

# Minutes of First Meeting of

## The Nepal-India Joint Committee on Water Resources

October 1 - 3, 2000

The Nepal-India Joint Committee on Water Resources (JCWR) formed in pursuance of the decision taken by the Prime Ministers of Nepal and India during the visit of the Right Honourable Prime Minister of Nepal to India from July 31 - August 6, 2000 held its first meeting in Kathmandu from 1 to 3 October 2000. The Nepalese delegation was headed by Mr. B. N. Sapkota, Secretary, Ministry of Water Resources of His Majesty's Government of Nepal and the Indian delegation was headed by Mr. Z. Hasan, Secretary, Ministry of Water Resources of the Government of India. The list of members of the delegation from India is attached in Annex-I and the list of the members from Nepal is attached in Annex-II.

Welcoming the Indian delegation, Mr. Sapkota pointed out that there existed ample opportunities for water resources development through joint endeavours whereby both countries could gain the maximum benefits for their people. Emphasising greater cooperation with India on water resources development, Mr. Sapkota noted that both countries can benefit by the utilization of surplus water in the spirit of goodwill, cooperation and equitable sharing of benefits.

Mr. Hasan expressed sincere thanks for the excellent arrangements and the warm welcome extended to him and to the members of his delegation. He expressed happiness that the first meeting of the JCWR was being held in pursuance of the decision of the two Prime Ministers. He said that India is ready to extend her fullest cooperation in resolving all issues in the spirit of trust and goodwill, and emphasised that India is keen to cooperate with Nepal on the development of water resources.

The agreed agenda for discussion during the meeting is attached in Annex-III. The JCWR, after deliberation on the agenda items, agreed as follows.

### 1. TERMS OF REFERENCE OF THE JOINT COMMITTEE.

The JCWR agreed to adopt the Terms of Reference (TOR) of the JCWR as attached in Annex-IV.

### 2. REVISITING THE EXISTING COMMITTEES RELATED TO WATER RESOURCES

The JCWR reviewed the work of different committees in the water resources sector and agreed as follows:



- a) The Standing Committee on Inundation Problems (SCIP) will continue. The Standing Committee on Inundation Problems (SCIP) will also prepare master plan on flood management.
- b) The Joint Team of Experts (JTE) on extension of embankments and the Joint Committee on Embankment Construction shall be merged and reconstituted as a sub committee on embankment construction. This committee will look into planning, design and construction of embankments.
- c) Recommend to the respective governments to dissolve the Co-ordination Committee on Kosi Project and the Co-ordination Committee on Gandak Project and form a new Joint Committee headed by the Director General of the Department of Irrigation, Nepal and Engineer-In-Chief (Bihar), India which will review and take necessary measures on issues pertaining to the operation and maintenance of the Kosi and Gandak projects. The composition of the committee has been attached in Annex - V.
- d) Recommend to the respective governments to dissolve the Committee on Karnali. The Karnali Co-ordinating Committee, a technical level committee, may continue. Its Terms of Reference and composition would be reviewed.
- e) Recommend to the respective governments to dissolve the Sub-Commission on Water Resources as its mandate has been assigned to JCWR.

### 3. INUNDATION PROBLEMS IN NEPAL – INDIA BORDER AREAS

#### 3.1 *Inundation in Banke District*

It was noted that in pursuance of the decision taken by the two Prime Ministers in August 2000, joint inspections in Banke district of Nepal were carried out in August and September 2000, and the situation was closely monitored.

Some areas in India along the Rapti river in Shrivasti district have been protected by construction of embankment. It was agreed in principle by India that the embankments along Rapti River for protection of Nepalese territory in Banke district shall be taken up on priority basis. For this purpose, joint survey will be done by the contact officers and proposal will be submitted for the consideration of SCIP by December 2000

#### 3.2 *Erosion of Sanedi Bund and Sarada Sagar Bund*

With regard to the erosion of Sanedi and Sarada Sagar Bund in India, it was agreed that a model test be conducted at the earliest. New construction will start based on the result of the model test. It was agreed that a proposal of the model test will be prepared by India and submitted for discussion in the SCIP meeting. Nepal will assist in collecting all the data required for model test and India shall carry out the model test. A Nepalese representative will be involved in the model test.

It was also agreed that the problem resulting from the midstream shoal downstream of the Banbasa Barrage will be suitably addressed.




