

**Summary Record of the Discussions of 53rd Meeting of
Ganga Flood Control Commission (GFCC) held on 13.12.2022 at New Delhi**

The 53rd meeting of Ganga Flood Control Commission (GFCC) was held on 13th December, 2022 at New Delhi under the chairmanship of Shri M. K. Srinivas, Chairman, GFCC. Representatives from Member States i.e. Bihar, Uttar Pradesh, West Bengal, Uttarakhand, Jharkhand, NCT Delhi, Rajasthan and representative from Government of India /State Departments viz. DoWR, RD & GR, Ministry of Jal Shakti, Central Water Commission, Farakka Barrage Project, CWPRS, NIH, FMISC (Bihar), RDSO, NHA & NIH attended the meeting. The list of participants is at **Annexure-I.**

At the outset, Shri R.K. Singh, Director, Master Plan-I Directorate, GFCC, Patna, greeted all the participants and requested the participating members for their brief introduction.

After a brief round of introduction of all the participants, Shri Chandra Kumar Lal Das, Member (Co-ordination), GFCC stressed upon the need of hydrographic/bathymetry survey in pre and post flood conditions before taking up emergent maintenance of embankments for more efficient solution. He further stressed upon preparation of guidelines on zone-wise standardization of anti-erosion works, mechanism of erosion and governing principles as well as approach methodology to take up anti-erosion works in a flood plain. There is a need to evolve appropriate technical solution to the problem of river bank erosion in various zones of flood plain on the basis of the hydro-morphological condition of the rivers, (viz. velocity, silt factor, scour depth etc., characteristics of river bank) availability of type of construction materials for protection of riverbanks, which in turn would result broad standardization of design of anti-erosion works in a particular zone and its estimated cost.

Shri M. K. Srinivas, Chairman, GFCC extended a warm welcome to the participants including Members/Permanent Invitees/Special Invitees and other officers. In his opening remarks, Chairman, GFCC highlighted the following issues;

- (i). The Meeting of GFCC could not be held during last two years due to covid-19 pandemic restrictions. This conglomeration of all stakeholders of Ganga basin allows, through technical discussions, the way out to mitigate the flood menace to the populace and other infrastructural developmental works like road/bridges/drainage/river development etc.

He requested Member States to detail out the action taken by them on the decision of previous meeting and share their experience for deliberating in this forum for workable action points and updating the existing guidelines of GFCC related to flood management.

- (ii). He further emphasized on use of space technology. He apprised that remote sensing tools, GIS applications and UAV for survey/data collection are now extensively being used in planning of Flood Management. He emphasized that the outcome/data and experience gained should be shared for capacity

building in a collaborative manner and also for development of integrated comprehensive flood management plan of a river basin as a whole.

Chairman, GFCC then called for views and/or presentation, if any, by participating States on Flood management and related aspects.

Presentation by West Bengal:

Shri Biplab Mukherjee, Joint Secretary, Irrigation and Waterway Department, Govt. of West Bengal made a presentation wherein he highlighted that 83% of total river basin of West Bengal is in Ganga river basin. He further presented the construction of RCC flood wall in place of earthen embankment due to costly & non-availability of land required for construction of earthen embankment. He further demonstrated the palliative restoration works during last flood season. He asserted that central funding and technical assistance both are required as the anti-erosion works on Ganga/Padma are highly capital intensive.

Discussions of Agenda Items:

The agenda points discussed during the meeting and deliberations/decisions thereon are as under:

Item No.53.1 Confirmation of Summary Record of discussions of the 52nd Meeting of Ganga Flood Control Commission held on 03.06.2019 at New Delhi

The Summary Record of Discussions of the 52nd Meeting of the GFCC held on 03rd June, 2019 at New Delhi was circulated to all members vide GFCC's letter no. E-11/1/2018-MP-1/1/1473/2019 Dated: 15.07.2019. No comments were received thereon from any of the members.

The Commission confirmed the Summary Record of discussions of the 52nd Meeting of GFCC held on 03.06.2019.

