

Interview with Odd Hoftun

Mr. Odd Hoftun toiled more than 50 years in various development activities in Nepal mainly in development of Mission Hospital, Tansen, Palpa, Butwal Technical Institute (BTI) in Butwal; and later in the hydropower development in Butwal and neighbouring Districts of Nepal. He has been instrumental in training several hundreds of skilled technical manpower and establishing high value companies such as Butwal Power Company, BTI, Nepal Hydro & Electric Ltd. (NHE), Himel Hydro and General Construction etc. He talked with Jeewan P. Thanju, Editor-in-Chief of HYDRO Nepal. Below are excerpts from the talk:-

For several years you have been involved in the development of Hydropower sector in Nepal. How do you perceive opportunities and challenges for hydropower development in Nepal?

I am always having big ideas and expectations in hydropower development in Nepal. There is a growing market in Nepal and also in India. One should expect Hydro projects being commissioned one after another. Further, such project could also serve as a platform for development of Human Resources.

The biggest challenges are from political side and some from social/local disturbances. There are technical challenges also, but the biggest challenges are non technical. Power Developers must realize and understand that hydropower is a long term investment. Many businessmen/ developers think that they can build hydropower in no time and immediately start getting a good return. There is no quick profit in hydropower; but the return will be steady, consistent for a long period.

Now Nepal is in grip of long hours of load shedding and is likely to be continued for next 5 or more years. Where do you see the problems and how it needs to be managed?

We cannot accept long hours of load shedding. That is bad for the economy of the country. Industrial development will not take place if there is no safe and reliable supply of power. Running diesel generators in every house is very inefficient way of producing electricity.

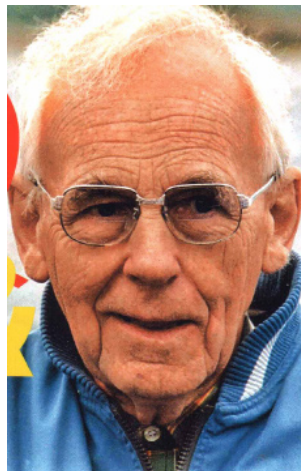
Power plants take long time to construct. Even a small plant takes time. There must be a plan and long term commitment. Small hydropower developers after getting license think they can develop project without much planning. They have not used qualified /experienced personnel in planning, preparation and design. Some projects are less than successful. I have been told that some small hydro projects under construction have stopped before they are finished due to all funds used up.

The contribution from the private sector is not encouraging as envisaged by the 3 Years Plan. Some believe that without massive construction program from the Public sector, the load shedding will not go away.

What is your opinion?

Private sector will not come until they see good prospects of succeeding, good environment and profit. For instance, political disturbances are not encouraging for power developers to invest in Nepal. At present, there is no Government in Nepal to make long term decisions. Planning takes time.

There should be both private and public sector investment in hydropower. Nepal should maintain firm and predictable terms and policies that will encourage the private sector to invest in hydro power for the long term benefit of the country. Private sector will not come unless they see profit for themselves.



For large hydropower projects, the only market is India. However, exporting electricity has not been materialized. Nepalese people have a phobia that it gets cheated whenever there is a treaty or agreement with the neighboring country. In this scenario, how do you see the cooperation between two countries?

That is outside my field of experience. But I remember that many years ago a plan was prepared for a coordinated long term development of the Mekong River basin involving 5-6 countries i.e Cambodia, Vietnam, Thailand, China for . I have no updated information; but I believe that they laid down rules/regulations, compensation for damages, fair and equal sharing of benefits etc. For the Ganges Basin, there should be similar plan. Nepal is a small country and India is a big country. And therefore it is even more important to have internationally agreed principles for the use and sharing of available across the borders. In storage projects, for example, much of damages fall on Nepal; whereas most of the benefits go to India. There should be a system of compensation for water storage in Nepal.

