

**3rd Meeting of Task Force-I
USAID - SARI/EI**

**Investment related issues concerning the
growth of CBT**

**4-5 June, 2014
Thimphu**

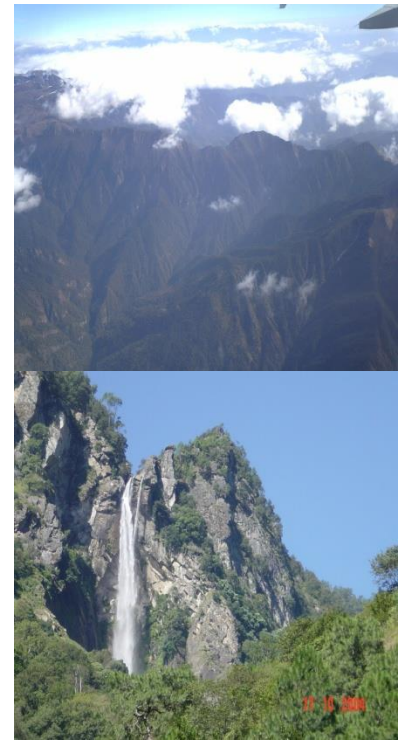
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Why Accelerated Development?

- ✓ Hydropower - backbone of our economy
- ✓ Hydro Power Development very Slow
- ✓ Fully dependent on bilateral grants and loans
- ✓ Huge energy demand in the region
- ✓ Vast potential
- ✓ Key driver for achieving the goal of economic self reliance
- ✓ Impact of global warming on the flow regime

Initiatives:

- ✓ Power System Master Plan Updation (2003)
- ✓ Formation of DHPC initiated (2005)
- ✓ Umbrella Agreement with the GOI (2006)
- ✓ Formulation of Hydropower development policy (2008)



Relevant Policies, Regulations & Laws - Investment

- **Electricity Act 2001**
 - *“No person or entity shall engage in, construction, generation, transmission, system operation, distribution, sales, export or import of electricity without a license”*
- **SHDP 2008**
 - Bidding route (BOOT) - concession of 30 yrs
 - Upfront premium & Royalty Energy
 - Developer’s responsibility to construct ATS up to nearest National Grid & beyond border
 - Exemption of import duty and BST for direct input to project & export of power
 - Development of local area as integral part of project
 - HPDF
- **FDI 2010**
 - Under priority list of activities Schedule-I
 - Companies Act of Bhutan 2000
 - Govt. guarantees - currency of Investment, repatriation of dividends & capital (in currency of earnings & investment)

Relevant Policies, Regulations & Laws – Investment Cont..

- **EDP 2010** – economic self reliance and full employment
 - diversification of economic base, value addition & increase and diversify export
 - Hydropower as strategic resources (affordable rate to domestic consumers to reduce dependency on non-renewable energy)
- **AREP 2013**
 - Renewable Energy & Small Hydro ≤ 25 MW
 - Bidding on lowest tariff for domestic & highest royalty for export
 - Other renewable energy on RPO (target by 2025 – 5 MW each for solar, wind and biomass)
 - REDF & exemptions of import duties/sales tax for direct inputs to project

10,000 MW by 2020

Sl. #	Name of Project	Capacity (MW)	Generat'n (MU)	Implement'n Mode	Cost Estimates (Million Nu.)	Price Level
Inter-Governmental Mode						
1	Punatsangchhu-I	1,200	5,700	IG	35,148.10	6-Dec
2	Punatsangchhu-II	1,020	4,350	IG	37,778.00	9-Mar
3	Mangdechhu	720	2,924	IG	28,963.00	8-Mar
4	Amochhu	540	1,835	IG	37,383.70	11-Jul
5	Sankosh	2,560	6,216	IG	114,719.83	12-Apr
6	Kuri-Gongri	2,640	10,056	IG	146,799.51	12-Jun
Joint Venture Mode						
7	Kholongchhu	600	2,599	JV	31,436.39	11-Mar
8	Wangchhu	570	2,526	JV	40,027.56	11-Sep
9	Bunakha	180	1,651	JV	24,926.42	11-Aug
10	Chamkharchhu-I	770	3,249	JV	47,760.22	11-Dec
	Total	10,800	41,106		544,942.73	

Projects outside 10,000 MW Initiative

- i. Dagachhu 126 MW under Public-Private Partnership (PPP)
 - Cost to Completion – Nu. 12 billion
 - Commission by July 2014
- ii. Nikachhu 118 MW under PPP
 - Estimated costs Nu. 12 billion
 - DPR completed & project structuring underway
- iii. Rotpashong 1200 MW under PPP
 - DPR under preparation
 - Estimate cost \$ 2 billion

Projects outside 10,000 MW Initiative...Contd

iv. Prefeasibility studies underway:

- Under DHPS, MoEA
 - Dangchhu (100 MW), Chamkharchhu-II (720 MW) & IV (350 MW), Dagachhu-II (135 MW), Manas (2600 MW), Shongarchhu (107 MW) & Jomori (60 MW)
- Under DGPC
 - Nyeramari (475 MW) & Gamrichhu (166 MW)
- As per SHDP 2008, 1 or 2 projects to be implemented under PPP/IPP in 11th FYP through bidding process

NTGMP

Prospective Bhutan Grid by 2030

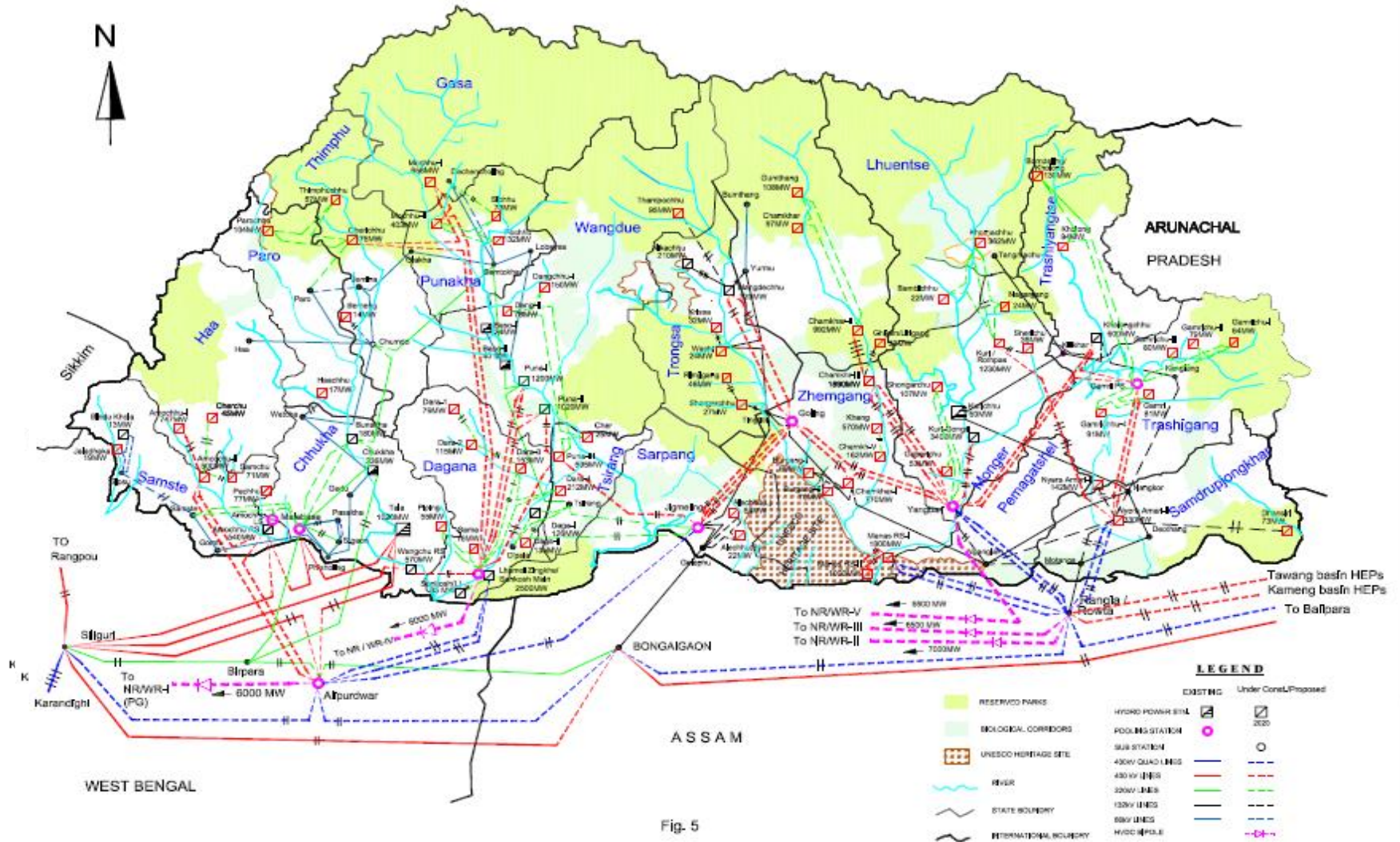


Fig. 5

Other Issues

- 11FYP – Self reliance & inclusive green socio-economic development
- Lack of funds (inadequate internal financial resources) & huge investment
- Debt Sustainability & Currency Mismatch
- Small domestic mkt, inadequate infrastructure, shortage of professional and labor
- Access to land!