

# Etalin Hydro Electric Project (3097 MW), Dibang Valley District, Arunachal Pradesh

**Major initiatives on Socio-Economic upliftment & welfare activities of local populace / community**



**TOUCHING LIVES... BEYOND BUSINESS**

## INTRODUCTION

**Jindal Power Limited (JPL)**, a company promoted by Jindal Steel and Power Limited (JSPL), has earned the distinction of setting up India's first mega power project in the private sector, the 1000 MW thermal power plant at Tamnar in Raigarh district of Chhattisgarh.

It commenced commercial production of the first unit in December 2007, with all four units getting commissioned by December 2008. The fuel supply of the plant is met through a 6.9 km conveyer pipeline set up for transportation of coal between the company's captive mines and the plant. It has constructed a 258 km, 400 KV Double Circuit transmission line from the plant to the PGCIL sub-station at Raipur, Chhattisgarh through which power can be sold anywhere in India. An 18 m high dam over the Kurket River, 25 km away from the project site, takes care of the plant's water requirements.

Presently, JPL is implementing an additional 2400 MW (4X600 MW) at Tamnar. The company has commissioned three units of 600 MW each and shall commission the fourth unit in FY 2014-15. It has earned the record of commissioning of a unit of this project within only 16 months and ten days from the start of boiler erection, making it the only company in the country to do so.

In the hydro sector, the company has signed agreements for 6123 MW hydroelectric projects in Arunachal Pradesh in Joint Venture with the Hydro Power Development Corporation of Arunachal Pradesh Limited.





## EXPANSION PLANS

## THERMAL POWER

### **2400 MW at Tamnar, Chhattisgarh**

The company is implementing the 2400 MW (4X600 MW) thermal power project at Tamnar, Raigarh in Chhattisgarh. Three units have already been commissioned and the fourth shall be commissioned in FY 2014-15.

### **1980 MW at Andhra Pradesh**

The company has acquired a 1980 MW (3X660 MW) coastal thermal power project based on imported coal. This project is currently in the development phase.



## HYDRO ELECTRIC PROJECTS

### 3097 MW Etalin Hydroelectric Project, Arunachal Pradesh

The project is being executed through Etalin Hydro Electric Power Company Limited (EHEPCL), a JV company of Jindal Power Limited (74%) & Hydro Power Development Corporation of Arunachal Pradesh Limited (26%). The agreement was signed for power generation of 4000 MW, however, as per concurred Detailed Project Report (DPR) of the project (by Central Electricity Authority), Installed Capacity has been finalized as 3097 MW. Etalin HEP is envisaged as a run of the river scheme on Rivers Dri and Talo (Tangon) in Dibang Valley District of Arunachal Pradesh. It is the largest hydroelectric project presently being developed in India.

### 22 MW Anonpani Small Hydroelectric Project, Arunachal Pradesh

Etalin Hydro Electric Power Company Limited also proposes to set up Anonpani Small Hydro Electric Project of 22 MW for meeting the construction power requirements of Etalin Hydroelectric Project.

### 680 MW Attunli Hydroelectric Project, Arunachal Pradesh

The project is being executed through Attunli Hydro Electric Power Company Limited (AHEPCL), a JV company of Jindal Power Limited (74%) and Hydro Power Development Corporation of Arunachal Pradesh Limited (26%). Attunli HEP is envisaged as a run of the river scheme on Talo (Tangon) river in Dibang Valley District of Arunachal Pradesh. The power potential studies have been concurred by Central Electricity Authority for an installed capacity of 680 MW, as against the allotted capacity of 500 MW.

### 1800 MW Kamala Hydroelectric Project, Arunachal Pradesh

The project is being executed through Kamala Hydro Electric Power Company Limited (KHEPCL), a JV company of Jindal Power Limited (74%) & Hydro Power Development Corporation of Arunachal Pradesh Limited (26%). The Power Potential studies have been concurred by Central Electricity Authority for an Installed Capacity of 1800 MW as against the allotted capacity of 1600 MW. Kamala HEP is envisaged with twin objectives of Power generation & Flood moderation being set up on Kamla river in Lower Subansiri District of Arunachal Pradesh.

