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

(January 10-14, 2011)

The fourth meeting of Nepal-India Joint Committee on Inundation and Flood Management (JCIFM) was held from January 10-14, 2011. The Indian delegation was led by Mr. S. Masood Husain, Member (Coordination), Ganga Flood Controi 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 Janakpur, Dhanusha on January 9, 2011.

The meeting of the Committee was preceded by joint field visits 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-I*.

EXTENSION OF EMBANKMENTS

A) FIELD VISIT OF ONGOING WORKS

A-I Kamala River

The Committee carried out the field visit of the Kamala river on January 10 2011. The Committee visited the right bank starting from Ch. 0.00 km ch the Nepal-India border and proceeded upstream up to Ch. 19.95 km.

It was observed that the embankment work along the right bank from Ch. 2.10 km to Ch. 5.50 km has been completed. The work from Ch 0.00 to 2.10 km is also completed, except for 200 m length from the Nepal-india border. The Committee instructed that this portion along with Anti Flood Sluice (AFS) be completed as per the contract schedule. The Committee reiterated its earlier decision 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.

In the work package from Ch. 15.700 to 16.000 km, AFS and some revetment work remain to be completed. The Committee instructed that the works be completed as per the contract schedule. It also instructed that remaining works of dressing and turfing on the embankment as per design may be completed.

Thereafter, the Committee visited the left bank from Ch. 0.000 km to Ch. 10.550 km. Approximately 300 m part of the embankment near the Nepal India border remains incomplete. The Committee instructed that the works be completed as per contract schedule. It also instructed that remaining



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works of dressing and turfing on the embankment as per design may be completed. The Committee observed that the slope of the embankment at many locations was not as per the design specifications. It was decided that the slope of the embankment may be rectified as per the design specification.

A-II Bagmati River

The field visit to Bagmati took place on January 11, 2011. During the second meeting of JCIFM, GON had tendered River Bed Material (RBM) work for nine work packages out of which the Committee approved five work packages totaling 30.48 km, the work of which is presently in progress and near completion. During the third meeting, 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 including contingencies and excluding VAT. These work packages were to be initiated on completion of the ongoing RBM work of 30.48 km approved previously. However, the Committee found that RBM works of the four work packages approved in the third meeting had already been initiated.

The Committee observed that the slope of the embankment at many locations was not as per design specification. It was decided that the slope of the embankment may be rectified as per the design specification. The Committee instructed that the different work packages be completed as per contract schedule.

A-III Lalbakeya River

The field visit to Lalbakeya embankment works took place on January 11, 2011. Some structures such as AFS at Ch. 0.40km from Nepal-India border, at Nepal Eastern Canal (NEC) breach point and at Ch. 5.075 km from NEC and also ongoing work of left bank Ch. 4.50km (Package 8) remain incomplete. It was observed that the slope of the embankment at many locations was not as per the design specification. The Committee directed that the slope of the embankment may be rectified as per the design specification. The Committee instructed that the different work packages be completed as per contract 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

Ongoing Works

The Committee noted that the initial 50% of expenditure amount for three retendered and one gap closing contracted work packages in Bagmati river of NRs. 2.43 crore has already been released. Since the utilization certificates related to these works have been submitted, the balance 50% i.e. NRs. 2.43 crore is recommended for release.

The River Bed Material (RBM) work of 30.48 km approved previously is ongoing. The works were inspected by the Committee. The utilization certificate of 75% of funds may be submitted after which the balance payment of NRs. 4.45 crore will be released.

Since the four work packages for RBM works on the right bank totaling 20.32 km have already been initiated, the Committee recommends the release of 50% of Gol contribution for these works i.e. NRs. 2.26 crore. The balance payment would be made on receipt of utilization certificate of 75% of funds released and inspection of the works by the Committee.

The emergent works carried out during the monsoon floods of 2010 were inspected. The utilization certificates of the emergent works amounting to NRs. 0.45 crore were submitted to the Committee. The summary of works is at *Annex-II*. The Committee approves the reimbursement of NRs. 0.45 crore spent on the emergent works of 2010 monsoon floods.

Further, the Committee recommended taking up emergent anti-erosion works along both banks of the river as per details given at *Annex-III* before the monsoon of 2011. The GON will submit a report in respect of these emergent works to GFCC for examination. After the approval of report by GFCC, competent authority of GON will invite tenders as per Financial Regulations of GON. The summary of tender evaluation along with recommendation of award of contracts shall be submitted to EOI, Kathmandu for the endorsement of the Indian side. Thereafter 50% of GoI contribution will be released.

New Works

During the third meeting, the Committee had 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



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proposed embankment on the left bank from Ch. 31.250 to 42.500 km. The investigation report submitted to GFCC was examined by it and approved. Accordingly 5 work packages (Package nos. LE1 to LE 5) were tendered. the summary of which is at *Annex-IV*. The Committee endorsed the tenders as approved by GON. The total Gol contribution for these packages including contingencies is NRs. 3.114 crore. The Committee recommends the release of 50% of this amount i.e. NRs. 1.557 crore. The balance payment would be made on receipt of utilization certificate of 75% of funds released and inspection of the works by the Committee.

Tenders were also invited by the Govt. of Nepal for the construction of embankment works along the Jhanj river, a tributary of Bagmati river. The Committee decided to keep the endorsement of the tender on hold and consider the issue at the next meeting of JCIFM.

B-II Work along the Lalbakeya river

Ongoing Works

As decided in the second meeting of JCIFM the embankment works of 12.2 km along both banks and Anti Flood Sluice (AFS) along the right bank of Lalbakeya are being undertaken. 50% of the total GOI contribution i.e. NRs. 9.615 crore has already been released to GON. The utilization certificates for these works have been submitted, hence the balance amount of NRs. 9.615 crore is recommended for release.

The emergent works carried out during the monsoon floods of 2010 were inspected. The utilization certificates of the emergent works amounting to NRs. 0.42 crore were submitted to the Committee. The summary of works is at *Annex-V*. The Committee approves the reimbursement of NRs. 0.42 crore spent on the emergent works of 2010 monsoon floods.

