

1. That I am the Applicant No.2 in the above titled Application and I am conversant with the facts and circumstances of the case and I am competent to swear this affidavit.
2. That the contents of the accompanying Application are true and correct and nothing material has been concealed therefrom.

DEPONENT

VERIFICATION

Verified on this ____ day of September 2017 that the contents of the present Affidavit are true and correct to my knowledge and belief and nothing material is concealed therefrom.

True copy

DEPONENT

Govt to begin work on 3 river linking projects soon: Nitin Gadkari

Union minister Nitin Gadkari says the centre aims to begin work on Ken-Betwa, Par-Tapi-Narmada and Damanganga-Pinjal river inter-linking projects in the next 3 months



Nitin Gadkari said the projects will cost the government around Rs40,000 crore and will be launched by Prime Minister Narendra Modi. Photo: Ramesh Pathania/Mint

New Delhi: The government aims to begin work on three river inter-linking projects and building two dams in the next three months, Union water resources minister Nitin Gadkari said on Tuesday. The projects will cost the government around Rs40,000 crore and will be launched by Prime Minister Narendra Modi, he said.

Gadkari, who held a review meeting with senior officials of the water resources ministry on Tuesday evening, said he would hold meetings with chief ministers of the states where the projects will be implemented and resolve various issues.

The river inter-linking projects, he said, were necessary to tackle flood and drought situations. He said the government will use the latest technology in Ken-Betwa, Par-Tapi-Narmada and Damanganga-Pinjal river inter-linking projects.

Besides, the government aims to begin work on Pancheshwar and North Koel dams. "These five projects will help irrigate lakhs of hectares. These projects

are almost ready. I am fine-tuning it. I will try to see the actual work begins in next three months," he told reporters after the meeting.

On Ken-Betwa, considered as the first river inter-linking project, Gadkari said the project would help irrigate around 15 lakh acres of area. With use of drip irrigation, he added, the total area to be irrigated would swell from 25 lakh to 30 lakh acres.

The Ken-Betwa project envisages fulfilling water needs of Bundelkhand region, which falls in Uttar Pradesh and Madhya Pradesh. The minister said the project, when completed, will have bearing on socio-economic life of people in the region.

"This will help end poverty in Bundelkhand. We intend to complete all the projects in transparent and time-bound manner using new technologies," he added.

Gadkari has decided to convene a meeting with the chief ministers of Uttar Pradesh and Madhya Pradesh over the Ken-Betwa river inter-linking project. The Par-Tapi-Narmada and Damanganga-Pinjal river inter-linking projects, estimated to cost Rs16,000 crore, are envisaged to meet the water needs to Maharashtra and Gujarat.

The minister said the India-Nepal bilateral Pancheshwar multi-purpose project in Uttarakhand will help mitigate floods, besides generating electricity and irrigating land.

The Centre had in July given its nod to complete the remaining works of the North Koel reservoir project in Bihar and Jharkhand at an estimated expenditure of over Rs1,622 crore. Once completed, the project will create annual irrigation potential for 91,917 hectares land in Bihar and 19,604 hectares in Jharkhand.

True copy