

**Planning and Development Department (P&DD),
Government of Gilgit Baltistan**

**UNLOCKING INVESTMENT OPPORTUNITIES IN
GILGIT BALTISTAN, PAKISTAN**



**Prepared by
Planning and Development Department (P&DD), GB in collaboration with Rupani
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Acronyms and Abbreviations

GB	-	Gilgit-Baltistan
GoGB	-	Government of Gilgit Baltistan
P&DD	-	Planning and Development Department
CPEC	-	China-Pakistan Economic Corridor
HKH	-	Himalayas, Karakoram, Hindukush
CAREC	-	Central Asia Regional Economic Cooperation
RDI	-	Rupani Development Initiatives
AKRSP	-	Aga Khan Rural Support Programme
SEZs	-	Special Economic Zones
LOI	-	Letter of Intent
BOT	-	Build Operate and Transfer
JV	-	Joint Venture
KKH	-	Karakoram Highway
ICT	-	Information and Communication Technologies
GLOF	-	Glacial Lake Outburst Flood
WWF	-	World Wildlife Fund
IPS	-	Industrial Promotion Services
SCO	-	Special Communication Organization
SGDs	-	Sustainable Development Goals
MHPs	-	Micro Hydropower Projects
MICS	-	Multiple Indicator Cluster Surveys
TELCO	-	Telecommunication Company
PPP	-	Public-Private Partnership
BOI	-	Board of Investment
PGJDC	-	Pakistan Gems and Jewellery Development Company

Executive Summary

The Gilgit Baltistan (GB) Investment Plan overview the wide spectrum of Investment Opportunities available across the board, not limited to sectors such as tourism, energy, information technology (IT), minerals and mining, industries, trade, and commerce including agriculture. In view of the strategic advantages and untapped potential of GB, this plan will strive to woo investors by focusing on the key opportunities that will lie a solid foundation for sustainable economic growth for the region.

The sector of tourism and hospitality is one of the emerging sectors of GB, characterized by scenic beauty, cultural heritage, and adventure opportunities. Thus, the current scenario of GB of hospitality infrastructure, ecotourism initiatives, and adventure sports facilities will help GB increase its attraction and finally lead to an increase in visitor expenditure, resulting in economic development.

GB has an abundance of many renewable energy resources, and thus it provides quite an attractive opportunity for the development of clean energy investment projects. The region provides opportunities for solar, wind, and even energy storage to meet the needs of the area without the effects of pollution, meaning it can contribute to climate change mitigation.

In Information Technology, GB offers the opportunity for investment in physical and digital infrastructure, software development, and IT services. With an increase in youth populations and better connectivity, GB might offer a bright potential of being a hub for the innovation of IT because of investment not only from local investment but also from other parts of the world.

The GB minerals and mining sector is bedecked with precious, semi-precious stones, gemstones, and mineral resources. It represents a promising investment in the carrying facilities for exploration, extraction, and processing. The GB region is full of best practices with sustainable mining practices and local economic development while providing possible unlocking of economic value.

Industries in GB are poised for growth, hence offering opportunities in Assembling, Manufacturing, Handicrafts, etc. Thus, the investment in industrial infrastructure and productive facilities of value addition may open more job opportunities and result in its economy becoming more diversified as one of the contributory elements in the overall development of the region. The strategic location of GB, serving as a gateway from South Asia to Central Asia and vice versa, would further bring an increase in trade and commerce. There are also investment opportunities in the logistics and warehousing areas, apart from facilities for trade facilitation infrastructure, to facilitate the huge potential of cross-border commerce.

Agriculture in GB holds a world of promise through fertile land and a variety of agro-climatic conditions. In addition, the modernization of farm practices and new value-added agriculture products present investment opportunities in the region, along with improved supply chain infrastructure for boosting productivity and profitability for the farmers.

The government of Gilgit Baltistan is working to improve the regulatory environment for keeping and attracting the interest of investors in a number of measures to rationalize the process and business-friendly environment.

Summing up, the investment plan for Gilgit Baltistan underscores the potential of the region for inclusive and sustainable development in the multifarious sector. With these strategic advantages, GB seeks to unleash its potential for a prosperous tomorrow for the people of the area and further contribute towards the collaborative approach amongst governments, the private sector, and development organizations for regional and national economic growths.

Strategic Intent

Mission

Our mission is to position Gilgit Baltistan as a thriving hub for sustainable and responsible investments, leveraging its competitive edge and strategic advantages. We aim to facilitate economic growth, foster regional connectivity, and empower local communities while adhering to principles of diversity, equity, and inclusion. Through strategic partnerships, policy initiatives, and infrastructure development, we strive to create a conducive environment for impact investments, unlocking the untapped potential of Gilgit Baltistan across diverse sectors.

Vision

Our vision is to see Gilgit Baltistan emerge as a powerhouse of economic development, harnessing its natural resources, strategic location, and skilled workforce. We envision a future where impact investments contribute not only to financial returns but also drive positive socio-environmental impacts.

Objectives

Invest in Human Capital

- Strengthen education and skill development initiatives to maintain and enhance the region's skilled workforce.
- Encourage the adoption of technology to connect remote areas, fostering economic mobility.

Ensure Regulatory Ease for Investors

- Continuously refine and implement policies that simplify business registration, licensing, and compliance procedures.
- Offer tax incentives and financial benefits to attract and retain investors, especially in Special Economic Zones (SEZs).

Enhance Connectivity and Accessibility

- Prioritize the completion of infrastructure projects, including the Shandur Expressway and Shounter-Astore Highway.
- Further, develop airports and improve air connectivity to attract global tourists and investors.

Promote a Serene and Secure Investment Environment

- Maintain and enhance the region's excellent law-and-order situation to

provide security for life and capital investment.

- Collaborate with stakeholders to create an atmosphere of peace and tranquility that attracts both local and foreign investors.

Leverage CPEC for Socio-Economic Transformation

- Maximize the socio-economic benefits of the China-Pakistan Economic Corridor (CPEC) for Gilgit Baltistan.
- Facilitate and encourage investments in sectors linked to CPEC, such as Energy, Tourism, IT, and Agriculture.

Promote Sustainable Resource Utilization

- Encourage and ensure responsible mining practices and value addition in the mineral and mines sector.
- Support renewable energy projects to harness the hydro-energy potential of Gilgit Baltistan.

Facilitate Impact Investments in Climate Resilience

- Implement climate-resilient infrastructural development projects to mitigate natural disaster risks.
- Promote initiatives that minimize carbon emissions and address climate change challenges.

1. Gilgit Baltistan – A Land of Endless Opportunities!

Gilgit-Baltistan (GB), a jewel of Pakistan nestled within the grandeur of the Himalayas, Karakoram, Hindukush (HKH), and Pamir ranges, is a region of exquisite natural splendour and strategic significance. It stretches across 72,670 square kilometres in northern Pakistan, standing as the critical juncture of the China-Pakistan Economic Corridor (CPEC) — a transformative project that links Gwadar Port to China's Xinjiang region. This corridor is not merely a passage for commerce but a bridge facilitating robust economic and diplomatic ties between Pakistan and China. Gilgit-Baltistan's crucial position at the corridor's heart amplifies its role as a conduit for goods, services, and cultural exchange, further solidifying its strategic importance at the crossroads of South Asia, Central Asia, and China.

Home to 1.713¹ million inhabitants, Gilgit-Baltistan is a melting pot of diverse ethnic groups such as the Shina, Balti, Burusho, Wakhi, and Khowar. The region boasts the world's densest collection of towering peaks, including the majestic K-2, which Marco Polo once revered as the "roof of the world". Referred to as the "Third Pole," the "Heart of Asia," and the "Water Towers of the World," it serves as a cornerstone of the Tibetan Plateau, holding 75% of the Upper Catchment of the Indus River Basin. These waters are the lifeline for millions downstream, showcasing the ecological and hydrological significance of Gilgit-Baltistan.



The region's demographic diversity and strategic location offer a robust foundation for investors seeking access to emerging markets, infrastructure development, and a skilled, multicultural workforce. Gilgit-Baltistan's economy is as diverse as its landscape and people. Its agricultural sector has vast potential, with the capacity for high-quality organic produce that can be exported to international markets. The region's mineral wealth is largely untapped, presenting opportunities in the mining sector, while the numerous rivers and streams offer potential for hydroelectric power projects. Tourism is a burgeoning industry, with Gilgit-Baltistan's stunning scenery attracting visitors from across the globe. The region's strategic location makes it an ideal candidate for becoming a hub for logistics and trade, providing a gateway to Central Asia, South Asia, and China, and benefitting from the trade inflow of the CPEC.

With the strategic shift in the region following the United States (US) exit from Afghanistan, Gilgit-Baltistan's potential as a trade and investment hub is more pronounced than ever. The region's development is a priority under CPEC, and it stands to benefit from increased connectivity with Central Asia Regional Economic Cooperation (CAREC) countries. This connectivity is expected to spur development in sectors such as transport, storage, and communications, which are crucial for the modernization of the region. Gilgit-Baltistan's investment appeal is further enhanced by government incentives for foreign direct investment, particularly in infrastructure, energy, and tourism.

As investors look to capitalize on the region's strategic position and rich resources, Gilgit-Baltistan is set to transform into a dynamic economic hub that bridges the markets of East, Central, and South Asia.

1.1 Bouquet of Diversity

Gilgit Baltistan, once known as "Daradadesa" in the ancient texts of the subcontinent like the Rajatarangini², is a showcase of cultural and socio-diversity. The writings of the Tibetan historian Taranatha highlight the region's significance during the Asoka dynasty, as it was from here that Buddhist missionaries embarked on their spiritual expeditions towards Kashmir.

The Chinese pilgrim Fa-Hien passed through Gilgit Baltistan in the late 5th century, documenting its role as a prominent Buddhist centre of the time. This passage became a pivotal route for Buddhist pilgrims and missionaries to disseminate their beliefs into Central and Eastern Asia. The advent of Islam in the 14th century introduced Persian and Arabic cultural elements³.



Gilgit Baltistan's history reveals a multifaceted identity that is multi-sectarian, multi-ethnic, and multi-linguistic. This boutique of cultural and socio-diversity includes a religious landscape featuring four Islamic denominations: Shi'ism, Sunni, Isma'ilism, and Noorabakhshi. The main ethnic groups are the Yashkun and Sheen tribes, with the presence of Mughal, Raja, Pashtun, Kashmiri, Soniwal, and Kashgari communities. The linguistic heritage of Gilgit Baltistan, influenced by its Tibetan origins, includes languages such as Shina, Burushaski, Khowar, Balti, Domaaki, Wakhi, and Gujari.

The complex cultural and religious fabric of GB has fostered a community characterized by resilience, inclusivity, and a strong sense of social engagement. Impressively, the people of Gilgit Baltistan have managed to thrive in human development against the backdrop of a rugged landscape and limited economic incentives, presenting their homeland as a region steeped in cultural and historical wealth.

1.2 Third Pole - Feeding Indus - Feeding Pakistan

Gilgit Baltistan is often hailed as the 'third pole' of the world, a title it earns by hosting the most extensive glacial ice reserves found outside of the polar regions.

The formidable Nanga Parbat massif, soaring to 8,125 meters and ranking as the ninth-highest peak globally, is cradled within the Indus River basin. This majestic mountain is the source of 69 glaciers, creating a labyrinth of ice that is subject to the full force of monsoon precipitation. This results in frequent ice falls and snow avalanches, which in turn produce a significant covering of debris across the glaciers.

To the northeast of Nanga Parbat lies the Siachen Glacier, a strategic and significant body of ice in the region. The Raikot Glacier, more approachable from the Karakoram Highway, rests on the northern face of Nanga Parbat, offering a more accessible glimpse into the icy realm of this region. The vast Batura Glacier resides in the Upper Hunza, flowing from west to east beneath the Batura Muztagh peaks. This glacier is particularly known for its dynamic avalanches, which play a critical role in its mass balance and contribute to its dense debris.



² Anton Schiefner, Taranatha' s Geschichte des Buddhismimul in Indien an demTibetischen Ubersetzt, p. 23

³ <https://core.ac.uk/download/pdf/7433553.pdf>

The Biafo Glacier stands as one of the largest and longest glaciers of the Karakoram range. Covering an area of 628 square kilometers, it boasts a significant expanse of perpetual snow and ice. Unlike many of its Himalayan counterparts, which rely on avalanching for nourishment, the Biafo Glacier primarily grows from direct snowfall, highlighting its unique nature within the Himalayan landscape.

Indus River, the lifeline that feeds Pakistan, draws its strength from the countless glaciers of Gilgit-Baltistan. Small streams contribute a significant amount of meltwater from the glaciers, which becomes the very essence of life for the communities and ecosystems downstream. Around 90% of lowland flows of Pakistani rivers originate from the mountains of the Himalaya, Hindu Kush, and Karakoram ranges, which cover the Upper Indus Basin (UIB)⁴. This basin is critical, as the meltwater from the Hindu Kush–Karakoram–Himalaya ranges is responsible for half of the surface water available in Pakistan, serving as an indispensable resource for agriculture, industry, domestic consumption, and the generation of hydropower.

After the completion of the Tarbela Dam in 1976, a large portion of the UIB's waters began to be stored in the resulting Tarbela Reservoir. The Hunza, Gilgit, and Astore rivers, four major tributaries of the UIB, contribute over 60 percents of the inflow to this reservoir. The agricultural zones downstream are inextricably linked to the fortunes of the Tarbela Reservoir, with 90 percent of the agriculture produced annually—making up 24 percent of Pakistan's GDP—reliant on this intricate water system. Thus, the glaciers and streams of Gilgit-Baltistan are not merely geographical features; they are the foundation upon which the agricultural heartland of Pakistan depends, illustrating the profound truth that the waters from the Indus, fed by Gilgit-Baltistan, are indeed the waters that feed Pakistan.

1.3 Natural Assets - Flora and Fauna

The mountainous valleys of Gilgit-Baltistan serve as a sanctuary for a diverse range of wildlife, including some of the rarest species on Earth. This region is home to the majestic Markhor, agile Ibex, sturdy Yak, elusive Snow Leopard, colourful Pheasant, Chakor, Doves, Ducks, the regal Marco Polo Sheep, Astore Markhor, and the imposing Himalayan Griffin Vulture. These creatures are not just wildlife; they are the natural treasures of GB, playing a pivotal role in maintaining the ecological balance and enhancing the region's natural beauty, which in turn attracts tourists from around the world.

The behavioural patterns of these animals add to the region's dynamic environment. In winter, the Ibex and Markhor descend from the mountains in search of food in the various pastures and meadows upstream of local villages, as heavy snowfall blankets their higher-altitude homes. With the arrival of spring, especially in March and April, Ducks, Seagulls, and Swans embark on their long journey from the Polar Regions to the welcoming waters of GB.

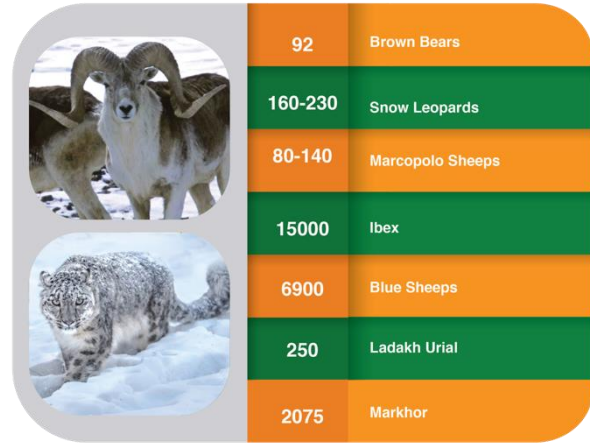
The region's forests boast a rich variety of flora, including the towering Deodar Cedar, the Himalayan White Pine, Chilghoza Pine, West Himalayan Fir, Morinda Spruce, and Holly Oak. These forests not only contribute to the breathtaking landscape but also support the local ecosystem and provide resources for the community.



⁴ Liniger, H.; Weingartner, R.; Grosjean, M. Mountains of the World: Water Towers for the 21st Century; Mountain agenda for the comparison on sustainable development (CSD), BO12; University of Bern: Bern, Switzerland, 1998

⁵ Mukhopadhyay, B.; Khan, A. A quantitative assessment of the genetic sources of the hydrologic flow regimes in Upper Indus Basin and its significance in a changing climate. J. Hydrol. 2014, 509, 549–572.

GB's enchanting valleys, glaciers, fertile soils, and abundant waterbodies create a perfect environment for cattle farming, trout fishing, fruit cultivation, and dry fruit production, which are the mainstay of the local economy. However, the preservation of GB's delicate and rare ecological system demands mindful investment and sustainable practices to ensure that these natural assets continue to thrive for generations to come.



1.4 Ecological Zones in Gilgit Baltistan

The following key ecological zones can be identified in GB along with the species of flora and fauna they support:

Montane Dry Sub Tropical Scrub Zone: This zone comprises lower reaches and southern slopes of mountains, especially along Indus, Gilgit, and Hunza Rivers in southern and central parts of Northern Areas. This area is mainly located along the main Indus River up to Raikot and Bunji. The altitudinal range is between 750 – 1219 meters.⁶

Dry Alpine Zones and Permanent Snowfields: This zone occurs in high altitudes around major peaks of the Karakoram Mountains and occurs in the northern most regions. It covers most of the upper Hunza and the northern parts of Baltistan. It is characterized by vast glaciers, steep cliffs, and a desolate waste of boulder. Areas with typically moist soils are found beneath glaciers and snowfields and along stream banks.

Alpine Meadows and Alpine Scrub Zone: This zone covers areas between high valleys and a permanent snowfield. Lush green and well-watered alpine meadows occur between 3,500 and 3,800 m on valley bottoms or high plateaus surrounding the main watercourses. This plateau provides habitat to many endemic species of plants, mammals, and birds.

Sub-alpine scrub zone: Sub-alpine scrub zone spread throughout higher mountains of Himalayas Hindu Kush and Karakoram, including Gilgit (Naltar), Skardu, Ghizer and Astore regions, albeit, confined to small ravines on upper slopes.⁷



Forest, Wildlife & Environment Department-Government of Gilgit-Baltistan

⁶ https://portals.iucn.org/library/sites/library/files/documents/2003-095_6.pdf

⁷ https://portals.iucn.org/library/efiles/documents/2003-095_2.pdf

1.5 International borders

Gilgit Baltistan (GB) is encapsulated by diverse and significant international boundaries. To the north, it is framed by the Wakhan strip (Afghanistan) and the Xinjiang province of China. On the south and southeast, its borders extend to Indian Occupied Kashmir, while to the west, it meets Chitral (Khyber Pakhtunkhwa).

The region is characterized by majestic, snow-clad mountains crisscrossed by valleys. The Hindukush Mountain range lies to the north, separating Ishkuman and Yasin valleys from the Wakhan corridor, with the highest peak being Tirich Mir (25289 feet) in Chitral. The convergence of the Pamirs and Hindukush occurs near the point where the borders of Pakistan, China, and Afghanistan meet.



Moving eastward, the Muztagh mountains of Karakoram dominate the landscape, and the southern boundary of Karakoram is demarcated by the Gilgit, Indus, and Shyok Rivers, creating a separation from the Himalayas. K2 (28251 feet), the second-highest peak globally, stands tall in this range, accompanied by other notable peaks like Gasherbrums, Broad Peak, Rakaposhi, and Mashabrum. Further east, the Himalayan range is positioned in Pakistan, featuring the highest mountain, Nanga Parbat (26620 feet). Remarkably, five of the world's fourteen mountains taller than 8000 meters are situated in Pakistan, particularly in Gilgit Baltistan, with four of them located near Concordia in the Baltoro region.⁸

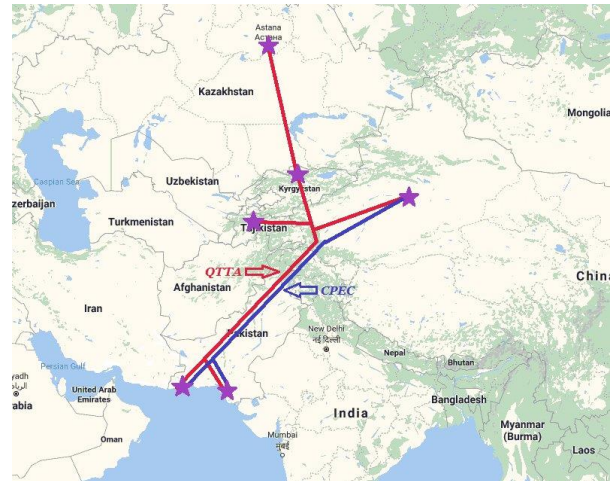
This intricate geography not only defines GB's boundaries but also contributes to its status as a region with unparalleled natural beauty and topographical significance.

⁸ <https://www.dawn.com/news/791636/concordia-the-mountaineers-paradise>

1.6 Connectivity Initiatives

The Quadrilateral Traffic and Transit Agreement (QTTA)

QTTA is a landmark regional cooperation initiative established on March 9, 1995, through the joint endorsement of Pakistan, China, Kyrgyz Republic, and Kazakhstan⁹. This agreement was conceived to facilitate transit trade and enhanced connectivity among the participating nations. The key objective of the QTTA is to establish an efficient transportation and transit infrastructure that links Central Asia with the strategically located Gwadar port in Pakistan, situated along the Arabian Sea.



The member countries of the QTTA recognized the potential for mutually beneficial cooperation in the realm of trade and transit, and thus, they came together to formulate a comprehensive agreement that would facilitate the movement of goods, people, and services across their borders. Each member nation contributes to the agreement's success by leveraging its geographical location, infrastructure capabilities, and economic strengths.

The participating countries play unique roles within the QTTA framework:

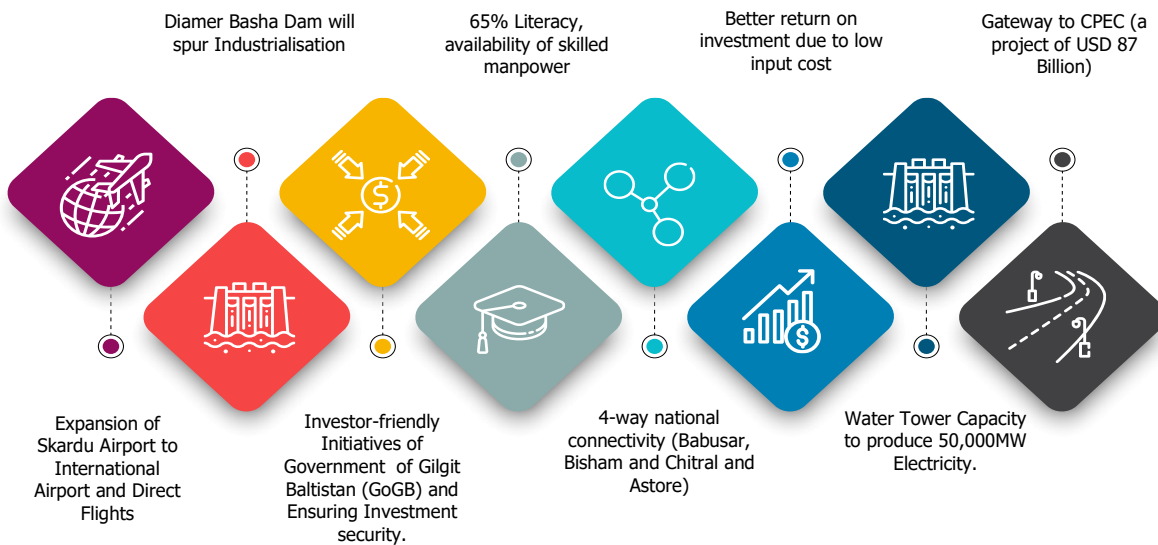
China: As one of the world's largest economies and a global trade hub, China is a crucial participant in the QTTA. Its economic prowess and infrastructure capabilities contribute significantly to the success of the agreement. China aims to utilize the QTTA to establish smoother transit routes for its goods and services, promoting trade links with Central Asian nations.

Pakistan: Positioned at the crossroads of South Asia, Central Asia, and the Middle East, Pakistan serves as a vital transit point within the QTTA. The Gwadar port, strategically located along the Arabian Sea, is a key element in the agreement, providing a maritime gateway for goods to and from Central Asia. The QTTA enhances Pakistan's role as a transit country, boosting its economic prospects.

Kyrgyz Republic and Kazakhstan: The Central Asian nations of Kyrgyz Republic and Kazakhstan are landlocked, and the QTTA offers them access to the Arabian Sea through the Gwadar port. This agreement enables these countries to diversify their trade routes, reducing dependence on existing transit options and fostering economic growth.

⁹ <https://www.ips.org.pk/wp-content/uploads/2021/09/18-Geo-economic-and-Geo-political-Significance-of-QTTA.pdf>

2. The Competitive Edge of Gilgit Baltistan



2.1 Securing Prosperity: Ensuring Investment Safety in Gilgit-Baltistan

The Government of Gilgit Baltistan (GoGB) is actively working to foster investments across Gilgit Baltistan and to achieve the results it has been organizing events, conferences, and seminars to showcase investment opportunities and engage with potential investors.

A few recent examples are the GB Investment Roadshow 2023 in Islamabad, Pakistan, and GB Investment Roadshow 2021 organized in Dubai by GoGB in collaboration with Rupani Development Initiatives (RDI), these events attracted numerous local and international investors who expressed keen interest in investing in Gilgit Baltistan. Some investors have already submitted Letters of Intent (LOI), and GoGB, in collaboration with RDI, is currently assisting them in their investment plans.

Moreover, in collaboration with RDI, GoGB has established GBInvest, a comprehensive platform designed to streamline all investment activities in Gilgit Baltistan. Serving as a one-stop solution, GBInvest facilitates investment processes on behalf of GoGB. Additionally, GoGB is proactively engaged in formulating and executing policies across various sectors aimed at simplifying procedures for business registration, licensing, and compliance to mitigate obstacles. Moreover, GoGB is extending tax incentives and other financial advantages to incentivize and retain investors in the region, particularly through the establishment of Special Economic Zones (SEZs).

The GoGB is investing in infrastructure projects to improve connectivity and make the region more accessible to investors, ensuring the availability of land for industrial and commercial purposes, along with clear land titling, currently working actively on the Public Private Partnership (PPP) act to further facilitate investors in the region, implementing laws and measures to protect the rights of investors, including dispute resolution mechanisms, promoting the region's tourism potential and providing incentives for tourism-related investments and lastly, emphasizing sustainable and responsible business practices to ensure compliance with environmental and social standards.