## ETALIN HYDRO ELECTRIC PROJECT (3097 MW)

MoA to develop Etalin HEP on BOOT basis was executed between Government of Arunachal Pradesh, Hydro Power Development Corporation of Arunachal Pradesh Limited and Jindal Power Limited on 01st December 2008.







## Project Features:

General		
Location	Dibang Valley District, Arunachal Pradesh	
Type of Development	Run of River (ROR)	
Salient Features		
	Dri Limb	Talo (Tangon) Limb
Installed Capacity (Main Powerhouse / Dam Toe Powerhouse)	1861.60 MW {1842 MW (6x307 MW / 1x19.60 MW)}	1235.40 MW {1228 MW (4x307 MW / 1x7.40 MW)}
Dam: Type / Height (m)	Concrete Gravity / 101.50 m	Concrete Gravity / 80 m
Diversion Tunnel: No. / Dia. (m)	3 on Right bank & 1 on Left bank / 10.90 m	3 (on Left bank) / 11.50 m
HRT: Length (m)/ Dia.(m)	10722m/ 11.3m	13045m / 9.7m
Surge Shaft: No./ Dia./ Height (m)	1No./ 26.0m/ 132m	1No./ 21.0m/ 137m
Pressure Shaft: No./Length (m)/ Dia. (m)	3Nos./ 49.2, 26.6, 49.2m/ 5.6m	2Nos./ 46m each, / 5.6m
Main Powerhouse: Size	352m (L) / 23.5m (W) / 59.83m (H)	
Total Land requirement (Ha)	1155.11 Ha	
Length of Project Road / No. of Bridges	46.60 km (approx.) / 9 Nos.	
Affected villages / PAFs / Population	18 / 265 / 1153	
Cost for implementing R&R / EMP	Rs 105.50 Crs. / Rs 534.20 Crs.	

## ECONOMIC BENEFITS

**Compensation on account of land acquisition** as per Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013.

**Compensation to be provided as per Rates of Land value approved by Govt. of Arunachal Pradesh**

**Annuity for all the PAFs** (@ Rs. 2,000/- per month to all 265 PAFs for a period of 20 years).

**Subsistence grant** for 156 families getting displaced (@ Rs. 3,000/- per month per family for a period of 1 year).

**Onetime Transportation grant** for 156 families getting displaced (@ Rs. 50,000/- per family).

**Onetime Housing benefits & Compensation** for 156 families getting displaced as per Design of House approved by PAC (@ Rs. 15,00,000/- per house ; @ Rs. 80/- per sq.m for plot of size 250 sq.m in rural areas).

**Onetime Cattle shed / Petty shop grant** for 156 families getting displaced (@ Rs. 25,000/- per family).

**Onetime Resettlement allowance** for 156 families getting displaced (@ Rs. 50,000/- per family).

**Onetime Financial assistance for 9 Self Employed individuals** (@ Rs. 25,000/- per family).

**Onetime Compensation against Diversion of 1165.66 Ha Unclassified State Forest (USF)** (@ Rs. 1,56,000/- per hectare for USF).

**Pension for life to 105 Vulnerable Affected Persons** (@ Rs. 500/- per month for a period of 20 years).

**100 Units of free electricity** per month to all 265 PAFs for a period of 10 years from Commercial Operation Date.

**Onetime Compensation against extinction of Traditional Rights over the USF of 1165.66 Ha** (@ 25% of NPV to be paid to CAMPA).

**Onetime financial assistance against R&R benefits for all 265 PAFs belonging to the ST&SC** (500 days min. agricultural labour wage @ Rs. 100/ day).

## SOCIAL BENEFITS

**Educational & Skill development** including up-gradation & assistance to schools, scholarship grants, Skill Development Centre.

Up-gradation & Assistance to **Health centres**.

