

Minutes of the Fourth Meeting of India-Nepal Joint Committee on Water Resources (JCWR) held on 12-13 March 2009  
in New Delhi, India.

The fourth meeting of the India- Nepal Joint Committee on Water Resources (JCWR) was held in New Delhi on March 12-13, 2009. The Indian delegation was led by Mr. U. N. Panjjar, Secretary, Ministry of Water Resources, Government of India and the Nepalese delegation was led by Mr. S. P. Koirala, Secretary, Ministry of Water Resources, Government of Nepal. The lists of the Indian and Nepalese delegates are in Annex-I and Annex-II respectively.

1. The Leader of the Indian delegation welcomed the Nepalese delegates and mentioned that India and Nepal share a unique and special relationship. Both the countries are bound by history, geography and culture. The relations between the two countries are marked by deep-rooted people to people contacts across open borders and a visa-free regime. He expressed hope that in the 4<sup>th</sup> meeting, JCWR would be able to discuss the issues of water resources development projects in a comprehensive manner, further strengthening the ties between the two countries. He expressed satisfaction over the present status of breach closure works of eastern afflux bund of Kosi Barrage and hoped that the works would be completed in time with the cooperation of Government of Nepal.

2. The leader of the Nepalese delegation expressed gratitude for the excellent hospitality extended by the Indian side to his delegation. He deeply appreciated and expressed satisfaction over the timely closure of the breach in the Kosi afflux bund at Kusaha. He further reiterated the commitment of the Government of Nepal to extend full cooperation and security to the Indian side for restoration of the afflux bund to its design section in a timely manner. He informed that Government of Nepal was making all necessary efforts to ensure resumption of the suspended field investigations at the Sapt Kosi High Dam site at the earliest possible.

3. After detailed deliberations on agenda which is placed at Annex-III, the following decisions were made:

## 1.0 Review of the Actions taken on decision of 3<sup>rd</sup> meeting of JCWR

### 1.1 Mahakali Treaty

#### 1.1.1 Pancheshwar Multipurpose Project

4. During the 3<sup>rd</sup> meeting of JCWR, it was decided to set up Pancheshwar Development Authority (PDA) in accordance with Article-10 of the Mahakali treaty. In this regard, the Indian side presented draft Terms of Reference (TOR) of Pancheshwar Development Authority (PDA) to the Nepalese side for their consideration. In response, the Nepalese side provided with the revised TOR with some modifications. Both sides discussed the draft TORs exchanged by each side and after deliberation agreed to discuss it further and finalise at the next meeting of the JCWR.

#### 1.1.2 Sill level of the Head Regulator for Nepal at Tanakpur Barrage

5. JCWR was informed that NHPC is in process of preparation of DPR for construction of 1.2 km long canal for supply of 1,000 cusecs of water from Tanakpur barrage to Nepal with a sill level of the Head regulator at EL.245.0 m. It was informed by the Indian side that the canal alignment has been finalized but it needs some modification at junction point fixed by Nepalese side. Nepalese side agreed to modify the alignment of canal accordingly.

6. Nepalese side, while reiterating their previous position on placing the sill level at EL 241.5 m, requested that the discharge capacity of the canal in Indian portion may be increased to 56 cumecs (2,000 cusecs) to take care of a situation when Sarada barrage would become defunct. Indian side mentioned that the inlet portion of the Head-regulator has already been constructed in 1992 for design discharge of 28 cumecs (1,000 cusecs) of water and it would not be advisable to dismantle the head regulator at this stage as it would require complete shut down of Tanakpur H E Project. Further, a canal of higher capacity with lower discharge would result into siltation in the canal. Therefore, a new canal with separate head regulator would be considered as and when Sarada Barrage becomes non-functional.

7. The Nepalese side pointed out that Tanakpur-Mahendranagar Link road is also being planned in the same area which can be aligned along the canal. The Indian side stated that since the alignment for the proposed canal has been finalized, the alignment of the proposed road can be adjusted accordingly. It was agreed that this issue would be

taken care of, by holding a tripartite meeting between agencies executing the works of canal on Indian & Nepalese side and the agencies executing link road.

8. The JCWR directed JSTC to monitor the progress and take necessary decision.

#### 1.1.3 Tanakpur-Mahendranagar Link Road

9. Progress made in preparation of the DPR was reviewed. It is noted that some of the environmental issues such as provision of the elephant pass was to be finalized shortly. DPR of the link road shall be completed keeping in view para 7 above and environmental issues.