Further, the Committee recommended taking up emergent anti-erosion works on both banks as summarized in *Annex-VI* before the monsoon of 2011. The GON will submit a report in respect of these emergent works to GFCC for examination. After the approval of report by GFCC, competent authority of GON will invite tenders as per Financial Regulations of GON. The summary of tender evaluation along with recommendation of award of contracts shall be submitted to EOI, Kathmandu for the endorsement of the Indian side. Thereafter 50% of GoI contribution will be released.

New works

During the third meeting of JCIFM, it was decided that embankment works may be extended by 10.50 km on each bank and RBM works may be carried out for a length of 6.40 km (0+000 to 6+400 from NEC, Fatuwa Bridge) on both banks. Following the re-examination of the above proposal

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in consultation of GFCC, it was decided to extend embankment works by 9.5 km on left bank and 11.5 km on right bank. Accordingly, 9 works packages (Package nos. 18 to 25 and GRV1) were tendered as per GON financial regulations and approved by the competent authority of the Government of Nepal. Furthermore, 6 work packages were proposed to be awarded to user groups. The summary of works is at *Annex-VII*.

The Committee endorsed the 9 tendered work packages. The total GOI contribution including contingencies for these works is NRs. 14.795 Crore. The Committee recommends the release of 50% of this amount i.e. NRs. 7.397 crore to GON. The balance payment would be made on receipt of utilization certificate of 75% of funds released and inspection of the works by the Committee.

The Committee further decided that the 6 work packages earlier proposed to be awarded to user's group may also be tendered. The summary of tender evaluation along with recommendation of award of contracts for these works will be submitted to EoI, Kathmandu for endorsement by the Indian side. Thereafter 50% of GoI contribution will be released.

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

Ongoing Works

The embankment works to be carried out before the monsoon of 2010 were divided into two phases, of which the first phase had been completed and fund amounting to NRs. 17.698 crore was released. The second phase has been initiated for which the initial 50% of funds amounting to NRs. 6.165 crore has been released in the third meeting of JCIFM. Since the utilization certificates for the second phase have been submitted, the balance 50% i.e. NRs. 6.165 crore is recommended for release.

Similarly, works of 150 m revetment and 3 studs at Sakhuwa Madhan and extension of 500 m length embankment at Hathmunda were approved and the initial 50% of GOI contribution i.e. NRs. 0.96 crore has already been released. The works were inspected by the Committee. The utilization certificate of 75% of funds may be submitted after which the balance payment of NRs. 0.96 crore will be released.

The emergent works carried out during the monsoon floods of 2010 were inspected. The utilization certificates of the emergent works amounting to NRs. 0.901 crore were submitted to the Committee. The summary of works is at *Annex-VIII*. The Committee approves the reimbursement of NRs. 0.901 crore spent on the emergent works of 2010 monsoon floods.

Further, the Committee recommended taking up emergent anti-erosion works along left bank as summarized at Annex-IX before the monsoon of

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2011. The GON will submit a report in respect of these emergent works to GFCC for examination. After the approval of report by GFCC, competent authority of GON will invite tenders as per Financial Regulations of GON. The summary of tender evaluation along with recommendation of award of contracts shall be submitted to EOI, Kathmandu for the endorsement of the Indian side. Thereafter 50% of GoI contribution will be released.

New works

During the third meeting of JCIFM, it was decided that the embankment works totaling 13.00 km on the left bank and 10.74 km on the right bank may be extended on both banks so as to close all the gaps and tag with East-West highway. However, as explained by the concerned Division Office, to tag the embankment works to the high land, there was need to extend the embankment by additional 0.47 km on the left bank and additional 3.11 km on the right bank.

Accordingly, 9 work packages (Package nos. 29 to 37) on the left bank and 13 work packages (Package nos. 38 to 50) on the right bank were tendered as per GoN financial regulations and approved by the competent authority of the Government of Nepal. Furthermore, 3 work packages to be given to user groups were also approved by the competent authority of Government of Nepal. The summary of works is at *Annex-X*. The Committee endorsed the 22 tendered work packages and the 3 work packages to be given to user groups.

The total Gol contribution including contingencies is NRs. 35.86 crore. The Committee recommends the release of 50% of this amount i.e. NRs.17.93 crore. The balance payment would be made on receipt of utilization certification of 75% of funds released and inspection of the 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. Accordingly the Nepalese side handed over the details of differences of bed levels to the Indian side. A revised DPR for Khando river embankment works was also submitted to the Committee.

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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. The Committee emphasized to expedite the recovery process.

C) FLOOD INUNDATION ISSUES

C-I Kalkalwa Bund

The Indian side informed the Committee that as decided by JCWR, an opening in the Kalkalwa bund has been provided. The Committee noted with appreciation that the issue has been resolved and decided to drop this issue from the agenda.

C-II Rasiyawal-Khurd-Lotan Bund

The Indian side informed the Committee that as directed by JCWR construction of the culverts in Rasiyawal-Khurd-Lotan Bund has been completed. The Nepalese side informed that they had already completed the requisite works in Nepalese territory. The Committee noted with appreciation that the issue has been resolved and decided to drop this issue from the agenda.

C-III Mahali Sagar

The Committee noted that the joint survey, as directed by JCIFM during its 3rd meeting, could not be undertaken 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. The Committee directed the Contact Officers to complete the work by 30 April, 2011 and submit their report before the next meeting of the JCIFM.

C-IV Bairganiya Ring Bund

The Nepalese side informed the Committee that the construction of embankment on the right bank of Bhakuwa Nala and sluice on the right bank of Lalbakeya river near Nepal-India border is being carried out and is likely to be completed before the monsoon of 2011.

C-V Rato River

The Committee noted that the joint study of the inundation situation in the area, as directed by JCIFM during its 3rd meeting, could not be undertaken

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by the Contact Officers. The Committee directed the Contact Officers to complete the work by 30 April, 2011 and submit their report before the next meeting of the JCIFM. It was agreed to maintain status quo in this regard till further consideration of the matter by the Committee.

