

**BEFORE THE HONOURABLE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE-CHENNAI
OA.No.27/2023 (SZ)**

BETWEEN

Tellam Naresh and another ... Applicants
,

Vs

Union of India & others ... Respondents

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T.RAGHAVAN

Counsel for MOEF & CC

**IN THE HON'BLE NATIONAL GREEN TRIBUNAL, SOUTHERN ZONE
BENCH, CHENNAI**

ORIGINAL APPLICATION NO. 27 of 2023

IN THE MATTER OF: -

Tellam Naresh and another

.... Applicant(s)

Versus

Union of India and Others

.... Respondent(s)

**REPLY AFFIDAVIT ON BEHALF OF RESPONDENT NO. 1, MINISTRY
OF ENVIRONMENT, FOREST AND CLIMATE CHANGE**

MOST RESPECTFULLY SHOWETH:

I, Tarun Kathula, S/o Shyamala Rao, aged about 46 years working as Director/ Scientist 'F' in the Sub Office of the Ministry of Environment, Forest and Climate Change, at Hyderabad, do hereby solemnly affirm on oath and state as under:

1. That the Hon'ble Tribunal, vide order dated 08.07.2024, directed the Ministry of Environment, Forest and Climate Change (hereinafter referred to as 'MoEF&CC/Ministry') to assess the damages due to construction and file a report after assessing the damages. The relevant portion is reproduced below:

"...there was a direction to assess the damages due to construction, which has not yet been filed by the MoEF&CC. Let the report be filed by the MoEF&CC after assessing the damages..."

**COMPLIANCE OF DIRECTIONS PASSED BY THE HON'BLE TRIBUNAL
VIDE ORDER DATED 08.07.2024**



Tarun Kathula
Director/Scientist 'F' (C)
Integrated Regional Office,
Ministry of Environment Forest and Climate Change
Aranya Bhavan, Hyderabad, Telangana-500 004.

2. It is submitted that in compliance of the above mentioned direction of the Hon'ble Tribunal, a two-member committee was constituted by the Ministry vide order dated 23.09.2024, comprising of Senior Scientist from the Sub-Office of MoEF&CC at Hyderabad and Ecological Damage Assessment Expert from Central Pollution Control Board (hereinafter referred to as 'CPCB') for conducting Ecological Damage Assessment on account of illegal construction and expansion of Sittamma Sagar Multi-Purpose Project (SSMPP), having a capacity of 320 MW (8 units \times 40 MW) and a command area of 2.73 lakh hectares, by the Irrigation & CAD Department of State of Telangana. The Committee conducted a site visit on 18.11.2024 and vide email dated 06.01.2025; the Sub-Office of MoEF&CC at Hyderabad submitted the Ecological Damage Assessment report for the project in question. The relevant extract of the said report is reproduced hereunder:

"Based on the above deliberations, the Committee observed that the Project Proponent shall pay for the ecological damage assessed due to the commencement of construction of the project without securing the prior environmental Clearance, as provided hereunder:

i. Remediation Cost and Natural & Community Resource Augmentation (B) is = Rs. 1.18 Cr

ii. Environmental Compensation at 1.5% of Project Cost (C) is = Rs. 52.23 Cr.

Therefore, based on the above calculation, the Committee recommends Environmental Compensation of Rs. 53.41 crore, which also includes a remediation cost."

The copy of the report of Ecological Damage Assessment is annexed as **Annexure -R1**.

3. Further, it is most humbly submitted that the payment of above-mentioned remediation cost and ecological damage compensation by the Project Proponent shall not be construed as deemed permission to resume


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construction of the project. It is appropriate to mention that in view of act of violation of EIA Notification, 2006, as amended the Ministry has already issued closure order to stop the project construction work vide letter dated 04.01.2023.

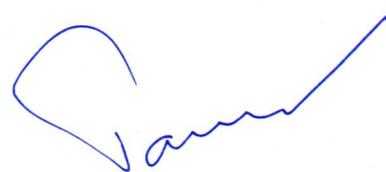
Further, it is also pertinent to mention that since the Hon'ble Supreme Court vide order dated 02.01.2024 has stayed the Standard Operating Procedure (SOP) dated 07.07.2021 read with OM dated 28.01.2022, delineated by the Ministry for considering the projects under violation category, the project in question shall not be allowed to start the project construction work until the vacation of stay on SOP as ordered by the Hon'ble Supreme Court followed by grant of Environmental Clearance under violation category by the MoEF&CC.

4. That Answering Respondent further apprises this Hon'ble Tribunal that the project in question was considered by the Advisory Committee of the Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti, in its 157th meeting held on 11.02.2025. During the said meeting, the Advisory Committee deliberated upon the project and, after due consideration, deferred the same with the following observations:

“After detailed deliberations, project was deferred by the Advisory Committee of DoWR, RD & GR with the following observations;

- i. The design aspects of the project shall be appraised in CWC within 1 month*
- ii. The project authorities shall collaborate with MoEF&CC to address and mitigate the project's environmental impact, including resolving outstanding issues.*
- iii. The project authorities shall come up with concrete plan for introducing Micro irrigation as well as piped distribution network wherever possible.”*

Copy of the summary record of discussion of the 157th Meeting of the Advisory Committee of Department of Water Resources, River Development



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& Ganga Rejuvenation, Ministry of Jal Shakti is annexed and marked herein as **Annexure- R2**

5. In light of the aforementioned facts of the matter, the compliance affidavit may kindly be taken on record.
6. It is submitted that the Hon'ble Tribunal may pass appropriate order(s), direction(s) as deemed fit and proper under the facts and circumstances of the present case.

