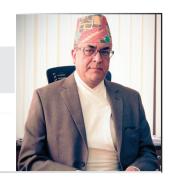
An Interview with Mr. Radhesh Pant

Chief Executive Officer, Investment Board Nepal, Government of Nepal

Mr. Radhesh Pant granted an interview to Mr. Bhai Raja Manandhar, Managing Editor, Hydro Nepal Journal. The interview in its entirety is presented.



The establishment of Investment Board Nepal (IBN) with the aim of promoting large scale infrastructure projects on fast track through FDI is certainly a welcome step from the government of Nepal. As the chief of the IBN, what vision have you set towards reducing Nepal's already alarming dependence on imported fossil fuels and eventually making Nepal a hydro-powerful nation in the region?

First of all, let me start by thanking the Journal for promoting informed dialogue on issues concerning water, energy, and the environment. How we manage our resources involves decisions that are critical to our future well being as a nation. We have the potential and the ability to transform our economy based on the principles of sustainability provided we do so wisely, in a manner consistent with protecting Nepal's national interests. Thank you for this opportunity to be part of the dialogue.

In answer to your specific question, I would remind your readers that the Investment Board is only one instrument of Government responsible for developing our hydro potential, and reducing dependence on carbon-based fuels. The Board has a specific mandate to put in place partnership agreements that are consistent with the national interest and promote Nepal's economic development. We have been assigned that responsibility within the energy sector relating to hydro power projects over 500 MW. As of this date, that mandate consists of 5 projects amounting to 3800 MW. This is but a small fraction of Nepal's full hydro potential. Nevertheless, our signing of two concession agreements on the first 1800 MW enables both those projects to move into the financing and implementation stage involving raising billions of dollars and arranging contracts and employment for the thousands of construction jobs. We are also making progress in preparing for negotiations of three other hydro projects in the IBN mandate.

The *vision* for development of hydro through partnership between Nepal and the private sector is governed by *nine principles* set out by Government and the Investment Board. These are:

- Meet Nepal's electricity needs first (receiving a portion of output free and giving Nepal the option to buy additional power at commercial rates)
- Capture for Nepal her fair share of economic benefits (royalties, taxes, equity stakes in projects

and dividend returns)

- Ensure the optimal use of river basins (giving Nepal the right to allocate projects upstream and downstream)
- Return hydro asset to Nepal in good operating condition (with elaborate handover requirements and oversight mechanisms)
- Transfer project risks to the party best able to manage that risk (with clear allocation of risks to parties)
- Ensure balanced deals (with a fair market return to the developer and financial as well as economic, industrial, employment and social benefits to Nepal)
- Ensure high environmental sustainability and high safety standards (with mandatory compliance to international standards and a panel of independent experts to oversee implementation of design and operations as well as environmental mitigation plans)
- Commitment to industrial and employment benefits (to provide full and fair opportunities to the Nepali supplier base and employment and skills development programmes)
- Model community benefits package (following international best practices for local and community benefits and local shares to ensure local people have a stake in and benefit from the project)

Water and energy are strategic resources with multiple political and economic dimensions. Nepal's geographic location between China and India intensifies these dimensions even further. How can Nepal utilize its unique location and these resources for the maximum benefit of the country? How important would hydropower development be in such a national endeavor?

Water has always been a sensitive issue in Nepal. It is our lifeblood and our birthright, and we must make decisions concerning its use carefully. Unlike hydrocarbons, it is a renewable resource that will continue to benefit our nation. Water issues can be controversial, and our geographic location brings even greater policy and political sensitivities.. But I think our geographic location can be a big opportunity. There

