



*Correspondence between the
Ministry of Environment & Forests,
Government of India
&
Shekhar Singh
Member
The Narmada Control Authority
Environment Sub-Group (ESG)*

1993-2017

Photo on cover: Fisherfolk on the Indira Sagar reservoir. Photo by
Shekhar Singh, April 2009.

*Correspondence between the
Ministry of Environment & Forests,
Government of India
&
Shekhar Singh
Member
The Narmada Control Authority
Environment Sub-Group (ESG)*

1993-2017

PREFACE

This is a collection of letters and notes exchanged with the Ministry of Environment and Forests, Government of India, between 1993 and 2017, in my capacity as member of the Environment Sub-Group (ESG) of the Narmada Control Authority.

The ESG was set up and first met in November 1987 to oversee the implementation of the environmental conditions relating to the Narmada projects¹. The Supreme Court of India, by its order of October, 2000, further gave the ESG the following responsibilities:

“...3) The Environment Sub-group under the Secretary, Ministry of Environment & Forests, Government of India will consider and give, at each stage of the construction of the dam, environment clearance before further construction beyond 90 meters can be undertaken.

4) The permission to raise the dam height beyond 90 meters will be given by the Narmada Control Authority, from time to time, after it obtains the above-mentioned clearances from the Relief and Rehabilitation Sub-group and the Environment Sub-group.

5) ... 6) Even though there has been substantial compliance with the conditions imposed under the environment clearance the NCA and the Environment Sub-group will continue to monitor and ensure that all steps are taken not only to protect but to restore and improve the environment.”²

The ESG survives till today.

I started attending the meetings of the ESG from 1989. The most recent (51st) meeting was held in August, 2019. I now remain the only surviving member of the original membership of the ESG, the others having retired, been transferred, or sadly passed away.

Shekhar Singh
August 2021

¹ For details, see <http://shekharsinghcollections.com/content/Dams/Narmada/nca/1987-1992-introduction-and-proceedings-of-the-nca-esg-part-i.pdf> pp I & ii.

² ² For details, see <http://shekharsinghcollections.com/content/Dams/Narmada/nca/1987-1992-introduction-and-proceedings-of-the-nca-esg-part-i.pdf> pp iv onwards (Annexure).

Table of Contents

<i>1993: 2 November</i>	<i>1</i>
<i>1994: 28 November</i>	<i>8</i>
<i>1995: 9 March</i>	<i>10</i>
<i>1995: 15 April</i>	<i>14</i>
<i>1995: 15 December</i>	<i>17</i>
<i>1997: 20 May [1]</i>	<i>20</i>
<i>1997: 20 May [2]</i>	<i>23</i>
<i>1998: 9 April</i>	<i>27</i>
<i>1999: 1 October</i>	<i>30</i>
<i>2000: 31 October</i>	<i>33</i>
<i>2001: 7 January</i>	<i>41</i>
<i>2001; 1 May</i>	<i>46</i>
<i>2001: 11 May</i>	<i>49</i>
<i>2002: 8 February</i>	<i>58</i>
<i>2002: 13 February</i>	<i>61</i>
<i>2002: 22 February</i>	<i>67</i>
<i>2002: 20 March</i>	<i>69</i>
<i>2003: 15 July</i>	<i>71</i>
<i>2004: 24 November</i>	<i>78</i>
<i>2005: 24 June</i>	<i>80</i>
<i>2010: 30 March</i>	<i>82</i>
<i>2010: 31 March</i>	<i>86</i>
<i>2010: 14 May</i>	<i>88</i>

<i>2013: 24 March</i>	<i>92</i>
<i>2016: 28 August</i>	<i>95</i>
<i>2016: 9 November</i>	<i>104</i>
<i>2017: 28 April</i>	<i>115</i>

1993: 2 November

INDIAN INSTITUTE OF PUBLIC ADMINISTRATION
Indraprastha Estate
New Delhi 110002

2 November, 1993

Dear Shri Rajamani,

I enclose a note on the proposal to close the Sardar Sarovar Sluice Gates in December, 1993, to be discussed at the 20th meeting of the Narmada Control Authority Sub-group on environment (scheduled for 3.11.93). This note is based on the agenda papers for the said meeting and on the Report of the Expert Group on Environmental Impact on Closure of Construction Sluices .. of the Narmada Planning Group.

I would be grateful if the points I have raised in the enclosed note be discussed at the forthcoming sub-group meeting.

With regards,

Yours Sincerely,

Shekhar Singh

Shri R.Rajamani
Secretary
Ministry of Environment and Forests, &
Chairman, NCA Sub-group on Environment
Government of India
New Delhi 110 003

Encl: aa

NOTE ON THE PROPOSED CLOSURE OF SLUICE GATES OF SARDAR SAROVAR DAM

Despite the decision of the sub-group to not allow the closure of the sluice gates before March, 1994, and even then after taking approval of the sub-group, there is now a proposal before the sub-group to close the gates in December, 1993. Given below are some of the main reasons why this should not be accepted.

1. PENDING ACTION

1.1 Relocation and rehabilitation work in six villages in Gujarat has been stayed by the Gujarat High Court, of which Vadgam and Gader will be permanently submerged if gates are allowed to be closed in December, 1993. This would be in violation of the High Court order.

1.2 Even if stay is lifted today, the R&R conditions prescribed in the tribunal, especially clauses IV(2)(iv), IV(6)(ii) and V(3)(iii).

1.3 Similar violation will occur in relation to Manibeli in Maharashtra, which would also be permanently submerged.

1.4 The NPG report mentions (p12) that "The impounding of water would, however, result in the submergence of important road linkages below EL 53 m.... Further, they (GOM) have been advised to construct a road at higher elevation ..." Unless we know the status of this, we cannot decide about the closing of the sluices.

1.5 There is another road (not mentioned in the NPG report), connecting the dam site to Vadgam and beyond to other villages which would also be submerged and needs to be replaced. The status of this road also has to be determined.

1.6 Nowhere is there a mention if the people have been consulted or even informed about the issue. From the report of Ms Tripti Soni on the downstream impacts of Sardar Sarovar Project, titled "The Voiceless Tragedy" and presented to the Committee currently reviewing the project, it seems the people in the downstream area have not been taken into confidence about the closure of the construction sluices. Nor is it evident from the NPG report whether the people likely to be affected by the closing of the sluices have been informed about the consequences. This concern also is not mentioned in the list of specific areas (p 6) the Expert Group identified for closer scrutiny, as listed in the NPG report.

1.7 It is particularly important to discuss this with the downstream fisherfolk, who would be significantly affected by the closure of the sluice gates, and to evolve in consultation with them mitigatory and compensatory strategies.

1.8 It is also critical to discuss the implications with the many downstream villages whose sources of water will be affected and who would be affected with salt water ingress. Preventive and mitigative strategies would have to be evolved in consultation with them.

1.9 This last point is especially important as the impact on drinking water supply, downstream of the dam, would be significant despite statements to the contrary in the NPG report. The NPG report mentions (p 13) that "currently 147 MLD are being drawn from various water supply schemes through intake wells or by divert pumping." However, as per CICFRI report on sociological survey of downstream villages, people in 28.7% of the villages on the banks of the Narmada depend on the river directly for their daily supply of domestic water.

15.9% villages depend on wells, 24.2% on tubewells and 26.7% villages depend on water-supply schemes. All of them would be affected when water flow downstream of SSP gets reduced drastically. They have not been mentioned in the break up of users mentioned in the NPG report.

1.10 No users are mentioned from Baroda District, though there are many villages on the banks of the river in Baroda District. These villages would also be dependent on the river water. It is, therefore, important to determine how much water is being used in the downstream area, who is using it, and for what. An assessment needs to be made as to how much water will be actually available for these people.

1.11 A similar analysis will have to be done for the areas and populations dependent on Karjan Reservoir, if water is to be made available from there.

1.12 It is also not clear whether the losses due to seepage and evaporation have been taken into consideration while working out the water availability scenario downstream after the closing of the sluices, especially considering the fact that in that season there is ordinarily no flow in Karjan River below the dam.

1.13 Regarding the increased risk from water pollution due to reduced water flow, the NPG report says (p 17) "... during the period of the flow reduction, the Gujarat Pollution Control Board may persuade the concerned industries to adopt stringent controls so that the quality of effluents is kept within permissible limits. It showed not be difficult to obtain necessary support and cooperation from the concerned industries for such a limited period." This seems to be an unworkable solution for, if all that was needed was persuasion the SPCB could have already ensured that effluents were within "permissible limits". Usually what is required is investment and the installation of pollution control devices. Besides, without knowing the details of the pollutants, the current levels of pollution, and the response of the industry to this "persuasion", no decisions can be made.

2. NON-AVAILABILITY OF STUDIES

2.1 It is recorded in the minutes of the 19th meeting of NCA-ESG (p 5-7) that "Sub-Group also discussed implications of the closure of sluices beyond December '93 and felt that the studies which have been done for mitigating the downstream impacts need to be scrutinised, mitigation measures proposed and their need to be checked and recommended measures should be implemented in time and in any case the Sub-Group cannot arrive at a firm recommendation or suggestion just now.

"Chairman referring to the discussions of the 18th meeting of the ESG stated that the Sub-Group had recommended shifting of the dates for closing of the sluices to March. '94,...

"He (Chairman) suggested that the Sub-Group cannot decide on closing of the sluices unless data on the following aspects is available:

- (i) Provision of downstream water supply
- (ii) Salt intrusion with and without dam; and
- (iii) Areas which are likely to be submerged at the level pool submergence (pondage)."

It seems obvious that much of this information is still not available and, at least as far as the ESG members go, they have not had access to the reports that might be available (some of which are listed below) since the 18th meeting. Therefore, it is still not possible to recommend the closing of sluices.

REHABILITATION

2.2 Rehabilitation plan for fisherfolk families: Annexure VI of the Agenda notes says: "GOG officials also agreed to examine the need for developing an action plan for rehabilitation of all those fisherman likely to be affected by reduced flow downstream of the SSP." The need for such a plan was felt even in CICFRI's study of 1991. In the 18th meeting of the NCA-ESG, it was suggested by the Chairman that, "the fisherman families, living downstream may be resettled in the command area in the growth centre." Despite this, even till today the GOG has only agreed "to examine the need for developing action plan ..". There is still no action plan, leave alone action. But the NPG report does not even mention what is to be done about the fisherfolk and boat-operators families whose livelihoods would be immediately affected. CICFRI report of 1991 mentioned the figure of over 5000 families so affected. We need to look into this aspect seriously while taking a decision on the sluices.

ECOLOGICAL IMPACTS

2.3 Salt water ingress: While it is claimed that 67 cumecs of water will be released, this is less than a third of the normal flow at this time of the year. What is not clear is the level of flow at the Narmada River mouth with and without the closing of the sluice gates and the implication on salt water ingress. The general statement in the report that saline intrusion zone is 72 kms has no basis provided. Besides, this might be the situation currently, but would change when the water flow is significantly reduced and the saline water is drawn into the aquifers due to the action of pumps in the region. Also, the impact of this saline ingress has not been assessed. Experience elsewhere (eg. Vaiga River in Ramanathapuram District in Tamil Nadu) shows that once salt water enters aquifers it would take many many years and huge expenditure to clean up the aquifer, if it can ever be cleaned.

2.4 The NPG report mentions (p 14) that "Dr. S.N. Singh, Head of Vadodara Unit at CICFRI examined the likely impacts and had prepared a note on various aspects discussing the fishery potential, ecology of the Narmada riverine systems, the biological study at the river and a broad assessment at macro-benth. He found that with a large reduction in the flow at water in the river, the following repercussions may be expected:

- i) Changes in habitat in terms at hydrographic and hydro dynamic regimes;
- ii) Tidal ingress and salinity tongue invasion;
- iii) Hydrobiological aberrations;
- iv) Pollutational severity and
- v) Effect on mangroves ecosystem."

The only response to this in the NPG report is: "However, since a flow of over 67 cumecs is to be maintained downstream of the confluence of Kanjan river with the Narmada and since the reduction of flow will be for a short duration of about 6 to 15 days only, the adverse impact on fisheries, in general, is expected to be limited" (p 15). However, considering the first stretch of the river (40 kms) would

be with much smaller flows, and considering the assumption made in the response is not scientific, such a response would not suffice. Therefore, the ESG members need to look at the note prepared by Dr. S.N.Singh.

2.5 In 19th meeting of NCA-ESG (28 July) it was stated (p 13) that, "Regarding report on Environmental Impact of downstream of SSP Govt. of Gujarat informed that the final report is awaited from HR Wallingford Institute, London." This was despite the fact that an earlier report prepared by NCA "SSP:Environmental Overview and Prioritised Action Plan, dated June '93" says on p74: "There have been a number of studies carried out on the downstream environment. These have been assessed and synthesized in the Wallingford report." Obviously the report was available in June, 1993 and should, therefore, have been circulated to the members of the ESG. An examination of this report is necessary before any decision about the closing of sluices can be taken.

2.6 Similarly, the report at the CWPRS is referred to several times, but this report has also not been circulated to the members of the sub-group. Neither has the NPG-GOG report on comprehensive downstream impacts.

2.7 Impact on the first stretch : While it is clear that not more than 12.5 cumecs (which is also gradually built up) will be available for upto 40 kms, the impact of this low flow in this region is not analysed, and the whole exercise assumes a flow of 67 cumecs. What would be the impact of this low flow on the ecosystem and drinking water availability for the first 40 kms is not assessed. Whether this would permanently damage the aquifers is also not clear.

2.8 Period of water flow suspension : While in the 18th meeting of the NCA-ESG it was said that the water would be stopped for a period at 22 days, in this document it is variously mentioned as 6, 10 and 15 days (p 20). This vagueness makes it difficult for anyone to come to a conclusion about the likely impact and necessary mitigative measure. It is necessary is to show what is the amount of storage capacity till 53 mt. and the present flow rate in Narmada, leading to estimation of the number of days for which the flow rate in the downstream will stop.

FISHERIES

2.9 While there is some assessment of the impact on commercial fish species, there is no assessment of the impact of aquatic fauna and flora of the river, especially in the stretch between the dam and Karjan River mouth. Even the solutions suggested for commercial species are impractical and without any scientific basis. For example, what would be the impact of fish concentration in pools on the availability of food or on water oxygenation? Has the report of Mr. K.G.S.Nair on the impact of the closing of sluice gates on the fish been received (as requested in meeting on 22.9.93 and reported on p 61 of agenda) ? If it has, what are the findings? If not, how can we take a decision in its absence.

2.10 How can prawn seeds be available and collected in the same quantities in a shorter period? What would be their viability if collected prematurely, or late? In case it is maintained that the viability would not be affected then scientific evidence for this must be produced. It must also be explained why people do not ordinarily collect these in two months, as is being proposed, rather than the three months that is the practice. This is especially important as the giant fresh water prawn is stated to be very important to the economy of the region (p 60 of agenda).

2.11 The "Desk Review Study on fish conservation in Narmada Sagar and Sardar Sarovar and its downstream" was entrusted to CICFRI in Feb'92, to be completed in 3 months. (Ref: Minutes of the 14th meeting of NCA-ESG). In both 18th and 19th meeting of NCA-ESG, it was stated that the report is under printing. After twenty months, the Agenda notes of 20th meeting (Annex - VI) do state that the said report is now available, but this crucial report, which would help the NCA-ESG members to arrive at their own assessment, has not yet been circulated to the members. Annex VI does discuss the report, but does not mention the recommendations of the report.

3. GENERAL ISSUES

3.1 The closing of the sluice gates mark an important step in the dam construction schedule. The ESG must, therefore, assess whether the pari passu condition has been fulfilled before it approves the time schedule for closing the sluices. If the project authorities unilaterally create conditions where the construction work advances beyond the level justified by the pari passu clause then this cannot be used as a basis to get approval for further construction work.

3.2 It seems that the progress of rehabilitation work in Maharashtra is way behind schedule and that the identification of land and of the estimated 1700 families who would be affected by June, 1994 has not yet been completed. As the tribunal lays down that various tasks related to rehabilitation must be completed atleast one year in advance of the submergence, according to the proposed construction schedule this is no longer possible.

3.3 The proposed allocation of water releases of the Narmada river seem to have been drawn up without any reference to the ecological requirements of the down stream riverine system. Surely this should be settled before the closing of sluice gates is agreed upon.

ss\narmada\nca\sluice

1994: 28 November

November 28, 1994

Dear Shri Krishnan,

I write to you as a member of the Narmada Control Authority - Sub-Group Environment, whose meeting is scheduled for to-morrow, 29th November, 1994 from 10.30 a.m.

I would be grateful if you could, as Chairman of the Sub-group, ensure that earlier decisions of the Sub-group are implemented, especially those relating to:

- i. not raising the height of the dam beyond the height reached in December, 1993 without specific approval of the Sub-group.
- ii. review of the pari passu status of the project in order to determine whether clauses of the conditional environmental clearance have been violated.

In this connection, I draw your attention to my letter of 2nd May, 1994, addressed to Shri Rajamani, your predecessor. A copy is enclosed for your ready reference.

With regards,

Yours sincerely,

(Shekhar Singh)

Encl: as above

Shri N.R. Krishnan
Chairman
NCA Sub-group on Environment and
Secretary,
Ministry of Environment and Forests
Government of India
New Delhi.

1995: 9 March

FAX IMMEDIATE Page 1 of 2 9 March, 1995

To: Shri N.R.Krishnan
 Secretary
 Ministry of Environment and Forests, and
 Chairman, NCA Environment Sub-group
 FAX: 11-4360678

From: Shekhar Singh
 Member, NCA Environment Sub-group

Dear Shri Krishnan,

The notice for the 24th meeting of the NCA Environment Sub-group, dated 14 February, was received after 22 February in my office and I saw it only on 2 March, on my return to Delhi. As I had already committed to be in the LBS Academy of Administration, Mussoorie, till 11 March, I am not able to attend the meeting. I would be grateful if I be granted leave of absence.

Could I also suggest, for your consideration, that much longer notice be given for these meetings and, as far as possible, the date of the next meeting be fixed in the earlier meeting.

The minutes of the 23rd meeting were also received in end February, vide letter dated 16 February, 1995. Considering the 23rd meeting was held on 29 November, it would have been desirable for the minutes to be sent much earlier, preferably within a month of the meeting.

With regards the minutes, I have the following observations to make:

1. In item No. XXIII-2(117), point 3, last para, it is stated that "on the issue of making an assessment of the compliance of environmental conditions pari-passu with the construction works, after discussions, it was agreed that the bottlenecks in smooth and speedy implementation of the environment safeguard measures should be removed." In actual fact, I had addressed a letter to you on the topic prior to the last meeting and also raised the following points in the meeting:

1.1 that the construction schedule of the SSP should be approved by the SSCAC only after taking the approval of the NCA

Page 2 of 2

Environment Sub-group with regards to compliance with pari passu requirements.

1.2 that where the pari passu conditions have not been satisfied, the construction must be halted till pari passu status has been achieved.

1.3 that, at present, it appears that for many aspects pari passu has not been achieved and therefore it is not clear how further construction has been approved.

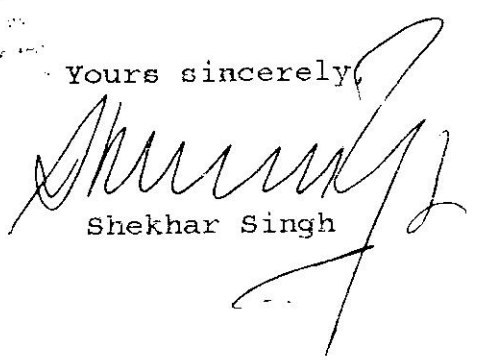
1.4 that decisions to this effect have been taken in earlier meetings of the Sub-group and recorded in the minutes.

2. The points made above are only some of the various points made during the meeting that are not reflected in the minutes. I recollect that, towards the end of the meeting, Shri N.V.V. Char, Secretary, SSCAC, had proposed that as the Supreme Court was currently hearing a case regarding the Sardar Sarovar Project and as the minutes of the NCA Environment Sub-group were being considered by the Supreme Court, we should only record the final decisions taken and not the main issues raised. However, unless I am mistaken, this proposal had been rejected by the Chairman. However, I find that the minutes of the 23rd meeting, as circulated, miss out many of the important issues raised which need further consideration. Though I am not, in the time available, able to record them all, I would request that the points made above be included in the Minutes and, henceforth, a proper record of the discussion maintained.

I trust the minutes will be accordingly amended.

With regards,

Yours sincerely,


Shekhar Singh

950309fx.kri



Dr.(Mrs.) Nalini Bhat
Additional Director

D.O.No.3-87/80-IA.I.

तार :

Telegram : PARYAVARAN,
NEW DELHI

दूरभाष :

Telephone : 4360478

टेलिक्स (द्विभाषीय) :

Telex : (bi-lingual) : W-66185 DOE IN

Fax : 4360678

भारत सरकार

पर्यावरण एवं वन मंत्रालय

GOVERNMENT OF INDIA

MINISTRY OF ENVIRONMENT & FORESTS

पर्यावरण भवन, सी. जी. ओ. कॉम्प्लेक्स

PARYAVARAN BHAWAN, C.G.O. COMPLEX

लोदी रोड, नई दिल्ली-110003

LODHI ROAD, NEW DELHI-110003

March 21, 1995.

Dear Shri Singh,

This has reference to your fax message of 9th March, 1995 addressed to Shri N.R. Krishnan, Secretary, Ministry of Environment and Forests and the Chairman, NCA Environment Sub Group regarding the Minutes of the 23rd Meeting.

2. The points and issues raised by you have been looked into and I am directed to inform that while concluding the discussions on the format for recording the proceedings, it was agreed that only the record of the final decisions would be included in the minutes of the meeting. As such, the Minutes as issued are in order.

3. This has the approval of the Chairman, Environment Sub Group, NCA.

With regards,

Yours sincerely,

(Nalini Bhat)

Shri Shekhar Singh,
Member, Environment Sub Group, NCA,
Indian Institute of Public Administration,
I.P. Estate,
New Delhi.

1995: 15 April

Shekhar Singh
Project Director

April 15, 1995

Dear Shri Krishnan,

Kindly refer to D.O. letter No. 3-87/80-IA.I., dated March 21, 1995, from Dr. Nalini Bhat of your ministry, in response to my FAX of March 9, 1995, to you regarding the Minutes of the 23rd meeting of the NCA Environment Sub Group.

2. The said letter states that "while concluding the discussions on the format for recording the proceedings, it was agreed that only the record of the final decisions would be included in the minutes of the meeting. As such, the Minutes as issued are in order." However, as already mentioned in my FAX of March 9, 1995, the proposal that the minutes of the Sub Group should only reflect the final decisions taken, as the Supreme Court is currently hearing a case on the Narmada, was not agreed to. My impression was that you yourself, as Chairman, had rejected this point. In any case, the point was never discussed otherwise I would have certainly objected to it.