DEPONENT
 Tarun Kathula
 Director/Scientist 'F' (C)
 Integrated Regional Office,
 Ministry of Environment Forest and Climate Change
 Aranya Bhavan, Hyderabad, Telangana-500 004.

VERIFICATION

I, the above-named deponent do hereby solemnly affirm and state that the contents of the aforesaid affidavit are true and correct to my personal knowledge and have been derived from the official records maintained by the Respondent. No part of it is false nor has anything material been concealed therefrom.

Verified at Hyderabad on this 01st day of April, 2025.

DEPONENT
 Tarun Kathula
 Director/Scientist 'F' (C)
 Integrated Regional Office,
 Ministry of Environment Forest and Climate Change
 Aranya Bhavan, Hyderabad, Telangana-500 004.

ENVIRONMENTAL DAMAGE ASSESSMENT REPORT IN THE MATTER OF HON'BLE NGT (SZ) O.A No. 27 OF 2023 TELLAM NARESH & ANR. VS UNION OF INDIA & ORS.

Background:

Ministry of Environment, Forest and Climate Change (Impact Assessment Division), New Delhi, vide order dated 23.09.2024, constituted a two-member Committee consisting members from Regional Office, Hyderabad and CPCB for conducting Ecological Damage Assessment for starting the construction of Sitamma Sagar Multipurpose Power Project (SSMPP) in Telangana by Government of Telangana without obtaining prior Environmental Clearance under the provisions of EIA Notification, 2006, as amended.

2. Subsequently, the Central Pollution Control Board, Regional Directorate-Chennai, has nominated Dr. R. Rajkumar, Scientist-E, to assess the environmental damage. Sh. Tarun Kathula, Scientist 'F,' MoEFCC, Sub-Office, Hyderabad, represented MoEFCC.

3. CPCB & MoEFCC carried out a field visit cum meeting on 18.11.2024 with the officials of Telangana State Irrigation and Command Area Development Officials and a representative of Right Source Industrial Solutions Pvt. Ltd, an accredited environment consultant firm, has conducted a public hearing for the said project.

Brief about the Project based on the Report of MOEF&CC filed in Hon'ble NGT(SZ), Chennai

4. The Irrigation and CAD Department, Government of Telangana, has submitted a proposal (Proposal No. IA/TG/RIV/251367/2022 dated 13th January 2022) to the Ministry of Environment for the grant of Terms of Reference (ToR) for the Sittamma Sagar Multi-Purpose Project (SSMPP). The project, with an installed capacity of 320 MW (8 units × 40 MW) and a command area of 2.73 lakh hectares, spans 3,122.38 acres. It involves constructing a barrage across the Godavari River, 200m downstream of the existing Dummugudem Anicut, and developing a hydroelectric project at Ammagaripalli Village, Aswapuram Mandal, Bhadradi Kothagudem District, Telangana.

5. The project is located at the starting point of the Sita Rama Lift Irrigation Project (SRLIP), which has already received Environmental Clearance on 07.01.2019 and aims to supply irrigation water to its command area as needed. The proposed SSMPP is expected to generate 719.12 MU in a 90% dependable year, 765.04 MU in a 75% dependable year, and 1,016.88 MU in a 50% dependable year, with an average annual generation of approximately 999.48 MU. The turbines are designed for a discharge rate of 2,400 cumecs, with the unlined power channel capable of handling 3,048 cumecs for overload capacity. The reservoir has a storage capacity of 36.57 TMC and is located 2 km from State Highway SH-12 (Bhadrachalam to Chandrapatla).

6. The project requires 3445.36 acres of land, including 3122.38 acres of patta land, ex-gratia land, government land, and 322.98 acres (130.70 Ha) of forest land. The total cost of the project is estimated at ₹3,481.90 crores.

7. In compliance with the Hon'ble Tribunal order dated 12.07.2023, MoEFCC conducted a site inspection on 09.08.2023 and observed that 25 to 30% of project-related construction work had been completed without obtaining environmental clearance from MoEFCC, amounting to a violation of EIA Notification, 2006.

8. Considering the findings of the Site Inspection Report, the Ministry examined the matter and observed that the Sitamma Sagar Multi-Purpose Project (SSMPP) was reported under construction without prior environmental clearance. Hence, the EIA Notification, 2006 (as amended from time to time) has been violated as the said construction was carried out without prior environmental clearance.

9. Accordingly, MoEFCC issued Show Cause Notice under Section 5 of the Environment (Protection) Act, 1986, for not taking prior Environmental Clearance.

10. In this regard, Hon'ble NGT (SZ), Chennai, vide order dated 08.07.2024, stated as follows:

"... However, there was a direction to assess the damages due to construction, which has not yet been filed by the MoEF&CC. Let the report be filed by the MoEF&CC after assessing the damages..."

11. Further, Hon'ble NGT (SZ), Chennai vide order dated 24.09.2024 stated as follows:

"1. It is stated by the learned counsel appearing for the MoEF&CC that pursuant to our order dated 02.04.2024 a committee has been constituted to assess the damages and seeks short accommodation for filing their assessment report.

2. Post the matter on 03.12.2024"

12. The Expert Appraisal Committee considered the proposal and recommended the grant of Standard ToR vide F.No. J-12011/03/2022-IA-I(R) dated 29.06.2022 for conducting an EIA study for SSMPP with the following additional/Specific ToR

Environmental Management Plan

- A. Environmental Management and Biodiversity Conservation*
- B. Socio-economic Study*
- C. Muck Management*
- D. Disaster Management*
- E. Miscellaneous*

13. The Environmental Impact Assessment (EIA) and Environmental Management plan (EMP) for SSMPP was carried out by Right Source Industrial Solutions Pvt. Ltd, and the report is under finalisation.

