

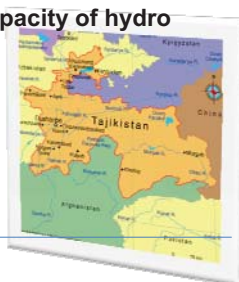


Small Hydro Power Development in Tajikistan

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Macroeconomic overview

- ❖ **Potential of hydro power resources exceed 527 billion kW of annual production**
 - ❖ **Tajikistan is ranked #2 in the world by its per capita hydro power resources**
 - ❖ **Total installed generation capacity is 5070 MW**
 - ❖ **Average annual electricity generation is 17.5 billion kWh**
 - ❖ **Only 5% is being used from the total capacity of hydro**
 - ❖ **Population is about 7.5 million**



Important facts

- ❖ Consistent GDP growth
- ❖ Relatively stable political system
- ❖ Bordering countries: Afghanistan, China, Kyrgyzstan and Uzbekistan
- ❖ More than 50 corporate and private SHP stations
- ❖ Concession agreement with private company “Pamir Energy”



Important facts

- ❖ Insufficient electricity during winter season time
- ❖ Electricity shortage in 2008 was 4.4 billion/Kwt
- ❖ Electricity shortage in 2010 decreased to 1.8 billion/Kwt due to
 - ❖ Launch of HP Sangtuda -1 (capacity is 670 MW)
 - ❖ Implementation of energy-saving bulbs
 - ❖ Modernization of generation and accounting system
 - ❖ Establishment of SHP stations in mountain area



Main obstacles to SHP development

- ❖ Electricity tariff – the average is \$0.29/kW
- ❖ Monopoly of energy sector
- ❖ Transportation losses of electricity
- ❖ Access to finance for SHP projects



SHPD center

- ❖ Establishment in September of 2010
- ❖ Main partners:
 - ❖ Ministry of Energy and Industry
 - ❖ JSHC "Barki Tojik"
 - ❖ Association of Power Engineers
 - ❖ OSCE
 - ❖ Inter Ministerial Working Group (5 ministries and 2 NGOs)
- ❖ All activities are guided by National Program of Energy Sector Development by 2020



SHPD center

- ❖ Pilot projects on Small Hydro Power
- ❖ Small Hydro Power Cadastre
- ❖ Assessment of usage of SHP stations
- ❖ Conducting research on energy sector development



Conclusion

- ❖ Impact of Small Hydro Power development
- ❖ Huge hydro resources of Tajikistan
- ❖ Water resources as national heritage

