

THE THIRD MEETING OF NEPAL-INDIA JOINT COMMITTEE ON INUNDATION AND FLOOD MANAGEMENT [JCIFM]

(14TH– 19TH May, 2010)

The third meeting of Nepal-India Joint Committee on Inundation and Flood Management (JCIFM) was held from 14th to 19th May, 2010. The Indian delegation was led by Mr. M. U. Ghani, Member, Ganga Flood Control Commission (GFCC), Government of India and the Nepalese delegation was led by Mr. K. R. Dahal, Director General of the Department of Water Induced Disaster Prevention (DWIDP), Government of Nepal. The Nepalese delegation welcomed the Indian delegation at Inarwa, Dhanusha just across the Nepal-India border on 14th of May, 2010.

The meeting of the Joint Committee was preceded by a joint field visit to the completed, ongoing and proposed embankments and flood protection works along the Kamala, Bagmati and Lalbakeya rivers. The list of participants of the meeting is at *Annex-1*.

EXTENSION OF EMBANKMENTS

A) FIELD VISIT OF ON GOING WORKS

A-1 Kamala River

The committee carried out the field visit of the Kamala river on 14th and 15th May, 2010. On the first day, the committee visited the right bank of the Kamala river from Ch. 0.00 km to Ch. 19.95 km at Inerwa, Sakhuwa Maran, Hathmunda and Harnee.

It was observed that the embankment work along the right bank from Ch. 2.10 km to Ch. 5.50 km has been completed, but some sections in the reach that were incomplete require to be completed at the earliest. The work from Ch 0.00 to 2.10 km is going on. Most of the earthwork part of the embankment from Ch. 5.50 to 19.95 km, with a few gaps in between, has been completed whereas the compaction, dressing and grass sod turfing are yet to be completed. The anti erosion works such as revetment and construction of studs is continuing. As suggested in the last meeting, anti flood sluice of hume pipe with flap valve is yet to be constructed at Ch 5.08 km.



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The committee inspected the end point of the embankment at the Nepal-India border. The committee decided that the construction of embankment should be taken up on the Indian side to close the gap along both banks appropriately by Government of India.

At some locations, the top width of embankment was found not as per design width therefore, the committee directed that it should be brought to the design width. Furthermore, one stud at Hathmunda at Ch. 15.51 km was found to be placed at incorrect location. The committee directed that it be shifted further upstream. The Nepalese side informed that revetment and stud work on the already constructed embankment at Hathmunda had been omitted from the estimate approved previously and due to the proximity of the river channel, it is required to be constructed before the monsoon of 2010. It also requested that the embankment at Harine needed to be extended further to avoid probable outflanking of the embankment. The committee decided that revetment and stud may be provided for a distance of 150 m at Ch. 12.85 km and the embankment may be extended further by 500 m at Harnee before the onset of monsoon floods.

On May 15, 2010 field visit was taken up along the left bank at Chatri and from Ch. 5.05 km to the Nepal-India border. The embankment and related works at Chatri had been completed. The studs were properly tagged to the embankment as instructed previously by the committee. Most of the embankment earthwork was seen to be completed. From Ch. 5.05 km to Ch. 0.50 km at some places, the dressing and grass sod turfing was yet to be taken up.

The committee noted that the borrow pits for the earth were too close to the toe of the embankment on the river side and in continuation. The committee instructed that the borrow pits should be at least 100 m away from the toe of the embankment so as to avoid parallel flow. The earth cutting from the borrow pit should not be in continuation. These technical requirements should be strictly adhered to. The overall progress of works was noted to be good and the committee instructed that the different work packages contracted out be completed as per schedule.

A-II Bagmati River

The field visit to Bagmati took place on 16th May, 2010. During the second meeting of JCIFM, the committee had approved for RBM work on the top of embankment for a length of 30.48 km on both banks which was found to be going on. The committee directed that the gravel works should be completed in the schedule time.

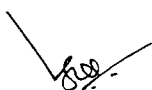
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A-III Lalbakeya River

The field visit to Lalbakeya embankment works took place on 16th May, 2010. During the second meeting of JCIFM, the committee had approved the construction of embankment and related protection works on both banks from Ch. 5.40 km to Ch. 11.50 km (6.10 km on each bank) as measured from Nepal Eastern Canal. The committee observed the ongoing works on the left bank from Ch. 5.40 km to Ch. 11.5 km. The earthwork part from Ch. 5.40 km to Ch. 7.40 km was found to be complete whereas the studs were under construction. The earthwork for embankment was ongoing from Ch. 7.40 km to Ch. 11.50 km. The following directions were given by the committee:

- i) The alignment of studs being constructed was not proper. Such studs should be aligned at right angle to the flow of the river, as such it should be rectified at the locations where necessary.
- ii) The placement of launching aprons was found quite above the lowest water level (LWL) at some places. The bottom level of the launching apron should be at LWL of the river. The committee directed to rectify accordingly.
- iii) The level of the inlet structure at Ch. 7.35 km was not found as per approved design. It was found about 2-3 feet below ground level. The inlet and outlet levels of the structure should match with the existing ground levels. It should be rectified accordingly.
- iv) Three studs at location P13 should be replaced by revetment and launching apron as the river is flowing close to the embankment.
- v) It was observed that the borrow pits were adjacent to the embankment and continuous without any breaks. The instruction given for Kamala river may be followed here as well.

The committee visited the embankment work on the right bank from Ch. 11.50 km to 8.70 km. Most of the earthwork of the embankment was seen to be complete whereas the dressing and grass sod turfing were yet to be initiated. The construction of studs and revetment has been started. The committee instructed that the ongoing works for Lalbakeya be completed as per schedule.



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Decisions of the Joint Committee on inundation & Flood management (JCIFM)

B) PROPOSED WORKS AND RELEASE OF FUNDS

B-I For Bagmati river

The committee directed the concerned field officers to carry out the necessary field investigation including inundation area and to collect information of damages to see the necessity of proposed embankment on the left bank from Ch. 31.80 km to Ch. 42.80 km. During the second meeting of JCIFM, GON had tendered RBM work for nine work packages out of which the Committee approved five work packages totaling 30.48 km and work is presently in progress. The Committee decided to approve the remaining four work packages on the right bank totaling 20.32 km of which GOI contribution is NRs 4.52 crores, excluding VAT and including contingencies. These work packages may be initiated on completion of the ongoing RBM work of 30.48 km approved previously.

The committee noted that during the 12th meeting of SCEC and also endorsed in the first and second meetings of JCIFM, 9 work packages already evaluated, 2 work packages in the process of evaluation and 4 work packages to be done by user groups totaling GOI contribution of NRs. 16.327 crore was approved. Accordingly, the initial 50% of fund i.e. NRs. 8.163 core was recommended for release and has been released by GOI and the balance was to be released after receipt of utilization certificates of 75% of GOI aid. Since the utilization certificates for the above have already been submitted, the balance 50% i.e. NRs. 8.163 is recommended for release. For the remaining two works for release of balance 50% amounting to NRs. 2.43 crore and 50% for RBM works amounting to NRs. 4.45 crore, the utilization certificate is still awaited from GON.

B-II Work along the Lalbakeya river

The committee decided that the process for extension of the Lalbakeya embankment for a further length of 10.50 km on each bank with RBM of 3.5 m width and 15 cm thickness for a length of 6.40 km also on each bank be initiated. The GON may submit the estimate of above proposed works to GFCC for technical appraisal. Thereafter, tenders may be floated by the competent authority of Government of Nepal as per Financial Regulations of Government of Nepal and the tenders shall be considered for approval in the next meeting of JCIFM.



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As decided in the second meeting of JCIFM, for the works of 12.2 km along both banks and Anti Flood Sluice (AFS) along the right bank of Lalbakeya near Nepal-India border, totaling GOI contribution of NRs. 19.23 crore out of which 50% of this amount i.e. NRs. 9.615 crore has been released on 25/3/10 to GON. For the release of balance payment, utilization certificate has not been submitted by GON as yet.

GOI has also released 50% of balance amount (entire amount for 5.4 km on both banks upstream of NE Canal and also for the 6 studs) i.e. NRs. 10.73 crore and also NRs. 0.245 crore for emergent work of Lalbakeya river done during flood of 2009.

The tender for the construction of embankment for a length of 2.8 km along the right bank of Bhakuwa river (Jaan river in India) at the tendered amount of NRs. 1,41,47,703.00 excluding VAT as vetted by the competent authority of GON was approved by the committee. The GOI contribution of tender amount and contingencies is NRs. 1.486 crore. Out of which the initial 50% i.e. NRs. 0.743 crore is recommended for release. The balance will be released after receipt of utilization certificates of expenditure of 75% of GOI aid and monitoring of the same by JCIFM.