C-VI Geruwa River

The Nepalese side informed that no embankment exists along Geruwa river in Nepal territory close to the India-Nepal border and therefore, no action is required from their side. The Committee decided that the Contact Officers may verify this jointly.

C-VII Bhutahi Balan

The Nepalese side stated that JSTC during its 2nd meeting had directed JCIFM to discuss this issue. The Committee directed that a presentation highlighting the problem may be made on the issue at the next meeting of the Committee.

D) FLOOD FORECASTING ISSUE

D-I Flood Forecasting Master Plan

The Indian side informed that the new Draft Flood Forecasting Master Plan under (2010-2014) prepared bv Government Nepal is side further informed that the The Indian examination/updation. Government of Bihar has requested inclusion of seven more raingauge stations at Khokana, Sundarijal, Pendera-Dhoben, Raigaun, Ramolobair. Gaurighat and Brahmapuri in Nepal in the Draft Flood Forecasting Master Plan. The Nepalese side informed that there are 16 raingauge stations in the Bagmati basin in Nepal which includes Khokana, Sundarijal, Pendera-Dhoben stations proposed by the Government of Bihar. The Nepalese side further informed that the remaining four stations proposed by the Government of Bihar would be necessary. The Committee decided that Indian side may examine the list of existing 16 raingauge stations in Bagmati basin in Nepal and if more stations are required, the same may be brought before the Committee.

D-II Transmission of Real Time Data

The Indian side mentioned that during the monsoon season of 2010, data from only 6 hydro-meteorological stations, namely, Narayanghat. Bhalubhang, Kusum, Mainachuli, Chatra and Karmaiya in Nepal were received by the Central Water Commission till August 22, 2010 and thereafter, no data was received, and requested the Government of Nepal to ensure un-interrupted transmission of Real Time Data. The Nepalese side informed that there was strike by the hydro-meteorological staff who

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are casual employees and, therefore, data from auto-transmission stations could only be supplied. They assured that necessary action was being taken by the Government of Nepal in this regard and informed that there should not be any problem in future.

D-III Early Warning System in Koshi Basin

The Nepalese side informed that the Government of Nepal is developing Disaster Management Plan for Koshi Basin including Early Warning System for Kosi river, which is supported by the Asian Development Bank and requested the Government of India to provide data for this purpose. The Committee decided that the Government of Nepal may send a request with relevant details in this regard to the Government of India through diplomatic channel.

E) COMPREHENSIVE STRATEGY FOR FLOOD MANAGEMENT

E- I Preparation of prioritized list of flood management works

The Nepalese side submitted a priority list of rivers (Annexure-XI) for undertaking short term flood control measures and mentioned that Government of Nepal is executing river training works along several of these rivers. The Committee desired the Nepalese side to provide the details of flood control works being undertaken by them. The Committee also desired the Indian side to submit their priority list.

It was decided to hold the next meeting of JCIFM in first week of May. 2011.

The meeting was held in a cordial and friendly atmosphere.

Signed on January 14, 2011 at Kathmandu.

(K.R. Dahal)

Team Leader/ Director General

Dept. of Water Induced Disaster Prevention (DWIDP)

(S. Masood Husain)

Team Leader/Member

Ganga Flood Control Commission

(GFCC), Patna

4th Meeting of the JCIFM held from January 10-14, 2011

LIST OF PARTICIPANTS

INDIAN SIDE:

Mr. S. Masood Husain
 Member (Coordination),
 GFCC, Patna
 Team Leader

Mr. Sanjiv RanjanDirector (North)MEA, New Delhi - Member

3. Mr. H. K. Jain
Counsellor (Commerce)
EOI, Kathmandu - Member

. 4. Mr. A. S. P. Sinha
Sr. Joint Commissioner (Ganga)
MOWR, New Delhi - Member

5. Mr. A. K. Ojha
Chief Engineer
Irrigation Department, Govt. of UP,
Lucknow - Member

6. Mr. Hari Narayan
Chief Engineer (WRD)
Govt. Of Bihar, Patna - Member

7. Mr. S. K. Gangwar
Director, GFCC, Patna - Member Secretary

8. Mr. Subir Dutta
Under Secretary
MEA - Member

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NEPALESE SIDE:

Mr. Khom Raj Dahal
 Director General/DWIDP - Team Leader

Mr. Hira Nand JhaDeputy Director General/DWIDP - Member Secretary

3. Mr. Sanjaya Dhungel
Senior Divisional Engineer, WECS - Member

4. Mr. R. D. Maskey
Senior Divisional Engineer, Dept. of Irrigation - Member

Mr. Sashi Bahadur Bisht
 Senior Divisional Engineer, DWIDP - Member

Mr. Ananta Kumar Gajurel
 Senior Divisional Engineer, RTP/DWIDP - Member

7. Mr. Rishi R. Ghimire
Under Secretary, Ministry of Foreign Affair - Member

8. Mr. Amrit Shrestha
Senior Divisional Engineer, Ministry of Irrigation - Member

9. Mr. Bimal SapkotaSection Officer, Ministry of Finance - Member

10. Mrs. Bibhuti PokharelHyd. Engineer, DHM- Member

SPECIAL INVITEES

- 1. Mr. Rajendra Prasad Adhikari, SDE, 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
- 4. Mr. S. C. Acharya, Division Chief, WIDPD No. 5, Rupandehi
- 5. Mr. B. N. Yadav, Division Chief, WIDPD No. 6, Banke

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Government of Nepal Ministry of Irrigation

Department of Water Induced Disaster Prevention Division Water Induced Disaster Prevention Division Office No 3