2.2 The Path to Prosperity: CPEC through Gilgit Baltistan

GB with its pivotal geo-strategic positioning and politico-legal status, has been the hub for intraregional connectivity and trade – particularly, through access to branches of Silk Route such as the trade link between Kashmir and Eastern China. The colonial interests of Russia and British India in the nineteenth century followed similar courses which highlighted the strategic importance of GB as a gateway for regional trade and transit connecting China with Central Asia—which eventually led to the construction

of the Karakoram Highway (KKH). The KKH or commonly known as the Friendship Highway was built primarily for re-opening archaic trade routes to the Central Asian States—consequently re-emphasizing GB’s geo-strategic position in the region. The inauguration of 1,300 km long KKH¹⁰ at an elevation of 4,714 m in 1979, which is the artery between China and Pakistan, is a milestone towards GB’s economic development and has also strengthened a bond between the remote isolated GB with Pakistan and the other regions.

The China-Pakistan Economic Corridor (CPEC) is hailed as the impetus for the economic transformation of Pakistan and a game changer for the remote region of GB. It is a part of the Chinese Belt and Road Initiative (BRI), a project between Pakistan and China with initial Chinese Investments totalling USD 87 billion for the development-related projects in Pakistan. Upgrading of KKH is amongst the early targets set under (CPEC), proving GB’s importance for regional connectivity, and economic growth and determining the socio-economic way forward for Pakistan. This section attempts to highlight the socio-economic benefits of CPEC and sheds light upon how the impetus is going to impact GB. The impact of the initiative will primarily affect the development of economic zones and socioeconomic transformation of Pakistan, benefiting Pakistan in general and the people of GB in particular. It is also going to explore the impact of socio-economic benefits that GB can reap from the economic spill over because of the growing trade and industry expansion in the region.

The CPEC is being viewed as a regional game-changer that will connect Central and South Asian Countries, reinvigorating the historically significant Silk Route that once served as the pillar for the local economy, trade, and cultural diversity. Today, by connecting the landlocked areas up North with seaports along the Arabian Sea Coastline in South of Pakistan, CPEC is presenting an opportunity for countries like Pakistan, China, Afghanistan, India, and for those from Central Asia to collaborate for transit and trade, that will boost regional economic activity and bring social prosperity. Since Gilgit Baltistan (GB) is at the juncture of these countries and is the border region of Pakistan, it will be the first in line to benefit minerals, gemstones, and fresh agricultural produce, with a huge potential for renewable energy in the forms of wind and hydropower.

Thus, apart from better mobility, CPEC will create international and national markets for these trade commodities, facilitated by an influx of knowledge, human resources, and technical assistance. The future keeps major changes and surprises in stock. The CPEC agreement on widening KKH and converting the highway into a major artery for road and rail traffic and for transporting fossil fuels via pipeline from the Arabian Sea port at Gwadar via Gilgit and the Khunjerab Port of Xinjiang Province will have a tremendous impact on Pakistan in general and an impact on the tourist flow an overall economy of Gilgit-Baltistan in particular.

2.3 Gilgit Baltistan - A raw-material mine

One of the compelling advantages for investors to invest in Gilgit Baltistan is the low input cost environment, contributing to enhanced competitiveness and profitability. The region is characterized by abundant natural resources, including water, minerals, and agricultural products, often available at comparatively lower costs. Additionally, the relatively lower cost of labour in the region is advantageous for businesses seeking cost-effective production.

This low input cost advantage extends to areas such as energy, with the potential for hydropower generation, agricultural produce, and mineral and mine resources, making it an attractive proposition for industries requiring substantial resources. Gilgit-Baltistan is a strategic imperative, given the region’s status as a veritable treasure trove of precious, semi-precious, and dimension stones. With over 70% of the entire country’s gemstone production originating from Gilgit-Baltistan, the province stands out as a primary hub for these coveted resources.¹¹

For investors, this translates into the opportunity to establish and operate businesses with reduced operational expenses, thereby optimizing overall costs and increasing the potential for higher returns on investment. The combination of these factors positions Gilgit Baltistan as an attractive destination for businesses looking to leverage a cost-efficient operational environment.

¹⁰ <https://www.bbc.com/travel/article/20230903-the-karakoram-highway-the-road-thats-the-eighth-world-wonder>

¹¹ <http://akrsp.org.pk/wp-content/uploads/2018/09/Horizons-of-CPEC-in-Gilgit-Baltistan.pdf>

2.4 4-Way National Road Connectivity

Gilgit Baltistan has witnessed a transformative shift in its infrastructure, notably in terms of improved road connectivity. The famous 4-Way National Road connectivity (Babusar, Bisham, Chitral, and Astore) connects Gilgit Baltistan with Islamabad the capital of Pakistan via KPK and Azad Jammu and Kashmir (AJK) with different routes and different highways namely the mighty 1300 Kilometres Karakoram Highway (KKH) and 216 Kilometres Shandur Expressway and Shouner-Astore highway projects at a cumulative cost of over PKR 50 billion.¹²

Govt. of Pakistan has allotted a budget for a tunnel that would link the Shouner Valley of Azad Kashmir and Rattu village of Astore, Gilgit-Baltistan. The tunnel would be approximately 10-12 km long and after completion, the distance from Islamabad to Khunjerab (Pak-China border) would be shortened by 08 hours after the completion of the project.¹³



KKH has been completed and operational while Shandur expressway is under construction and is expected to complete by 2027. However, the Shouner-Astore highway is expected to be completed by 2028.

The region has invested significantly in developing and upgrading its road networks, linking remote areas with urban centres, and facilitating smoother transportation. Enhanced road connectivity is a key driver of economic development, enabling easier access to markets, educational institutions, healthcare facilities, and tourist destinations. The construction of well-maintained roads has not only improved the overall accessibility within Gilgit Baltistan but has also strengthened its ties with the broader national and international transport networks. This improvement in connectivity has far-reaching implications, fostering trade, promoting tourism, and catalyzing various sectors of the economy.



As Gilgit Baltistan continues to prioritize infrastructure development, the upgraded road connectivity stands as a testament to the region's commitment to fostering sustainable growth and prosperity.

Time is a critical factor for any business. Reduced travel time due to improved road connectivity allows investors to conduct business activities more efficiently, contributing to increased productivity also a well-maintained and extensive road network reflects the commitment of the GoGB to infrastructure development. This, in turn, instils confidence in investors about the region's commitment to fostering a conducive business environment.

¹² <https://profit.pakistantoday.com.pk/2021/05/11/rs50bn-shandur-gilgit-road-included-in-gb-development-package/>

¹³ <https://profit.pakistantoday.com.pk/2021/06/04/ecnec-approves-roads-to-connect-gilgit-baltistan-with-kp-azad-kashmir/>

2.5 Higher Literacy Rate and Workforce

The literacy rate in Gilgit Baltistan was reported to be around 65% as per the MICS Survey 2017¹⁴. This literacy rate signifies a significant effort in promoting education within the region. A higher literacy rate in Gilgit Baltistan is not only indicative of a more educated population but also holds the potential to contribute to the socio-economic development of the region. This literate population fosters a skilled workforce, encourages innovation, and creates an environment conducive to business growth.

With a higher literacy rate, Gilgit Baltistan (GB) boasts a growing and increasingly skilled workforce, making significant strides in education and professional training. The emphasis on education in the region has resulted in a workforce equipped with diverse skills, ranging from technical expertise to managerial capabilities. This skilled workforce plays a pivotal role in driving economic growth in GB.

Investors are drawn to regions with a proficient and adaptable workforce that can effectively contribute to various industries, fostering innovation and productivity. As GB continues to invest in education and skill development, the region not only positions itself as an attractive destination for businesses but also ensures the sustainability and resilience of its economic development. The skilled workforce in GB serves as an asset, contributing to the region's competitiveness, attracting investments, and ultimately propelling long-term economic growth.

2.6 Airports - Catalyzing Regional Connectivity and Prosperity

The inauguration of Skardu International Airport alongside the domestic Gilgit Airport signifies a monumental leap in enhancing Gilgit-Baltistan's connectivity, promising to reshape the region's economic and tourism landscape. Skardu's international Airport status opens the region to a global audience, attracting tourists and investors worldwide, while Gilgit's domestic operations ensure seamless connectivity within Pakistan. Together, they form a comprehensive network that boosts the local economy, invigorating sectors such as hospitality, transportation, and retail, and offering new avenues for trade and commerce.

The strategic development of Skardu International and Gilgit domestic airports is poised to stimulate surrounding infrastructure and real estate growth, offering lucrative opportunities for investment and development. These gateways not only promise to make Gilgit-Baltistan's stunning landscapes and rich cultural heritage more accessible but also pave the way for substantial economic development. They stand as beacons of progress, enhancing the region's appeal as a premier tourist destination and a hub for cultural and economic exchange, fostering a future of prosperity and connectivity for Gilgit-Baltistan.

Skardu International Airport is all set to welcome direct flights from a few other countries in 2024 besides UAE which will bolster all sectors of Gilgit Baltistan.

There were five direct multiple flights from Islamabad, Lahore, Karachi, Sialkot, and Faisalabad to Skardu International Airport while two direct multiple flights from Lahore and Islamabad to Gilgit during 2023. Additionally, besides PIA, Airblue, and AirSial have also commenced their flight services to Skardu from Islamabad from 2023 and it is likely to increase in the coming years with an increasing tourist flow towards the region.

2.7 Powerhouse of Pakistan - 50,000MW

Gilgit Baltistan possesses immense hydro-energy potential (50,000MW), emerging as a key player in Pakistan's energy landscape.¹⁵ Snuggled amid the majestic Himalayas and Karakoram ranges, the region is endowed with numerous rivers and water bodies. As per the GoGB data, GB has rich resources like 8,000 Glaciers, 1300 hectares of Lakes, 1760 km of streams/Nallah, and 1500 km of rivers. The fast-flowing rivers, including the Indus, Hunza, and Gilgit, offer significant opportunities for hydropower generation.

The topography of the region, characterized by steep gradients and high-altitude terrain, enhances the hydroelectric potential. As a result, Gilgit Baltistan has become a focal point for hydropower projects, attracting both domestic and international investments. The harnessing of this hydro-energy potential

¹⁴ <https://www.unicef.org/pakistan/media/3166/file/MICS%202016-17%20GB%20Key%20Findings%20Report.pdf>

¹⁵ <https://www.thenews.com.pk/print/118200-Gilgit-Baltistans-hydropower-potential-to-resolve-energy-crisis>

not only addresses the region's energy needs but also contributes significantly to the national grid, providing clean and renewable energy to power homes, industries, and businesses. The sustainable utilization of Gilgit Baltistan's hydro-energy potential exemplifies the region's commitment to environmental responsibility and its pivotal role in shaping Pakistan's energy future.

3. Investing in Gilgit Baltistan – Impact over Commercial Investments

As per Global Impact Investing Network (GIIN), 3,349 organizations¹⁶ manage USD 1.164 trillion¹⁷ in impact investing worldwide, 88% reported investors met or exceeded their expectations across the globe. Pakistan has one of the largest impact investment landscapes with an estimated deployment of USD 1.9 billion as impact funds with 18 active impact investors¹⁸.

Impact investing is a rapidly trending phenomenon in the global economy and has present the socio-economically driven investors with huge growth prospects. Impact investment is the latest addition to investment profiling in response to the growing ecological and environmental degradation and is an answer to the need for a socio-economically responsible form of investment. Impact investing is a

"Financial undertaking that aims to generate specific and measurable beneficial, social, or environmental impacts in addition to financial gains".

Impact investor invests with the intention to yield twofold objectives which includes financial returns as well as social/ environmental returns.

Impact investment holds crucial significance for Gilgit-Baltistan across various sectors due to the region's unique challenges and untapped potential. GB being socially mobilized economy and due to its unique aura and ecological landscape as described earlier is ideal for impact investing and can adhere to the globally accepted trends for impact investments. Impact investments driven by Diversity, Equity, and Inclusion (DEI) offer higher economic returns coupled with socio-ecological impacts. There are three aspects fundamental to DEI driven impact investments and include:

Investing in diverse entrepreneurs – includes priority investments in businesses that employ diverse workforce unlike conventional entrepreneurs who focus more on static business models rather than dynamic. GB in this case presents itself as an ideal market for impact investors as GB is home to an ethnically and socially diverse population.

Pioneering technology to reach people outside of cities – Investing in technology and ICT to connect remotely located GB with the rest of the world to enhance and utilize its work force towards economic mobility. However, for the people GB with the current ICT portfolio and connectivity concerns, it is still challenging to connect and work remotely to partake in innovative business processes and solutions. Therefore, there lies a huge potential in the market to invest in green technological solutions to bring GB at par with the rest of Pakistan and at global level.

Aggregating demand for smaller buyers – It is also important to aggregate demand for small buyers and invest in micro and small enterprises to meet the domestic demand with the products and services produced domestically.

GB being at the centre of regional development and housing a fragile ecosystem presents the opportunity for impact investment particularly for conserving its natural resources. GB is also prone to natural disaster such as Glacial Lake outburst flood (GLOF) therefore climate resilient infrastructural development is also one of the areas to focus on for any impact investor. Another relatively important area to focus on are climate change mitigation initiatives that minimize carbon emissions.

In the tourism sector, impact investment can play a pivotal role in sustainable infrastructure development, promoting eco-friendly accommodations, and supporting community-based tourism initiatives. This not only preserves the pristine landscapes but also generates economic opportunities for local communities.

¹⁶ Global Impact Investing Network (GIIN), 2022

¹⁷ <https://thegiin.org/research/publication/impact-investing-market-size-2022/>

¹⁸ https://www.findevgateway.org/sites/default/files/publications/files/the_landscape_of_impact_investing_in_south_asia_pakistan.pdf

In the mineral and mines sector, impact investments can address challenges such as underdeveloped infrastructure and insufficient resources, unlocking the vast potential of the mining sector. Investments in responsible mining practices, value-addition facilities, and gemstone processing centers can enhance local skills and add value to the industry.

Renewable energy projects, supported by impact investments, can address energy shortages and promote clean energy sources, harnessing the region's hydropower potential for sustainable development. In the technology sector, impact investments can bridge the digital divide, providing access to education, healthcare, and market information.

Lastly, in the industries sector, impact investments can focus on sustainable practices, empowering local communities and fostering economic growth. The strategic deployment of impact investments across these sectors is essential for Gilgit-Baltistan's holistic development, ensuring environmental conservation, community empowerment, and long-term socio-economic sustainability.

The policy of the Government of Gilgit-Baltistan is to strive to maximize the developmental impact and spin-offs of investments in the region. While the Government encourages, and indeed, welcomes Investment in all sectors, especially large inflows in the development of infrastructure including power generation, tourism & areas having the potential for creating employment opportunities on a large scale. With its highly educated and large pool of young manpower, Gilgit-Baltistan offers immense opportunities not only for industry but also for tourism, both foreign & local. The cornerstone of this investment must remain the empowerment and benefits to the local population. Just like the landscape, the area is serene and peaceful. The law-and-order situation in this region is excellent and a positive indicator for the investor with security of life and capital investment.

4. One Window Investors Facilitation - GBInvest

GBInvest is a private lead initiative — aiming at investment facilitation to foster private sector-led growth in Gilgit-Baltistan with the support of GoGB and other stakeholders. The broader idea of GBInvest is to bring progressive socio-economic change in the landscape of GB by providing a platform for impact-oriented investment to develop an ecosystem. Furthermore, the platform believes in partnerships and collaborations with private and public sector institutions within and outside GB.



Delivering its promise, GBInvest in collaboration with the GoGB conducted the first-ever Gilgit Baltistan Investment conference in Dubai in February 2022 to bring impact investment into the region. Over 27 MOUs worth billions of dollars were signed during the event and 5 of them have been successfully executed in GB and active collaboration is going on with other signed MOUs. The platform is continuously engaged with the investors as well as the government of GB to translate these investments on the ground. In continuation to the efforts made in Dubai, GBInvest along with the GoGB has organised a GB Investment Roadshow in Islamabad in October 2023 to further showcase potential Investment opportunities in GB. GBInvest has also engaged the Chamber of Commerce, corporate groups, regulatory bodies, and government line departments to pave a pathway for future investments in the region.

GBInvest, branded with the tagline '**People.Nature.Value**' is focused on harnessing the power of value-driven investment models, that integrate nature conservation and social empowerment when tapping into investment opportunities for viable prosperity in GB.

As the tagline highlights by putting '**people**' first, the initiative views GB's local communities as the primary stakeholders of the region, who are being engaged across the various verticals of the initiatives, enabling them to take on empowering roles. The initiative recognizes the rights and needs of the indigenous communities, who are custodians of the region and whose expertise and knowledge are critical in making GBInvest the success it is today.

The word '**nature**' represents a recognition of GB's fragile ecosystem, that holds immense value due to an array of ecosystem services it offers to the people, flora, and fauna. GB's ecosystem is globally renowned for being home to the meeting point of three mountain ranges (the Hindu Kush, Himalayas, and Karakorum), as well as to many of the world's highest peaks, meadows, forests, glaciers, and

rivers, that have immense potential for supporting tourism, renewable energy, minerals and mining, agribusinesses, trade, and technology, given that conservation and preservation remain integral for sustainable use of GB's natural bounties.

The word '**value**' portrays the significance of GB's delicate ecosystem and the uniqueness of the local society, where it is a melting pot of diverse cultures, religions, ethnicities that speaks about the rich anthropological history and heritage of GB's communities. These distinguished traits call for value-driven approaches for growth, that preserve GB's ecosystem and values, while developing greater prosperity.

5. A Deep Dive into Sectors Ripe for Growth!

Gilgit Baltistan stands as a promising hub for diverse investment avenues. The region boasts a rich tapestry of investment prospects across multiple sectors, each offering unique opportunities for growth and development.

Within the realm of tourism, Gilgit Baltistan beckons with its majestic peaks, pristine lakes, and vibrant culture, presenting an ideal canvas for hospitality and leisure investments. The Information Technology sector emerges as a burgeoning frontier, fuelled by the region's growing digital infrastructure and skilled workforce, providing avenues for innovation and technological advancement. Moreover, the abundance of mineral resources in Gilgit Baltistan underscores its potential as a lucrative destination for mining and mineral exploration investments. In tandem, the energy sector holds promise, with vast untapped potential for hydropower projects and renewable energy initiatives, leveraging the region's abundant natural resources. Industrial prospects also flourish, with opportunities ranging from manufacturing to value-added processing industries, capitalizing on the region's strategic location and resource endowment. Furthermore, the robust labor force and burgeoning commercial landscape in Gilgit Baltistan offer fertile ground for investments in trade and commerce, facilitating economic growth and employment opportunities. Lastly, the fertile lands and favourable climatic conditions present in the region make agriculture a viable sector, ripe for investments in modern farming techniques, agribusiness, and food processing industries, contributing to food security and rural development. In essence, Gilgit Baltistan emerges as a beacon of opportunity, poised to harness its potential across diverse sectors and pave the way for sustainable economic prosperity.

This document extensively explores opportunities in Tourism, Information Technology, Mines and Minerals, Energy, Industries, Labour and Commerce, and Agriculture. All investment opportunities mentioned in the document are subjected to detailed feasibility studies and due diligence.



5.1 Tourism and Hospitality Outlook

Gilgit-Baltistan is bestowed with immense natural and cultural heritage including 146 peaks above 7000 meters with 5 peaks over 8000 meters within three mountain ranges of Himalaya, Karakoram, and Hindukush. The mountain valleys within these ranges are linked and connected through passes, trails, and modern road infrastructure¹⁹.

Historically the region had close linkages with the central Asia Tajikistan, Uzbekistan, and the Peoples Republic of China through different branches of the Old Silk Route. These linkages with the outside regions had a long-lasting impact on the communities of Gilgit-Baltistan. Its unique location – the main trading route between China, India, and Central Asia (Silk Route), passed through the area – not only made it a meeting place for traders and pilgrims but also attracted emperors and conquerors from Central

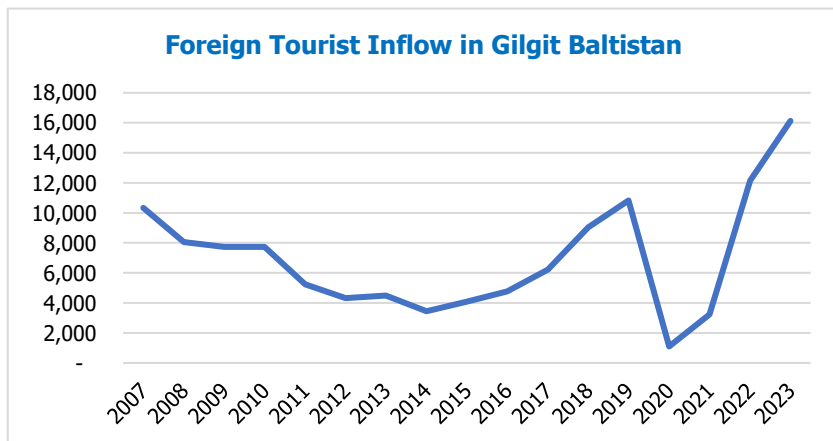
¹⁹ <https://www.kiu.edu.pk/cms/wp-content/uploads/2023/02/Mountain-Studies-Book-Online-Version.pdf>

Asia and Persia. The influence of different cultures and civilizations thus can be traced in archaeology, architecture, landmark monuments, languages, beliefs, and festivals to name a few.

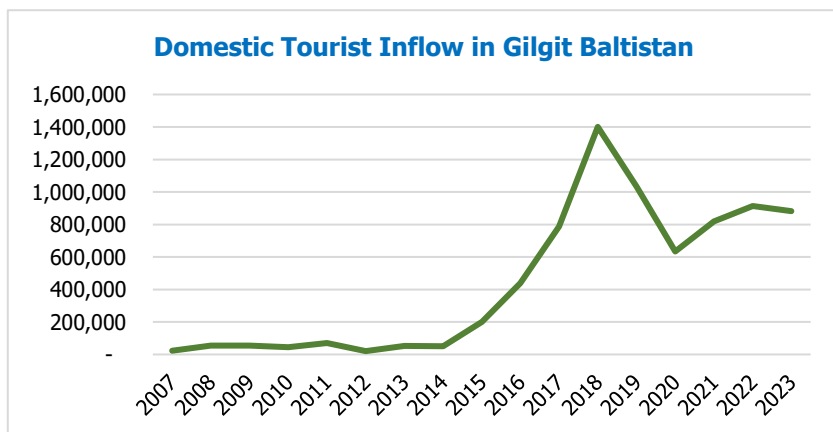
The construction of the Karakoram Highway and improved accessibility played a dominant role in changing livelihoods. For communication and rural development, traffic infrastructure was in certain areas a pre-condition for investment and improvement. Out-migration for work and education, enhanced exchange relations of goods and services as well as cross-border communication with the neighboring country China have opened new business opportunities, supported economic transformation, and led to accentuated social stratification. In this contribution, the impact of the Karakoram Highway is put into perspective of road network extension in High Asia and overall linkages between down country Pakistan and its mountain regions.

When looking at the macro picture, tourism can be viewed as one promising outcome of a variety of social factors and economic sectors that culminate to create tourism opportunities and add value. This is because tourism is essentially an activity where people visit a geographic location to avail a value or fulfill a personal or professional purpose. When it comes to value creation, the location should be distinguished and recognizable for a group of traits, like immersive scenery, that can generate a visitor's interest. On the other hand, when people travel for professional pursuit, an economically vibrant region comprising industry, commerce, human capital, and plenty of natural resources will attract far more people and opportunities. Therefore, the development of the tourism sector in GB will be largely dependent on the growth of the hospitality industry, manufacturing, utilities, ICT, and financial services.

Gilgit Baltistan views the Tourism and Hospitality sector as an economic driver with a multiplier effect due to its multi-faceted nature. As per some estimates, In GB, tourism has contributed approximately Rs. 300 million in the past few years as of 2019²⁰ and this trend can continue upwards with the growing brand identity of GB, especially online on social media platforms.



The table on the right illustrates the trend of tourist arrivals in Gilgit Baltistan from 2007 to 2023. Following the COVID-19 pandemic, there has been a noticeable upward trajectory in tourist arrivals, with expectations of continued growth in the future.



²⁰ <https://tribune.com.pk/letter/1970934/6-tourism-economy-gilgit-baltistan>

5.2 Unique Districts and Key Attractions

Gilgit Baltistan comprises of 10 districts and each district has its own uniqueness and attractions.



5.3 The Diverse Palette of Tourism in GB

Gilgit Baltistan's tourism sector can be divided into four areas;

- a) Natural attractions and sightseeing
- b) Religious, Historical, and Cultural sites
- c) Adventure and Sports Tourism
- d) Eco-tourism

a) Natural attractions and sightseeing

Gilgit Baltistan is situated at the junction of the world's greatest mountain ranges, where the Himalayas, Karakorum, and Hindukush meet at the Gilgit confluence, and the Karakorum ranges are joined by the Pamir and Kun Lun ranges in the north. The second highest peak in the world "K2" is 8,611m high. As many as 36 peaks in the Karakoram Himalaya are over 7,000m while five are over 8,000m. These mountain ranges are rich with biodiversity and offer great value to people who possess an interest in landscapes, wildlife sightings, athletic undertakings like hiking and skiing, or to scientists, researchers, and content creators who delve deep into the local environment to gain knowledge and insights into the local ecology or culture.

Every year, extreme sports lovers from around the world visit GB during the summer and a few in the winter season. The expeditions are a source of handsome income for national based companies who hire local people as guides, support staff, and low and high-altitude porters. Mountaineering and wild camping experiences are at the top of the list of famous adventure sports in the mountains.

Some of the famous mountain base camps include the K2 base camp, Rakaposhi base camp, Rupal base camp, Nanga Parbat base camp, Gasherbrum base camp, and Batura base camp.

Apart from the sky-high mountains, the Deosai Plateau, Skardu is the second world's highest plateau²¹ and national park, located in the north of the main Himalayan range in the Gilgit Baltistan region, covering an area of 5,000 km with an altitude of 4,115 m (14,500 ft).²² Deosai has a very short spring season from June to August with an average temperature of 5–15 degrees Celsius. During the winter season, the area remains snow-covered, and temperatures are always below the freezing point i.e. 25 to 32 degrees Celsius.

Continuing with the theme of lush green beauties found at unusually high altitudes, GB is known for being home to several meadows, the most popular of which are Fairy Meadows, Basho Meadows and Rama Meadow, etc.

b) Religious, Historical, and Cultural sites

The rich variety of local cultures and religions is a significant value associated with the GB. This bouquet of cultural, ethnic, and religious groups makes Cultural and Religious Tourism prevalent in Gilgit Baltistan. In GB, one can trace the eras of time and witness the passing of several historic eras by immersing themselves in the local culture. Historically, between the 8th to 15th centuries, the Buddhists dominated this region, building many places of worship and meditation (locally called Buddhist Stupas) which are frequently visited today.²³ Then, in the late 14th century, Islam entered with Muslim conquerors. Today, these ancient eras can be revisited by viewing historical sites, like the inscriptions and rock carvings found at Danyore Rock, Alam Bridge, Butogah, Thalpan, and Thor, etc.