Environmental Compensation Calculation

A. Environmental Compensation as per EIA/EMP report:

- i. As stated in the previous section, the Environmental Management Plan is under finalization, and the cost to have arrived under various management plans such as Environmental Management and Biodiversity Conservation, Socio-economic study, Muck Management, Disaster management, etc., as per ToR will become a mandatory component, as per the EIA report.
- ii. Further, vide MoEFCC letter dated 4th January 2024, PP was directed to submit an additional TOR to consider the project under violation. **(Appendix 2)**
- iii. The project proponent, the Irrigation and CAD Department, Government of Telangana, has yet to apply for a Forest Clearance to divert 322.98 acres (130.70 Ha) of forest land. **As on date, no forest land has been diverted for the said project.**

B. Environmental Compensation calculated as per visit of Committee:

The Sitamma Sagar Multipurpose Power Project (SSMPP) in Telangana, initiated by the Government of Telangana without obtaining prior Environmental Clearance under the provisions of the EIA Notification, 2006 (as amended), has caused irreversible ecological damage. Since PP is yet to obtain ToR under the violation category and no standard/ statutory/ legal methodology is currently available for ecological damage assessment, the Environmental Compensation (EC) has been calculated using the CPCB formula, which is as follows:

$$E=PI \times N \times R \times S \times LF$$

$$E=50 \times 632 \times 250 \times 1.5 \times 1$$

$$E=\text{Rs. } 1,18,50,000/-$$

E = Environmental compensation

PI=Pollution index of the industrial sector (average PI of 50 is taken for the orange category)

N = Number of days violation took place Start date 30.06.2021 and Stopped date is 23.03.2023 (three years = 632 days)

R = A factor in Rupees for EC (250 is considered for environmental compensation for violation)

S = Factor for scale of operation (medium scale of 1 is considered)

LF = Location factor (1 is considered for less than one million population)

The compensation is calculated to address the irreparable damage caused by project activities and ensure that a **Remediation Plan** and **Natural & Community Resource Augmentation** initiatives are carried out in addition to the requirements raised during the public hearing. The cost derived will be utilized for compensatory remediation measures to restore environmental balance and provide sustainable benefits to the affected communities.

The Bifurcation of Environmental compensation **cost Rs. 1.18 Crores** is based on:

- Discussions held with the project proponent and during field visits at the project site.
- Representation and issues raised during the public hearing

Accordingly, the details of the Remediation Plan and Natural & Community Resource Augmentation Environmental compensation cost is rounded off to Rs. **1,18,70,000/-** as below:

S. No	Remediation Cost bifurcation	Irreparable damage or reparable damage	Cost bifurcation in Rs
1	Rs. 27,50,000: Water, air, and noise environment and ecology.	Irreparable damage was caused due to improper muck management, quarrying, dozing, and material transportation.	27,50,000: Air and Noise Environment and Ecology for plantation of 11000 Nos native plants at Rs. 250 per sampling adjacent to 45 kilometers (with a gap of an average of four meters between each sapling) in 44 villages roads, including maintenance for 3 years.
2	Rs. 35,20,000: Natural resources Augmentation plan	Irreparable damage was caused by not providing fuel wood-saving devices.	Rs. 35,20,000: Providing two 1 kilowatt Solar Street lights in 44 villages with a unit cost of Rs 40,000 each (including panels, inverters, wiring, structure, connectors, junction box, maintenance, etc. (40,000 X 88), including maintenance for 3 years.
3	Rs. 56,00,000 Community Resources Development Plan	Irreparable damage is caused by not providing occupational health and safety to the community.	Rs. 56,00,000: One-month short-term training course for local communities living in 44 villages on sustainable temples, nature tourism, and hotel management. Giving training to 700 youth with a minimum of 50% women @ Rs. 8000 fee per candidate. (8000 X 700 = Rs. 56,00,000) in three years.
Total rounded to Rs. 1,18,70,000/-			

C. Environmental Compensation imposed by Hon'ble NGT in similar violation cases:

- In similar violation cases in respect of Polavaram/ Indira Sagar MIP, Purushothapatnam LIS, Pattiseema LIS, Chintalapudi LIS, and KGPR Linking Project were disposed of by the Hon'ble NGT imposing the environmental compensation in the matters of OA

NO. 175/2018 (EARLIER O.A. NO. 125/2017 (SZ)), OA NO. 350/2018, RA NO. 46/2019 IN OA NO. 48/2019, OA NO. 857/2018 (I.A. NO. 133/2021).

- ii. In the judgment order dated 02.12.2021, the Hon'ble NGT computed the environmental compensation for the violation cases based on the project's cost. **The environmental compensation is imposed at 1.5% of the project's cost.**
- iii. As per the ToR, estimating the cost of the environmental management plan is a mandatory component of the EIA report. In addition to the said cost, Environmental Compensation at 1.5% of the project cost is calculated due to the project execution without environmental clearance.
- iv. Environmental Compensation = Environmental Compensation at 1.5% of the cost of the project
- v. Total cost of the project as per ToR is 3481.90 Cr
- vi. Environmental Compensation at 1.5% = Rs. 52.23 Cr

Conclusion:

Based on the above deliberations, the Committee observed that the Project Proponent shall pay for the ecological damage assessed due to the commencement of construction of the project without securing the prior environmental Clearance, as provided hereunder:

- i. Remediation Cost and Natural & Community Resource Augmentation (**B**) is = **Rs. 1.18 Cr**
- ii. Environmental Compensation at 1.5% of Project Cost (**C**) is = **Rs. 52.23 Cr.**

Therefore, based on the above calculation, the Committee recommends Environmental Compensation of Rs. 53.41 crore, which also includes a remediation cost.



