

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL

PRINCIPAL BENCH, NEW DELHI

Original Application No. 361/2018

IN THE MATTER OF

Narmada Pradushan Nivaran

Samiti & Ors.

...Applicant

VS

Ministry of Environment, Forest &

Climate Change & Ors.

... Respondents

**ADDITIONAL REPLY AFFIDAVIT/FRESH STATUS REPORT ON
BEHALF OF RESPONDENT NO.2/NARMADA CONTROL AUTHORITY
AND RESPONDENT NO.3/MINISTRY OF JALSHAKTI, DEPARTMENT
OF WATER RESOURCES, RIVER DEVELOPMENT AND GANGA
REJUVENATION**

I, R.Vasudevan, S/o. Late Sh. P.M. Ramasamy Aged about 55 Years working as Director (Civil), Narmada Control Authority, Ministry of Jal Shakti, DoWR, RD &GR, Govt. of India do hereby solemnly affirm and declare as under:

1. That I am authorized and competent to file the present additional reply affidavit on behalf of Respondent No.2 and 3. I am well versed with the facts and circumstances of the case and filing the present affidavit on the basis of the

(R. VASUDEVAN)
Director (Civil)
Narmada Control Authority
(MoJS, DoWR, RD &GR)
INDORE (M.P.)

R. Vasudevan
(R. VASUDEVAN)
Director (Civil)
Narmada Control Authority
MoJS, DoWR, RD &GR
INDORE (M.P.)

official records, discussions and materials provided by SSNNL, GoG on the progress made so far w.r.t E-Flow study.

2. **That**, the Respondent Nos.2 and 3 have filed reply by way of affidavit dt.30.07.2018 before this Hon'ble Tribunal, which is on record(Paper Book Page No.482 to 627).
3. **That**, the Respondent Nos. 2 and 3 have filed Additional documents by way of affidavit dated 01.02.2021 before the Hon'ble Supreme Court in Civil Appeal No.4550/2019, which is on record (Paper Book Page No.1 to 18).
4. **That**, the Respondent Nos. 2 and 3 have filed Additional documents by way of affidavit dated 18.04.2024 before the Hon'ble National Green Tribunal (NGT) in OA No.361/ 2018, which is on record (Paper Book Page No.1 to 58).
5. **That**, the Respondent Nos. 2 and 3 have filed additional reply/ fresh status report by way of affidavit dated 27.07.2024 before the Hon'ble National Green Tribunal (NGT) in OA No.361/ 2018, which is on record (Paper Book Page No.774-832).
6. **That**, the Respondent Nos. 2 and 3 have filed additional reply/ fresh status report by way of affidavit dated 11.03.2025 before the Hon'ble National Green Tribunal (NGT) in OA No.361/ 2018, which is on record (Paper Book Page No.972 to 987).
7. **That**, with reference to the order of the Hon'ble National Green Tribunal, Principle Bench, New Delhi dated 19.03.2025 directing the submission of an affidavit detailing the progress made in respect of the study which is to be conducted and decision, if any,taken by the E-Flow Committee, it is

(R. VASUDEVAN)
Director (Civil)
Narmada Control Authority
(MoJS, DoWR, RD & GR)
INDORE (M.P.)

d. v. le.
(R. VASUDEVAN)
Director (Civil)
Narmada Control Authority
(MoJS, DoWR, RD & GR)
INDORE (M.P.)

respectfully submitted that SSNNL, GoG vide letter dated 21.02.2025 which is annexed as **Annexure-R/18** communicated to NCA that the revised Memorandum of Understanding (MoU) for conducting the E-Flow study in the downstream stretch from SSD/Garudeshwar weir to the Bhadbhut Barrage has been approved by SSNNL.

8. **That**, Deputy Conservator of Forests, Environment Cell, SSNNL has signed the MoU on behalf of SSNNL and Director, CIFRI has been requested to sign the copy of MoU and return to SSNNL for records.

9. **That**, Furthermore, the Chief Engineer (Dam), Ekta Nagar, is authorized to provide CIFRI with all necessary data, including River cross-section, to facilitate the study.

10. **That**, SSNNL vide letter dated 15.03.2025 which is annexed as **Annexure-R/19** communicated that the study "*Assessment of Environmental flows towards river habitat and ecological requirement with a focus on downstream fish species of Sardar Sarovar Dam (SSD) in Narmada River*" from Garudeshwar weir to Bhadbhutt barrage has been awarded to CIFRI, Kolkata with the following objectives:-

1. To assess the seasonal Hydrological and Hydraulic dynamic in the study area.
2. To assess the seasonal habitat requirement (ecology) of the keystone fish species and major fish diversity.
3. To estimate E-Flow for fish diversity employing hydraulic rating cum habitat simulation Method.