3. Further, the Minutes of the meeting (the 23rd), in which this alleged agreement was supposed to have been reached, do not record this agreement. You will agree that such an agreement, if it was ever reached, would only be effective if it was a decision of the Sub Group. As this has not been recorded in the minutes, and as there is a dispute on whether such a decision was ever taken, the correct thing to do would be to revert back to the original practice of recording in detail the proceedings of the meeting.

4. To change the reporting procedure of the Sub Group, in such a drastic manner, just because the Supreme Court is currently hearing the case on Narmada would tantamount to willfully withholding critical information from the Supreme Court. Apart from this not being in the interest of justice, it might also constitute a contempt of the Supreme Court.

5. Besides, the whole purpose of having NGO representatives on the Sub Group is to ensure transparency. If the points raised by NGO representatives are not even mentioned in the minutes, there appears to be little purpose for NGO representatives to continue on the Sub Group.

6. In light of the above, I would once again request you to include the various observations that I made during the Sub Group meeting, and which were summarised in my FAX of March 9, 1995, as also the contents of the letter that I had sent to you prior to the meeting, in the minutes of the 23rd meeting of NCA Environment Sub Group.

7. I would also be grateful if the other points made in my FAX, especially those relating to the prompt receipt of minutes and agenda papers, and adequate notice for the meetings, be also noted and acted upon.

I would be grateful for an early response

With regards.

Yours sincerely,

Shekhar Singh

Shri N.R. Krishnan
Secretary
Ministry of Environment and Forests
Paryavaran Bhawan
CGO Complex
Lodi Road
New Delhi 110 003

*Recd
RSL
17/4/95*

1995: 15 December

December 15, 1995

Dear Shri Krishnan,

Kindly refer to my letter of April 15, 1995 regarding the minutes of the 23rd meeting of the NCA Environment Sub-group. My letter was in continuation of my earlier fax of March 9, 1995 and your ministry's response vide D.O. No. 3-87/80-IA.I dated March 21, 1995. Unfortunately, I have received no response to my said letter of April 15, 1995.

I had subsequently thought that you might bring this matter up in the meeting of the NCA Environment Sub-group. However, the agenda papers and minutes of the subsequent meetings suggest that the issues I had raised in my said letters have not been put to the Sub-group.

Consequently, I sought and have received legal opinion on the matter. I am informed by my lawyers that the amendment of reporting procedures and the withholding of any part of the proceedings of a meeting with the purpose of keeping information from the Supreme Court would be considered contempt of Court, specifically under Clause 2(C) of the Contempt of Courts Act, 1971. As such, I would once again urge you to kindly reconsider your decision that only the record of final decisions would be included in the minutes of the meeting. As you would appreciate, given the background of this decision, it might be interpreted as something that 'interferes or tends to interfere with the due course of judicial proceedings'.

I would also bring to your kind notice that despite my pointing out both during the 23rd meeting of the Environment Sub-group and consequently, vide my fax of March 9, 1995, that: "the construction schedule of the SSP should be approved by SSCAC only after taking the approval of NCA Environment Sub-group with regards to compliance with pari passu requirements", this was neither reflected in the minutes nor is being acted upon. This is despite the fact that there are clear decisions, reflected in the earlier minutes of the NCA Environment Sub-group meetings, that the height of the Sardar Sarovar Dam can only be increased after it has been cleared by the NCA Sub-group on Environment.

Contd...2..

(2)

Infact, Shri Kamal Nath, then Minister of Environment & Forests, Government of India, had written on September 7, 1993, to Shri V.C. Shukla, vide D.O. 3-87/80-IA that the question of closing the sluices " should be only taken after due consultation with the Environment Sub-group....". I am not aware that the Ministry has since changed its stand on this critical matter. In case this has happened, I would be grateful if the Sub-group is informed of any change and the reasons thereof.

In light of the issues mentioned in my earlier letters and above, you will appreciate that it would not be appropriate for me to participate in the forthcoming meeting of the Environment Sub-group, especially as my views as a non-official member would not be reflected in the minutes of the meeting, and the minutes would continue to be drafted in a manner in which they run the risk of being considered in contempt of the Supreme Court.

I would, therefore, request to be granted leave of absence for the NCA Sub-group meeting scheduled for December 18, 1993. I would also urge you to consider the points that I have made and let me know your answer as soon as possible.

With regards,

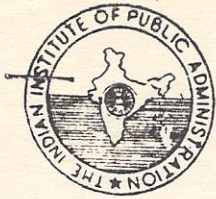
Yours sincerely,

S/d
Shekhar Singh

Shri N.R. Krishnan
Secretary, Ministry of Environment & Forests
Paryavaran Bhawan, CGO Complex,
Lodi Road, New Delhi 110003

15/12/93
(JOSEPH)

1997: 20 May [1]



भारतीय लोक प्रशासन संस्थान

इन्द्रप्रस्थ एस्टेट, रिंग रोड, नई दिल्ली-110 002 • दूरभाष : 331 7309 (9 लाइन)

INDIAN INSTITUTE OF PUBLIC ADMINISTRATION

INDRAPRASTHA ESTATE, RING ROAD, NEW DELHI-110 002

GRAMS : ADMNIST • FAX : 011-331-9954 • PHONES : 331-7309 (9 LINES)

Dear Shri Anand,

May 20, 1997

Kindly refer to the minutes of the 30th meeting of the environment sub-group of Narmada Control Authority (NCA) circulated vide letter No. 34/3/97/363-402, dated March 11, 1997, from the NCA. In this connection I have the following points to make:

- 1) In response to agenda item No. 5 regarding construction programme of Sardar Sarovar Narmada Sagar projects, there was an agreement at the meeting that because progress had been reported only for Catchment Area Treatment (CAT) and compensatory afforestation, and no clear indication was there of what amounted to pari-passu, this matter would be kept in abeyance till the next meeting, when all these issues would be clarified and discussed. I would, therefore, request that a sentence be added after the second para of Point 2 of item No. XXIX-3 (140) as below:

"In light of there being no information on other aspects of the environment and rehabilitation, except for CAT and compensatory afforestation, and no clear indication of what would constitute as pari-passu, the sub-group decided to keep in abeyance its decision on whether pari-passu would be maintained if the height of the dam was raised beyond its current level."

- 2) In annexure XXX-Min(2) of the said minutes, in response to para 5 of my letter, it is stated that

"Since the environmental safeguards were considered to be implemented satisfactorily, as brought into current agenda, there was no issue relating to environmental raised in SSCA or RCNSA".

However, in light of the discussions in the sub-group meeting, as indicated in the earlier point given above, it is not correct to say that environmental safeguards were considered to be implemented satisfactorily. This is a matter which the NCA sub-group on environment has to determine and, as decided in the 30th meeting, it is not yet in a position to so determine. Consequently, this should be reflected in the minutes by replacing the earlier quoted sentence with the following sentence:

"It was agreed that the question of whether environmental progress was pari-passu with construction would be determined by the environment sub-group after the relevant information had been made available to them."

Contd..2..

(2)

3) In response to point 6 annex XXX-min(2), it is stated that

"It was earlier accepted that submergence of the area would be the attribute for ascertaining level of progress of the project works".

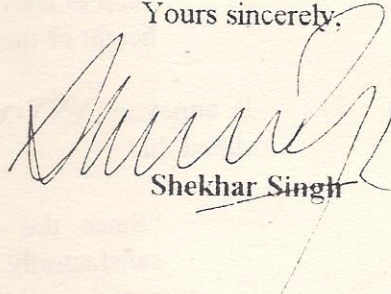
However, this was discussed in the meeting and the NCA was asked to produce extracts from earlier minutes where this had been decided. Pending this, this issue cannot be considered to have been agreed. In any case, submergence of an area cannot be the sole criterion for determining pari-passu. Therefore, the total sentence should be replaced by

"It was agreed that a detailed statement would be put up before the sub-group in the next meeting suggesting the basis on which the pari-passu clause can be monitored. Earlier decisions, if any, on the matter would also be brought to the notice of the sub-group alongwith copies of the relevant documents."

I would be grateful if these changes were incorporated in the minutes of the 30th meeting.

With regards,

Yours sincerely,



Shekhar Singh

①
21/5/92

Shri Vishwanath Anand
Secretary
Ministry of Environment and Forests
Government of India
Paryavaran Bhawan, CGO Complex
Lodi Road
New Delhi 110003

1997: 20 May [2]



भारतीय लोक प्रशासन संस्थान

इन्द्रप्रस्थ एस्टेट, रिंग रोड, नई दिल्ली-110 002 • दूरभाष : 331 7309 (9 लाइन)

INDIAN INSTITUTE OF PUBLIC ADMINISTRATION

INDRAPRASTHA ESTATE, RING ROAD, NEW DELHI-110 002

GRAMS : ADMNIST • FAX : 011-331-9954 • PHONES : 331-7309 (9 LINES)

May 20, 1997

Dear Shri Anand,

I have separately written to you, today, regarding the minutes of the 30th meeting of the NCA sub-group on environment. However, I am bringing to your notice some very critical issues currently under consideration of the sub-group.

Two of the critical issues being debated in the NCA sub-group meetings are:

1. Whether the recommendation of NCA sub-group on environment is required for proposing the raising of the dam height, keeping in mind the pari-passu clause of the environmental clearance. This issues was also discussed in earlier meetings of NCA sub-group and there was a clear decision, recorded in the minutes, that invariably any proposal to increase the dam height must first be cleared from the pari-passu angle by the NCA sub-group on environment. Unfortunately, in the last two meetings of the NCA sub-group, there was a hesitation at acknowledging this earlier decision and at clearly recording it in the minutes. However, since the last meeting was held, there has been an advertisement issued in the Indian Express, New Delhi edition, of Sunday, March 30, 1997, by the Sardar Sarovar Narmada Nigam Ltd. (SSNL). This advertisement says:

"Criticism: Is there a committee similar to the Rehabilitation committee which ensures that environment measures have been taken?"

Facts: The Environment committee of the NCA under the chairmanship of Secretary, Environment & Forest, Govt. of India closely monitors the environmental steps to be taken. This committee has also expressed its satisfaction and has recommended the raising of the dam height."

From the above it is clear that the SSNL also believes that the NCA sub-group is to recommend the raising of the dam height. Therefore, I would suggest that once and for all we settle this dispute and clearly record in the minutes, as stated by me in the last meeting, that "the NCA sub-group on environment must invariably be consulted and its recommendations taken, based on its assessment regarding compliance with the pari-passu clause, before any proposal for raising dam height is made to the NCA or to the government".

2. The second issue that has been debated is whether the NCA sub-group has, in the last meeting, actually recommended the raising of the dam height. As you would notice, the SSNL has claimed this in the advertisement issued in the Indian Express.

Contd.,2..

(2)

In the 29th meeting the matter was raised by me that newspaper reports suggested that the government was considering raising the height of the Sardar Sarovar project. I had mentioned in the meeting that as this proposal had not been placed before the sub-group and its recommendations taken, it was not clear how such a proposal had been submitted to the Government. The Chairman had agreed with this and had requested the NCA to present the relevant facts in the next meeting.


Accordingly, in the 30th meeting, there was a detailed statement of the CAT and compensatory afforestation work done in connection with the project. I had then pointed out that these are not the only parameters which need to be considered while determining whether construction work was pari-passu with the environmental work. I had stressed that the NCA and the Ministry of Environment and Forests must present a clear statement specifying what level of implementation regarding each aspect of the environment would correspond to what level of dam construction, impoundment and other works, in order to maintain pari-passu. It was agreed that this would be presented in the next meeting, as already mentioned earlier.

However, despite this, neither was this decision clearly stated in the draft minutes nor did it deter the SSNI from stating in their advertisement that "this committee has also expressed its satisfaction and has recommended the raising of dam height".

I would strongly reiterate that the NCA sub-group neither expressed its satisfaction nor recommended the raising of the dam height. I would, therefore, suggest that you, as Chairman of the NCA sub-group, set the record straight in the next meeting of the sub-group.

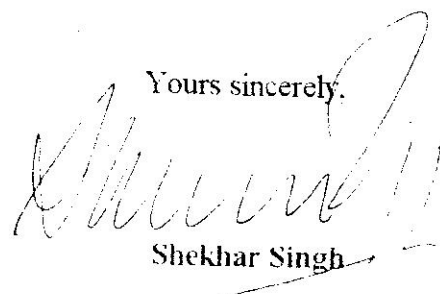
I would also recommend that your Ministry present, at the next meeting of the NCA sub-group and for the sub-group's consideration, a note outlining the detailed parameters by which compliance to pari-passu clause can be assessed.

With regards,



Shri Vishwanath Anand
Secretary
Ministry of Environment and Forests
Government of India
Paryavaran Bhawan, CGO Complex
Lodi Road
New Delhi 110003

Yours sincerely,


Shekhar Singh

विश्वनाथ आनंद
VISHWANATH ANAND



सचिव
पर्यावरण एवं वन मंत्रालय
भारत सरकार
SECRETARY
MINISTRY OF ENVIRONMENT & FORESTS
GOVERNMENT OF INDIA

D.O.No.3-87/80-IA.I

June 13, 1997

Dear Shri Singh,

I have received your letters dated 20th May, 1997 regarding amendment to the Minutes of the 30th Meeting of the Environment Sub Group of the Narmada Control Authority (NCA) and various issues pertaining to the Sardar Sarovar Project (SSP).

2. The Minutes of the 30th Meeting have been circulated to all the Members of the Environment Sub Group. During confirmation of these minutes in the next meeting, views expressed by you will be duly considered. As agreed in the last Environment Sub Group Meeting, a detailed note is being prepared in regard to pari-passu clause vis-a-vis raising the height of the dam of SSP which will also be discussed in the next meeting of the Environment Sub Group. I am forwarding your comments/observations to the NCA for incorporation in the Agenda for the next meeting.

With regards,

Yours sincerely,

(Vishwanath Anand)

Shri Shekhar Singh
Indian Institute of Public Administration
Indraprastha Estate, Ring Road
New Delhi 110 002

1998: 9 April



भारतीय लोक प्रशासन संस्थान

इन्द्रप्रस्थ एस्टेट, रिंग रोड, नई दिल्ली-110 002 • दूरभाष : 331 7309 (9 लाइन)

INDIAN INSTITUTE OF PUBLIC ADMINISTRATION

INDRAPRASTHA ESTATE, RING ROAD, NEW DELHI-110 002

GRAMS : ADMINIST • FAX : 011-331-0954 • PHONES : 331-7309 (9 LINES)

9 April, 1998

Dear Shri Anand,

Kindly refer to the minutes of the 31st meeting of the Narmada Control Authority's (NCA) sub-group on environment, circulated vide NCA letter of 2 March, 1998. On page 15 of the said minutes it has been stated, in relation to the presentation made by the Narmada Project authorities on compliance with the *pari passu* clause, that the Chairman 'suggested that in case, Dr Singh desired to improve the presentation further, he may come forward with concrete suggestions.' In the meeting I had disagreed with the interpretation of the *pari passu* clause that the project authorities had put forward. You had agreed that the question of satisfactory compliance should be left open till I have had an opportunity of communicating my objections and reasoning to the sub-group. Accordingly, I am enclosing a note on the *pari passu* clause, for the consideration of the sub-group and of your ministry.

In this context, the second para on page 16 of the said minutes is not correct. As stated earlier, you had agreed to leave the question of compliance with the *pari passu* clause open and had not, as reported in the minutes, agreed with the assertion of the MD, SSNL, that compliance with the *pari passu* clause was reasonably satisfactory. The minutes may accordingly be amended.

I might also point out that on page 2 of the said minutes it is stated that the points raised by me in my letters placed at Annex-XXXI-2 of the agenda would be taken up under any other item. However, these were not discussed and, as such, may kindly be included in the agenda for the next meeting.

Finally, I would be grateful if the earlier practice of fixing the date of the next meeting in the last meeting is again revived. Whenever this is not possible, at least two weeks notice must be given for a meeting. The notice usually given for the meetings is so short that it is often difficult to cancel all prior commitments in order to attend.

With regards,

Yours sincerely,

Shekhar Singh
Member
NCA sub-group on the environment

Shri Vishwanath Anand, IAS
Secretary, Ministry of Environment and Forests
Government of India
New Delhi

Encl. aa

1999: 1 October



भारतीय लोक प्रशासन संस्थान

इन्द्रप्रस्थ एस्टेट, रिंग रोड, नई दिल्ली-110 002 • दूरभाष : 331 7309 (9 लाइन्स)

INDIAN INSTITUTE OF PUBLIC ADMINISTRATION

INDRAPRASTHA ESTATE, RING ROAD, NEW DELHI-110 002

GRAMS : ADMINIST • FAX : 011-331-3954 • PHONES : 331-7309 (9 LINES)

1 October, 1999

Dear Shri Anand,

I would like to draw your attention to letter No Env-3(33)/99/ 726-59 dated 15 September, 1999, from Shri ND Tiwari, Member (E&R), Narmada Control Authority, announcing the 33rd meeting of the NCA sub-group on the environment and forwarding the agenda papers. Despite the letter being dated 15 September, it, along with its enclosures, was delivered, by hand, to my house in Delhi on 27 September, 1999. No prior intimation of the meeting date and venue was sent to me. This resulted in my not being able to attend the meeting as it was not possible for me to read and digest the agenda papers in one evening.

Also, in the agenda papers it is stated that the report of the committee set up to review the *pari passu* context and compliance was sent to all the members of the Sub-group vide letter No. Env-3(33)/99/1594-1608 dated 23.8.99. However, I never received this letter and its enclosure. A copy of the said committee report was, however, enclosed with the agenda papers received on 27 September, suggesting that, despite the statement in the agenda papers, it was not sent to me in August.

Considering the letter forwarding the agenda papers is dated 15 September, 1999, and the date and venue is printed on the cover of the agenda papers, surely the NCA knew of the date and venue well before then. What, then, was the difficulty in informing all the members by telegram, fax or email of the date and venue. Considering most of the members are outstation, they must have been informed in advance in order to attend. Why, then, was I kept in the dark. As the outstation members must have also been sent the agenda papers in advance, why were they delivered to me at the last moment.

I am not sure whether there is a deliberate attempt by the NCA secretariat to ensure that I do not attend the meetings or, in any case, do not come prepared. Nevertheless, I would appeal to you, as Chairman of the Sub-Group, to take a serious view of this recurring practice. You might recollect that I had also earlier written to you on this matter. I would further request you to lay down certain rules which require each member be informed of the meeting at least two weeks in advance and to receive the agenda papers and other related material at least a week in advance of the meeting.

Contd....2

I am writing separately to you about the substantive points raised in the agenda.

With regards,

Yours sincerely,

Shekhar Singh
Member
NCA Sub-group on
environment

Shri Vishwanath Anand, IAS
Secretary
Ministry of Environment and Forests, and
Chairman, NCA Sub-group on the Environment
Paryavaran Bhawan
New delhi 110 003

2000: 31 October



भारतीय लोक प्रशासन संस्थान

इन्द्रप्रस्थ एस्टेट, रिंग रोड, नई दिल्ली-110 002 • दूरभाष : 331 7309 (9 लाइन)

INDIAN INSTITUTE OF PUBLIC ADMINISTRATION

INDRAPRASTHA ESTATE, RING ROAD, NEW DELHI-110 002

GRAMS : ADMNIST • FAX : 011-331-9954 • PHONES : 331-7309 (9 LINES)

31 October, 2000

Dear Shri Anand,

I have received, a few days back, the agenda for the next meeting of the NCA sub-group on the environment, scheduled to be held on 14 November, 2000. I must thank you for ensuring that this time the notice and agenda of the meeting were sent out well in time.

As I am sure you are aware, the Supreme Court, in its recent judgement on the Sardar sarovar Project, has ordered that the NCA sub-group on the environment "...will consider and give, at each stage of the construction of the dam, environment clearance before further construction beyond 90 meters can be undertaken. ". The order goes on to say that: "The permission to raise the dam height beyond 90 meters will be given by the Narmada Control Authority, from time to time, after it obtains the above-mentioned clearances from the Relief and Rehabilitation Sub-group and the Environment Sub-group." Finally, the order specifies that "the NCA and the Environment Sub-group will continue to monitor and ensure that all steps are taken not only to protect but to restore and improve the environment."

In my view, this puts a very grave responsibility on the sub-group and also changes the functioning of the sub-group to the extent that at least in part it is now functioning under the orders of the Supreme Court.

Consequently, it is important for the sub-group to have a clear understanding of what its responsibilities are. Clearly, one of them is to monitor compliance with the conditions of clearance, including the *pari passu* condition. However, it is impossible for the sub-group to do this unless your Ministry, which is the Ministry that specified the conditions, gives a clear statement of what *pari passu* means in the context of the Narmada Dams.

You might recollect that I had made an effort to define *pari passu* and specify what it implies for the various aspects of the Narmada Project . I had

Contd.....p2

forwarded this to you (copy enclosed) and you had been good enough to discuss this in detail at one of the meetings of the sub group. However, the minutes of that meeting do not indicate whether the Ministry of Environment and Forests agrees with my proposal.

Could I, therefore, request your Ministry to urgently, and before the next meeting, give its views on my proposed understanding of the *pari passu* clause and, in so far as it differs from what I have proposed, indicate how it wants that clause to be interpreted.

I am sure you will agree with me that it would be impossible for the sub-group to fulfill the responsibilities that the Supreme Court has given it, if it did not clearly understand what was expected of it.

With regards,

Yours sincerely,



Shekhar Singh
Member, NCA Sub-
Group on
Environment

Shri Vishwanath Anand, IAS
Secretary
Ministry of Environment and Forests
Government of India
Paryavaran Bhawan
Lodhi Road
New Delhi 110 003

Encl: aa

1. In the last 15 years or so, there has been a tendency to grant conditional environmental clearance to major dams with a *pari-passu* clause. This means that the environmental studies and assessments that need to be done, and the action that needs to be taken in advance of project clearance would have to be done concurrently with project construction.
2. Presumably, such clearances are given when there is a need to expedite initiation of the construction of the project. The desirability, or otherwise, of this is not being discussed here.
3. There are three distinct sets of environmental issues relating to dam projects. These are:
 - i) Whether the project is environmentally viable? In other words, are the inevitable environmental costs of the project justified?
 - ii) What measures need to be taken, if the project is to be made environmentally viable, to minimise its negative impacts on the environment?
 - iii) What are the costs of such measures and how do they affect the financial viability of the project?
4. In order to answer question (i), detailed environmental impact studies need to be carried out and their findings assessed. On the basis of these, it can be determined whether the benefits from the project justify its inevitable environmental costs.
5. If, based on the earlier exercise, the project is found viable then the earlier studies have to be built-upon and action plans have to be formulated to minimise environmental damage.
6. Once the measures required for minimising environmental damage have been clearly determined, then they need to be costed in order to ensure that even if the project is considered environmentally viable, does it remain financially viable if all that is required to protect the environment is done.
7. Clearly, if proper decisions have to be made, all these questions have to be asked and answered prior to a project being considered for environmental clearance.
8. When a conditional *pari-passu* clearance is given, it usually means that these three questions have not been answered to the point where a final decision can be made. In other words, when a project is given conditional *pari-passu* clearance, there is a possibility that the project might subsequently be proved to be environmentally and/or financially non-viable.
9. There is also the practical danger that, due to the inadequate monitoring system of the Ministry of Environment and Forests (MoEF), once clearance is given, albeit conditional, the required studies and action plans would not be finished in time. Even where the studies and action plans are completed, there is the danger that the required remedial measures will not be implemented in time or properly. Therefore, in

Consequently, it cannot be argued that if 10% of the surveys of wildlife have been completed and 10% of the remedial action taken, then it does not violate the *pari-passu* clause if 10% of the area is submerged. Clearly, 100% of the surveys and action plans and 100% of the rehabilitation must be completed before such submergence is allowed.