**Water Supply treatment schemes**.

**Sanitation up-gradation**.

Social Welfare Schemes like:

- One time **Financial Assistance for female marriages**.
- **Medical camps** (proposed to be organized once in every 3 months).
- **Tribal Community Development** (skill of art & craft of the tribal people would be encouraged for income generation).
- Support services for **Agricultural & Horticultural activities** (necessary infrastructure support to be provided for a period of 10 years).

Development of basic infrastructures like **Road network, Bus shelter, Street lights, Market complex, Community centres, Sports complex & Gymnasium**.

Assistance to entrepreneurs for purchase of **Transport vehicles**.

Apart from above, Local Populace will also be benefitted with following:

- Better & effective connectivity throughout the year on existing Anini – Etalin – Roing & Malinye – Etalin roads.
- Local Populace would be able to take their produce to Roing / Tinsukia for enhanced earning because of better road connectivity.
- Enhanced living standard.





## WELFARE ACTIVITIES

- HEALTH
- EDUCATION
- INFRASTRUCTURE SUPPORT/ STAKEHOLDERS ENGAGEMENT
- LIVELIHOOD
- SPORTS, ART & CULTURE
- OTHER ACTIVITIES





## HEALTH

- **Rs 1.20 Lacs** spent for repair & renovation of PHC, Etalin.
- Medical Service including free issue of medicines to the local populace by **MBBS doctor** and the Support Staff.
  - Critically ill patients being attended on emergency in their native village.
- Well-equipped **Ambulance** provided by EHEPCL.
- Patients requiring specialised treatment being transported to Roing, Tinsukia and Dibrugarh.
- A **Digital Hearing Aid** provided to **Master Liko Mena**, Age-11yrs s/o Mr. Rupo Mena from Punli (Dri Bank) Village.
- EHEPCL is funding **Rs 6.63 Lacs** per annum towards salaries of four staffs at District Hospital, Anini.