R. Vasudevan

(R. VASUDEVAN)
Director (Civil)
Narmada Control Authority
(MoJS, DoWR, RD & GR)
INDORE (M.P.)

11. **That**, SSNNL vide letter dated 09.07.2025 which is annexed as **Annexure-R/20** communicated that the duration of study will be 9 months' from the date of receipt of the 1st installments of funding i.e., 27.03.2025 for three seasons covering lean/pre-monsoon, monsoon and post-monsoon seasons.
12. **That**, CIFRI will submit the preliminary report on completion of six months from the Start of the project and the final report after completion of the study at the end of nine months
13. **That**, regarding the progress of the study so far, SSNNL intimated that it has provided the cross sectional data of the river Narmada upto the sea to CIFRI through email dated 11.03.2025.
14. **That**, the Respondent Nos.2 & 3 will abide by whatever direction/order passed by this Hon'ble Tribunal.

R. Vasudevan

Deponent

(R. VASUDEVAN)
Director (Civil)
Narmada Control Authority
(MoJS, DoWR, RD & GR)
INDORE (M.P.)

Verification

Verified at New Delhi on....., 2025 that the contents of above affidavit are true and correct to the best of my knowledge and belief and derived from the official records.

R. Vasudevan

Deponent

(R. VASUDEVAN)
Director (Civil)
Narmada Control Authority
(MoJS, DoWR, RD & GR)
INDORE (M.P.)

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(R. VASUDEVAN)
Director (Civil)
Narmada Control Authority
(MoJS, DoWR, RD & GR)
INDORE (M.P.)



Sardar Sarovar Narmada Nigam Limited

(A Wholly Owned Govt. of Gujarat undertaking)

Add. Principal Chief Conservator of Forests

Environment Cell, Block-12, 9th Floor, New Sachivalay,
Gandhinagar-382010 (Gujarat)

(L) (079) 232 52812, 232 52442
E-Mail: envirmntcell@gmail.com

NO. SSNNL/ENV/NCA/113/2025

date: 21/02/2025

To
Dr. B. K. Das.
Director, CIFRI
Barrackpore, Kolkata 700120, West Bengal

Sub: Project Proposal on E-Flow in the downstream of SSD/Garudeshwar Weir
Ref : Director, CIFRI's letter no. CIFRI (Proj.)-51/SSNNL(1)/2025-D.Cell dated
23/01/2025

Dear Sir,

With reference to the above-cited subject, CIFRI has submitted a revised Memorandum of Understanding (MoU) for conducting the E-flow study in the downstream stretch from SSD/Garudeshwar Weir to the Bhadbhut Barrage. The MoU has been approved by SSNNL.

The Deputy Conservator of Forests, Environment Cell, SSNNL, has signed the MoU on behalf of SSNNL. Two copies of the MoU have been signed and submitted for your signature. You are kindly requested to return one duly signed copy for our records.

Furthermore, the Chief Engineer (Dam), Ekta Nagar, is authorized to provide CIFRI with all necessary data, including river cross-sections, to facilitate the study. As per the approved financial outlay, the project is subject to an 18% GST. We kindly request CIFRI to issue an invoice with their GST number and PAN details to facilitate the processing of payments.

With regards.

Encl : Two Copies of MoU

(G. Ramana Murthy)
Add. Pri. Chief Conservator of Forests
SSNNL, Gandhinagar

Copy submitted for kind information to:

- Hon'ble CMD, SSNNL, Gandhinagar.
- Director (Canals), SSNNL, Gandhinagar.
- CGM (T&C), SSNNL, Gandhinagar.
- Member (E&R), Narmada Control Authority, Narmada Sadan, Sector - B, Scheme No. 74, Vijaynagar, Indore-452010 (M.P.)

25/02/2025
K. B.
5.285

Sardar Sarovar Narmada Nigam Ltd.

("A Wholly Owned Government of Gujarat Undertaking")

Add.Prin. Chief Conservator of Forests, Environment Cell, Block No: - 12, 9th Floor,
New Sachivalay, Gandhinagar-382010(Gujarat). E-mail: envirementcell@gmail.com

No. SSNNL /Env /CIFRI/e-flow/119

Date: 15/03/2025

Sub: Assessment of Environmental flows towards river habitat and ecological requirement with a focus on downstream fish species of Sardar Sarovar Dam (SSD) in Narmada River

Ref: Director, CIFRI's letter No. CIFRI (Proj.)-51/SSNNL (1)/2025 dated 07/02/2025

Preamble:

As decided in the 94th NCA meeting held on 08/05/2024, an E-Flow Committee was formed under the Executive Member, NCA, to review the environmental flow of the Narmada River downstream of the Sardar Sarovar Dam (SSD).