B-III Works to be carried out in Kamala river embankment

The committee decided to extend the embankment works in Kamala as prioritized below:

- i) Ch. 10.55 km to Ch. 14.50 km (3.95 km) on the left bank
- ii) Ch. 15.10 km to Ch. 18.80 km (3.70 km) on the left bank
- iii) Ch. 27.15 km to Ch. 32.50 km (5.35 km) on the left bank
- iv) Ch. 5.08 km to Ch. 6.80 km (1.72 km) on the right bank
- v) Ch 19.95 km to Ch. 24.45 km (4.50 km) on the right bank
- vi) Ch. 25.45 km to Ch. 29.97 km (4.52 km) on the right bank

The GON may submit the estimate of above proposed works to GFCC for technical appraisal. Thereafter, tenders may be floated by the competent authority of Government of Nepal as per Financial Regulations of Government of Nepal and the tenders shall be considered for approval in the next meeting of JCIFM.

During the second meeting of JCIFM, the tender for the works was approved for completion before the monsoon of 2010. The works were



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divided into two phases of which the GOI contribution for the first phase as mentioned in the minutes of the second meeting of JCIFM, was NRs. 17.698 crore and the initial 50% of this i.e. NRs. 8.85 crore was recommended for release and has already been released. The balance was to be released after receipt of utilization certificates of 75% of GOI aid. Since the utilization certificate for the above have already been submitted, the balance 50% i.e. NRs. 8.848 crore is recommended for release.

For the second phase, the tendered amount excluding VAT but inclusive of contingencies is NRs. 12.33 crore. The initial 50% of GOI contribution i.e. NRs. 6.165 crore is recommended for release. In the same way, the estimated works of 150 m revetment and 3 studs at Sakhuwa Madhan and extension of 500 m length embankment at Hathmunda including contingencies but excluding comes to NRs. 1.92 crore. The initial 50% of GOI contribution i.e. NRs. 0.96 crore is also recommended for release. The balance payment for both cases would be made on receipt of utilization of 75% of funds released and inspection of works by the Committee.

B-IV Detailed Project Report for extension of embankment along Khando River

During the second meeting it was decided that the Nepalese side would compare the present cross sections with previous cross sections in the report and findings would be provided to GFCC. The Joint Committee would consider the DPR at the next meeting of JCIFM. The Nepalese side informed that the comparison of cross sections could not be done as yet. The Nepalese side would send the same to GFCC at the earliest.

B-V Miscellaneous

1) Bagmati embankment - recovery of advance from the contractors of Package C and D of Bagmati Embankment

As regards recovery of mobilization amount of advance given to the contractors of Package C & D of Bagmati embankment, Nepalese side informed that the process of recovery of mobilization of advance has been taken up. It was emphasized to expedite the recovery process.



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C) FLOOD INUNDATION ISSUES

C-I Kalkalwa Bund and Laxmanpur Barrage

The Indian side stated that the construction of the structure as discussed in the fifth meeting of JCWR has been taken up. Efforts are on to complete it at the earliest.

C-II Rasiyawal-Khurd-Lotan Bund

The Nepalese side informed that construction of culvert in Nepalese territory as decided in the fifth meeting of JCWR has been completed. The Indian side stated that the construction of the culvert has been taken up and efforts are on to complete it at the earliest.

C-III Mahali Sagar

As requested by the Government of Nepal, the committee decided to carry out joint survey to fix the contour level of 92.76 m in order to assess the reservoir area both in Nepal and India at pond level of 92.76 m and also to verify the same with the existing historical marker.


C-IV Bairganiya Ring Bund

Construction of embankment on the right bank of Bhakuwa Nala and sluice on the right bank of Lalbakeya river near Nepal-India border is likely to reduce the flow towards the Bairganiya ring bund. Consequently it would mitigate the inundation problem of Gaur Bazaar. After the study of the affect of these structures on their completion, the issue of further opening in Bairganiya ring bund would be examined.

With regard to study of impact of spill of Jhanj River on inundation in Gaur Bazar area as directed in the previous meetings of JCIFM, the Nepalese side informed that a joint study report prepared by the concerned Contact Officers has been sent to GFCC through diplomatic channel for consideration.

C-V Rato River

The Government of Nepal raised the issue of construction of ring bund in India. The Indian side clarified that the ring bund has been constructed for the protection of thickly populated villages on the Indian side of the border. The Indian side also raised the issue of construction of embankment along both banks of Rato river in Nepal, which has been constructed upto 0.40 km. up stream of Nepal-India Border and is still going on. During the field visit, the committee visited the Rato river at Nepal-India border. The committee discussed the issue of construction of embankment on both





sides of the border. The committee decided that both sides should maintain the status quo of the construction of embankment as of now.

It further decided the inundation situation in the area would be studied jointly by the Contact Officers and further course of action for mitigation of inundation problem would be decided accordingly.