In places of spirituality, the region has notable mosques, buildings, and sites like the Chaqchan Mosque, Amburiq Masjid among several other historic mosques around GB. Manthal Buddha Rock, Kargah Buddha Rock, Haldeikish sacred rock site, and the sacred rock of Hunza. To understand the political structures of the region, one can visit the Khaplu Palace, Altit Fort, and Baltit Fort, etc.

Additionally, there is an entire route in GB that is referred to as the "Pilgrim's Path" and comprised of inscriptions and engraved stones by the ancient Buddhists who resided in this area. "The Rock of the First Sermon" is also in Gilgit, it is the area where Buddha gave his first sermon.

²¹ <https://tribune.com.pk/story/1149552/g-b-govt-holding-festival-worlds-highest-plateau>

²² <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4039317/>

²³ <https://visitgilgitbaltistan.gov.pk/blog/1>

Some carvings are as old like from the 1st century. More than 39,000 rock carvings, 65 archaeological sites, and 23 historical forts make this region a hub of cultural and religious heritage. The historical Silk Route extension in GB is also a source of attraction for visitors.²⁴

Gilgit Baltistan also showcases the region's rich cultural heritage via its more than 15 festivals every year. Tourists and locals immerse themselves in the festivities, experience traditional music and dance, and witness the cultural splendor of the remarkable Gilgit Baltistan. A few popular festivals are Shandoor Polo Festival, Nauroze Festival, Babusar Polo Festival, Kharmang Shigar Polo Festival, Jashn-e-Baharan, Harvest Festival, Jashan e Mayfang, Ginani Festival, Babagundi Festival, Takhum Rezi/Spring Festival, Rama Festival and Shaap etc.

c) Adventure and Sports Tourism

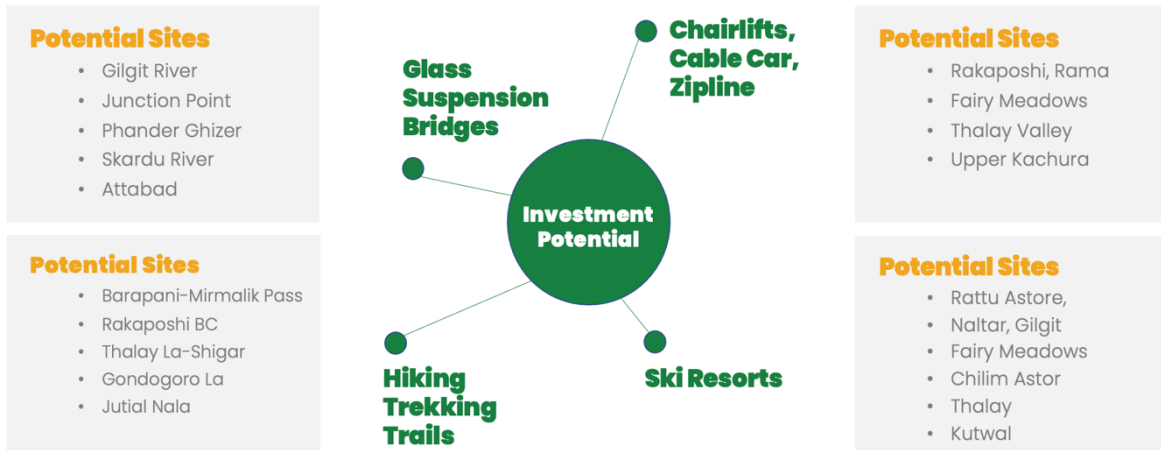
Gilgit Baltistan stands as a proud haven for adventure enthusiasts, boasting a myriad of exhilarating sports that beckon both local and foreign tourists. According to the statistics from the Tourism Department, GB in 2022, 45% of local tourists and 89% of foreign tourists flocked to GB primarily for the thrill and excitement offered by adventure tourism. This trend not only reflects the region's growing popularity as an adventure sports destination but also hints at the burgeoning demand that is poised to escalate even further in the future.

The diverse topography and challenging landscapes of GB provide the perfect backdrop for a wide range of adventure sports, making it a playground for thrill-seekers. While the list is extensive, some of the noteworthy adventure sports and potential areas that contribute to the region's allure include, but are not limited to, the following:

- Climbing Expeditions
- Hiking
- Skiing
- Cycle Touring
- Glamping
- Trekking
- Skating
- Paragliding
- Camping
- Rafting
- Ice Hockey
- Freestyle Polo
- Parasailing
- Mountain Biking
- Ballooning
- Glass Suspension
- Bridge
- Paragliding
- Trophy Hunting
- Chairlifts
- Rock Climbing
- Angling

²⁴ <https://gilgitbaltistan.gov.pk/system/files?file=Tourism.pdf>

A few potential identified adventure sports and proposed locations are as under;



d) Eco-tourism

The World Economic Forum estimates that more than 50% of the global economy is moderately or highly dependent on nature.²⁵ The mountains of northern Pakistan offer tourists a diversity of adventurous, cultural, culinary, and aesthetic experiences, among a wide range of landscapes ranging from jagged snow-capped peaks to lush green meadows and picturesque lakes. The enchanting landscapes and serene natural surroundings of GB transform it into a haven for peace-seeking tourists. A remarkable 70 percent of the total area falls within protected zones, encompassing a sprawling 6,592 square kilometers of forests. GB boasts three wildlife sanctuaries, nine-game reserves, and four national parks. Among them, the Khunjarab National Park²⁶, established in the '70s and located in the Hunza district near the Chinese border, stands out as a popular destination for tourists. Its allure lies in the diverse flora and fauna, coupled with convenient access via the Karakoram Highway. The active involvement of Village Organizations, nurtured by the Aga Khan Rural Support Programme (AKRSP), plays a pivotal role in park management.

In a groundbreaking move, community-controlled wildlife conservation areas have been established at 42 locations across GB. This innovative approach allows tourists to witness wildlife movement within and beyond village boundaries. The concept of community partnership in conservation began in the '80s, aligning with the initiation of the Aga Khan Rural Support Programme. The International Union for Conservation of Nature (IUCN), mandated to work on conservation, intervened and collaborated with the programme, subsequently scaling it up across GB.

The Worldwide Fund for Nature Pakistan (WWF-P) has been at the forefront of introducing sustainable ecotourism in GB. WWF-P has forged close partnerships with local communities, the private sector, and regulatory bodies. In 1999, the organization played a pivotal role in organizing the first convention on sustainable ecotourism. It further contributed to the establishment of the Tourism Development Board, the training of ecotourism guides and porters, the development and dissemination of ecotourism brochures, and the introduction and facilitation of sport-hunting in the region.

There is a vast potential in utilizing barren lands, especially those above existing irrigation channels, for transforming them into green patches. This approach aims to create transitional habitats for wildlife, attracting tourists eager to observe the presence of wildlife in and around villages during the winter months. Such initiatives not only enhance the ecological appeal of the region but also contribute to the economic prosperity of local communities by drawing more tourists to guesthouses, fostering increased business opportunities, and augmenting incomes. The strategic utilization of these untapped resources holds the promise of fostering sustainable ecotourism in GB.

Eco-tourism in Gilgit Baltistan emphasizes sustainable practices that minimize environmental impact and benefit local communities. Initiatives such as community-based tourism projects, homestays, and responsible trekking programs promote conservation and socio-economic development while preserving the region's natural and cultural heritage.

Overall, Gilgit Baltistan's eco-tourism potential lies in its pristine natural landscapes, cultural diversity, adventure opportunities, and commitment to sustainable tourism practices. By promoting responsible tourism and preserving its ecological and cultural assets, GB can position itself as a leading eco-tourism destination while fostering socio-economic development and environmental conservation in the region.

²⁵ <https://www.thethirdpole.net/en/nature/opinion-ecotourism-could-be-key-to-protecting-pakistans-mountains/>

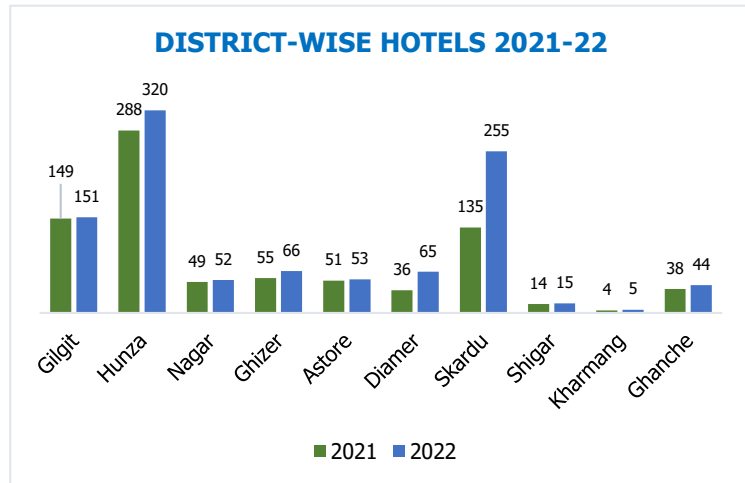
²⁶ <https://gilgitbaltistan.gov.pk/system/files?file=Tourism.pdf>

Investment Opportunities

Brownfield Investment Opportunities

Renovating the existing hotels and restaurants. Although the number of hotels in GB has hiked remarkably over the past few years. The chart on the left shows the number of hotels in each district in 2022 but not all of them attain the quality standards.

Poor architecture and fixtures, limited services, lack of improved sanitation, lesser accommodation, and low-quality food are quite prevalent. Due to limited options, tourists must rely on the existing hotels. Hence, instead of constructing new ones, there is a high need to improve the quality of the hard and soft components of the existing hotels and investors can explore this investment opportunity.



Source: Tourism Department, GB

Improving the overall security is yet another brownfield investment. Tourists must be provided with a safe and secure environment. This adds a lot to the tourist attraction. People don't prefer staying in areas where they feel threatened and insecure. Only a few hotels in GB offer proper security systems such as Serena, Ramada, Avari Xpress, and PC Legacy, etc. Although some of the few hotels also provide security to the guests, however, it is not digitalized and proper. So, there is a high-risk factor. Hence, investing in video surveillance, security guards, fire safety, health safety, etc. are crucial areas for brownfield investment.

Upgradation of the existing sports infrastructure. There is a high percentage of adventure tourists visiting this region every year, however, the sports infrastructure offers limited choices, and existing sporting gear and infrastructure are inadequate. For instance, in water recreation areas, extreme sports river rafts are limited and only available at the potential river sites, and the adventurers must wait a long time for their turn. There are no kits or proper safety measures in place either. Investing in more rafts and better kits would result in an instant and high return.

Souvenir and Handicrafts Retail: Establishing and upgrading or expanding retail outlets selling locally-made handicrafts, souvenirs, and artisanal products to provide tourists with authentic cultural experiences and support local artisans and craftsmen. Online selling platforms of these can be another investment opportunity to sell locally handmade products to customers both nationally and internationally

Greenfield Investment Opportunities

Constructing new hotels and bringing innovation is a great greenfield opportunity in Gilgit Baltistan. The 1106 hotels in the region are insufficient to host around 01 million tourists that visit per year. Although Serena has a chain of hotels in GB, they are mostly in the main city areas. The lack of hotels on KKH and link roads plus the high demand means that there is an investment opportunity in this area. A shortage of rooms and residential facilities means that there is a high demand for new hotels.

Setting up of new sports infrastructure and introducing new sports-related activities. Which includes establishing new stadiums, bird and wildlife watching facilities, skiing facilities at specific locations, promoting snowmobile trips, expanding freestyle polo events, parasailing, paragliding, rock climbing, mountain biking, angling, ballooning, trophy hunting, helicopter rides, rappelling, glamping, organizing tours of the mines to enable tourists to pick up semi-precious gemstones. Farming and

agriculture tourism might include organizing fishing activities, fruit picking, and packing directly from the local farms and orchards.

Transport and travel services. This includes private airlines and helicopter services, tour guides, training of high-altitude porters, introducing private tour buses, recreational and camping vehicles, etc.

Cultural Heritage Sites: Investing in the preservation and promotion of cultural heritage sites and historical landmarks in Gilgit Baltistan to attract cultural tourists interested in learning about the region's rich history and traditions.

Community-based Tourism Projects: Investing in community-based tourism initiatives that empower local communities to participate in and benefit from tourism activities, such as homestay programs, handicraft workshops, and cultural tours.

Camping and Glamping Sites: Establishing camping and glamping sites equipped with modern amenities and facilities to cater to tourists seeking unique and immersive outdoor experiences in Gilgit Baltistan.

Event and Festival Hosting: Investing in the event management company that promotes cultural events, festivals, and tourism-related activities to attract visitors and showcase the cultural diversity and heritage of Gilgit Baltistan.

Investible Projects

CITY PARK PLANTATION

Sector: Tourism

Location: Gahkuch



Key Indicators:
 Estimated Project Cost :PKR 500.00 million

RR	25%
NPV	PKR 3000 million
Payback	12 Years
Concession Period	30 years
Development Period	01 years

Business Opportunity:
 Financers/Investors
 Project Status: Locations are identified based on technical grounds.
 Project Status: Pre-feasibility stage

Description: 1. Development of high-tech capsules, tree houses, and log homes for tourists
 2. Development of compatible plantation restaurants.
 3. Development of spots for children, trails & tracks and other recreational activities for residents of Ghizer

Corporate Structure of the Project: PPP/ DIRECT INVESTMENT

Indicative Government Support & Guarantee:
 Please mention which are applicable (Benefit sharing mechanism under GB Forest Act 2019, Licensing support, Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act, Approved GB Tourism Policy, Provision of enabling overall investment environment, Tax incentives)

Expected Implementation Schedule:

1. Preparation: March 2024
2. Investor Solicitation: June 2024
3. Construction: Dec 2024
4. Operation: March 2025

Impact Outcomes of the Project

- Outcome 1: Local Economy and improved livelihood
- Outcome 2: Recreational opportunities on forest lands
- Outcome 3: Aesthetic improvement
- Outcome 4: Infrastructure Development

WILDLIFE HUT CHILIM ASTORE

Sector: Tourism

Location: Chilim



Key Indicators:

Estimated Project Cost :PKR 250.00 million

RR	25%
NPV	PKR 1000 million
Payback	12 Years
Concession Period	30 years
Development Period	01 years

Project Status:

Feasibility or pre-feasibility stage

Description:

1. Development of high-tech capsules, tree houses, and log homes for tourists
2. Development of compatible plantation restaurants.
3. Development of ski resort, trails & tracks and other recreational activities for residents of Astore

Corporate Structure of the Project: PPP/ DIRECT INVESTMENT

Indicative Government Support & Guarantee:

Please mention which are applicable (Benefit sharing mechanism under GB Forest Act 2019, Licensing support, Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act, Approved GB Tourism Policy, Provision of enabling overall investment environment, Tax incentives) incentives) incentives)

Expected Implementation Schedule:

1. Preparation: March 2024
2. Investor Solicitation: June 2024
3. Construction: Dec 2024
4. Operation: March 2025

Impact Outcomes of the Project

Outcome 1: Local Economy and improved livelihood

Outcome 2: Recreational opportunities on forest lands

Outcome 3: Aesthetic improvement

Outcome 4: Infrastructure Development

FOREST HUT

Sector: Tourism

Location: Naltar



Key Indicators:

Estimated Project Cost :PKR 250.00 million

RR	25%
NPV	PKR 1000 million
Payback	10 Years
Concession Period	30 years
Development Period	01 years

Project Status:

Feasibility or pre-feasibility stage

Description:

1. Development of high-tech capsules, tree houses, and log homes for tourists
2. Development of compatible plantation restaurants.
3. Development of ski resort, trails & tracks and other recreational activities for residents of Naltar

Corporate Structure of the Project: PPP/ DIRECT INVESTMENT

Indicative Government Support & Guarantee:

Please mention which are applicable (Benefit sharing mechanism under GB Forest Act 2019, Licensing support, Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act, Approved GB Tourism Policy, Provision of enabling overall investment environment, Tax incentives) incentives)

Expected Implementation Schedule:

1. Preparation: March 2024
2. Investor Solicitation: June 2024
3. Construction: Dec 2024
4. Operation: March 2025

Impact Outcomes of the Project

- Outcome 1: Local Economy and improved livelihood
- Outcome 2: Recreational opportunities on forest lands
- Outcome 3: Aesthetic improvement
- Outcome 4: Infrastructure Development

FOREST HUT

Sector: Tourism

Location: Cheleli Kargah



Key Indicators:

Estimated Project Cost :PKR 200.00 million

RR	25%
NPV	PKR 1000 million
Payback	10 Years
Concession Period	30 years
Development Period	01 years

Project Status:

Feasibility or pre-feasibility stage

Description:

1. Development of high-tech capsules, tree houses, and log homes for tourists
2. Development of compatible plantation restaurants.
3. Development of ski resort, trails & tracks and other recreational activities for residents of Gilgit

Corporate Structure of the Project: PPP/ DIRECT INVESTMENT

Indicative Government Support & Guarantee:

Please mention which are applicable (Benefit sharing mechanism under GB Forest Act 2019, Licensing support, Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act, Approved GB Tourism Policy, Provision of enabling overall investment environment, Tax incentives) incentives)

Expected Implementation Schedule:

1. Preparation: March 2024
2. Investor Solicitation: June 2024
3. Construction: Dec 2024
4. Operation: March 2025

Impact Outcomes of the Project

- Outcome 1: Local Economy and improved livelihood
- Outcome 2: Recreational opportunities on forest lands
- Outcome 3: Aesthetic improvement
- Outcome 4: Infrastructure Development

CAPSULE PODS HOTO PLANTATION

Sector: Tourism

Location: Skardu



Key Indicators:

Estimated Project Cost :PKR 300.00 million

RR	25%
NPV	PKR 1000 million
Payback	07 Years
Concession Period	30 years
Development Period	01 years

Project Status:

Feasibility or pre-feasibility stage

Description:

1. Development of high-tech capsules, tree houses, and log homes for tourists
2. Development of compatible plantation restaurants.
3. Rafting, water sports, trails and tracks

Corporate Structure of the Project: PPP/ DIRECT INVESTMENT

Indicative Government Support & Guarantee:

Please mention which are applicable (Benefit sharing mechanism under GB Forest Act 2019, Licensing support, Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act, Approved GB Tourism Policy, Provision of enabling overall investment environment, Tax incentives)

Expected Implementation Schedule:

1. Preparation: March 2024
2. Investor Solicitation: June 2024
3. Construction: Dec 2024
4. Operation: March 2025

Impact Outcomes of the Project

- Outcome 1: Local Economy and improved livelihood
- Outcome 2: Recreational opportunities on forest lands
- Outcome 3: Aesthetic improvement
- Outcome 4: Infrastructure Development

SAILING PLANTATION GHANCHE

Sector: Tourism

Location: Ghanche



Key Indicators:

Estimated Project Cost :PKR 100.00 million

RR	25%
NPV	PKR 1000 million
Payback	13 Years
Concession Period	30 years
Development Period	01 years

Project Status:

Feasibility or pre-feasibility stage

Description:

1. Development of high-tech capsules, tree houses, and log homes for tourists
2. Development of compatible plantation restaurants.
- 3 Development of spots for children, trails & tracks and other recreational activities for residents of Ghanche.

Corporate Structure of the Project: PPP/ DIRECT INVESTMENT

Indicative Government Support & Guarantee:

Please mention which are applicable (Benefit sharing mechanism under GB Forest Act 2019, Licensing support, Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act, Approved GB Tourism Policy, Provision of enabling overall investment environment, Tax incentives)

Expected Implementation Schedule:

1. Preparation: March 2024
2. Investor Solicitation: June 2024
3. Construction: Dec 2024
4. Operation: March 2025

Impact Outcomes of the Project

- Outcome 1: Local Economy and improved livelihood
- Outcome 2: Recreational opportunities on forest lands
- Outcome 3: Aesthetic improvement
- Outcome 4: Infrastructure Development

CAPSULE PODS PINE PLANTATION

Sector: TOURISM

Location: JUTIAL, GILGIT



Key Indicators:

Estimated Project Cost :PKR 150.00 million

RR	25%
NPV	PKR 500 million
Payback	8.5 Years
Concession Period	30 years
Development Period	01 years

Project Status:

Feasibility or pre-feasibility stage

Description:

1. Development of high-tech capsules, tree houses, and log homes for tourists
2. Development of compatible plantation restaurants.
- 3 Development of trails and tracks for residents of Gilgit.

Corporate Structure of the Project: PPP/ DIRECT INVESTMENT

Indicative Government Support & Guarantee:

Please mention which are applicable (Benefit sharing mechanism under GB Forest Act 2019, Licensing support, Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act,

Expected Implementation Schedule:

1. Preparation: March 2024
2. Investor Solicitation: June 2024
3. Construction: Dec 2024
4. Operation: March 2025

Impact Outcomes of the Project

- Outcome 1: Local Economy and improved livelihood
- Outcome 2: Recreational opportunities on forest lands
- Outcome 3: Aesthetic improvement
- Outcome 4: Infrastructure Development

CITY PARK SKARDU

Sector: Tourism

Location: Skardu



Key Indicators:

Estimated Project Cost :PKR 500.00 million

RR	25%
NPV	PKR 2000 million
Payback	10 Years
Concession Period	30 years
Development Period	01 years

Project Status:

Feasibility or pre-feasibility stage

Description:

1. Development of high-tech capsules, tree houses, and log homes for tourists
2. Development of compatible plantation restaurants.
- 3 Development of spots for children, trails & tracks and other recreational activities for residents of Skardu

Corporate Structure of the Project: PPP/ DIRECT INVESTMENT

Indicative Government Support & Guarantee:

Please mention which are applicable (Benefit sharing mechanism under GB Forest Act 2019, Licensing support, Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act, Approved GB Tourism Policy, Provision of enabling overall investment environment, Tax incentives)

Expected Implementation Schedule:

1. Preparation: March 2024
2. Investor Solicitation: June 2024
3. Construction: Dec 2024
4. Operation: March 2025

Impact Outcomes of the Project

- Outcome 1: Local Economy and improved livelihood
- Outcome 2: Recreational opportunities on forest lands
- Outcome 3: Aesthetic improvement
- Outcome 4: Infrastructure Development

WAZIR AYUB MEMORIAL HUT RAMA ASTORE

Sector: Tourism

Location: Rama



Key Indicators:

Estimated Project Cost: PKR 200 million

RR	25%
NPV	PKR 1000 million
Payback	10 Years
Concession Period	30 years
Development Period	01 years

Project Status:

Feasibility or pre-feasibility stage

Description:

1. Development of high-tech capsules, tree houses, and log homes for tourists
2. Development of compatible plantation restaurants.
3. Development of spots for children, trails & tracks and other recreational activities for residents of Astore.

Corporate Structure of the Project: PPP/ DIRECT INVESTMENT

Indicative Government Support & Guarantee:

Please mention which are applicable (Benefit sharing mechanism under GB Forest Act 2019, Licensing support, Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act, Approved GB Tourism Policy, Provision of enabling overall investment environment, Tax incentives)

Expected Implementation Schedule:

1. Preparation: March 2024
2. Investor Solicitation: June 2024
3. Construction: Dec 2024
4. Operation: March 2025

Impact Outcomes of the Project

- Outcome 1: Local Economy and improved livelihood
- Outcome 2: Recreational opportunities on forest lands
- Outcome 3: Aesthetic improvement
- Outcome 4: Infrastructure Development

FOREST HUT

Sector: Tourism

Location: Babusar



Key Indicators:

Project Cost Estimated: PKR 200 Million

NPV: PKR 1000 Million

FIRR: 25%

Payback: 10 Years

Financing: 100% Equity

Prospective investors are advised to undertake their own preliminary feasibility assessments.

Business Opportunity:

Financers/Investors

Project Status: Locations are identified based on technical grounds.

Project Status : Pre-feasibility stage

Description: Considering the rising trend of tourists at various destinations and assessing the existing accommodation facilities, a project (Construction of 3 Star hotel) is envisaged to develop on Built Operate and Transfer mode.

Corporate Structure of the Project

Special Purpose Vehicle, PPP

Indicative Government Support & Guarantee:

Licensing support, Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act, Approved GB Tourism Policy, Provision of enabling overall investment environment.

Expected Implementation Schedule:

1. Preparation : 2024
2. Investor Solicitation : 2024
3. Construction : 2025 – 2026
4. Operation : 2026

Social Impact Outcomes of the Project

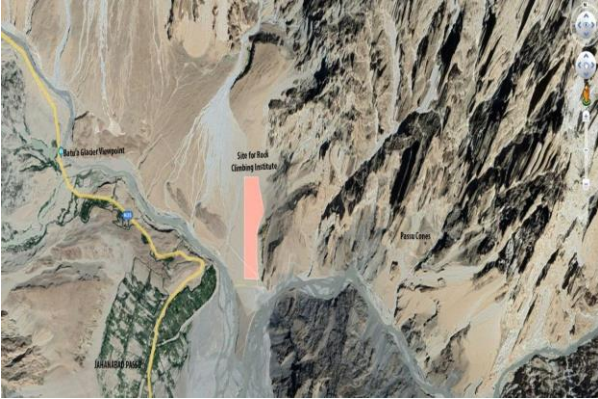
- Outcome 1: Promotion of Tourism
- Outcome 2: Boost Local Economy.
- Outcome 3: Infrastructure Development

MOUNTAINEERING AND ROCK-CLIMBING INSTITUTE

Sector: Tourism

Location: Passu, Gojal

Project Location Map



Key Indicators:

Project Cost Estimated: 2,275.42 Million

NPV: PKR 415.561 Million

FIRR: 29.9 %

Payback: 4.2 Years

Financing: 100% Equity

Prospective investors are advised to undertake their own preliminary feasibility assessments.

Business Opportunity:

Financers/Investors

Project Status: Locations are identified based on technical grounds.

Project Advisor / Consultant: Apex & Co. Limited

Description: Construction of an Adventure Sports Training Institute on 100 Kanals of prime land in Passu Gojal for the growth of adventure tourism in the region.

Corporate Structure of the Project

Special Purpose Vehicle, PPP

Indicative Government Support & Guarantee:

Licensing support, Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act, Approved GB Tourism Policy, Provision of enabling overall investment environment.

