

**Discussion notes on  
Indo- Nepal Water Relation in the Changed Context: Possible Cooperation in  
Sikta, Bhalubang and Naumure Projects**

**Organised by:**  
**Jalsrot Vikas Sanstha (JVS), Nepal/  
Nepal Water Partnership (NWP)**

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**Presentation by :** Dr. U. N. Parajuli, Trans-Boundary Water Management Researcher

**Topic:** Development option of West Rapti Water Resources Development Project with a focus to Sikta, BhaluBang and Naumure Projects

*The summary of the discussion issues and consensus arrived at, following Dr. Parajuli's presentation are summarized below. Detailed discussion notes are presented thereafter:*

**Summary of Discussion Issues:**

The main issues that came up during the discussion are summarized as follows:

Is India's current interest on assisting Nepal to build Naumure Project an opportunity or a threat? The reason behind Nepal's Naumure proposal to India needs to be discussed.

India's interest in assisting Nepal in constructing Naumure could be due to construction of Sikta irrigation Project. One option for Nepal is to construct Naumure Project according to the Sikta model, i.e., at as slow pace using its internal resources.

Another issue discussed was, if India is to give a grant, should Nepal go for other projects such as Upper Karnali instead of Nuamure?

Discussions with India on water issues should also be interest based, i.e., at the best interest of both countries and not only on position based (water rights and riparian issues)

Ghagra which is in India should also be included in any Rapti Basin planning.

It seems that India has asked Nepal not to use West Rapti waters for Kapilbastu irrigation if it is to offer assistance for Naumure Project. However, apart for West Rapti, there are no options for irrigating Kapilbastu command area.

Should ground water and surface water be treated differently while negotiating with India?

### General consensus reached

The general consensus reached during the discussions is as follows:

1. Nepal cannot move ahead without engaging India on water resources. The question as to what is right in Naumure on principle requires continued dialogue with a clear vision.
2. Irrigation in Kapilbastu is essential be it ground water, tunnel diversion or Naumure.
3. Since in the present context since we are negotiating on surface water, there is no need to include ground water in such negotiations with India.
4. The fact is that the water at Naumure needs to be regulated. And if the water is to be regulated we need to go for multipurpose project.
5. For multipurpose project, Naumure and Bhalubang combined is a better option to meet Kapilbastu's irrigation requirements.
6. We need to negotiate on our portion of water needs.
7. The understanding between the two countries has been ***'in any joint project Nepal's requirement will be given prime consideration.'*** Thus, we need to look at our options and come up with what ours requirements are in the water sector.

## Details of Discussion

**I R Onta:** Nepal should look at Laxmanpur dam as an example of what India's expectation on water is.

**S. N. Paudel:** in 1960's J L Nehru and B. P. Koirala had a meeting on Jalkundi. As the Project would inundate Deukhuri Valley, B. P. did not agree to implement this project unless India would agree to compensate Nepal with an equivalent land area. Although, India agreed to resettle the population that would be inundated, it did not agree to compensate Nepal with an equivalent land area.

From historical perspective, Naumure is primarily hydropower project, whereas Bhalubang is irrigation project.

In the present context, 100% water use within Nepal will not be pragmatic

**S. N. Upadhyay:** The reason behind Nepal's Naumure proposal to India needs to be discussed.

**N. K. Agrawal:** From 1950's India has been collecting flow data on Jalkundi. The WECS/Canadian study concluded that hydropower option would be best for Naumure

**J L Karmacharya:** NEA undertook a hydropower feasibility study on Naumure. The study showed that Naumure as a power project would be infeasible as the benefit:cost ratio was 0.9.

**K. B. Aryal:** Since license for other similar projects were not available with the government around the year 2000, Nepal proposed Naumure to the Government of India. This could also be due to the current construction stage of Sikta.

We also need to look at this in light of International treaties on water rights that Nepal has signed.

Another option is to implement Naumure according to the Sikta/Babai model, i.e., to build slowly by mobilizing internal resources

**Tika D. Niraula (Secretary, MoWR):** India is still putting pressure on Sikta as it is being constructed. During one of the two large power summits that were organized in Kathmandu in 2006, the Indian Ambassador mentioned that India would provide grant assistance to Nepal for a 250 MW hydropower project. The matching project then came to be Naumure, which Nepal put forward.

After some preliminary discussions India stated that if it is to finance Numure, Nepal should agree on not using the downstream flows for irrigation in Kapilbastu

**Sharada P Sharma:** Nepal discusses with the central government in India but water in India is a state issue. If the states in India do not agree, there is not much that the central government can do.

If India is giving a grant, why not go for other projects such as Upper Karnali?

Nepal should also consider upper riparian rights. What should be Nepal's right as the upper riparian?

**Govinda D Shrestha:** India's interest on Naumure could be to avoid confrontation as Nepal is constructing Sikta on its own, i.e., to cater to its own (India's) need and interest

There have been talks on West Rapti for 50 years. Both countries need to decide on issues of mutual benefit. Negotiations should now be "interest based" rather than "position based".

**S. N. Upadhyay:** Whether India's interest is an opportunity or threat need to be looked at from past experience as well. India's intension is clear – "no irrigation in Kapilbastu".

**Ram K Tiwari (WECS):** Our focus should be on learning from past experience and to go for mutual benefit rather than concentrating on past bitter experiences. Need to determine how much benefit will go to Nepal and India as basis for Naumure and Bhalubang.

If Bhalubang and Naumre projects do not irrigate Kapilbastu, there are no other options including groundwater.