An International Authority such as UN or the World Bank can play an honest Broker's role to plan and implement the Ganges River Basin Development and bring the countries together including Bangladesh and Bhutan. About 30 years ago there was an effort by the World Bank to make India-Nepal cooperation in Karnali (10,800 MW project) multipurpose project. But there does not seem to be much talk about that today.

In the past there used to be a debate on small vs big hydropower projects. Now the debates have decreased. How do you see the role of small hydropower projects (0.5 MW to 10 MW)?

I think there is a role for both small and big projects. Small projects create local capability development. There are many businesses producing whole range of machinery of micro/mini hydropower now. Several of them are in Butwal.

Even though, Nepal is pioneer in Micro Hydro Technology, there is question of sustainability of these plants. Most of plants are mainly used for lighting purpose. Some plant may have had faulty planning. Technical, mechanical problems will be there and require regular maintenance. What is your view?

Small privately owned plants are probably doing best. The most successful are those that combine milling or other industrial activities with lighting etc. in nearby villages. Local operators with some experience are often quite clever, and can go to the local manufacturer for spare parts. Mostly, it should run mills in day time and for lights in the evening and nights. Just operating only for lights will not be commercially viable. Electrification makes big difference in the rural area.

Plants in the 10 to 200 kW range are more problematic. They require reasonably competent local owners. Eventually, when possible, also these small plants should be connected to a grid. There must be an understanding that NEA should buy power from small plants where there is a grid. Together, they can make a fair contribution to overall generation capacity. There has to be a fair price also for such small producers. I was told that in Gulmi district of Nepal, Nepal Electricity Authority (NEA) refused to connect about 50kW plant in the grid. There is no reason why NEA should not connect small plants. It is technically possible with some minor modifications.

Butwal Technical Institute (BTI) has been a successful model for creation of trained skilled manpower. What is your suggestion to replicate it in other place and also to increase its (BTI) capacity?

The secret of success of BTI is that it was developed together with Industry and has been operating very close to the Industry providing apprenticeship for the trainees. It was practical on the job training combined with certain amount of theoretical teaching. It is a four year apprenticeship training program with a Tradesman Certificate at the end. The tradesmen graduates of BTI often end up becoming foremen in various industries because of their practical and theoretical experiences, or they start their own small enterprises.

When there is no connection to an Industry vocational training becomes a school. BTI was never a school. For replication of BTI a close relationship to industry is essential, and the same "on the job" training principles should be applied.

BTI's output has gradually been increased in number. Originally, it was only the 4 year apprenticeship training program. Later several shorter courses have been added, like machine operator training.

Tinau Khola hydropower plant (1MW) in Butwal is only partially operational at present. In your opinion what is the best manner/ modality to operate it ?

I have been told that out of the three units only one is operational. Timely maintenance has not been done. This plant needs whole time maintenance; not after the machinery breaks down. The turbine machinery of Tinau has been running for a long time and is not particularly efficient. Further, Tinau is a bad river and needs frequent maintenance of the intake works. Some portion of the income should be set aside for maintenance. NEA does not have flexible financing arrangements for maintenance.

The advantage of the Tinau plant is that the NHE workshop is very close by. There is a possibility to increase its capacity by local community replacing the existing turbines with new larger units, increasing the capacity to say about 2 MW. People from Butwal have presented proposals a number of times to purchase the plant or operate it on lease. But NEA has not been interested. It is necessary to bring this plant into private hands for optimum benefits for both NEA and the local area. Let it be run on a commercial basis.

The Tinau plant was instrumental for training many people in hydropower development. One result of this modest undertaking was the establishment of companies like Himal Hydro and NHE. It was learning job for everybody.

How do you see the work environment in the hydro related industries in Nepal? How can the relation between the management and the workmen be improved?