Health Camp at Angolin village



Medicine distribution at Eron village



Health Camp at Amboli village



Health Camp at Etalin Middle School

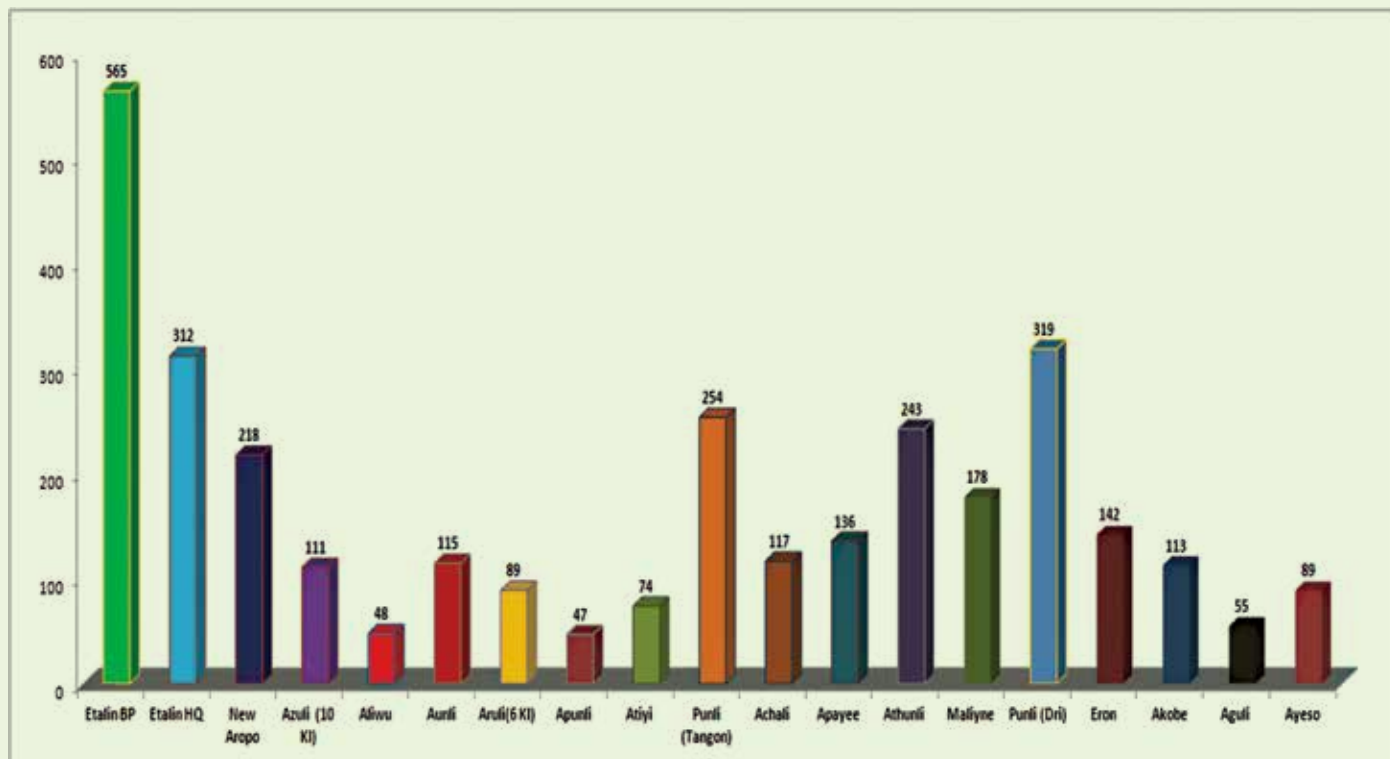


Health Camp in Progress



Demonstration on Hand washing at Punli (DRI) School

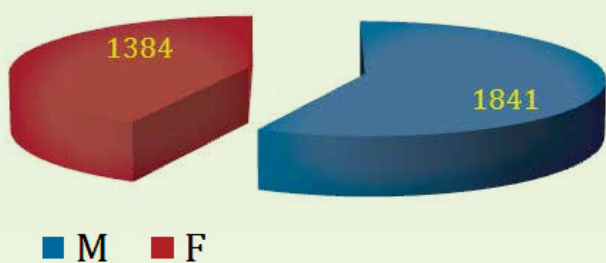
- Financial support for Medical Treatment to patients of the peripheral villages – **(14 Nos of Patients benefitted)**.
- Provided financial support of **Rs 1.55 Lacs** for treatment of ailment of local people.
- In the 18 Villages OPD & Health Camps organized & **3225 Patients treated since June' 2012**.



Coverage of Patients in Project Affected Villages

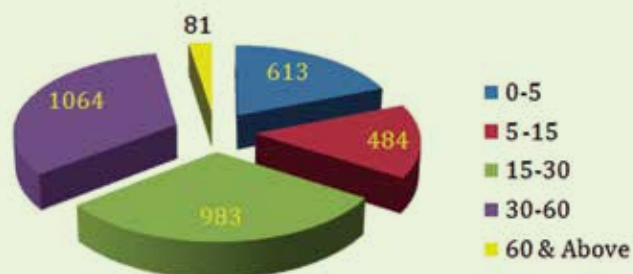
## HEALTH - Snapshot

### SEX



Sex profile of 3225 patients treated since June' 2012

### AGE



Age profile of 3225 patients treated since June' 2012



- Monthly School Health Camps were organised in the PAA at 6 (six) No of Schools.



Health Camp at Maliney village



Anti-Drug Rally at Roing



Health Camp at Anganwadi Centre, Etalin



Health Camp at Punli (Dri) village

## HEALTH BABY SHOW

- Health baby show organised in October 2014 in collaboration with Karuna Trust at PHC, Etalin. Parents & Family members of children between (0-1 yr) were invited. 25 families (approx.) were present out of which 18 mothers participated in the programme.
- Objective of the Healthy Baby Show :
  - To promote safe motherhood & childhood.
  - To promote behaviour change communication among the mothers & family members and to do away with their existing taboos.
  - To promote a sense of responsibility of the father.