Sh. Tarun Kathula
Scientist 'F'

Ministry of Environment, Forest and Climate
Change
Sub-Office, Hyderabad, Telangana



Dr. R. Rajkumar
Scientist-E

Central Pollution Control Board
Regional Office, Chennai
Tamil Nadu



Committee site visit on 18th November 2024 at SSMPP

**Government of India
Central Water Commission
Project Appraisal Organization**

Telefax: 011-29583512
Email: ceprjap@nic.in

7th Floor (S), Sewa Bhawan,
R.K. Puram, New Delhi.

Date: 03.03.2025

Minutes of Meeting

A copy of the Summary Record of discussions of the 157th Meeting of the Advisory Committee of DoWR, RD & GR on Irrigation, Flood Control & Multipurpose Projects held under the Chairmanship of Secretary, Department of Water Resources, River Development & Ganga Rejuvenation on 11.02.2025 is enclosed herewith for information and further necessary action, please.

It is requested that comments, if any, on the enclosed Summary Record of Discussion, may kindly be forwarded to this office within 15 days.

Encl: As above.



(Yogesh Paithankar)

**Member Secretary of the Advisory Committee &
Chief Engineer (PAO)**

To,

Members of Committee:

1. Chairman, CWC, Sewa Bhawan, R. K. Puram, New Delhi.
2. Secretary (Expenditure), Ministry of Finance, 1st Floor, North Block, New Delhi.
3. Secretary, Department of Power, Room No. 205, S.S. Bhawan, II Floor, New Delhi.
4. Secretary, Ministry of Environment & Forests & CC, 4th Floor, Prithvi Block, Indira Paryavaran, Jor Bagh, New Delhi.
5. Secretary, Department of Agriculture, Cooperation & Farmers Welfare, R. No. 126, Krishi Bhawan, New Delhi.
6. Secretary, Ministry of Tribal Affairs, Room No. 738, A-Wing, Shastri Bhawan, New Delhi.
7. Director General, ICAR, Room No-108, Krishi Bhawan, New Delhi.
8. Chairman, CEA, Sewa Bhawan, R. K. Puram, New Delhi.
9. Chairman, Central Ground Water Board, Jam Nagar House, New Delhi.
10. Adviser (Power), NITI Aayog, Room No. 248, Yojana Bhawan, New Delhi.
11. Adviser (WR&LR), NITI Aayog, Room No. 230, Yojana Bhawan, New Delhi.
12. Joint Secretary & Financial Adviser, DoWR, RD & GR, Room No-401, Shram Shakti Bhawan, New Delhi.

Invitees from State Government concerned:

1. Principal Secretary, I&CAD Department, Govt of Telangana.
2. Additional Chief Secretary, Water Resources Department, Government of Bihar, Patna.
3. Development Commissioner-cum-Addl.Chief Secy., Department of Water Resources, Government of Odisha.

Special Invitees:

1. Additional Secretary, DoWR, RD&GR, New Delhi.
2. Member (WP&P), CWC, New Delhi.
3. Member (D&R), CWC, New Delhi.
4. Member (RM), CWC, New Delhi.
5. Chairman, GRMB, Hyderabad, Telangana.
6. Chairman, GFCC, Patna, Bihar.
7. Chief Advisor (Cost), Department of Expenditure, Lok Nayak Bhawan, New Delhi.
8. Economic Advisor, DoWR, RD&GR, New Delhi.
9. Commissioner (SPR), DoWR, RD & GR, New Delhi.
10. Commissioner (FM), DoWR, RD & GR, New Delhi.
11. Chief Engineer (IMO), CWC, New Delhi.
12. Chief Engineer (M&ERO), Bhubaneswar, Odisha.

Copy for kind information to:

1. Sr. PPS to Secretary, DoWR, RD & GR, Room No. 407, Shram Shakti Bhawan, New Delhi.
-

Government of India
Ministry of Jal Shakti
Department of Water Resources, River Development & Ganga Rejuvenation
Central Water Commission
Project Appraisal Organization

**ADVISORY COMMITTEE FOR CONSIDERATION OF TECHNO-ECONOMIC VIABILITY OF MAJOR
 & MEDIUM IRRIGATION, FLOOD CONTROL AND MULTIPURPOSE PROJECT PROPOSALS**

157th meeting held on 11th February 2025

SUMMARY RECORD OF DISCUSSIONS

The 157th meeting of the Advisory Committee of Department of Water Resources, River Development & Ganga Rejuvenation (DoWR, RD & GR), Ministry of Jal Shakti (MoJS), for consideration of techno-economic viability of Major & Medium Irrigation, Flood control and Multipurpose project proposals, was held under the chairpersonship of Ms. Debashree Mukherjee, Secretary to the Government of India, DoWR, RD & GR, MoJS on Tuesday, 11th February 2025. The list of participants is **Annexed**.

At the outset, the Chairperson welcomed the participants and thereafter, requested the Member-Secretary to take up the agenda items.

Brief records of the discussion & decisions taken in the meeting are summarized below:

I. Confirmation of the Minutes of the 156th Meeting of the Advisory Committee:

The 156th meeting of the Advisory Committee was held on 03.09.2024. Member Secretary informed that the Summary Record of Discussions of 156th Meeting was circulated on 10.09.2024 and no comment has been received. The committee confirmed the Minutes of 156th meeting of the Advisory Committee.

