

Utilizing India's One Billion Dollar Line of Credit

Budhi Gandaki, Mahakali III and Bridge over Mahakali – Projects Born and Bred at Singha Durbar?

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Abstract: When India's Prime Minister Narendra Modi offered Nepal \$1 billion USD line of credit in August 2014, many Nepalese believed this would be utilized to implement the stalled 6,480 MW Pancheshwar Multipurpose Project. During the September 1996 Mahakali Treaty ratification, the Pancheshwar Project was claimed to make the 'sun rise from the west' for Nepal! In fact, the joint press release of the two prime ministers did stress to 'finalise the DPR of Pancheshwar Development Project and begin implementation of the Project within one year.' However, it was reported that, India's External Affairs Secretary, Ms. Sujata Mehta, visited Nepal in November 2014 and 'concluded the terms and conditions for the credit line.' While there was no word on the Pancheshwar Multipurpose Project, the Budhi Gandaki Hydropower Project suddenly raised its head with the government's own finance minister strongly justifying it. Similarly, the Mahakali III Irrigation Project from the Tanakpur Barrage and a multi-lane motorable bridge over Mahakali River were also identified as projects to be funded through the Indian line of credit. This article examines the background of these three projects (Budhi Gandaki, Mahakali III, and bridge over Mahakali) and questions whether they were truly born in Singha Durbar, or further away in Delhi.

Keywords: Budhi Gandaki, Mahakali III, Pancheshwar Multipurpose Project, Nepal

Foreword

The Nepalese media¹ reported that the government will give priority to 'irrigation, hydro, and road' projects while utilizing the largest-ever line of credit offered by India: \$1 billion USD². Many believed this credit would be utilized to finance the Pancheshwar Multipurpose Project. At the Joint Session of the Parliament on September 11, 1996 Water Resources Minister, Pashupati SJB Rama, had claimed³ 'Future generation.....shall exclaim in wonder that this Parliament has caused the sun to rise from the west!' However, not long after the credit was extended, Finance Minister, Dr. Ram Saran Mahat, said that approximately half of the fund would go to the Budhi Gandaki Hydropower Project as 'It is the only hydropower project that can be implemented at the earliest'. Irrigation Ministry Secretary, Madhav Prasad Regmi, said that his Ministry has sought funding for Mahakali III and the Koshi Pumped Canal. Regarding roads, the media reported that the Indian government had promised during Modi's visit to Nepal to construct a multi-lane motorable bridge over the Mahakali River to facilitate smooth traffic along Nepal's East-West Highway and establish a vital link between Nepal, Uttar Pradesh, and Uttarakhand. After Modi's visit, according to finance ministry officials, Ms. Sujata Mehta, Secretary at the Indian External Affairs Ministry 'visited Nepal last week and concluded the terms and conditions for the credit line'. This article would examine the background and analyze the logic behind financing these projects, keeping in mind past Indo-Nepal commitments that were made at the Secretary-level Joint Committee on Water Resources (JCWR) and the 1996 Mahakali Treaty.

Multi-lane Motorable Bridge over Mahakali River

Regarding this multi-lane motorable bridge over the Mahakali River, one needs to refer back to the 1996 Mahakali Treaty signed by the Prime Ministers of Nepal (Sher Bahadur Deuba) and India (PV Narashima Rao). The very first Clause of the February 12, 1996 Letters of Exchange between these two Prime Ministers stated:

"1. The all-weather link road connecting the Tanakpur Barrage to the East-West Highway at Mahendranagar in Nepal shall be completed by India within one year from the date of the entry into force of the Treaty."

This Tanakpur-Mahendranagar link road is a mere 12 kilometer stretch. The Mahakali Treaty came into force when the two governments of Nepal and India exchanged the instruments of ratification on June 5, 1997. Needless to say, this link road did not materialize within a year as it is still unbuilt to this day, eighteen years later. But that's not to say the road wasn't discussed at the Indo-Nepal Joint Committee on Water Resources. The following JCWR minutes regarding that link road are both fascinating and self-explanatory.