Parwanipur, Bara

Name of Project: Bagmati River Training Project

Location: Sarlahi & Rauthat Districts

Summary of Emergency Works During Monsoon 2010

		Work Order		Estimated	Payment	Remarks
SN	Name of Work	Date	Agency (User's Committee)	Amount, NRs	Released NRs	
H	Supply of Empty Gunny Bags	Aug, 2010	Vikas Nepaltatha Prakop NivantranSanstha	198,000.00	132,000.00	
2	Emergency Flood Fighting Works near Laxmipur Village, Right Bank	Sept, 2010	Bagmati Tatha Lalbakaiya Nadi NiyantranSanstha	951,021.00	932,200.00	
3	Supply of Empty Gunny Bags and Nylon Crates	Sept, 2010	Jal Utan Prakop Niyantran Sanrakchan Upbhokta Sanstha, SamannurMadanpur. Rauthat	305,541.11	305,339.15	
4		Aug, 2010	Jal Utan Prakop Niyantran Sanrakchan Upbhokta Sanstha, SamanpurMadanpur, Rauthat	360,000.00	360,000.00	
5	Emergency Flood Fighting Works near Laxmipur Village, Right Bank	Sept, 2010	Bagmati Tatha Lalbakaiya Nadi NiyantranSanstha	816,784.66	800,478.00	
æ	Emergency Flood Fighting Works near Laxm pur Village, Right Bank	Sept, 2010	Bagmati Tatha Lalbakaiya Nadi NiyantranSanstha	1,745,830.00	1.710,394.00	

Name of Project: Bagmati River Training Project

Location: Sarlahi & Rauthat Districts

Summary of Emergency Works During Monsoon 2010

			S	Amount Requested for Release NRS	
4,494,641.15			5		
4,494,641.15				Total Amount Paid Till Date NRS.	
				75% of Released Amount NRs	
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				I OLUI IVAS	
4,638,494.77 4,494,641.15				Total NIDS	Ì
261,318.00 254,230.00		Nadi Niyantran Vikas Kendra	Sept, 2010	Emergency Flood Fighting Works near Rajbara Village , Right Bank	7
			Dute		
Amount, NRs R		Agency (User's Committee)	Work Order	Name of Work	S
Estimated Payment			14/-11. Order		



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Government of Nepal
Ministry of Irrigation
Department of Water Induced Disaster Prevention
Water Induced Disaster Prevention Division office no 3

Water Induced Disaster Prevention Division office no 3

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Proposed Works for Fiscal year 2010-11 (2067/68)

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	663 D39 89	200 54			1,010,000	644,652.40	12,893,048.04	21+250-34+200 Embankment (2.95 Km)	24+250-34+200	I-N/Bagmati/L-	T
	000	5,8/6,924.05	5,232,272.45	15,213,796.68	1 676 006 24				THE DISTRICT	Left bank (Sarlahi District)	A
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							Amount				
			(Excluding VAT)	Total	VAT	Contingencies	Estimated	Proposed Works	Location	Contract No	Ŝ
Remarks	NRS	GOI Part NRs	Amount		Estimate (NKS)	As per Approved Estimate (NKS)					
			Lowest					ect	Ragmati River Training Project	ımati River T	Rac

Government of Nepal Ministry of Irrigation Department of Water Induced Disaster Prevention Division

Water Induced Disaster Prevention Division Office No 3

Parwanipur, Bara

Name of Project: Lal Bakaiya River Training Project

Location: Rauthat Districts

Summary of Emergency Works During Monsoon 2010

318,604.00	354,110.00	Lal Bakaiya Jhanjh Nadi NiyantranUpbhokta samiti, Rajpur, Farhadwa, Rasithai	Sept, 2010	Emergency Flood Fighting Works near Buniyad Village, Right Bank	J:
	268,170.00	Nadi Niyantran Vikash KendraNepal, Inawari, Rauthar	Aug, 2010	Emergency Flood Fighting Works near Matiyarwa Inarwa, Right Bank	5
	369,080.00	Lal Bakaiya Nadi Niyantran Jingarwa- 3, Rauthat	Auġ, 2010	Emergency Flood Fighting Works near Jingarwa village(P-8), Left Bank	4
	610,334.00	Lal Bakaiya Nadi Niyantran Sanstha, Rajpur, Farhadwa-4, Rauthat	Sept, 2010	Emergency Flood Fighting Works near Pokhariya, Rajpur (P-4), Right Bank	3
366,000.00	366,200.00	Nadi Niyantran Sanrakchan Sanstha, Gaur N.P. 9, Rauthat	Aug, 2010	Supply of Empty Gunny Bags and Nylon Crates	2
821,790.00	858,187.00	Samudaik Vikas Tatha Nadi Niyantran Kendra, Auraiya-8, Rauthat		Emergency Flood Fighting Works near Khusukpur and Bintol Village, Aug, 2010 Right Bank	н
Payment Released NRs	Estimated Amount, NRs	Agency (User's Committee)	Work Order Date	Name of Work	NS

Name of Project: Lal Bakaiya River Training Project

Location: Rauthat Districts

Summary of Emergency Works During Monsoon 2010

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Amount Requested for Release, NRs	Total Amount Paid Till Date, NRs	75% of Released Amount NRs	Total Amount Released Till Date, NRs	Total NRs	Emergency Flood Fighting Works near Mithuyaba,Karuniya, Left Bank	Emergency Flood Fighting Works near Tikuliya, Left Bank	ng Works	Emergency Flood Fighting Works near Tikuliya , Left Bank	Emergency Flood Fighting Works near Pokhariya, Rajpur (P-4), Right Bank	Name of Work
l'S			IRs		Sept, 2010	Sept, 2010	Sept, 2010	Sept, 2010	Sept, 2010	Work Order Date
		•			Nadi Niyantran Vikash KendraNepal, Inawari, Rauthar	Jal Utan Prakop Niyantran Sanrakchan Upbhokta Sanstha, SamanpurMadanpur, Rauthat	Lal Bakaiya Jhanjh Nadi NiyantranUpbhokta samiti, Rajpur, Farhadwa, Rauthat	Nadi Niyantran Vikash KendraNepal, Inawari, Rauthar	Lal Bakaiya Jhanjh Nadi NiyantranUpbhokta samiti, Rajpur, Farhadwa, Rauthat	Agency (User's Committee)
				4,322,060.00	104,087.00	150,095.00	622,710.00	104,087.00	515,000.00	Estimated Amount, NRs
4,162,943.00	4,162,943.00			4,162,943.00	103,750.00	145,500.00	600,120.00	103,750.00	500,000.00	Payment Released NRs
										Remarks