**3.3 Erosion Problem on Left Bank of Gandak River down stream of the Gandak Barrage**

It was agreed to entrust this matter to the SCIP, which will study all the technical aspects of the problem and propose remedial measures.

**3.4 Erosion of Sotwa Nala at Banganga**

In order to overcome the danger of likely avulsion of Banganga River in Nepal to the nearby Sotwa Nala, which is running close and parallel to Banganga, the JCWR instructed that the Contact Officers carry out the site survey and submit proposals to the next meeting of SCIP. It was agreed to conduct a joint visit to the site by a team headed by the Regional Director, Western Regional Irrigation Directorate of Nepal and Chief Engineer from the Government of U.P.

**3.5 Erosion in Dodhara-Chandani Area of Nepal**

With respect to the problem of erosion in the agricultural land and settlements along the Jog Budha river of Dodhara - Chandani area of Nepal, it was agreed to review and reassess the situation by a team headed by the Regional Director, Far Western Regional Irrigation Directorate of Nepal and Chief Engineer (Flood) of U.P. within one month. The report will be submitted to the forthcoming SCIP meeting for further action

**3.6 Construction of Embankment in Lal Bakaya, Bagmati, Kamala, Khando Rivers.**

After reviewing the progress of the embankment construction of Lal Bakeya river, the Indian delegation agreed to start the construction of the embankment of Bagmati in the current fiscal year with a target to complete it at the earliest. It was also agreed that the works on Kamala and Khando embankments would follow.

**3.7 (a) Construction of Embankments on Chandan and Pyas Rivers**

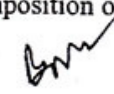
The proposal for the construction of the embankments through the no man's land on rivers Chandan and Pyas to tie them to the Nepalese embankment was discussed. The JCWR agreed in principle to tie up these stretches and it was agreed to process this matter through the respective government channel by December 2000.

**(b) Other Problems related to inundation in border area.**

For other problems related to inundation along the Nepal - India Border, it was recognised by both the delegates that the concerned contact officers should jointly monitor the problem, meet at least once in every three months and submit its report on the possible remedial measures required to be implemented to the SCIP. The reports shall be reviewed by the SCIP and shall be further reported to JCWR.

**4. FLOOD CONTROL AND FLOOD FORECASTING**

Recognizing the importance of flood forecasting as one of the effective non-structural measures to forewarn and manage the flood disasters, the JCWR agreed to further enhance close cooperation in this field. Towards this end, it was agreed to form a Committee on Flood Forecasting (CFF). The composition of the Committee is attached in



Annex - VI. The committee shall meet by December 2000. The CFF will review the existing flood forecasting system and prepare a comprehensive Flood Forecasting Master Plan before the next Monsoon. The Master Plan will also include the upgrading of data transmission system and exchange of hydrological and meteorological data for an integrated flood management.

## **5. WORKS TO BE DONE UNDER THE PROVISIONS OF THE MAHAKALI TREATY**

### **5.1 Pancheshwar Multipurpose Project**

The JCWR expressed satisfaction at the progress on preparation of the Detailed Project Report (DPR) and instructed Joint Group of Experts (JGE) and the Joint Project Office - Pancheshwar Investigations (JPO-PI) to complete the work within the agreed time frame.

The JCWR decided that the JGE may consider the enhancement of delegation of financial authority to the JPO - PI for timely completion of the DPR.

### **5.2 Construction of Head Regulator for Dodhara Chandani Area**

It was agreed that this matter would be looked into in the next meeting of JCWR in light of the provisions of the Mahakali Treaty.

### **5.3 Sill Level of the Head Regulator for the Canal towards Nepal at Tanakpur Barrage**

It was agreed that India will provide detailed information on the Tanakpur power house and the supply channel for further study and the matter will be finalised in the next JCWR meeting.

### **5.4 Supply of Power from Tanakpur Power House**

It was noted that supply of 70 million units of free power to Nepal had started from January 1, 2000. The schedule for supply of this power had also been agreed to.

Regarding the request from Nepal that the supply of peak power during the dry months, October to April, be increased to a level of 16 MW, it was agreed that the Power Exchange Committee would discuss the issue.

### **5.5 Tanakpur - Mahendra Nagar Link Road**

The Indian delegation informed that the funds for the road construction are already available and requested the Nepalese delegation to expedite the land acquisition and the finalisation of exchange of letters. The Nepalese delegation informed that the land acquisition is underway and the exchange of letters will be expedited.