C-VI Geruwa River

Geruwa river, a left bank tributary of Karnali river is inundating a vast populated area in India during monsoon season. In order to check the inundation of villages, GOI has proposed an embankment along the left bank of Geruwa River in India starting from Nepal-India border. A DPR for the construction of embankment starting from Nepal-India border has been prepared, which would be forwarded to the GON through diplomatic channel for vetting at the earliest.

The Nepalese side had already constructed embankment along this river which was damaged during monsoon of 2009. GON was requested to restore the damaged portion of the embankment.

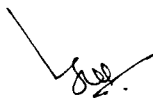
C-VII Maraha River

The issue of construction of channel to divert part of the flow of Maraha river away from the affected village in Indian side was discussed. It was clarified by the Indian side that structure constructed to divert the flow of river in the new channel will be permeable and will not cause inundation in Nepalese side. As such it was decided to drop it from the future agenda of JCIFM.

D) FLOOD FORECASTING ISSUE

D-I Flood Forecasting Master Plan

During the second meeting of JSTC it was noted that the Master Plan approved in 2004 had been completed and a new Draft Flood Forecasting Master Plan (2010-2014) had been submitted to the Indian side. The Indian side informed that the Draft Master Plan is being examined and its comments would be conveyed to the Nepalese side shortly.



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E) COMPREHENSIVE STRATEGY FOR FLOOD MANAGEMENT

E-1 Preparation of prioritised list of flood management works

As directed by JSTC during its second meeting, the GON may prepare and submit the prioritized list of ongoing and proposed flood management works in the next meeting of JCIFM. The Indian side would also prioritize their works accordingly so that works are carried out by both sides for the mitigation flood problem in both countries.

It was decided to hold the next meeting of JCIFM after the monsoon of 2010.

The meeting was held in a cordial atmosphere.

Signed on 19th May, 2010 at Kathmandu

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(K.R. Dahal)

Team Leader/ Director General

Dept. of Water Induced Disaster Prevention
(DWIDP)

M.U. Ghani
19/05/10

(M.U.Ghani)

Team Leader/Member

Ganga Flood Control Commission
(GFCC), Patna

**3Rd Meeting of the JCIFM
held from 14th - 19th May 2010**

LIST OF PARTICIPANTS

INDIAN SIDE:

- | | | | |
|----|--|---|------------------|
| 1. | Mr. M. U. Ghani
Member (C),
GFCC, Patna | - | Team Leader |
| 2. | Mr. K. N. Keshri
Chief Engineer (LGBO)
CWC, Patna | - | Member |
| 3. | Mr. A. K. Ojha
Chief Engineer
Irrigation Department, Govt. of UP,
Lucknow | - | Member |
| 4. | Mr. H. K. Jain
Counsellor (Commerce)
EOI, Kathmandu | - | Member |
| 5. | Mr. ASP Sinha
Sr. Joint Commissioner (Ganga)
MOWR, New Delhi | - | Member |
| 6. | Mr. Prakash Chandra
Executive Engineer
Water Resources Department
Govt. of Bihar, Patna | - | Member |
| 7. | Mr. Subir Dutta
Under Secretary (Nepal)
MEA, New Delhi | - | Member |
| 8. | Mr. Awadhesh Sharma
Director, GFCC, Patna | - | Member Secretary |

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NEPALESE SIDE :

- | | | | |
|----|---|---|-----------------|
| 1. | Mr. Khom Raj Dahal
Director General/DWIDP | - | Team Leader |
| 2. | Mr. Hira Nand Jha
Deputy Director General/DWIDP | - | Member Secretar |
| 3. | Mr. Sanjaya Dhungel
Senior Divisional Engineer, WECS | - | Member |
| 4. | Mr. Mahesh Bahadur Pradhan
Senior Divisional Engineer, Dept. of Irrigation | - | Member |
| 5. | Mr. Sashi Bahadur Bisht
Senior Divisional Engineer, DWIDP | - | Member |
| 6. | Mr. Rishi R. Ghimire
Under Secretary, Ministry of Foreign Affair | - | Member |
| 7. | Mr. Amrit Shrestha
Senior Divisional Engineer, Ministry of Irrigation | - | Member |
| 8. | Mr. Bimal Sapkota
Section Officer, Ministry of Finance | - | Member |
| 9. | Mr/s. Bibhuti Pokharel
Hyd. Engineer, DHM | - | Member |

SPECIAL INVITEES

1. Mr. A. K. Gajurel, Project Manager, RTP/DWIDP
2. Mr. R. L. Karna, Division Chief, WIDPO, D.No. 2, Dhanusha
3. Mr. A. C. Jha Division Chief, WIDPO, D.No.3, Bara

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