Government of Nepal
Ministry of Irrigation
Department of Water Induced Disaster Prevention
Water Induced Disaster Prevention Division office no 3

Proposed Works for Fiscal year 2010-11 (2067/68)

Proposed Works for Fiscal years 2010 44

Lal Bakaiya River Training Project-II, Rautahat District

3 Left bank	S.Total	9 EMB/UC10/2010-11	8 EMB/UC9/2010-11	7 EMB/UC8/2010-11.	6 EMB/UC7/2010-11	5 I-N/LBK-II/R- GRV1/2010-11	4 EMB/P21/2010-11	3 I-N/LBK-II/R- EMB/P20/2010-11	2 i-N/LBK-II/R- EMB/P19/2010-11	1 EMB/P18/2010-11	A Right bank		SN Contract No
•	<u>-</u>	 	+	-II/R- 2010-11.	2010-11		 	 	 	ļ	* 		ct No
	O 71 7 7 10	23+400 Garja	2+200, 23+200	18+900	17+000	Fatuwa Bridge to 6+400	20+000-23+000	17+000-20+000	14+100-17+000	11+500 - 14+100			Location
	Embankment (11.5 km), Anti-Flood Sluices (5 Nos), Studs (20 Nos), Revetment (600m) and Gravelling Work! 6.4 Km)	Stud (1 No)	Studs (2 Nos on each)	Studs (4 Nos)	Studs (2 Nos)	Gravelling Work (6.4km left bank and 6.4 km right bank)	Embankment (3 Km), Revetment (400m) and Anti-Flood Sluices (1No)	Embankment (3 Km), Studs(4Nos) and Anti- Flood Sluices (1 Nos)	(2.9 Nos 0m) ice (11	Embankment (2.6 Km), Studs(3 Nos) and Anti-Flood Sluices (2 Nos)			Proposed Works
	168,662,178.84	5340204.61	9,918,582.65	9,918,582.65	4,959,291.33	19,241,152.00	31,025,238.30	30,183,160.51	30,299,683.75	27,776,283.04		Estimated Amount	
	8,433,108.91	267010.23	495,929.13	495,929.13	247,964.56	962,057.60	1,551,261.91	1,509,158.02	1,514,984.18	1,388,814.15		Contingencies	As per Approved Estimate
	19,538,667.87	289160.21	496,476.16	496,476.16	248,238.08	2,501,349.76	4,033,280.97	3,923,810.86	3,938,958.88	3,610,916.79		VAT	d Estimate (NRs)
	196,633,955.66	5896375.06	10,910,987.95	10,910,987.95	5,455,493.98	22,704,559.36	36,609,781.18	35,616,129.39	35,753,626.81	32,776,013.98		Total	
	78,617,726.75					8,625,810.00	18,845,351.82	18,398,985.45	16,890,521.53	15,857,057.95		(Excluding VAT) NRs	Lowest Responsive Bid Amount
	117,187,496.90	5607214.84	10,414,511.78	10,414,511.78	5,207,255.89	9,587,867.60	20,396,613.73	19,908,143.47	18,405,505.71	17,245,872.10		NRs	GOI Part
	11,750,655.06	289160.21	496,476.16	496,476.16	248,238.08	1,121,355.30	2,449,895.73	2,391,868.10	2,195,767.79	2,061,417.53		NRs	GON Part
												Kemarks	В

Government of Nepal
Ministry of Irrigation
Department of Water Induced Disaster Prevention

Water Induced Disaster Prevention Division office no 3 Parwanipur, bara

Proposed Works for Fiscal year 2010-11 (2067/68)

