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# Big hydro-power potential in north-eastern region

FROM OUR CORRESPONDENT

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The north eastern region is a "store house of fantastic hydroelectric potential not only in the country, but also in the world" according to Mr. S. N. Phukan, chief engineer of Assam State Electricity Board.

In the course of an analytical study made by him of the hydro-power potentials of this region, he says that the "greatest natural resource" of this remote region is not oil or tea, but water, the region being blessed with two unique river basins, the Brahmaputra basin and the Barak basin.

With the sharply increasing cost and rapidly decreasing reserves of oil and coal now in use for power generation, there can be no better alternative source of energy than available hydro-electric resources, ever replenished by nature, devoid of pollution and unaffected by inflation, argues Mr. Phukan.

The river system of the region, according to him, offers without doubt the "highest hydro potential" in a single region, estimated at about 14 million KW of hydro power. Later investigations have revealed even higher potential.

A total of about Rs. 40 crores has been spent on four power stations which have already been commissioned to produce 125 MW. The cost to

tap the balance of 1955 MW is estimated between Rs. 1200 crores and Rs. 1400 crores. Mr. Phukan justifies this expenditure and effort. This, he says, will effect an annual saving of 2.6 million tonnes of oil or nearly four million tonnes of coal depending on fuel used, which would otherwise be consumed to generate an equivalent quantum of power.

Two million KW that can be tapped from Brahmaputra tributaries under study are chickenfeed compared to vast possibilities of Subansiri and Dihang, the two most powerful rivers flowing onto the Brahmaputra valley. There is a proposal to build a 210-metre high rockfill dam on the Subansiri river, creating a reservoir to store over three million acre feet of water, most of which will be passed through underground power houses turning nine huge turbines capable of generating 1800 MW of power. This will be the largest hydro power station in country.

The most promising, but the most difficult hydro-electric project of the basin is located on the Dihang river, where a 240-metre high rockfill dam will create one of biggest man-made lakes to store 20 million-acre feet of water with a surface area of 350 square km. This will be in Arunachal Pradesh. Its proposed power house with 15 giant machines of 500 MW each will break all records.

The estimated cost of these two gigantic hydel projects will be between Rs. 8000 crores and Rs. 9000 crores, but generation of 50,000 million units of electricity a year will, according to Mr. Phukan, earn for them a handsome gross return of Rs. 2,500 to Rs. 3,000 crores a year, almost ten times the present annual value of oil produced in Assam. Nowhere in India has hydro-electric project of the size of Dihang been conceived which can augment the presently installed electric power of the whole country by as much as 40 per cent in one shot.