Tanakpur-Mahendranagar Link Road

First JCWR Meeting⁴ of October 1-3, 2003

"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 final exchange of letters. The Nepalese delegation informed that the land acquisition is underway and the exchange of letters will be expedited." (author's emphasis)

Fourth JCWR meeting of March 12-13, 2009

"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** were to be finalized shortly. DPR of the link road shall be completed keeping in view para 7 above and environmental issues."⁵ (author's emphasis)

Seventh JCWR meeting of January 24-25, 2013

"It was brought to the notice of JCWR by the Indian side that the **necessary approval for forest clearance** from the concerned agency in India would **take some more time**, as about one kilometer

length of the link road passes through forest area in Uttarakhand, India. It was decided to direct the consultant (RITES Ltd.), assigned for the preparation of DPR to complete the DPR for the remaining parts and the works on the Nepalese side to be implemented while obtaining clearance for the said one kilometer length on the Indian side.” (author’s emphasis)

This is the sad 18-year plight of the 12 km ‘*all-weather link road connecting the Tanakpur Barrage to the East-West Highway at Mahendranagar in Nepal.*’ Though stipulated to be complete ‘*within one (1) year from the date of the entry into force of the Treaty*’ and though the Treaty came into force in June 1997, a series of excuses ranging from land acquisition and DPR preparation to necessary specifications for elephant passes have been cited by JCWR for the delay. But now, the cat finally emerged from the bag: *the two countries in November 2014 agreed to utilize a portion of the US\$ 1 billion Indian line of credit for a multi-lane motorable bridge over Mahakali at Mahendranagar.* Analysts believe that India, after having signed the 1996 Mahakali Treaty, quickly realized she had erred by allowing Nepal’s East-West Highway traffic⁶ to trundle over her strategically important asset, the newly-built Tanakpur barrage. While India preferred to keep that secret close to her own chest, Nepal strangely failed to decipher it over 18 years at the seven JCWR meetings. Now stranger still, Nepal is burdening her poor citizens with the ‘soft loan’ for the ‘multi-lane motorable bridge over Mahakali’ that she was already entitled to under the Mahakali treaty!

Mahakali III Irrigation

In 1972, more than fifty years after the Sarada Treaty, Nepal initiated steps to use the Mahakali waters to irrigate her lands in the Kanchanpur district. Subsequently, the Mahakali I and Mahakali II Irrigation Projects were financed by the World Bank in 1978 and 1988 to provide irrigation to over 14,800 hectares of land from the Sarada Barrage. It is important to note here that the ‘colonial’ British had provided the intake structure for the Nepal canal from the Sarada Barrage at the **same sill level as that of the India canal: elevation 220.52 meters** (author’s emphasis). It is from this ‘equal colonial sill level’ that Nepal irrigated her Kanchanpur lands under the Mahakali I and II Irrigation Projects. With the signing of the Mahakali Treaty in 1996, the World Bank was keen to continue financing the Mahakali III Irrigation Project that utilized the waters from the newly constructed Tanakpur Barrage upstream. But this never materialized. Without consulting Nepal, India in 1992 **unilaterally constructed the sill level of the Nepal canal from Tanakpur Barrage at EL. 245.0 meters while lowering her own to EL. 241.5 meters** (author’s emphasis). This 3.5 meter (11.55 feet) sill level difference had serious implications for Mahakali water availability for Nepal and remains mired in controversy to this day. During talks for ratifying the 1996 Mahakali Treaty, Nepal had requested India to lower down the Nepal sill level to

the same level as India’s.

The following JCWR minutes shed some light on the 18 year saga of this quest to bring the sill level to equal levels, and in doing so, depicts India’s mindset⁷ when it comes to water and Nepal.

Sill Level of the Head Regulator for the Canal towards Nepal at Tanakpur Barrage:

First JCWR meeting of October 1-3, 2000

“5.2 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.”

Third JCWR Meeting of 29 September-1 October 2008

“10. The JCWR was apprised with the outcome of joint inspection undertaken by the two sides in March 2005.

11. The Nepalese side **reiterated that the Sill elevation of the Head Regulator**, for releasing water from the Tanakpur barrage to Nepal under Article 4 of the Mahakali Treaty, **be lowered to 241.5 meter. (author’s emphasis)**

12. The Indian side assured the Nepalese side that **the pond level at the Tanakpur Barrage would be maintained at EL 246.7m by the project authority at all times**, as this was also required to operate the power plant, and would in turn allow flow of committed discharge of water from Tanakpur Barrage through the existing regulator. **(author’s emphasis)**

13. The JCWR decided to direct the concerned authorities to **commence the construction of the 1.2 km of canal in the Indian territory to match with the corresponding level of the ongoing Mahakali III canal works in the Nepalese territory, so that the canal system could be operationalized.**” (author’s emphasis)

Fourth JCWR Meeting of 12-13 March 2009

“5. JCWR was informed that NHPC (National Hydro Power Corporation) 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 245.0m.