Lal Bakaiya River Training Project-II, Rautahat District

HAILBK-IIIL- 13+700-15+200 Embankment (1.5 Km), Amount 1700-15+200 Revertment (500m) and 27412843.3 1370642.16 3563669.62 32347155.08 I-NILBK-IIIL- Embankment (1.10 Km), Embankment (1.10 Km) Hailby P23/2010-11 15+200-17+000 Revertment (400m) and 26656275.41 1332813.77 3465315.8 31454404.98 I-NILBK-IIIL- 17+000-21+000 Anti-Flood Sluices (1No) Anti-Flood Sluices (1Nos) 4729375.2 236468.76 248238.08 5214082.05 I-NILBK-IIIL- 11+500 Studs (2 Nos) 4729375.2 236468.76 248238.08 5214082.05 I-NIBagmati/I- 18+000 Studs (7 Nos),	SN Contract No	Location	Proposed Works		As per Approved Estimate	d Estimate (NRs)		Responsive Bid Amount	GOI Part	٦
I-N/LBK-II/L- 13+700-15+200 Embankment (1.5 Km), EMB/P23/2010-11 13+700-15+200 Anti-Flood Sluices (1 No) Embankment (400m) and 27412843.3 1370642.16 3563669.62 32347155.08 EMB/P23/2010-11 15+200-17+000 Embankment (400m) and 26658275.41 1332813.77 3465315.8 31454404.98 I-N/LBK-II/L- 17+000-21+000 Embankment (4 Km) and 26658275.41 1332813.77 3465315.8 31454404.98 I-N/LBK-II/L- 17+000-21+000 Studs (2 Nos) 24331624.06 1216581.2 3163111.12 28711316.38 I-N/LBK-II/L- 11+500 Studs (2 Nos) 4729375.2 23648.76 248238.08 5214082.05 I-N/Bagmati/L- 18+000 Studs (4 Nos) 9458750.43 472937.52 496476.16 10428164.12 Embankment (900m) and Gravelling Work (6.4 Km) Gravelling Work (6.4 Km) Anti-Flood Sluices (10 Nos), Revetment (1500m) and Gravelling Work (12.8 283525500.5 14176274.98 33371157.56 331072933.1 331072933.1 340820.5 340820				Estimated Amount	Contingencies	VAT	Total	(Excluding VAT) NRS	g VAT)	g VAT) NRS
I-N/LBK-II/L- 15+200-17+000 Revertment (400m) and 26656275.41 1332813.77 3465315.8 31454404.98	2 I-N/LBK-II/L- EMB/P23/2010-11		Embankment (1.5 Km), Revetment (500m) and Anti-Flood Sluices (1 No)	27412843.3	1370642.16	3563669.62	32347155.08	16265	16265184.46	184.46 17635826.62
I-N/LBK-II/L- 17+000-21+000	3 I-N/LBK-II/L- 8 EMB/P24/2010-11		Embankment (1Km), Revetment (400m) and Anti-Flood Sluices (1No)	26656275.41	1332813.77	3465315.8	31454404.98	1519	15196629.74	6629.74 16529443.51
I-N/LBK-II/L- 11+500 Studs (2 Nos) 4729375.2 236468.76 248238.08 5214082.05 I-N/Bagmati/L- 18+000 Studs (4 Nos) 9458750.43 472937.52 496476.16 10428164.12 I-N/Bagmati/L- 18+000 Studs (4 Nos) 9458750.43 472937.52 496476.16 10428164.12 I-N/Bagmati/L- 18+000 Studs (4 Nos) 9458750.43 472937.52 496476.16 10428164.12 I-N/Bagmati/L- 18+000 Studs (7 Nos) 114,863,321.6 5,743,166.1 13,832,489.7 134,438,977.4 I-N/Bagmati/L- 18+000 Studs (7 Nos) 114,863,321.6 5,743,166.1 13,832,489.7 134,438,977.4 I-N/Bagmati/L- 18+000 Studs (4 Nos) 114,863,321.6 5,743,166.1 13,832,489.7 134,438,977.4 I-N/Bagmati/L- 18+000 Studs (7 Nos) 114,863,321.6 5,743,166.1 13,832,489.7 134,438,977.4 I-N/Bagmati/L- 18+000 Studs (4 Nos) 9458750.43 472937.52 496476.16 10428164.12 I-N/Bagmati/L- 18+000 Studs (4 Nos) 9458750.43 472937.52 496476.16 10428164.12 I-N/Bagmati/L- 18+000 Studs (4 Nos) 9458750.43 472937.52 496476.16 10428164.12 I-N/Bagmati/L- 18+000 Studs (4 Nos) 9458750.43 472937.52 496476.16 10428164.12 I-N/Bagmati/L- 18+000 Studs (4 Nos) 9458750.43 472937.52 496476.16 10428164.12 I-N/Bagmati/L- 18+000 Studs (7 Nos) 14,863,321.6 5,743,166.1 13,832,489.7 134,438,977.4 I-N/BAGMATIAN 13,832,489.7 134,438,977.4 I-N/BAGMATIAN 13,832,489.7 134,438,977.4 I-N/BAGMATIAN 14,863,321.6 5,743,166.1 13,832,489.7 134,438,977.4 I-N/BAGMAT	4 I-N/LBK-II/L- EMB/P25/2010-11	17+000-21+000	Embankment (4 Km) and Anti-Flood Sluices (1Nos)	24331624.06	1216581.2	3163111.12	28711316.38	1327	13278671.51	8671.51 14495252.71
I-N/Bagmati/L- 18+000 Studs (4 Nos) 9458750.43 472937.52 496476.16 10428164.12	5 EMB/UC11/2010-1		Studs (2 Nos)	4729375.2	236468.76	248238.08	5214082.05			4965843.96
Embankment (9.5 km), Anti-Flood Sluices (5 Nos), Studs (7Nos), 114,863,321.6 5,743,166.1 13,832,489.7 134,438,977.4 Revetment (900m) and Gravelling Work (6.4 Km) Embankment (21km), Anti-Flood Sluices (10 Nos), Studs (27 Nos), Revetment (1500m) and Gravelling Work (12.8 Studs (27 Nos), 283525500.5 14176274.98 33371157.56 331072933.1	6 EMB/UC12/2010-1		Studs (4 Nos)	9458750.43	472937.52	496476.16	10428164.12			9931687.95
Embankment (21km), Anti-Flood Sluices (10 Nos), Studs (27 Nos), Revetment (1500m) and Gravelling Work (12.8 * 33371157.56 * 331072933.1	Sub total	,	Embankment (9.5 km), Anti-Flood Sluices (5 Nos), Studs (7Nos), Revetment (900m) and Gravelling Work(6.4 Km)	114,863,321.6	5,743,166.1	13,832,489.7	134,438,977.4	57,36	57,369,481.2	59,481.2 77,300,772.9
	G.Total NRs		Embankment (21km), Anti-Flood Sluices (10 Nos), Studs (27 Nos), Revetment (1500m) and Gravelling Work (12.8 Km)	283525500.5	14176;	3337115		135	135987207.9	987207.9 194488269.8 19953401.82

Kamla River Embankment and Protection Works Dhanusha,Sirha Nepal India Co-operation Kamala Embankment Project

Emergent work carried out during monsoon 2010

Summary Sheet of Emergent Work of Kamala River Training Project Fiscal Year 2010-2011 (067/068 B.S.)

