

## Key Bhutan India Development Projects



Bhutan - India Development Cooperation is wide-ranging and multi-faceted in consonance with the Vision of His Majesty The *Druk Gyalpo* and the Concept of Gross National Happiness for all. Bhutan is following a low-carbon emission development strategy which focuses on the development of Hydropower Sector for both domestic consumption and for enabling Bhutan's economic development through the export of Hydro - electricity.

By 2023, Bhutan aims to graduate from the list of Least Developed Countries (LDCs) which would require holistic capacity development of various sectors of the Bhutanese economy. For the 12th Five Year Plan of Bhutan, India is providing an assistance of Nu./Rs. 45 billion out of which Nu./Rs. 28 billion has been earmarked for Project Tied Assistance (PTA) projects. These projects are spread over various sectors, inter-alia, Health, Education, Agriculture, Economic Development, ICT, Infrastructure, Urban Development, Technical & Vocational Trainings, Judiciary, Sports and Capacity building of Public Servants.

The 12th Five Year Plan of Bhutan aims to build a **“Just, Harmonious and Sustainable Society through enhanced Decentralisation”**. For grassroots development across Dzongkhags and Thromdes, India has committed an amount of Nu./Rs. 8500 million for the High Impact Community Development Projects (HICDPs)/Small Development Projects (SDPs). These are short gestation small projects situated in remote parts of Bhutan for creation of infrastructure such as Farm Roads, livestock centres, water supply and irrigation

systems and capacity development at a local level.

At present, India is supporting 77 Project Tied Assistance (PTA) projects with an outlay of Nu./Rs. 28 billion, 526 High Impact Community Development Projects (HICDP)/Small Development Projects (SDP) at an outlay of Nu./Rs. 8.5 billion. Apart from this, India has committed Program Grant development assistance to Bhutan to the tune of Nu./Rs. 8.5 billion and a transitional Trade Support Facility (TSF) amounting to Nu./Rs. 4 billion for Bhutan's 12th Five Year Plan.

### **720 MW Mangdechhu Hydroelectric Power Project**



The 720 MW Mangedchhu Project is an environment friendly run-of-the river scheme, located on river Mangdechhu in Trongsa Dzongkhag in Central Bhutan. The project was inaugurated by Prime Minister of India, Narendra Modi in August 2019. Annual energy generation from the Project with 95% machine availability is 2925.25 million units. For its engineering breakthroughs, the Project was awarded the prestigious 'Brunel Medal' in 2020 by the Institution of Civil Engineers (ICE), UK.

## **Punatsangchhu - 1 Hydroelectric Power Project**



The Punatsangchhu - 1 HEP is a 1200 MW run-of-the river project located on the left bank of Punatsangchhu river in Wangdue Phodrang Dzongkhag in Western Bhutan. Its estimated capacity is 5700 million units of electricity in an average year. Construction of Punatsangchhu-I HEP started in November 2008 at a project cost of Rs 3514.8 crore. In July 2016, the cost of the Project was revised to Rs. 9375.58 crore. The project is scheduled to be completed in March 2025.

## **Punatsangchhu - 2 Hydroelectric Power Project**



The Punatsangchhu - 2 HEP is a 1020 MW run-of-the river project located on the Punatsangchhu river in Wangdue Phodrang Dzongkhag in Western Bhutan. Its estimated capacity is 4357 million units of electricity in an average year. Construction of Punatsangchhu-II HEP commenced in December 2010 at a project cost of Rs. 3777.8 crore. In July 2016, the cost of the project was revised to Rs. 7290.62 crore. The project is scheduled to be completed in December 2022.

## **Kholongchhu Hydroelectric Power Project**



The Kholongchhu HEP is 600 MW run-of-the-river in the lower course of Kholongchhu river in Trashiyangtse district of Bhutan. It is the first HEP in Bhutan to be implemented under the Joint Venture model, by a JV-company between Druk Green Power Corporation(DGPC) of Bhutan and SJVN Ltd. of India. The foundation stone for the first HEP 600 MW Kholongchhu was laid by Prime Minister Shri. Narendra Modi during his visit to Bhutan in June 2014 and the pre construction activities are in progress.

The concession agreement for the project was signed in 2020. The Concession Period for the project shall be 30 years from the Commercial Operation Date (COD) of the project, after which it will be handed over to the Royal Government of Bhutan. In March 2021, contracts for major construction works for the Project were awarded. These works include construction of the Dam, Power House, Intake structures, Head Race Tunnel and the Water Diversion structures. The total value of the contracts awarded is Rs. 2027.63 crores.