#### 1.1.4 Release of irrigation water for Chandani Dodhara Area

10. The two sides reiterated their positions regarding the interpretation of the Mahakali Treaty on release of irrigation water for Chandani Dodhara area. While the differences on the opinions between the two sides persist, JCWR directed JSTC to look into the technical details of the irrigation scheme.

### 1.2 Kosi Afflux Bund Breach and related matters

#### 1.2.1 Kosi Breach closure work

11. JCWR noted the progress of breach closure works of eastern afflux bund of Kosi Barrage near Kusaha and expressed satisfaction over timely closure of breached section. Indian side stated that the raising and strengthening of afflux bunds including spurs at other vulnerable points was also planned and would be completed by middle of June 2009 provided there is no disruption by the local people. Nepalese side assured their full cooperation for smooth execution of works. Nepalese side expressed the need to carry out major rehabilitation works for which a detailed plan would be required. Indian side informed that the maintenance works required before the monsoon season was already underway. The repair works of Kosi barrage and strengthening of existing Kosi embankment on the downstream of the barrage has been taken up. Nepalese side requested to avail a copy of such a plan. Indian side agreed to provide the copy within three weeks.

#### 1.2.2 Joint Committee on Koshi and Gandak Project (JCKGP)

12. The Indian side informed that the meeting of JCKGP is scheduled on 2-3rd May 2009. In case these dates interfere with the programme of the general elections in India, revised dates will be intimated to the Nepalese side shortly. The possibility of holding it in April 2009 will also be explored.

### 1.3 Sapta Koshi High Dam Multipurpose Project including Sun Koshi Storage cum Diversion Scheme - Review of progress of works

13. It was informed that some of the works related to detailed investigations at Sapta Koshi Project area were suspended since May 2007 due to opposition from local groups. Attempts were made to restart the hydrological observation at Barakhshetra and Chatra barrage sites in January'2009 but it was disrupted again.

14. Indian side reiterated its request to the Nepalese side to provide security at all the sites, so that the investigations may be resumed immediately to complete the works by June 2010. The Nepalese side informed that GoN has constituted two level security committees, one at the Minister level and other at the District level. Nepalese side further stated that all efforts were being made to arrive at a political consensus for creating a secure environment for earliest possible resumption of the suspended works.

15. The Indian side requested the Nepalese side to indicate a clear time frame by which the investigation works at the sites could be resumed. It was proposed that the JPO may be downsized to avoid infructuous expenditure on idle manpower that could be utilized elsewhere. The Nepalese side conveyed that GoN was making all possible efforts to ensure that the work would resume at the earliest at the Sapta Kosi Project area. The Indian side stated that if this does not succeed within three months, downsizing of the JPO should be considered.

#### 1.4 Issues related to Gandak Project

16. Nepalese side informed about the demands of local people for maintenance and rehabilitation of Main Gandak Western Canal and flood control structures. Till now, no noticeable progress on these demands could be observed. The Indian side informed that short term measures have already been implemented. The DPR for special repair works on Gandak Main Western Canal has been prepared and the implementation of the works will commence soon. It was also informed that flood control works being executed by the Government of UP in Nepal have already been taken up and would be completed before onset of monsoon.

#### 1.5 Inundation problems due to Mahali Sagar, Laxmanpur barrage, Kalkalwa bund and Rasiawal Khurd Lotan Bund

##### 1.5.1 Inundation problems due to Mahali Sagar

17. The Committee was informed that the Task Group-I visited the Mahali Sagar on 22 December 2008 and directed the contact officers to conduct joint survey to verify the sill level on 26-28 December 2008. The joint survey established that there was no difference in the sill level of the new and the old structure. JCWR noted the finding.

18. Nepalese side requested some time for the study to assess the inundation area by water ponding at different sill levels in the structure and the bund using the old drawings.

##### 1.5.2 Inundation problems due to Laxmanpur Barrage

19. As directed by JSTC, Task Group-1 visited the site in January 2009. The Group observed that Gandhelia Nala has two right angle turns and suggested to realign the Nala and accordingly decide the location for opening in the Kalkalwa bund. It also observed that the river Rapti is eroding the right bank in Nepal necessitating flood protection works in the territory. JCWR noted the findings and directed the Task Group to complete the joint field survey and design the opening in Kalkalwa bund by 15th May 2009.

### 1.5.3 Inundation problems due to Rasiawal Khurd-Lotan Bund

20. As directed by JSTC, the Task Group-1 visited the site in January 2009 and reconciled the the level at boundary pillar no. 32 near Rasiawal Khurd Lotan Bund, which was found in order. The Indian side requested the JCWR to allow laying the slab over openings in the embankment before the monsoon to facilitate the movement of the local residents. It also requested the Nepalese side to provide suitable sized culverts in the North South gravel road to facilitate flow of water from Kunra (Dano) river to Ghongi river.