Γ		- 1			
GOI Contribution = 9013929	GOI Contribution =				
9013929			- Otal -		
208867			Total -		
N. Ni. U/S Siraha 1 to 9	ala N. Ni. U/S Siraha 1 to 9	Kamala	(9+875)	Left Bank	Enicidency Anoly of Odiging Oligans
la N. Ni. U/S Chikana Bhokaraha 1051814	la N. Ni. U/S Chikana Bhokaraha	Kamala	(5+510)	Lair Daily	11 Emergency Work of Carbon Carlo Charles
1232163	a N. NI. U/S Chikana Bhokaraha	Nalliala	(5.540)	Tof Dank	Emergency Work at Mannur to Phulharia Siraha
a N. Ni. U/S Singyahi Madaan Dhanusha 187252	a N. NI. U/S Singyahi Madaan Dhanusha	Validio	\perp	l eft Bank	Emergency Work at Manpur to Phulbaria Siraha
NI NI 1/2 O O O O O O O O O O O O O O O O O O O	N Ni 110 Oilly all Wadaan Dhanusha	K 2000		Right Bank	Emergency Work at Madaan Dhanusha
	a N Ni 11/2 Singyahi Madaga Dhamah	Kamala		Right Bank	Emergency Work at Lakkad Dhanusha
+	la Nadi Ni Ka 11//S Dhantisha	Kama	912+600)	Right Bank	Eilleigelicy work at Madaan Dhanusha
Kamala N. Ni. U/S Hathletwa Dubarkot Dhanusha 821037	ila N. Ni. U/S Hathletwa Dubarkot Dhaniisha	Kama	(17+71)	Night Dalik	
nailiala N. Ni. U/S Singyahi Madan Dhanusha 1342944	ala IV. IVI. U/S Singyahi Madan Dhanusha	Malia	\perp	Dight Dank	Emergency Work at Hathmunda Dhanusha
306720	Ni. Callalesiwoi - Sivianottary	V and		Right Bank	Emergency Work at Hathmunda Dhanusha
Sa injections & Make #10. O/O jaical (WO)	Ni Sa jalochinos E Mahati	Nadi N		Right Bank	Emergency Work at Malhniya
Jangha Bigghi Rato N Ni S 11/S jalashwor	a Jangha Bigghi Rato N Ni S 11/S jalashwor) Marha	(4+250 & 5+050)	Lett Bank	Elife Belles Anoth at Matibut Olidia
V. IVI. Jaleshwor -6 Mahottary 724179	v. Ni. Jaleshwor -6 Mahottary	Valo IV	(1.020)		Emergency Work at Mannur Siraha
		Bata	(4+525)	l eff Rank	Emergency Work at Manpur Siraha
Name of Contractor/Local	Name of Contractor/Hours		Ch :- (km)	Bank	S.N. Work & Location

K

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Kamia River Embankment and Protection Works
Dhanusha, Sirha
Nepal India Co-operation
Kamala Embankment Project

Proposed Emergent work before monsoon 2011

NS	Incation	Proposed Protection Works			>						
		· · oposse · occonon **Once		csumated	Estimated Cost NRS.			GOI, NRs.		GON NRs	
			Estimated Cost Contengencies NRs.	Contengencies	VAT	Total	duding	Contingencies	Total	Vat(13%)	Remarks
Left Bank	Sirha						val)				
1	Ch 5+050	Stud construction- 2 po	8556740 20	27077	1						
		Ciad Constitution - 2 110	0330749.20	42/03/.40	11123/7.40	10096964.06	8556749.20	427837.46	8984586.66	1112377.40	
Right Bank	Dhanusha										
_	ch 18+500	Stud construction -2 no	6940335 56	347016 78	0000043 60	9190505					
				04101010	902243.02	0109090.90	6940335.56	347016.778	7287352.34	902243.62	į
			13437004.70	//4054.24	2014621.02	18286560.02	15497084.76	774854.24	16271939.00 2014621.02	2014621.02	
			`								

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Kamla River Embankment and Protection Works Dhanusha,Sirha Nepal India Co-operation Kamala Embankment Project