is a huge market for Nepal's hydro power in India, growing by 12,000 to 15,000 MW per year. Moreover, there are major complementarities between India's coal based system and Nepal's hydro system. A recent study we commissioned of the India market shows that India needs more power during the wet season and could be willing to pay premium prices at a time when Nepal in future will be producing significant wet season surpluses. And in the dry season when Indian demand drops and power prices are lower, Nepal can import when and if needed. We must recognize that our run of the river hydro projects produce 70 to 80% of their energy in the four month wet season, and only 20 to 30% in the other 8 months of the year, but demand in Nepal is very flat on a seasonal basis. We, therefore, must export for our hydro projects to be viable. The Power Trade Agreement (PTA) recently signed between Nepal and India, not only makes this trade possible, it has raised confidence among the national and international hydropower investors. Similarly, the recent agreement among SAARC member countries on energy cooperation will open regional energy markets for Nepal. I think rationality and good planning should prevail over emotions when it comes to decisions on how best to utilize Nepal's water resources. I also think we need to diversify our investors. The Investment Board is reaching out to French, Korean, Norwegian, American, British, along with Chinese and Indian investors for Nepal's hydropower development. Foreign investment that is governed by concession agreements that embody the nine principles I have outlined above will assure Nepalese that hydro development will be a key driver of economic wealth for our country.

Power trade, transmission lines, and regional connectivity are just a few of the issues that require increased attention for Nepal's hydropower development. In your opinion, does Nepal currently possess sufficient technical, managerial, and regulatory capacities to deal with these issues?

The billions of dollars that are being invested in hydro open up enormous opportunities for Nepali suppliers and employees. We must find ways to take maximum advantage of these opportunities by developing our skill base and working closely with the developers on training and industrial development opportunities. Hydro capital spending in Nepal is a great opportunity to upgrade our skill base and develop new higher value added industries, similar to how other countries have developed new industries. That is why the Investment Board is insisting on industrial, employment and training plans associated with each of the hydro projects. Development of our skill base starts with ensuring we are well equipped to negotiate good deals on behalf of our nation. We recognize that the companies we are negotiating these multi-billion dollar deals are supported by highpowered talent within their corporations and by high powered advisors. I am very proud of the team of talented and professional Nepalese we have attracted to the Investment Board. They are working in close

coordination with world leading international expert advisors and one of the top five energy law firms in the world. In all cases when we are using outside experts, we are also bringing about a transfer of knowhow to our people so we will be less reliant on outside advisors. We are also working closely with the Ministry of Energy and the Nepal Electricity Authority as well as other key ministries, all of whom are gaining experience and knowhow in meeting these new challenges.

It appears that hydropower development in Nepal has been hindered by institutional incongruities and a lack of inter/intra-agency communications. For example, there has been an apparent misunderstanding between the Ministry of Energy and the IBN. Should Nepal design a single mechanism or body that regulates all of these agencies and activities? The lack of inter-departmental communication was seen on the issue of irrigation development and impact that Upper Karnali HEP will have on downstream irrigation. What safeguards you would like to suggest on such an issue?

I think your question arises from media stories that do not have much foundation in fact. Allegations of conflict and controversy make for media stories. Harmony and effective functioning of Government does not. The Investment Board is ably supported by an interministerial PDA negotiating committee which includes a joint Secretary from each of the Ministry of Energy and the Department of Electricity Development as well as Joint Secretaries from Law Justice and Finance Ministries. IBN has the benefit of its own Act setting out its mandate, and clear instructions from Cabinet. Moreover, it is chaired by our country's Prime Minister, and includes the key Cabinet minister as either members or attendees, which makes for very effective coordination. The evidence of this effective coordination includes the current work requested by Cabinet now underway by the project proponents to have a more detailed look of the possible impact of two of the hydro projects on downstream irrigation.

Clearly, there is a great potential for regional power market among the SAARC nations. And recently concluded PTA with India could be instrumental in fostering this regional power market. Presuming that the PTA has opened up the Indian market both to the domestic IPPs and the producers under FDI arrangement, what should the Nepalese government now do strategically in order to make the most out of the Indian power market, which seems set to grow in the years to come?

You are correct about the growth potential of the Indian market. Our forecast indicates that India will need an additional 12,000 to 15,000 MW of new capacity each year for at least the next 15 to 20 years. By enabling access to that market south of our border, the PTA is a major enabler for encouraging development of Nepal hydro on a large scale, and for enabling two way trade in electricity. Now we need to

ensure that transmission gets built on both sides of the border. And we need to make sure the projects which have been signed up get built so that the world can see that Nepal is committed to economic development for the benefit of its people.