21. Nepalese side stated that the hume pipe outlet across the bund be enlarged to the size of the culverts to ease the inundation caused by obstruction. The construction of the RCC slab on the culvert at chainage 11+025 may be done simultaneously. The embankments on Kunra (Dano) river on the Indian side may be extended upstream along the river to tie them to the high land in Nepalese territory, so that the villages are safeguarded against the overflow of flood waters during monsoon.

22. It was decided to instruct the Task Group 1 to prepare the details and submit proposal to the subsequent JSTC meeting for consideration and appropriate decision.

## 1.6 Review of activities of various bilateral Committees

### 1.6.1 Joint Standing Technical Committee (JSTC)- review of progress

23. JCWR noted the decisions/recommendations made by the first meeting of the JSTC. As recommended by JSTC, JCWR decided to constitute a Joint Committee on Inundation and Flood Management (JCIFM) which will replace the earlier bilateral committees namely, SCIP, HLTC, JCFM, SCEC and SCFF. The composition of JCIFM is placed at Annex-IV.

### 1.7 West Rapti Multipurpose (Naumure) Project- review of progress

24. Indian side informed that data and toposheets received from Government of Nepal are being analyzed. However, toposheet of 1: 2,50,000 scale indicating rainfall stations is required to study the complete basin and requested Government of Nepal for providing such map at an early date following which the study will be completed within two weeks.

## 1.8 Embankment on Mechi River

25. The Nepalese side conveyed that they have no major comments on the schemes for construction of embankment along the Mechi river in Bihar and West Bengal. It further stated that they have forwarded a copy of the scheme for construction of embankment along Nepal bank of the Mechi river and requested that the works on both sides of the river should be taken up simultaneously so that there is no adverse impact on either bank. They further requested the Indian side to provide financial assistance for embankment construction along Mechi river in Nepal. Indian side informed that GFCC will techno-economically appraise the scheme submitted by the Nepalese side and submit its report within a week and the Government of India will examine the proposal.

## 2.0 Finalization of Terms of Reference (TOR) of Pancheshwar Development Authority

26. The TOR for PDA will be further discussed and finalized in next JCWR meeting.

## 3.0 Finalization of TOR of Joint Ministerial Level Commission on Water Resources

27. The recommended TOR for JMCWR is placed at Annex-V.

## 4.0 Flood forecasting activities on rivers common to India and Nepal

28. The Task Group -3 (Bihar) visited Nepal area and submitted its report along with action plan, which would be implemented by CWC, Patna in consultation with the Department of Hydrology and Meteorology, Nepal.

## 5.0 Power Supply

### 5.1 Revision of tariff for power supplied by BSEB to NEA, Nepal and settlement of pending dues

29. Indian side informed that there were several issues relating to supply of power by BSEB to Nepal as stated below:

- (i) Review of tariff for power supplied from Kosi power house under Kosi agreement.
- (ii) Clearing of outstanding dues by NEA to BSEB for power supplied under power exchange.
- (iii) Provisional payment for power supply on monthly basis as was agreed at the last PEC meeting. Suitable provision for surcharge on account of delayed payment should also be considered.
- (iv) Payment on commercial basis for overdrawl of power above 50 MW by NEA from BSEB system.

30. The Nepalese side raised following issues relating to power supply:

- (i) Enhance the upper limit for power exchange from 50 MW to 150 MW.
- (ii) The rate for Kosi power shall be continued as fixed based on already agreed principle of 14:10 ratio depending upon the level of power exchange tariff.
- (iii) Early repair of the second circuit of Forbesgunj to Kataiya 132 kv transmission line (Purniya-Kataiya 132 kv line).
- (iv) Early scheduling of the next meeting of the Power Exchange Committee (PEC).
- (v) Reinforcement of existing 33 kv interconnection and construction of new interconnection by BSEB.

31. JCWR authorized the Power Exchange Committee to deliberate and decide on the issues raised by the two sides at its next meeting to be held before June 2009.

### 5.2 Cross-border Transmission Line

32. The Nepalese side informed that the Special Purpose Vehicle (SPV) formed for construction of the cross border transmission line from Dhalkebar to Muzaffarpur was finding it difficult to raise commercial funding for the Indian portion of the transmission line. They requested the Indian Government to extend support to facilitate timely construction



of the transmission line in the Indian territory to allow it to import power from India. Indian side noted the request.