Expected Implementation Schedule:

1. Preparation : 2024
2. Investor Solicitation : 2024
3. Construction : 2025 – 2026
4. Operation : 2026

Social Impact Outcomes of the Project

- Outcome 1: Promotion of Tourism
- Outcome 2: Boost Local Economy.
- Outcome 3: Infrastructure Development

HOSPITALITY AND HOTEL MANAGEMENT INSTITUTE

Sector: Tourism

Location: Skardu

Project Location Map



Key Indicators:

Project Cost Estimated: 2,275.42 Million

NPV: PKR 415.561 Million

FIRR: 29.9 %

Payback: 4.2 Years

Financing: 100% Equity

Prospective investors are advised to undertake their own preliminary feasibility assessments.

Business Opportunity:

Financers/Investors

Project Status: Locations are identified based on technical grounds.

Project Advisor / Consultant: Apex & Co. Limited

Description: Construction of Hospitality & Hotel Management Institute on 100 Kanals of prime land in Skardu for the training of hotel staff.

Corporate Structure of the Project

Special Purpose Vehicle

Indicative Government Support & Guarantee:

Licensing support, Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act, Approved GB Tourism Policy, Provision of enabling overall investment environment.

Expected Implementation Schedule:

1. Preparation : 2024
2. Investor Solicitation : 2024
3. Construction : 2025 – 2026
4. Operation : 2026

Social Impact Outcomes of the Project

- Outcome 1: Promotion of Tourism
- Outcome 2: Boost Local Economy.
- Outcome 3: Infrastructure Development

Cable Car Project from Lower Kachura to Upper Kachura

Sector: Tourism

Location: Kachura, Skardu

Project Location Map



Key Indicators:

NPV: PKR 4.7 Billion

FIRR: 20%

Payback: 4.2 Years

Financing: 100% Equity

Prospective investors are advised to undertake their own preliminary feasibility assessments.

Business Opportunity:

Financers/Investors

Project Status: Locations are identified based on technical grounds.

Description: Considering the rising tourist flow, accessibility, and distance from Skardu International Airport (21km) it is envisaged to develop a 2.87-kilometer-long cable car from Lower Kachura to upper Kachura at District Skardu, Gilgit-Baltistan. The project will be the first of its kind in Gilgit-Baltistan and will be built on BOT mode through a public-private partnership (PPP).

Corporate Structure of the Project

Special Purpose Vehicle , PPP

Indicative Government Support & Guarantee:

Licensing support, Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act, Approved GB Tourism Policy, Provision of enabling overall investment environment.

Expected Implementation Schedule:

1. Preparation : 2024
2. Investor Solicitation : 2024
3. Construction : 2025 – 2026
4. Operation : 2026

Impact Outcomes of the Project

Outcome 1: Boost the Local Economy

Outcome 2: reduce the traffic congestion at Kachura road.

Outcome 3: attract adventure tourism.

Outcome 4: Infrastructure Development

Ski Resort Project

Sector: Tourism

Location: Babusar, Diamer

Project Location Map



Key Indicators:

NPV: PKR 21.8 Billion

FIRR: 26%

Payback: 9 Years

Financing: 100% Equity

Lease Tenure: 30 Years

Community Royalty: 8%

Prospective investors are advised to undertake their own preliminary feasibility assessments.

Business Opportunity: Financers/Investors

Project Status: Locations are identified based on technical grounds.

Project Advisor / Consultant: Apex & Co. Limited

Description: Development of a Ski Resort Project in Babusar with a potential to cater over 100,000 tourists (Domestic & International) with adventure tourism facilities, contributing to the socio-economic development of the entire region. The landscape of the identified land is technically viable for this intervention.

Corporate Structure of the Project Special Purpose Vehicle

Indicative Government Support & Guarantee:

Licensing support, Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act, Approved GB Tourism Policy, Provision of enabling overall investment environment.

Expected Implementation Schedule:

1. Preparation : 2024
2. Investor Solicitation : 2024
3. Construction : 2025 – 2026
4. Operation : 2026

Social Impact Outcomes of the Project

- Outcome 1: Local Economy
- Outcome 2: Recreational opportunities on forest lands
- Outcome 3: Aesthetic improvement
- Outcome 4: Infrastructure Development

Ski Resort Project

Sector: Tourism

Location: Chilam, Deosai, Naltar, Bagrote

Project Location Map



Key Indicators:

NPV: PKR 21.8 Billion

FIRR: 26%

Payback: 9 Years

Financing: 100% Equity

Lease Tenure: 30 Years

Community Royalty: 8%

Prospective investors are advised to undertake their own preliminary feasibility assessments.

Business Opportunity: Financers/Investors

Project Status: Locations are identified based on technical feasibility.

Project Advisor / Consultant: Department of Tourism GoGb

Description: Development of a Ski Resort Projects in the designated locations, complete with essential equipment, dedicated parking areas and accommodation arrangements to unlock the full potential of winter adventure tourism in the regions. The sites selected check all the pre-requisites for these interventions.

Corporate Structure of the Project Special Purpose Vehicle

Indicative Government Support & Guarantee:

Licensing support, Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act, Approved GB Tourism Policy, Provision of enabling overall investment environment.

Expected Implementation Schedule:

1. Preparation : 2024
2. Investor Solicitation : 2024
3. Construction : 2025 – 2027
4. Operation : 2027

Social Impact Outcomes of the Project

Outcome 1: Local Economy

Outcome 2: Recreational opportunities on forest lands

Outcome 3: Aesthetic improvement

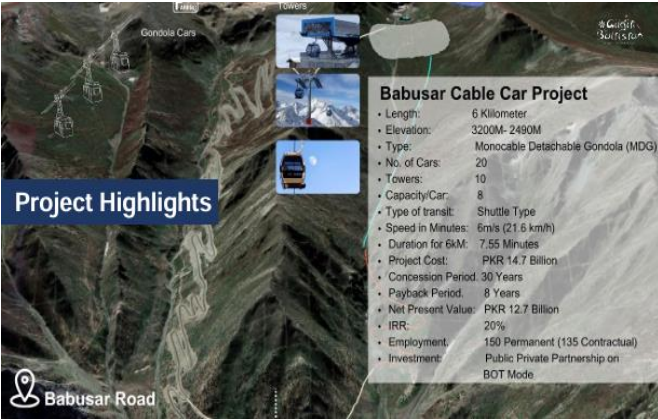
Outcome 4: Infrastructure Development

CABLE CAR PROJECT

Sector: Tourism

Location: Babusar, Diamer

Project Location Map



Key Indicators:

NPV: PKR 21.8 Billion

FIRR: 26%

Payback: 9 Years

Financing: 100% Equity

Lease Tenure: 30 Years

Community Royalty: 8%

Prospective investors are advised to undertake their own preliminary feasibility assessments.

Business Opportunity:

Financers/Investors

Project Status: Locations are identified based on technical grounds.

Project Advisor / Consultant: Apex & Co. Limited

Description: Due to the escalating tourist activity in Babusar, emerging as a prime destination, there is a growing demand for enhanced infrastructure to cater to the influx of visitors. Recognizing this need, plans are underway to construct a cutting-edge cable car system spanning 6 kilometers. This Babusar Cable Car project aims to provide seamless connectivity and breathtaking aerial views, catering to the burgeoning tourism sector. Set against the backdrop of Babusar's stunning landscapes, this initiative signifies a significant step towards fostering sustainable tourism growth in the region.

Corporate Structure of the Project Special Purpose Vehicle

Indicative Government Support & Guarantee:

Licensing support, Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act, Approved GB Tourism Policy, Provision of enabling overall investment environment.

Expected Implementation Schedule:

1. Preparation : 2024
2. Investor Solicitation : 2024
3. Construction : 2025 – 2027
4. Operation : 2027

Social Impact Outcomes of the Project

- Outcome 1: Boost the Local Economy.
- Outcome 2: Attract adventure tourism.
- Outcome 3: Infrastructure Development.

WILDLIFE HUT

Sector: Tourism

Location: Chilim, Astore

Project Location Map



Business Opportunity:

Financers/Investors

Project Status: Locations are identified based on technical grounds.

Project Status : Pre-feasibility stage

Description: Development of high-tech capsules, tree houses, and log homes for tourists.

The fragile ecosystem of Gilgit-Baltistan is in dire need of eco-friendly accommodation products made of 'green wood' – a blend of recycled materials such as plastic bags and scraps used to construct structures such as gazebos, staff accommodation quarters, kitchen, dining area, benches, and picnic tables.

Corporate Structure of the Project Special Purpose Vehicle

Indicative Government Support & Guarantee:

Licensing support, Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act, Approved GB Tourism Policy, Provision of enabling overall investment environment.

Expected Implementation Schedule:

1. Preparation : 2024
2. Investor Solicitation : 2024
3. Construction : 2024 – 2025
4. Operation : 2025

Social Impact Outcomes of the Project

- Outcome 1: Promotion of eco-tourism
- Outcome 2: Boost Local Economy.
- Outcome 3: will ensure low carbon footing.
- Outcome 4: Infrastructure Development

FOREST HUT

Sector: Tourism

Location: Chilas

Project Location Map



Business Opportunity:

Financers/Investors

Project Status: Locations are identified based on technical grounds.

Project Status : Pre-feasibility stage

Description: Development of high-tech capsules, tree houses, and log homes for tourists

The fragile ecosystem of Gilgit-Baltistan is in dire need of eco-friendly accommodation products made of 'green wood' – a blend of recycled materials such as plastic bags and scraps used to construct structures such as gazebos, staff accommodation quarters, kitchen, dining area, benches, and picnic tables.

Corporate Structure of the Project

Special Purpose Vehicle

Indicative Government Support & Guarantee:

Licensing support, Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act, Approved GB Tourism Policy, Provision of enabling overall investment environment.

Expected Implementation Schedule:

1. Preparation : 2024
2. Investor Solicitation : 2024
3. Construction : 2024 – 2025
4. Operation : 2025

Social Impact Outcomes of the Project

- Outcome 1: Promotion of eco-tourism
- Outcome 2: Boost Local Economy.
- Outcome 3: Will ensure low carbon footing.
- Outcome 4: Infrastructure Development

CAPSULE PODS FOREST PLANTATION

Sector: Tourism

Location: Khaplu, Ghanche

Project Location Map



Business Opportunity:

Financers/Investors

Project Status: Locations are identified based on technical grounds.

Project Status : Pre-feasibility stage

Description: Development of high-tech capsules, tree houses, and log homes for tourists

The fragile ecosystem of Gilgit-Baltistan is in dire need of eco-friendly accommodation products made of 'green wood' – a blend of recycled materials such as plastic bags and scraps used to construct structures such as gazebos, staff accommodation quarters, kitchen, dining area, benches, and picnic tables.

Corporate Structure of the Project

Special Purpose Vehicle

Indicative Government Support & Guarantee:

Licensing support, Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act, Approved GB Tourism Policy, Provision of enabling overall investment environment.

Expected Implementation Schedule:

1. Preparation : 2024
2. Investor Solicitation : 2024
3. Construction : 2024 – 2025
4. Operation : 2025

Social Impact Outcomes of the Project

- Outcome 1: Promotion of eco-tourism
- Outcome 2: Boost Local Economy.
- Outcome 3: Will ensure low carbon footing.
- Outcome 4: Infrastructure Development

WAZIR AYOUB MEMORIAL HUT

Sector: Tourism

Location: Rama, Astore

Project Location Map



Business Opportunity:

Financers/Investors

Project Status: Locations are identified based on technical grounds.

Project Status : Pre-feasibility stage

Description:

Development of high-tech capsules, tree houses, and log homes for tourists. The fragile ecosystem of Gilgit-Baltistan is in dire need of eco-friendly accommodation products made of 'green wood' – a blend of recycled materials such as plastic bags and scraps used to construct structures such as gazebos, staff accommodation quarters, kitchen, dining area, benches, and picnic tables.

Corporate Structure of the Project

Special Purpose Vehicle

Indicative Government Support & Guarantee:

Licensing support, Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act, Approved GB Tourism Policy, Provision of enabling overall investment environment.

Expected Implementation Schedule:

1. Preparation : 2024
2. Investor Solicitation : 2024
3. Construction : 2024 – 2025
4. Operation : 2025

Social Impact Outcomes of the Project

- Outcome 1: Promotion of eco-tourism
- Outcome 2: Boost Local Economy.
- Outcome 3: Will ensure low carbon footing.
- Outcome 4: Infrastructure Development

AGRI-TOURISM PARK & RESORT PROJECT

Sector: Tourism

Location: Basho, Skardu

Project Location Map



Business Opportunity:

Financers/Investors

Project Status: Locations are identified based on technical grounds

Prospective investors are advised to undertake their own preliminary feasibility assessments.

Description: This nursery is located on the main drive of Gilgit-Skardu road having great potential for agro tourism and other eco friendly activities purposes with an area of 250 kanals with fully protected fencing with the provision of enough water facility. The adjacent site is under the forest department with full forest trees coverage adding beauty to this scenic site. This site may be used for tourist destinations in addition to agriculture practices.

Corporate Structure of the Project

Public-private-partnership (PPP) model is recommended where public and private cash and in-kind resources under a well elaborate and agreed upon partnership deed/agreement.

Indicative Government Support & Guarantee:

Licensing support, Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act, Approved GB Tourism Policy, Provision of enabling overall investment environment.

Expected Implementation Schedule:

1. Preparation : 2024
2. Investor Solicitation : 2024
3. Construction :2024-2026
4. Operation : 2026

Social Impact Outcomes of the Project

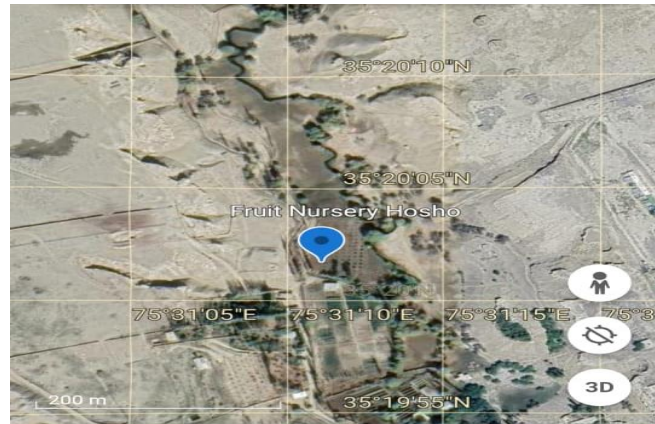
- Outcome 1: Promotion of Tourism
- Outcome 2: Boost Local Economy.
- Outcome 3: Infrastructure Development

AGRI-TOURISM PARK & RESORT PROJECT

Sector: Tourism

Location: Gamba Skardu

Project Location Map



Business Opportunity:

Financers/Investors

Project Status: Locations are identified based on technical grounds

Prospective investors are advised to undertake their own preliminary feasibility assessments.

Description: Fruit nursery Hosho located at Gamba Skardu near Skardu International Airport with an area of nearly 269 kanal. But litigation issue of the adjacent land is running in the court with the community. Adjacent to the spring water is gently sloping & ideal for construction of water channels, ponds and raceways. Given the additional availability of good road access and power, this site seems perfect for construction of huts and themed Agri-Tourism Park.

Corporate Structure of the Project

Public-private-partnership (PPP) model is recommended where public and private cash and in-kind resources under a well elaborate and agreed upon partnership deed/agreement.

Indicative Government Support & Guarantee:

Licensing support, Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act, Approved GB Tourism Policy, Provision of enabling overall investment environment.

Expected Implementation Schedule:

1. Preparation : 2024
2. Investor Solicitation : 2024
3. Construction :2024-2026
4. Operation : 2026

Social Impact Outcomes of the Project

- Outcome 1: Promotion of Tourism
- Outcome 2: Boost Local Economy.
- Outcome 3: Infrastructure Development

AGRI-TOURISM PARK & RESORT PROJECT

Sector: Tourism

Location: Gamba, Skardu

Project Location Map

Business Opportunity:

Financers/Investors

Project Status: Locations are identified based on technical grounds

Prospective investors are advised to undertake their own preliminary feasibility assessments.

Description: Fruit nursery Hosho located at Gamba Skardu near Skardu International Airport with an area of nearly 269 kanal. But litigation issue of the adjacent land is running in the court with the community. Adjacent to the spring water is gently sloping & ideal for construction of water channels, ponds and raceways. Given the additional availability of good road access and power, this site seems perfect for construction of huts and themed Agri-Tourism Park.

Corporate Structure of the Project

Public-private-partnership (PPP) model is recommended where public and private cash and in-kind resources under a well elaborate and agreed upon partnership deed/agreement.

Indicative Government Support & Guarantee:

Licensing support, Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act, Approved GB Tourism Policy, Provision of enabling overall investment environment.

Expected Implementation Schedule:

5. Preparation : 2024
6. Investor Solicitation : 2024
7. Construction :2024-2026
8. Operation : 2026

Social Impact Outcomes of the Project

- Outcome 1: Promotion of Tourism
- Outcome 2: Boost Local Economy.
- Outcome 3: Infrastructure Development

AGRI-TOURISM PARK & RESORT PROJECT

Sector: Tourism

Location: Kachura, Skardu

Project Location Map



Business Opportunity:

Financers/Investors

Project Status: Locations are identified based on technical grounds

Prospective investors are advised to undertake their own preliminary feasibility assessments.

Description: Fruit orchard Kachura is located at Kachura with the stunning view of Shangrilla resort in the cradle, comprising of an estimated area of about 89 kanal fully protected with fencing, near Skardu International Airport. Given the additional availability of good road access and power, this site seems perfect for construction of huts and themed agri Tourism Park.

Corporate Structure of the Project

Public-private-partnership (PPP) model is recommended where public and private cash and in-kind resources under a well elaborate and agreed upon partnership deed/agreement.

Indicative Government Support & Guarantee:

Licensing support, Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act, Approved GB Tourism Policy, Provision of enabling overall investment environment.

Expected Implementation Schedule:

1. Preparation : 2024
2. Investor Solicitation : 2024
3. Construction : 2024-2026
4. Operation : 2026

Social Impact Outcomes of the Project

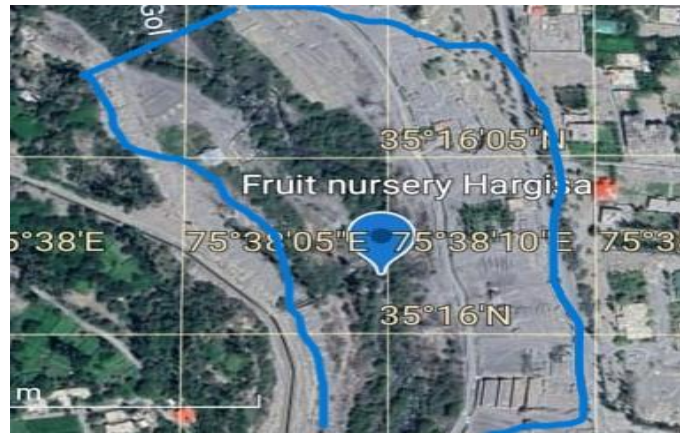
- Outcome 1: Promotion of Tourism
- Outcome 2: Boost Local Economy.
- Outcome 3: Infrastructure Development

AGRI-TOURISM PARK & RESORT PROJECT

Sector: Tourism

Location: Hargisa, Skardu

Project Location Map



Business Opportunity:

Financers/Investors

Project Status: Locations are identified based on technical grounds

Prospective investors are advised to undertake their own preliminary feasibility assessments.

Description: Hargisa fruit nursery is in the upper site of Skardu city with 250 Kanal of land along both sides of main Sadpara stream flowing in the middle of nursery. Fencing is partially completed and there is a fully furnished Agri-hut comprising of four bedrooms with great scenic view. The historical Buddha rock is also located with the nursery. The nursery is also gateway of sadpara nallah and Deosai plain.

Corporate Structure of the Project

Public-private-partnership (PPP) model is recommended where public and private cash and in-kind resources under a well elaborate and agreed upon partnership deed/agreement.

Indicative Government Support & Guarantee:

Licensing support, Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act, Approved GB Tourism Policy, Provision of enabling overall investment environment.

Expected Implementation Schedule:

1. Preparation : 2024
2. Investor Solicitation : 2024
3. Construction :2024-2026
4. Operation : 2026

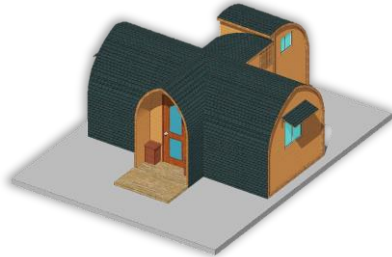
Social Impact Outcomes of the Project

- Outcome 1: Promotion of Tourism
- Outcome 2: Boost Local Economy.
- Outcome 3: Infrastructure Development

Camping Pods

Sector: Tourism

Location: Rama, Astore



Business Opportunity:

Financers/Investors

Project Status: Locations are identified based on technical grounds.

Description: The fragile ecosystem of Gilgit-Baltistan is in dire need of eco-friendly accommodation products made of 'green wood' – a blend of recycled materials such as plastic bags and scraps used to construct structures such as gazebos, staff accommodation quarters, kitchen, dining area, benches, and picnic tables.

Corporate Structure of the Project

Special Purpose Vehicle, PPP

Indicative Government Support & Guarantee:

Licensing support, Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act, Approved GB Tourism Policy, Provision of enabling overall investment environment.

Expected Implementation Schedule:

1. Preparation : 2024
2. Investor Solicitation : 2024
3. Construction : 2025 – 2026
4. Operation : 2026

Impact Outcomes of the Project

- Outcome 1: Promotion of eco-tourism.
- Outcome 2: Boost Local Economy.
- Outcome 3: will ensure low carbon footing.
- Outcome 4: Infrastructure Development.

AIR SAFARI

Sector: Tourism

Location: Across Gilgit Baltistan



Prospective investors are advised to undertake their own preliminary feasibility assessments.

Business Opportunity:

Prospective investors are advised to undertake their own preliminary feasibility assessments.

Description: With the flourishing tourism in Gilgit Baltistan, there lies a lucrative business opportunity for investors in the provision of both Air Safari experiences and Emergency Air Rescue services, complemented by Air Ambulance capabilities. Delight in captivating aerial tours amidst mesmerizing landscapes, all while ensuring swift emergency response and seamless medical evacuation when the need arises. This dual-service model not only meets the demands of adventurous travelers but also addresses the crucial need for safety and security in remote regions, presenting a promising investment prospect in the thriving tourism sector of Gilgit Baltistan.

Corporate Structure of the Project Special Purpose Vehicle

Indicative Government Support & Guarantee:

Licensing support, Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act, Approved GB Tourism Policy, Provision of enabling overall investment environment.

Expected Implementation Schedule:

1. Preparation : 2024
2. Investor Solicitation : 2024
3. Construction :2024-2026
4. Operation : 2026

Social Impact Outcomes of the Project

- Outcome 1: Local Economy
- Outcome 2: Emergency Services
- Outcome 3 Promotion of Adventure Tourism

ESTABLISHMENT OF HOTEL

Sector: Tourism

Location: Phander, Ghizer

Business Opportunity:

Financers/Investors

Project Status: Locations are identified based on technical grounds.

Project Status : Pre-feasibility stage

Description: Considering the rising trend of tourists at various destinations and assessing the existing accommodation facilities, a project (Construction of 3 Star hotel) is envisaged to develop on Built Operate and Transfer mode.

Corporate Structure of the Project

Special Purpose Vehicle, PPP

Indicative Government Support & Guarantee:

Licensing support, Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act, Approved GB Tourism Policy, Provision of enabling overall investment environment.

Expected Implementation Schedule:

5. Preparation : 2024
6. Investor Solicitation : 2024
7. Construction : 2025 – 2026
8. Operation : 2026

Social Impact Outcomes of the Project

- Outcome 1: Promotion of Tourism
- Outcome 2: Boost Local Economy.
- Outcome 3: Infrastructure Development

ESTABLISHMENT OF HOTEL

Sector: Tourism

Location: Skardu, Gilgit and Hunza

Business Opportunity:

Financers/Investors

Project Status: Locations are identified based on technical grounds.

Investors are advised to conduct their own feasibility.

Description: Establishment of world-class 5-star hotels in Gilgit-Baltistan, spanning an area of 4 acres (32 Kanals). The hotels will cater to the increasing demand for lodging in Skardu, Gilgit, and Hunza. Their locations shall be strategized for both international standard ambiance and panoramic views, making up premium hospitality experiences.

Corporate Structure of the Project

Special Purpose Vehicle, PPP

Indicative Government Support & Guarantee:

Licensing support, Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act, Approved GB Tourism Policy, Provision of enabling overall investment environment.

Expected Implementation Schedule:

1. Preparation : 2024
2. Investor Solicitation : 2024
3. Construction : 2025 – 2026
4. Operation : 2026

Social Impact Outcomes of the Project

- Outcome 1: Promotion of Tourism
- Outcome 2: Boost Local Economy.
- Outcome 3: Infrastructure Development

POLICY AND LEGAL ENVIRONMENT

- Overall planning, policymaking, and execution of schemes for the development, up-gradation, and improvement of the tourism infrastructure in different parts of the GB.
- Support to the private sector industry in the form of incentives for setting up various tourist facilities as well as for promotion and marketing of their products and services.
- Promotion and marketing of various tourist destinations and products of the Gilgit-Baltistan.
- Regulation of the tour operator by issuing licenses to tour operators, enforcement of provisions of Tourism Act of Gilgit-Baltistan (in process)



The Core Strategic Thrust Areas of GB Tourism Policy 2017

INCENTIVES FOR INVESTORS

- GoGB ensures security packages for national and international investments.
- A financial regime such as 100% foreign ownership of companies is permissible.
- Tax rebates.
- Flexible modes of investment available.
- Fast track processing of cases regarding investment.
- Exemption on Custom duties on Import of Machinery.



5.2 Energy Outlook

Renewable Energy and renewable energy resources are increasingly adding to the energy and power sectors for the provision and generation of clean and green eco-friendly energy. With the increase in the global electricity demand, there is a consistent rise in the demand for sustainable energy resources including renewable energy. The key contributors to the higher demand are rapid population growth, industrialization, urban expansion, and affluent lifestyle transformation. The crises have resulted in severe problems such as reliance on imported fossil fuels, environmental emissions impact, and unreliable access to electricity.

The adoption of the Sustainable Development Goals “ensure access to affordable, reliable, sustainable and modern energy for all” by 2030, and to “take urgent action to combat climate change and its impacts” have placed clean energy development front and center as the pathway to a more sustainable future. To meet the growing energy demand and to achieve the SDGs, untapped renewable energy potential is required to be harnessed on priority.