Workmen-management problems are not only in hydro industry. It is in all industries. There are lots of problems these days. Nepal Hydro & Electric Limited has had its problems. But it is a national problem. In NHE there are 2 unions: One Mao Union and one UML union. How can there be peace when labor unions are run by political instructions from outside. When I was in-charge of the NHE for a period, I encouraged workers to establish a union. At that time there were no politics involved. The workers selected their trusted leaders through election and there was open contact between the union and the management at all times to discuss any problems. That was my philosophy.

How do you see the future of hydropower development in Nepal? Will it materialize or needs some major action by the GON?

Well I think, the Government should not interfere too much in the private hydro power development apart from looking after national and local interests, working out clear and well considered regulations, and ensuring that licensing terms are adhered to. Power purchase agreements (PPA) must be completed reasonably quickly with prices and terms fixed in a predictable manner.

How to get cooperation from local people during hydro project construction?

Developer should realize from the very beginning that they must have good contact with the community, and a program should be developed in consultation with those affected by the project so that the local community gets their fair share of the benefits for example access to electricity, but they should pay for energy consumed to avoid wasteful use. There must be limits to benefits in order for the project to be economically viable.

In Andhi Khola Hydel project (5.1 MW) there was close, contact with the government community more than one year before any construction started. The local community development aspect was integrated as a part of the project from the very beginning. For this very

reason, BLUE PLANET (international award) was given to the Andhi Khola Project.

Jhimruk project (12.5 MW) was not a good example. It was built on contract with GoN and hardly any systematic coordination was made with the local community in the beginning. Hence, there was a lot of quarrel with the local people.

Would you like to convey some message to the stakeholder such as hydro developers and policy makers in the Government?

One has to be optimistic, but at the same time well prepared. Hydro power development takes time. So be patient and keep going. I hope there will be a better Government than what is the case at present.

CALENDAR OF ENERGY

14-16 February 2011, International Conference on Energy Systems and Technologies, Location: Cairo, Egypt. More info: <http://www.afaqscientific.com/ic-est2011>

1-3 March 2011, Carbon Market Insights (CMI) 2011, Location: Amsterdam, Noord Holland, Netherlands. More info: <http://www.pointcarbon.com/events>

17-25 March 2011, International Conference on Future Environment and Energy (ICFEE 2011), Location: Sanya, China. More info: Contact name: Conferences Secretary, Website: <http://www.icfee.org/>

8-9 April 2011, National Conference on Sustainable Development in Energy Sector, Location: Dehradun, Uttarakhand, India. More info: <http://www.conferencealerts.com/seeconf.mv?q=caixxa6>

13 -15 April 2011, Energy Efficiency and Renewable Energy Sources for South-East Europe, Location: Sofia, Bulgaria. More info: Website: <http://viaexpo.com> Email: office@viaexpo.com

24 - 26 May 2011, EEDAL: Energy Efficiency in Domestic Appliances and Lighting, Location: Copenhagen, Denmark, More info: Contact: mnk@dansken-

ergi.dk

25 to 26 August 2011, 2011 Western Energy Policy Research Conference, Location: Boise, United States Enquiries: LisaWennstrom@boisestate.edu Web address: <http://epi.boisestate.edu/conference>

20-22 Sept. 2011, Jordan International Energy Conference, Location: Amman, Jordan, Contact name: Ahmed Freewan, Website: <http://www.jea-conf.org/jiec2011/index.html>

12-14 October 2011, International Conference on Sustainable Development through Renewable Energy Technology, Location: Kathmandu, Nepal. Contact Email: ces@ioe.edu.np

15-17 Nov. 2011, WATEC Israel 2011, The 6th International Exhibition and the 3rd International Conference on Water Technologies, Renewable Energy and Environmental Control, Location: Tel Aviv Exhibition Centre, Tel Aviv, Israel. More info: <http://www.watec-israel.com>

20 - 24 November 2011, 2011 WEC Executive Assembly; Further details to follow; Location: Oran, Algeria, Contact: Deborah Best, Manager, Governance Processes; best@worldenergy.org