6. Nepalese side, **while reiterating their previous position on placing the sill level at EL 241.5m**, requested that **the discharge capacity of the canal in the Indian portion may be increased to 56 cumecs (2,000 cusecs) to take care of a situation when the Sarada barrage would become defunct.** The Indian side mentioned that the **inlet portion of the head-regulator had 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 shutdown of Tanakpur HE Project.**

Further, a canal of higher capacity with lower discharge would result in siltation in the canal. Therefore, **a new canal with separate head regulator would be considered as and when Sarada Barrage becomes non-functional.” (author’s emphasis)**

But then, for reasons unknown, at the Sixth JCWR Meeting⁸ of November 2011, headed by Nepal’s Energy Secretary, Balananda Paudel, the Nepal government backtracked on its previous positions regarding the sill level at the Tanakpur Barrage.

Sixth JCWR Meeting of 24-25 November 2011

*“JCWR reviewed the status of construction of 1.2 km long canal for supply of 1,000 cusecs of water from Tanakpur barrage for Nepal. NHPC and CWC held discussions on the sill level of Head Regulator for Nepal Canal..... After discussion, it was **proposed to lower the sill level of the Head Regulator at EL 244.25m instead of EL 245.00m proposed earlier.** JCWR directed JSTC to finalize this Sill Level after reviewing the technical details.” (author’s emphasis)*

Seventh JCWR Meeting of 24-25 January 2013

*“As the 4th meeting⁹ of JSTC, which was supposed to be held prior to the 7th meeting of JCWR to finalize the sill level, could not be organized in time, the JCWR has again directed that the **next meeting of JSTC would review the technical details of the new Sill Level of 244.25m of Head Regulator at Tanakpur for Nepal Canal and finalize it.” (author’s emphasis)***

Thus, India as usual assured Nepal that the ‘pond level at the Tanakpur Barrage would be maintained at EL 246.7m by the project authority at all times’ and dismissed Nepal’s requests on the grounds that ‘the Head-regulator **had already been constructed in 1992** and it would not be advisable to dismantle the head regulator at this stage as it would require complete shutdown of Tanakpur HE Project.’ But Nepal continued with her stand until November 2011, when it was finally ‘swayed to agree’ to a Sill Level of EL. 244.25 m for the Nepal Canal from Tanakpur Barrage. So, Nepal incomprehensibly had to eat the humble pie after 18 years of stand for a 3.5 meter reduction and eventually surrendering for a mere reduction of 0.75 meters! It is also sad to note India’s reluctance to grant Nepal’s request to increase the canal capacity in the Indian territory to **‘56 cumecs (2,000 cusecs) to take care of a situation when Sarada barrage would become defunct.’** In other words, India wanted Nepal to patiently wait for a flood disaster to wipe out the Sarada Barrage before she would consent to construct another canal that would deliver Nepal the 1,000 cusecs of water that she was already utilizing through the Sarada Treaty of 1920! This ‘as and when Sarada Barrage becomes non-functional’ mindset of India must be viewed in the context of the recent Kosi embankment breach of August 2008. This breach not only deprived Bihar of irrigational facilities to 9.7 lakh hectares of farmland from the Kosi Barrage but

also deprived Nepal of electricity from the 20 MW (installed) Kataiya hydro power station. Nepal was entitled by the Kosi Treaty fifty percent of the power generation. Six years down the road till August 2014, there was still no electricity¹⁰ for Nepal from Kataiya power station! But India, within a year, had the Kosi Barrage supplying water for her irrigational canals.

As mentioned earlier, one should not forget that the colonial British when constructing the Sarada Barrage at Banbasa in 1920 voluntarily provided the sill level both for India and Nepal at the same level of EL. 220.52 m. But India deemed it very much unfit to replicate the colonial British India on this equal Sill Level issue! With India quibbling endlessly over the Tanakpur Sill Level for Nepal Canal, the World Bank was ‘eased out’ of the Mahakali III Irrigation Project. Now, rather than asking the World Bank to ‘re-visit’ the Mahakali III Irrigation Project, Nepal’s Ministry of Irrigation chose to use the Indian line of credit.