Recently, PDAs were signed with the GMR for Upper Karnali HEP (900 MW) and Sutlej Jal Vidyut Nigam for Arun III HEP (900 MW). How far do you think the IBN has been successful in ensuring maximum national interest in the PDAs of Upper Karnali HEP and Arun III HEP?

I am very confident that we have deals in place with both companies that protect and promote Nepal's national interests. We have embodied the nine principles I described earlier in these agreements, and have built in oversight and verification mechanisms to ensure they are delivered. These agreements ensure international best practices in all areas, including International Finance Corporation (IFC) environmental performance standards. These agreements bring substantial benefits to Nepal. For example: Nepal gets 12% free energy and 27% free equity plus income tax, royalties from Upper Karnali. Similarly, we get 21.9% free energy and other revenues from Arun-3. The free electricity from both projects is the equivalent of a 300 MW project that the Government would otherwise have to finance on its own. During the 25 year concession period, Nepal gets revenues worth approximately Rs 880 billion and over 6000 jobs on site from the two projects, plus many other economic benefits.

Both the projects provide for local shares, as well as local business development and training which will gradually uplift the economic status of local people. Another aspect of the PDA is that both the projects will be transferred back to Nepal government after 25 years in a good operating condition at no cost to the Government. With good government management after the transfer back, these assets, fully paid for by the developer, should last another 50 to 75 years.

As a major chunk of energy to be generated by the Upper Karnali HEP will be during monsoon season, it seems that needs of India are clearly the priority. How will the energy that Nepal will get under free entitlement from the Upper Karnali HEP contribute to reducing the loadshedding during the non-monsoon season when the energy shortage is usually very acute in Nepal?

I had mentioned earlier how run of the river hydro projects in Nepal generate most of their power in the wet season and a smaller proportion in the dry season. These characteristics are also true for Upper Karnali. Our free electricity is a 12% proportion of monthly output, an arrangement that was agreed to in the MOU with GMR signed in 2008. The PDA with GMR gives Nepal the right to purchase additional power from Upper Karnali to meet its needs. Moreover, the transmission line to India that GMR will put in place for exports will enable power imports if needed in the

dry season to eliminate load shedding in far western and other parts of Nepal.

In absence of the price of Upper Karnali HEP energy to be sold to Indian power system, what is the basis of calculating the figure of NRs. 430 billion as the revenue to Nepal from the Upper Karnali HEP under free entitlement?

No one can guarantee the future. Nevertheless, we have one of the leading infrastructure companies in India investing over \$1.5 billion dollars in Upper Karnali with the expectation that it will earn a return on that investment. We know what the minimum required return is that GMR requires, so our financial model uses that threshold to calculate financial flows and returns to Nepal. In addition, we have commissioned market outlook and price forecasts of the Indian power market from the two top power forecasting firms in India, Mercados and ICF, in 2012 and updated during 2014. These two studies give us an independent price outlook for sales to India that enable us to do sensitivity analysis and not rely on GMRs outlook. But returns are not just a function of prices, they are also a function of costs, so as part of our due diligence process to protect Nepal's national interest, we commissioned a study of the costs of Upper Karnali by one of the World's leading hydro engineering firms, Lahmeyer. Then we have built in oversight and verification mechanisms in the PDA so that we have transparency on GMRs spending. We have also built in protection mechanisms to ensure the dividends arrive by strengthening the Joint Venture Agreement, and put provisions into the PDA to ensure arms length transactions by GMR in both marketing and procurement, thereby avoiding certain techniques that international corporations have for removing expected profits from companies in host countries. These are all innovations the IBN has brought into our concession agreements to help ensure expected benefits to Nepal will actually happen.

In absence of official information based on the PDA of Upper Karnali HEP, it is being widely speculated that the price of energy to be sold to Nepal (if Nepal wishes to buy) would go higher than that to be sold to India on long-term basis. Would such an arrangement be palatable to the Nepalese people? Would there be any arrangement in the future with the company that such a situation does not arise?

I think we all have to recognize that with two new cross border transmission lines between Nepal and India that are being built by GMR and SJVN plus the Dhalkebar Muzzafupur transmission line plus the PTA, that the Nepal and India markets for electricity are being fully integrated. GMR cannot charge Nepal more for electricity than Nepal can buy power from the Indian market. We have additional protections built into the PDA to ensure fair pricing of power we may choose to buy from GMR.