16. - Similarly, degraded catchments would have a negative impact on the project by silting up the reservoir. Where any impoundment starts before the catchments (at least the very high and high erodibility categories) are adequately treated and stabilised, an important purpose of catchment area treatment is defeated. Clearly, if all this is kept in mind, the simple formula of percentage of impoundment being co-related to the percentage of environmental study and action is not correct.
17. Many other such examples can be given to establish that if proper management of the environment is to take place, a simple formula equating the proportion of impoundment to the proportion of environmental studies and action taken, would not work.
18. I have attempted below to suggest some sort of a timetable for many of the specific aspects relating to the environment. My belief is that, unless this or a similar timetable is followed, the *pari-passu* clause for these projects could not be considered as having been complied with.

Issue	Required Time Frame			Remarks
	Study (to be completed)	Action plan (to be completed)	Implementation (to be completed)	
1. Catchment Area Treatment	Prior to start of construction of coffer dam/ main dam	Prior to start of construction of coffer dam/ main dam	Two years prior to any impoundment (Of at least the very high and high erodibility categories of the catchment)	All very high and high erodibility catchments must be treated and allowed to stabilise before any impoundment is permitted, in order to prevent siltation. Infact, the actual activity of catchment area treatment, which often involves pit digging and other earthwork, can temporarily enhance rates of siltation. Therefore, it is important that all these activities are completed before any trapping of silt through impoundment starts.
2. Rehabilitation	Prior to start of construction of coffer dam/ main dam	Prior to start of construction of coffer dam/ main dam	Two years prior to impoundment	The rehabilitation component of the project is perhaps the most critical and is the one which usually requires the largest financial outlays. As such, it is essential that all studies and action plans must be completed before any impoundment, including that due to building-up of back waters, takes place. This also includes the identification of land and its acquisition. However, the shifting of families should start only when the impoundment schedule is final. The process should start at least two years in advance of impoundment, with the families having the option to maintain both sites while they settle down in their new homes. The final shifting of project affected persons should be done only when submergence of an area is imminent.
3. Seismicity and dam safety	Prior to start of any construction	Prior to start of any construction	Prior to start of any construction	Critical for ensuring the safety of the dam and other structures. It is therefore important that construction should not be started till all the safety-related studies are completed and the resultant modifications, if any, to the structural designs have been incorporated.

If specific dates have been prescribed in the clearance letter, by which any or all of these steps have to be completed, then those dates have to be adhered to, if they are earlier.

4. Impact on human health	Prior to start of construction of coffer dam/ main dam	Prior to start of construction of coffer dam/ main dam	Prior to impoundment	The negative impacts of reservoirs on human health, especially as they breed vectors, are well documented. Even in the Narmada project there is concrete evidence of this. Therefore, preventive measures must be in position prior to impoundment.
5. Impact on aquatic ecosystems	Prior to start of construction of coffer dam/ main dam	Prior to start of construction of coffer dam/ main dam	Prior to diversion/ impoundment	The diversion of the river, building of a coffer dam and the creation of reservoirs have major negative impacts on aquatic ecosystems, especially on fish diversity, other biodiversity, and on water quality. As this is an irreversible process once diversion or impoundment starts, it is important that studies and action plans be completed prior to any diversion. Implementation of preventive measures should be completed prior to the affecting activity (diversion or impoundment) being permitted.
6. Dust and noise pollution at construction site	Prior to any construction	Prior to any construction	Prior to any construction	The construction activities related with such projects pose a significant threat of dust and noise pollution on the surrounding ecosystem and human settlements. It is, therefore, essentially to study the surrounding ecosystems and to develop and implement action plans for the minimisation of the impacts and for the rehabilitation of species and ecosystems, prior to the start of construction.
7. Submergence of terrestrial biodiversity	Prior to start of construction of coffer dam/ main dam	Prior to start of construction of coffer dam/ main dam	Prior to impoundment	All wildlife (flora and fauna) studies and action plans must be completed prior to any impoundment being allowed. Rehabilitation programmes, as required, must be implemented so as to ensure that species or ecosystems are adequately rehabilitated before their original locations are submerged.
8. Archaeological monuments and sites	Prior to start of construction of coffer dam/ main dam	Prior to start of construction of coffer dam/ main dam	Prior to submergence of site/ monument	Archaeological monuments must be identified and shifted out prior to their sites being submerged. More importantly, all archaeological sites must be investigated and the findings evaluated prior to their being submerged. Where required, salvage of archaeological objects must be done prior to impoundment.

Issue	Required Time Frame			Remarks
	Study (to be completed)	Action plan (to be completed)	Implementation (to be completed)	
9. Impact on downstream aquatic ecosystems	Prior to start of construction of diversion canal/ coffer dam/ main dam	Prior to start of construction of diversion canal/ coffer dam/ main dam	Prior to diversion/ impoundment	The blocking of a river by a dam has significant negative impacts on the downstream aquatic ecosystems. These include a loss of nutrients due to the trapping of silt by the dam. The change in water flow regimes and the blockage of passage of migratory fish. Even the diversion of the river waters has many such impacts. As these are irreversible impacts, studies, action plans and implementation must be completed before any diversion or impoundment is permitted.
10. Water logging	Prior to start of construction of coffer dam/ main dam	Prior to start of construction of coffer dam/ main dam	Prior to impoundment	The social and economic justifications for large dams are usually very critically dependent on the benefits from irrigation. However, these benefits are often not realised because of significant problems relating to waterlogging in the command area. Consequently, the possibility of water logging and the modalities of preventing such waterlogging must be determined before permitting any impoundment. Very often, when the modalities of preventing waterlogging are properly understood, there is a requirement to change the water use patterns determined for the project. This becomes impossible if the project has progressed to a stage where impoundment has been permitted.
11. Compensatory afforestation	Prior to start of construction of coffer dam/ main dam	Prior to start of construction of coffer dam/ main dam	At least five years prior to the cutting of trees in the submergence zone	Compensatory afforestation, as the name suggests, is meant to compensate for the forests that would be felled or submerged as part of the project. Consequently, the compensatory forests must be established before the original ones are cut or submerged.
11. Other environmental issues				A similar analysis has to be done for each of the other environmental issues to determine what is the proper timeframe within which they should be studied, their action plans developed and implementation started and completed.

2001: 7 January

17 January, 2001

Dear Shri Jaya Krishnan,

This has reference to letter No Env 3(35)/2000/ dated 3 January, 2001, from the NCA regarding the rescheduling of the NCA environment sub-group meeting from 10th to 19th January. Unfortunately, I have an earlier commitment for the 19th and, therefore, will not be able to attend.

I received the agenda papers for the meeting yesterday and was alarmed to see that there is a proposal to approve the raising of the height of Sardar Sarovar to 100m. Given our discussions in the last meeting, I was expecting to get some response from the Ministry before this issue was taken up again.

Though time is short, I am putting down some of my comments on this item of the agenda. I have not had the time to look at the other items.

I would be grateful if, in light of what I have stated, any decision on raising the height of the dam is deferred till the outstanding issues are sorted out. As I have said in my earlier letter, we are now functioning under the orders of the Supreme Court and must ensure that we do not, in any way, disregard their orders.

I am giving below my comments on agenda item No. XXXV-2(162) regarding the proposed raising of the dam height to RL 1000M.

1. As I have already mentioned in my earlier letter to the Chairman of the sub-group, we are now working under the orders of the Supreme Court and are charged, among other things, with the responsibility of ensuring that the conditions of clearance are complied with.
2. The terms of reference of our sub-group, as quoted in the agenda papers (Annex p 1-2) state that the sub group is to: "work out the environmental safeguard measures to be planned and implemented for the entire Narmada basin so that the environmental safeguard measures are executed and remain fully in consonance with the clearance accorded to the Narmada Sagar and Sardar Sarovar Projects" (emphasis added).
3. The first condition of clearance says that "The Narmada Control Authority (NCA) will ensure that environmental safeguard measures are planned and implemented *pari passu* with progress of work on projects." I had, in my letter of 31.10.2000 pointed out that we still do not have an agreement on what exactly *pari passu* means in terms of the Narmada Projects. I had brought to the Chairman's notice a definition that I had proposed. In the

last meeting the Chairman had agreed to send me a reply on the points raised in my letter, as was also recorded in the minutes (p 4). However, no reply has yet been received and, as such, the matter is still pending.

4. The enclosure to my said letter was also discussed in the 32nd meeting of the subgroup held on 14 October, 1998. The minutes of that meeting state that:

” The note on the time frame circulated by Dr Shekhar Singh was taken up for discussions. A copy of the note is placed at Annex-XXXII.Min.(2).

“Chairman desired to review the broad time frame on compliance and suggested that while discussing this, the views expressed by Dr Shekhar Singh in his note may also be kept in view”. (p 3)

The minutes go on to say that:

“Summing up the discussion on the time frame the Chairman clarified that all these issues were considered prior to according environmental clearance by the MoEF. He however, desired that a tabular statement on the lines discussed above may be prepared for a review, while preparing the statement the submergence would be the criteria for assessing the pari passu compliance in general. However, on the issue like flora-fauna, archeology etc. which are impacted by the submergence directly, steps for their mitigation have to be taken, prior to submergence. He further clarified that the sub-group accepted the spirit of the Dr Shekhar Singh’s letter”. (P 4, emphasis added)

However, despite this, no such tabular statement has yet been prepared. Therefore, it cannot be argued that the matter of compliance with pari passu has been settled.

5. Surprisingly, in the note on past discussions on the pari passu clause included in the agenda papers (Annex XXXV –(1)), this recent discussion has been left out, thereby presenting a misleading picture. Consequently, till a tabular presentation is made, discussed and agreed upon, in accordance with the decisions made in the in the 32nd meeting, we cannot proceed with determining whether the project is pari passu or not.
6. The second condition of clearance specifies that: “ The detailed surveys/studies assured will be carried out as per the schedule proposed and details made available to the Department for assessment”. This clause is not involved with our understanding of pari passu. Your Ministry can confirm to you that almost all the studies/surveys assured were not carried out as per the schedule proposed and, what is more important, many of them have still not finished nor have they been assessed by your Ministry. In light of this, we can certainly not certify that progress is ‘fully in consonance’ with conditions of clearance.
7. The third condition specifies that: “The Catchment Area Treatment programme and the Rehabilitation plans be so drawn as to be completed ahead of reservoir filling” (emphasis added). The meaning of this clause was further clarified by Mr TN Seshan, then Secretary, MOEF, in his letter of 4/2/88 addressed to the Secretary, MoWR, GOI, wherein he states that:

“Catchment Area Treatment should cover both submergence area as well as free draining catchment”. The agenda papers of this (35th) meeting seem to suggest that the conditions of clearance require the treatment of only directly draining watersheds. However, this is factually incorrect and has been so determined in earlier meetings of the sub-group. I give below the relevant quote from the minutes of the 22nd meeting (Item No. XXII-2(112), p 3-4):

“Shri D. Rajgopalan, Secretary (R&R), Govt. of Gujarat made a reference to the suggestion of the committee of Secretaries & pointed out that only those critically degraded sub-watersheds, which are directly draining into the reservoir are to be treated at the project cost. Whereas, for the balance critically degraded subwatersheds he pointed that according to the above decision the issue was to be decided by the Planning Commission in consultation with Ministry of Environment & Forests & Ministry of Agriculture. He also referred to the report of the committee of Environment Sub-group submitted in July, 1993 and proceedings of the 15th meeting of the Environment Subgroup, to state that treatment of freely draining sub-watershed is to be kept outside the conditionalities of pari-passu. To explain his point further he stated that the CAT works in directly draining areas, in all the three states put together have been completed in more than 55% area as against the submergence of the land which is likely to be only 15% of the total by the monsoon of 1994. He emphasized that the extent of CAT work completed is enough to justify raising the height of the dam to 81 M.

Chairman however disagreed with this analysis & stated that the stand of Ministry of Environment & Forests (MOE&F) regarding this has been made very clear on more than one occasion. He stated that the completion of works on entire critically degraded subwatersheds within the freely draining areas are also to be completed. He also stated that the view expressed by Shri Rajagopalan to treat only the directly draining sub-watersheds for satisfying the pari-passu clause was conceived and advocated by the project authorities and not by the Ministry of Environment & Forests. He further made it clear that it is the responsibility of the project authorities to locate the source of funding for this programme” (emphasis added).

It is not clear, therefore, why this question is brought up again and again.

8. Given this, the factual position for Sardar Sarovar is as follows:

1. Total catchment area to be treated "ahead of reservoir filling"	606640 ha	Source: 35 th meeting agenda, p 19
2. Total treated to date	134832 ha	Source: 35 th meeting agenda, p 21
3. Percentage of catchment treated to date	22.2%	
4. Percentage to be treated in order to comply with conditions of clearance (ahead of reservoir filling)	100%	Considering the reservoir has already been filled,

Clearly, by no stretch of imagination can the sub-group certify that, in catchment area treatment, the Sardar Sarovar project is in compliance with the conditions of clearance.

Consequently, I would be grateful if the required tabular statement regarding the implications of pari passu is discussed and decided by the MoEF and presented to the sub-group, before any effort is made to determine whether the pari passu clauses are being complied with. For the other clauses of clearance, the issues that I have raised need to be clarified before any view can be taken.

I would also be grateful, given the important issues that the sub-group has to decide upon, if, in future, agenda papers are sent so as to reach at least a week in advance of the meeting and the meeting dates are fixed and communicated at least a month in advance.

With regards,

Yours sincerely,

Shekhar Singh
Member, NCA Sub-group
on the Environment

Shri P.V. Jaya Krishnan, IAS
Secretary
Ministry of Environment and Forests
Government of India
New Delhi

2001; 1 May



भारतीय लोक प्रशासन संस्थान

इन्द्रप्रस्थ एस्टेट, रिंग रोड, नई दिल्ली-110 002 • दूरभाष : 331 7309 (9 लाइन)

INDIAN INSTITUTE OF PUBLIC ADMINISTRATION

INDRAPRASTHA ESTATE, RING ROAD, NEW DELHI-110 002

GRAMS : ADMINIST • FAX : 011-331-0954 • PHONES : 331-7309 (9 LINES)

MOST IMMEDIATE

1 May, 2001

Dear Shri Jaya Krishnan,

While reading the Minutes of the 35th meeting of the Environment Sub-Group of the Narmada Control Authority, I saw that in response to my letter to you of 17 January 2001, concerning the permission to raise the height of the Sardar Sarovar dam to 100m, it was recorded that “ the Chairman referred to the judgement of 18th October, 2000 of the Apex Court in Civil Writ Petition No. 319/1994 of NBA v/s Union of India and Others and observed that the matter was discussed and settled, particularly under the caption “Catchment Area Treatment”. He further stressed that the directions given are quite clear and the Sub-group has to function in accordance with the operative part of the judgement”. (p3-4)

2. For one, it is not clear to me what part of the judgement can be understood to have ‘discussed and settled’ the matter of non-compliance with the conditions of clearance. I would be grateful if you could get your Ministry to kindly clarify this to me.

3. Further, I draw your attention to the operative part of the said judgement, especially the Directions. Therein, it is clearly stated that “ While issuing directions and disposing of this case, two conditions have to be kept in mind, (i)..... (ii) ensuring compliance with conditions on which clearance of the project was given including.....”. From this it is clear that compliance with conditions of clearance is part of the directions of the Supreme Court.

4. My letter of 17 January, 2001 has clearly established that many of the conditions of clearance have not been complied with. This letter, along with my earlier letter of 31 October, 2000, makes it clear that there is still no clarity of what would tantamount to ‘pari passu’ and that without this we cannot even monitor some of the conditions of clearance.

5. The minutes of the 34th meeting of NCA sub-group on environment state that the Chairman “assured Dr Shekhar Singh that he would send a reply on the points raised by him.” However, no reply has yet been received.

6. Given the situation described above, I would reiterate my earlier position that it would be a grave contempt of the Supreme Court if the sub-group gave permission for any further raising of the height of the dam before the various conditions of clearance were complied with.

7. I was hoping to be able to discuss all this at the next meeting of the sub-group which, according to the minutes of the last meeting, was to be held sometime in April. However, I have till today not received any intimation of the meeting. Accordingly, I am sending you this letter.

8. I trust you will ensure that adequate notice is given of the next meeting and the agenda papers are sent well in time so that we could study them properly prior to the meeting.

With regards,

Yours sincerely,

Shekhar Singh

Shri P.V. Jaya Krishnan, IAS
Secretary
Ministry of Environment and Forests
Chairman, NCA Sub-group on Environment
Government of India
New Delhi

2001: 11 May

11 May, 2001

Dear Shri Jaya Krishnan,

I was surprised to receive, on the afternoon of 3 May, 2001, the notice and agenda papers for the 36th meeting of the Environmental Sub Group of the Narmada Control Authority, scheduled to be held on 2 May, 2001. From the cover (copy enclosed) I saw that they had been despatched by speed post from Indore on 1 May, 2001. As the meeting was scheduled for 2.30 pm on 2 May, by posting them only on 1 May it was ensured that they would not reach me in time for me to attend the meeting, leave alone study the 182 page agenda papers.

The letter giving notice of the meeting is dated 20 April, 2001 and signed on the same day. Therefore, I do not understand why it was despatched to me only on 1 May. Considering I am one of three non-governmental members of the sub-group and often the only dissenting voice, this delay in despatch on the part of the NCA secretariat appears to be deliberate and malafide. I am confident that you, as Chairperson of the sub-group, will take appropriate action and keep me informed.

I might here add that I have on many occasions in the past pointed out, both verbally and in writing, that agenda papers are sent to me very late and usually much later than they are sent to other members. Various Chairpersons, from time to time, have instructed the NCA secretariat to ensure that the notice and papers reach well in time. However, this is perhaps the first time that they were delivered after the meeting!

You will also recall that I had written to you on 1 May, 2001, indicating that as I had not so far received any intimation of the next meeting of the sub-group (though it was supposed to be in April), I was sending you my observations on the proposal for granting clearance to raise the dam height beyond 90 m. This letter was faxed to you and a copy hand delivered to your office on 1 May itself. As I do not know what decisions were taken in the meeting that I was prevented from attending, I do not know what the consequences of my absence are. However, I am keeping all my options open in case further action is called for.

With regards,

Yours sincerely,

Shekhar Singh
Member, NCA Sub-group on the Environment

Shri P.V. Jaya Krishnan, IAS
Secretary, Ministry of Environment and Forests
Chairman, NCA Sub-group on Environment
Government of India, New Delhi

Encl: aa



नर्मदा नियंत्रण प्राधिकरण NARMADA CONTROL AUTHORITY

सं: पर्यावरण-3-(36)/2001/1766-1803

दिनांक: २० अप्रैल, २००१
स्पीड पोस्ट द्वारा

सेवामें,

न.नि.प्रा. के पर्यावरण उपदल के सभी सदस्य/आमंत्रितगण,
संलग्न सूची के अनुसार ।

विषय: नर्मदा नियंत्रण प्राधिकरण के पर्यावरण उपदल की छत्तीसवी बैठक के सम्बन्ध में ।

महोदय,

सादर सूचित करना है कि न.नि.प्रा. के पर्यावरण उपदल की छत्तीसवी बैठक बुधवार दिनांक २ मई, २००१ को २.३० बजे सायं में सचिव, वन एवं पर्यावरण के कार्यालय के सभाकक्ष, कमरा सं. ४०३, पर्यावरण भवन, सी.जी.ओ. काम्पलेक्स, लोदी रोड, नई दिल्ली में होना निश्चित हुआ है ।

आपसे अनुरोध है कि निर्धारित तिथि पर उपरोक्त बैठक में भाग लेने का कष्ट करें । बैठक की कार्यसूची इस पत्र के साथ संलग्न की जा रही है ।

संलग्नक— उपरोक्त

भवदीय,

(डा० पवन कुमार)

कृते सदस्य (पर्यावरण एवं पुनर्वास) एवम
सदस्य सचिव, पर्यावरण उपदल

प्रतिलिपि सूचनार्थ प्रेषित :

१. सचिव, जल संसाधन मंत्रालय एवं अध्यक्ष, न.नि.प्रा., भारत सरकार, श्रम शक्ति भवन, रफी मार्ग, नई दिल्ली — ११० ००१.
२. मुख्य अभियन्ता, न.नि.प्रा., क्षेत्रीय कार्यालय, इन्दौर ।
३. अधीक्षण अभियन्ता, न.नि.प्रा., क्षेत्रीय कार्यालय, ई-४/५६, अरेश कालोनी, भोपाल-१६.
४. निदेशक सिविल, न.नि.प्रा., ४३५, नर्मदा नहर भवन, बी.-ब्लॉक, छानी जकात नाका, बड़ोदरा-३९०००२.
५. उप-निदेशक सम्पर्क, नर्मदा नियंत्रण प्राधिकरण, १००१, १०वीं मंजिल, भिकाजी कामा भवन, आर.के. पुरम, नई दिल्ली — ११० ०६६.

(डा० पवन कुमार)

कृते सदस्य (पर्यावरण एवं पुनर्वास) एवम
सदस्य सचिव, पर्यावरण उपदल



नर्मदा नियंत्रण प्राधिकरण NARMADA CONTROL AUTHORITY

No. Env. 3(36)/2000/1766-1803

Dated: 20 April, 2001
BY SPEED POST

To

All the Members & Invitees of Env. Sub-group of NCA
As per list attached.

Sub: 36th meeting of Environment Sub-group of NCA.

Sir,

It is proposed to convene the 36th meeting of the Environment Sub-group of Narmada Control Authority under the Chairmanship of Secretary, Ministry of Environment & Forests, Govt. of India, on Thursday, 2nd May, 2001 at 2.30 PM in the Committee Room No. 403, Paryavaran Bhawan, C.G.O. Complex, Lodi Road, New Delhi - 110 003.

You are requested to attend the above meeting & confirm your participation. A copy of the agenda papers is enclosed herewith.

Yours faithfully,

Encl: As above.