#### 6.0 Any other Business

33. The Indian side recalled that the Kosi Tappu wildlife reserve in the project area was creating severe access problems for maintenance of the afflux bund and timely undertaking of the flood fighting measures. The Indian side further stated there were large number of staff employed at the Land Acquisition and Liaison Offices relating to Kosi and Gandak Projects, most of whom were not fully utilised. The Indian side suggested that these officials should be allowed to be suitably and usefully redeployed. The Nepalese side responded that these issues were brought for the first time before the JCWR and will be examined and discussed at the next meeting of JCWR.

34. The meeting was held in a cordial atmosphere.

Signed on 13 March 2009 at New Delhi.

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U. N. Panjiyar  
Secretary  
Ministry of Water Resources  
Government of India

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S. P. Koirala  
Secretary  
Ministry of Water Resources  
Government of Nepal

**List of Delegates - India**

|  |                 |
|--|-----------------|
| 1. Mr. Umesh Narayan Panjiar, Secretary, Ministry of Water Resources               | Team Leader     |
| 2. Mr. A.K. Bajaj, Chairman, CWC, New Delhi  | Member          |
| 3. Mr. R.C. Jha, Chairman, GFCC, Patna   | Member          |
| 4. Mr. Gurdial Singh, Member (Hydro), CEA, New Delhi                               | Member          |
| 5. Mr. Ajay Nayak, Secretary, WRD Govt. of Bihar, Patna                            | Member          |
| 6. Mr. Satish C. Mehta, Joint Secretary (North), MEA, New Delhi                    | Member          |
| 7. Mr. S.P. Kakran, Commissioner (Ganga), MOWR                                     | Member          |
| 8. Mr. Jayant Kawale, Joint Secretary (Hydro), Ministry of Power, New Delhi        | Member          |
| 9. Mr. P.K.Singh, Engineer-in-Chief, Irrigation Department, Govt. of U.P., Lucknow | Member          |
| 10. Mr. D.P. Bhargava, Executive Director, NHPC                                    | Special invitee |
| 11. Mr. M.U.Ghani, Member, GFCC, Patna   | Special invitee |
| 12. Mr. D. K. Mukherjee, Secretary (I&WD), Government of West Bengal               | Special invitee |
| 13. Mr. H.K.Jain, Counsellor (Commerce), EOI, Kathmandu                            | Special invitee |
| 14. Mr. Tanmoy Das, Chief Engineer, CEA, New Delhi                                 | Special invitee |
| 15. Mr. Swapan Mukherjee, BSEB, Chairman, Patna                                    | Special invitee |
| 16. Mr. A.S.P. Sinha, SJC (Ganga), MOWR, New Delhi                                 | Special invitee |
| 17. Mr. R.K. Sharma, Member, BSEB, Patna   | Special invitee |
| 18. Mr. S.K. Sahu, Project Manager (I), JPO-SKSKI, Biratnagar, Nepal               | Special invitee |
| 19. Mr. A.K. Kharya, Director (N&BC), CWC, New Delhi                               | Special invitee |

List of Delegates - Nepal

|  |                 |
|--|-----------------|
| 1. Mr. Shanker Prasad Koirala, Secretary, MOWR   | Team Leader     |
| 2. Mr. Shital Babu Regmee, Joint Secretary, MOWR   | Member          |
| 3. Mr. Rajendra Kishore Kshatri, Joint Secretary, WECS   | Member          |
| 4. Mr. Anup Kumar Upadhyay, Joint Secretary, MOWR  | Member          |
| 5. Mr. Dhananjay Jha, Joint Secretary, Ministry of Foreign Affairs   | Member          |
| 6. Mr. Madhusudhan Paudel, Director General, DOI   | Member          |
| 7. Mr. Sriranjana Prasad Lacoul, Director General, DOED  | Member          |
| 8. Mr. Mahendra Bahadur Gurung, Director General, DWIDP  | Member          |
| 9. Mr. Uttar Kumar Shrestha, Managing Director, Nepal Electricity Authority  | Member          |
| 10. Dr. Keshav Prasad Sharma, DDG, Department of Hydrology and Meteorology   | Member          |
| 11. Mr. Shiv Kumar Sharma, Director, Mid- Western Regional Directorate.  | Member          |
| 12. Dr. Hari Dahal, Joint Secretary, Ministry of Agriculture and Cooperatives.                                       | Special Invitee |
| 13. Mr. Dilli Bahadur Singh, Project Manager, Pancheshwar Multipurpose Project.                                      | Special Invitee |
| 14. Mr. Surendra Manand Bajracharya, Project Manager, Sapta Kosi High Dam Multipurpose Project and Sun Kosi Storage- | Special Invitee |
| 15. Mr. Yagya Bahadur Hamal, Counsellor, Embassy of Nepal, New Delhi.  | Special Invitee |