In the second E-Flow Committee meeting held on 17/01/2024, CIFRI was tasked with preparing the Scope of Work/ToR, including partner institutions and financial implications, for the E-Flow reassessment study. On 09/02/2024, CIFRI submitted a draft project proposal titled "Assessment of Environmental Flows towards River Habitat and Ecological Requirement," focusing on the stretch from SSD to Bhadbhut Barrage.

The third E-Flow Committee meeting, held on 19/03/2024, focused on finalizing the Scope of Work/ToR for CIFRI's reassessment study to protect the downstream riverine environment. As no consensus was reached among the party States, the Executive Member, NCA, and Chairman of the Committee decided to seek directions from the Authority in the next NCA meeting.

In the 95th NCA meeting on 04/09/2024, it was decided that, in light of the case pending before the Hon'ble NGT, the studies for E-Flow would be conducted in a phased manner. In the initial phase, two separate studies will be undertaken by CIFRI through SSNNL:

1. From Garudeshwar Weir to Bhadbhut Barrage.
2. From Bhadbhut Barrage to the mouth of the river.

In continuation, CIFRI submitted a draft Memorandum of Understanding on 23/01/2025. After review, SSNNL proposed modifications to the terms of payment via a letter dated 01/02/2025. CIFRI accepted the suggested changes and submitted a revised MoU incorporating them via a letter dated 07/02/2025.

Office Order:

After careful consideration, SSNNL, has consented to assign the task of '*Assessment of Environmental flows towards river habitat and ecological requirement with a focus on downstream fish species of Sardar Sarovar Dam (SSD) in Narmada River*' to CIFRI,

Kolkata, W.B. as contained in the Project proposal and terms of reference of Project proposal dated 07/02/2025 as proposed hereafter.

Deputy Conservator of Forests, SSNNL, Gandhinagar is authorized to sign Agreement for carrying out the study (MoU/ToR) on behalf of Sardar Sarovar Narmada Nigam Ltd., Block No.12, New Sachivalaya, Gandhinagar- 380010, and to release payments as per the agreed terms as mentioned in terms of payments.

The Chief Engineer (Dam), Ekta Nagar, is authorized to provide CIFRI with all necessary data, including river cross-sections, to facilitate the study. Necessary sanction has been accorded by competent authority on the file of even number.

Objectives:

1. To assess the seasonal hydrological and hydraulics dynamic in the study area.
2. To assess the seasonal habitat requirement (ecology) of the key stone fish species and major fish diversity
3. To estimate E-flow for fish diversity employing hydraulic rating cum habitat simulation Method.

Study Area:

The study will be carried out between the Garudeswar weir to Bhadbhut stretch in river Narmada (162 km). Total -9 stations (Garudeswar, Poicha, Sisodara, Jhanor, Bharuch, Sakkarpura and Bhadbhut and additional one site between Sisodara and Jhanor and one site between Jhanor and Bharuch) will be selected to study on different hydro-biological parameters representing different seasons.

Methodology

- Site visit and field data collection.
- Measurements from boat through ADCP and by physical (habitat, depth, velocity, discharge)
- Experimental fishing, biotic and abiotic samples collection as per the standard protocol
- Fish species diversity, migratory species and reproduction of this species
- Habitat preference rating curve for selected fish species
- Seasonal dynamics of hydrological and ecological parameters
- Time series hydrological data collection and analysis
- Survey on the major tributaries of Narmada below SSD and hydrological contribution
- Assessment of Fish based habitat and Hydraulic rating method(HECRAS)
- Assessment through Mike 11 hydrological model with fish habitat requirement
- Integrating fish habitat-based models for E-flows estimation between Garudeswar weir and Bhadbhut

Duration of work:

- 9 months, covering lean/pre-monsoon and post-monsoon seasons.

Study Area:

- From Sardar Sarovar Dam to Bhadbhut Barrage in the Narmada River.

Deliverables:

- Three-season E-Flow data for the survival and propagation of keystone fish species and for maintaining downstream ecology, supported by justifications and modeling for E-Flow calculations.

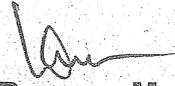
Consultancy Fee:

- Total consultancy fee for the studies is Rs. 60, 94,488.00/- (Rupees Sixty Lakhs Ninety Four Thousand Four Hundred Eighty Eight-Only) inclusive of service tax, TA/DA and all other charges.