What is the arrangement made in the PDA of Upper Karnali HEP with regard to the schedule and

mechanism for delivery of the 12% free energy to Nepal? Will it be through dedicated turbine within or import from India?

These are technical issues that will be dealt with between GMR and NEA through an operating procedure code provided for under the PDA. It will depend in part on NEA plans and timing of construction of the east west transmission system in Nepal to ensure the free power will get to market.

Is there any benchmark, accepted model or guiding principle specifically for concluding and implementing PDAs? If so, could you shed some light on it?

I have outlined the nine principles guiding our negotiations and underlying our Project Development Agreements, our due diligence processes and financial evaluations, and our implementation monitoring to ensure these agreements are in Nepal's national interests. Agreements that are not in our national interest will not be recommended for signature.

In the context of the constitutional guarantee of right to information, non-disclosure of these PDAs has raised many speculations among all. So, does the IBN have any plan to make them public in the near future? If not, could you cite some reasons for that?

It is not fair to say that we have put the people in dark about PDA content. We have already made the PDA summary documents public, and the summary has been published in local newspapers of project affected districts. We conducted rigorous consultation processes with key stakeholders before we signed PDA with the developers of Upper Karnali and Arun-3 Hydropower Projects. Confidentiality of commercial deals is standard practice throughout the world. If we want to continue to attract foreign investment to Nepal, we must respect commercial confidentiality. It is also an advantage in our negotiations with other developers if they do not know what we have agreed to in other deals.

As we all know, Nepal's hydropower potential of 83,000 MW was estimated by Dr. Hari Man Shrestha in 1966 AD. Don't you think it is already time now to update or reassess the country's actual hydro-power potential by utilizing the best of technologies and tools currently available for future energy planning?

I agree that there is always a need for better planning and updating of past studies. I understand the Ministry of Energy is working with multilateral and bilateral aid agencies to get the necessary resources to do so.

Considering significant leniency in legal provisions on EIA procedure for mega projects, the Investment Board Act, 2068 seems to have been inequitable to medium and small scale project proponents, a majority of

whom happen to be the IPPs of Nepal, treated by another law, viz. Environment Protection Act, 2053. In what ways a level playing field is created for the domestic and foreign investors to develop hydropower projects in Nepal? Would that not mean in essence that the Nepalese consumers are going to subsidize the energy to be exported?

Our PDAs require international best practice environmental standards, and are also subject not only to scrutiny by Nepal ministries, but also international agencies involved in providing finance. These environmental plans will also be reviewed and overseen by international experts who are part of the joint monitoring process between IBN, the developers and the international lenders. The projects under the PDAs are subject to more rigorous environmental standards and requirements that will not disadvantage domestic investors in smaller projects. It is a fallacy to claim that domestic consumers would subsidize exports. On the contrary, they will benefit. We must also recognize that the two export oriented PDAs that have been signed to date will be providing a minimum of 300 MW of free electricity for the Nepal market.

Lastly, would you like to convey any message to the readers of HYDRO Nepal journal?

I would like to sincerely thank all who supported us by providing their valuable suggestions and cooperation to move the Upper Karnali and Arun-3 hydropower projects forward. We have navigated through the political process and now it is time to recognize the tangible role of hydropower development in Nepal's economic transformation. IBN needs full understanding support from all political parties, bureaucracy, civil society, media, people's representatives and local stakeholders for rapid economic prosperity through hydro and infrastructure development.

I would also like to repeat some general comments I made above. Thanks to the PTA, the development of new transmission, Nepal's world of electricity will become an open system with India. We should see this as a huge benefit for Nepal, as it enables us to develop run of the river projects that generate 3 times as much electricity in the 4 month wet season as during the 8 month dry season. Without an export market, Nepal hydro cannot be developed viably. Two way trade in electricity with India and the south Asia region will be a welcome reality in the next decade that will unlock Nepal's hydro potential. The key challenge will be to make sure we continue to secure deals for development of this hydro to assure the national interest.

I also thank the HYDRO Nepal for providing me an opportunity to clarify a number of issues on Nepal's hydropower development. Informed debate leads to much better understandings on the part of everyone concerned.