(Dr. Pawan Kumar)
for Member(Environment & Rehab.) &
Member Secretary to the Environment Sub-group

Copy for kind information to :

- 1) The Secretary, MOWR & Chairman, NCA, Shram Shakti Bhawan, Rafi Marg, New Delhi - 110 001.
- 2) The Chief Engineer, Regional Office, NCA, Indore.
- 3) The Superintending Engineer, Regional Office, NCA, E-4/56, Arera Colony, Bhopal - 462 016.
- 4) The Director (Civil), NCA, 435, Narmada Nahar Bhawan, B-Block, Chhani Jakat Naka, Vadodara - 390 002.
- 5) The Dy. Director (L), NCA, 1001, Bhikaji Cama Bhawan, 10th Floor, R.K. Puram, New Delhi - 110 066.

(Dr. Pawan Kumar)
for Member(Environment & Rehab.) &
Member Secretary to the Environment Sub-group

पर्यावरण उपदल के सदस्यगण

- १— श्री पी०वी० जय कृष्णन, सचिव, भारत सरकार, पर्यावरण एवं वन मंत्रालय, सी०जी०ओ० कॉम्पलेक्स, लोदी रोड, नई दिल्ली—११० ००३ — अध्यक्ष
- २— श्री सुरेश चन्द्रा, कार्यकारी सदस्य, न.नि.प्रा., बी.जी.११३, योजना क्रमांक—७४—सी, विजय नगर, इन्दौर — ४५२ ०१० म.प्र.
- ३— श्री रवीन्द्र शर्मा, उपाध्यक्ष, नर्मदा घाटी विकास प्राधिकरण, नर्मदा भवन, तुलसी नगर, भोपाल—४६२००३.
- ४— श्री ए०सी० त्यागी, आयुक्त, पी.पी, भारत सरकार, जल संसाधन मंत्रालय, श्रम शक्ति भवन, रफ़ी मार्ग, नई दिल्ली — ११० ००१.
- ५— सचिव पर्यावरण, महाराष्ट्र सरकार, पर्यावरण विभाग, मंत्रालय, मुम्बई—३२
- ६— श्री के०सी० कपूर, प्रबन्ध निदेशक, सरदार सरोवर नर्मदा निगम लि०, नया सचिवालय परिसर, गोंधिनगर — ३८२ ०१०
- ७— सचिव, पर्यावरण, राजस्थान सरकार, पर्यावरण विभाग, सचिवालय, जयपुर — ३०२००५
- ८— महानिदेशक, नृवंशविज्ञान सर्वेक्षण विभाग, पश्चिम ब्लॉक—२, प्रथम मंजिल, स्कंध—६, रामकृष्ण पुष्पा, नई दिल्ली — ११००६६
- ९— महानिदेशक, भारतीय आयुर्विज्ञान अनुसंधान परिषद, अंसारी नगर, पोस्ट बाक्स नं—४५०८, नई दिल्ली — ११० ०२९
- १०— उपमहानिदेशक, मृदा कृषि विज्ञान एवं इंजीनियरी, भारतीय कृषि अनुसंधान परिषद, कृषि भवन, डा० राजेन्द्र प्रसाद मार्ग, नई दिल्ली — ११०००१
- ११— श्री एस०के० मुखर्जी, निदेशक, भारतीय वन्य जीव संस्थान, पोस्ट बाक्स नं० १८, देहरादून — २४८ ००१
- १२— डा० आर०के० कट्टी, सलाहकार, ४०१/बी०, पूनम चेम्बर्स, शिव सागर स्टेट, डा० एनी बेसेन्ट रोड, मुम्बई — ४०० ०१८
- १३— डा० एस० रामाशेषन, सलाहकार, प्रोफेसर, सिविल इंजिनियरिंग विभाग, कोन्गू इंजिनियरिंग कालेज, पेरुन्दुरई, इरोड — ६३८०५२
- १४— डा० शेखर सिंह, प्रोफेसर, भारतीय लोक प्रशासन संस्थान, इन्द्र प्रस्थ स्टेट, रिंग रोड, नई दिल्ली — ११० ००२
- १५— उप-महानिरीक्षक, वन, भारत सरकार, पर्यावरण एवं वन मंत्रालय, पर्यावरण भवन, सी.जी.ओ. कॉम्पलेक्स, लोदी रोड, नई दिल्ली—११० ००३
- १६— महानिदेशक, भारतीय पुरातत्व सर्वेक्षण, ११, जनपथ, नई दिल्ली — ११०००१
- १७— श्री नरेन्द्र देव तिवारी, सदस्य, पर्यावरण एवं पुनर्वास, न०नि०प्रा०, इन्दौर — सदस्य सचिव

MEMBERS OF ENVIRONMENT SUB-GROUP OF NCA

1. Shri P.V. Jaya Krishnan, Secretary, Govt. of India, Ministry of Environment & Forests, Paryavaran Bhawan, C.G.O. Complex, Lodhi Road, New Delhi-110 003.
- Chairman
2. Shri Suresh Chandra, Executive Member, NCA, BG-113, Scheme No.74-C, Vijay Nagar, Indore, 452 010.
3. Shri Ravindra Sharma, Vice-Chairman, Narmada Valley Development Authority, Narmada Bhawan, Tulsi Nagar, Bhopal - 462 003.
4. A. A.C. Tyagi, Commissioner (PP), Govt. of India, Ministry of Water Resources, Shram Shakti Bhawan, Rafi Marg, New Delhi-110001.
5. Secretary (Environment), Govt. of Maharashtra, Environment Department, New Administrative Building, Opposite Mantralaya, Mumbai-400032
6. Shri K.C.Kapoor, Managing Director, Sardar Sarovar Narmada Nigam Ltd. New Sachivalaya Complex, Gandhinagar-382 010
7. Secretary (Environment), Govt. of Rajasthan, Environment Department, Sachivalaya, Jaipur - 302 005.
8. The Director-General, Anthropological Survey of India, West Block No.2, Wing No.6, 1st Floor, R.K. Puram, New Delhi - 110 066.
9. The Director-General, Indian Council of Medical Research, Ansari Nagar, Post Box No.4508, New Delhi-110029.
10. The Deputy Director-General, Soil Agronomy & Engineering, ICAR, Krishi Bhawan, Dr. Rajendra Prasad Marg, New Delhi - 110 001.
11. Shri S.K. Mukherjee, Director, Wild Life Institute of India, Post Box No.18, Dehradun - 248 001.
12. Dr. R.K. Katti, Consultant, 401/B, Poonam Chambers, Shiv Sagar Estate, Dr. Annie Besant Road, Mumbai - 400 018.
13. Dr. S. Ramaseshan, Professor & Head, Civil Engineering Deptt. Kongu Engineering College, Perundurai, ERODE - 638052.
14. ✓ Dr. Shekhar Singh, Indian Institute of Public Administration, Indra Prastha Estate, Ring Road, New Delhi - 110 002.
15. The Deputy Inspector General, Forest (FC), Govt. of India, Ministry of Environment & Forest, Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi- 110 003
16. The Director-General, Archaeological Survey of India, 11, Janpath, New Delhi - 110001.
17. Shri N.D.Tiwari, Member (E&R), NCA, BG-79, Scheme No.74-C, Vijay Nagar, Indore - 452 010
-Member-Secretary

आमंत्रितगण

- १— श्री ए०के० महाना, सचिव, सरदार सरोवर निर्माण सलाहकार समिति, ए—ब्लॉक, चौथी मंजिल, नर्मदा भवन, इन्दिरा एवेन्यू, बडोदरा — ३९० ००१
- २— श्री वी० राजगोपालन, संयुक्त सचिव, भारत सरकार, पर्यावरण एवं वन मंत्रालय, सी.जी.ओ. काम्पलेक्स, लोदी रोड, नई दिल्ली—११० ००३
- ३— मुख्य वन संरक्षक —मध्य— भारत सरकार, पर्यावरण एवं वन मंत्रालय, क्षेत्रीय कार्यालय, ई—३/२४०, अरेरा कालोनी, भोपाल ।
- ४— सदस्य, पर्या० एवं वन, नर्मदा घाटी विकास प्राधिकरण, नर्मदा भवन, तुलसी नगर, भोपाल — ४६२ ००३
- ५— संयुक्त सचिव, मृदा संरक्षण, कृषि मंत्रालय, भारत सरकार, कृषि भवन, डा० राजेन्द्र प्रसाद मार्ग, नई दिल्ली ।
- ६— श्री सतीश त्रिपाठी, प्रधान सचिव, वन, राजस्व एवं वन विभाग, महाराष्ट्र सरकार, मंत्रालय, मुम्बई — ४०० ०३२
- ७— श्री एम०के०माथुर, अति० सचिव पर्यावरण, राजस्थान सरकार, पर्यावरण विभाग, कमरा नं० ३२१—ए, एस०एस०ओ० भवन, सचिवालय, जयपुर —३०२ ००५
- ८— मुख्य अभियन्ता —इएपी— एवं संयुक्त सचिव, सिंचाई, महाराष्ट्र सरकार, सिंचाई विभाग, मंत्रालय मुम्बई — ४०० ०३२
९. प्रबन्ध निदेशक, नेशनल हाइड्रो पावर डेवलपमेन्ट कॉर्पोरेशन लि०, पर्यावास भवन, वल्लभ भवन के पास, भोपाल ।
- १०— श्री मान दाहिमा, आयुक्त, पुशतत्व एवं संग्रहालय विभाग, मध्य प्रदेश शासन, बाणगंगा, भोपाल ।
११. डा० सनत ए० चव्हाण, मुख्य वन संरक्षक, सरदार सरोवर नर्मदा निगम लि०, नया सचिवालय परिसर, गोंधीनगर ।
- १२— श्री आर०डी० दीक्षित, संयुक्त निदेशक, पर्यावरण एवं वन मंत्रालय, भारतीय वनस्पति सर्वेक्षण, केन्द्रीय वृत्त, १० चेथम लेन, इलाहाबाद — २११००२
- १३— श्री बी०जी० वर्गीज, अनुसंधान प्रोफेसर, सेन्टर फार पालिसी रिसर्च, धर्मा मार्ग, चाणक्यपुरी, नई दिल्ली — ११००२१
- १४— डा० आर०सी० शर्मा, उप—निदेशक, राष्ट्रीय संक्रामक रोग संस्थान, २२, श्याम नाथ मार्ग, नई दिल्ली — ११० ००७
- १५— डा० शमशेर सिंह, एडी० कमिशनर, भारत सरकार, एग्रीकल्चरल एवं कोआपरेशन विभाग, कृषि भवन, नई दिल्ली ।

INVITEES

1. Shri A.J. Mahana, Secretary, Sardar Sarovar Construction Advisory Committee, A-Block, 4th Floor, Narmada Bhawan, Indira Avenue, Vadodara-390001.
2. Shri V. Rajagopalan, Joint Secretary, Ministry of Environment & Forests, Paryevaran Bhawan, CGO Complex, Lodhi Road, New Delhi - 110 003.
3. Chief Conservator of Forests (C), Ministry of Environment & Forest, Regional Office, E-3/240, Arera Colony, Bhopal.
4. Member (E&F), Narmada Valley Development Authority, Narmada Bhawan, Tulsi Nagar, Bhopal - 462 003.
5. Joint Secretary, (Soil Conservation), Govt. of India, Ministry of Agriculture, Krishi Bhawan, Dr. Rajendra Prasad Marg, New Delhi - 110 001.
6. Principal Secretary (Forests), Revenue & Forest Department, Govt. of Maharashtra, Mantralaya, Mumbai- 400 032.
7. Shri N.K.Mathur, Addl. Secretary (Env.), Govt. of Rajasthan, Environment Department, Room No.321-A, SSO Bhawan, Sachivalaya, Jaipur - 302 005.
8. The Chief Engineer (EAP) & Joint Secretary (Irrigation), Govt. of Maharashtra, Irrigation Department, Mantralaya, Mumbai- 400 032.
9. Shri Man Dahima, Commissioner, State Department of Archaeology & Museum, Govt. of M.P., Banganga, Bhopal.
10. Managing Director, National Hydropower Development Corporation Ltd., Paryavas Bhawan, Near Vallabh Bhawan, Bhopal, M.P.
11. Dr. Sanat A. Chavan, Chief Conservator of Forests, Sardar Sarovar Narmada Nigam Ltd., New Sachivalaya Complex, Gandhinagar - 382010.
12. Shri R.D. Dixit, Joint Director, Botanical Survey of India, Central Office, 10 Chatham Line, Allahabad - 211 002 (U.P.)
13. Shri B.G. Varghese, Research Professor, Centre for Policy Research, Dharma Marg, Chanakyapuri, New Delhi - 110 021.
14. Dr. R.C. Sharma, Dy. Director, National Institute of Communicable Diseases, 22, Shyam Nath Marg, New Delhi-110 007.
15. Dr. Samsher Singh, Addl. Director, Govt. of India, Dept. of Agriculture & Cooperation, Shastri Bhawan, New Delhi - 110 001.

By Speed Post

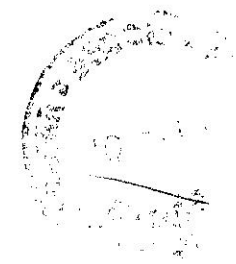
EMI SPEED POST
BANK OF INDIA
GATE NO. 10
IDR-10-2-85
Dated 1/5/01



14. Dr. Shekhar Singh, Indian Institute of Public Administration, Indra Prastha Estate,
Ring Road, New Delhi - 110 002.

9
मार्गदर्शक अधिकारी
National Authority
प्लॉट नं. 74-अ
एन.पी.ई. इलाहाबाद
एन.पी.ई. इलाहाबाद

Received
3/05/2001
1.45



2002: 8 February

URGENT

8 February, 2002

To: Mr P.V. Jayakrishnan
Chairman, NCA Sub-Group on the Environment

From: Shekhar Singh
Member, NCA Sub-Group on the Environment

I would be grateful if the following matters are clarified during the meeting today, regarding the status of compliance of SSP with the conditions of clearance, as stipulated by the Supreme Court.

1. On page 2 of the agenda papers it is stated that the NCA approved the construction of the dam upto 100 m height by June 2002, in its 81st meeting held on 17.11.2000. However, as per the Supreme Court order, they can do this only after the various sub groups have approved the raising of height. **Therefore, this may kindly be explained.**
2. On page 3 it is mentioned that at 100 m level the impoundment would extend up to 105 km. All other calculations seemed to be based on this figure. However, this is only the permanent impoundment, there would likely to be significant temporary impoundment due to build up of backwaters. Where are the calculation and implications of that. **This may kindly be explained.**
3. On page 34-35 it is stated (in Marathi) that only a sample survey has been carried and sample counting has been carried out, for areas to be affected at 100 m. However, there is no report of any final survey or counting. Even the marking of the area that would be submerged at 100 m is not complete. **This may be clarified.**
4. Further, it is stated that the forest department counted 1758 trees per ha while the FDCM (Corporation) counted only 765 trees per ha. The reason for this discrepancy is not understandable. Besides, the discrepancy does not allow confidence. **This may kindly be explained.**
5. The agenda papers state that the total catchment of SSP, below Narmada Sagar Dam 24,42,440 ha out of which 6,82,769 ha has been identified as critically degraded (p 90). **It may be clarified when the studies for identification of critically degraded land were done.**
6. The agenda papers state that out of this, an area of 1,43,351 ha has so far been treated (p 3). However, this works out to only 20.1% of the catchment area to be treated, as per the conditions of clearance, and not 80%, as has been claimed in the agenda papers. **This may kindly be clarified.**
7. Besides, the conditions of clearance stipulate that the entire catchment area treatment must be completed prior to impoundment. As impoundment started many years back, it is not clear how the project can be considered to be in compliance with the conditions of clearance. **This may kindly be explained.**

8. On page 201 there is a letter from the Secretary, Dept. of Agriculture and Cooperation, stating that insufficient funds are being made available for catchment area treatment. This would mean that even the announced schedules cannot be adhered to. **Therefore, the revised schedule may kindly be reported.**
9. The agenda papers (p 16) states that even treatment of the directly draining catchment for the 100 m level was not complete and 7508 ha remained to be done. **The current status may kindly be reported.**
10. In activities related to the Shoolpaneshwar Sanctuary, it is listed that fuelwood, timber, MFP and fruit trees are being planted and made available to the tribals (p 19). However, this appears to be in violation of the Wildlife (Protection) Act of 1972. **This may kindly be clarified.**
11. On page 29 it is stated that the committee set up by the MoEF “has not approved the creation of these (Mathwad and Bokarata) sanctuaries keeping in view the local conditions.” **Therefore, what alternate measures for the protection of wildlife have been planned and implemented.**
12. Page 193 lists some of the safeguards needed while raising the dam height to 100 m. **The status of implementation of these safeguards may kindly be reported.**
13. On p 209 there is the mention of an appraisal committee formed by the MoEF. However, no further details, including membership and TOR are given. **This may kindly be provided.**
14. Has there been any independent assessment of the quantity and quality of the actions claimed to be taken? Field reports and my own earlier visits suggest that this is needed before a final view can be taken. Could a committee be set up of Env. Sub. Group members, involving all the non-official members, and the representatives of MoEF and other concerned departments?

2002: 13 February

NOTE OF DISSENT

I do not endorse the decision taken by the NCA Environment Sub-group (ESG) to approve the raising of the height, of Sardar Sarovar Dam, to 100m. The reasons for my dissent are given below:

1. The ESG was set up with, among others, the following objective:
 - I. To
 - II. To
 - III. To devise a suitable monitoring and evaluation mechanism so that the action plans are effectively implemented in consonance with stipulations at the time of clearance of the projects.
 - IV. To
 - V. To
 - VI. To
2. Subsequently, the Supreme Court, in its majority judgement of ... enjoined upon the ESG further responsibility, namely:

“The Environment Sub-group under the Secretary, Ministry of Environment and Forests, Government of India will consider and give, at each stage of the construction of the dam, environment clearance before further construction beyond 90 meters can be undertaken.”

“The permission to raise the dam height beyond 90 meters will be given by the Narmada Control Authority, from time to time, after it obtains the above-mentioned clearances from the Relief and Rehabilitation Sub-group and Environment Sub-group.”

“Even though there has been substantial compliance with the conditions imposed under the environment clearance the NCA and the Environment Sub-group will continue to monitor and ensure that all steps are taken not only to protect but to restore and improve the environment.”

3. The supreme court, apart from explicitly directing the ESG to do the above, also reposed significant confidence in the ESG when they, in their said judgement, stated...

“There is no reason whatsoever as to why independent experts should be required to examine the quality, accuracy, recommendations and implementation of the studies carried out. The Narmada Control Authority and the Environmental Sub-group in particular have the advantage of having with them the studies which had been carried out and there is no reason to believe that they would not be able to handle

any problem, if and when, it arises or to doubt the correctness of the studies made.”

4. Consequently, it is both morally and legally incumbent upon us to ensure that:
 - I. We ensure that the conditions of clearance are being strictly followed.
 - II. We ensure that adequate monitoring is being done by the Sub-Group to ensure that the field realities, both in quantity and quality, meet what is being stated in the documents and what is required.
5. Given this background, the decision of the ESG to approve the raising of height of the SSP to 100 m is flawed on the following basis.
6. First, there is evidence before us that even the requirements pertaining to 100 m height have not been fulfilled. Specifically, Government of Madhya Pradesh reported that it had not yet been able to fell trees in all the submergence zone and it was unlikely that they would be able to do so before submersion. This violates the directions given by the Sub-group and the MoEF.
7. Further, Government of Madhya Pradesh reported that they had not completed catchment area treatment of even the critically degraded catchments directly draining into the reservoir at 100 m. This is, consequently, a violation of even their own limited undertaking of treating all directly draining catchments prior to the reservoir reaching that level. This was also as per the stipulation of the MoEF.
8. The Government of Maharashtra stated that they had only done a sample counting of the trees that would be submerged at 100 m level, and that the area had still not been demarcated. Further, there were major discrepancies even in this sample counting, between the counts done by the Forest Department and the Forest Corporation.
9. There was no clarity given, despite it being asked for, whether all the calculations were based on 100 m dam with additional humps of 3 m, or with the total height being 100 m, including the humps. This matter was left for the NCA to decide.
10. There was also no clarification given on why back water build up areas where temporary submergence would take place were not considered while assessing the status of preparation for raising the height to 100 m.
11. There was no information about the status of safeguards that need to be taken before the dam height is raised to 100 m.
12. There was no information on the alternate plans to protect wildlife, considering the earlier recommendation by the expert institution asked to study the problem, namely the setting up of two wildlife sanctuaries, had been rejected by the state government committee because “local conditions were not feasible”.
13. The MoEF was not able to give a statement on how many of the studies and plans had been assessed by it, as required under the conditions of clearance, and what were the outcomes of such an assessment.

14. Further, there appears to have been no effort by the ESG to independently verify the claims of the project authorities about the quantity and quality of the environmental measures taken, as enjoined upon it by, before taking this decision. A look at the documents themselves shows the urgent need to do that. For example, in the agenda papers for the 36th meeting, held on 2nd May, 2001, the Government of Madhya Pradesh had reported that “the entire area commensurate with EL 100m was felled” (Page 7). However, in the 37th meeting, held on 8 February, 2002, over nine months later, the Vice-Charman of NVDA informed the Sub-Group that some 300 ha still remained and had not yet been felled. Similar discrepancies can be found repeatedly in the agendas and minutes of various meetings.
15. Reports from the field and my own observations during earlier visits also suggest that there is a real need for the Sub-Group to monitor and assess the field realities on their own before any further clearance is given.
16. At a more general level, as there is still no clear understanding of what exactly *pari passu* means, If we, for the moment, forget the linguistic questions and look at the substantive issues. Then:
 - I. Catchment area treatment is done in order to ensure that silt does not flow into the reservoir and start silting it up. This means that, unless we ensure that silt flow is minimized before its trapping starts, all the money and effort we spend on the treatment goes to waste.
 - II. Also. It is well known that during the treatment of a catchment the flow of silt temporarily goes up as a lot of earth work is involved, Therefore, if we allow the impoundment to start before catchment area treatment has been completed, then we not only allow the normal silt to accumulate in the reservoir, without minimizing it through the required treatment but we also add to this load additional silt dislodged because of the treatment activity itself.
 - III. Protection of wildlife enjoins that we make provisions to give at least the animals of the submersion area the opportunity to be able to find some safe haven as the waters advance. Therefore, we cannot here apply blindly the rule of percentage of reservoir matching percentage of action. Before even an inch of land is submerged, the arrangements for the movement of wildlife must be fully complete at least from the submergence area.
 - IV. In fact, as I had already written to you in my letter of 17 January, 2001, the matter of what *pari passu* means had not been closed. I had quoted the following passage from the minutes of the 32nd meeting:

” The note on the time frame circulated by Dr Shekhar Singh was taken up for discussions. A copy of the note is placed at Annex-XXXII.Min.(2).