Pakistan is endowed with huge renewable energy resources. However, about 85% of these resources are still untapped and need to be exploited to resolve the persistent energy crises ensuring minimum dependency on thermal energy. A major chunk of the clean energy resources lies in Gilgit Baltistan. The region is rich in hydro resources due to the large area of glaciers and snow deposits in its mountains, it has vast outstanding potential for the development of hydroelectricity but so far it remains underutilized. About 50,000 MW of clean energy can be generated from the main Indus and its tributaries within Gilgit Baltistan²⁷. As per the data of Hydropower resources in Pakistan-2022, 302 project sites with a total capacity of 21162 MW are identified as having high, medium, and small heads. Out of the huge hydropower potential, only 199 MW has been harnessed and 58 projects with accumulative capacity of 285 MW are in operation. The data shows that only 1% of the hydropower resources have been or are being harnessed.

Moreover, hundreds of Megawatt electricity can be generated from the potential solar and wind energy sites of the region. The clean energy potentials were unutilized due to a lack of policies and financing.

However, the National Power Generation Policy, 2015, and the Private Power Infrastructure Board Act, 2012 have been extended to Gilgit Baltistan. Hence, a vast opportunity is available for investors to tap the immense potential of renewable energy in a conducive environment under the National Power Generation Policy, 2015.

GB Energy Sector Background

The population of Gilgit Baltistan (GB) has increased to 1.7mn in 2022 with a population growth rate of 2.80% from 2017²⁸, GB with a leading population in Gilgit (0.33Mn) followed by Diamer with (0.32Mn) and Skardu (0.31Mn). There are over 140 installed hydropower plants in GB, however, a very limited proportion of the total hydropower potential of the region has been tapped. GB is facing severe challenges in terms of electricity shortfalls, albeit it features a good untapped renewable energy potential in the form of Photovoltaic (PV), wind corridors, and an abundance of hydro resources. Gilgit-Baltistan is experiencing acute energy shortages.

Load shedding and power breakdowns are routine and result in disruption in the smooth functioning of every other sector, household, and institution in the region.

Consequently, deforestation in the region occurs at a high rate to meet the energy demand, especially in harsh weather conditions during the winter season. According to the Water and Power Department (WPD) of GB, the forecasted electricity demand in GB for 2030; GB will require a total of 863MW of electricity by 2030 to meet its electricity needs. The table on the right shows the district-wise electricity demand in GB.

DISTRICTS	PRESENT GENERATION (MW)						PRESENT DEMAND		PRESENT SHORTFALL	
	SUMMER (IN MW)			WINTER (MW)			SUMMER (MW)	WINTER (MW)	SUMMER (MW)	WINTER (MW)
	HYDEL	THERMAL	TOTAL	HYDEL	THERMAL	TOTAL				
GILGIT	49.00	0.00	49.00	26.80	7.80	33.60	49.89	94.51	0.89	60.91
NAGAR	4.56	0.00	4.56	2.03	0.50	2.53	9.27	16.97	4.71	14.44
HUNZA	3.91	0.80	4.71	2.78	0.80	3.58	12.83	20.51	8.12	17.03
GHIZER	12.50	0.00	12.50	8.80	0.58	9.38	38.88	71.34	26.38	61.96
DIAMER	9.79	0.80	10.59	6.75	4.00	10.75	36.02	50.34	25.43	39.59
ASTORE	4.50	0.00	4.50	4.00	0.00	4.00	14.83	24.53	10.33	20.53
SKARDU	20.30	0.00	20.30	14.20	2.00	16.20	50.60	94.47	30.30	78.27
SHIGAR	3.50	0.00	3.50	2.00	0.00	2.00	10.35	19.36	6.85	17.36
KHARMANG	4.61	0.00	4.61	4.07	0.00	4.07	6.65	12.54	2.04	8.47
GHANCHE	8.09	0.00	8.09	5.00	0.16	5.16	25.50	48.52	17.41	43.36
TOTAL	120.76	1.60	122.36	76.43	15.84	91.27	254.82	453.19	132.46	261.92

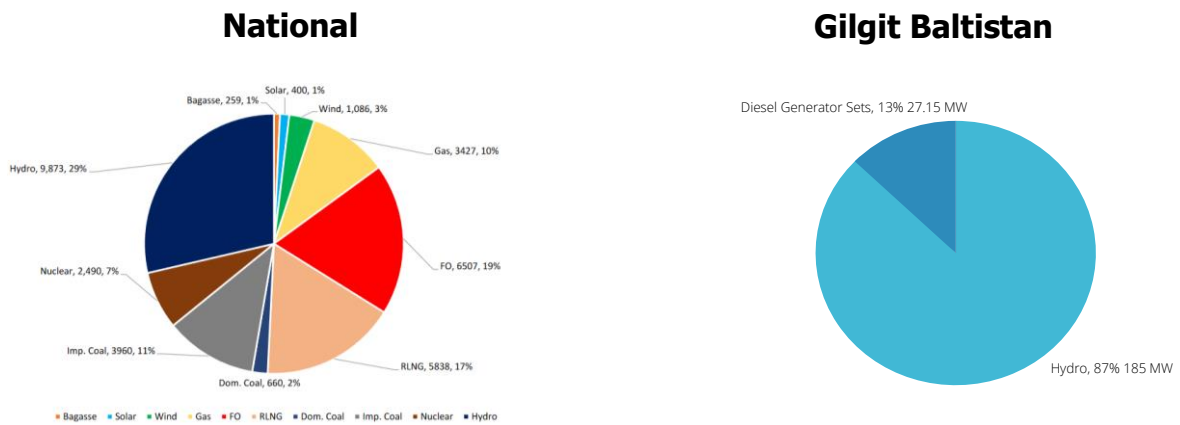
SOURCE: POWER DEPARTMENT GB

Source: Water and Power Department, GB

²⁷ <https://www.ijrer.org/ijSmartGrid/index.php/ijsmartgridnew/article/viewFile/220/pdf>

²⁸ <http://src.pnd.gog.pk/GBDS/GBDS2023.pdf>

Energy Mix Mismatch in Gilgit Baltistan



The absence of a diverse mix of energy sources in Gilgit Baltistan presents several challenges and issues for the region. Dependence on only two energy sources, particularly hydro-dependent, can make the region vulnerable due to variability in water flow due to climate change, seasonal changes, or other factors that can impact energy production and reliability, especially during the winter season. During the winter season, the power generation shortfalls increase drastically, leading to electricity shortages. This disrupts daily life and economic activities in the region.

A narrow energy mix also impedes the development and integration of innovative and cleaner technologies. Diversification in the energy mix can spur investments in solar, wind, or other renewable sources, fostering technological advancements in the region. To address these issues, Gilgit Baltistan can benefit from developing a more diversified energy mix also keeping in mind the potential of hydropower energy, incorporating renewable sources like solar and wind, and exploring energy storage solutions to enhance resilience and sustainability in its energy infrastructure.

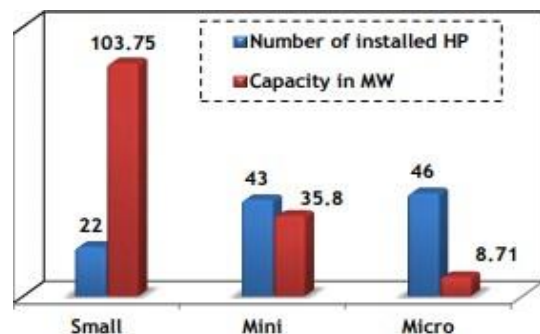
Options for the Energy Mix in Gilgit Baltistan

The introduction and implementation of sustainable and renewable energy sources, such as hydropower, wind power, and solar energy, can play a significant role in addressing the energy deficit and high costs.²⁹ Not only do these clean energy sources offer a more reliable energy supply but they also have the potential to spur local economic growth, create employment opportunities and reduce the environmental damage caused by diesel generators.

a) Hydro Power Potential in GB

Gilgit-Baltistan's energy needs are mostly met by power generation through small and medium hydropower stations, with capacities ranging from 50 kW to 17,000 kW. Operational Hydropower stations have a total installed capacity of 149 MW. During winter, the supply of electricity reduces as water flow in the rivers drops; however, demand remains high because of harsh weather. The seasonal shifting of the population from higher altitudes to lower valleys also affects the overall demand for energy in winter. The GoGB has developed more than 140 hydel plants, which consist of 22 small plants having an installed capacity of 103.75 MW, 43 mini plants with an installed capacity of 35.8 MW, and 46 micro hydel plants having an installed capacity of about 8.71 MW to meet the region's energy requirements.³⁰

The hydroelectric power supply is unable to meet full load demand; therefore, the population across Gilgit-Baltistan has to rely on other energy sources to fulfill their needs. Gilgit-Baltistan is known as the water bank of the country.



Source: Water and Power Department, GB

²⁹ <https://www.thenews.com.pk/print/1037810-energy-in-gilgit-baltistan>

³⁰ Water and Power Department, GB

Apart from having over 7,000 Glaciers as a perennial source of water³¹, the area receives a tremendous volume of snow which complements water flow in the streams and rivers including the Indus River which is the core source of the Tarbela dam generating over 7,000 MW of electricity. In Gilgit-Baltistan, many micro and mini hydroelectric plants are used to provide electricity to suburban centers and small rural communities. The operating cost of a small hydropower plant is very little compared to other conventional and renewable sources. Therefore, local government and international organizations have consistently shown interest in financing community-based micro-hydro stations in GB. There are many special areas having potential sites, with a regular flow of tourists, not only do these sites have a high demand for electricity but have the capacity to pay the bills.

The unique topography and abundant water resources in Gilgit-Baltistan provide an ideal environment for the exploration and implementation of run-of-the-river hydroelectric projects. Unlike conventional hydropower projects that require the creation of large reservoirs, run-of-the-river projects harness the natural flow and elevation drop of rivers to generate electricity without significant disruption to the river's course.

In the context of Gilgit-Baltistan, where numerous rivers and streams traverse the region, run-of-the-river projects offer a sustainable and environmentally friendly solution to meet the growing energy demands. These projects leverage the constant flow of water, especially during the melting of glaciers and snowmelt, to generate electricity consistently throughout the year. This continuous flow aligns well with the region's seasonal variations in demand, ensuring a more reliable and steady power supply.

Run-of-the-river projects also minimize the environmental impact associated with traditional dam construction³². They avoid the large-scale submergence of land and the alteration of ecosystems, preserving the natural landscape and biodiversity of the region. This approach is particularly crucial in Gilgit-Baltistan, known for its pristine and ecologically sensitive areas.

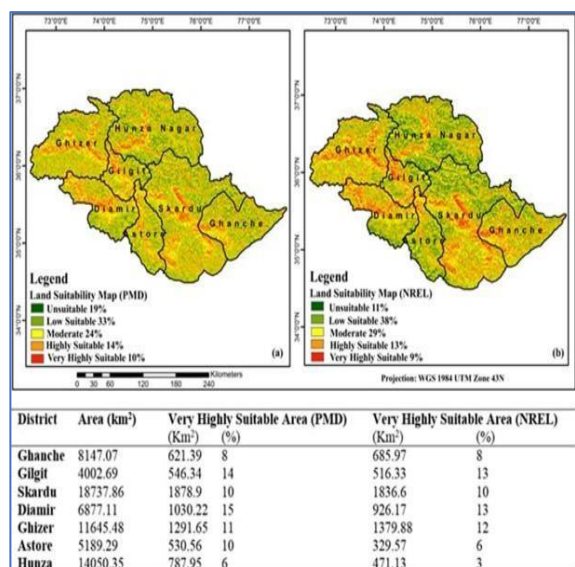
Moreover, the implementation of run-of-the-river projects can enhance the resilience of the energy infrastructure in the face of climate change. As the region experiences variations in precipitation patterns and glacier melt, the adaptability of run-of-the-river projects ensures a more robust response to these changes compared to static reservoir-based systems.

Investing in run-of-the-river projects not only contributes to the sustainable development of Gilgit-Baltistan but also aligns with global efforts to transition towards cleaner and more environmentally friendly energy sources. By harnessing the natural flow of rivers, these projects can play a pivotal role in addressing the evolving energy needs of the region while promoting ecological balance and resilience in the face of changing climatic conditions.

b) Solar Energy Potential in GB

Small Solar Home solutions are installed in houses all across GB, for meeting the energy needs of households in the load shedding hours. Through the Annual Development Plan, the government has also started to install Solar Systems in key public buildings across GB. The institutions include administrative offices, schools, and hospitals. 23 such systems have been installed in Hunza including the Civil Hospital Aliabad and the District Health Office of Hunza. Gilgit Baltistan has the potential of generating electricity using renewable resources like Solar and Wind.

The figure on the right shows the district-wise land sustainability map on (a) PMD Solar Data and (b) NREL Solar Data. It is also observed that the range of daily solar radiation in Gilgit Baltistan is 5–7 kWh/m²/day during summer and 1.5–2.5 kWh/m²/day during winter. Therefore, solar radiation



³¹ https://sdpi.org/gilgit-baltistans-energy-access-/news_detail

³² <https://www.osti.gov/servlets/purl/1854486>

intensity remains favorable and this indicates that Northern areas have a potential for solar power development

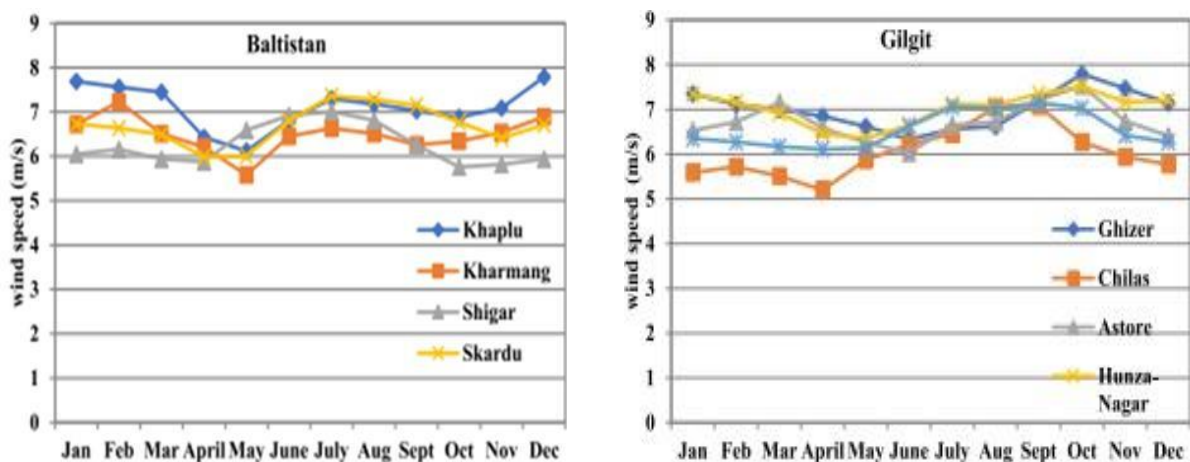
First Public-Private Partnership (PPP) project to produce clean energy in Gilgit Baltistan

In a game-changing first, NPak Energy Ltd, a subsidiary of Industrial Promotion Services (IPS), has installed a 1-MW solar power plant in the Hunza district of Gilgit-Baltistan in 2023 to offset the region's acute energy deficit and ensure communities living in these remote valleys a clean, sustainable source of electricity. The project sets a unique precedent as the region's first public-private partnership to produce clean energy at comparable scale, while actively contributing to global climate change mitigation. Sitting at 2,800 metres above sea level, the plant's more than 2,300 photovoltaic panels will produce 1,600 MWh of electricity per year to power local households and businesses. What it generates in clean energy will also avoid over 1,100 metric tons of CO₂ equivalent annually. NPak Energy has signed a 30-year Concession Agreement with the Government of Gilgit Baltistan. It aims to strengthen public service delivery by creating a sustainable, self-reliant utility operation that makes clean electricity reliable and affordable to every household in the Hunza district – and in turn catalyses economic opportunities and job creation.³³

c) Wind power

Wind energy is the fastest-growing renewable energy source today. A continued interest in wind energy development worldwide has produced steady improvements in technology and performance of wind power plants. New wind power projects have proven that wind energy not only is cost-competitive but also offers additional benefits to the economy and the environment.

The profile of wind across the Gilgit Baltistan region is astonishing and capable of catering to the peak demand of winter at the least cost of energy with no backup system. The figure below shows the average wind speed in the districts of GB. The Water and Power Department of GB is also conducting a feasibility study for power generation from wind in the Wind Corridor of Hunza and the study is also in the last stages of completion. The following graph illustrates the monthly average wind speed across districts of GB.



Investment Opportunities

Brownfield Investment Opportunities

Improving and upgrading the transmission and distribution of electricity from the existing power plants. The Industrial Promotion Services (IPS) ran the "Loss Reduction Program in Hunza", in which transformers were repaired, a sub-station was installed in Hassanabad, and 1000 energy meters were installed in Karimabad. After successful completion of the program, the T&D losses were reduced from 52% to 12%. There is great potential for other districts to learn from this experience and attract investors to participate in the loss reduction Programme through the business model.

³³ <https://the.akdn/en/resources-media/whats-new/news-release/solar-energy-to-transform-life-in-gilgitbaltistan>

Upgrading and O&M of the existing community-managed MHPs: Many of the community-managed Micro Hydropower Projects (MHPs) across Gilgit Baltistan have been gathering dust due to a lack of proper maintenance or have reduced efficiency due to the E&M equipment that was installed. Upgrading the existing plants in terms of generating capacity is an area of potential investment. Operation and maintenance of such plants have proved to be a task difficult to manage for the communities. For example, the community of Shishkat, Hunza has handed over their MHP to GBWPD for operation and maintenance due to the unavailability of the private sector.

In terms of cost and quality, the operation and maintenance of existing MHPs built and operated by the GB government are questionable. Therefore, there is a need for the private sector to take over the operation and maintenance of GB government-built MHPs. For instance, a private firm has taken over the O&M of inefficient MHPs and it has been successful in streamlining electricity generation as well as making profits.

Installing Mini-grids for a reliable supply of electricity to geographically scattered population clusters in GB. Different energy projects in adjacent villages can be connected by installing a mini-grid and the supply of electricity can be made efficient and reliable.

Greenfield Investment Opportunities

Wind Turbines: The wind energy potential can be tapped by installing wind turbines in the wind corridors of GB, e.g. the Attaabad Wind Corridor in Upper Hunza, and distributing the generated electricity to the nearby population settlements and recently built hotels and restaurants.

Off-grid Renewable Energy Projects: Investing in off-grid renewable energy projects such as solar home systems, mini-grids, and solar-powered water pumps to provide clean and reliable energy access to remote communities in Gilgit Baltistan.

Hydropower Projects: Gilgit Baltistan is known as the water bank of Pakistan. The hydropower potential of GB is always discussed and referred to in many documents and platforms, but the potential has not been tapped so far.

Hybrid Energy Systems for Rural Electrification: Renewable resources of energy such as wind, solar thermal, solar photovoltaic, small, and large hydro can provide sustainable and cost-effective energy to all, irrespective of their geographical locations. The renewable off-grid hybrid energy generation is gaining attention for rural electrification across the world. In major parts of GB, hydroelectricity coupled with electric power from diesel generators can be used to minimize load shedding periods, especially in winter. The potential hybrid systems for GB based on available resources include:

- a) Hydro/PV/Battery
- b) Hydro/Wind/Battery
- c) Wind/PV/Battery
- d) Hydro/PV/WIND/Battery
- e) Solar/Wind

Hybrid Energy Systems Integration: Integrating hybrid energy systems combining multiple renewable energy sources such as solar, wind, and hydropower to create resilient and reliable energy supply solutions for remote and off-grid areas in Gilgit Baltistan.

Smart Grid Technologies: Deploying smart grid technologies to modernize the energy infrastructure in Gilgit Baltistan, improve energy efficiency, and enable demand response and load management capabilities.

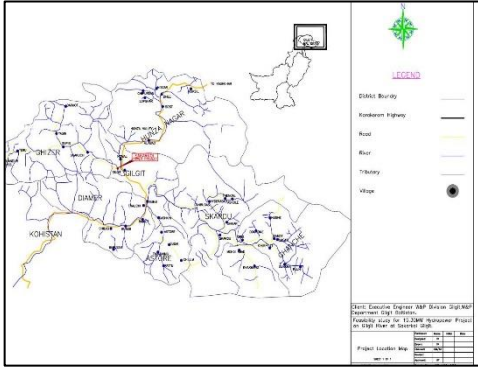
Investible Projects

CONSTRUCTION OF 15 MW HYDROPOWER PROJECT

Sector: Energy Sector

Location: Skarakoi Muhallah, Gilgit

Project Location Map



Key Indicators:

Project Cost Estimated: PKR 12,750 Million
 NPV: PKR 415.561 Million
 FIRR: 29.46 %
 Payback: 10 Years
 Concession Period: 30 Years
 Development Period: 03 Years

Prospective investors are advised to undertake their own preliminary feasibility assessments.

Business Opportunity: Financers/Investors

Project Status: Project is ready for execution (Feasibility Study Completed, PC-I Ready) if financing is secured.

Description: The run-of- river project will be constructed near Skarkoi Gilgit which will add 15 MW (375 Gwh per year) clean energy to the resident of Gilgit town. Its main objective is to provide reliable and consistent power to the energy stricken Gilgit city.

Corporate Structure of the Project: PPP, SPV

Indicative Government Support & Guarantee:

Licensing support, Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act, Approved GB Tourism Policy, Provision of enabling overall investment environment)

Expected Implementation Schedule:

1. Preparation : 2023-2024
2. Investor Solicitation 2023-2024
3. Construction 2023-2027
4. Operation 2028

Impact Outcomes of the Project

Green and Clean renewable Energy will lead to positive Environmental Impact as well as Considerable direct and indirect employment will be generated on its completion and the business activities will be promoted besides facilitating other sectors such as health, education, poultry development, cottage industry etc.

Construction of 10 MW Hydropower Project

Sector: Energy Sector

Location: Tormik Valley, Roundu

Project Location Map



Key Indicators:

Project Cost Estimated: PKR 8500 Million

NPV: PKR 415.561 Million

FIRR: 16 %

Payback: 12 Years

Concession Period: 30 Years

Development Period: 03 Years

Prospective investors are advised to undertake their own preliminary feasibility assessments.

Business Opportunity: Financers/Investors

Project Status: Locations are identified based on technical grounds.

Project Advisor/Consultant: Salman Ahmed Lodhi, Karachi (Kista Farms Pvt Ltd)

Description: The project's objective is to exploit the potential of hydropower available on the lower stretch of Tormik Lungma to generate 10 MW output (77.8 Gwh), which will augment power to the existing electricity network of the area to resolve power shortage to the consumers of load centers in Skardu valley from Tormik to Hussainabad village. It is the policy of the government to provide cheap power through environmentally friendly projects to the consumers for their domestic, commercial, and industrial usage. The proposed hydropower project is the most appropriate development for generation of energy. Implementation of this project is a step forward in achieving the goals of the sector being renewable and economically viable.

Corporate Structure of the Project: Project will be executed under following investment modalities.

PPP, BOT, BOOT, Direct Investments, Partnership with local business/ Communities)

Indicative Government Support & Guarantee:

Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act, National Power Policy Act 2015, Provision of enabling overall investment environment, PPIB Act 2012, GB Governor Order, 2016

Expected Implementation Schedule:

1. Preparation 2023-2024
2. Investor Solicitation 2023-2024
3. Construction 2023-2028
4. Operation 2029

Impact Outcomes of the Project

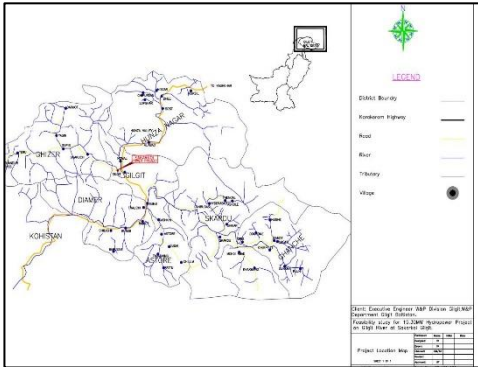
Green and Clean renewable Energy will lead to positive Environmental Impact as well as Considerable direct and indirect employment will be generated on its completion and the business activities will be promoted besides facilitating other sectors such as health, education, poultry development, cottage industry etc.

CONSTRUCTION OF 40 MW HYDROPOWER PROJECT

Sector: Energy Sector

Location: Basho Valley, Skardu

Project Location Map



Key Indicators:

Project Cost Estimated: PKR 34217 Million

NPV: PKR 120 Million

FIRR: 18.5 %

Payback: 15 Years

Concession Period: 30 Years

Development Period: 03 Years

Prospective investors are advised to undertake their own preliminary feasibility assessments.

Business Opportunity: Financers/Investors

Project Status: Project is ready for execution (Feasibility Study Completed, PC-I Ready) if financing is secured
Project Advisor / Consultant: GoGB

Description: The run-of-river project will be constructed near Skarkoi Gilgit which will add 15 MW (375 Gwh per year) clean energy to the resident of Gilgit town. Its main objective is to provide reliable and consistent power to the energy stricken Gilgit city.

Corporate Structure of the Project:

Indicative Government Support & Guarantee:

Licensing support, Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act, Approved GB Tourism Policy, Provision of enabling overall investment environment)

Expected Implementation Schedule:

1. Preparation : 2023-2024
2. Investor Solicitation 2023-2024
3. Construction 2023-2027
4. Operation 2028

Impact Outcomes of the Project

Green and Clean renewable Energy will lead to positive Environmental Impact as well as Considerable direct and indirect employment will be generated on its completion and the business activities will be promoted besides facilitating other sectors such as health, education, poultry development, cottage industry etc.

CONSTRUCTION OF 80 MW HPP

Sector: Energy Sector

Location: Phander and Gupis, Ghizer

Project Location Map



Key Indicators:

Project Cost Estimated: PKR 84,521 Million

NPV: 1568.561 Million

FIRR: 16.6 %

Payback: 16 Years

Concession Period: 30 Years

Development Period: 03 Years

Prospective investors are advised to undertake their own preliminary feasibility assessments.

Business Opportunity: Financers/Investors

Project Status: Project is ready for execution (Feasibility Study Completed, PC-I Ready) if financing is secured
Project Advisor / Consultant: GoGB

Description: The run-of-river project will be constructed near Pander Lake Ghizer at 170 Km from Gilgit City. It will add 80 MW (375 Gwh per year) cheap and clean energy to the energy system of GB. The main objective of development of the Project is to generate clean energy and to provide more reliable and consistent power to local/National consumers through Regional Grid for at least another 50 years. The project will also provide adequate facilities for generation, transmission and distribution of electrical energy keeping in view the present severe power shortage and future requirements for socio-economic development of the country.