Kholongchhu Hydroelectric Power Project will be the seventh hydropower project to be built in Bhutan with financial support from the Government of India. The project is being financed under a debt equity ratio of 70:30, wherein the debt will be raised by the Joint Venture Company and the equity would be divided equally between Satluj Jal Vidyut Nigam Ltd. (SJVN) and Druk Green Power Corporation (DGPC). Government of India is providing DGPC's share of equity in the JV company as grant. The project is being built at a cost of Nu./Rs. 54.818 billion. The project is stated to be completed by March 2026.

### **Digital Drukyul Flagship Program**



In line with Bhutan's developmental philosophy of Gross National Happiness, Digital Drukyul aims to harness the power of information and communication technology to accelerate Bhutan's digital transformation into a smart, connected and inclusive society. Government of India is providing support to components of the program, viz. E-Business National Single Window, Bhutan Integrated Taxation System, Integrated Citizen Services, Digital School, Enhancement of ICT sector's Capability and Capacity and the Government Initiated Network. India is contributing Nu./Rs. 1.98 billion during the 12th Five-Year Plan (2019-2023) to Bhutan's multi-faceted digital transformation which would enhance good governance, promote socio-economic development and inclusion, foster ease of doing business and provide efficient and effective public services to the citizens of Bhutan.

## Health Flagship Program



The objective of the Health Flagship is to reduce the incidence of and mortality on account of Gastric, Cervical and Breast cancers. This program will focus on providing effective screening facilities for different types of cancer along with the capacity building of health care officials in Bhutan. The Nu./Rs. 1.109 billion flagship program is being supported by the Government of India through its Project Tied Assistance (PTA) to Bhutan.

In healthcare, Government of India has been regularly supporting the Royal Government of Bhutan through supply of medical equipment including vaccines, capacity building and training programs. Under the 12th Five Year Plan of Bhutan, India is providing development assistance to the tune of Rs. 4.09 billion for different health projects. These projects include the construction of Deothang Hospital, Mother and Child Hospital, Nganglam Hospital, Procurement of medical equipments for Jigme Dorji Wangchuk National Referral Hospital, and support to the Vector Borne Disease Control Program. During the testing times of COVID - 19 pandemic, India has provided support in the form of 150,000 vaccines, PPE kits, Testing Kits and other medicines to Bhutan.