Budhi Gandaki Hydropower Project

Towards the end of November 1991, when Prime Minister GP Koirala made his first official call to New Delhi, the Tanakpur fiasco surfaced on his return. In order to clamp down the Tanakpur **‘MOU or Treaty’** furor, the Ministry of Water Resources, HMG/N, hurriedly issued a notification¹¹ in the Nepal Gazette. Besides indicating that Prime Minister Koirala had availed¹² Nepalese lands at Jimuwa for Tanakpur Barrage in exchange for ‘10 MW of energy annually free of cost to Nepal’, the notification also indicated that Koirala had already given his consent to India to develop Nepal’s entire portfolio of water resource projects from Karnali Chisapani, Pancheshwar, Sapta Koshi, to Budhi Gandaki, Kamala and Bagmati. As all eyes were glued on Tanakpur and later the integrated Mahakali Treaty, no one took notice of what Prime Minister GP Koirala agreed to on Budhi Gandaki during his visit. Looking back at that Gazette one is enlightened by the following interesting statement.

“5. Budhi Gandaki Project: *A joint team of experts shall conduct field surveys to reach agreement on the parameters of the project as outlined in the **prefeasibility study completed by HMG/N.** These field surveys shall be **completed by June 1992.** Modalities of financing the project will be worked out jointly **pari passu.** The detailed Project Report should be prepared **so that construction can start by 1994.**” (author’s emphasis)*

The reference to a ‘prefeasibility study [of Budhi Gandaki Project] completed by HMG/N’ is that of the 1984 study which recommended a 225 m high rock-fill dam with clay core located 2 km upstream of Benighat. The dam would create a 40 km long reservoir with a gross storage capacity of 3.32 billion cubic meters (bcm). Through a one km tunnel and a net head of 185 meter, the 600 MW (four units of 150 MW each) powerhouse, located at Benighat, could generate an average annual energy of 2,495 GWh. The December 1991 HMG/N gazette notification clearly indicates that India was so ‘bowled over’ by this Budhi Gandaki

Project that she wanted field surveys completed in six months by June 1992 and the detailed project report (DPR) prepared so that construction could begin by 1994!

The Tanakpur episode led to the epic call of then CPN-UML General Secretary, MK Nepal, for an Integrated Mahakali Treaty with the '*Sarada barrage of yesterday, Tanakpur barrage of today, and the Pancheshwar High Dam of tomorrow*' and thus led to the 600 MW Budhi Gandaki Project consigned to some dusty drawers of the Ministry of Water Resources. However, with CPN-UML's pledge for 10,000 MW in 10 years followed by 20,000 MW in 20 years plan from the CPN-Maoist (United) and increasing load shedding, construction of medium sized storage projects became a national obsession for Nepal's policy makers. Thus Budhi Gandaki was resurrected. In December 2012, the feasibility study and detailed design of Budhi Gandaki Hydropower Project was awarded to Tractebel Engineering SA France in association with JADE Consult/Nepal. Tractebel Engineering recommended a dam height of 263m instead of 225m, and suggested converting the rock-fill dam to concrete arch gravity dam and sited the powerhouse at the toe of the dam itself instead of Benighat. With a substantial increase in dam height, the gross reservoir volume increased to 4.5 BCM. Similarly, much to the delight of Nepal's policy makers, the installed capacity of the powerhouse doubled to 1,200 MW (*six units of 200 MW each*) and the average annual energy increased substantially to 3,383 GWh.

For the sake of comparison, the characteristics of the recently commissioned 260.5m high Tehri Dam in India's Uttarakhand State with a gross storage of 3.5 BCM is akin to that of the 263m high Budhi Gandaki dam with 4.5 BCM gross storage. The 2,400 MW Tehri¹³ has three power generation components: four 250 MW units on the left bank, four 100 MW units on the Koteshwar balancing reservoir, and four 250 MW units from the Tehri pumped storage plant for an annual generation total of 6,500 GWh. Tehri's stored water (live storage 2.6 BCM) stabilizes the existing irrigational benefits to 6.04 lakh hectares and provides an additional irrigation benefit to 2.70 lakh hectares of land in Uttar Pradesh (UP). Three hundred cusecs of water are diverted from Tehri to Delhi (162 million gallons per day) to provide drinking water to 40 lakh people. Similarly, 200 cusecs (108 million gallons per day) of water will meet the requirements for 30 lakh people in the towns and villages of Uttar Pradesh. As UP is the beneficiary of all irrigational benefits, the UP State Government bears the entire cost of irrigation component from Tehri. Uttarakhand receives 12% of generated power free of cost as 'royalty in lieu of use of natural resources.' 25% of the remaining 88% generated power is allocated to the UP Government in exchange for a 25% contribution of power Component. 75% of the remaining 88% power is allocated to the central pool in lieu of cost sharing of power component.