Corporate Structure of the Project: PPP and SPV

Indicative Government Support & Guarantee:

Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act, National Power Policy Act 2015, Provision of enabling overall investment environment, PPIB Act 2012, GB Governor Order,

Expected Implementation Schedule:

1. Preparation 2023-2024
2. Investor Solicitation 2023-2024
3. Construction 2023-2028
4. Operation 2029

Impact Outcomes of the Project

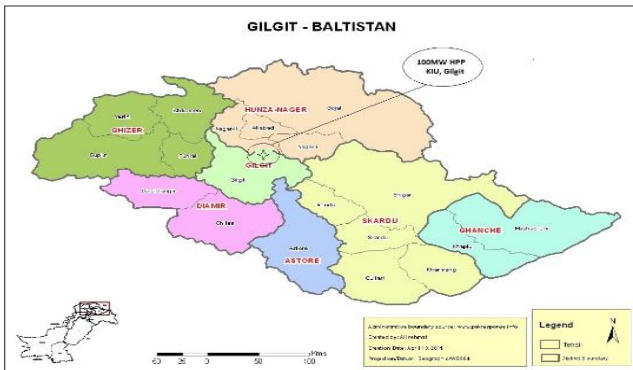
Green and Clean renewable Energy will lead to positive Environmental Impact as well as Considerable direct and indirect employment will be generated on its completion and the business activities will be promoted besides facilitating other sectors such as health, education, poultry development, cottage industry etc.

CONSTRUCTION OF 100 MW HYDROPOWER PROJECT

Sector: Energy Sector

Location: Kashiro Das, Gilgit

Project Location Map



Key Indicators:
 Project Cost Estimated: PKR 84,544.570 Million
 NPV: PKR 1415.561 Million
 FIRR: 16 %
 Payback: 12 Years
 Concession Period: 30 Years
 Development Period: 03 Years

Prospective investors are advised to

Business Opportunity: Financers/Investors
 Project Status: Project is ready for execution (Feasibility Study Completed, PC-I Ready) if financing is secured
 Project Advisor / Consultant: GoGB

Description: The project will add 100 MW cheap and clean energy to the energy system of GB resulting load shedding free in Gilgit region. It will generate 611.41Gwh electric energy per annum and the requirement of the area will be met for at least next 20 to 30 years. The site is located within the Gilgit district to feed the power supply existing 132 KV grid station in all directions to all load centers with minimum voltage drop and power losses.

Corporate Structure of the Project: PPP and SPV

Indicative Government Support & Guarantee:
 Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act, National Power Policy Act 2015, Provision of enabling overall investment environment, PPIB Act 2012, GB Governor Order, 2012

- Expected Implementation Schedule:**
1. Preparation 2023-2024
 2. Investor Solicitation 2023-2024
 3. Construction 2023-2028
 4. Operation 2029

Impact Outcomes of the Project
 Considerable direct and indirect employment will be generated on its completion and the business activities will be promoted besides facilitating other sectors such as health, education, poultry development, cottage industry etc. This project will have overall positive impacts on the socio-economic condition of the region.

POLICY AND LEGAL ENVIRONMENT

- Gilgit Baltistan Governance Order, 2018
- Electricity Act, 1910
- Private Power Infrastructure Board (PPIB) Act, 2012
- National Power Generation Policy, 2015
- Public Private Partnership (PPP) Act 2019, Gilgit Baltistan
- Public-private partnership arrangements for concession contracts under GB PPP Act 2019.

TARIFF DETERMINATION

The existing power system is not connected with the National Grid; however, Regional Grid Phase-1 project is under execution and GB will be connected to National Grid by 2030. The tariff is determined/ revised under the technical assistance of NEPRA and get approved from Gilgit Baltistan Cabinet each year. However, tariff will be competitive and negotiable for the investors and their investment will be secured as per relevant provisions under National Power Generation Policy, 2015.

INCENTIVES FOR INVESTORS

- Power Policy 2015 ensures security packages for national and international investments.
- Fiscal incentives such as exemption from income tax under Income Tax Ordinance 2001 shall be available to the new IPP and PPP projects.
- Financial regime such as 100% foreign ownership of companies is permissible.
- Ease of access to the national markets for the transmission of generated power.
- Flexible modes of investment are available.
- Fast-track processing of cases regarding investment.
- Exemption on Custom duties on Import of Machinery.



5.3 Information Technology Outlook

The global IT sector's rapid expansion, with an expected global IT spending reaching \$4.6 trillion in 2023 and cloud computing growing at a compound annual growth rate (CAGR) of 17.5% by 2025, is a promising picture³⁴. Gilgit-Baltistan (GB), with its strategic location and untapped potential, stands as a prime candidate for IT sector investment. The region's literacy rate, higher than the national average, coupled with its youth population skilled in digital technologies, presents a unique opportunity to cultivate a tech-savvy workforce adept at meeting the demands of the global IT and freelancing industry. This educational advantage is a cornerstone for developing IT infrastructure and fostering a conducive environment for tech start-ups, aligning with the global shift towards digital economies.

In Pakistan, the IT and freelancing sectors have seen exponential growth, with the country earning a reputation as a significant player in the global digital economy. Ranking 4th worldwide in freelancing

³⁴ <https://connect.comptia.org/blog/information-technology-stats-facts>

and generating \$500 million in FY-2022³⁵, Pakistan showcases a vast talent pool that contributes 9% to the global market. This success story, powered by nearly \$400 million in IT export remittances in 2022³⁶ and a promising BPO industry expected to reach \$405.6 billion by 2027³⁷, tells the potential for regions like GB to leverage national trends and carve out a niche in the IT and digital services sector. The presence of a skilled yet cost-effective workforce offers a competitive edge in attracting IT businesses and investors looking to capitalize on emerging markets.

The cost of doing business in GB is notably lower than in many other regions, attributed to cheap electricity, affordable rentals, and readily available human resources. These factors significantly reduce operational expenses, making GB an attractive destination for start-ups and established IT firms alike. Moreover, GB's moderate temperatures provide an ideal environment for data centers and outsourcing services, where climate control constitutes a major operational cost. This environmental advantage not only reduces the need for extensive cooling systems but also aligns with global sustainability trends, enhancing GB's appeal to eco-conscious investors.



The strategic deployment of the Pakistan-China Optical Fiber Cable, which provides high-speed internet connectivity, is a game-changer for GB. This infrastructure not only facilitates seamless communication and data transfer but also positions GB as a reliable hub for outsourcing services, software development, and IT-enabled services targeting global markets. The optical fiber cable enhances GB's connectivity, reducing latency and improving the reliability of IT operations, crucial for businesses that depend on real-time data exchange and cloud computing services.

Investing in GB's IT sector presents a unique opportunity for investors to tap into a growing market with significant cost advantages and strategic connectivity. The combination of low operational costs, a skilled workforce, strategic geographic positioning, and robust digital infrastructure makes GB a lucrative option for IT investments. With the right blend of policy support, investment in training and infrastructure, and leveraging its strategic assets, GB can attract significant IT investment, driving economic growth, creating jobs, and positioning Pakistan more prominently on the global digital map.

³⁵ Erozgar Pakistan.

³⁶ <https://tribune.com.pk/story/2372834/freelancers-earn-400-million-in-fy22>

³⁷ <https://www.businessmanagementreview.com/news/bpo-industry-driving-global-business-growth-nwid-1319.html>

The Opportunity!

A. Technology Infrastructure

The opportunity to pioneer a comprehensive IT infrastructure development in Gilgit-Baltistan stands out as not just an investment in technology, but a stake in the future. With the strategic infusion of capital into connectivity, data centers, freelancing hubs, IT parks, and digital villages that promises to reshape the socio-economic landscape of Gilgit-Baltistan while delivering substantial returns on investment.

The journey begins with enhancing the connectivity infrastructure in Gilgit-Baltistan. With global internet penetration reaching 59.5% by 2021³⁸, and the recognition by the World Bank that a 10%-point increase in fixed broadband penetration would increase GDP growth by 1.21% in developed economies and 1.38% in developing ones³⁹, the region's potential to leapfrog into the digital age is undeniable. Considering Pakistan's vision to increase its digital literacy and connectivity, as part of its "Digital Pakistan Vision," Gilgit-Baltistan represents a critical frontier for achieving nationwide digital inclusivity. Investing in broadband and WiFi infrastructure here not only taps into a growing WiFi market, projected to reach over USD 9.5 billion by 2025, but also sets the stage for a digital ecosystem conducive to economic growth and innovation.

The global data center market, valued at USD 187.35 billion in 2020 with expectations of a CAGR of over 10% through 2028, coupled with the cloud computing market's forecasted growth to USD 832.1 billion by 2025, underscores the burgeoning demand for digital storage and processing. Gilgit-Baltistan, with its strategic location and climatic advantages, offers an ideal setting for sustainable data center operations. This investment aligns with the increasing global reliance on data, promising investors a robust ROI typically ranging from 15-25%.

Pakistan ranks as the 4th most popular country for freelancing in the world, showcasing a vibrant talent pool eager to contribute to the global digital economy. By establishing freelancing hubs in Gilgit-Baltistan, we can unlock this human capital potential, offering local talents the platform to enhance their skills, access global markets, and significantly increase their incomes. Such an initiative not only supports the local economy but also aligns with global trends of remote work and digital entrepreneurship, offering investors a foothold in global freelance market.

The establishment of IT parks and digital villages represents a strategic investment in the technological and social development of Gilgit-Baltistan. IT parks act as catalysts for innovation, attracting tech companies and startups, and promoting research and development. Drawing inspiration from global success stories like Bangalore, IT parks in Gilgit-Baltistan could serve as incubators for the next wave of global tech leaders. Simultaneously, digital villages aim to democratize access to technology, echoing initiatives like Kenya's digital villages, and enhancing education, healthcare, and agricultural practices through digital means. This not only improves the quality of life for local communities but also opens new markets for digital products and services.

Investing in Gilgit-Baltistan's IT infrastructure presents a unique proposition: the chance to be at the forefront of a socio-economic transformation powered by digital innovation. This investment is more than financial; it's a contribution towards bridging the digital divide, stimulating economic growth, and positioning Gilgit-Baltistan as a model for digital development. With supportive national policies aimed at enhancing digital infrastructure and literacy, and a clear vision for the future, your investment in Gilgit-Baltistan promises not just lucrative returns but also the opportunity to make a lasting impact on the region and its people.

B. Tech Enabled Services

Investing in the tech-enabled services of Gilgit-Baltistan is a compelling case for investment in the region. In tourism, Gilgit-Baltistan offers an untapped potential for digital innovation. With the global tourism market previously valued at approximately \$1.9 trillion, the region's pristine landscapes and cultural heritage position it as a prime candidate for a digital tourism transformation. Implementing e-

³⁸ <https://www.statista.com/statistics/325706/global-internet-user-penetration/>

³⁹ <https://documents1.worldbank.org/curated/en/178701467988875888/pdf/102955-WP-Box394845B-PUBLIC-WDR16-BP-Exploring-the-Relationship-between-Broadband-and-Economic-Growth-Minges.pdf>

tourism services, online booking systems, and tour management platforms could significantly enhance the travel experience, aligning with global trends towards sustainable and immersive travel. Such digital advancements not only promise to elevate Gilgit-Baltistan's visibility on the international stage but also to generate substantial economic returns. The government's Vision 2025, which focuses on enhancing tourism's economic contribution through improved infrastructure and services, denotes the necessity of digital platforms to sustainably manage and promote tourism growth.

Agriculture in Gilgit-Baltistan, characterized by its production of high-quality organic produce, stands to benefit immensely from digital integration. The global organic food market, experiencing rapid growth, presents a lucrative opportunity for the region's agricultural sector. E-agriculture platforms could serve as a pivotal channel, connecting local farmers with global markets and ensuring premium prices for their organic products. Such digital initiatives not only aim to yield high returns on investment but also support sustainable farming practices, contributing positively to the region's economic and environmental sustainability. Agriculture, a key sector within Pakistan's economy, significantly benefits from leveraging digital platforms to connect directly with consumers, bypassing traditional supply chains and tapping into the increasing global demand for organic and sustainably farmed produce.

The crafts and gemstone industries in Gilgit-Baltistan reflect the region's rich cultural and geological heritage. Establishing e-commerce platforms for these products could unlock access to global markets, ensuring higher returns for local artisans and miners. This approach aligns with consumer trends favouring authenticity, craftsmanship, and ethical sourcing, offering substantial investment returns while promoting Gilgit-Baltistan's cultural heritage on a global scale.

Furthermore, Gilgit-Baltistan's strategic location along the CPEC route positions it as a critical hub for future transborder trade between China and Pakistan. Digitizing trade and logistics operations can streamline processes, reduce operational costs, and enhance trade efficiency. Such digital advancements are pivotal for integrating Gilgit-Baltistan into the New Silk Road, attracting further investment, and elevating the region's strategic significance globally. The digitalization of trade and logistics, aligned with CPEC, is expected to play a crucial role in achieving Pakistan's goal of increasing IT exports, thereby contributing significantly to the national economy.

Investment in Gilgit-Baltistan's tech-enabled services aligns with Pakistan's broader digital transformation and economic diversification goals. The Pakistan Digital Policy, aimed at enhancing digital literacy and fostering innovation, presents Gilgit-Baltistan with an opportunity to overcome traditional development hurdles through technology. This strategic approach positions the region as a digital innovation leader within Pakistan and serves as a model for rural and remote development worldwide.

C. Tech for Life

Technology for life is a golden opportunity for investors, promising substantial returns on investment (ROI) across several key sectors. By capitalizing on the region's strengths—such as its high literacy rate, tech-savvy youth, and strategic location—investments in education technology (ed-tech), healthcare technology (health-tech), agricultural innovations (agri-technologies), green energy, and electronic governance (e-governance) can deliver compelling economic benefits. These sectors not only offer the potential for high financial returns but also pave the way for GB to become a pivotal player in the global digital economy, enhancing its socio-economic fabric.

Investments in ed-tech, propelled by global trends in AI and VR, and health-tech, exemplified by telehealth and digital healthcare solutions, stand out for their high ROI potential. The rapid expansion of the global education technology market indicates a growing demand for innovative learning solutions, which GB can fulfil by developing smart classrooms and digital learning platforms. Similarly, the success of health-tech initiatives in providing remote care demonstrates the vast potential for investments to revolutionize healthcare in GB, making it more accessible and efficient. These sectors not only cater to immediate needs but also promise long-term financial returns by tapping into burgeoning markets and addressing critical human and educational needs.

Moreover, the integration of digital tools in agriculture and renewable energy sectors offers investors a chance to contribute to GB's sustainability and operational efficiency, further enhancing the ROI potential. Digital agriculture technologies can increase productivity and environmental performance, while investments in renewable energy and e-governance can streamline operations and foster

transparency. These advancements not only support GB's economic growth and sustainability efforts but also align with global investment trends towards digital and green technologies.

Investment Opportunities

Brownfield Investment Opportunities

Improvement in the telecommunications and internet sector. As per the estimates of 2022, the total population of GB is somewhat around 1.7 million. SCOM is the only network currently providing internet services in the area. There is a lot of room for betterment in the telecommunication and internet services in GB. In 2014, Zong invested 516 million USD and upgraded its telecommunication and internet services by introducing 3G and 4G in Pakistan. Within a span of two years, Zong's revenue generation hiked from 47.75 billion rupees in 2015 to 65.95 billion rupees in 2019. So, investing in the telecommunication and internet domain is a high demand and a significant brownfield investment opportunity. The earnings of SCO from GB stood at 5.5 billion rupees in 2020. Introducing 3G and 4G facilities in all regions of GB will bring a lot of customers as there is no other network offering it currently. Zong after introducing 4G in Pakistan, generated 65.95 billion rupees in 2019.

Software Development Firms. Investing in existing software development firms to expand their operations and capabilities. This could include hiring additional software engineers, designers, and project managers, as well as investing in research and development to create new software products and solutions, linking them with the wider markets within and outside Pakistan.

IT Outsourcing Services: Expanding existing IT outsourcing services in Gilgit Baltistan to attract more clients and projects from international markets. This could involve investing in marketing and sales efforts, as well as hiring additional staff with specialized skills to meet client demands.

IT Training and Education Centers: Upgrading existing IT training centers and educational institutions to enhance the quality of IT education and training provided to students and professionals in Gilgit Baltistan. This could involve modernizing facilities, updating curriculum, and investing in new technology and equipment.

Greenfield Investment Opportunities

IT Parks and Innovation Centers: Establishing IT parks and innovation centers equipped with modern infrastructure and facilities to attract IT companies, startups, and entrepreneurs. These centers can serve as hubs for collaboration, networking, and innovation in the region.

New telecommunication and internet services. Internet access in Pakistan is around 35 percent. It is one of the countries with the highest digital illiteracy. SCOM has been the sole internet provider in Gilgit Baltistan for years now. Since there are not many competitors in the market, the users must rely on SCOM. The introduction of new telecommunication services in the area with 3G and 4G facilities is a golden opportunity. SCOM itself is an example. It provides internet to around 1.7 million people in AJK and GB. As of 2019, the revenue generation of SCOM stood at Rs. 5.5 billion.³⁴ By this, it is evident that telecommunication investments have a massive potential for revenue generation.

New training institutes: There are only 18 colleges in Gilgit Baltistan—most of them being in the Skardu and Gilgit districts. Karakorum International University (KIU) and University of Baltistan (UOB) are the only universities in GB. KIU has its campuses in Chillas, Ghizer, Hunza, and Gilgit. KIU is the only institute offering computer and technological education to the students as a part of its 4-year honors program. Hence, setting up new training institutes is the need of time. Such institutes are specifically dedicated to providing advanced technological, computer-related, and scientific education.

E-agriculture: It is a new concept that seeks to digitize the agricultural domain. Under this concept, many attempts are being made worldwide such as the use of robots (for sorting and cleaning, irrigation, harvesting, pest control, fertilizer application), precision application of water and chemicals, geospatial, animal and weather monitoring, feeding the cattle, keeping check and balance on the production, and monitoring the health of livestock. Currently, states like China, Israel, and the USA are using digital agriculture techniques. NatureSweet is a company that owns six tomato farms in the US and Mexico.

They utilized artificial intelligence on their farm in Arizona and noticed a 2 percent increase in their tomato production in a week.

E-commerce: E-commerce relates to the commercial activities that take place using the internet. There are several types of e-commerce such as; business to consumer, business to business, direct to consumer, consumer to consumer, and consumer to business. All these types of e-commerce facilitate businesses. Easing the process of online financial exchanges, electronic markets, online retailing, etc. boosts e-commerce.

After the covid-19 pandemic hit the world, new economic patterns have emerged which highlight the importance of virtual connectivity for businesses. 35% of the growth in the e-commerce market of Pakistan was observed in the first quarter of 2021⁴⁰. Compared to the rest of Pakistan, the internet-usage is minimal in Gilgit Baltistan, even though the potential for e-commerce is plentiful—particularly for products like fruits, dry fruits, rugs, gemstones, handicrafts, oils, and juices, etc. Due to intermittent access to connectivity, the e-commerce platform remains largely untapped. Amazon, Alibaba, eBay, Walmart, JD.com are the top e-commerce giants in the world today. Recently, Amazon has added Pakistan to its sellers list. Setting up business accounts on Amazon and selling local GB products online can boost fiscal revenue. The Pakistan Ministry of Commerce revealed a 35% growth in e-commerce market size recently. Amazon is likely to facilitate the access of local GB products like gemstones, fruits, rugs, dry fruits, handicrafts, etc. to the international markets.

Introducing new telecommunication services that offer quality internet like 3G and 4G is yet another greenfield opportunity in GB. There is no other network providing high-quality internet in the region. Lack of competition suggests that investing in internet and telecommunication infrastructure will prompt hefty economic benefits for the investors.

IT Enabled Services (ITES) Setting up a company in Gilgit Baltistan that offers IT-enabled services such as business process outsourcing (BPO), knowledge process outsourcing (KPO), and IT support services can be a lucrative investment opportunity for investors.

Digital Tourism Initiatives: Establishing new digital tourism initiatives such as virtual tour platforms, travel booking websites, and destination marketing campaigns to promote tourism in Gilgit Baltistan. These initiatives can attract more tourists and visitors to the region, boosting the hospitality and tourism industry.

Setting up a Cloud computing company in Gilgit Baltistan There are several benefits to setting up a company in Gilgit Baltistan starting from tax incentives and cheap labour etc. Below are cloud computing services can be offered from Gilgit Baltistan as these are in high demand and the market of these are growing;

- **SaaS Development:** Investing in the development of SaaS products tailored to specific industries or business needs can be lucrative. Examples include project management tools, customer relationship management (CRM) software, and human resource management systems (HRMS).
- **Cloud Computing Services:** Offering cloud computing services such as infrastructure as a service (IaaS), platform as a service (PaaS), and software as a service (SaaS) can cater to businesses looking to scale their operations without significant upfront investments in hardware and software infrastructure.
- **Data Analytics and Business Intelligence:** Investing in data analytics and business intelligence solutions can help businesses in Gilgit Baltistan make data-driven decisions. This could involve developing analytics platforms, predictive modeling tools, or data visualization software.
- **Cybersecurity Solutions:** With the increasing digitalization of businesses, there is a growing demand for cybersecurity solutions. Investing in cybersecurity startups or offering services such as threat detection, vulnerability assessments, and security consulting can address this need.

⁴⁰ <https://tashheer.com/pakistan-e-commerce-report-2022/#:~:text=The%20Pakistani%20eCommerce%20market%20grew,the%20same%20period%20last%20year.>

- **Mobile App Development:** Developing mobile applications for various purposes, such as e-commerce, education, healthcare, and tourism, can be a lucrative investment opportunity. Mobile apps tailored to the unique needs of Gilgit Baltistan's residents and businesses could see significant adoption.
- **IT Consulting and Outsourcing Services:** Offering IT consulting and outsourcing services can help businesses in Gilgit Baltistan optimize their IT infrastructure, improve efficiency, and reduce costs. This could include services such as IT support, software customization, and system integration.
- **E-Learning Platforms:** Investing in e-learning platforms and online education solutions can address the need for accessible and affordable education in Gilgit Baltistan as well as the services can be offered to other regions of Pakistan. This could involve developing platforms for K-12 education, vocational training, or higher education.
- **Healthcare IT Solutions:** Developing healthcare IT solutions such as electronic medical records (EMR) systems, telemedicine platforms, and health information exchanges (HIEs) can improve healthcare delivery in Gilgit Baltistan and attract investment from both public and private sectors.

Investible Projects

Establishment across GB

Sector: Information Technology

Location:

1. Naltar, Gilgit
2. Phander Valley, Ghizer
3. Upper Kachura Lake, Skardu
4. Rama Valley, Astore
5. Karimabad, Hunza

Project Location Map



Key Indicators:
 Project Cost Estimated: PKR 86.70 Million
 NPV: PKR 30.96 Million
 FIRR: 13 %
 Payback: 10 Years
 Concession Period: 10 Years
 Development Period: 01 Years

Prospective investors are advised to undertake their own preliminary feasibility assessments.

Business Opportunity: Financers/Investors
Project Status: The Nomad Hub Project in Gilgit-Baltistan aims to transform the region into a premier destination for digital nomads by providing essential facilities. With reliable power, high-speed internet, and comfortable living arrangements, it seeks to tap into the growing trend of remote work, unlocking economic opportunities and global connectivity.

Description: The Nomad Hub Project in Gilgit Baltistan aims to establish cutting-edge Digital Nomad Hubs, capitalizing on the region's annual influx of over 02 million tourists. By providing essential amenities like reliable power, high-speed internet, and comfortable accommodations, the project seeks to position Gilgit-Baltistan as a prime destination for digital nomads, fostering economic opportunities and global connectivity.

Corporate Structure of the Project
 PPP Mode

Indicative Government Support & Guarantee:
 The government is dedicated to ensuring a seamless establishment of a Nomad Hub. The IT department will furnish the necessary space, support, and ongoing maintenance for the project's execution. Collaboratively aligning with government support, this initiative aims to transform the region into a premier destination for digital nomads by providing essential facilities.

<p>Expected Implementation Schedule:</p> <ol style="list-style-type: none"> 1. Preparation : June 2024 2. Investor Solicitation : July 2024 3. Establishment : 2025 	<p>Impact Outcomes of the Project</p> <ul style="list-style-type: none"> Outcome 1: Emergence of Digital Nomad Community Outcome 2: Economic Opportunities Outcome 3: Enhanced Tourism Appeal Outcome 4: Global Connectivity Outcome 5: Job Creation
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Unlocking Potential through Transformative Investment in E-Commerce

Sector: Information Technology

Location: Gilgit

Project Location Map



Key Indicators:

Project Cost Estimated: PKR 111.70 Million

NPV: PKR 64.7 Million

FIRR: 43 %

Payback: 10 Years

Concession Period: 10 Years

Development Period: 01 Years

Prospective investors are advised to undertake their own preliminary feasibility assessments.

Business Opportunity: Financers/Investors

Description: Gilgit-Baltistan's government is dedicated to catalyzing economic growth through e-commerce by bolstering digital infrastructure, implementing supportive policies, and fostering local skill development. This commitment aims to position the region as a hub for unique products on the global ecommerce stage, driving sustainable development and empowerment.

Corporate Structure of the Project

PPP Mode

Indicative Government Support & Guarantee:

The government pledges comprehensive support for e-commerce investment in Gilgit-Baltistan, focusing on enhancing digital infrastructure, implementing a supportive regulatory framework, providing financial incentives, fostering skill development, facilitating market access, ensuring consumer protection, supporting efficient logistics, promoting cultural exchange through e-commerce, collaborating with established platforms, and implementing robust monitoring and evaluation mechanisms. This commitment aims to create a conducive environment for sustainable growth, empower local entrepreneurs, and showcase the unique products of Gilgit-Baltistan on the global e-commerce stage.

Expected Implementation Schedule:

1. Preparation : June 2024
2. Investor Solicitation : July 2024
3. Establishment : 2025

Impact Outcomes of the Project

- Outcome 1: Economic Growth
- Outcome 2: Global Market Access
- Outcome 3: Job Creation
- Outcome 4: Cultural Promotion

Establishing Data Centers

Sector: Information Technology

Location: Gilgit

Project Location Map



Key Indicators:

Project Cost Estimated: PKR 287 Million

NPV: PKR 57.3 Million

FIRR: 13 %

Payback: 10 Years

Concession Period: 10 Years

Development Period: 01 Years

Prospective investors are advised to undertake their own preliminary feasibility assessments.