## **6. SAPTAKOSHI - SUNKOSHI MULTIPURPOSE PROJECT**

The JCWR expressed satisfaction on the progress made so far. It was agreed that a written response to the Indian comments on the Inception Report of the Saptakoshi Multipurpose Project would be made available by Nepal before Diwali, 2000. It was also agreed that a

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back to back meeting of the technical level will be held in New Delhi followed by the meeting of the Joint Team of Experts (JTE) in which the composition of the study team, the location of the project/field offices and the cost estimates of the study would be decided. Efforts will be made to open these offices at the earliest and prepare the DPR as early as possible.

#### **7. NEPAL – INDIA POWER EXCHANGE**

It was brought to the notice of the JCWR that the Fifth Meeting of the Power Exchange Committee had recommended the enhancement of the quantum of power exchange between Nepal and India from the existing level of 50 MW to a level of 150 MW. This is under the consideration of the Government of India.

It was agreed that the construction of the three 132 kV transmission lines that were required for the enhanced power exchange be discussed in the forthcoming meeting of the Power Exchange Committee.

It was also agreed that the possibility of utilizing HVDC interconnection for power exchange between the two countries be discussed in the same meeting.

#### **8. KOSI AND GANDAK AGREEMENTS**

The JCWR discussed the various issues concerning operation and maintenance of the projects. It was agreed that all these matters shall be examined by the Joint Committee constituted at Para 2 (c) above. This committee will review and take necessary measures on issues pertaining to the operation and maintenance of the projects including the overall requirement of the Nepalese staff. The number of the Nepalese staff would be limited to 46 as agreed to and the staff requirement shall be reviewed before any fresh appointment.

#### **9. KAMALA AND BAGMATI MULTIPURPOSE PROJECTS**

The JCWR discussed Kamala and Bagmati Multipurpose Projects. The Nepalese delegation explained that the projects may not be feasible because of social and environmental implications. The JCWR instructed the JTE on Saptakoshi-Sunkoshi Project to look into the irrigation requirements in the command areas of Bagmati and Kamala both in Nepal and India.

It was also agreed to exchange relevant data on the existing irrigation projects on Kamala for discussion.

#### **10. IDENTIFICATION AND IMPLEMENTATION OF HYDRO POWER PROJECT**

Regarding the agreement in principle to cooperate in the development of a small/medium hydropower project in Nepal and export of the generated power to India, the Indian delegation explained that the project could be taken up by an entity of the Government of

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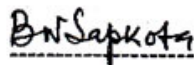
India in line with the prevailing policy in private hydropower development of Nepal. The Nepalese delegation suggested the names of a few projects presently available, including Budhi Gandaki. It was agreed that an Indian team would visit Kathmandu in the third week of October, 2000 to finalize the project to be taken up.

## 11. MISCELLANEOUS

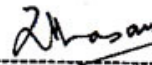
### 11.1 Dhauliganga Hydro electric Project in India

It was agreed that India will supply related data on the Project.

The meeting was held in a cordial and friendly atmosphere.



(B. N. Sapkota)  
Secretary  
Ministry of Water Resources  
His Majesty's Government of Nepal



(Z. Hasan)  
Secretary  
Ministry of Water Resources  
Government of India

## Delegation Members and Special Invitees from India

### Delegation Members

1. Mr. Z Hasan  
Secretary, Ministry of Water Resources, Government of India
2. Mr. G.N. Murty  
Chairman, Ganga Flood Control Commission
3. Mr. Ajay Shankar  
Joint Secretary (Hydel), Ministry of Power, Government of India
4. Mr. D. P. Singh  
Principal Secretary, Irrigation Department, Government of U.P.
5. Ms. Radha Singh,  
Secretary and Commissioner (WR), Government of Bihar
6. Ms. Meera Shanker  
Joint Secretary (North), Ministry of External Affairs, Government of India.
7. Mr. M.K. Sharma  
Commissioner (ER), Ministry of Water Resources, Government of India.
8. Mr. Ashok Kumar  
Deputy Chief of Mission, Embassy of India, Kathmandu
9. Mr. Dinesh Bhatia  
First Secretary (Commerce), Embassy of India, Kathmandu