II. Project Proposal Considered by the Advisory Committee :

The Member Secretary informed the committee that there are five (5) proposals to be discussed during the meeting. Out of these five proposals, two (2) are Irrigation and three (3) are Flood control schemes. State wise breakup is as under:

A. Irrigation schemes (2 Nos.)

1. From Govt. of Telangana: Major Irrigation Project (1 No.)
2. From Govt. of Odisha: Medium Irrigation Project (1 No.)

B. Flood control schemes (3 Nos.)

1. Govt. of Bihar: 3 Nos.

Irrigation Schemes

1. Integrated Sita Rama Lift Irrigation & Sitamma Sagar Multipurpose Project (Estimated Cost Rs 19954.10 Crores @ June 2023 PL), BC Ratio 1.57:1)

A detailed presentation was made by the Member-Secretary of the Advisory Committee (CE, PAO, CWC) mentioning that the Integrated Sita Rama Lift Irrigation Project (SRLIP) and Sitamma Sagar Multi-Purpose Project (SSMPP) envisages to create new ayacut to irrigate command area of about 1,68,196 ha and stabilized command of other projects of about 1,50,571 ha in Bhadradi Kothagudem, Khammam and Mahabubabad districts of Telangana State with proposed utilization of 67.05 TMC (Thousand Million Cubic feet) and production of hydro electric power of 282.8 MW capacity.

Member-Secretary further informed that the project consists of a barrage located 200 meters downstream of the existing Dummugudem Anicut in Bhadradi Kothagudem District. The barrage has a total length of 1332.75 meters and is divided into six blocks with 67 radial gates for flood discharge. The storage capacity at the Full Reservoir Level (FRL) of + 63.000 m is 36.57 TMC. The Lift Irrigation System is designed to lift 67.05 TMC of Godavari River water, distributing it across the project area through a network of pump houses and gravity canals. Eleven pump houses with a total load of 755.0 MW will be installed to facilitate this process. In addition to irrigation, the system will provide drinking water to the Khammam and Bhadradi Kothagudem districts. A 282.8 MW hydroelectric power plant is also proposed at the Barrage to utilize the water resource for energy generation.

Secretary, DOWR, RD & GR enquired about the water availability for the project. The Member Secretary informed that as per the hydrological studies conducted in CWC water is available for the project. Moreover, the project was also sent to GRMB after its appraisal by CWC as per SOP.

Member-Secretary informed the committee that the project had achieved 56.8% physical and 56.71% financial completion as of January 2025, with expenditures reaching Rs. 11,316 Cr. However, no irrigation potential has been created yet. Secretary, DoWR, RD & GR inquired about the possibility of incorporating pipe distribution systems for water distribution/delivery, given the project is new and land acquisition will be less in case of UGPL. She also enquired whether it was too late to consider this option. The Principal Secretary, Telangana State responded that the addition of pipeline systems, along with a micro-irrigation component, would be attempted. Joint Director, Ministry of Environment, Forest and Climate Change (MoEF&CC) informed that the ban has been imposed on the construction of the project because Telangana Government started the construction activities without prior approval from MoEF&CC, constituting a violation of environmental regulations and resulting in environmental damage estimated at Rs. 54 Crore. Secretary, DoWR, RD & GR remarked that generally projects are accepted by the committee subject to the environmental clearance to be submitted during the investment clearance (IC) stage, however, in this case the Committee may consider, since the violation has already occurred and there is stop work order from Hon'ble National Green Tribunal.

Member-Secretary informed that as per SoP, the project was sent to GRMB after its appraisal by CWC and the views/ observations made by the Government of Andhra Pradesh have been considered but they were found to be general in nature and this Committee has already recommended a few Projects of Telanaga, however all Projects require to be approved by the Apex Council as per SoP framed under Andhra Pradesh Reorganisation Act, after recommendation of the Advisory Committee.

Secretary, DoWR, RD & GR enquired about the site investigation, to which Project Authority informed that the foundation is found to be hard rock.

Additional Chief Advisor (Cost) enquired if execution of the project has already started, why is it presented before Advisory Committee, to which Member-Secretary informed that the technical clearance from Advisory Committee is needed for all the unapproved projects as per Gazette Notification issued under the Andhra Pradesh Reorganisation Act, 2014.

Deputy Advisor (WR&LR), NITI Aayog raised several inquiries regarding the project, including suggestions of CGWB regarding conjunctive use of groundwater in case of water logging, design aspects highlighted by CSMRS and the impact of the above project on the planned link from the Godavari River in interlinking project. The Project Authority responded that 0.3 TMC of water needs to be used w.r.t. conjunctive use, which is being firmed up. Regarding the CSMRS design concerns, the Project authorities stated that the commissioned barrage exhibits no seepage or foundation issues. Furthermore, the project currently does not affect planned link from the Godavari River in interlinking project.

Secretary, DoWR, RD & GR raised apprehensions about adequate design safety of the structures in view of recent Report of the National Dam Safety Authority Committee constituted for the Meddigadda barrage under Kaleshwaram Project. Chairman, CWC submitted that as per the guidelines, CWC does not check the designs when due certificate from the State Central Design Office is furnished. Secretary (WR, RD & GR), however, stated that she would like to make an exception and directed Central Water Commission (CWC) to review design of the Project within 1 month, and reconvene the meeting of the Advisory Committee, thereafter, to which Chairman, CWC agreed to.