## Education Flagship Program

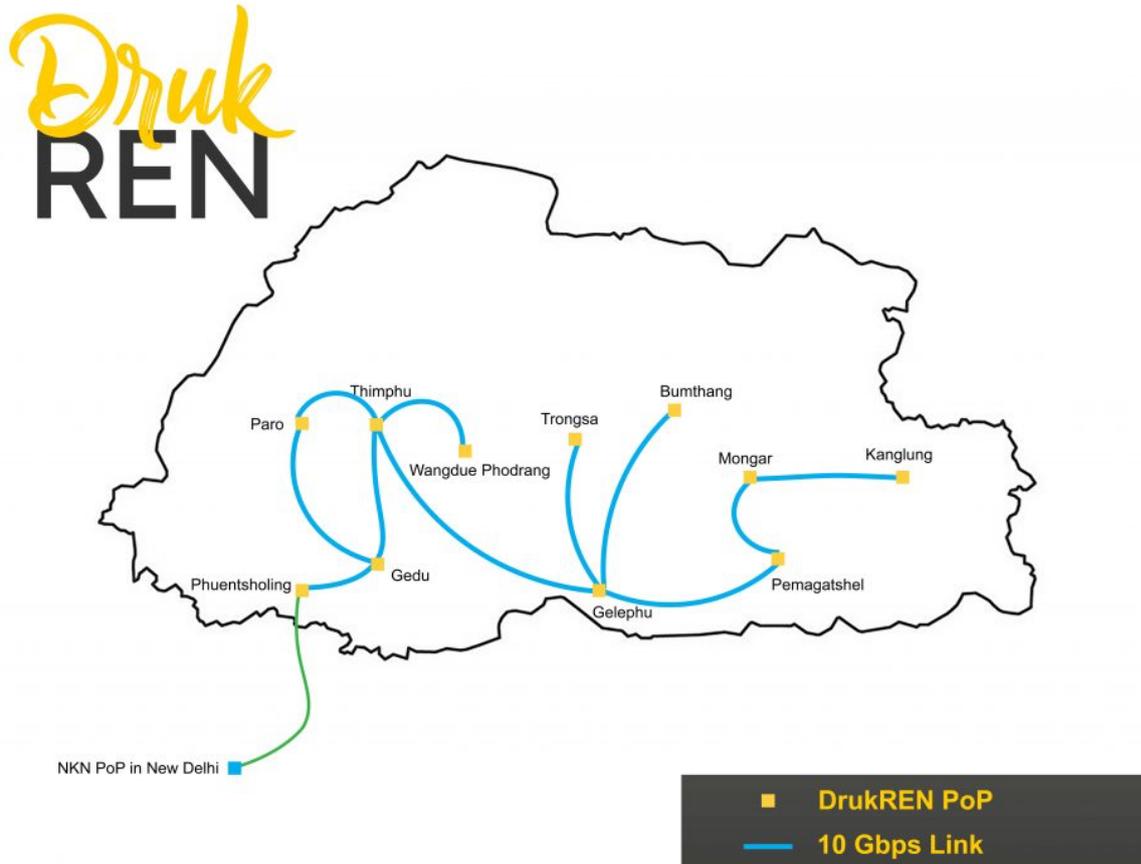


Education is essential to build human capital and a well skilled labor force to underpin a modern and competitive economy. Currently, the main challenge facing the education sector as a whole is to improve the expected learning outcomes of students and equipping them with 21st century skills and values to make them productive, socially responsible, culturally grounded, ecologically sensitive, spiritually aware and globally competent. The focus of the Nu./Rs. 600 million Education Flagship Program is on Enhancing ICT skills and knowledge of the students to perform productively and responsively in a knowledge society. The main components under this project will be related to the revision of ICT Curriculum, integration of ICT curriculum in other disciplines and provision of ICT infrastructure for teaching learning process.

## **E - Library Project**

The E-library project complements Bhutan's efforts at digital transformation and e-learning. The project commenced its work in September, 2016 and was handed over to the Ministry of Education on June 26, 2020. The project includes the development of an e-library portal, establishment of a data centre in Thimphu tech park, creation and management of e-content and the creation of e-libraries in 49 schools and 12 colleges in each district of Bhutan. The e-library project is presently benefitting 1.6 lakh high-school students and 9800 college-going students. Phase II of the project will complement the Royal Government's efforts to safeguard Bhutan's cultural heritage by digitising traditional texts, oral heritage at remote monasteries and documents of historical significance. In 2020, Government of India has established 'India-Bhutan e-Library Project' in all districts of Bhutan with support from Centre for Development of Advanced Computing (C-DAC). This Project is in sync with the Digital Druk Yul Education Flagship Programmes of the Government of Bhutan. The Project has benefited Bhutan positively, especially during COVID-19, providing a platform of e-learning and online education.

## NKN - Drukren Connect Project



The integration of Bhutan's DrukRen with India's National Knowledge Network is a key cooperation in the domain of e-Learning. This integration creates an information highway between the universities, research institutions, libraries, health-care and agricultural institutions of the two nations. The network is being actively used by 28 active DrukREN members including the top universities, colleges and hospital in Bhutan and is benefitting more than 6000 users.