Mother explaining care taken during pregnancy & child upbringing



## EYE SCREENING CAMP

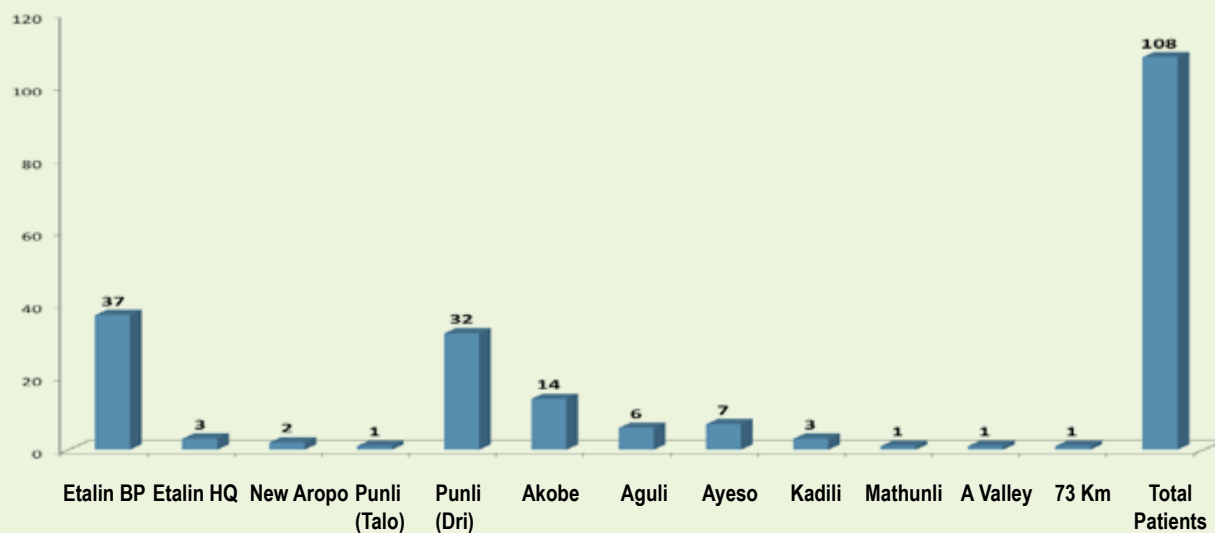
- One day Eye Screening Camp was organised in October 2014 by EHEPCL in two venues covering Project Affected Area. Dr. Rajiv Kr. Das, Registrar (Eye Deptt), AMCH, Dibrugarh facilitated the camp.
- A total of 108 patients were checked (63 Nos. at Punli (Dri Bank) camp & 45 Nos. at Etalin camp).

### Future Plan:

- 40 Nos. of patients will be provided with spectacles



## VILLAGE WISE PATIENT TURNOUT





## EDUCATION

- Sponsored **05 Students** for Civil Eng. Course for studying at **Down Town University & GIMT, Guwahati & OPJIT, Punjipatra.**
- Manpower Support to schools with 8 (Eight) Teachers in Project Affected Area (PAA).
- **Teaching Learning Materials (TLM)** provided to Aanganwadi Centre, Etalin (**Benefitting 25 Children**).
- Provided **furniture to the schools** in Project Affected Area.
- Constructed toilets in the schools.
- **School Dress** provided to all the **06 schools** (01 Middle & 05 LP School) benefitting **250 Students approx.**



School Dress Distribution at Etalin, Middle School



Distribution of TLM (Teaching Learning Materials) at Aanganwadi, Etalin



School Dress Distribution at Punli ( Dri), L.P. School





EHEPCL is supporting **08 students** for studying in Vivekanada Kendriya Vidyalaya (VKV), Roing, Lower Dibang Valley District. There is no High School (CI IX-X) in the Project Area. The only school available is 200 km from the project area. Support is provided to the students who perform well in their Class – VIII exams.

Company sponsored students at VKV, Roing

- 31 students sponsored for skill development training at O.P Jindal Community College, Punjipatra (OPJCC).



Felicitation of Students at OPJCC



Students going for Skill Development Training at OPJCC



Five Students Sponsored for 3 years Nursing Course at MNR College of Nursing, Secunderabad under Dr. Y.S Reddy Foundation.