Item No. 53.2 Follow up Action undertaken on the minutes of 52nd meeting of GFCC

The status as in the agenda notes was noted by the *Commission*. However, further discussions were made in the following points;

(i) **Compliance of Audit observations:** It was informed to the *Commission* that response on outstanding observations of the following two Audits are pending from States especially from Bihar & West Bengal.

1. **Paras of C&AG Report No. 10:** West Bengal was requested to arrange to supply the source document in support of their response made against para no 5.2.2.
2. **Audit Requisition No. 21 of DoWR, RD & GR:** The audit observations of years 2006-07 and 2007-09 are still outstanding.

Shri Rakesh Toteja, Sr. Joint Commissioner, DoWR, RD & GR stated that an early response is solicited from the concerned State Governments so as to settle the audit paras.

The Commission decided that the GFCC may issue fresh reminder to the concerned States to communicate the requisite inputs to settle the audit paras and States concerned shall send their response at the earliest.

(Action: GFCC/ Bihar and West Bengal)

- (ii) **Implementation of e-PAMS:** Shri Rajeev Kumar, Director, Project Appraisal (Central), Central Water Commission, New Delhi informed the *Commission* that as per the latest guidelines the online submission of Detailed Project Report through e-PAMS has been made mandatory. All flood schemes in CWC are routed through e-PAMS. The use of e-PAMS makes the process of appraisal expeditious and transparent. He further stated that user ID & Password of admin could be obtained through requisition by e-mail to Project Appraisal (Central) Dte., CWC, New Delhi.

Shri Biplab Mukherjee, Joint Secretary, I & WD, Govt. of West Bengal suggested that hands on training for submission of DPR through e-PAMS may be arranged in capital cities of States.

After discussions it was decided that all the member States may obtain the user-ID & Password from CWC. It was also decided that a one day workshop shall be organized to arrange hands-on training on e-PAMS.

(Action: GFCC and CWC)

- (iii) **Guidelines for use of Geo-textiles/Geo-textile bag/Geo-textile tubes in construction of Flood Management Works:** This agenda point was also discussed in 51st & 52nd meetings of GFCC. Member States were required to execute a pilot project as per the Guidelines finalized by GFCC.

Representatives of all member states stated that Geo-textiles are being extensively used in the flood management/ anti-erosion schemes. Chairman, GFCC stressed that for uniformity and clarity regarding material specifications; designs and other aspects of technically innovative materials like geo-synthetics in the form of geotextile bags/geotextile tubes etc. requires valuable inputs from member states who are involved in actual execution by means of sharing of individual experiences and technical know-how. He also emphasised the need for inclusion of Director, CSMRS as a special invitee in future meetings to get their expert view in this regard.

The Commission decided that the concerned Directorates of GFCC may visit the sites where such materials other than traditional materials like boulder, timber have been used in flood management works and collect the feedback on GFCC Guidelines, especially regarding dimensional requirements, stitching requirements, installation guidelines, schematic diagram, test reports etc. from the concerned State Governments.

(Action: GFCC/Member States)

Item No. 53.3 Review of process of submission of flood schemes and funding under: Flood Management and Border Area Programme (FMBAP) for period 2021-26

The representatives of all Member States emphasized for review of process of submission and appraisal of Flood management and Anti-erosion schemes based on priority of completion besides cost for timely inclusion for central funding and more clarity in the existing Guidelines of FMBAP. Presently, there are different sets of guidelines for FMP and RMBA components of FMBAP even after merger of the said two components under FMBAP.

Further, the threshold distance from the international border for taking up works under the scope of RMBA component of FMBAP needs to be clearly defined and structural measures for flood management on common rivers other than Kosi and Gandak may also be included.

Shri Rakesh Toteja, Sr. Joint Commissioner, DoWR, RD & GR, Ministry of Jal Shakti informed that in order to develop the strategy for flood management work in entire country and River Management Activities and work related to Border Areas, a Committee was constituted under Chairmanship of Vice Chairman, NITI Aayog. This Committee has submitted in its final report in January, 2021 and is under consideration by the Acceptance Committee of Govt. of India.