Terms of payment

- 1st Installment (40%): ₹24, 37,795/- to be released as an advance upon signing the MoU and for initiating the study.
- 2nd Installment (45%): ₹27, 42, 520/- to be released after six months upon submission of the preliminary report.
- 3rd Installment (15%): ₹9, 14,173/- to be released after acceptance of the final report.

This order has been issued in concurrence with the sanction accorded by the competent authorities of SSNNL on a note in the file of even number.


(G. Ramana Murthy)

Add. Pri. Chief Conservator of Forests
SSNNL, Gandhinagar.

To
Dr. B. K. Das.
Director, CIFRI
Barrackpore, Kolkata 700120, West Bengal.

Copy Submitted for kind information to:

- Hon'ble Chairman & Managing Director, SSNNL, Gandhinagar.
- Director (Canal), SSNNL, Gandhinagar.
- C.E. (QC, CPC & T&C), Gandhinagar.

Copy forwarded for information and necessary action to:

- Deputy Conservator of Forests, SSNNL, Gandhinagar.



Sardar Sarovar Narmada Nigam Limited

(A Wholly Owned Govt. of Gujarat undertaking)

Add. Principal Chief Conservator of Forests

Environment Cell, Block-12, 9th Floor, New Sachivalay,
Gandhinagar-382010 (Gujarat)

(L) (079) 232 52812, 232 52442
E-Mail: envirementcell@gmail.com

NO. SSNNL/ENV/NCA/31/2025

date: 09/07/2025

To
Director (Civil)
Narmada Sadan, Sector -B,
Scheme No.74-C, Vijay Nagar,
Indore-452 010 (M.P.), INDIA

Sub: To review the environment Flow of river Narmada in the downstream of Sardar Sarovar Dam- reg

Ref : Director (Civil) 's letter No. NCA/ENV/443/2023/231 dated 08/07/2025.

With reference to the above-cited letter, please find below the point wise details regarding the ongoing environmental flow (e-flow) study entrusted by SSNNL to ICAR-CIFRI:

(i) The date of the Award of the study given to the CIFRI

The study was awarded to ICAR-CIFRI vide SSNNL's letter dated 15/03/2025. A copy of the award letter is enclosed for your ready reference. Further, in response to your email dated 28/05/2025 requesting a copy of the award letter, the same was shared by this office on the same day, i.e., 28/05/2025.

(ii) Time period for conducting the study

As per the terms of the MoU signed between SSNNL and ICAR-CIFRI (**Copy enclosed**), the details are as below:

4. The ICAR-CIFRI will execute the Project in order to address the Terms of Reference/Objectives indicated under ICAR-CIFRI project proposal to SSNNL.

b) This agreement shall come into force with effect from the date of receipt of the first installment of funding and shall be for a period of **Nine Months** and all works under this agreement shall be completed within this period. However, on the expiry of the aforesaid period, it may be extended for reasons not attributable to the ICAR-CIFRI on such terms and conditions as may be decided by or agreed mutually between the parties in a fresh agreement for the extended period.

Submission of report by ICAR-CIFRI

- Submission of Preliminary Report - On completion of six months from the start of the project.
- Submission of Final Report - After completion of the study at the end of nine months.

As per the terms, SSNNL has released the first installment of ₹24, 37,795/- **(40% OF THE TOTAL Consultancy fee for initiation for investigation)** on 27/03/2025. Therefore, as mentioned above, the agreement came into force from the same date, i.e., 27/03/2025.

(ii) **The progress of the study so far**

To facilitate the e-flow study, SSNNL has already provided the cross-section data of the River Narmada up to the sea to CIFRI via an email dated 11/03/2025 **(Copy enclosed)**.

Further, an Exploratory Consultation on the "Reassessment of Environmental Flow Downstream of Sardar Sarovar Dam / Garudeshwar Weir – Potential Collaboration between CIFRI and Team cNarmada" was convened on 15/05/2025 under the Chairmanship of Member (E&R), NCA. CIFRI presented the preliminary outline of the study during this meeting. The minutes of this meeting are enclosed herewith for your kind perusal. **(Copy enclosed)**

Encl : As above


(G. Ramana Murthy)

Add. Pri. Chief Conservator of Forests
SSNNL, Gandhinagar

Copy submitted for kind information to:

- Hon'ble CMD, SSNNL, Gandhinagar.
- Director (Canals), SSNNL, Gandhinagar.
- CGM (T&C), SSNNL, Gandhinagar.