Distribution of Play & Learning material to Anganwadi Centre, Etalin



School Dress distribution at Maliney, I.V School



Information, Education & Communication (IEC) materials distribution at Anganwadi Centre, Etalin



IEC materials distribution at Anganwadi Centre, Etalin



## INFRASTRUCTURE SUPPORT/STAKEHOLDERS ENGAGEMENT

- **Tata Star Bus (capacity: 40+1)** was provided to Idu Mishmi Cultural and Literary Society (IMCLS) Roing to facilitate connectivity to remote villages of Dibang Basin.
- Contractual works were provided to local populace for :
  - Construction of Cement Concrete Steps
  - Drains
  - Construction and Maintenance of Hanging Bridges
  - Toilets in School
  - Renovation of School Building
  - Construction of Residential Colony
  - Semi Permanent Type Buildings
  - Retaining Walls
  - Trace Cut and Foot Track
- Deployed heavy earth moving machines from Roing to Anini to ensure faster clearance of road blockades.
- **Financial Assistance – Rs 10 Lacs** provided to Angolin Hydel for repair & renovation.
- Repair and Renovation of kitchen, boundary fencing, Electrical Works, etc. in Project Affected Area (PAA) Schools.
- Regular Employment provided to **9 Nos. Project Affected Family**.



Construction of Cement Concrete Steps



20 Nos. hanging bridge repaired & renovated



- Locals being engaged as contractual labour for various works at site. The construction works were provided to locals valuing approx. **5 Crores** since start of the project.
- **EHEPCL's JCB (3 Nos.) & Dozer (3 Nos.)** engaged 24x7 in clearance of road blockades as and when required.



Construction of Semi Permanent Type Building



## INFRASTRUCTURE SUPPORT/STAKEHOLDERS ENGAGEMENT



Construction of Toilet at Punli (Dri) L.P School



Construction of Cement Concrete Foot Way



Construction of toilet at Punli (Talo) village



Road Blockade clearing by EHEPCL's JCB



Construction of Cement Concrete Steps



Construction of Cement Concrete Drain



## LIVELIHOOD

- Need Assessment & Demonstration Training programme organized by experts from Krishi Vigyan Kendra (KVK) Roing.
- Azolla Fodder Farming for Pigs & Hen –sensetizing **42 members** of local families.
- **Poultry Farming & Fodder for Mithun** (Bos Frontalis) the state animal.
- Nursery & Horticulture Management – Training and Tips.



Azolla Farming at Punli ( Dri) village



Azolla Farming at Aruli village



Techniques for care of Orange Orchard near Aruli village



Promotion of Poultry Farming at Aruli village



Demonstration on Mithun (Bos Frontalis) Farming at Aruli village



Demonstration on Nursery Development at Punli village



## SPORTS, ART & CULTURE

- Financial support of approx. **Rs 5.20** Lacs to organise cultural festivals - **REH & Ke Me Ha.**
- Provided Sports Items to Middle School, Etalin benefitting **90 Students** approx.



Glimpses of the REH Festival Celebration – Promoting harmony and encouraging the Rich Art and Culture of the region



## OTHER ACTIVITIES (WITH A CAUSE)

- **Rs 15.50 Lacs** given to Ms. Tine Mena for her Mount Everest Expedition. **Ms. Mena** is the 1st women of North Eastern India who has scaled Mt. Everest (8848 m), the highest peak of the world on 9th May' 2011.
- EHEPCL provided free Diesel for provision of electricity to the entire Etalin village area during 2012-13.



Distribution of relief materials at Etalin in 2010

In June, 2010 disasters, relief materials worth **750 kg of rice & salt** were distributed to the locals by bringing helicopter service from Mohanbari, Assam. Medicines worth **Rs 2 Lacs** were flown in from Dibrugarh and provided to the Govt. Primary Health Centre (PHC), Etalin. Also, Company Vehicles were provided to the locals for to & fro movement from Etalin - Anini and Etalin - Arzoo for 3 months as there were no other public transportation facilities.



Distribution of relief materials at Etalin in 2010



Distribution of relief materials at Etalin in 2010 by bringing Helicopter Service



Distribution of relief materials at Etalin in 2010



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