After detailed deliberations, project was deferred by the Advisory Committee of DoWR, RD & GR with the following observations;

- i. *The design aspects of the project shall be appraised in CWC within 1 month.*
- ii. *The project authorities shall collaborate with MoEF&CC to address and mitigate the project's environmental impact, including resolving outstanding issues.*
- iii. *The project authorities shall come up with concrete plan for introducing Micro irrigation as well as piped distribution network wherever possible.*

2. Mankada Medium Irrigation Project, Govt. of Odisha (Estimated Cost Rs. 1053.69 Cr (Price Level:2024), BC Ratio 1.60:1)

Member-Secretary gave presentation on the project mentioning that Mankada Irrigation Project is a storage project proposed in Brahmani basin on Mankada nallah, a tributary to river Brahmani near village Kolipal in Pallahara block of Angul district. The project envisages construction of a 2180 m. long and 30.40 m. height earthen dam besides a central ogee crested spillway proposed across the river. The proposed dam site is located just downstream of the confluence of the Mankada and Kakharua nallahs. The irrigation will be provided through an open flow system comprising a 34.672 km, left main canal (LMC) and a 10.7 km right main canal (RMC). The project will provide irrigation to 9850 ha of CCA (including stabilizing the existing Mankada MIP ayacut of 1800 Ha) with annual irrigation of 12155 ha in Pallahara block of Angul district. The project will also supply 1.68 MCM of drinking water to 45,000 people in Angul district and

44.05 MCM for industrial demand. The project requires a total land area of approximately 1374.2 hectares, of which 1089 hectares will be submerged.

Deputy Advisor (WR&LR), NITI Aayog inquired about the timeline for environmental clearance and the potential submergence of the 7 km of National Highway-6 due to the project as mentioned in annexure 3 of Advisory Committee note. The Govt of Odisha responded that environmental clearance would be taken after forest clearance is secured. Regarding the highway submergence issue, Project Authority stated that a diversion has been planned, and its cost has already been factored into the project's current estimates. Furthermore, the Government of Odisha assured the committee that while substantial forest land about 444.06 Ha would be required, no sanctuary or national park would be affected by the project.

Secretary, DoWR, RD & GR recommended that project authorities consider expanding the command area under micro-irrigation and pipeline distribution system beyond 10% to increase water use efficiency and minimize land acquisition challenges. Secretary, DoWR, RD & GR inquired about Odisha's experience with underground pipeline (UGPL) distribution systems, to which the state government reported the existing systems were in good condition and has improved efficiency. However, the precise extent of that improvement remained unclear without any concrete figure.

After detailed deliberations, the project was accepted by the Advisory Committee of DoWR, RD & GR with the following observations.

- i. *Acceptance of project proposal by Advisory Committee of DoWR, RD & GR does not guarantee any eligibility towards release of fund under any existing scheme of DoWR, RD & GR such as AIBP, PMKSY, RRR, FMP etc or funding from any external multilateral agency.*
- ii. *Statutory clearance (Environment, Forest, Wildlife, Tribal Affairs & R & R etc.) as applicable may be ensured by the Project Authority.*
- iii. *Project Authorities shall obtain State Finance Concurrence.*
- iv. *Project Authorities shall come up with comprehensive plan for pipeline distribution system and micro irrigation in the command area well beyond 10% at Investment Clearance stage.*

Flood Protection Schemes

3. Strengthening and Pakkikaran from km 66.00 km to 132.80 km of Champaran Embankment (Estimated cost: Rs. 294.91 Cr., BC ratio- 1.8:1)

A detailed presentation was made by Member Secretary wherein it was mentioned that the project is situated on the left bank of Gandak River. The strengthening and Pakkiakaran of Embankment will facilitate inspection of embankment and smooth carriage of flood relief materials during the flood period. This will ensure effectively carrying out flood relief activities which are essential to safeguard the embankment and adjoining areas from recurring flood of River Gandak and mitigate flood damages.

Principal Secretary, Govt of Bihar informed the Committee that Government of Bihar (GoB) has constituted a committee on 23.12.2024 to assess floodplain zoning for embanked

rivers. The committee is expected to submit its final report this month. Further, following the submission of the final report, GoB intends to formally declare the area between the embankment and the river as the designated floodplain zone for embanked rivers through an executive order, thereby restricting floodplain limits up to the embankment line. He further highlighted that for un-embanked rivers, GoB has decided to conduct a comprehensive study to facilitate the delineation of the floodplain zone, ensuring a data-driven approach to floodplain management.

It was further highlighted that under pakkikaran, black topping of embankment is proposed. Commissioner (FM) highlighted that the major cost of work is for pakkikaran. Secretary, DoWR, RD & GR asked about ratio of cost involved in strengthening and pakkikaran (black topping) to which the State Government responded that approximately 65% of cost involves pakkikaran/black topping and 35% involves strengthening of sides.

Commissioner (FM) stated that embankment was built in 1914 and after a span of approx 90 years raising work was done. Now after around 20 years, strengthening and pakkikaran is being proposed. State government clarified that the purpose of pakkikaran and strengthening is to increase the life of the embankment.

Member (RM) raised the risk of entry of heavy vehicles on the embankment and inquired if the embankment is built for heavy vehicle. Govt. of Bihar clarified that restriction of heavy vehicles is imposed on the embankment.

Deputy Advisor (WR&LR), NITI Aayog, pointed out that as per BC ratio, annual cost involved is Rs. 47.19 Cr and suggested if State Govt. could charge a nominal amount from Highways Department for entry of vehicles, then its revenue could be used in the O&M and B.C. ratio would further improve.