“Chairman desired to review the broad time frame on compliance and suggested that while discussing this, the views expressed by Dr Shekhar Singh in his note may also be kept in view”. (p 3)

The minutes go on to say that:

“Summing up the discussion on the time frame the Chairman clarified that all these issues were considered prior to according environmental clearance by the MoEF. He however, desired that a tabular statement on the lines discussed above may be prepared for a review, while preparing the statement the submergence would be the criteria for assessing the *pari passu* compliance in general. However, on the issue like flora-fauna, archeology etc. which are impacted by the submergence directly, steps for their mitigation have to be taken, prior to submergence. He further clarified that the sub-group accepted the spirit of the Dr Shekhar Singh’s letter”. (P 4, emphasis added).

However, till today, no such statement has been prepared and it is argued that the Supreme Court has determined that environmental activities are *pari passu* with construction work.

17. However, a close reading of the judgement does not bear this out. The court, in its directions has said that
“Even though there has been substantial compliance with the conditions imposed under the environment clearance the NCA and the Environment Sub-group will continue to monitor and ensure that all steps are taken not only to protect but to restore and improve the environment.” The operative word here is “substantial”. The court did not say total.
18. Besides, even this observation seems to be based on what was reported to them to be observations of the Environment Sub-Group:

“The status of compliance with respect to *pari passu* conditions indicated that in the year 1999, the reservoir level was 88.0 meter, the impoundment was 6881 hectares (19%) and the area where catchment treatment had been carried out was 128230 hectares being 71.56% of the total work required to be done. The Minutes of the Environment Sub-group as on 28th September, 1999 stated that catchment area treatment works were nearing completion in the states of Gujarat and Maharashtra. Though, there was some slippage in Madhya Pradesh, however, overall works by and large were on schedule. This clearly showed that the monitoring of the catchment treatment plan was being done by the Environmental Sub-group quite effectively.”

Therefore, the Sub-group continues to have the responsibility of ensuring compliance to the conditions of clearance and we cannot hide behind the Supreme Court judgement.

19. This brings us to the final point. I have raised this repeatedly in the Sub-Group. The conditions of clearance clearly state that all of the critically degraded catchment has to be treated and not just the “directly draining” one. This point was amply clarified by Mr. TN Seshan, the then Secretary (E&F), in his letter of clarification to the then Secretary of Water Resources when he said that “ Catchment Area Treatment should cover both submergence area as well as free draining catchment” (Letter of 4.2.1988).
20. I have also not found any mention in the Supreme Court order suggesting that the Supreme Court has relaxed this condition and now requires only the directly draining areas to be treated. The quotation from the judgement, given above, only repeats what the sub-group seems to have said.
21. As there is also no letter from the MoEF subsequently changing the conditions of clearance, the Sub-Group allowing construction to take place when only 20% of the required catchment area had been treated is not only a violation of the conditions of clearance but also a violation of the Supreme Court order, that has asked us to ensure that the construction is as per the conditions of clearance.

13-02-2002

2002: 22 February

o/c

22 February, 2002

Dear Shri Jayakrishnan,

Please refer to our telephonic conversation some ten days back regarding the minutes of the meeting of 8 February, 2002, of the NCA Sub-Group on the Environment. You had then agreed to send me the portion of the minutes that recorded the decision of the Sub-Group, as soon as it was drafted, to enable me to draft my note of dissent. This was necessitated because the wording of the decision and the conditions to be stipulated were not finalised during the meeting of the Sub-Group and you had indicated that these would be finalised by you later. I subsequently spoke to Shri V.Rajagopal, Jt. Secretary in your Ministry, on 18 February and reminded him.

However, I have not so far received a copy of the said minutes. As I need to finalise my note of dissent so that it could be included as a part of the final minutes, I would be grateful if the relevant portions of the draft minutes are sent to me at the earliest. I would also be grateful if the minutes are not finalised till my note of dissent has been received and included.

With regards,

Yours Sincerely,


Shekhar Singh

Shri P.V. Jayakrishnan, IAS
Secretary
Ministry of Environment and Forests
Government of India
New Delhi

2002: 20 March



भारतीय लोक प्रशासन संस्थान

इन्द्रप्रस्थ एस्टेट, रिंग रोड, नई दिल्ली-110 002 • दूरभाष : 331 7309 (9 लाइन)

INDIAN INSTITUTE OF PUBLIC ADMINISTRATION

INDRAPRASTHA ESTATE, RING ROAD, NEW DELHI-110 002

GRAMS : ADMNIST • FAX : 011-331-9954 • PHONES : 331-7309 (9 LINES)

20 March, 2002

Dear Shri Jayakrishnan,

Kindly refer to my letter of 22 February, 2002, copy enclosed for ready reference. Unfortunately, I have still not received the promised draft minutes of the NCA sub-group on environment meeting of 8th February.

I would be grateful if these draft minutes are sent to me at the earliest and, as earlier requested, if you could ensure that they are not finalised without the inclusion of my note of dissent.

With regards,

Yours Sincerely,

Shekhar Singh

Shri P.V. Jayakrishnan, IAS
Secretary
Ministry of Environment and Forests
Government of India
New Delhi
Encl: aa

2003: 15 July

Shekhar Singh
Honorary Director

15 July, 2003

Dear Shri Misra,

A copy of the Integrated Command Area Development Plan (Phase I) for the Sardar Sarovar Project was circulated by the NCA to members of the NCA Subgroup on the Environment, vide their letter of 23 May, 2003. I enclose some preliminary comments on the plan, for consideration of your Ministry and the Subgroup.

Considering the critical importance of a CAD plan and the advanced state of the Sardar Sarovar Project, I think it is important to subject this plan to a thorough scrutiny by concerned experts and institutions. I also think that at this late stage the complete CAD plan should have been submitted and approved before any request was made for further increase in the height of the dam. What we have at present is a plan covering only a small part of the command area.

I do hope you would request the concerned authorities to respond to the points I have raised well before the next meeting of the subgroup, so that their responses can be duly considered.

With regards,

Yours sincerely,

Shekhar Singh
Member, NCA Subgroup on the Environment

Shri K.C. Misra, IAS
Chairman, NCA Subgroup on the Environment
Secretary to the Government of India
Ministry of Environment and Forests
Paryavaran Bhawan
CGO Complex, Lodhi Road
New Delhi 110 003

Encl: aa

Comments on The Integrated Command Area Development Action Plan Phase I (Vol.- I) SSNNL: April 2003

Overall Comments

This plan should have been made years ago. The plan is being made in April 2003 when the irrigation is said to have commenced last year (2002) in an areas of about 100,000 ha. It would be important to study what the impact of the delay would be.

While a large number of studies have been carried out (from time to time, spread over many years and not at the planning stage), some of the major recommendations of these studies are overlooked. (For example, that irrigation should be avoided in the so called "supercritical area of the command" – in Zone 7. See *Critical Zones in Narmada Command Report for Zone 7 Extended Bhal Region*)¹. It would, therefore, be useful to get a comprehensive statement of the major recommendations of the earlier studies and their current status. Specifically, it is also not clear whether the recommendations made in the Wallingford Report (summary at annex 1) were actually acted upon. The SSNNL should give a detailed statement of the status of each recommendation.

Several of the recommendations of the study that call for review of the project design have been ignored and only mitigative measures are being talked about. (For eg. The WRI study on the *Impact of SSP Canal on Wild Ass* calls for cutting out one section of the canal totally – I think it is the Maliya Branch).

Chapter 7, relating to soil salinity and water logging, appears only to deal with the four regions of the command area between the Narmada River and the Mahi Doab. The larger remaining part of the command area, with nine regions (5 to 13), was studied by the CES Water Resources Development and Management Consultancy Private Limited, for the SSNNL. Their report, dated December 1992, states that a large proportion of the area under these nine regions would have TDS of over 3000 ppm and would, therefore, need special handling (p9.3-9.4). This CAD plan does not seem to have covered this large area and, as such is incomplete.

Specific Comments

1. On page 2/3 (bottom of 2 and top of three), it is said that this will be "*the first project in India to plan simultaneous implementation of surface waters delivery and rain water disposal system.*" Yet, every year from 1995 onwards, it has been reported that in the initial part of the command where the canal network is most advanced, in the monsoons there are large areas that suffer from waterlogging as the canals have cut off the drainage. This has resulted in large crop losses in these areas. This is a clear indication that the drainage network is *not* being built simultaneously. The actual status should be reported.
2. On the top of page four it says, "It is evident that very few projects in developing countries have so much data gathered on such a wide variety of subjects. The immediate task is to analyse and synthesise the results of the studies, identify mitigatory measures where necessary and plan monitoring activities for inclusion in action plan, is a challenge." The analysing and synthesizing of results of the studies

¹ I do not recollect the exact title, but it is something like this.

should have been done long ago and not at this late stage. As already mentioned, the impact of this delay ought to be determined.

3. Page 16 talks about change in the cropping pattern. Its assumptions seem to be quite at variance with the ground reality. One of the important likely developments is that large number of farmers will go for sugarcane. This is evident from large number of sugar factories that have come up or are planned in the area that is the first phase of command. These factories have come up all waiting for the SSP waters. Also, in the first phase, excess water is likely to be available. Despite this, sugar cane has not been mentioned on page 16. This needs to be explained.
4. Also, though tobacco is listed as a major crop in the command area, in *sardar Sarovar: Environmental Management*, (October 2000, NCA, page 95), it is not even mentioned in the CAD. This needs to be explained.
5. Similarly, there is no mention of tree crops and dry area crops in the CAD. These need also to be focussed on.
6. On page 20, the three classes of waters are set out. Class "C" – which is the excess water during the project build up is likely to cause serious problems by completely upsetting the very finely tuned, meticulously detailed, controlled water delivery that the project deems necessary to control the waterlogging and salinity problems, (See Water logging and Salinity section of the report.). Another problem will be that the use of these waters may be deemed by people to have created rights to this water for them. A more detailed and realistic plan is needed to meet with such eventualities.
7. Page 21 talks about services to be provided for removing surplus waters harmful to crops. This essentially is the provision of drainage. Bullet point "C" says that water pumped to control groundwater that is suitable quality and water recovered from surface drains would be utilised for irrigation. But what about water that is *not* of suitable quality? What about the highly saline waters? Elsewhere in the report (Page 22), there is mention of "disposal areas" but there is only a mention – no details are given. It should be pointed out that the problem of disposal of saline waters is one of the most vexed problems and even in irrigation systems that are a hundred years old (like Punjab) this is still a major issue. It is critical to get a detailed plan of how this water is going to be disposed of and assess it for its environmental and social impacts.
8. Page 23 mentions an overall irrigation efficiency of 65% which is unrealistically high. Has this been achieved in other similar projects. Details need to be provided, along with justifications.
9. Page 29, last but one para, says that the implementation of the action plan will go on *pari-passu* with the phase one irrigation area. Two issues – one raised in third point of Overall comments – what about certain aspects that require design changes and hence need to be implemented before the project commences. Second issue is whether on ground the work is going on *pari-passu* or not – this needs to be checked as there is doubt about this – see point 1 above.
10. Page 31 has the conclusion (Sec. 5.1 first line) – that "according to Studies conducted there will be no impacts on major fauna." This appears to be incorrect. For example, there is likely to be a huge impact on the wild ass, an endangered species. The various studies done on this aspect need to be summarised and their findings presented in support of this point.
11. Page 32 talks about livestock. One major possibility is that livestock would suffer as grazing land is likely to be lost over the years due to conversion to cultivation. Has this been assessed and planned for?
12. Page 48 talks about some of the areas that are at high risk of water logging and salinisation. In this page, as elsewhere in the report, the measures outlined to prevent these are very fine-tuned, elaborate, meticulous and needing huge coordination between large number of agencies. Page 48 says, "A very limited irrigation water

allowance would be permitted. Groundwater extraction, and part mixing of saline water, improved water management and agricultural practices, leaching of surface salts by flooding the surplus spill waters of Narmada, salinity resistant agriculture and continuous careful monitoring of the groundwater table and salinity status through observation wells piezometers etc. will constitute the multipronged strategy for tackling the problem areas." For one, it is unrealistic to expect such a strategy to work. One very crucial thing in making the strategy work is the full participation of the people and taking them into confidence, especially about the fact that their lands are at severe risk and that they will be given only very limited water supplies. *Has this has been done and have the people been taken into confidence?*

13. Another important pointer of the workability of these measures is given in the report itself. On page 102, it says, "The phase I area will have plentiful amounts of water available during the first stage of project development, such that there will be little or no incentive for development of conjunctive use by individual farmers and "worst-case" conditions for waterlogging might prevail."
14. Page 49 once again asserts that the construction of drainage system is going on concurrently with canals. This assertion has already been questioned above. It needs an explanation.
15. Pages 55-60 describe the large number of detailed measure that will be required to prevent waterlogging and salinisation. The workability of these measures has already been questioned above. Another issue that comes up through these pages is that it is expected by the SSP that in the regions 1-4 (first phase of command), medium rivers like Dhadhar and other streams will form the main drains. Now, it is acknowledged that these are today only seasonal rivers. What will happen when these dry rivers / streams carry the load of saline drainage waters in the non-monsoon months? This will have serious impacts on the areas through which they pass. Has this been studied and assessed? If so, the findings need to be disseminated.
16. The issue of water quality in the command (page 102-) is dealt with most cursorily. It appears from this that there is no plan to deal with this issue adequately. A far more professional plan needs to be developed.
17. An important aspect in water quality is that contamination of the waters is expected in the command area due to fertiliser and pesticide residues, salinity, irrigation return flows, industrial discharge etc. This is outlined on Page 102 in "Issues". Then, at the bottom of the page, it is stated "Projected demand is based on prevailing population estimated and accepted per capita requirements after subtracting all assured supply alternatives". What this means is that the SSP will assume that the village will use all the water resources available to it for drinking and domestic and cattle water needs, and SSP will supply only additional water. But these very water resources of the village are likely to be degraded due to contamination resulting directly or indirectly from the project. Yet, there is no cognisance of this problem. This needs to be studied and added.
18. Under "Mitigation" (Page 103), it is stated that "The mitigation plan would include guaranteeing minimum flow in rivers...". While this is a welcome recognition, it should be pointed out there is not a single river or dam project in Gujarat where this principle has been accepted. (Including in SSP). Now to ensure minimum flows in rivers would mean re-designing the operation if not the structures of virtually every river project in the state. How is this to be done? For example, the Action Plan expects that one of the medium rivers – Dhadhar – will play the most important role in drainage. One of the tributaries of Dhadhar is the Vishwamitri. On this river, near Baroda is a dam and reservoir – the Ajwa - which supplies water to the city. Due to this dam, the river is virtually dry below (including where it passes through the Baroda city). To now make sure that Vishwamitri will always have a minimum flow

is a welcome step – but will mean re-writing the operating rules of the Ajwa reservoir and importantly, releasing water from it into the river in all the non-monsoon months. Will the Baroda Corporation, which is already crying that they are water deficient, allow this? This section needs to be re-examined and made realistic.

19. In the section on Planning (Page 103), the Action Plan proposes that there will be "restricted use of water until proper provisions have been made for transport, treatment and disposal of downstream discharges". Some of these measures are listed. It is totally unrealistic to expect that it will be possible to impose such a restriction. Perhaps the SSNL can give more details on how it proposes to achieve the stated objectives.
20. The section on groundwater contamination, under "Mitigation", (Page 105) states: "Mitigation of groundwater pollution necessarily involves corrective measures in regions of critical concern, in the form of fertiliser and chemical use plans. The project authorities would provide research for, and inputs into, the plans". First of all, it will be virtually impossible to impose / implement a fertiliser and pesticide use plan in such a large area. Secondly, it is clear from the wordings that such a plan does not exist and will be made in the future – whereas the irrigation has already started. This needs detailed explanation.
21. In the section on Agricultural Chemical Use (Page 106), there is a statement (last line) "Multiple cropping is not likely so that pest problem will be reduced". But in the irrigation plans there is repeated talk about how the cropping will change from a single crop to multiple cropping. This contradiction needs to be resolved and a coherent plan needs to be made.

Findings of TATA-IWMI Research Project

The Tata-IWMI research team based at Anand, Gujarat has published results of a detailed survey of the first part of the SSP command area.² Their findings and conclusions:

- A. While Water Users Associations (WUAs) have been registered, few are actually functional and not many are prepared to collect water fees on behalf of SSP. None of the villages has built a distribution system; instead, thousands of diesel pumps are likely to get pressed into service to convey water through rubber pipes.
- B. One idea that is deeply ingrained in the minds of farmers is that SSP's need to supply water to them is greater and stronger than farmers' need to use the water.
- C. Farmers and management committee members [of the WUA] we met assigned no seriousness or urgency to SSP's insistence on the operating practises it intends to pursue....All in all, farmers and local notables take SSP and the government so lightly that they are totally nonchalant about SSP's new water policy...
- D. The most difficult challenge in establishing SSP's rules of the game is in ensuring that its writ runs in the command area.

These findings point out to the great difficulties in implementing the detailed mitigatory plans prepared by the SSP which require lot of control on the water supply and other farmer practises.

² Shah Tushaar 2002; *Framing the Rules of the Game: Preparing for the first Irrigation season in the Sardar Sarovar Project*; IWMI-Tata, Anand. Available at www.iwmi.org/iwmi-tata

*Annex 1 Summary of recommended actions:
Environmental Changes Downstream of Sardar
Sarovar Dam: Report EX 2750: March 1993*

Action	Timescale	Priority	Staff time (months)	Approximate costs*	Comments
Immediate					
1 Prepare plan to mitigate effects of initial dam closure	Minimal	High	Minimal	Minimal	Subject to availability of CWPRS results
2 Prepare plan to mitigate effects of surges from turbines	1 month	High	Local 1m	Rs 12 500	
Short-term					
3 Prepare and implement policy for monitoring and mitigating effects on fishermen	Ongoing	High	Local 3m per year	Rs 37 500yr ⁻¹ plus direct costs	Direct costs include all costs of rehabilitation
4 Data collection and Workshop on fish ecology	2 years	High	Local 12m	Rs 150 000	Possibly met by redefining CICFRI's tasks
5 Salinity monitoring at freshwater intakes	Ongoing	High	Minimal	Minimal	
6 Study of flood risk to determine if flood zoning needed	6-9 months	Lower	Local 12m	Rs 150 000	
7 Monitor reservoir limnology to warn of poor quality releases	Ongoing	Lower	Local 1m per year	(Rs 12 500yr ⁻¹)	No additional cost if part of wider limnological monitoring
8 Coordinated monitoring of water quality in river and estuary	Ongoing	High	local 6m per year, Intl ½m	Rs 75 000yr ⁻¹ US\$ 9 000	Cost might be reduced by rationalising existing monitoring and using water quality probes
Medium-term					
9 Study of low flow hydrology and integration of items 12 to 15 below	3 months	High	local 4m Intl 1m	Rs 50 000 US\$ 18 000	To be undertaken once Stage 2 operating policy for SSP established
10 Reconnaissance study of domestic water supplies close to river	2 months	Lower	local 3m	Rs 37 500	Study required once releases from SSP are cut for several weeks
11 Reconnaissance study of mosquito breeding in river channel	2 months	Lower	local 3m	Rs 37 500	As for 10
12 Water quality and salinity model of river and estuary and study of effluent disposal options	12 months	High	local 12m Intl 2m	Rs 150 000 US\$ 32 000 plus software costs	May include further modelling of estuary morphology, Depends on 8
13 Assessment of costs and benefits of providing compensatory flows	2 months	High	local 2m	Rs 25 000	Depends on results of 9, 12 and 14
14 Policy options to safeguard freshwater intakes	2 months	High	local 2m	Rs 25 000	Depends on results of 9 and 12
15 Prediction of ecological changes particularly to fisheries	2 months	Lower	local 3m Intl 1m	Rs 37 500 US\$ 18 000	Depends on results of 4, 9 and 12

* Assuming Rs 12 500 per month local and US\$ 18 000 per month international.

2004: 24 November

C 17A Munirka
New Delhi 110 067

24 November, 2004

Dear Shri Suresh Chand,

I would be grateful if, prior to the next meeting of the NCA sub-group on the environment, I could be sent the undermentioned information and documents.

1. Details of the wildlife sanctuaries planned in connection with the projects being looked at by the NCA sub-group, and details of the related displacement (no. of villages, no. of families, etc).
2. Similar details for both the Mathvad and Pati sanctuaries.
3. The detailed plan for the eco-tourism being planned at Kevadia, near the SSP dam site.
4. Impacts of the reported canal breaches.
5. Details of the compensatory afforestation and catchment area treatment done in the three states, giving village level details and monitoring reports, where available.
6. Current status of the Command Area Development Plan, with copies of any revisions and/or additions since the last version that was circulated to the Sub-group members, and details on any implementation on the ground.
7. Reports of any water logging in the SSP command, with details thereof.

With regards,

Yours sincerely

Shekhar Singh
Member, NCA Sub-group on the Environment

Shri Suresh Chand
Member Secretary
NCA Sub-group on the Environment
Narmada Control Authority
116-BG, Scheme No. 74-C
Vijay Nagar
Indore 452 010

Fax: 0731-2554333

2005: 24 June

C 17 A Munirka
New Delhi 110 067

24 June 2005

Dear Dr. Ghosh,

Kindly refer to the minutes of the Environment Sub-group of the Narmada Control Authority, circulated vide NCA letter No. Env-3(42)/2005/ of May 18 2005.

You will recollect that while discussing the action taken report on implementation of the environment safeguard measures (Item XLII-2(195) of the agenda), some of us had raised the point that though some reports had been submitted on the progress on catchment area treatment and compensatory afforestation in Gujarat, Maharashtra and Madhya Pradesh, there appeared to be no monitoring, as was required, by the sub-group. The NAC officials confirmed that the last field visit had been sometime in the mid 1990s.

You had, therefore, suggested, that aerial survey should be conducted before the monsoons. In fact, while agreeing with you, Prof Ramseshan had suggested that these should be with stereo vision and you had also agreed to this.

Unfortunately, I find no mention of this decision in the said minutes. As, by the time the next meeting is held and the minutes are considered, it might be too late, I would be grateful if you could immediately instruct the concerned authorities to carry out these aerial surveys so that their findings could be put up to the sub-group in the next meeting.

With regards,

Yours sincerely,

Shekhar Singh

Dr. Prodipto Ghosh
Chairman, NAC Environment Sub-group
Secretary to the Government of India
Ministry of Environment and Forests
Government of India
Paryavaran Bhawan, CGO Complex
Lodi Road
New Delhi 110 003

2010: 30 March

MOST IMMEDIATE

C 17A Munirka
New Delhi 110067
30 March 2010

Dear Shri Sharma,

I am writing to you in my capacity as a member of the NCA Environmental Sub-Group (ESG), which you chair.

2. In the 47th meeting of the ESG I had tried to make the point, relating to the proposal of the Government of Gujarat to raise the piers of the SSP to full reservoir level (FRL), that the issues at stake were two:

2.1. Irrespective of whether or not the new backwater calculations are legitimate and correct, would the construction of the piers to full reservoir level (FRL), as proposed by GoG, cause additional afflux/back water, and therefore additional submergence, over and above the level likely at 121.92 meters, which is the current level of the dam crest/pier?