**Agenda Points for  
the 4<sup>th</sup> meeting of Joint Committee on Water Resources (JCWR)  
on 12 – 13 March, 2009 at New Delhi .**

- 1.0 Review of the Actions Taken on decisions taken in 3<sup>rd</sup> meeting of JCWR.**
- 1.1 Implementation of Mahakali Treaty**
  - 1.1.1 Pancheshwar Multipurpose Project
  - 1.1.2 Sill level of the Head Regulator for Nepal at Tanakpur Barrage
  - 1.1.3 Tanakpur-Mahendranagar Link Road
  - 1.1.4 Release of irrigation water for Chandani Dodhara Area
- 1.2 Kosi Afflux Bund Breach and related matters**
  - 1.2.1 Kosi Breach closure work
  - 1.2.2 Joint Committee on Kosi and Gandak Project (JCKGP)
- 1.3 Sapta Kosi High Dam Multipurpose Project including Sun Kosi Storage cum Diversion Scheme- review of progress of works**
- 1.4 Issues related to Gandak Project**
- 1.5 Inundation problems due to Mahali Sagar, Laxmanpur barrage, Kalkalwa bund, and Rasiawal Khurd Lotan Bund**
  - 1.5.1 Inundation problems due to Mahali Sagar
  - 1.5.2 Inundation problems due to Laxmanpur Barrage
  - 1.5.3 Inundation problems due to Rasiawal Khurd-Lotan Bund
- 1.6 Review of activities of various bilateral Committees**
  - 1.6.1 Joint Standing Technical Committee (JSTC)- review of progress
- 1.7 West Rapti Multipurpose (Naumure) Project- review of progress**
- 1.8 Embankment on Mechi River**
- 2.0 Finalization of Terms of Reference (TOR) of Pancheshwar Development Authority**
- 3.0 Finalization of TOR of Joint Ministerial Level Commission on Water Resources**
- 4.0 Flood forecasting activities on rivers common to India and Nepal**
- 5.0 Power Supply**
  - 5.1 Revision of tariff for power supplied by BSEB to NEA, Nepal and settlement of pending dues
  - 5.2 Cross border transmission line
- 6.0 Any other business.**

**COMPOSITION OF JOINT COMMITTEE ON INUNDATION AND FLOOD MANAGEMENT (JCIFM)**

| <b>Sl.No.</b> | <b>Indian side</b>   |                  | <b>Nepalese side</b>    |
|---------------|--|------------------|-------------------------|
| 1.            | Member (C), GFCC, Patna  | Team Leader      | Director General, DWIDP |
| 2.            | Chief Engineer (FM), CWC, New Delhi  | Member           | Representative of MOWR  |
| 3.            | Chief Engineer (WRD), GoB/ Chief Engineer, Irrigation Deptt, GoUP/ Chairman, North Bengal Flood Control Commission, GoWB | Member           | Representative of WECS  |
| 4.            | Director (North), MEA, New Delhi   | Member           | Representative of DOI   |
| 5.            | Sr. Joint Commissioner, MOWR, New Delhi  | Member           | Representative of DWIDP |
| 6.            | Representative of EOI, Kathmandu.  | Member           | Representative of DHM   |
| 7.            | Director (Finance), MEA.   | Member           | Representative of MOFA  |
| 8.            |  | Member           | Representative of MOF   |
| 9.            | Director (MP-II), GFCC, Patna  | Member-Secretary | DDG, DWIDP              |

**Terms of Reference**

1. The JCIFM shall be an umbrella Committee to implement the decisions of JSTC in inundation and flood management issues.
2. The JCIFM shall address the issues related to flood management and inundation and can form task group(s) if required.
3. The JCIFM shall monitor the progress of works and provide guidance to task group(s) and report to JSTC.

**Joint Ministerial Commission on Water Resources (JMCWR)**

**Terms of Reference:**

1. To discuss and decide plans for maximizing the benefits from water resources development through bilateral cooperation.
2. To take policy decisions on bilateral cooperation in water resources.
3. To take decisions on investment plan in water resources sector in joint projects.
4. To recommend public investments required for projects/activities identified jointly in the field of water resources.
5. To perform such other functions as the two governments may mutually agree upon.
6. The Commission shall meet at least once in a year, alternatively in the two countries, subject to the convenience of the two governments.