JS&FA, DoWR, RD & GR enquired about the flood control scheme in initial reach (i.e. Km 0 to Km 66) of the river. Project Authorities informed the committee that a scheme for the initial reach (i.e. Km 0 to Km 66) has been submitted in GFCC for appraisal as the highest flood was observed at two places between Km 0 to Km 66 in the recent past and hence raising of the embankment was also necessitated in the above reach. JS&FA, DoWR, RD & GR suggested to combine both the projects to which Project Authority requested the committee to accept the current proposal and assured that the B.C. ratio of the combined project will be submitted at Investment Clearance stage.

After detailed deliberations, the project was accepted by the Advisory Committee of DoWR, RD & GR in view of flood situation in Bihar with the following observations.

- i. *The acceptance of the proposal by the Advisory Committee of DoWR, RD & GR does not guarantee any eligibility towards the release of fund under any existing scheme of DoWR, RD & GR such as FMP etc.*
- ii. *To come up with B.C. ratio of the combined project at Investment Clearance stage.*

4. Raising, strengthening and Puckkikaran of left and right Kamla Balan Embankment (Phase - III) from Km 0.0 (Jainagar) to Km 11.72 (Kasama), km 21.50 (Pirahi) to Km 27.10 (Pipraghat) and Km 92.50 (Punach) to Km 105.350 (Ghoghepur) of L.K.B.E and from Km 0.00 (Jainagar) to Km 23.20 (Bhatgama) and Km 94.00 (Palwa) to Km 111.290 (Phuhia) of R.K.B.E, (estimated cost : 254.45 crores, BC ratio- 2.31:1)

A detailed presentation was made by Member Secretary wherein it was mentioned that Kamla Balan River originates from Nepal and enters Indian Territory near Jainagar in Madhubani district. Kamla Balan Embankment protects the surrounding area from the flood of the river and besides this it also serves as the chief means of communication for the entire area. At 26.50 Km of Left Kamla Balan embankment river Balan joins the main Kamla River. The River Kamla Balan strikes obliquely to embankment at many places which causes seepage & piping. In the year 2019 during flood, heavy rainfall in the Nepal area (catchment of Kamla River) resulted in heavy discharge in Kamla Balan. The gauge reading of 69.90 was observed at D/S of Kamla weir which was 0.50 above the last observed HFL resulting in a discharge of 6223.94 cumec. Due to this high flood breach occurred at eight points & seepage, piping at several places in this reach of embankment. It was further highlighted that phase I and phase II were already approved by the committee in its 152nd meeting held on 14.07.2023 and this project will cover the whole remaining reach of Kamla Balan.

The Member Secretary pointed out that the height by which the embankment is proposed to be raised is not mentioned in the Advisory Committee note to which Govt. of Bihar clarified that it is to be raised by 1 to 1.5 mts depending on the requirement at a particular section.

Deputy Advisor (WR&LR), NITI Aayog asked if free board is to be provided over and above the height proposed to be raised to which Govt. of Bihar clarified that the free board will be provided over and above the height proposed to be raised.

Additional Chief Advisor (Cost) asked about the progress of the project and if it could be completed within the timeline to which Govt. of Bihar responded that the project is completed by approximately 33% and the remaining work may take at most 5-6 months beyond the scheduled timeline.

After detailed deliberations, the project was accepted by the Advisory Committee of DoWR, RD & GR with the following conditions.

- i. *The acceptance of the proposal by the Advisory Committee of DoWR, RD & GR does not guarantee any eligibility towards the release of fund under any existing scheme of DoWR, RD & GR such as FMP etc.*

5. Bagmati- Shanti Dhar- Burhi Gandak River link Project under Samastipur District (estimated cost : 117.82 crores, BC ratio- 2.31:1)

A detailed presentation was made by the Member Secretary wherein it was mentioned that earlier the peak flow from Bagmati River used to flow through Shantidhar to Burhi Gandak. After the construction of the Sormarhat-Hayaghat embankment built on the right side of the Bagmati River, the old natural channel of Shantidhar, which used to flow near km 5.40 of embankment, has become almost dead due to siltation. To counter this, the project has been formulated for linking Bagmati to Burhi Gandak via Shantidhar. The main objective of the present proposed project is to link Bagmati River and the river Burhi Gandak through Shantidhar so that the excess water of river Bagmati can be diverted to river Burhi Gandak through Shantidhar. This scheme will also drain out water from nearby waterlogged areas, freeing land for agriculture. The total length of this project is 61 km in the district of Samastipur. It has been proposed to construct an Anti-Flood Sluice (AFS) of 15000 cusec water flow capacity near Ghogharaha village at Km 5.40 of Sormarhat-Hayaghat embankment. Along with this, a proposal to construct new RCC bridges in place of the previously constructed low-capacity bridges and culverts for movement on Shantidhar by desalinating it in the available land is also

included in the present proposal. Apart from this, provision has been made for protection work on both sides (R/S and C/S) in U/S and D/S of the proposed AFS.

Secretary, DoWR, RD & GR enquired about the year of construction of the Sormarhat-Hayaghat embankment and whether any escape channel to extract spill water was planned at that time to which Govt. of Bihar stated that the said embankment was built around 10 years ago and no escape channel was planned at the time of construction of Sormarhat-Hayaghat embankment.