2.2. Irrespective of whether or not there is additional afflux/backwater and the consequent additional submergence, are the stipulated environmental safeguards *pari passu* with the current level of the dam crest of 121.92 m?

3. With reference to 2.1 above, the Government of Gujarat and the Central Water Commission (CWC) have both stated that there will be additional afflux/backwater of 1.62 meters over the current level, with the raising of the piers. Please see the extract below from the "Minutes of the 5th Meeting of the Technical Sub-Committee to Review Backwater Levels for the Sardar Sarovar Project held on 4-8-2008 at New Delhi". Row 2 shows the increase of 1.62 m over current level (row 1). If we apply the new backwater calculations, the final levels will change (as in row 3) but the difference between backwater at 121.92 m and FRL will remain the same, namely 1.62 m.

B: C-V-2 Impact of raising of spillway piers and bridge on the afflux / backwater levels of Sardar Sarovar Project

Member (Civil), NCA informed that the Govt. of Gujarat had submitted the computation of afflux level for various conditions vide letter no. SSNNL/NMD/2006/5/ D: PH dated 15th Dec 2006 addressed to the Secretary, SSCAC, which is reproduced herein below:

Sr. No.	Sardar Sarovar Project		Afflux level in metre for 1 in 100 year flood of 24.5 lakh cusecs	Remark
	Crest level in metre	Pier raised upto in metre		
1	121.92 m	121.92 m	134.32 m	Without considering moderation effect at ISP
2	121.92 m	F.R.L.	135.95 m	Without considering moderation effect at ISP
3	121.92m	F.R.L.	133.65m	Considering moderation effect at ISP

4. The contention of the Government of Gujarat seems to be that even with this additional submergence of 1.62 m after the piers have been constructed, the level reached by the backwater, according to the new calculations, would be 133.65 m. This, they argue, is less than the level of 134.32 m that they thought it would reach even without the piers, as per the old calculation. Therefore, as the ESG sub-group had given clearance for 121.92 m dam height in 2005, which would according to the old calculation have caused the backwater level to reach 134.32 m, why should they not give clearance for the piers that will, with the new calculations, only result in 133.65 m backwater level.

5. Though on the face of it this argument may seem persuasive, in actual fact the ESG gave clearance, in the 41st meeting (January 2005), to the raising of the dam to 121.92 m. Nowhere in the agenda or the minutes was the back water figure of either 134.32 m (old calculation) or 132.03 (new calculation) mentioned or approved. Therefore, the clearance was only for the height of the dam, and not for the old or new backwater level.

6. In any case, coming to 2.2 above, additional works (like the raising of piers) requires, as per the Supreme Court's orders, fresh clearance, irrespective of the levels of backwater or submergence. This is also the opinion of the Attorney General, as given on 24-6-2009. Such clearance can only be given if the ESG and the MoEF are satisfied that the environmental conditions are being complied with and environmental safeguards are *pari passu* with the progress of works.

7. But are environmental safeguards *pari passu* with progress of work? This was also the question before the 46th meeting of the ESG (20 June 2008), and the ESG and MoEF, in order to determine the status of *pari passu* compliance, set up the Pandey Committee.

8. The Pandey Committee has, since then, given two interim reports and, in its second report (February 2010), has unequivocally stated that, based on its findings, the SSP is not in compliance with the *pari passu* requirement for most of the important parameters (CAT, CAD, Health, Fauna and Flora). For example, a summary of the CAT and CAD status, as found by the Pandey Committee (p 1-6, 21-26) is given below:

SSP at 121.92 m – 88% of the FRL, wanting clearance for FRL

	Condition of clearance	Status
CAT	Treatment to be completed ahead of reservoir filling (later on allowed by ESG to be	Total area to be treated – 5,25,000 ha. Total area treated – 2,36,000 ha (45%) Remaining area – 2,61,000 ha Total area treated since conditional clearance in 2005

	completed by 2011-12)	(2005-09) 15,281 ha – an average of 3056 ha per annum. Time required to treat the remaining catchment at the current rate of treatment: 85.4 years.
CAD	To be implemented <i>pari passu</i> with the work	CAD Plan submitted in October 2009 . Plan not yet approved and therefore implementation of approved plan not yet started. However, irrigation commenced in 2002/03 and work on canal network complete for phase I.

9. Therefore, either the ESG and the MoEF have to examine and reject, on merit, the Pandey Committee report, or hold up all further construction till the SSP has complied with the environmental conditions. Anything else would not only be a violation of the Supreme Court orders but also a violation of the mandate of the ESG and the conditions of clearance.

10. Also, considering that once permission is granted to construct the piers and bridge, the works on the dam would be complete and there would be no further need for the SSP to come to the ESG, especially as the closing and opening of the gates are an operational matter not legally requiring the project authorities to take permission of the ESG/MoEF, this is the last chance to ensure that all the environmental measures that were required to be taken up have actually been implemented.

11. I would be grateful if these points are considered and discussed in the next meeting of the ESG, scheduled for 1 April 2010.

With regards,

Yours sincerely,



Shekhar Singh

Shri Vijai Sharma, IAS
Secretary (E&F) and Chairman, ESG, Ministry of Environment and Forests
Paryavaran Bhawan, CGO Complex
Lodhi Road, New Delhi 110003

Copy to: JM Mauskar (AS)/ Nalini Bhat (Adv)/ S. Bhowmik (Addl. Dir.) MoEF; Pawan Kumar (Director) NCA

2010: 31 March

C 17A Munirka
New Delhi 110 067
31 March 2010

Dear Shri Sharma,

In the last (47th) meeting of the NCA ESG, the Government of Gujarat had stated that they had circulated the CAD plan for Sardar Sarovar Project to members of the ESG and that it should be considered for approval.

I seem to have received this report on 6 February 2010 and have, since, had a cursory look at it. My preliminary comments are given below.

First, this report only covers phase I of the command area, whereas the conditions of clearance require that the entire plan be ready and implemented prior to the start of irrigation. In this context, it might be noted that construction of canals for phase I seem to be completed and irrigation for most, if not all, of the area seems to have commenced.

In any case, I had given detailed comments, vide my letter of 15 July 2003 (copy enclosed for ready reference) on the earlier version of the draft CAD plan for phase I. Unfortunately, no response to that seems to have been received. I would, therefore, be grateful if a response to the points I had raised therein, in relation to the new draft plan, be given before the new draft is taken up for consideration.

With regards,

Yours sincerely,



Shekhar Singh

Shri Vijai Sharma, IAS
Secretary (E&F) and Chairman, ESG
Ministry of Environment and Forests, Paryavaran Bhawan
CGO Complex, Lodhi Road
New Delhi 110 003

CC: JM Mauskar (AS)/ Nalini Bhatt (Adv)/ S. Bhowmik (Addl. Dir.) MoEF; Pawan Kumar (Director) NCA

2010: 14 May

14 May 2010

Dear Shri Sharma,

Please find below my comments on the minutes of the 47th and 48th meeting of Environment Sub-Group of the Narmada Control Authority, chaired by you, that were circulated vide NCA letter dated 21 April. I would be grateful if the suggested corrections and additions are made in the said minutes.

Minutes of the 47th meeting

1. In paragraph 3 of page 7 (item No. XLVII-3(219)) it is stated that “Shri Shekhar Singh, Expert Member stated that more time need to be given to study the CAD report”. However, apart from this, I had also stated that the approval of the CAD report was not an item in the agenda of this meeting and, therefore, it cannot be taken up without any notice. I would be grateful if this sentence is added to the minutes.
2. I might here add, that this is factually correct, as the only mention of the GoG CAD plan in the agenda papers was as given below – which only talked about circulating the plan in order to “facilitate finalization”

“In pursuance of the decision taken in the meeting of Committee of Experts on CAD Plan held on 11th September, 2009, Govt. of Gujarat has circulated the CAD Plan submitted by Govt of Gujarat in August, 2008, along with comments of MoWR and Dr. A.K. Bhattacharya with para-wise compliance/ comments submitted by Govt of Gujarat amongst all Members of Environment Sub Group to facilitate finalization of the said CAD Plan by Environment Sub Group.” (P8).

3. In the last paragraph of page 7 it is said that the sub-group approved the CAD Plan. Actually, no such decision was taken and the only thing that happened was that the NCA officials disputed my statement (as it turns out, wrongly) and held that the approval of the GoG CAD plan was an item in the agenda. After that, no decision was expressed by the Chairman that the CAD plan had been approved by the sub-group.
4. Therefore, I would be grateful if either this paragraph is either deleted or changes to read that “No final decision on the GoG CAD Plan was taken by the Sub-group”.

Minutes of the 48th meeting

5. Though in the second last paragraph of page 3 it is mentioned that I had stated that I had already sent my views on the GoG CAD Plan and on various other issues to the Secretary

(E&F), my letters (copy of which was also sent in advance of the meeting to the Secretary of the Sub-Group and to various other officials of the MoEF, and confirmed to have been received prior to the meeting) have not been enclosed along with the minutes, despite this being the accepted practice.

6. In fact, along with the minutes of the 47th meeting there is annexed a letter purportedly handed over by the MD SSNL before or during the meeting, and therefore it is attached to the minutes. However, considering the letter describes events that took place during the meeting, it was clearly submitted after the meeting and should not ordinarily have been a part of the minutes. Though I have no objections to this letter being attached to the minutes, surely my letters which were received before the meeting and mentioned in the meeting should be annexed to the minutes.
7. I would, therefore, be grateful, if the two letters (attached for ready reference) are taken on record and annexed to the minutes of the 48th meeting.
8. The last sentence of the second last paragraph of page 3 states, referring to Member (E&R), “He, further, clarified that afflux/backwater levels corresponding to proposed construction to EL 121.92m was considered by the ESG in its 41st meeting while giving clearance for raising of the dam height to EL 121.92m”. Though the Member (E&R) did state this, it was in response to my assertion that while clearing 121.92m the Sub-group had not approved any backwater level. As it turns out, my statement was correct for no such approval exists in either the agenda papers or the minutes of the 41st meeting.
9. Nevertheless, to preserve the accuracy of the minutes,, I would be grateful if before the quoted sentence starting with “He, further, clarified that afflux/backwater levels...” the following sentence is added: “ Shri Shekhar Singh stated that as per the minutes and agenda of the 41st meeting of the ESG, while approving the raising of the dam height to 121.92m, the Sub-group had not approved any specific backwater level.”
10. I had also stated that: “When the subgroup approved the raising of dam height to 121.92m, in its 41st meeting, it approved it on the assessment of compliance of pari passu conditions for 110.64m, which was the height of the dam at that time. Even at this height, it maintained that there was not full compliance but took note of the assurances of the state government that the gaps would be immediately filled. Therefore, the clearance given in the 41st meeting was at best in relation to the backwater levels of 110.62 m and not of 121.92m. This makes the argument that new calculations have shown that backwater levels with additional submergence of 1.6 m would be below what was earlier thought of for 121.92m irrelevant to the issue”. I would be grateful if this paragraph is added after the second last paragraph of page 3.
11. Towards the conclusion of the meeting, when the Chairman summarised the intention to clear the proposed construction of piers and gates, I had requested that my dissent be recorded. However, that has not been done. Therefore, I would be grateful if The following sentence be added on page 7 after the second paragraph: “Shri Shekhar Singh

requested that his dissent be recorded with the decision of the Sub-group to allow the construction of the piers and gates.”

With regards,

Yours sincerely,



Shekhar Singh

Shri Vijai Sharma, IAS
Secretary to the Government of India
Ministry of Environment and Forests
Chairman, Environment Sub-Group of the Narmada Control Authority
Paryavaran Bhawan, CGO Complex
Lodi Road
New Delhi 110 003

Copy to: Copy to: JM Mauskar (AS)/ Nalini Bhat (Adv)/ S. Bhowmik (Addl. Dir.) MoEF; MK Sinha (Member), Pawan Kumar (Director) NCA

2013: 24 March

C1 17A DDA Flats,
Munirka
New Delhi 110067
March 24, 2013

To
Dr V Rajagoplan,
Chairman,
Environment Sub Group of Narmada Control Authority
& Secretary, Ministry of Environment and Forests
Government of India
New Delhi
envisect@nic.in, secy-moef@nic.in, sanjeev62@nic.in (PPS to Dr Rajagoplan)

Sub: Environment and social impacts of Garudeshwar weir as part of Sardar Sarovar Project on Narmada River

Dear Dr Rajagopalan,

I am writing to you in my capacity as a member of the Environmental Sub Group (ESG) of Narmada Control Authority (NCA) to draw your attention to the captioned issue. As you are aware, the ESG is mandated to look into environment aspects of all the components of the Sardar Sarovar Project.

Garudeshwar weir, to be built 12 km downstream of the SSP dam with a live storage capacity of 32.9 Million Cubic Meters is a component of the Sardar Sarovar Project, as was envisaged by the Narmada Water Disputes Tribunal Award of 1979. However, as far as I recollect, the environmental and social impacts of construction and operation of Garudeshwar weir (GW) have never been brought before the ESG of NCA.

In my estimation, the construction and operation of the GW will have significant social and environmental impacts, since it will entail a reservoir of about 12 km in length and unknown width and submergence area. The weir will have the potential of affecting the fisheries in the immediately surrounding areas and also of affecting the downstream river and its biodiversity, and other related aspects. This is especially because the weir will control the flow of water and silt downstream.

However, I do not know whether there has been a comprehensive assessment of the environmental and social impacts of the GW and its contribution to the cumulative impact of all the projects and activities in the area. And if there has been, I do not believe that this has been put up to the ESG for its approval.

Despite all this, I learn from the Annual Report of the Sardar Sarovar Construction Advisory Committee for the year 2011-12 (<http://sscac.gov.in/AnnualReport2011-12.pdf>, see particularly page 54-55) that it was decided in the 79th meeting of SSCAC on March 16, 2012 that: "EVALUATION OF BIDS FOR CONSTRUCTION OF GARUDESHWAR WEIR Committee decided to approve the recommendation of the PSC to accord approval of the revised cost estimates of Garudeshwar Weir amounting to Rs 438.18 crores .It further decided to award the work of construction of Garudeswar Weir as recommended by the PSC in its 103rd meeting to the lowest

bidder M/s. Rithwik Project Pvt. Ltd., Hyderabad amounting to Rs.299,43,36,391.50 (23.0884% below the estimate) for construction of Garudeshwar Weir subject to the condition that an additional performance guarantee for the difference equivalent to estimated amount and quoted amount i.e. Rs.7.0 Crores is to be obtained from the bidder prior to issuance of work order towards lower rate for gate works, which shall be released only after the completion of the entire gate work. The work to be taken up by GOG in compliance of all statutory clearances.

“The Committee accordingly directed GOG to take further follow up actions.”

I understand that subsequent to this decision, the work of construction of the GW has been started on the ground.

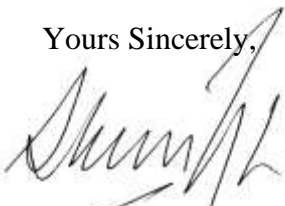
If this is correct, I find this problematic as ESG has not yet cleared the construction of this weir. Under the circumstance, I urge you to:

1. Ask the Government of Gujarat (GoG) to immediately stop construction of the GW. All other activities related to the GW should also be stopped.
2. Ask GOG/ SSNNL to submit the full feasibility report, environment and social impact assessment report including impacts during construction and operation of the GW to the ESG and seek clearance of the ESG for this work.
3. Ask GOG not to start any work in this regard till the ESG clears this.

I look forward to an early response.

With regards,

Yours Sincerely,



Shekhar Singh
Member, ESG of NCA
shekharsingh@gmail.com

2016: 28 August

IMMEDIATE

C 17A DDA Flats, Munirka
New Delhi 110067
28th August 2016
shekharsingh@gmail.com

Dear Shri Jha,

I write to you in my capacity as a member of the Environment Sub-Group of the Narmada Control Authority, which you chair. As you know, this subgroup is scheduled to meet on 31st August 2016, and the agenda for the 49th meeting was received by me a few days back. In this connection I would like to urgently bring to your notice the following points.

1. Agenda item XLIX-1(225) seeks confirmation of minutes of the 47th and 48th meetings, held over six years back, and states that "As no comments/observations have been received from any of the Member, the same may be confirmed by the Sub-Group". However, in my capacity as a member I had sent comments to the then chairman on minutes of both the meetings, soon after receiving them, on 14th May, 2010 (copy enclosed for ready reference). I would, therefore be grateful if the changes and additions suggested by me are incorporated into the minutes before they are confirmed.
2. The mandate given to the ESG by the Supreme Court, vide their order of 18th October 2000, was: *"The Environment Sub-group under the Secretary, Ministry of Environment & Forests, Government of India will consider and give, at each stage of the construction of the dam, environment clearance before further construction beyond 90 meters can be undertaken."* Therefore, clearly, the responsibility for determining whether the environmental conditions have been met with is that of the sub-group. In the past the sub-group, and the MoEF had been undertaking independent assessments of the compliance statement through expert committees and field visits. These were undertaken by MoEF experts and other independent experts. One such, perhaps the last such, was set up by the MoEF under the chairmanship of Dr Devendra Pandey, and finalized its report in January 2011. In that report they had determined that for all the environmental conditions the compliance was far behind the progress in the construction of the dam, in terms of the *pari passu* clause. Therefore, if any view is to be taken by the sub-group on the current status of compliance and its correlation to the construction progress, a fresh assessment needs to be carried out by a group of independent experts, set up by the MoEF&CC, which works in consultation with ESG members and other stakeholders. Institutions like the Forest Survey of India and the Wildlife Institute of India, among others, could also be involved.
3. The need for such an independent review, apart from being a part of the ESG and MoEF&CC mandate, is also necessitated by the fact that there are a lot of discrepancies in the data being reported by the NAC. For example, on their website http://nca.gov.in/forms_pdf/Status_Report_Dec_2015.pdf accessed today, the December 2015 "STATUS REPORT ON SARDAR SAROVAR PROJECT" reports that only 41% of the catchment area treatment for phase II had been completed (table on page 8, copy enclosed for ready reference). However, in the agenda papers of August 2016 it is claimed (page 7)

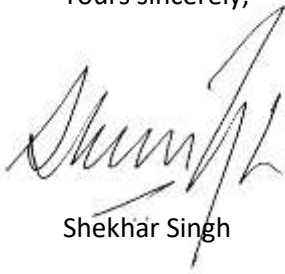
that 85.45% has been achieved. Surely CAT coverage could not have more than doubled in the last six months!

4. Could I also take this opportunity to bring to your notice that I had written in my capacity as member of the ESG to the chairman, ESG, on 24th March, 2013, raising various concerns about the violation of the *pari passu* compliance clause. I enclose a copy for ready reference. Unfortunately, I have not yet received a response.

I would, as such, be very grateful if you could take into consideration the various points raised by me in your capacity as chairman of the ESG and take appropriate decisions in the 49th meeting.

With regards,

Yours sincerely,



Shekhar Singh

To

Shri Ajay Narayan Jha
Secretary to the Government of India
Ministry of Environment, Forests and Climate Change
Indira Paryavaran Bhawan
Jor Bagh Road, New Delhi, 110003
secy-moef@nic.in
+91 11 24695270 (Fax)

Enclosures:

1. Letter of 14th May 2010
2. Table from NAC website
3. Letter of 24th March 2013

ENCLOSURES

C 17A Munirka
New Delhi 110067

14 May 2010

Dear Shri Sharma,

Please find below my comments on the minutes of the 47th and 48th meeting of Environment Sub-Group of the Narmada Control Authority, chaired by you, that were circulated vide NCA letter dated 21 April. I would be grateful if the suggested corrections and additions are made in the said minutes.

Minutes of the 47th meeting

1. In paragraph 3 of page 7 (item No. XLVII-3(219) it is stated that “Shri Shekhar Singh, Expert Member stated that more time need to be given to study the CAD report”. However, apart from this, I had also stated that the approval of the CAD report was not an item in the agenda of this meeting and, therefore, it cannot be taken up without any notice. I would be grateful if this sentence is added to the minutes.
2. I might here add, that this is factually correct, as the only mention of the GoG CAD plan in the agenda papers was as given below – which only talked about circulating the plan in order to “facilitate finalization”

“In pursuance of the decision taken in the meeting of Committee of Experts on CAD Plan held on 11th September, 2009, Govt. of Gujarat has circulated the CAD Plan submitted by Govt of Gujarat in August, 2008, along with comments of MoWR and Dr. A.K. Bhattacharya with para-wise compliance/ comments submitted by Govt of Gujarat amongst all Members of Environment Sub Group to facilitate finalization of the said CAD Plan by Environment Sub Group.” (P8).

3. In the last paragraph of page 7 it is said that the sub-group approved the CAD Plan. Actually, no such decision was taken and the only thing that happened was that the NCA officials disputed my statement (as it turns out, wrongly) and held that the approval of the GoG CAD plan was an item in the agenda. After that, no decision was expressed by the Chairman that the CAD plan had been approved by the sub-group.
4. Therefore, I would be grateful if either this paragraph is either deleted or changes to read that “No final decision on the GoG CAD Plan was taken by the Sub-group”.

Minutes of the 48th meeting

5. Though in the second last paragraph of page 3 it is mentioned that I had stated that I had already sent my views on the GoG CAD Plan and on various other issues to the Secretary (E&F),

my letters (copy of which was also sent in advance of the meeting to the Secretary of the Sub-Group and to various other officials of the MoEF, and confirmed to have been received prior to the meeting) have not been enclosed along with the minutes, despite this being the accepted practice.

6. In fact, along with the minutes of the 47th meeting there is annexed a letter purportedly handed over by the MD SSNL before or during the meeting, and therefore it is attached to the minutes, However, considering the letter describes events that took place during the meeting, it was clearly submitted after the meeting and should not ordinarily have been a part of the minutes. Though I have no objections to this letter being attached to the minutes, surely my letters which were received before the meeting and mentioned in the meeting should be annexed to the minutes.
7. I would, therefore, be grateful, if the two letters (attached for ready reference) are taken on record and annexed to the minutes of the 48th meeting.
8. The last sentence of the second last paragraph of page 3 states, referring to Member (E&R), “He, further, clarified that afflux/backwater levels corresponding to proposed construction to EL 121.92m was considered by the ESG in its 41st meeting while giving clearance for raising of the dam height to EL 121.92m”. Though the Member (E&R) did state this, it was in response to my assertion that while clearing 121.92m the Sub-group had not approved any backwater level. As it turns out, my statement was correct for no such approval exists in either the agenda papers or the minutes of the 41st meeting.
9. Nevertheless, to preserve the accuracy of the minutes,, I would be grateful if before the quoted sentence starting with “He, further, clarified that afflux/backwater levels...” the following sentence is added: “ Shri Shekhar Singh stated that as per the minutes and agenda of the 41st meeting of the ESG, while approving the raising of the dam height to 121.92m, the Sub-group had not approved any specific backwater level.”
10. I had also stated that: “When the subgroup approved the raising of dam height to 121.92m, in its 41st meeting, it approved it on the assessment of compliance of pari passu conditions for 110.64m, which was the height of the dam at that time. Even at this height, it maintained that there was not full compliance but took note of the assurances of the state government that the gaps would be immediately filled. Therefore, the clearance given in the 41st meeting was at best in relation to the backwater levels of 110.62 m and not of 121.92m. This makes the argument that new calculations have shown that backwater levels with additional submergence of 1.6 m would be below what was earlier thought of for 121.92m irrelevant to the issue”. I would be grateful if this paragraph is added after the second last paragraph of page 3.