Business Opportunity: Financers/Investors

Description: Globally exist, only a fraction is outside the United States. In regions like Gilgit-Baltistan, with its strategic location and renewable energy, there's untapped potential for substantial contributions to the \$57 billion data center market. The lack of such infrastructure acts as a barrier to improved connectivity, economic development, and the establishment of a robust digital ecosystem in the region.

Corporate Structure of the Project

PPP Mode

Indicative Government Support & Guarantee:

The government is dedicated to ensuring a seamless establishment of a Data Center. The IT department will furnish the necessary space, support, and ongoing maintenance for the project's execution. Collaboratively aligning with government support, this initiative aims to enhance digital infrastructure, support technological advancements, and boost data management capabilities in the region.

Expected Implementation Schedule:

1. Preparation : June 2024
2. Investor Solicitation : July 2024
3. Establishment : 2025

Impact Outcomes of the Project

- Outcome 1: Enhanced Digital Infrastructure
- Outcome 2: Advanced Data Management
- Outcome 3: Increased Connectivity
- Outcome 4: Stimulated Technological Advancements
- Outcome 5: Facilitated Government Services

Mobile Phone Assembling Plant

Sector: Information Technology

Location: Gilgit

Project Location Map



Key Indicators:

Project Cost Estimated: PKR 244 Million

NPV: PKR 44.52 Million

FIRR: 27 %

Payback: 10 Years

Concession Period: 20 Years

Development Period: 5 Years

Prospective investors are advised to undertake their own preliminary feasibility assessments.

Business Opportunity: Financers/Investors

Description: Gilgit-Baltistan's government is dedicated to catalyzing economic growth through e-commerce by bolstering digital infrastructure, implementing supportive policies, and fostering local skill development. This commitment aims to position the region as a hub for unique products on the global ecommerce stage, driving sustainable development and empowerment.

Corporate Structure of the Project

PPP Mode

Indicative Government Support & Guarantee:

The government pledges comprehensive support for e-commerce investment in Gilgit-Baltistan, focusing on enhancing digital infrastructure, implementing a supportive regulatory framework, providing financial incentives, fostering skill development, facilitating market access, ensuring consumer protection, supporting efficient logistics, promoting cultural exchange through e-commerce, collaborating with established platforms, and implementing robust monitoring and evaluation mechanisms. This commitment aims to create a conducive environment for sustainable growth, empower local entrepreneurs, and showcase the unique products of Gilgit-Baltistan on the global e-commerce stage.

Expected Implementation Schedule:

4. Preparation : June 2024
5. Investor Solicitation : July 2024
6. Completion: 2025
7. Establishment : 2025

Impact Outcomes of the Project

- Outcome 1: Economic Growth
- Outcome 2: Global Market Access
- Outcome 3: Job Creation
- Outcome 4: Cultural Promotion

ESTABLISHING SOFTWARE HOUSES IN GILGIT-BALTISTAN

Sector: Information Technology Department Gilgit-Baltistan

Location: Tech Enclave Chilmish Das, Gilgit

Project Location Map



Key Indicators:

Project Cost Estimated: PKR 28.30 million/
USD 0.10Million IRR 42%

NPV USD 0.4 M

Payback 2.93 Years

Concession Period 10 years

Development Period 1 Years

Prospective investors are advised to undertake their own preliminary feasibility assessments.

Business Opportunity: Financers/Investors:

Project Status: project status can be Sole Proprietorship and the location is identified based on technical grounds.

Project Advisor / Consultant: IT Department Gilgit-Baltistan

Description: The project proposes investment in software houses in Gilgit-Baltistan specializing in database development and animation, targeting both local and export markets. Leveraging GB's readily available IT talent trained in AI, Blockchain & Data Science and infrastructure, the company will offer efficient services with skilled staff. The venture presents a promising opportunity in GB's booming IT sector.

Corporate Structure of the Project: PPP Mode

Indicative Government Support & Guarantee:

Tax breaks and holidays, Matching funds, Fast-track permitting process, Data privacy and security framework, Regulatory sandbox, One-stop shop facilitation center, Marketing and promotion, Dispute resolution mechanism, Transparency and accountability, Licensing support, Sovereign Guarantees, NOCs, Permits, Land provision, Approved Public Private Partnership Act, Adaptation of Federal IT Policies, Provision of an enabling environment.

Expected Implementation Schedule:

1. Preparation: June 2024
2. Investor Solicitation: July 2024
3. Completion: 2025
4. Establishment: 2025

Impact Outcomes of the Project

Outcome 1: Economic Growth through increased export revenue from software development services.

Outcome 2: Potential for future growth and expansion, creating even more jobs and economic benefits.

Outcome 3: Technological Advancement through the adoption of latest technologies and increased accessibility to high-quality software solutions and best practices in software development.

Outcome 4: Developed new skills, innovation and entrepreneurship within the GB's IT community & Tech industry.

POLICY AND LEGAL ENVIRONMENT

- Overall planning, policymaking, and execution of schemes for the development, up-gradation, and improvement of the IT sector across GB.
- Support to the private sector industry in the form of incentives for setting up various IT parks and software technology parks.
- To ensure access to finance for young and emerging entrepreneurs, GB Govt. has introduced a subsidized loan scheme that will encourage more youth to start their businesses in the IT sector.

INCENTIVES FOR INVESTORS

- GoGB ensures security packages for national and international investments.
- A financial regime such as 100% foreign ownership of companies is permissible.
- Tax rebates.
- Flexible modes of investment available.
- Fast track processing of cases regarding investment.
- Exemption on Custom duties on Import of Machinery.



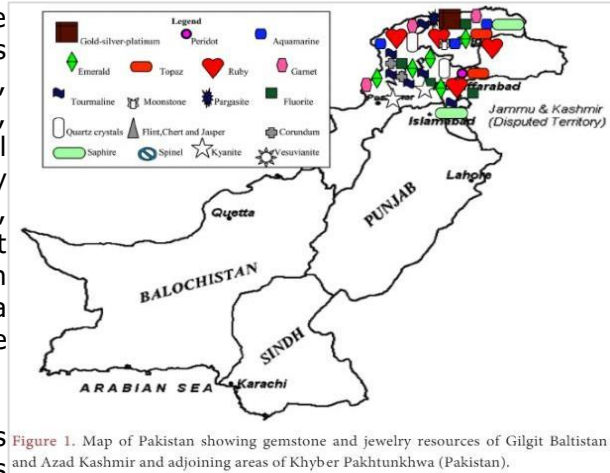
5.4 Minerals and Mining Outlook

Gilgit-Baltistan (GB) is a land brimming with mineral wealth. Reports from reputable sources like the World Bank and the Geological Survey of Pakistan (GSP) have consistently highlighted the vast potential of GB's minerals sector. The region is endowed with a wide array of minerals, including but not limited to, gemstones, gold, silver, platinum, copper, lithium, lead, and antimony, making it an attractive prospect for investors looking to tap into this untapped wealth. Gilgit-Baltistan is one of the primary gemstone mining areas with an estimated reserves of 80% of total gem reserves of Pakistan and is believed to have fifth largest gemstone deposits in the world.⁴¹

⁴¹ Mines and Minerals Department, Gilgit Baltistan.

The World Bank's economic reports on Gilgit-Baltistan have brought to light the significant mineral potential that the region possesses. These reports underscore the importance of the mining sector as a pivotal element in driving economic growth and sustainable development within GB. With an estimated annual extraction value of Rs. 500 million from gemstones alone, the mining sector stands as a testament to the region's capability to contribute substantially to Pakistan's economy.⁴² The acknowledgment by such a global institution not only validates the mineral wealth of GB but also encourages potential investors by highlighting the plethora of opportunities available.

Supporting the World Bank's assessments, the Geological Survey of Pakistan (GSP) has undertaken extensive surveys and explorations, revealing GB as home to 32 types of gemstones, which account for 95% of Pakistan's total gemstone production.⁴³ This impressive diversity includes high-value gemstones like rubies, emeralds, and sapphires, which are highly sought after in global markets. The GSP's efforts in mapping and exploring these deposits provide a solid groundwork for investment, showcasing the region's rich mineral diversity and abundance.



Beyond gemstones, the GSP's exploratory projects have also identified significant reserves of precious metals such as gold, silver, and platinum, along with base metals in GB. These findings are crucial for investors, as they open new avenues for exploration and extraction in a region already known for its mineral wealth. Studies like the reconnaissance of copper and gold mineralization in the Barit-Hunkoi Area of Gilgit-Baltistan not only demonstrate the presence of valuable resources but also guide future exploration efforts, making GB a compelling destination for mining investments.

The gemstone sector presently employs thousands of people as miners and traders, and it has potential to create additional opportunities for youth as manufacturers, appraisers, designers and cutters / polishers of gemstones in a developable and certainly growable processing industry. If the sector is managed and organized in a proper way, it can provide employment to thousands more, making this sector as one of the largest employers in the region. The gemstone sector in GB has a vital role to play in the social and economic development of the region.

For each miner's job at the grassroots, the gemstones industry can create up to 90 additional jobs at different levels along its value chain. (Gary et al, 2007). Based on number of artisanal miners (10,000) and assuming that half of these jobs will be created in GB, the future employment generation potential of the sector can safely be estimated between quarter & half a million.⁴⁴

The potential for lithium, lead, and antimony mining in GB further broadens the spectrum of opportunities. Given the increasing global demand for lithium-ion battery technology and lead and antimony in various industrial applications, the GSP's proactive approach in assessing the occurrence of these minerals in GB highlights the region's capacity to contribute to the global mineral market. These efforts points towards the importance of continued exploration and investment in the mining sector of GB.

⁴² <https://skarducity.com/2020/06/23/gemstones-in-gilgit-baltistan-pakistan/>

⁴³ <https://pdfpk.net/pdf/wp-content/uploads/2023/03/490-23.pdf>

⁴⁴ Mines and Minerals Department, Gilgit Baltistan

Types of Minerals, Rocks, and Stones available in Gilgit Baltistan

Gemstones	Metallic Minerals	Dimensional Stones	Industrial Rocks
Ruby	Gold	Marble	Dolomite
Emerald	Copper	Granite	Limestone
Aquamarine	Lead		
Tourmaline	Antimony		
Topaz	Molybdenum		
Garnet	Iron		
Epidote	Lithium		
Agate	Mica		
Serpentine	Feldspar		
Blood Stone	Calcite		
Quartz			
Amazonite			

Source: Mines and Minerals Department, GB

The National Mineral Policy of 2013, aimed at attracting private and international investments into Pakistan's mining sector, is particularly relevant for GB. This policy framework encourages sustainable mining practices and the development of infrastructure to support mining activities. For investors, this policy environment, coupled with GB's vast mineral resources, offers a conducive climate for investment, promising significant returns while contributing to the region's economic development.

The infrastructure in GB, though currently nascent, represents a unique opportunity for growth. Investment in transportation, power, and mining facilities can dramatically increase efficiency and reduce operational costs, enhancing the profitability of mining operations. This presents a win-win scenario for investors and the local community, as the development of infrastructure will not only support mining activities but also contribute to the overall development of the region.

Environmental sustainability and community engagement are critical considerations for mining operations in GB. Sustainable mining practices are essential to mitigate environmental impacts and ensure the conservation of the region's pristine natural beauty. Engaging with local communities and ensuring that they benefit from mining activities is crucial for the long-term success and acceptance of mining projects. Investors can lead the way in responsible mining practices that prioritize environmental protection and social development.

The diverse mineral wealth of GB, supported by favourable policy frameworks and the promise of infrastructural development, makes the region an attractive destination for mining investments. The combination of gemstones, precious metals, industrial minerals, and the potential for discovering new reserves offers a broad spectrum of opportunities for investors. By leveraging GB's mineral resources responsibly and efficiently, investors can unlock significant value, contributing to the economic growth of the region and generating substantial returns on their investments.

Gilgit-Baltistan's mining sector represents a frontier of opportunity, rich with potential yet largely untapped. With the backing of authoritative reports from the World Bank and the Geological Survey of Pakistan, along with a conducive policy environment, GB stands ready to welcome investors to its mineral-rich lands. The combination of natural wealth, strategic investments, and sustainable practices promises not only economic benefits for investors but also a brighter future for the people of GB and Pakistan at large.

Investment Opportunities

Brownfield Investment Opportunities

Exploration and Prospecting Investing in geological surveys, exploration activities, and prospecting efforts to identify and assess the mineral potential of untapped areas in Gilgit Baltistan. This could involve conducting airborne surveys, geological mapping, and drilling exploratory boreholes to discover new mineral deposits.

Lapidary Facilities and Quarry Management To upgrade the quality and quantity of extracted minerals and gemstones, it is essential to infuse the technologically advanced methods of extracting the minerals from the quarry. Presently, in GB indiscriminate blasting techniques are used for mining consequently wasting 75 percent of the total yield and also damaging the natural reserves. There is also a need to install technology for the disposal and management of quarry and processing waste. Quarry Reclamation includes concurrent revegetation with native species, refilling exhausted mines with waste rock, recycle waste rock as construction material, and using deeper pits that can be filled with water for pisciculture.

Improved Working conditions: Introducing safety and security protocols Mining accidents, mine collapses, rockfalls, and plunging over a cliff have all been observed from time to time. Additionally, the use of explosives, massive blasting, and drilling poses a threat to the ecosystem. On the surface and beneath, most Pakistani miners utilize Chinese-made gasoline-powered rock drilling. There is no airflow, and miners claim that they only stop working when they no longer can bear pollution in air, light fuse, shortage of oxygen, and noise of the drill. According to the Pakistan Central Mines Labour Federation, on an average between 100 and 200 miners die in mine accidents every year in Pakistan⁴⁵. Approximately 40,000 miners in northern Pakistan complain of lung problems from both silicosis and carbon monoxide poisoning⁴⁶. However, getting buried under rock falls or falling from a perch on a cliff face are the primary causes of death in this harsh environment.

State of the art Gemmological Laboratory Currently, the jewellery production industry is unable to flourish and reach its true potential mainly due to redundant techniques and outdated technology used in gemstone preparation and manufacturing of jewellery. The productivity can be increased by installing and operationalizing a state-of-the-art Gemmological laboratory that can facilitate the use of innovative techniques and technology in the art of cutting, polishing of gemstones, and manufacturing jewellery. Gilgit Baltistan government has launched few lapidary Centers under the Directorate of Mines and Minerals GB, these centers are equipped with Gemmological Testing Equipment / Lapidary Machinery, Accredited/Trained Staff. From the private sector side, Rupani Foundation is promoting the gemstone production industry and has launched labs along with the establishment of five gem centers across GB where the workforce is being trained and equipped with the latest techniques of gemstones processing and jewellery manufacturing.

Upgradation of machines At present, the number of jewellery items manufactured in GB is very low. For example, in a gems and jewellery shop in Altit fort, there are only two machines for jewellery manufacturing, consequently, only five to six rings are being manufactured per day. This number can be increased if technologically advanced and efficient machinery is introduced to enhance production by cutting on the production costs of traditional methods of jewellery making. Along with the upgradation of machines, up-gradation of techniques is required in all segments of gemstone value chain, e-g, mining technology, lapidary processing machinery, gemmological advance testing equipment, Jewellery manufacturing equipment/tools etc.

Greenfield Investment Opportunities

Modern mining techniques and advanced technology The minerals and mining sector is under the spotlight because of the potential it holds. The current jewellery market of Pakistan is USD 10 billion, and the annual export of gems and stones is \$3.7 billion.⁴⁷ 75% of wastage takes place because of the absence of mechanized and advanced mining practices.⁴⁸ However, the traditional methods of mining in GB have stunted the growth of this sector. Shovels, chisels, hammers, and pans are among the tools used. Minecarts transport the materials collected during the mining process. The traditional methods of mining minerals and gemstones are not only limited but time taking and risky. For example,

⁴⁵ <https://tribune.com.pk/story/2015519/6-neglect-miners-safety/>

⁴⁶ <https://www.palagems.com/klanin-pakistan>

⁴⁷ <https://www.thenews.com.pk/print/350751-pakistan-annually-exporting-3-7b-gems>

⁴⁸ KIU, Gilgit Baltistan

the fall of rocks and blasting cause deaths of miners, and during blasting up to 50 percent of gemstones are damaged in terms of value which results in economic loss⁴⁹. The introduction of modern techniques is a high demand as it can help in not only saving time but also boosting the economy through rapid analysis of the presence of valuable minerals and gemstones. Better mining techniques, for instance, geomodelling, 3D modelling, resource mapping, can play a massive role in catalyzing the promotion of local business and the growth of the economy.

Value Addition within Gilgit Baltistan One of the biggest reasons for the lack of development of the mining sector in Gilgit Baltistan and Pakistan is value addition. It refers to the process whereby value is added to the product. For example, if the raw mineral is processed, value is added to it. According to an estimate, only 25% of raw material went to processing centers, and most of the raw material was exported from mines in raw form for value addition. For example, India imports gemstones from Pakistan raw form and sold them after processing at a hundred times high price to Pakistan as well as globally. So technically, Pakistan buys its product at higher rates. That is why the mechanism of value addition within the country is most important which can magically boost the economy of region and state.

Moreover, around 75% of the gemstones produced in Pakistan are exported in raw form. The more refined a mineral is, the more will be its market value. Hence, most of the raw gemstone sales has failed to produce sufficient economic benefit. Setting up local refining and processing plants and investing in equipment to enable the process of mineral processing in GB will boost the revenue generation by gemstone sales. Gem Testing Laboratory has also been established in Gilgit because of a collaborative project between the Rupani Foundation (RF) and USAID. This helps in the testing and certification of gemstones which then paves way for setting a fair price for the products.

Moreover, the Gemstone Testing Laboratory with adequate pool of gemological equipment has been transferred to Gilgit Baltistan by the GoGB from Pakistan Gems and Jewellery Development Company (PGJDC). The qualified Gemologist with accreditation from AIGS Bangkok-Thailand in Gemstone Testing and Certifications available for gemological testing at the Department of Mines and Minerals GB.

Setting up of new laboratories and processing plants Proper testing of the minerals must be done to check the quality standards. There is one gem identification laboratory of PGJDC in Gilgit. It tests and grades the minerals. Laboratories need to be set up with modern machinery and systems that would ensure the quality of the gems and then the sale and prices must be set accordingly. Setting up of new machinery in the existing testing laboratories to upgrade the standards of testing as well as to save time. Currently, PCSIR laboratories are set up in Lahore, Islamabad, Peshawar, Skardu, and many other cities in Pakistan. PCSIR offers tests to determine the suitability of mineral ores for industrial use, studies on the determination of mineral composition of mineral raw materials, products etc., studies on the beneficiation of mineral raw materials to produce concentrates, Identification and evaluation of the mineral resources, Jewellery Hallmarking etc. Also it is significant to mention that Department of Mines and Minerals, GB has established Mineral Testing Laboratory in Gilgit, which is equipped with XRF, Atomic Absorption etc. to test mineral ores. It is required to upgrade the laboratory with addition of advanced testing equipment.

Two Gemstones Lapidary Centers have been established under administrative control of Directorate of Mines and Minerals GB, one in district Gilgit and the other in district Skardu. The Lapidary Centre in Gilgit, shifted from federal government (PGJDC) is equipped with machinery and equipment along with trained and experienced staff to offer gemstone identification and certification, and cutting and polishing lapidary processes, including faceting, carving, beads and cabochons making, tumbling and specimen dressing. One Accredited Gemologist trained from Asian Institute of Gemological Sciences Bangkok-Thailand available for Gemological Testing. In gemstone cutting and polishing section two trainers have already received training from Gems and Jewellery Institute of Colombo Sri Lanka. The center has received an adequate pool of machinery and equipment to serve the gemstone sector of GB in skill development as well as to offer services of cutting and polishing and gemstone grading and certification.

The lapidary center in Skardu-Baltistan has been established with a pool of machinery to carry out training/processing in gemstone cutting and polishing including Faceting and Carving.

Rupani Foundation, under its Gems and Jewellery project with USAID, has also set up a gemstone processing center across GB.

⁴⁹ Seminar held by directorate of mines and minerals, GB

Investible Projects

Up-Gradation of Lapidary Centre-Gilgit to A Centre of Excellence in Gemstones Certification, Branding, and Cutting & Polishing Services in line With International Standards

Sector: Minerals and Mining Sector

Location: Gilgit

Project Location Map



Key Indicators:

Project Cost Estimated: PKR245 million

NPV: PKR 1.2 billion

FIRR: 25%

Payback: 12 Years

Concession Period: 20 Years

Development Period: 03 Years

Prospective investors are advised to undertake their own preliminary feasibility assessments.

Business Opportunity: Financers/Investors /PPP Mode

Description: Gilgit-Baltistan is one of the primary gemstone mining areas with an estimated 80% of total gem reserves of the country. Pakistan is believed to have fifth largest gemstone deposits in the world. The gemstones from the region of Gilgit-Baltistan reach to the entire major national and international markets, indirectly mostly in rough form. Currently there is limited processing and value addition in the gems value chain as there are few lapidaries in the region with very basic technical and physical infrastructure. To exploit the true potential of this sector and make it the engine of development and economic growth, it needs to be upgraded in line with international standards and through adaptation of mechanized mining and processing techniques. This will develop the complete value chain from mine to market. To alleviate the acute shortage of skilled workers in the Gilgit-Baltistan Gemstones sector and to mitigate the value loss due to export of indigenous gemstones in rough and un-certified form the existing Lapidary Center of Directorate of Mines and Minerals is desired to be upgraded to a Centre of Excellence in Gemstones Testing, Branding, Cutting and Polishing Services.

**Corporate Structure of the Project
PPP Mode – Feasibility Stage**

Indicative Government Support & Guarantee:

Tax breaks and holidays, Matching funds, fast-track permitting process, Data privacy and security framework, Regulatory sandbox, Partnerships with educational institutions, One-stop shop facilitation centre, Marketing and promotion, Dispute resolution mechanism, Transparency and accountability, Licensing support, Sovereign Guarantees, NOCs, Permits, Land provision, Gilgit-Baltistan Public Private Partnership Act. Provision of an enabling environment.

Expected Implementation Schedule:

- 1. Preparation : June 2024
- 2. Investor Solicitation: July 2024
- 3. Establishment : 2025

Impact Outcomes of the Project

- Outcome 1: Improved finished products
- Outcome 2: Brand making and marketing.
- Outcome 3: Infrastructural Development
- Outcome 4: Job creation and financial success

POLICY AND LEGAL ENVIRONMENT

- Regulation of Mines and Oilfields and Mineral Development (Government Control) Act, 1948,
- Mining Concession Rules 2016 (amended 2019)
- Mines Act, 1923.

INCENTIVES FOR INVESTORS

- GoGB ensures security packages for national and international investments.
- A financial regime such as 100% foreign ownership of companies is permissible.
- Tax rebates
- Flexible modes of investment available.
- Fast track processing of cases regarding investment.
- Exemption on Custom duties on Import of Machinery



5.5 Industries, Labour, and Commerce Outlook

Gilgit Baltistan is blessed with countless natural resources and has tremendous potential to strengthen, grow, and make its industrial sector competitive to improve its economy and create employment opportunities. Due to various reasons in the past that include location disadvantage due to long distance from the port (increasing cost of imports and exports besides major consumer market in the down country), security challenges, lack of requisite infrastructure, energy crisis, financial constraints, and absence of a systematic mechanism for ease of doing business, the industrial sector could not achieve the expected growth.

Trade and commerce-related investments create the shell for all the other sector investments such as agri-business, minerals, hospitality, and others.

The sector has taken few key steps with a strong commitment to allocate resources and develop the industrial sector. In the same pursuit, the Government has also laid a strong emphasis on developing a convenient and integrated platform for ease of doing business to facilitate prospective investors. Furthermore, with significant improvements in infrastructure due to investments made through CPEC, the investment climate of Gilgit Baltistan is extremely promising.

A special focus is also being given to the development of Special Economic Zone (SEZ) and Industrial Zones to create clusters of Industrial excellence to start the growth of industries. The SEZs are prioritized to attract investors to strengthen the industrial sector and create a "Pull Factor" to form joint ventures with local investors, invest in utilizing indigenous natural resources, bring new technology, invest in labor-intensive and export-oriented industries, and add value to local products. Therefore, the GoGB stresses the importance of developing critical infrastructure facilities through the Public Private Partnership (PPP) process which will help the Government to optimally utilize its resources while extending full facilitation to the prospective investors.

The industrial cooperation under CPEC provides Gilgit Baltistan a great opportunity to start the industrialization process. The Maqpondas prioritized SEZ is the only SEZ in CPEC portfolio that is going to be done in Build operate and transfer (BOT) mode with Chinese state-owned enterprise or other potential developers and is like to bring Joint Ventures (JVs). Similarly, Chinese labour is graduating from low-paying to high-paying jobs, and along with the introduction of improved labour laws, the labour costs are also rising sharply. The average labour cost of an operational hour in the coastal and inland regions of China is thrice the cost in Vietnam and Pakistan. These pressures are compelling Chinese manufacturers to look elsewhere to relocate. For now, the Chinese focus seems to be on Vietnam, Myanmar, Cambodia, Indonesia, and Bangladesh.⁵⁰

The investment opportunity can leverage its natural endowments and low-cost Human Resources of Gilgit Baltistan to attract Chinese Industries to relocate to Gilgit Baltistan. The sunset industries in China are being pushed out due to overcapacity, rising production costs, and environmental factors. These include copper, aluminum, cement, papermaking, iron & steel, light engineering, and low-end motors and machines⁵¹. While smelting would need abundant availability of inexpensive energy, the potential exists in agri-businesses, food processing, mining, cement, light industrial products and transportation machinery, household appliances and some of the other sunset industries can be relocated in Gilgit Baltistan.

Central Asian markets have immense potential and if products and few goods produced in GB, are marketed properly and strategically, exports can be increased significantly when directed to those markets.

Transit and trade opportunities to and from Pakistan

Some important passes link Gilgit-Baltistan with China, Afghanistan, and India. The Kilik, Mintaka, Khunjerab, Shimshal, Mustagh, and Karakoram Pass link Pakistan with China Darkot Pass is a link from Yasin to Chitral and then to Wakhan through Baroghil Pass. Irshad Pass connects Chipursan River Valley/ Baba Ghundi in Gojal with the Wakhan corridor in Afghanistan.

At 5,000 meters above sea level, Khunjerab Pass is a major trade route between China and Pakistan and an important gateway to South Asia and Europe. The Khunjerab Pass is the highest border crossing in the world and the highest point on the Karakoram Highway.

The importance of Gilgit-Baltistan as a transit point had increased initially with the construction of the Karakoram Highway and now with the start of CPEC. Trade volume between China and Pakistan through the Khunjerab Pass is likely to increase drastically after CPEC.