Deputy Advisor (WR&LR), NITI Aayog asked about the construction of 6 RCC bridges proposed under this scheme to which Govt. of Bihar confirmed the same and informed that cost of the same is also included in the estimate of proposed scheme. Further, the Commissioner (FM) asked if the design of bridge components was done by other state department such as PWD etc. to which Govt. of Bihar clarified that the same is designed and certified by CDO, WRD, Govt. of Bihar

JS&FA, DoWR, RD & GR inquired about the calculation differences in O&M cost of the three estimates to which Govt. of Bihar clarified that while in the new project O&M cost is taken as 17% of proposed scheme whereas for repair/raising work the same is taken as 16%. Secretary, DoWR, RD & GR directed GFCC to look into the same as there is very small difference.

After detailed deliberations, project was accepted by the Advisory Committee of DoWR, RD & GR with the following conditions.

- i. *The acceptance of the proposal by the Advisory Committee of DoWR, RD & GR does not guarantee any eligibility towards release of fund under any existing scheme of DoWR, RD & GR such as FMP etc.*

Other Issues:

1. Referring to the design failure in Medigadda barrage in Kaleshwaram Project, Secretary (WR, RD & GR) directed Central Water Commission to evolve an accreditation process for accrediting State Design Offices and Certificates from only Accredited State Design Offices would be accepted for exemption of design check by CWC.
2. Secretary, DoWR, RD & GR remarked that Maharashtra, Madhya Pradesh and Odisha have done significant work in implementation of Underground pipeline (UGPL) in distribution system. She further asked Chairman Central Water Commission (CWC) to collaborate with the states having significant UGPL distribution systems to leverage the expertise of those states and conduct a comprehensive study evaluating the effectiveness of UGPL distribution systems on water use efficiency so that it can be scaled up in other states also.
3. Secretary, DoWR, RD & GR directed Chairman, GFCC to improve the quality of Advisory committee note prepared by GFCC with the help of Central Water Commission, on which Chairman, CWC suggested Member (RM) to conduct a Training Program for GFCC Officers for appraisal and preparation of Advisory Committee Notes.
4. Secretary (WR, RD & GR) also desired Central Water Commission to evaluate the performance of Projects where Piped distribution System have been adopted and modify guidelines, if so necessary.

The meeting ended with vote of thanks to the Chair.

ANNEXURE

**GOVERNMENT OF INDIA
ADVISORY COMMITTEE FOR CONSIDERATION OF TECHNO-ECONOMIC
VIABILITY OF MAJOR & MEDIUM IRRIGATION, FLOOD CONTROL AND
MULTIPURPOSE PROJECT PROPOSALS
157th MEETING HELD ON 11.02.2025**

List of Participants

Ms. Debashree Mukherjee, Secretary, DoWR, RD & GR

In Chair

Members of the Advisory Committee or their representative / Nominees:
Smt./Shri

1	Dr. M.K. Sinha, Chairman, Central Water Commission	Member
2	A. Murlidharan, Deputy Advisor(WR&LR), NITI Aayog	Member
3	Richa Mishra , Joint Secretary, & Financial Advisor , DoWR, RD & GR)	Member
4	Santosh Kumar, Director(H-II) (Representing Secretary, Ministry of Power)	Member
5	Dr. Krishnendu Mondal, Joint Director (Representing Secretary, MoEFCC)	Member
6	Arvind Mudgal, Under Secretary (Representing Secretary, MoTA)	Member
7	Yogesh Paithankar, Chief Engineer, Project Appraisal Organization, CWC	Member Secretary

Special Invitees:

O/o Chief Advisor (Cost), Department of Expenditure, Ministry of Finance

1. Manmohan Sachdeva, Addl. Chief Adviser

Deptt of Water Resources, RD & GR

Smt./Shri

1. Sharad Chandra, Commissioner (FM)
2. Sunita Yadav, Economic Adviser
3. Rajesh Kumar, Senior Joint Commissioner-II (FM)

Central Water Commission

Smt./Shri

1. Navin Kumar, Member (WP&P), New Delhi
2. Anupam Prasad, Member (RM), New Delhi
3. Prashant Kumar Gupta, Director, PA(S) Dte., New Delhi
4. Piyush Ranjan, Director, PA(N), New Delhi
5. S.K. Samal, Director, M&A, Bhubaneswar
6. Ajay Shivilal Banode, Director, RO Dte, New Delhi
7. Hitesh Kumar Gupta, Deputy Director, PA(N) Dte, New Delhi
8. K.V.K Kuchel, Deputy Director, M&A, Bhubaneswar
9. Ram Pratap Singh Tomar, Assistant Director, PA(N) Dte, New Delhi
10. Ankesh Ranjan Sinha, Assistant Director-II, PA(N) Dte, New Delhi

**Ganga Flood Control Commission (GFCC),
Smt./Shri**

1. Ambarish Nayak, Chairman
2. S.K. Rajan, Member

**Officers from State Government of Telengana
Smt./Shri**

1. Rahul Bojja, Principal Secretary, Irrigation
2. G. Anil Kumar, Engineer-in-Chief, General
3. G. Vijay Bhaskar Reddy, Engineer-in-Chief, O&M
4. A. Srinivas Reddy, Chief Engineer, Kothagudem
5. S. Sreenivasa Reddi, Superintending Engineer, Kothagudem

**Officers from State Government of Odisha
Smt./Shri**

1. Lingaraj Goud , Engineer in Chief (Planning & Design)
2. Sagar Mohanty, Chief Engineer, Planning
3. Priyaranjan Sahoo, Deputy Director (Coordination)

**Officers from State Government of Bihar
Smt./Shri**

1. Santosh Kumar Mall, Principal Secretary, WRD, Bihar
2. Manoj Raman, Engineer-in-Chief, Flood Control and Drainage, WRD
3. Chandra Shekhar Kumar, Resident Engineer (Executive Engineer), liaison office, WRD