11. Towards the conclusion of the meeting, when the Chairman summarised the intention to clear the proposed construction of piers and gates, I had requested that my dissent be recorded. However, that has not been done. Therefore, I would be grateful if The following sentence be added on page 7 after the second paragraph: "Shri Shekhar Singh requested that his dissent be recorded with the decision of the Sub-group to allow the construction of the piers and gates."

With regards,

Yours sincerely,



Shekhar Singh

Shri Vijai Sharma, IAS
Secretary to the Government of India
Ministry of Environment and Forests
Chairman, Environment Sub-Group of the Narmada Control Authority
Paryavaran Bhawan, CGO Complex
Lodi Road
New Delhi 110 003

Copy to: Copy to: JM Mauskar (AS)/ Nalini Bhat (Adv)/ S. Bhowmik (Addl. Dir.) MoEF; MK Sinha (Member), Pawan Kumar (Director) NCA

CAT TABLE FROM NCA WEBSITE

(DECEMBER 2015)

(I) CATCHMENT AREA TREATMENT

(Figure in Ha) Sl. No.	Description	Madhya Pradesh	Gujarat	Maharashtra	Total
1	Catchment below ISP	2248600	30230	163611	2442441
2	Very High and High degraded area as identified by AISSLUI	433740	30230	100993	564963
3	Phase I area: Directly draining Very High and High degraded area	115622	29730	24298	169650
4	Phase I area: Target (after deducting untreatable area on account of being rocky/steep slope, etc.	110997	29157	23295	163449
5	Phase I area: Achievement	110997	29157	23295*	163449
6	Phase I area: Achievement in %	100%	100%	100%	100%
7	Phase II area*: Freely draining Very High and High degraded area	318118	500	77568	396186
8	Phase II area*: Target (after deducting untreatable area on account of being rocky/steep slope, etc.)	262165	500	43125	305790
9	Phase II area*: Achievement	92792	500	33578	126870
10	Phase II area*: Achievement in %	35%	100%	78%	41%

C1 17A DDA Flats,
Munirka
New Delhi 110067
March 24, 2013

To
Dr V Rajagoplan,
Chairman,
Environment Sub Group of Narmada Control Authority
& Secretary, Ministry of Environment and Forests
Government of India
New Delhi
envisect@nic.in, secy-moef@nic.in, sanjeev62@nic.in (PPS to Dr Rajagoplan)

Sub: Environment and social impacts of Garudeshwar weir as part of Sardar Sarovar Project on Narmada River

Dear Dr Rajagopalan,

I am writing to you in my capacity as a member of the Environmental Sub Group (ESG) of Narmada Control Authority (NCA) to draw your attention to the captioned issue. As you are aware, the ESG is mandated to look into environment aspects of all the components of the Sardar Sarovar Project.

Garudeshwar weir, to be built 12 km downstream of the SSP dam with a live storage capacity of 32.9 Million Cubic Meters is a component of the Sardar Sarovar Project, as was envisaged by the Narmada Water Disputes Tribunal Award of 1979. However, as far as I recollect, the environmental and social impacts of construction and operation of Garudeshwar weir (GW) have never been brought before the ESG of NCA.

In my estimation, the construction and operation of the GW will have significant social and environmental impacts, since it will entail a reservoir of about 12 km in length and unknown width and submergence area. The weir will have the potential of affecting the fisheries in the immediately surrounding areas and also of affecting the downstream river and its biodiversity, and other related aspects. This is especially because the weir will control the flow of water and silt downstream.

However, I do not know whether there has been a comprehensive assessment of the environmental and social impacts of the GW and its contribution to the cumulative impact of all the projects and activities in the area. And if there has been, I do not believe that this has been put up to the ESG for its approval.

Despite all this, I learn from the Annual Report of the Sardar Sarovar Construction Advisory Committee for the year 2011-12 (<http://sscac.gov.in/AnnualReport2011-12.pdf>, see particularly page 54-55) that it was decided in the 79th meeting of SSCAC on March 16, 2012 that: "EVALUATION OF BIDS FOR CONSTRUCTION OF GARUDESHWAR WEIR Committee decided to approve the recommendation of the PSC to accord approval of the revised cost estimates of Garudeshwar Weir amounting to Rs 438.18 crores .It further decided to award the work of construction of Garudeswar Weir as recommended by the PSC in its 103rd meeting to the lowest bidder M/s. Rithwik Project Pvt. Ltd., Hyderabad amounting to Rs.299,43,36,391.50 (23.0884% below the estimate) for construction of Garudeshwar Weir subject to the condition that an additional performance guarantee for the difference equivalent to estimated amount and quoted amount i.e. Rs.7.0 Crores is to be obtained from the bidder prior to issuance of

work order towards lower rate for gate works, which shall be released only after the completion of the entire gate work. The work to be taken up by GOG in compliance of all statutory clearances.

“The Committee accordingly directed GOG to take further follow up actions.”

I understand that subsequent to this decision, the work of construction of the GW has been started on the ground.

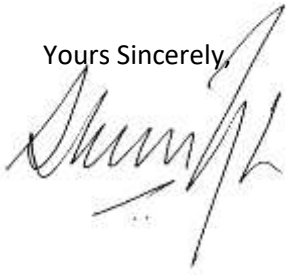
If this is correct, I find this problematic as ESG has not yet cleared the construction of this weir. Under the circumstance, I urge you to:

1. Ask the Government of Gujarat (GoG) to immediately stop construction of the GW. All other activities related to the GW should also be stopped.
2. Ask GOG/ SSNNL to submit the full feasibility report, environment and social impact assessment report including impacts during construction and operation of the GW to the ESG and seek clearance of the ESG for this work.
3. Ask GOG not to start any work in this regard till the ESG clears this.

I look forward to an early response.

With regards,

Yours Sincerely,

A handwritten signature in black ink, appearing to read 'Shekhar Singh', with a stylized flourish at the end.

Shekhar Singh
Member, ESG of NCA
shekharsingh@gmail.com

2016: 9 November

C 17A DDA Flats
Munirka
New Delhi 110067

9th November 2016

Dear Shri Jha,

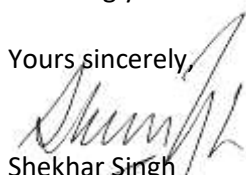
Kindly refer to letter No. NCA/Env./49th/2016/ dated 17th October, 2016, from Member (Environment & Rehabilitation) and Member Secretary, Environment Sub-Group, Narmada Control Authority, enclosing the draft minutes of the 49th meeting of the Sub-Group.

Unfortunately, there appear to be many omissions and inaccuracies in the draft minutes and I would request you as Chairman of the sub-group to kindly direct that the minutes be corrected before being issued. The omissions and inaccuracies are listed in the enclosure.

Also, as these are draft minutes which are subject to confirmation, they should be so titled. Otherwise, these incomplete and inaccurate minutes would be used in various fora as the final minutes, especially given the infrequency of the meetings of the sub-group.

Thanking you and with regards,

Yours sincerely,



Shekhar Singh
Member, ESG of NCA

Shri Ajay Narayan Jha, Secretary, Ministry of Environment, Forests & Climate Change, Government of India, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi 110003

Encl: aa (9 pages)

Copy with enclosures to:

1. Shri Shashi Shekhar, Chairman, NCA and Secretary to the Government of India, Ministry of Water Resources, Shram Shakti Bhawan, Rafi Marg, New Delhi 110001
2. Shri JN Singh, Chief Secretary, Government of Gujarat, Sardar Bhawan, Block No. 1, 3rd Floor, Sachivalaya, Gandhinagar, Gujarat 382020 csguj@gujarat.gov.in
3. Shri Swadhin Kshatriya, Chief Secretary, Government of Maharashtra, Mantralaya, Mumbai 400 032. Email : cs@maharashtra.gov.in
4. Shri Basant Pratap Singh, Chief Secretary, Government of Madhya Pradesh, Vallabh Bhawan, Bhopal 462003 cs-madhyapradesh@nin.in
5. Shri Om Prakash Meena, Chief Secretary, Government of Rajasthan, Secretariat, Jaipur cs-rajasthan@nic.in
6. Dr. Afroz Ahmad, Member (Environment and Rehabilitation) and Member Secretary, Environment Sub-Group, Narmada Control Authority, Narmada Sadan, BG Sector, Scheme No. 74, Vijay Nagar, Indore 452010, MP
7. Shri Gyanesh Bharti, Joint Secretary, Ministry of Environment, Forests, and Climate Change, Government of India, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi 110003

Comments on the draft minutes of minutes of the 49th meeting of the Environment Sub-Group of the Narmada Control Authority, by Shekhar Singh

Item No. XLIX – 1 (225)

Pease replace paragraph 4 by:

“Shekhar Singh pointed out that as the chairman and most of the members had changed since the 47th and 48th meetings of the ESG held over six years ago, it might not be possible to determine the accuracy of the comments made on the draft minutes vide his letter of 14th May, 2010. Therefore, Shekhar Singh requested that his letter may kindly be appended to the minutes of the 47th and 48th meetings and they be reissued accordingly. The Chairman agreed to this suggestion.”

Item No. XLIX – 2 (226)

The current minutes state:

“The Sub-Group noted the status of compliance ass contained in the Agenda at Page – 2-4 and expressed satisfaction.”

However, this is not correct. In my letter of 28th August 2016 to the Chairman, ESG (copy annexed for ready reference) I had, in paras 2 and 3, raised various issues regarding the review of the status of compliance. These were also subsequently raised by me at the meeting of the ESG where, among other things:

1. I stressed the need to have an independent review of the various aspects of compliance. This was agreed to by the Chairperson, ESG, who also stated that the independent expert body to review compliance would be set up by the Ministry of Environment, Forests, & Climate Change and, in order to be truly independent, would not include members of the ESG.
2. I had also pointed out the discrepancies between the data, as depicted in the ESG agenda papers and as available on the website of the NCA.
3. I had also pointed out discrepancies within the data presented in the agenda papers. For example, I had pointed out that in the table on page 7 of the agenda papers, the total target for Catchment Area Treatment (CAT) was shown (row 8) as 305790 ha., and the current achievement (row 9) as 207081 ha . This was shown (row 10) to be an achievement of 85.45 %, while in actual fact 207081 ha. Is only 67.7 % of 305790 ha.
4. For these various reasons, I had suggested that the sub-group could only take a view on the status of compliance once independent assessment has been completed and the various discrepancies in the data reconciled.

Therefore, it is manifestly false to state in the draft minutes that “The Sub-Group noted the status of compliance ass contained in the Agenda at Page – 2-4 and expressed satisfaction.”

I would be grateful if the suggested changes are made in the draft minutes before they are approved/finalised. At the very least, my remarks should be faithfully recorded as a part of the minutes.

Annexure

IMMEDIATE

C 17A DDA Flats, Munirka
New Delhi 110067
28th August 2016
shekharsingh@gmail.com

Dear Shri Jha,

I write to you in my capacity as a member of the Environment Sub-Group of the Narmada Control Authority, which you chair. As you know, this subgroup is scheduled to meet on 31st August 2016, and the agenda for the 49th meeting was received by me a few days back. In this connection I would like to urgently bring to your notice the following points.

1. Agenda item XLIX-1(225) seeks confirmation of minutes of the 47th and 48th meetings, held over six years back, and states that "As no comments/observations have been received from any of the Member, the same may be confirmed by the Sub-Group". However, in my capacity as a member I had sent comments to the then chairman on minutes of both the meetings, soon after receiving them, on 14th May, 2010 (copy enclosed for ready reference). I would, therefore be grateful if the changes and additions suggested by me are incorporated into the minutes before they are confirmed.
2. The mandate given to the ESG by the Supreme Court, vide their order of 18th October 2000, was: *"The Environment Sub-group under the Secretary, Ministry of Environment & Forests, Government of India will consider and give, at each stage of the construction of the dam, environment clearance before further construction beyond 90 meters can be undertaken."* Therefore, clearly, the responsibility for determining whether the environmental conditions have been met with is that of the sub-group. In the past the sub-group, and the MoEF had been undertaking independent assessments of the compliance statement through expert committees and field visits. These were undertaken by MoEF experts and other independent experts. One such, perhaps the last such, was set up by the MoEF under the chairmanship of Dr Devendra Pandey, and finalized its report in January 2011. In that report they had determined that for all the environmental conditions the compliance was far behind the progress in the construction of the dam, in terms of the *pari passu* clause. Therefore, if any view is to be taken by the sub-group on the current status of compliance and its correlation to the construction progress, a fresh assessment needs to be carried out by a group of independent experts, set up by the MoEF&CC, which works in consultation with ESG members and other stakeholders. Institutions like the Forest Survey of India and the Wildlife Institute of India, among others, could also be involved.
3. The need for such an independent review, apart from being a part of the ESG and MoEF&CC mandate, is also necessitated by the fact that there are a lot of discrepancies in the data being reported by the NAC. For example, on their website http://nca.gov.in/forms_pdf/Status_Report_Dec_2015.pdf accessed today, the December 2015 "STATUS REPORT ON SARDAR SAROVAR PROJECT" reports that only 41% of the catchment area treatment for phase II had been completed (table on page 8, copy enclosed for ready reference). However, in the agenda papers of August 2016 it is claimed (page 7) that 85.45% has been achieved. Surely CAT coverage could not have more than doubled in the last six months!

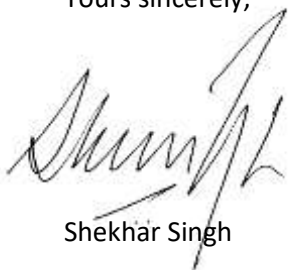
4. Could I also take this opportunity to bring to your notice that I had written in my capacity as member of the ESG to the chairman, ESG, on 24th March, 2013, raising various concerns about the violation of the *pari passu* compliance clause. I enclose a copy for ready reference.

Unfortunately, I have not yet received a response.

I would, as such, be very grateful if you could take into consideration the various points raised by me in your capacity as chairman of the ESG and take appropriate decisions in the 49th meeting.

With regards,

Yours sincerely,



Shekhar Singh

To

Shri Ajay Narayan Jha
Secretary to the Government of India
Ministry of Environment, Forests and Climate Change
Indira Paryavaran Bhawan
Jor Bagh Road, New Delhi, 110003
secy-moef@nic.in
+91 11 24695270 (Fax)

Enclosures:

1. Letter of 14th May 2010
2. Table from NAC website
3. Letter of 24th March 2013

ENCLOSURES

C 17A Munirka
New Delhi 110067

14 May 2010

Dear Shri Sharma,

Please find below my comments on the minutes of the 47th and 48th meeting of Environment Sub-Group of the Narmada Control Authority, chaired by you, that were circulated vide NCA letter dated 21 April. I would be grateful if the suggested corrections and additions are made in the said minutes.

Minutes of the 47th meeting

1. In paragraph 3 of page 7 (item No. XLVII-3(219) it is stated that "Shri Shekhar Singh, Expert Member stated that more time need to be given to study the CAD report". However, apart from this, I had also stated that the approval of the CAD report was not an item in the agenda of this meeting and, therefore, it cannot be taken up without any notice. I would be grateful if this sentence is added to the minutes.
2. I might here add, that this is factually correct, as the only mention of the GoG CAD plan in the agenda papers was as given below – which only talked about circulating the plan in order to "facilitate finalization"

"In pursuance of the decision taken in the meeting of Committee of Experts on CAD Plan held on 11th September, 2009, Govt. of Gujarat has circulated the CAD Plan submitted by Govt of Gujarat in August, 2008, along with comments of MoWR and Dr. A.K. Bhattacharya with para-wise compliance/ comments submitted by Govt of Gujarat amongst all Members of Environment Sub Group to facilitate finalization of the said CAD Plan by Environment Sub Group." (P8).

3. In the last paragraph of page 7 it is said that the sub-group approved the CAD Plan. Actually, no such decision was taken and the only thing that happened was that the NCA officials disputed my statement (as it turns out, wrongly) and held that the approval of the GoG CAD plan was an item in the agenda. After that, no decision was expressed by the Chairman that the CAD plan had been approved by the sub-group.
4. Therefore, I would be grateful if either this paragraph is either deleted or changes to read that "No final decision on the GoG CAD Plan was taken by the Sub-group".

Minutes of the 48th meeting

5. Though in the second last paragraph of page 3 it is mentioned that I had stated that I had already sent my views on the GoG CAD Plan and on various other issues to the Secretary (E&F), my letters (copy of which was also sent in advance of the meeting to the Secretary of the Sub-Group and to various other officials of the MoEF, and confirmed to have been received prior to the meeting) have not been enclosed along with the minutes, despite this being the accepted practice.

6. In fact, along with the minutes of the 47th meeting there is annexed a letter purportedly handed over by the MD SSNL before or during the meeting, and therefore it is attached to the minutes, However, considering the letter describes events that took place during the meeting, it was clearly submitted after the meeting and should not ordinarily have been a part of the minutes. Though I have no objections to this letter being attached to the minutes, surely my letters which were received before the meeting and mentioned in the meeting should be annexed to the minutes.
7. I would, therefore, be grateful, if the two letters (attached for ready reference) are taken on record and annexed to the minutes of the 48th meeting.
8. The last sentence of the second last paragraph of page 3 states, referring to Member (E&R), "He, further, clarified that afflux/backwater levels corresponding to proposed construction to EL 121.92m was considered by the ESG in its 41st meeting while giving clearance for raising of the dam height to EL 121.92m". Though the Member (E&R) did state this, it was in response to my assertion that while clearing 121.92m the Sub-group had not approved any backwater level. As it turns out, my statement was correct for no such approval exists in either the agenda papers or the minutes of the 41st meeting.
9. Nevertheless, to preserve the accuracy of the minutes,, I would be grateful if before the quoted sentence starting with "He, further, clarified that afflux/backwater levels..." the following sentence is added: " Shri Shekhar Singh stated that as per the minutes and agenda of the 41st meeting of the ESG, while approving the raising of the dam height to 121.92m, the Sub-group had not approved any specific backwater level."
10. I had also stated that: "When the subgroup approved the raising of dam height to 121.92m, in its 41st meeting, it approved it on the assessment of compliance of pari passu conditions for 110.64m, which was the height of the dam at that time. Even at this height, it maintained that there was not full compliance but took note of the assurances of the state government that the gaps would be immediately filled. Therefore, the clearance given in the 41st meeting was at best in relation to the backwater levels of 110.62 m and not of 121.92m. This makes the argument that new calculations have shown that backwater levels with additional submergence of 1.6 m would be below what was earlier thought of for 121.92m irrelevant to the issue". I would be grateful if this paragraph is added after the second last paragraph of page 3.
11. Towards the conclusion of the meeting, when the Chairman summarised the intention to clear the proposed construction of piers and gates, I had requested that my dissent be recorded. However, that has not been done. Therefore, I would be grateful if The following sentence be added on page 7 after the second paragraph: "Shri Shekhar Singh requested that his dissent be recorded with the decision of the Sub-group to allow the construction of the piers and gates."

With regards,

Yours sincerely,



Shekhar Singh

Shri Vijai Sharma, IAS
Secretary to the Government of India
Ministry of Environment and Forests
Chairman, Environment Sub-Group of the Narmada Control Authority
Paryavaran Bhawan, CGO Complex
Lodi Road
New Delhi 110 003

Copy to: Copy to: JM Mauskar (AS)/ Nalini Bhat (Adv)/ S. Bhowmik (Addl. Dir.) MoEF; MK Sinha
(Member), Pawan Kumar (Director) NCA

CAT TABLE FROM NCA WEBSITE
(DECEMBER 2015)

(I) CATCHMENT AREA TREATMENT

(Figure in Ha) Sl. No.	Description	Madhya Pradesh	Gujarat	Mahara-shtra	Total
1	Catchment below ISP	2248600	30230	163611	2442441
2	Very High and High degraded area as identified by AISSLUI	433740	30230	100993	564963
3	Phase I area: Directly draining Very High and High degraded area	115622	29730	24298	169650
4	Phase I area: Target (after deducting untreatable area on account of being rocky/steep slope, etc.	110997	29157	23295	163449
5	Phase I area: Achievement	110997	29157	23295*	163449
6	Phase I area: Achievement in %	100%	100%	100%	100%
7	Phase II area*: Freely draining Very High and High degraded area	318118	500	77568	396186
8	Phase II area*: Target (after deducting untreatable area on account of being rocky/steep slope, etc.)	262165	500	43125	305790
9	Phase II area*: Achievement	92792	500	33578	126870
10	Phase II area*: Achievement in %	35%	100%	78%	41%

C1 17A DDA Flats,
Munirka
New Delhi 110067
March 24, 2013

To
Dr V Rajagoplan,
Chairman,
Environment Sub Group of Narmada Control Authority
& Secretary, Ministry of Environment and Forests
Government of India
New Delhi
envisect@nic.in, secy-moef@nic.in, sanjeev62@nic.in (PPS to Dr Rajagoplan)

Sub: Environment and social impacts of Garudeshwar weir as part of Sardar Sarovar Project on Narmada River

Dear Dr Rajagopalan,

I am writing to you in my capacity as a member of the Environmental Sub Group (ESG) of Narmada Control Authority (NCA) to draw your attention to the captioned issue. As you are aware, the ESG is mandated to look into environment aspects of all the components of the Sardar Sarovar Project.

Garudeshwar weir, to be built 12 km downstream of the SSP dam with a live storage capacity of 32.9 Million Cubic Meters is a component of the Sardar Sarovar Project, as was envisaged by the Narmada Water Disputes Tribunal Award of 1979. However, as far as I recollect, the environmental and social impacts of construction and operation of Garudeshwar weir (GW) have never been brought before the ESG of NCA.

In my estimation, the construction and operation of the GW will have significant social and environmental impacts, since it will entail a reservoir of about 12 km in length and unknown width and submergence area. The weir will have the potential of affecting the fisheries in the immediately surrounding areas and also of affecting the downstream river and its biodiversity, and other related aspects. This is especially because the weir will control the flow of water and silt downstream.

However, I do not know whether there has been a comprehensive assessment of the environmental and social impacts of the GW and its contribution to the cumulative impact of all the projects and activities in the area. And if there has been, I do not believe that this has been put up to the ESG for its approval.