### Special Invitees

1. Mr. V.K. Tyagi  
Engineer-In-Chief, Irrigation Department, Government of U.P.
2. Mr. Ram Ratan Prasad  
Chief Engineer, Government of Bihar
3. Mr. S.C. Gupta  
P.M. (I), Joint Project Office - Pancheshwar Investigations

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## Delegation Members and Special Invitees from Nepal

### Delegation Members

1. Mr. B. N. Sapkota  
Secretary, Ministry of Water Resources
2. Mr. S. P. Sharma  
Joint Secretary, MOWR
3. Mr. M. N. Aryal  
Executive Director, Water and Energy Commission
4. Mr. R. L. Kayastha  
Director General, Department of Irrigation
5. Dr. K. B. Aryal  
Director General, Department of Electricity Development
6. Mr. A. P. Pokhrel  
Director General, Department of Hydrology and Meteorology
7. Mr. Lila Sharma  
Joint Secretary, Ministry of Foreign Affairs

### Special Invitees

8. Mr. M. M. Shrestha  
Joint Secretary, Ministry of Water Resources
9. Mr. B. B. Malla  
Executive Director, Nepal Electricity Authority
10. Mr. A. N. Mishra  
Deputy Director General, Department of Irrigation
11. Mr. B. K. Aryal  
Deputy Director General, Department of Irrigation
10. Mr. L. M. Singh  
Deputy Director General, Department of Electricity Development
11. Mr. P. M. S. Pradhan  
Chief (Planning), Nepal Electricity Authority
12. Mr. S. Lacoul  
Act. Chief, Pacheshwar Multipurpose Project
13. Mr. N. N. Vaidya  
Regional Director, Dept. of Irrigation
14. Mr. J. R. Shrestha  
Director, Nepal Electricity Authority
15. Mr. R. Nepal  
Under Secretary, Ministry of Foreign Affairs
16. Mr S. K. Sharma  
S. D. E. Ministry of Water Resources
17. Mr. M. P. Baral  
Engineer, Ministry of Water Resources
18. Mr. L. Sharma  
Engineer, Ministry of Water Resources

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**AGENDA OF DISCUSSION  
THE JOINT COMMITTEE ON WATER RESOURCES  
October 1-3, 2000**

1. TERMS OF REFERENCE OF THE JOINT COMMITTEE
2. REVISITING THE EXISTING COMMITTEES RELATED TO WATER RESOURCES
3. INUNDATION PROBLEMS IN NEPAL – INDIA BORDER AREAS
  - 3.1 *Inundation in Banke District*
  - 3.2 *Erosion of Sanedi Bund and Sarada Sagar Bund*
  - 3.3 *Erosion Problem on Left Bank of Gandak River down stream of the Gandak Barrage*
  - 3.4 *Erosion of Sotwa Nala at Banganga*
  - 3.5 *Erosion in Dodhara-Chandani Area of Nepal*
  - 3.6 *Construction of Embankment in Lal Bakaya, Bagmati, Kamala, Khando Rivers.*
  - 3.7 *Other Problems related to inundation in border area.*
4. FLOOD CONTROL AND FLOOD FORECASTING
5. WORKS TO BE DONE UNDER THE PROVISIONS OF THE MAHAKALI TREATY
  - 5.1 *Pancheswar Multipurpose Project*
  - 5.2 *Construction of Head Regulator for Dodhara Chandani Area*
  - 5.3 *Sill Level of the Head Regulator for the Canal towards Nepal at Tanakpur Barrage*
  - 5.4 *Supply of Power from Tanakpur Power House*
  - 5.5 *Tanakpur - Mahendra Nagar Link Road*
6. SAPTAKOSHI – SUNKOSHI MULTIPURPOSE PROJECT
7. NEPAL – INDIA POWER EXCHANGE
8. KOSI AND GANDAK AGREEMENTS
  - 8.1 *Implementation of the Provisions of Kosi and Gandak Agreements*
  - 8.2 *Field Specific Problems of Kosi and Gandak Projects*
  - 8.3 *The need for an Institution*
9. KAMALA AND BAGMATI MULTIPURPOSE PROJECTS
10. IDENTIFICATION AND IMPLEMENTATION OF HYDRO POWER PROJECT
11. MISCELLANEOUS
  - 11.1 *Downstream Benefits*
  - 11.2 *Dhauliganga Hydro electric Project in India*
  - 11.3 *Others*

**TERMS OF REFERENCE  
OF  
THE JOINT COMMITTEE ON WATER RESOURCES**

In pursuance of the decision taken by the Right Honorable Prime Ministers of Nepal and India during the visit of the Right Honorable Prime Minister of Nepal to India (July 31-August 6, 2000), this Joint Committee on Water Resources (JCWR) has been formed. The JCWR shall be headed by the respective water resources secretaries of the two countries.