Budhi Gandaki, despite having a live storage similar to Tehri, has been aptly termed the Budhi

Gandaki Hydropower Project. Why? Was it to divert the focus from water to hydropower? Regarding stored water and augmented flows, Tractebel Engineering's report has a single sentence: 'Globally, in terms of monthly average discharge, Budhi Gandaki Hydro Power Project will have a **positive effect** on the **Gandak irrigation project** since it **mitigates the effects of Nepal irrigation projects**' (author's emphasis). This positive effect on Gandak irrigation project means it will 'stabilize' irrigation benefits to India's existing 18.5 lakh hectares (eastern canal: 9.2 ha and western canal: 9.3 ha) of land in Bihar and UP besides providing 'additional' irrigation benefits to several lakh hectares of land. However, brushing aside these 'sundry' issues, Finance Minister, Dr. Ram Saran Mahat, roundly concluded that half of the Indian Line of Credit will be earmarked for Budhi Gandaki Hydropower Project as 'it is the only hydropower project that can be implemented at the earliest!' There is no word, none at all, on the positive effect to India's massive Gandak Irrigation Project.

Final Word

To conclude, should Nepal be happy with the soft loan to build the bridge over Mahakali when the Mahakali Treaty's Letter of Exchange stipulated India will construct the all-weather Tanakpur-Mahendranagar link road '*within one year*'? Knowledgeable sources quickly point out that India never promised in the Mahakali Treaty to build a bridge over Mahakali River. It is true: no bridge construction per se was promised, as the Tanakpur-Mahendranagar link road went over the Tanakpur Barrage. But the issue here is 'The goodwill intent' of India and not the bridge per se. India realized the risk in placing the road link over the Barrage. Thus, for 18 long years, while India kept the secret close to her chest, Nepal strangely never attempted to decipher India's reluctance. Now, stranger still, a 'soft loan' is being earmarked for that very 'link' promised by the 1996 Treaty over the Mahakali River!

Similarly, we see the same kind of 'intent' regarding the sill level for the Nepal canal from the Tanakpur Barrage. The colonial British in 1920 believed the sill levels from the Sarada Barrage should be at equal level and constructed them at EL. 220.52 meters. But the Republic India in 1992 unilaterally deemed it necessary to provide Nepal with a sill level 3.5 meters (*11.55ft*) higher than that of India. From the Tanakpur Barrage, Nepal dug three kilometers of canal at a sill level of EL. 241.25 meters while India is planning to construct it at EL. 244.25 meters, meaning there will be a free-fall of 2.75m (**9.08 feet**)! (See Photo 1). Sharp engineering minds are already hard at work to 'harmonize this mismatch' on the Nepal canal at the Indo-Nepal border. Furthermore, Nepal's request to increase the Nepal canal capacity from Tanakpur Barrage from 1,000 to 2,000 cusecs (*as entitled under Sarada treaty*) was casually dismissed '**as and when Sarada Barrage becomes non-functional**'! That is, Nepal must wait for a catastrophe to washout the Sarada Barrage in order to receive her stipulated

portion of the Mahakali waters from the Tanakpur Barrage! As mentioned earlier, Nepal did face the catastrophe of Kosi embankment breach in August 2008. Nepal was deprived of the fifty percent power entitlement from the Kataiya hydropower station entitled under the Kosi Treaty and for the last seven years that restoration work is still *'in progress'*. With such 'as and when' mindsets, is it advisable for Nepal to use the Indian line of credit for the Mahakali III irrigation project? The World Bank had financed the Mahakali I and II irrigation projects. Shouldn't the Nepalese government 're-visit' this option as well?