Despite all this, I learn from the Annual Report of the Sardar Sarovar Construction Advisory Committee for the year 2011-12 (<http://sscac.gov.in/AnnualReport2011-12.pdf>, see particularly page 54-55) that it was decided in the 79th meeting of SSCAC on March 16, 2012 that: "EVALUATION OF BIDS FOR CONSTRUCTION OF GARUDESHWAR WEIR Committee decided to approve the recommendation of the PSC to accord approval of the revised cost estimates of Garudeshwar Weir amounting to Rs 438.18 crores .It further decided to award the work of construction of Garudeswar Weir as recommended by the PSC in its 103rd meeting to the lowest bidder M/s. Rithwik Project Pvt. Ltd., Hyderabad amounting to Rs.299,43,36,391.50 (23.0884% below the estimate) for construction of Garudeshwar Weir subject to the condition that an additional performance guarantee for the difference equivalent to estimated amount and quoted amount i.e. Rs.7.0 Crores is to be obtained from the bidder prior to issuance of work order towards lower rate for gate works, which shall be released only after the completion of the entire gate work. The work to be taken up by GOG in compliance of all statutory clearances.

“The Committee accordingly directed GOG to take further follow up actions.”

I understand that subsequent to this decision, the work of construction of the GW has been started on the ground.

If this is correct, I find this problematic as ESG has not yet cleared the construction of this weir.

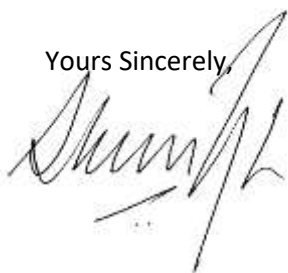
Under the circumstance, I urge you to:

1. Ask the Government of Gujarat (GoG) to immediately stop construction of the GW. All other activities related to the GW should also be stopped.
2. Ask GOG/ SSNNL to submit the full feasibility report, environment and social impact assessment report including impacts during construction and operation of the GW to the ESG and seek clearance of the ESG for this work.
3. Ask GOG not to start any work in this regard till the ESG clears this.

I look forward to an early response.

With regards,

Yours Sincerely,

A handwritten signature in black ink, appearing to read 'Shekhar Singh', with a stylized flourish at the end.

Shekhar Singh

Member, ESG of NCA

shekharsingh@gmail.com

2017: 28 April

IMMEDIATE

C 17A DDA Flats, Munirka
New Delhi 110067
28th April, 2017
shekharsingh@gmail.com

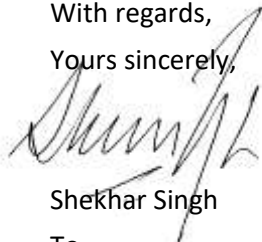
Dear Shri Jha,

I write to you in my capacity as a member of the Environment Sub-Group of the Narmada Control Authority, which you chair. As you know, this subgroup is scheduled to meet on 1st May, 2017. Though no agenda papers have been circulated, the letter of invitation states that ““The agenda of the meeting is to **Review the status of *pari-passu* Implementation of Environment Safeguard Measures with respect to the Phase-II proposal “Lowering down of the gates and impounding water in the reservoir to Full Reservoir Level (138.68m.)””**”. In this connection I would like to urgently bring to your notice the following points.

1. In the last meeting you had decided that the *pari-passu* status would be assessed by truly independent expert groups. Therefore, I presume these groups have been set-up and their assessment reports have now become available. However, these have not yet been sent to us, and now there is not enough time to go through them, even if we receive them before the meeting. Therefore, no decision on the *pari-passu* status can be taken by the sub-group till these reports have been circulated to the members and they have had a reasonable opportunity of studying them. This is in keeping with both the inherent mandate of the sub-group and the mandate given to it by the Supreme Court.
2. I would, therefore, request you to direct that these reports are circulated at the earliest to the NCA sub-group members.
3. I would also request you to ensure that no decision is taken at the meeting on 1st May on the *pari-passu* status of the project, and that the next meeting is fixed only after adequate time is given for the study of the reports, and with adequate notice.
4. As the notice for this meeting was only received on 26th April, 2017, I have already committed myself elsewhere and do not now have enough time to reschedule. Therefore, I regret that I will not be able to attend this meeting.
5. I would also be grateful if, in my absence and while finalizing the minutes of the last meeting, the points that I had raised in my letter of 9th November, 2016 addressed to you (copy enclosed for ready reference) are taken up.

With regards,

Yours sincerely,



Shekhar Singh

To

Shri Ajay Narayan Jha

Secretary to the Government of India, Ministry of Environment, Forests and Climate Change
Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi, 110003
secy-moef@nic.in +91 11 24695270 (Fax)

Enclosures: aa

Enclosures

C 17A DDA Flats
Munirka
New Delhi 110067

9th November 2016

Dear Shri Jha,

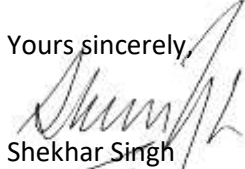
Kindly refer to letter No. NCA/Env./49th/2016/ dated 17th October, 2016, from Member (Environment & Rehabilitation) and Member Secretary, Environment Sub-Group, Narmada Control Authority, enclosing the draft minutes of the 49th meeting of the Sub-Group.

Unfortunately, there appear to be many omissions and inaccuracies in the draft minutes and I would request you as Chairman of the sub-group to kindly direct that the minutes be corrected before being issued. The omissions and inaccuracies are listed in the enclosure.

Also, as these are draft minutes which are subject to confirmation, they should be so titled. Otherwise, these incomplete and inaccurate minutes would be used in various fora as the final minutes, especially given the infrequency of the meetings of the sub-group.

Thanking you and with regards,

Yours sincerely,



Shekhar Singh
Member, ESG of NCA

Shri Ajay Narayan Jha, Secretary, Ministry of Environment, Forests & Climate Change, Government of India, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi 110003

Encl: aa (9 pages)

Copy with enclosures to:

1. Shri Shashi Shekhar, Chairman, NCA and Secretary to the Government of India, Ministry of Water Resources, Shram Shakti Bhawan, Rafi Marg, New Delhi 110001
2. Shri JN Singh, Chief Secretary, Government of Gujarat, Sardar Bhawan, Block No. 1, 3rd Floor, Sachivalaya, Gandhinagar, Gujarat 382020 csguj@gujarat.gov.in
3. Shri Swadhin Kshatriya, Chief Secretary, Government of Maharashtra, Mantralaya, Mumbai 400 032. Email : cs@maharashtra.gov.in
4. Shri Basant Pratap Singh, Chief Secretary, Government of Madhya Pradesh, Vallabh Bhawan, Bhopal 462003 cs-madhyapradesh@nin.in
5. Shri Om Prakash Meena, Chief Secretary, Government of Rajasthan, Secretariat, Jaipur cs-rajasthan@nic.in
6. Dr. Afroz Ahmad, Member (Environment and Rehabilitation) and Member Secretary, Environment Sub-Group, Narmada Control Authority, Narmada Sadan, BG Sector, Scheme No. 74, Vijay Nagar, Indore 452010, MP
7. Shri Gyanesh Bharti, Joint Secretary, Ministry of Environment, Forests, and Climate Change, Government of India, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi 110003

Comments on the draft minutes of minutes of the 49th meeting of the Environment Sub-Group of the Narmada Control Authority, by Shekhar Singh

Item No. XLIX – 1 (225)

Pease replace paragraph 4 by:

“Shekhar Singh pointed out that as the chairman and most of the members had changed since the 47th and 48th meetings of the ESG held over six years ago, it might not be possible to determine the accuracy of the comments made on the draft minutes vide his letter of 14th May, 2010. Therefore, Shekhar Singh requested that his letter may kindly be appended to the minutes of the 47th and 48th meetings and they be reissued accordingly. The Chairman agreed to this suggestion.”

Item No. XLIX – 2 (226)

The current minutes state:

“The Sub-Group noted the status of compliance ass contained in the Agenda at Page – 2-4 and expressed satisfaction.”

However, this is not correct. In my letter of 28th August 2016 to the Chairman, ESG (copy annexed for ready reference) I had, in paras 2 and 3, raised various issues regarding the review of the status of compliance. These were also subsequently raised by me at the meeting of the ESG where, among other things:

1. I stressed the need to have an independent review of the various aspects of compliance. This was agreed to by the Chairperson, ESG, who also stated that the independent expert body to review compliance would be set up by the Ministry of Environment, Forests, & Climate Change and, in order to be truly independent, would not include members of the ESG.
2. I had also pointed out the discrepancies between the data, as depicted in the ESG agenda papers and as available on the website of the NCA.
3. I had also pointed out discrepancies within the data presented in the agenda papers. For example, I had pointed out that in the table on page 7 of the agenda papers, the total target for Catchment Area Treatment (CAT) was shown (row 8) as 305790 ha., and the current achievement (row 9) as 207081 ha . This was shown (row 10) to be an achievement of 85.45 %, while in actual fact 207081 ha. Is only 67.7 % of 305790 ha.
4. For these various reasons, I had suggested that the sub-group could only take a view on the status of compliance once independent assessment has been completed and the various discrepancies in the data reconciled.

Therefore, it is manifestly false to state in the draft minutes that “The Sub-Group noted the status of compliance ass contained in the Agenda at Page – 2-4 and expressed satisfaction.”

I would be grateful if the suggested changes are made in the draft minutes before they are approved/finalised. At the very least, my remarks should be faithfully recorded as a part of the minutes.

Annexure

IMMEDIATE

C 17A DDA Flats, Munirka
New Delhi 110067
28th August 2016
shekhsingh@gmail.com

Dear Shri Jha,

I write to you in my capacity as a member of the Environment Sub-Group of the Narmada Control Authority, which you chair. As you know, this subgroup is scheduled to meet on 31st August 2016, and the agenda for the 49th meeting was received by me a few days back. In this connection I would like to urgently bring to your notice the following points.

1. Agenda item XLIX-1(225) seeks confirmation of minutes of the 47th and 48th meetings, held over six years back, and states that "As no comments/observations have been received from any of the Member, the same may be confirmed by the Sub-Group". However, in my capacity as a member I had sent comments to the then chairman on minutes of both the meetings, soon after receiving them, on 14th May, 2010 (copy enclosed for ready reference). I would, therefore be grateful if the changes and additions suggested by me are incorporated into the minutes before they are confirmed.
2. The mandate given to the ESG by the Supreme Court, vide their order of 18th October 2000, was: *"The Environment Sub-group under the Secretary, Ministry of Environment & Forests, Government of India will consider and give, at each stage of the construction of the dam, environment clearance before further construction beyond 90 meters can be undertaken."* Therefore, clearly, the responsibility for determining whether the environmental conditions have been met with is that of the sub-group. In the past the sub-group, and the MoEF had been undertaking independent assessments of the compliance statement through expert committees and field visits. These were undertaken by MoEF experts and other independent experts. One such, perhaps the last such, was set up by the MoEF under the chairmanship of Dr Devendra Pandey, and finalized its report in January 2011. In that report they had determined that for all the environmental conditions the compliance was far behind the progress in the construction of the dam, in terms of the *pari passu* clause. Therefore, if any view is to be taken by the sub-group on the current status of compliance and its correlation to the construction progress, a fresh assessment needs to be carried out by a group of independent experts, set up by the MoEF&CC, which works in consultation with ESG members and other stakeholders. Institutions like the Forest Survey of India and the Wildlife Institute of India, among others, could also be involved.
3. The need for such an independent review, apart from being a part of the ESG and MoEF&CC mandate, is also necessitated by the fact that there are a lot of discrepancies in the data being reported by the NAC. For example, on their website http://nca.gov.in/forms_pdf/Status_Report_Dec_2015.pdf accessed today, the December 2015 "STATUS REPORT ON SARDAR SAROVAR PROJECT" reports that only 41% of the catchment area treatment for phase II had been completed (table on page 8, copy enclosed for ready reference). However, in the agenda papers of August 2016 it is claimed (page 7) that 85.45% has been achieved. Surely CAT coverage could not have more than doubled in the last six months!

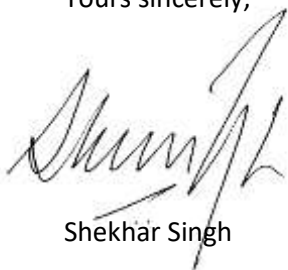
4. Could I also take this opportunity to bring to your notice that I had written in my capacity as member of the ESG to the chairman, ESG, on 24th March, 2013, raising various concerns about the violation of the *pari passu* compliance clause. I enclose a copy for ready reference.

Unfortunately, I have not yet received a response.

I would, as such, be very grateful if you could take into consideration the various points raised by me in your capacity as chairman of the ESG and take appropriate decisions in the 49th meeting.

With regards,

Yours sincerely,



Shekhar Singh

To

Shri Ajay Narayan Jha
Secretary to the Government of India
Ministry of Environment, Forests and Climate Change
Indira Paryavaran Bhawan
Jor Bagh Road, New Delhi, 110003
secy-moef@nic.in
+91 11 24695270 (Fax)

Enclosures:

1. Letter of 14th May 2010
2. Table from NAC website
3. Letter of 24th March 2013

ENCLOSURES

C 17A Munirka
New Delhi 110067

14 May 2010

Dear Shri Sharma,

Please find below my comments on the minutes of the 47th and 48th meeting of Environment Sub-Group of the Narmada Control Authority, chaired by you, that were circulated vide NCA letter dated 21 April. I would be grateful if the suggested corrections and additions are made in the said minutes.

Minutes of the 47th meeting

1. In paragraph 3 of page 7 (item No. XLVII-3(219) it is stated that "Shri Shekhar Singh, Expert Member stated that more time need to be given to study the CAD report". However, apart from this, I had also stated that the approval of the CAD report was not an item in the agenda of this meeting and, therefore, it cannot be taken up without any notice. I would be grateful if this sentence is added to the minutes.
2. I might here add, that this is factually correct, as the only mention of the GoG CAD plan in the agenda papers was as given below – which only talked about circulating the plan in order to "facilitate finalization"

"In pursuance of the decision taken in the meeting of Committee of Experts on CAD Plan held on 11th September, 2009, Govt. of Gujarat has circulated the CAD Plan submitted by Govt of Gujarat in August, 2008, along with comments of MoWR and Dr. A.K. Bhattacharya with para-wise compliance/ comments submitted by Govt of Gujarat amongst all Members of Environment Sub Group to facilitate finalization of the said CAD Plan by Environment Sub Group." (P8).

3. In the last paragraph of page 7 it is said that the sub-group approved the CAD Plan. Actually, no such decision was taken and the only thing that happened was that the NCA officials disputed my statement (as it turns out, wrongly) and held that the approval of the GoG CAD plan was an item in the agenda. After that, no decision was expressed by the Chairman that the CAD plan had been approved by the sub-group.
4. Therefore, I would be grateful if either this paragraph is either deleted or changes to read that "No final decision on the GoG CAD Plan was taken by the Sub-group".

Minutes of the 48th meeting

5. Though in the second last paragraph of page 3 it is mentioned that I had stated that I had already sent my views on the GoG CAD Plan and on various other issues to the Secretary (E&F), my letters (copy of which was also sent in advance of the meeting to the Secretary of the Sub-Group and to various other officials of the MoEF, and confirmed to have been received prior to the meeting) have not been enclosed along with the minutes, despite this being the accepted practice.

6. In fact, along with the minutes of the 47th meeting there is annexed a letter purportedly handed over by the MD SSNL before or during the meeting, and therefore it is attached to the minutes, However, considering the letter describes events that took place during the meeting, it was clearly submitted after the meeting and should not ordinarily have been a part of the minutes. Though I have no objections to this letter being attached to the minutes, surely my letters which were received before the meeting and mentioned in the meeting should be annexed to the minutes.
7. I would, therefore, be grateful, if the two letters (attached for ready reference) are taken on record and annexed to the minutes of the 48th meeting.
8. The last sentence of the second last paragraph of page 3 states, referring to Member (E&R), "He, further, clarified that afflux/backwater levels corresponding to proposed construction to EL 121.92m was considered by the ESG in its 41st meeting while giving clearance for raising of the dam height to EL 121.92m". Though the Member (E&R) did state this, it was in response to my assertion that while clearing 121.92m the Sub-group had not approved any backwater level. As it turns out, my statement was correct for no such approval exists in either the agenda papers or the minutes of the 41st meeting.
9. Nevertheless, to preserve the accuracy of the minutes,, I would be grateful if before the quoted sentence starting with "He, further, clarified that afflux/backwater levels..." the following sentence is added: " Shri Shekhar Singh stated that as per the minutes and agenda of the 41st meeting of the ESG, while approving the raising of the dam height to 121.92m, the Sub-group had not approved any specific backwater level."
10. I had also stated that: "When the subgroup approved the raising of dam height to 121.92m, in its 41st meeting, it approved it on the assessment of compliance of pari passu conditions for 110.64m, which was the height of the dam at that time. Even at this height, it maintained that there was not full compliance but took note of the assurances of the state government that the gaps would be immediately filled. Therefore, the clearance given in the 41st meeting was at best in relation to the backwater levels of 110.62 m and not of 121.92m. This makes the argument that new calculations have shown that backwater levels with additional submergence of 1.6 m would be below what was earlier thought of for 121.92m irrelevant to the issue". I would be grateful if this paragraph is added after the second last paragraph of page 3.
11. Towards the conclusion of the meeting, when the Chairman summarised the intention to clear the proposed construction of piers and gates, I had requested that my dissent be recorded. However, that has not been done. Therefore, I would be grateful if The following sentence be added on page 7 after the second paragraph: "Shri Shekhar Singh requested that his dissent be recorded with the decision of the Sub-group to allow the construction of the piers and gates."

With regards,

Yours sincerely,



Shekhar Singh

Shri Vijai Sharma, IAS
Secretary to the Government of India
Ministry of Environment and Forests
Chairman, Environment Sub-Group of the Narmada Control Authority
Paryavaran Bhawan, CGO Complex
Lodi Road
New Delhi 110 003

Copy to: Copy to: JM Mauskar (AS)/ Nalini Bhat (Adv)/ S. Bhowmik (Addl. Dir.) MoEF; MK Sinha (Member), Pawan Kumar (Director) NCA

CAT TABLE FROM NCA WEBSITE
(DECEMBER 2015)

(I) CATCHMENT AREA TREATMENT

(Figure in Ha) Sl. No.	Description	Madhya Pradesh	Gujarat	Mahara-shtra	Total
1	Catchment below ISP	2248600	30230	163611	2442441
2	Very High and High degraded area as identified by AISSLUI	433740	30230	100993	564963
3	Phase I area: Directly draining Very High and High degraded area	115622	29730	24298	169650
4	Phase I area: Target (after deducting untreatable area on account of being rocky/steep slope, etc.	110997	29157	23295	163449
5	Phase I area: Achievement	110997	29157	23295*	163449
6	Phase I area: Achievement in %	100%	100%	100%	100%
7	Phase II area*: Freely draining Very High and High degraded area	318118	500	77568	396186
8	Phase II area*: Target (after deducting untreatable area on account of being rocky/steep slope, etc.)	262165	500	43125	305790
9	Phase II area*: Achievement	92792	500	33578	126870
10	Phase II area*: Achievement in %	35%	100%	78%	41%

C1 17A DDA Flats,
Munirka
New Delhi 110067
March 24, 2013

To
Dr V Rajagoplan,
Chairman,
Environment Sub Group of Narmada Control Authority
& Secretary, Ministry of Environment and Forests
Government of India
New Delhi
envisect@nic.in, secy-moef@nic.in, sanjeev62@nic.in (PPS to Dr Rajagoplan)

Sub: Environment and social impacts of Garudeshwar weir as part of Sardar Sarovar Project on Narmada River

Dear Dr Rajagopalan,

I am writing to you in my capacity as a member of the Environmental Sub Group (ESG) of Narmada Control Authority (NCA) to draw your attention to the captioned issue. As you are aware, the ESG is mandated to look into environment aspects of all the components of the Sardar Sarovar Project.

Garudeshwar weir, to be built 12 km downstream of the SSP dam with a live storage capacity of 32.9 Million Cubic Meters is a component of the Sardar Sarovar Project, as was envisaged by the Narmada Water Disputes Tribunal Award of 1979. However, as far as I recollect, the environmental and social impacts of construction and operation of Garudeshwar weir (GW) have never been brought before the ESG of NCA.

In my estimation, the construction and operation of the GW will have significant social and environmental impacts, since it will entail a reservoir of about 12 km in length and unknown width and submergence area. The weir will have the potential of affecting the fisheries in the immediately surrounding areas and also of affecting the downstream river and its biodiversity, and other related aspects. This is especially because the weir will control the flow of water and silt downstream.

However, I do not know whether there has been a comprehensive assessment of the environmental and social impacts of the GW and its contribution to the cumulative impact of all the projects and activities in the area. And if there has been, I do not believe that this has been put up to the ESG for its approval.

Despite all this, I learn from the Annual Report of the Sardar Sarovar Construction Advisory Committee for the year 2011-12 (<http://sscac.gov.in/AnnualReport2011-12.pdf>, see particularly page 54-55) that it was decided in the 79th meeting of SSCAC on March 16, 2012 that: "EVALUATION OF BIDS FOR CONSTRUCTION OF GARUDESHWAR WEIR Committee decided to approve the recommendation of the PSC to accord approval of the revised cost estimates of Garudeshwar Weir amounting to Rs 438.18 crores .It further decided to award the work of construction of Garudeswar Weir as recommended by the PSC in its 103rd meeting to the lowest bidder M/s. Rithwik Project Pvt. Ltd., Hyderabad amounting to Rs.299,43,36,391.50 (23.0884% below the estimate) for construction of Garudeshwar Weir subject to the condition that an additional performance guarantee for the difference equivalent to estimated amount and quoted amount i.e. Rs.7.0 Crores is to be obtained from the bidder prior to issuance of work order towards lower rate for gate works, which shall be released only after the completion of the entire gate work. The work to be taken up by GOG in compliance of all statutory clearances.

“The Committee accordingly directed GOG to take further follow up actions.”

I understand that subsequent to this decision, the work of construction of the GW has been started on the ground.

If this is correct, I find this problematic as ESG has not yet cleared the construction of this weir.

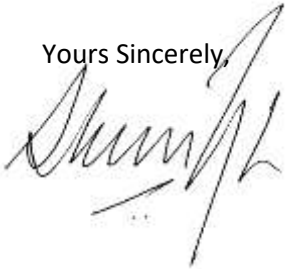
Under the circumstance, I urge you to:

1. Ask the Government of Gujarat (GoG) to immediately stop construction of the GW. All other activities related to the GW should also be stopped.
2. Ask GOG/ SSNNL to submit the full feasibility report, environment and social impact assessment report including impacts during construction and operation of the GW to the ESG and seek clearance of the ESG for this work.
3. Ask GOG not to start any work in this regard till the ESG clears this.

I look forward to an early response.

With regards,

Yours Sincerely,

A handwritten signature in black ink, appearing to read 'Shekhar Singh', with a stylized flourish at the end.

Shekhar Singh

Member, ESG of NCA

shekharsingh@gmail.com