He stated that in respect of the above two points, it has been recommended in the said report that DoWR, RD & GR, MoJS will modify and prepare a comprehensive guidelines on FMBAP that would describe procedure and documentation for release of Central Assistance. He stated that suggestions will be called from the Member States while finalising the comprehensive guidelines on FMBAP.

The revision of monetary limits for appraisal of flood control schemes has also been recommended as under in the report of Niti Ayog.

S. No.	Appraising Authority	Existing	As recommended
1.	State TAC	<Rs. 12.50 Crore	<Rs. 25 Crore
2.	GFCC (for Ganga Basin)/Regional Offices of CWC (other than Ganga Basin)	>Rs. 12.5 Crore and <Rs. 25 Crore	>Rs. 25 Crore <Rs. 40 Crore
3.	Advisory Committee of DoWR based upon appraisal by GFCC/CWC	>Rs. 25 Crore	>Rs. 40 Crore

Further, he informed that it is recommended in the report to review the scope of work under RMBA so as to include the maintenance of flood protection works of Kosi & Gandak projects (in Nepal) and river training works on all cross-border/border rivers within Indian territory.

The Commission stressed for early finalisation of comprehensive guidelines on FMBAP in consultation with Member States.

(Action: GFCC/DoWR, RD & GR)

Item No. 53.4 Review of existing Comprehensive Plans and preparation of Master Plan for Flood Management and their implementation and expected Inputs from Central/State Govt.

Issues of updation of comprehensive plans were discussed & it was felt that comprehensive plans need to be updated regularly Representative of Govt. of Bihar stated that collection of data and preparation of comprehensive plans are being taken up under NHP and all related data are shared with CWC. Director (MP-I),

GFCC informed during the meeting that currently, updating work for two river basins i.e. Kosi & Gandak had been taken up in GFCC. The list of data required was shared with the Member States.

In this regard, Chairman, GFCC stressed on development of integrated comprehensive plan for flood management of a river sub-basin as a whole considering the inter-State/trans-boundary aspects. The updation works shall be carried out in collaboration with the concerned States of associated river sub-basin.

The Commission decided that the concerned Directorate of GFCC may collect the data available under NHP with CWC and Member States were also requested to supply the data available under their domain.

(Action: GFCC/All Member States)

Item No. 53.5 Assessment of existing waterways under the road and rail bridges and to determine additional waterways to be provided for reducing the drainage congestion

Shri Chandra Kumar Lal Das, Member (Co-ordination), GFCC highlighted that due to rapid infrastructure development viz. highways, road & railway bridges etc. resulted in a network of criss-cross raised bunds dividing the gentle sloping flood plain in compartments. In most cases, outlets/waterways provided in these bridges/barriers are not adequate resulting in impeded drainage, embankment breaches & inundation issues and cited the example of recent embankment breaches in Gopalganj district, Bihar. There is also issue on sharing cost of widening of waterways and erosion control measures near bridges. He stressed on the need of active co-ordination mechanism including all the stakeholders i.e. WRD of State Govts., railways, road construction agencies etc. during the planning, design and execution of such development activities.

He further stated that it was recommended in erstwhile report of Rashtriya Barh Aayog that it should be mandatory on all departments of Central and State Governments to construct bridges on river only after getting clearance from the State Committee of Engineers and GFCC was represented in some of these State Committees.

The representative of West Bengal informed that clearances are given by State government and clearances are obtained from inland waterway in some rivers/reaches.

The representative from NHAI also informed that No Objection Certificates are being obtained from state Governments. The representative from Ministry of Transport stated that the computation of adequacy of water ways design is determined as per relevant code of IRC.

Chairman, GFCC felt that there is a lack of coordination amongst various departments leading to non-uniformity in fixation of waterways for bridges. As the subject matter has also been under the mandate of GFCC, survey works for determining adequacy of waterways are being presently carried out in the reaches of Ganga River from Haridwar to Rudrapryag.