The following shall be the Terms of Reference of the JCWR.

1. The JCWR shall discuss and take decisions on all the important issues pertaining to cooperation in the water resources sector including implementation of existing agreements and understandings;
2. The JCWR shall report to their respective governments to get required endorsement of their decisions or to get approval wherever applicable;
3. The JCWR shall oversee the work of all the technical and expert level committees and groups in the field of water resources and thus shall act as an umbrella committee of these committees and groups. The JCWR shall assess the compliance of the provisions of all the agreements and understanding reached between the two countries in water resources, monitor the progress achieved by different committees and groups and shall approve and/ or recommend the necessary actions needed to be undertaken by the respective governments in order to expedite the progress or to meet the agreed objectives.
4. The JCWR, whenever needed, shall appoint a group of technical personnel or experts to assist this committee on any matters related with water resources development;
5. The JCWR shall carry on the understandings, decisions and actions that were taken during the earlier meetings of the secretaries of water resources and the Sub-Commission on Water Resources; and

The meeting of the JCWR shall be held at least once in every six months alternatively in Nepal and in India at places mutually agreed upon. The JCWR shall adopt an agreed agenda for the meeting and discuss each of the agenda items. At the end, Minutes of Meeting shall be drawn up and signed by the leaders of both the delegations. The office of the secretaries of the respective countries will act as the secretariat for the JCWR. The in-charge of the secretariat will be designated by the respective secretaries and will be communicated to each other. The cost of running such secretariat shall be borne by the respective governments.

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## Composition of Joint Committee on Kosi and Gandak Projects

### India Side

- |                                                                     |   |          |
|---------------------------------------------------------------------|---|----------|
| 1. Engineer - in - Chief (Bihar)                                    | - | Chairman |
| 2. Chief Engineer (Birpur)                                          | - | Member   |
| 3. Chief Engineer (Motihari)                                        | - | Member   |
| 4. Chief Engineer, U.P. Government                                  | - | Member   |
| 5. Liaison Officer, Water Resources<br>Department, Bihar Government | - | Member   |
| 6. Representative of MEA/Embassy of<br>India, Kathmandu             | - | Member   |

### Nepal Side

- |                                            |   |          |
|--------------------------------------------|---|----------|
| 1. Director General, DOI                   | - | Chairman |
| 2. Deputy Director General (Planning), DOI | - | Member   |
| 2. Regional Director, ERID                 | - | Member   |
| 3. Regional Director, WRID                 | - | Member   |
| 4. District Irrigation Chief, Sunsari      | - | Member   |
| 5. District Irrigation Chief, Saptari      | - | Member   |
| 6. District Irrigation Chief, Nawalparasi  | - | Member   |
| 7. Representative, MOWR                    | - | Member   |

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## Composition of Committee on Flood Forecasting (CFF)

### Nepal Side

- |    |                                               |   |          |
|----|-----------------------------------------------|---|----------|
| 1. | Director General, DHM                         | - | Chairman |
| 2. | Deputy Director General (River Training), DOI | - | Member   |
| 3. | Chief, Flood Forecasting, DHM                 | - | Member   |
| 4. | Senior Telecom Engineer, DHM                  | - | Member   |
| 5. | Senior Meteorologist, DHM                     | - | Member   |
| 6. | Representative of MOFA                        | - | Member   |

### India Side

- |    |                                        |   |          |
|----|----------------------------------------|---|----------|
| 1. | Commissioner (ER), MOWR                | - | Chairman |
| 2. | Chief Engineer, CWC, Lucknow           | - | Member   |
| 3. | Chief Engineer, CWC, Patna             | - | Member   |
| 4. | Chief Engineer (Flood), U. P.          | - | Member   |
| 5. | Chief Engineer (Flood), Bihar          | - | Member   |
| 6. | Director, CWC, New Delhi               | - | Member   |
| 7. | Representative of MEA/Embassy of India | - | Member   |

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