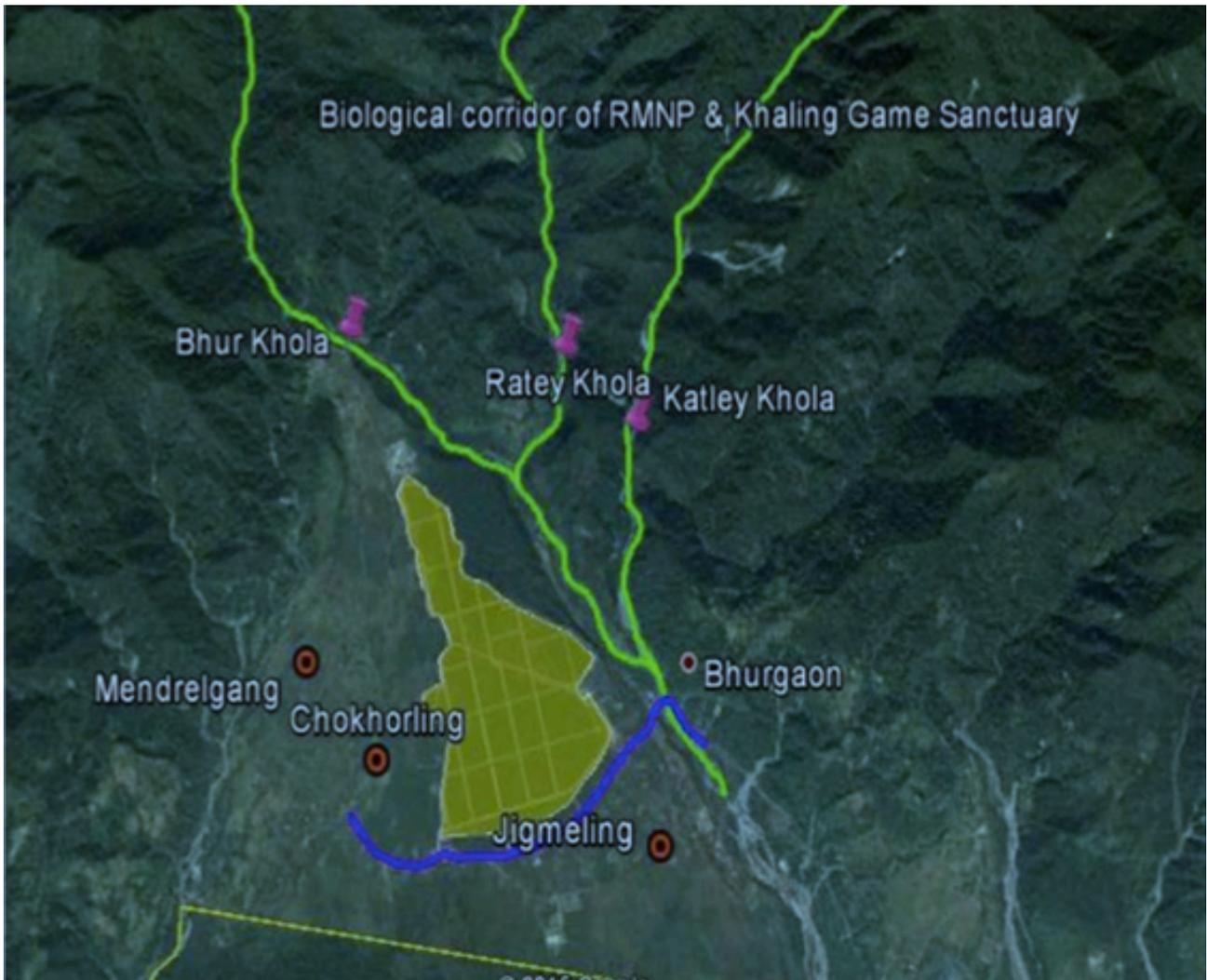
## Build Bhutan Project



The COVID-19 global pandemic has impacted various sectors of Bhutan's economy. The pandemic has created substantial employment gap across all the sectors and the majority are in the construction sector. The shortage is expected to worsen as the ongoing 12th FYP implementation may require additional workforce, exerting pressure on the workforce shortage which is already high and growing. On the other hand, many people have been laid off and/or on unpaid leave, and significant Bhutanese are returning home and there is a huge number of registered job seekers with the Ministry who could potentially enter the construction sector. Therefore, as an immediate intervention to the rising concern of unemployment, layoffs and workforce shortage in the construction sector the Build Bhutan Project (BBP) is initiated under the Economic Contingency Plan (ECP). While the overall purpose of the Build Bhutan Project (BBP) is to address the labour market issue arising as a

result of the COVID-19 pandemic, the project will also address wider and long-term objectives in the construction industry in the country to mobilize, create and manage a pool of skilled workforce to meet the requirement in the construction sector. The program seeks to promote the construction sector as an attractive avenue for employment, and design/develop attractive incentives to attract and retain the workforce in the construction sector.

## Development of Dhamdhum Industrial Park and Jigmeling Industrial Park



Located in Samtse and Sarpang Dzongkhags , the Industrial Parks is being developed at a cost of Nu./Rs. 536 million with an objective to promote balanced regional development and enhance growth of the rural economy. The development of these industrial estates will create a favourable environment for private sector development through the provision of land, civil and electrical infrastructure and waste management systems. The creation of cost effective infrastructure viable for industrial development is also expected to encourage the establishment of small and medium scale enterprises and increase the potential for industrial development in the Dzongkhags and Gewogs.

## Mother and Child Hospital, Mongar

### GJPMCH PROPOSED DESIGN



The 65 - bedded Mother and Child Hospital is being constructed in Mongar, to provide regular and specialised health care services related to Mothers and Children from Mongar, Trashigang, Pemagatshel, Trashy Yangtse, Lhuentse, Samdrup Jongkhar and Bumthang. The hospital will be equipped with advanced medical equipments for Intensive Care Units and Operation Units. The new Mother and Child hospital will consist of Obstetrics and Gynecology Department, Pediatrics and Neonatology Department, Intensive care units (Paediatrics and Neonate), Emergency and Trauma center, Operation theatres, Specialized services, Laboratory Unit and Community Health Unit. The hospital is being funded at a cost of Nu./Rs. 681 million through Government of India's Project Tied Assistance for the 12th Five Year Plan of Bhutan.