Annex-X

7.0											
-				35.	•				No. 1 Revenueur A Servery Special		
4-1						j.				- Tight	7
248.31.1	 21			255/11/43		.	10.000	A CONTRACTOR OF THE PARTY OF TH	15		
				1904/91 30	5 2 1 2 4 5		200000000	Addition of the control of	Charlest Zileare		
	200000	*. ;	1904/91/90	1904761.90	CONCOUNT		2000000 00	Hagis Committee	Sharmelization	72	
	0000000	3			2) 31 41 03 03	3015865 13	24358918 9	1 N Kanala RB-50 067 58	Stud = 8 No.	NX4m314/83 50/067-	
2138819 28	17512404 52	1150043 519	16452456.00	18591275 28	27374785.05			Rusuwa Aushteya J-V	Cimbankment = 2 8km, & Stud = 5 No	Ch. 30+800 to 32+000	12
	18070400 40	1641501 113	17933865.35	20265267.85	38741786 3	4268162.898	34473623.4	Sapan/Kamal J/V			
2331402.50	10575466 46		: (4001241.20	8183664.1	901590.11	7282073.99	LN/Kamala/RB-48/067-68	Embankment = \$50m & Revelment = 150m	Ch 30+050 to 30+600	 =
539240.83	4494771.82	346765.42	4148006.40	A6877A7 23			1700	Swachchhanda-Roshan J/V	Embankment = 450m, Revetment = 450m, Stud = 2No. & A.F.S.	Ch. 29+600 to 30+050	10
2654217.83	21586924.24	1169863.99	20417060.25	23071278.08	27608790.35	3041646.39	24567143 96		Embankment = 1.23 km, revolution = 3.7%, 0= 1 No.	Ch. 28+330 to 29+600	
		100100	16142/03.24	18241254.66	27936723.02	3077774.57	24858948.45	S. I-N/Kamala/RB-46/067-68 Amar	A.F.S. = 1 No.	Ch 1921-201-201-201-201-201-201-201-201-201-2	-
2098551.42	17326462.69	1183750 45				30000	e 25031829.40	I-N/Kamala/RB-45/067-68 Jayce	Embankment = 1.65 km, Revetment = 351m, Stud = 2 No. &	Ch. 26+700 to 28+350	8
2291076.01	18815653.47	1191991.87	17623661.60	19914737.6	28131008.34	3099178 88		Raman J/V	Embankment = 3 km, Stud = 1 No. & A.F.S. = 2 No.	Ch. 22+700 to 26+700	7
	185/1055.62	1309093.8	17261961.82	19506016.85	30894613.86	3403643.9	ka 27490969.96	Prithwi J/V		Ch. 20+450 to 22+700	o
2244055 04	2000		10940791.91	21408/44.85	28882418.5	3181961.36	25700457.14	I-N/Kamala/RB-43/067-68 D.S	275 Lm Shid = 3 No & A F.S. = 1 No.	portion)	
2462952.95	20169623.2	1223831.29	10045701 01				20101111120	I-N/Kamala/KB-42/06/-08	A.F.S. = I No.	Ch. 6+600 (Avulsion	5
3208782.20	26099946.73	1417006.727	24682940.00	27891722.2	33441358.75	3684217.489	20757141 26	Himdung & Thokar/Shah J/V	Embankment = 800m & Revention - 750m	Ch. 6+100 to 6+900	4
1024030.01	13746121./3	1251248.61	12494873.12	14119206.62	29529467.34	3253246.403	26276220.94	I-N/Kamala/RB-41/067-68	DOO 6 Designment = 450m		
				1021703	29761328.42	3278790.42	26482538 V	I-N/Kamala/RB-40/067-68 Mahadevkhimti/DEV & Sayar J/V	Embankment = 450m & Revetment = 501m	Ch. 5+650 to 6+100	3
2095771.54	17382392.78	1261073.23	16121319 55	1001700100			<	Shankarmali/U.K.N.?Lokpriya J/V	Embankment = 500m & Revenue = 7.5 m	Ch. 5+150 to 5+650	2
2347319.93	20860685.53	1265916.83	19594768.70	22142088.63	29875637.28	3291383.768	26584253.51	I-N/Kamala/RB-39/067-68		of Package No. 14 (Saurvi dhar)	
25.47940 03						0240490.90	c 261/3260.85	I-N/Kamala/RB-38/067-68 Pacific Asmita J/V	Embankment = 150m, Revetment = 150 & A.F.S. = 1 No.	Ohanusha Ch. 5+000 to 5+150, U/S	Right Bank
2576659.01	21066799.7	1246345.75	19820453.95	22397112.96	29413759.81	30 ADMONCE	20 025		A.F.S. =5No.	Total Left Bank	
		_	100010	120994097.33	218129485.13	24031214.47	194098270.66			to 18	
13919732.44	116317627.10	9242762.16	107074864 94	120004507 30			10000	I-N/Kamala/LB-3//00/-00 Dazia		Package No. 1 to 2 & 17	ဖ ဇ
2030584.79	16635942.63	1016059.626	15619883.00	17650467.79	23979304.79	2641787.82	94/5295.2/	I-N/Kamala/LB-36/067-68 Pappu	Embankment = 950m	Ch. 31+200 to 32+300	7
482904.25	4165852.63		3714648.10	4197552.353	10648427 07	3606832.70		I-N/Kamala/LB-35/067-68	Emhankment = 1 1km. Revetment = 501m & A.F.S. = 1 No.		
1939984.65	16310202.21	1387243.379	14922958.83	16862943 48	22728043 80				Embankment = 1.6km, Gabion Stud = 4 No., Ealuveit spur = 7 No., & A.F.S. = 1 No.	Ch. 29+600 to 31+200	6
2478643.77	20887186.34	1820695.84	19066490.50	21545134.27	42968421.84	4733809.185	38234612.65		n & A.F.S. = 1 NO.	Ch. 27+150 to 29+600	5
		1230017.30	12516355.60	14143481.83	29703374.51	.666	26430968.84		- 1 ≅	Ch. 17+000 to 18+975	4
1627126.23	13774973 16		12911783.15	14590314.96	18468313.54	2034644.713	16433668.83	Construction		Cn. 15+100 to 17+000	u
1678531 81		L		12948353.09	21143513.65	2329370.148	18814143.50	I-N/Kamala/LB-31/067-68 Jayee	Smbankment = 1.9km, Stud = 4 No. & A.F.S.=1 No.	CII. 12+030 to 17+000	2
1480633 54		٤		12360207.01	20182826.92	2223531.779	17959295.14	I-N/Kamala/RB-30/067-	Empankment = 1.4km Revetment = 201m & A.F.S. = 1 No.	0.050	
1421970 72						2015700.583	16280658.55	I-N/Kamala/LB-29/067-68 Himdung & Thokar/Jayabhavani	Embankment = 2.1km	Sirha Ch. 10+550 to 12+650	Left Bank
770352.69	6701059.372	5	+	669614261	3		11			9	о. Н
8	Total 7	Contingencies	g Vat)	Amount	Total	GON(13% VAT)	GOI With Contingency	Contract no./Name of Contractor	Proposed Protection Works	Chainage	2
Vat(13%)			,								

Priority list of rivers in Short Term Strategy on Flood Management and Control

Rivers between Koshi and Mech

- 1. Kankai (Western Kankai in India)
- 2. Biring (Eastern Kankai in India)
- 3. Lohendra
- 4. Mechi
- 5. Ratuwa
- 6. Chisang
- 7. Sunsari
- 8. Budhi (Parman in India)

Rivers between Gandaki and Koshi

- 1. Rato (Dhaus in India)
- 2. Balan
- 3. Lakhandehi
- 4. Jhim
- 5. Maraha (Harsingahi)
- 6. Bighi (Dhaus)
- 7. Jamuni
- 8. Pasaha
- 9. Sikta
- 10. Bangri
- 11. Uriya
- 12. Tilawe

Rivers between Mahakali and Gandaki

- 1. Karnali (Ghaghra in India)
- 2. Mohana
- 3. Banganga
- 4. Babai (Sarya in India)
- 5. West Rapti (Rapti in India)
- 6. Chaudhar
- 7. Donda
- 8. Mahakali (Sharda in India)
- 9. Rohini
- 10. Tinau
- 11. Dano (Kunhra in India)
- 12. Maan

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