The Commission decided to flag this agenda point in the next Ganga Flood Control Board meeting for defining the role of GFCC in fixation/examining the adequacy of waterway. Member States are required to submit their views/opinion on this issue.

(Action: All Member States)

Item No. 53.6 Flood Plain Zoning

The status of implementation of Flood Plain zoning bill in different States was discussed. The representative of Uttar Pradesh informed that as per the directions of NGT, demarcations in some reaches are under process.

The representative from FMISC, Govt. of Bihar informed that in compliance to Hon'ble NGT orders/directions and in response to NMCG letter, the Govt. of Bihar has furnished on 10.08.2021 a 'Report on Scientific study on the feasibility of Flood Plain Zoning in the State of Bihar wherein it has been concluded that flood plain zoning is not feasible in Bihar. Member (C), GFCC stated in this regard that the outright rejection of flood plain zoning is not a tenable option, hence, it is not acceptable. Instead, in the first place, further encroachment should be stopped and the whole flood plain be mapped on scientific basis and suitable short and long term alternatives and plans for flood plain management be brought forward.

Senior Joint Commissioner, DoWR, RD&GR informed that Secretary, Ministry of Jal Shakti has constituted a Committee under the chairmanship of Member (River Management), CWC for formulation of technical guidelines on Flood Plain Zoning.

Further Secretary, DoWR, RD & GR is also taking a meeting on adaptation of flood plain zoning with states of Uttar Pradesh, West Bengal, Assam and Bihar.

The Commission opined that the status of adaptation of flood plain zoning and views/opinion of Member States on technical issues regarding flood plain zoning may be shared with GFCC to facilitate formulation of technical guidelines.

(Action: All Member States)

Item No. 53.7 Use of Geo spatial data in planning & monitoring of the flood management schemes

The representatives of West Bengal and Bihar informed that a separate unit has been set up in their respective states for use of geo-spatial data for flood management schemes. The pre and post satellite imageries are also used in planning of emergent flood & anti-erosion works.

The Commission decided that the concerned Directorates of GFCC may visit these units in the States to evaluate whether the data can be utilized for planning and monitoring of flood Schemes.

(Action: GFCC)

Item No. 53.8 Agenda for proposed GFCB meeting

Chairman, GFCC informed that the meeting of Ganga Flood Control Board is chaired by the Hon'ble Union Minister of Jal Shakti and Hon'ble Chief Ministers of the member states are its members. The last meeting was held in 2015 and the next meeting is proposed to be held shortly. He highlighted that since this body is at the highest level of policy making, important issues should be placed before the Board in its next meeting.

The Commission decided that Member States may send their agenda points for the meeting of the Board by the end of January, 2023 so that the agenda of the next GFCB meeting could be formulated and sent to Ministry of Jal Shakti.

(Action: All Member States & GFCC)

Item No. 53.9 Inventory of anti-erosion and bank protection works in GIS environment:

Shri Piyush Kumar, Director (FM-I), CWC stated that a record of inventories has been maintained in Central Water Commission upto 12th year Plan. It needs to be updated upto 2021-2022.

The representatives of Uttar Pradesh and West Bengal stated that related information is available on their website. However, geo-tagging and data in GIS environment is not available.

The Commission decided that the data so available on websites of State Governments may be collected by the concerned Directorates of GFCC or may be obtained from States. Efforts may also be made to prepare inventory records in GIS environment.

(Action: GFCC/All Member States)

Item No. 53.10 Documentation of information regarding experience gained during execution of the scheme

Director (MP-I), GFCC highlighted that sharing of success stories of flood management works actually executed by various Ganga basin States helps in getting acquainted with the new/innovative development in construction material and design of embankment protection works and other structures/installations used in Flood Management Works and documentation of achievements.

The Commission decided that GFCC may organize a workshop involving all Member States and other Stakeholders to share the experiences of the States.

