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Regional Cooperation: Time to Act

There is a great need for bilateral and regional cooperation between the countries of South Asia in the water resources and energy sectors. Due to climate change, there will be increased instances of large floods during the monsoons, and decreased river flows in the dry season. The glaciers are melting, and very large water resources in the form of snow in the Himalayas are gradually disappearing. To counter this, a prudent solution would be the construction of large reservoirs for regulating river flows and to augment lean season flows.

The Ganges River Basin is home to 660 million people, in Nepal, India, Bhutan and Bangladesh. The dams and reservoir should be utilized for the benefit of the people in terms of hydropower generation (which is carbon free), water supply, irrigation benefits, flood control, etc.

Further, the recent incident of Japan's Fukushima nuclear reactor due to a tsunami induced by 8.9 Richter Scale earthquake has forced the world to think twice about the construction and safe maintenance of nuclear power plants. The Fukushima incident may lead to increased exploitation of hydropower potential in near future.

There are excellent examples of bilateral cooperation for generating and exporting electricity, such as that between Laos and Thailand. The Lao are also preparing to export electricity to neighboring Vietnam. Likewise, there is a good cooperation between Bhutan and India in electricity generation and export. The Mekong River Commission is another example of regional cooperation among participating nations along the river course. And in the southern Africa region, there is a successful transmission grid line.

For storage type hydropower projects, the downstream states need to understand that the regulated water from the dams comes at a price, due to submerging fertile lands in reservoirs, and the expenses of resettlement and rehabilitation that need to be accounted (paid) by the downstream states for the benefits taken from the regulated water flow in the form of flood control and irrigation facilities.

The seasonal variation in load (energy) demand in India and Nepal is matched by reciprocal availability in these two countries. Due to the hydrology of Nepali rivers, there is increased flow during the monsoon season inducing increased electricity generation to fulfill high demand in India in summer months. Similarly, reduced flow in the winter season and high demand in Nepal is matched by lower energy consumption in India creating the possibility of exporting thermal-based power to Nepal from India. This type of import-export system is beneficial for both countries to exploit their own competitive advantages. A regional transmission grid would be advantageous for the countries of the region, to maximize the available resources.

The deep rooted suspicion between the Himalayan neighbors needs to be gradually overcome by high level trust and transparent cooperation. One way is to open the door by engaging the private sector of both countries to operate under market forces/prices. This will gradually the way for bilateral cooperation on large scale water resources and energy projects to the benefit, ultimately, of the people of this region.

Jeewan P. Thanju, Editor-in-Chief