After Prime Minister Modi's tumultuous visit to



Photo 1: A part of the already dug 3 Km Nepal canal from the Tanakpur barrage at EL. 241.25 meters in the Nepalese territory (courtesy Mr. R. R. Lumsali)

Nepal in August 2014, the joint press release stated: "The two Prime Ministers witnessed the signing of the Exchange of Letters regarding Terms of Reference of the Pancheshwar Development Authority. They agreed that the two Governments would set up the Authority within 6 months and finalise the DPR of Pancheshwar Development Project and begin implementation of the Project within one year." It was thus believed that a major portion of the Indian line of credit would be utilized for the implementation of the stalled 6,480 MW Pancheshwar Multipurpose Project and as claimed by Water Resources Minister, Pashupati SJB Rana, make the 'sun rise from the west.' The Mahakali Treaty had already been ratified and the instruments of ratification already exchanged by the two governments in June 1997. The signing of the Terms of Reference of the Pancheshwar Development Authority was witnessed by the two Prime Ministers. But the sudden decision to divert the major portion of the Indian credit to the 1,200 MW Budhi Gandaki Hydropower Project has raised many eyebrows. Has this Budhi Gandaki Project undergone the usual vetting and discussions by institutions like Water and Energy Commission Secretariat, the National Planning Commission, or even by the concerned Ministries (Irrigation and Energy) themselves? Does this project fall within the framework of Nepal's Water Resources Strategy and National Water Plan that were formulated and approved by the government in 2002 and 2005 respectively? Also why has the 750 MW West Seti Storage Project languished for 20

years and still shrouded in mystery¹⁴ while the new 1,200 MW Budhi Gandaki storage receives immediate approval? The Nepalese media reported that India's Foreign Secretary has already signed the terms and conditions for the Indian line of credit with Nepal's Ministry of Finance. Economist Milton Friedman eloquently said, 'there's no such thing as a free lunch'. Then what exactly are the strings attached to that one billion dollar credit? Just consider the recent episode over the mere selection of consultant that exploded between the stakeholders (Ministry of Energy and Asian Development Bank) for the \$505 million USD 140 MW Tanahu Hydropower Project (formerly Upper Seti (Tanahun) Storage Project).

When a \$1 billion credit is placed on the table, no doubt the stakes are very high. With Mahakali's Pancheshwar Project already *wrapped up*, with Koshi's Sapta Koshi High Dam Project in the *wrapping up process*, and with Karnali's Karnali Chisapani Project about to be *'re-activated'*, the lone Gandak River remained a distinct out-caste. Budhi Gandaki, as indicated by the Nepal Gazette of December 1991, had always been uppermost in the minds of New Delhi mandarins. With Nepal's varied stakeholders - from muscular middle agents to *'a hydro project in my backyard'* Constituent Assembly members - no surgical precision was required to rope in Budhi Gandaki Hydropower Project. Former Managing Director/NEA, Ajit Narayan Thapa, lovingly termed the long lists of multilateral banks' covenants for the 201 MW Arun III HEP, the all curing *'Vicks 44 formula'*. Analysts believe that New Delhi, undoubtedly, has incorporated such *'Vicks 44 formula'* on the use of the one billion dollar credit line. However, when the likes of the Nepal Investment Board shields itself behind a *'non-disclosure clause'* on Upper Karnali and Arun III HEPs, the democratic government of Republic Nepal would no doubt simply keep a discreet silence on the *'Vicks 44 formula'* attached to the one billion dollar Indian credit!.

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Foot Notes

1. Kathmandu Post's Money, November 10, 2014 (Kartik 24, 2071).
2. According to the media, the loan will have 1% interest charge, 0.25% commitment charge (reduced from 0.5%) and the 0.25% service charge waived off. Analysts, therefore, note a major paradigm shift in India's "water politics" behind this huge One Billion Dollar Indian Credit with such attractive terms for Nepal.

