

HYDRO POWER DEVELOPMENT



PRESENTATION OUTLINE

- **Our Vision**
- **Development Process Requisites**
- **Development Process Steps**
- **Valley wise Project Development Approach**
- **Benefits of Valley Development Approach**
- **Ongoing Projects**
- **Case Study- BTAD Assam**
- **Case Study- Uttarakhand**
- **IL&FS Advantage**
- **Geographical Spread**
- **Contact us**



OUR VISION

“Exploit Hydro power potential in India and the Neighboring countries to achieve sustainable & economic development”



DEVELOPMENT PROCESS-REQUISITES

- Experience of Project development and Requisite Manpower
- Hydro Power Development needs Concentrated and systematic approach in entire process
- Risk mitigations to the extent possible need to be done, before inviting implementer
- Understanding of various frameworks and policies for faster implementation of hydro projects
- Communication & Land acquisition issues including R&R needs to be addressed



DEVELOPMENT PROCESS REQUISITES

-----Cont.

- Geological Surprises needs to be addressed at DPR stage to minimize time & cost overrun
- To adopt latest construction equipment & technology for faster implementation of Projects
- Ecology, Environment , control on tariff etc needs proper attention in larger interest of nation.
- Integration of Social Aspects like Fisheries, Tourism, Drinking Water, Irrigation , Rural electrification



DEVELOPMENT PROCESS STEPS

- Reconnaissance of the valley to identify the projects
- L-Section & Cross Section Survey for the valley
- Identification of potential sites based on survey, already identified, on-going and completed projects
- Collection of data's like hydrology, topology, geology, satellite imageries etc from the respective departments
- Optimization of the Valley for power potential
- Preparation of PFR's cum Commercial Viability Report
- Detailed survey & investigation for DPR preparation



DEVELOPMENT PROCESS STEPS

---- Cont.

- Preparation of Detailed Project Report
- Integration of Social Aspects like Fisheries, Tourism, Drinking Water etc for sustainable development
- EIA/EMP studies
- Obtaining all Statutory and non-statutory clearances
- Land acquisition, power purchase agreement, state support agreement, implementation agreement
- Initiation of process for CDM Benefits
- Bid Process Management for selection of developer
- Equity and debt Syndication, if required.



VALLEYWISE DEVELOPMENT APPROACH

- Integrated approach for exploitation of the potential of entire valley
- Economization of cost towards Manpower, consultants, Survey & Investigations, Infrastructure & Transmission
- Integration of social aspects like Fisheries, Tourism, Drinking water & Rural Electrification with HEP
- Prepare Bankable DPR'S
- Development of projects thru' IPP'S
- Bulk Power Trading



BENEFITS OF VALLEY DEVELOPMENT APPROACH

- Optimum exploitation of the potential of entire valley thus meeting the power shortages
- Increased revenue for state Govt. due to free power benefits etc.
- Faster Implementation of Projects because of removal of bottlenecks and clearly defined contours of the project
- Environment up gradation and Social up liftment of the people of the valley
- Development of additional employment opportunities.
- Improvement in road connectivity and communication network



ONGOING PROJECTS

- Approx 2500 MW projects of various capacities, identified/restructured by IL&FS are under various stages of development in River Valleys of Uttarakhand.
- Development of Small Hydro Projects in Bodoland Territorial Council (BTC)
- Development of small HEPs in Assam
- Development of Hydro projects in Chattisgarh
- Joint Development of large hydropower projects in Sikkim
- Joint Development of hydro power projects in Nepal



CASE STUDY- BTAD ASSAM

- **MoA signed between BTC and IIDC in Nov-05**
- **3 small hydro projects Identified in Bodoland Territorial Council**
- **Detailed project Reports with survey and investigations, Land lease agreements, Power evacuation Arrangement, Power Purchase agreement and Bid process management completed in record time of 14 months only.**
- **Social Aspects like Fisheries and Tourism addressed**



CASE STUDY- UTTARAKHAND

- **MoA signed between GoU and IIDC in Jan-06**
- **Valley wise development approach taken up. Approx 2500 MW projects are under various stages of development . Most of the Projects are newly identified.**
- **PFRs and DPRs of approx. 1000 MW in progress**

Example – Nayar Valley

- **Nayar Dam HEP(34 MW) was lying abandon since 1940s. It has been restructured successfully for 14 MW capacity with no R&R**
- **Social Aspects like Fisheries and Tourism considered in Nayar Dam**
- **Nayar Dam Project is likely to be bidded out by Dec-07 along with 3 other identified projects i.e entire Nayar valley.**



IL&FS ADVANTAGE

Infrastructure (Project Development) & Financial Services

- In-house Techno-commercial skills & credentials for hydro power projects
- Leadership in Project Development
- Strong domain knowledge
- Access to funds

Networking & relationships

- Financial Services
- Government(s), Government institutions & bodies, Public Sector Organizations

GEOGRAPHICAL SPREAD





CONTACT INFORMATION

SANJAY KUMAR

sanjay.kumar@ilfsindia.com

G K PHARLIA

g.pharlia@ilfsindia.com

IL&FS Infrastructure Development Corporation Limited

Mahindra Towers – 1st Floor, 2A Bhikaji Cama Place

New Delhi 110 066 INDIA

Tel: (+91 11) 2670 9210, 2670 9242 Fax: (+91 11) 2610 3986)

www.ilfsindia.com



Thank You