**U N Parajuli:** Based on thumb rule calculations, both irrigation requirements for Kapilbastu and regulated flows for downstream release can be met from the projects.

**S.N. Paudel:** Without releasing some additional flow to India, Nepal can not move ahead with these Projects. One option is to use Kali Gandaki diversion for additional flows and nullify the Trans Basin agreement on Gandak Basin (which prohibits trans basin water transfer).

**Divas Basnyat:** National Water Plan has been prepared. Need to look at River Basin Planning level and decide on priority (weightage) between power and water. Thus, should define Nepal's need from basin perspective for West Rapti till India's Ghaghra.

**S.N. Upadhyay:** Surface water and consumptive uses should be looked at differently due to limitations and complications in groundwater.

**Rajendra Chhetri (WECS):** There is no changed context when it comes to water issues between Nepal and India. To date no joint project has moved far ahead. Even Pancheswor is in a poor state of progress. Nepal is not able ascertain its water rights. Should define what a joint project is.

During the power summit in Soaltee Hotel, Indian Ambassador said India would support one 100 MW – 200 MW project in Nepal. Nepal may have proposed Naumure but as it is a reservoir project, conflicts will occur due to issues related to regulated flows

“Positions” should not be a problem if the technical committee gives the go ahead as per international law and if it benefits both countries.

If Nepal is to only release residual flows to India, it can not be a joint project.

Consumptive use should be treated as a separate issue while dealing with the neighbouring state.

**S.N. Upadhyay:** Lower Sarada does not consider ground water, so yes, consumptive use should be dealt as a separate issue. If Government of India has said RoR due to logistic simplicity, should we go for it? Need to discuss

**N. K. Agrawal:** Power and irrigation have different requirements. So if Naumure and Bhalubang both are constructed, both power and irrigation sectors will benefit.

**Sheetal B. Regmi:** There has been a long history of Nepal-India water issues, e.g., obstruction in Sikta and India’s construction of Laxmanpur Barrage which Nepal has objected. India calls Laxmanpur Barrage “level crossing” and not a Barrage.

It should be noted that Rapti is a water constraint basin (not power) both in Nepal and India. Nepal’s concern is water stress during the lean season and flood impacts during the high flows.

Irrigation in Kapilbastu is essential and Nepal should not ask for alternatives during negotiations. Also all of West Rapti’s water is generated within Nepal and thus, Nepal should have the first right and Kapilbastu should get irrigation waters.

**Khem R Sharma (DoI):** The experience is that year round irrigation is not feasible with surface water. So the focus should be to develop year round irrigation and thus one option is consumptive use e.g., ground water. If Kapilbastu has no ground water another option is storage. However, there could be other cross border repercussions if such water rights are established.

Ground water is more expensive and thus it will not sustain traditional cultivation. Need to look at water management including rainwater harvesting. We need to delineate “needs” and “options”.

**Shiva K Sharma:** With a benefit:cost ratio of 0.9, Naumure is at a threshold. If regulated flows are also accounted for, it could become viable. Due to India’s strong reservation on Sikta, Nepal needs to engage India on Naumure. Sikta is not yet fully secured.

Other alternatives such as Karnali or Budi Gandaki to irrigate Kapilbastu will take a long time. So for the next 30 years, apart from Naumure/Bhalubang there are no other alternatives.

**Danda P Jaisi:** India's current competition is with China. China has started river diversion projects. India's interest on West Rapti seems to be "river linking". Naumure could be a part of this strategy.

**Navin M. Joshi:** If India is to invest on Naumure it will look at the business terms. The benefits to Nepal and what Nepal is to give, should be looked at carefully.

**Dibya R Kansakar:** Ground water and surface water issues should be looked at separately at trans-boundary level. Although, from hydrological science both ground water and surface water are interrelated, it can be self defeating if treated as one issue on trans boundary level – due to shallow tubewells. But within one's territory, these need to be looked at as one issue since surface water is not able to cater to year round irrigation

**Anup Acharya:** We have seasonal flow disparity in the rivers and thus we need to regulate these flows. On one hand our policy is to electrify all households in the country which requires storage projects given high demand for electricity and minimal river flows during winter, and on the other hand we face conflicts on dam issues.

West Rapti needs to be looked at differently as both power and irrigation requirements can be met along with some regulated flows downstream to India. Thus, these projects justify further studies.

**Govinda D. Shrestha:** 1996 UN Convention on Riparian issues that Nepal signed is not in its benefit. This looks at both surface and ground water. Thus, how feasible will it be to look at surface and ground water as one issue within the country but separately across the boarder?

Rapti Basin also includes Ghagra which need to be remembered. We need to look at this from practical aspects.

**S.N. Upadhaya:** We can not move ahead without engaging India or else the costs will be high. The question as to what is right in Naumure on principle requires continued dialogue and we need to keep our vision clear. Irrigation in Kapilbastu is essential be it ground water, tunnel diversion or Naumure.

In the present context since we are negotiating on surface water, there is no need to include ground water.

The fact is that the water at Naumure needs to be regulated. And if the water is to be regulated we need to go for multipurpose project. For multipurpose project, Naumure

and Bhalubang combined is a better option to meet Kapilbastu's irrigation requirements. We need to negotiate on our portion of water needs.

The understanding between the two countries is that "in any joint project Nepal's requirement will be given prime consideration." We need to look at options and come up with Nepal's requirements.

To sum up:

- Negotiation with India: We should clearly put Nepal's need transparently on the table.
- For wider cooperation, we need to look at India's study on water sharing, i.e., studies should be extended on both sides.

***Discussion Notes prepared by Ajoy Karki, Member JVS  
24 Feb 07***