3. Water Resources Ministry's booklet of 2053 Kartik 29 regarding the Treaty on the Integrated Development of the Mahakali River including Sarada Barrage, Tanakpur Barrage and Pancheshwar Project.
4. Nepal's delegation for the First JCWR meeting was led by BN Sapkota, Secretary/Ministry of Water Resources, HMG/N. Please do note the tag: *Ministry of Water Resources and HMG/N*. India's delegation was led by Z Hasan, Secretary/Ministry of Water Resources, GOI. By November 2009, the Indo-Nepal Water Resources talk at the Fifth JCWR meeting was led by Nepal's Energy Ministry. This is in striking contrast to India's delegation consistently led by Water Resources Secretary.
5. Para 7 stated: 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....
6. From the colonial British-India times, vehicular traffic over the Mahakali River has been through the Sarada barrage which was limited to two hours per day. Republic India continued this two hour per day practice citing conditions of the old barrage. However, due to public pressure from both sides of the border, this has recently been increased to seven hours per day. Decision makers at Singha Durbar are totally oblivious of the hassles that the Nepalese have to undergo while crossing the Mahakali over the Sarada barrage.
7. During the height of Indo-Bangladesh dispute over the Farakka Barrage in the mid-1970s, the Indian High Commissioner to Bangladesh, Muchkund Dubey, confided to the Nepalese ambassador, Harka Bahadur Thapa, *'Thapa Saheb, you Nepalese do not know the value of water. For us, Indians, every drop of water is equivalent to a drop of blood!'*
8. It is to be noted that Nepal was led at the 4th JCWR meeting of March 2009 by SP Koirala, Secretary Ministry of Water Resources. The 5th JCWR meeting of November 2009 was again led by SP Koirala but in the capacity of Secretary Ministry of Energy. Premier MK Nepal had scrapped the Water Resources Ministry to juggle out two Ministries, Energy and Irrigation, simply to create more jobs for his coalition partner, Nepali Congress! Interestingly, Water Resources Secretary SP Koirala opted for the more charming Energy Ministry. On the Nepal Canal Sill Level at the 5th JCWR meeting of November 2009, Energy Secretary Koirala, however, continued with the decision taken at the 4th JCWR meeting. It was the new Energy Secretary, Balananda Poudel, who on the Nepal Canal Sill Level surprisingly backed down from the stand taken by his predecessors in the past five JCWR meetings.
9. Minutes of the Fourth Meeting of India-Nepal Joint Standing Technical Committee (JSTC) held on 12-13 September 2013 in Kathmandu: It was decided that the concerned agency of the Government of India would carry out the detailed design of the intake and head regulator structures **considering Elevation to 244.25m as sill level** and put up for consideration of JSTC in its next meeting.
10. Minutes of the Seventh JCWR Meeting of 24-25 January 2013: 'The Nepalese side requested the Indian side for the speedy restoration of Birpur powerhouse, which was damaged due to breach of Kosi afflux bund and not in operation since the event in 2008. As a result, Nepal is deprived of getting 50 percent of the electricity generated from the powerhouse at mutually agreed rate under the provision of Kosi agreement on account of the damage. The Indian side stated that the restoration work was in progress and it was also a matter of priority for India as much as it was for Nepal.' Note, though India stated that it was 'a matter of priority for India as much as it was for Nepal', the restoration work is in the seventh year now!
11. Nepal Gazette Vol. 41 No. 36, Kathmandu, December 29, 1991 – Bhasin AS. *Nepal's Relations with India and China*. 1994. Siba Exim Pvt. Ltd., Delhi, India.
12. Many fail to note the following glaring concessions provided by Prime Minister GP Koirala to the Government of India: *'The availability of land for construction of bund will be effected in such a way by HMG/N that the work could start by 15th of December 1991.'* For India, this permission to start work by 15th December 1991 (not even a fortnight after Premier GP Koirala's visit) was extremely important. India had to tie up her eastern afflux bund to the higher ground in the Nepalese territory on a war footing before the 1992 monsoon onslaught. So important was this GP Koirala concession to India that it is enshrined in the 1996 Mahakali Treaty as *'Recalling the decision taken in the Joint Commission dated 4-5 December, 1991*' Hence, while Kosi and Gandak treaties are attributed to his brothers, MP Koirala and BP Koirala, the Mahakali treaty can safely be attributed to GP Koirala though Sher Bahadur Deuba was the Prime Minister who initialed the treaty.
13. From the brochure: ***Tehri Hydro Development Corporation Ltd – Profile.***
14. Daily Newspaper **Nagarik's Arthik** January 14, 2015 (Poush 30, 2071) reported that the 750 MW West Seti Storage Project (*awarded through MOU basis by Energy Minister Gokarna Bista to Chinese company, CWE Investment Corporation, a subsidiary of Three Gorges*) has become a mere football to be kicked around between Nepal Investment Board, Energy Ministry and Nepal Electricity Authority. While the Energy Ministry states that it has no legal role at the Nepal Investment Board, the Board believes the Energy Ministry is unhappy with the West Seti project as it was not processed through competitive bidding. Meanwhile, NEA is keen to clarify that, under the existing circumstances, it is not in a position to alone take the responsibility to consume all the West Seti energy.