(Action: GFCC/All Member States)

Item No.53.11 Any other item(s) with the permission of the Chair

With the permission of Chair, the representative of West Bengal raised the issue of preparation of Comprehensive Flood management schemes to address the river erosion along Ganga-Padma river for the entire stretch in W.B. and immediate upstream stretch in Bihar through a joint study by Govt. of West Bengal, Bihar and Farakka Barrage Project, under the aegis of GFCC.

The Commission decided that the matter will suitably looked into by GFCC.

(Action: GFCC)

The meeting ended with a vote of thanks to the chair.

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List of participants of the 53rd meeting of GFCC held on 13th December, 2022 at New-Delhi.

Chairman/Members/Permanent Invitees

1. Shri M.K. Srinivas, Chairman, Ganga Flood Control Commission, Patna – In Chair
2. Shri C K L Das, Member (Coordination), GFCC, Patna.
3. Dr. R.S. Kankara, Director, CWPRS, Pune.
4. Shri Dinesh Kumar Chaturvedi, General Manager (Technical), NHAI HQ, New Delhi.
5. Shri Biplab Mukherjee, Joint Secretary, I & W Directorate, West-Bengal.
6. Shri Subhash Chandra, Chief Engineer, Irrigation Department, Uttarakhand.
7. Er. Sharad Kumar, Joint Director, FMSIC, Water Resource Department, Bihar.
8. Shri Rajeev Kapil, Executive Engineer, Irrigation & Water Resources Govt. of, Uttar Pradesh.
9. Shri Arun Kumar Das, Secretary, Technical, Chief Engineer office, Water Resource Department, Deoghar, Jharkhand.
10. Shri Shiv Kumar, Executive Engineer, Irrigation and Flood Control Department, New Delhi.
11. Shri Ashvani Kumar Yadav, EE & Liaison Officer, Govt. of Rajasthan.
12. Shri M.K.Shukla, ADE/ B&S, RDSO, Lucknow.
13. Shri Pranjal Gupta, Assistant Executive Engineer, Ministry of Road Transport & Highways.

Other Invitee/Participants

Department of Water Resource, River Development & Ganga Rejuvenation, Ministry of Jal Shakti.

14. Shri Rakesh Toteja, Senior Joint Commissioner (FM), DoWR, RD & GR, Ministry of Jal Shakti.

Farakka Barrage Project

15. Shri Sandeep Kumar, Superintending Engineer, Farakka Barrage Project.

NIH, ROORKEE

16. Dr. Sanjay Kumar, Scientist (F), NIH Roorkee

Bihar

17. Er. Parwez Akhtar, DD-II, FMSIC, Water Resource Department, Bihar.

Uttarakhand

18. Shri Anil Kumar, Assistant Engineer, Irrigation Department, Uttarakhand.

RDSO

19. Shri Manish Kumar Yadav, SSRE/ B&S, RDSO, Lucknow.

Central Water Commission

20. Shri Piyush Kumar, Director (FM-I), CWC, New Delhi.

21. Shri Rajiv Kumar, Director, PA (C), CWC, New Delhi.

Ganga Flood Control Control Commission

22. Shri Rajesh Kumar Singh, Director MP-I, GFCC, Patna.

23. Shri Pradeep Kumar, Deputy Director (P&C), GFCC, Patna.

24. Shri Shamsul Quamer, Deputy Director (MP-I), GFCC, Patna.

25. Shri Om Prakash Singh, Deputy Director (MP-II), GFCC, Patna.

26. Shri Vivek Johri, Deputy Director (LKO), GFCC, Lucknow.

27. Shri Raushan Kumar, AD-II, GFCC, Patna.

28. Shri Kanhaiya Kumar, AD-II, GFCC, Patna.

29. Shri Avinash Kumar Singh, JE, GFCC, Patna.

30. Shri Pratik Raj, JE, GFCC, Patna.

31. Ms. Priti Dwivedi, Steno Gr.I, GFCC, Lucknow.