⁵⁰ <https://tribune.com.pk/story/1976992/cpec-industry-relocation>

⁵¹ <https://kpboit.gov.pk/wp-content/uploads/2020/02/KP-Industrial-Policy-2020.pdf>

Supply of Tradeable Products to the Economy of GB

Fruits as Commodities: The specialty in fruits involves apricots, pears, apples, peaches, grapes, mulberry, cherries, and plums. In dry fruits, almonds and walnuts are the most common. GB also produces cereal crops including wheat, barley and maize.

Flowers as Commodities: The region is also rich in flowers and medicinal plants; 342 different species of flowers are naturally grown in 3,584 km² Deosai National Park at an altitude of 3500 to 5200m. This creates a big potential for the flower industry to bloom in GB, to create high-end products like luxury bouquets. GB's favorable climate and diverse terrain provide an ideal environment for cultivating a variety of flowers, including roses, tulips, and indigenous wildflowers.

Minerals and Mining: With its rich geological landscape, GB is endowed with abundant mineral resources, including gemstones and minerals like marble and granite. The extraction and trade of these resources can not only generate revenue but also create employment opportunities for the local population. Gemstone mining, in particular, has gained prominence, with GB being a significant contributor to Pakistan's gemstone industry. Additionally, marble and granite quarrying activities contribute to the construction and infrastructure sectors, both locally and nationally. Furthermore, the export of these tradeable mineral products enhances GB's economic standing by fostering trade relationships and attracting investment in the region's mining sector. However, sustainable mining practices and effective regulation are essential to ensure the long-term viability of these resources and to mitigate environmental impacts.

The Economic Demand of Trade and Commerce in GB

Undertaking tourism, tech-based services, minerals-related activities, agri-business, and energy-related activities all require and thus generate demand for trade and commerce. Trade and commerce investments are the missing 'aggregators' that will enable the development of brand GB. Demand for trade and commerce in GB can be slotted into the following dimensions.

Connectivity and Logistics

For trade to happen in any sector connectivity, defined as connecting goods, people, and data, is essential physically as well as virtually. The availability of infrastructure plays important role in markets connectivity and trade promotion while the lack of infrastructure disrupts markets and retards trade. Infrastructure makes a huge difference in the process of development and the comparative edge of any region, particularly in trade. Similarly, Information and Communication Technologies (ICT) contribute to business internationalization by reducing the transaction costs linked to and increasing the efficiency of the logistics process (World Bank, 2016). This results in lower trade costs and higher trade flows. The effect of Internet use on trade using a sample of 200 countries in the period 1990–2006 was analyzed and the results show that a 10% increase in Internet users increases international trade by 0.2–0.4%⁵².

E-Commerce

E-Commerce involves the purchase of goods and services between businesses, households, individual consumers, governments, and other public or private organizations which are carried out via the Internet mainly. Commerce is enabled by the consumer to business to consumer services, again both physical and virtual, such as advertising and booking and payment platforms.

The number of cellular subscribers increased from 189.44 million by end December 2023 to 190.18 million by end January 2024, the Pakistan Telecommunication Authority (PTA) data revealed. The number of 3G and 4G users in Pakistan increased from 127.68 million by end of December 2023 to 128.79 million by end of January 2024⁵³. Despite these staggering figures, e-commerce remains an unexploited market in the country, In the due course of globalization Pakistan has embraced E-commerce and it is intruding in all the economic sectors of Pakistan, like Banks, Airlines, Medical, Engineering, Insurance, Telecommunication, Manufacturing (products), Trading and Retailing, Even the

⁵²https://www.researchgate.net/publication/271940982_Estimating_the_effect_of_the_Internet_on_international_trade

⁵³ <https://www.brecorder.com/news/40290309>

remote areas in Pakistan Like Chitral are using e-commerce platforms. There is a huge prospect of e-commerce-related businesses in Gilgit Baltistan as the mobile and internet connectivity in the region is on the rise and the region is expected to turn into a business hub with CPEC.

Special Economic Zones (SEZs) - Nearest to China

Covering 250 acres at Maqpoon Das, Minawar, Gilgit

Government of Gilgit Baltistan has allocated 250 Acres government land for Establishment of special Economic Zone at Maqpoon Das Gilgit with the objective to attract investment in medium and large scale industries in the strategically located SEZ. The governments of GB (industries department) has completed feasibility study (Geo technical, topography, financial plan, management plan & development Plan etc) and also conduct a feasibility of 48 MW captive hydropower project on the run of river near Maqpoon Das.

- Nearest SEZ with China and included in CPEC
- 184 KM from Sust dray port ,30 KM form Gilgit Airport and 190 km form Skardu international airport
- Feasibility study completed.
- Land available for future expansion.
- Just 2 KM away from Bunji Dam
- Feasibility for 48 MW captive hydropower on run of River completed.
- 10-year Tax exemption for Developers
- 10-year tax exemptions for Enterprises



Covering 194 acres Minawar Gilgit

- Completion of feasibility study and master plan
- Adjacent to KKH
- Home to food, agriculture, gemstones, and construction industries
- Upper elevational area divided in three main blocks:
 - Food Processing & Cold Storages
 - Packaging & Warehousing
 - Housing /Residential
- Lower elevational area reserved for two blocks:
 - Agricultural Implements & Pesticide
 - Gemstone, Marble & Construction Material.



Investment Opportunities

Brownfield Investment Opportunities

Trade Infrastructure Upgrades: Upgrading trade infrastructure such as Sost ports, airports, and inter country crossings to facilitate the movement of goods and commodities in and out of Gilgit Baltistan. This could involve expanding cargo handling capacity, improving customs clearance processes, and enhancing logistics and transportation networks.

Introducing the Agri-tech based business models these models will address the redundant business processes and re-engineer business processes by integrating technology and reducing number of steps involved in procurement of goods, services, and people.

Factory Modernization Investing in the modernization of existing factory facilities in Gilgit Baltistan to increase productivity, efficiency, and competitiveness. This could include upgrading machinery, adopting new technologies, and implementing lean manufacturing practices.

Greenfield Investment Opportunities

Establishment of Industrial Zone at Minawar Gilgit

The establishment of Industrial Zone at Minawar in District Gilgit is planned to play an important role in the success of China Pakistan Economic Corridor (CPEC). It shall further aid the local and foreign investors by providing all the facilities in one place and facilitating industries producing products through the presence of vendor industries in proximity. The project shall have numerous social, economic, and financial benefits for the local population including business and job opportunities, cash flow, industrial growth, better connectivity and linkage between China and southern parts of Pakistan. It is located just 17 KM from Gilgit Airport and on the main CPEC.

Establishment of Special Economic Zone at Maqpondas Gilgit

The project is included in CPEC. The project is intended to provide a motivation to increase the economic activities in the region. By developing Special Economic Zone, the high-quality infrastructure, best location, and benefit of clustering will create an ideal business environment to provide for the organized growth of industry. The concentration of industry in a single area will also encourage the development of support industries and suppliers that in turn increases ease of doing business. The Special Economic Zones models had been very successful in different countries as it helps developing countries to rationalize and concentrate their infrastructure investment into well-placed industrial areas.

Warehouses (regular and temperature-controlled) Storage facilities are pivotal for the trade of all types of goods. Construction of storage facilities including warehouses for storage of general goods and temperature-controlled warehouses for storage of Agri-products is a potential area

of investment in GB as GB lacks these modern warehouses. Currently, the Sost Dry port is the only facility for storage of non-perishable /general trade items and that too with limited capacity.

- **Private ports:** Construction of private ports for loading, off-loading, aggregation, and disaggregation of goods and handling containers is also a potential area of investment. This has been done in Pakistan in the past. Sialkot Dry Port Trust was established in the private sector in 1984 by 52 exporters/businessmen of Sialkot. They had earned the honour of being the pioneers in establishing the first-ever Dry Port in Asia in the private sector⁵⁴. Their facilities include:
 - Air and Sea Cargo Handling
 - Cargo Warehouse
 - Custom Bonded Transport Facilities
 - Container Stacker and Crane Facilities

Aviation and trucking services with peripheral infrastructure: For a long time, PIA has been the only air service provider in Gilgit Baltistan. PIA operates daily flights from Islamabad and weekly from Lahore and Karachi to Gilgit and Skardu. Skardu airport can accommodate large airplanes and thus offer opportunities. Air cargo services are also not available in the region and no private airliner operates. The aviation and air cargo service in Gilgit is also a potential investment opportunity for investors.

Private trucking service is non-existent in GB for trade purposes. It is estimated that after CPEC at least 100,000 additional trucks would be required for the movement of export-import trade and increased volume of goods.⁵⁵

Peripheral facilities to service all the above: Currently, GB lacks modern and professional facilities for vehicle maintenance. The development of trade in GB will require peripheral facilities like workshops, auto-parts, and supplies along the KKH to service the trade activities happening. As per an estimate, there are 55 automobile workshops in Gilgit City and 7 transport companies (one government-owned and 6 private) owing around 360 vehicles and employing more than 993 employees. With an increase in local trade activities, logistical operations will expand, requiring more service stations for vehicles.

ICT platforms to allow commerce of these products—e-commerce at the core.

E-commerce is today, at the heart of this investment sector. It includes but is not limited to marketing, content, and information for developing commercial activities. E-commerce is not just a B2C activity as it can include many business-to-business (B2B) activities (bank-to-bank clearance, bank to airline payments, and so on) and other activities such as online auctions, banking, sales, reservations, and more! A recent inclusion is 'm-commerce' which implies doing e-commerce through mobile/hand-held devices where the products are mainly marketed on social media through business accounts on Facebook/Instagram etc. as this is free of cost to the sellers.

The growth of e-commerce is primarily dependent upon the boost in ICT infrastructure. The Smartphone market and Internet diffusion have proved to be a catalyst for the growth of the e-commerce industry. The prospective for the growth of e-commerce in Gilgit Baltistan is very high but ICT being the precondition, lack of ICT infrastructure will hamper the rate of its growth. ICT is an umbrella term that involves the usage of computers, including hardware, software, and networks used to communicate, store, and manage the requisite information.

⁵⁴ Sialkot Dry-port Trust : <http://www.sdpt.org.pk/>

⁵⁵ National Freight and Logistics Policy, Ministry of Communication, 2022

Investible Projects

Establishment of Special Economic Zone, GB

Sector: Industries Sector

Location: Maqpondass, Gilgit

Project Location Map



Key Indicators:

Project Cost Estimated: PKR 27 Billion

NPV: PKR 44.52 Million

FIRR: 12 %

Payback: 10 Years

Concession Period: 20 Years

Development Period: 03 Years

Prospective investors are advised to undertake their own preliminary feasibility assessments.

Business Opportunity: Financers/Investors

Project Status: Feasibility completed and ready for investment.

Description: The project is intended to provide a motivation to increase the economic activities in the region.

By developing Special Economic Zone, the high-quality infrastructure, best location and benefit of clustering will create an ideal business environment to provide for the organized growth of industry. The concentration of industry in a single area will also encourage the development of support industries and suppliers that in turn increases ease of doing business. Industrial areas.

Corporate Structure of the Project

Special Purpose Vehicle

Indicative Government Support & Guarantee:

Licensing support, Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act, Provision of enabling overall investment environment, Tax incentives)

Expected Implementation Schedule:

1. Preparation : 2023–2024
2. Investor Solicitation : 2024-2025
3. Construction : 2025–2026
4. Operation : 2027

Impact Outcomes of the Project

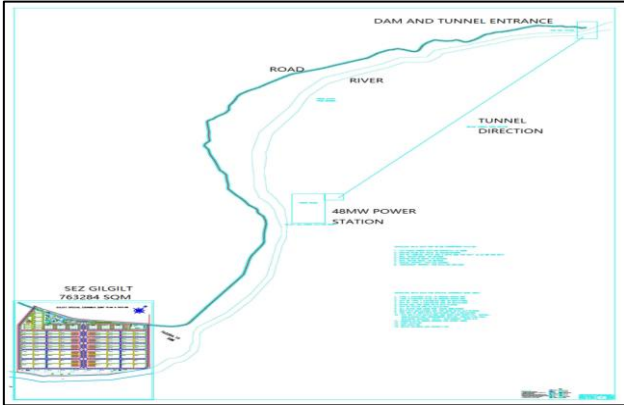
- Outcome 1: Local Economy
- Outcome 2: Expected direct job creation.
- Outcome 3: Expect enterprises.
- Outcome 4: Infrastructure Development

Establishment of 48 MW Captive Hydro Project for SEZ Gilgit

Sector: Industries Sector

Location: Maqpondass, Gilgit

Project Location Map



Key Indicators:

Project Cost Estimated: PKR 10 Billion

NPV: PKR 1.2 Billion

FIRR: 10 %

Payback: 10 Years

Concession Period: 20 Years

Prospective investors are advised to undertake their own preliminary feasibility assessments.

Business Opportunity: Financers/Investors

Project Status:

Feasibility completed and ready for investment.

Description: Gilgit Maqpoon Dass project was identified by GB government in the lower stretch of Indus River which is the left tributary of Indus River with confluence 30 km upstream of Gilgit city Centre. The topographical and geological conditions allow a project layout with headrace channel, sand trap, low pressure tunnel, surge tank, pressure shaft, and surface powerhouse and tailrace outfall into Indus River. The exploitation of available renewable resources in Indus River can help to meet the future power demands of the proposed special Economic zone and industrial zone.

Corporate Structure of the Project
PPP, BOT Investments

Indicative Government Support & Guarantee:

Licensing support, Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act, Provision of enabling overall investment environment, Tax incentives)

Expected Implementation Schedule:

1. Preparation : 2023–2024
2. Investor Solicitation : 2024-2025
3. Construction : 2025–2026
4. Operation : 2027

Impact Outcomes of the Project

Outcome 1: Local Economy

Outcome 2: Availability of electricity of GB SEZ

Outcome 3: Industrial development

Outcome 4: Infrastructure Development

Establishment of Fruit Processing Unit

Sector: Industries Sector

Location: Chilas and Skardu

Project Location Map

Prospective investors are advised to undertake their own preliminary feasibility assessments.

Business Opportunity: Financers/Investors

Project Status:

Feasibility completed and ready for investment.

Description: Skardu, being situated in a mountainous region, may have a favorable climate for the cultivation of a variety of fruits. Establishing a fruit processing unit would allow the local community to harness the abundance of fresh fruits, preventing wastage and promoting sustainable agricultural practices.

Corporate Structure of the Project:

PPP, BOT Investments

Indicative Government Support & Guarantee:

Licensing support, Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act, Provision of enabling overall investment environment, Tax incentives)

Expected Implementation Schedule:

- | | |
|---------------------------|-----------|
| 1. Preparation : | 2023-2024 |
| 2. Investor Solicitation: | 2024-2025 |
| 3. Construction : | 2024-2025 |
| 4. Operation : | 2026 |

Impact Outcomes of the Project

- Outcome 1: Local Economy
- Outcome 2: Revenue Generation
- Outcome 3: Employment opportunities
- Outcome 4: Infrastructure Development

Establishment of Apple Grading, Waxing & Packaging Unit

Sector: Industries Sector

Location: Gilgit

Project Location Map

Prospective investors are advised to undertake their own preliminary feasibility assessments.

Business Opportunity: Financers/Investors
Project Status:
Feasibility completed and ready for investment.

Description: Gilgit-Baltistan is known for its high-quality apples, and the region produces a significant quantity of this fruit. Establishing a grading, waxing, and packaging unit locally ensures that the excellent quality of apples is maintained throughout the post-harvest processing, adding value to the produce. A grading, waxing, and packaging unit can add significant value to the apples produced in the region. Grading ensures that only high-quality apples reach the market, while waxing and proper packaging enhance the fruit's shelf life and appearance. This value addition can lead to better market access and premium pricing. The establishment of such a unit would create employment opportunities for the local population. Jobs would be generated not only in the unit itself but also in associated activities such as transportation, maintenance, and administration, contributing to economic development.

Corporate Structure of the Project
PPP, BOT Investments

Expected Implementation Schedule:

- | | |
|---------------------------|-----------|
| 5. Preparation : | 2023-2024 |
| 6. Investor Solicitation: | 2024-2025 |
| 7. Construction : | 2024-2025 |
| 8. Operation : | 2026 |

Impact Outcomes of the Project

- Outcome 1: Local Economy
- Outcome 2: Revenue Generation
- Outcome 3: Employment opportunities
- Outcome 4: Infrastructure Development

POLICY AND LEGAL ENVIRONMENT

- Special Economic Zone ACT, 2012
- Special Economic Zone Rules. 2013
- GB Board of investment & trade Act 2019
- The Gilgit-Baltistan Special Economic Zone Authority (SEZA) has been notified under Section 10 of the SEZ Act, 2012 which is headed by Chief Minister GB.

INCENTIVES FOR INVESTORS

- GoGB ensures security packages for national and international investments.
- A financial regime such as 100% foreign ownership of companies is permissible.
- Tax rebates
- Flexible modes of investment available.
- Fast track processing of cases regarding investment.
- Exemption on Custom duties on Import of Machinery
- SEZs - 10 Year Tax Exemption to the Enterprises
- SEZs - 10-Year Tax Exemption to the Developer



5.6 Agriculture Outlook

Agriculture, Livestock, and Fisheries in GB hold immense potential for livelihood enhancement through the sustainable utilization of the region's natural resources, strategic geographical location, and the promotion of diverse economic activities. The main strength of the economy of Gilgit-Baltistan depends largely on agriculture, livestock, and fisheries, hence the sector plays a pivotal role in overall economic conditions and livelihood earning of residents of the region, approximately 90% of the residents are

engaged in agriculture and livestock ranching, average land holding is 7-8 Kanals⁵⁶. The table on the right depicts the area covered in hectares for each category.

Moreover, GB's unique geographical location, bordering China, Kashmir, India, and Chitral, as well as having access to Central Asian corridors, opens new horizons for investments in the sector. Gilgit Baltistan has diverse landscapes that support the growth of winter and summer crops, where the variability of the rainfall, solar radiation, and atmospheric temperatures allow local farmers to grow fruits, vegetables, and cereals. The Agro-climatic conditions of Gilgit-Baltistan are mainly related to its range of elevations and mountainous terrain that affects the local soil and hydrology cycle.

Type of land	Area (000 ha)	Percentage (%)
Mountains/lakes/rivers/glaciers	4,810	66.34
Forest: protected	65	0.90
Forest: private	219	3.02
Communal agro-forest	362	4.99
Rangeland	1,646	22.70
Cultivated land	58	0.80
Cultivable land (waste)	90	1.24
Total land	7,250	100

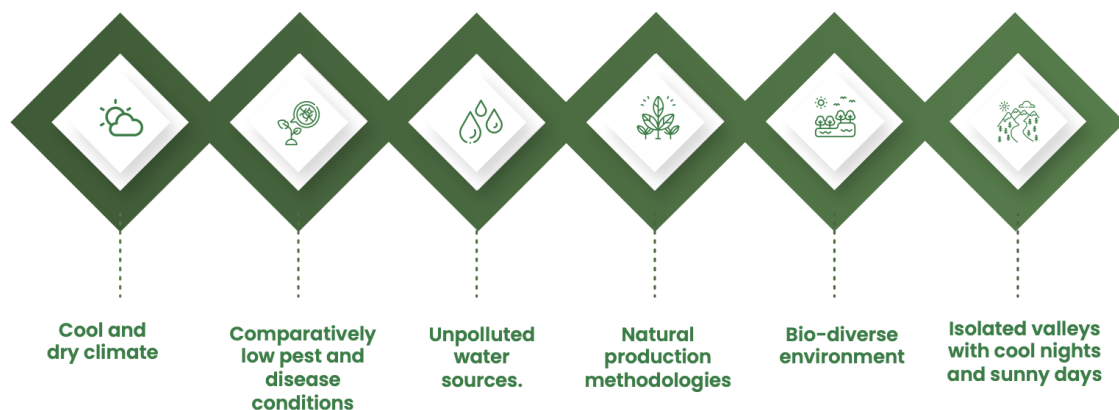
Source: Land use data 2009, Forest Department, Government of Gilgit-Baltistan

The annual cycle of temperature in Gilgit-Baltistan reveals that during summers, the hottest month of the year is July with the average temperature reaching anywhere from 27.2°C to 40°C with a monthly minimum average temperature above 14°C. During the winter period, the coldest month of the year is January, with a mean monthly temperature of 1.8°C, while the maximum temperature rises to 11.1°C, and the minimum temperature of -7.6°C.

For precipitation, the rainfall in the region varies from 150 mm in the north to above 1500 mm in the southeast side of GB. Rainfall mainly occurs in summer while heavy snowfall occurs frequently in winters. Moreover, these diverse climatic conditions of Gilgit Baltistan are highly favorable to produce deciduous fruits (apple, pear, quince, peach, apricot, almond, cherry, walnut, pomegranate, and grapes), vegetables (cabbage, lettuce, onion, potato, tomato, ladyfinger, etc.) and cereal crops (maize and wheat). People of the area grow these fruits, vegetables, and cereal crops on their fields and earn a livelihood by selling off their product in the local as well as in the down country markets.

Gilgit-Baltistan has unique geographic features and is dominated by one of the most mountainous landscapes on earth with an arm of the Hindu Kush to the west, the lesser Himalaya to the south, the Karakoram to the east, and the Pamir to the north.

Agriculture sector in Gilgit Baltistan has a very huge potential for investment because of the availability of a following resource:



⁵⁶ <https://ztbl.com.pk/wp-content/uploads/Documents/Publications/Research-Studies/AgriPromotionGilgit.pdf>

Analyzing Priority Agriproducts of GB

Fresh and Dry Fruits

The climate of GB is very suitable for growing fruit trees, horticultural crops, and other agronomic crops which luckily enjoy good commercial value in the market. Horticulture contributes about 83% of the entire income generated from agriculture and within the horticulture, fruits contribute 60% in the region.⁵⁷ GB produces and trades off raw fresh fruits apples, apricots, pears, mulberry, peaches, and grapes, and is known for producing dry fruits like almonds and walnuts. The demand for these agriproducts exists both within regional and national markets but also outside of Pakistan, thus allowing GB to create high-revenue export streams.

Out of the total cultivated area of 3,938.8 sq km, a big proportion goes to the production of fruits. The table below shows the major categories of fruits cultivated in GB, providing an insight into the number of non-bearing and bearing trees, along with their production quantities from estimated land areas.

Fruits	Non-Bearing Trees	Bearing Trees	Total	Area (Ha.)	Production (MT)
Apricot	1,209,734	1,946,068	3,155,215	12,750	1,209,734
Apple	370,117	826,505	1,196,078	4,242	370,117
Grapes	120,884	183,043	303,780	1,134	120,884
Pears	40,648	68,066	108,714	435	40,648
Peaches	41,061	107,800	148,862	529	41,061
Pomegranate	75,746	137,818	213,564	708	75,746
Cherry	155,772	200,214	356,843	1,392	155,772
Mulberry	141,723	212,472	354,195	1,324	141,723
Walnut	122,973	249,544	371,888	1,417	122,973
Almond	123,791	181,262	305,054	1,164	123,791
Total	1,209,734	1,946,068	3,155,215	12,750	1,209,734

The table below shows that there are considerable wastages for every fruit production, which reduces the total available produce for consumption by the end consumers. The wastage reflects that the supply chain is not efficient and incurs losses in profits which can be overcome if proper fruit storage, processing, and logistical operations are available in GB. The CPEC Route and the increase in economic mobility can improve system efficiency.

Fruits	Prod. (MT)	Wastage (MT)	% Loss	Consumption (MT) Fresh	Marketed (MT) Fresh
Apricot	125,184	43,730	35	7,238	2,778
Apple	23,332	4,014	17	8,521	10,798
Grapes	8,379	1,294	15	3,809	3,276
Pears	2,719	502	18	1,626	590
Peaches	3,262	810	25	1,750	703
Pomegranate	4,540	785	17	1,458	2,297
Cherry	4,085	253	6	1,584	2,248
Mulberry	11,664	6,475	56	2,942	79
Walnut	7,466	62	1	3,173	4,231
Almond	2,362	38	2	1,136	1,188
Total	192,992	57,963	30	33,236	28,188

Flowers

So far, the different types of flowers that are being cultivated in Gilgit-Baltistan for commercial use remain on a very small scale. However, given the natural wilderness and forest cover found in GB, it has a very high potential to foster the flower industry as a high-value commercial product. Areas with high potential for flower farms include flat, lush green meadows nesting between mountainous ranges

⁵⁷ <https://ztbl.com.pk/wp-content/uploads/Documents/Publications/Research-Studies/AgriPromotionGilgit.pdf>

at incredibly high altitudes, like the Deosai Plain, which is rich in plant life, with a huge variety of flowers that have great medicinal value. Some research papers have reported as many as 342 species of plants belonging to 36 families.⁵⁸ The park is adorned with several varieties of wildflowers, creating a breathtaking sight during the spring season. Some notable plant species include *Polygonum affine*, *Thalictrum alpinum*, *Saxifraga flagellaris*, and more.⁵⁹

Cereal Crops

Gilgit Baltistan produces cereal crops and quality vegetables which are consumed locally as well as sold in the market. Wheat is the major crop grown across GB for household consumption followed by maize barley and buckwheat. The table below shows the variety and quantity of various cereal crops and vegetables grown in Gilgit Baltistan and the proportion of each marketed.

Crop	Area (Hac.)	Production(MT)	Consumption(MT)	Marketed(MT)
Wheat	6,422	17,143	16,899	284
Maize	1,392	3,245	2,648	102
Barley	3,838	7,442	6,308	989
Buckwheat	971	1,104	1,142	367
Potato	3,419	29,175	9,785	40,168
Lucerne	291	15,149	13,547	1,464
Tomato	-	2,069	907	1,173
Peas	-	23	71	143
Others	-	12,595	159	129
Total	16,333	87,945	51,466	44,819

Livestock Products

The projected population of livestock in Gilgit Baltistan was 2,513,576 as per the data shared by the livestock department, GB. Around 87% of households in the region own farm animals/livestock⁶⁰, which varies significantly between urban (64%) and rural areas (91.4%). In GB, the ownership of cattle, goats, and sheep is almost 30% higher than the rest of the country, which indicates the significant role of livestock in the rural economy of GB. Apart from traditional livestock, which includes the rearing of sheep, cows, goats, and chickens, a unique activity in GB is yak herding. In Hunza, Yak herding is popular in Passu and Shimshal Valleys and Yak by-products make a significant contribution to the household diet and have a cash value in the market. The below chart illustrates the projected population of livestock for 2016.

	Cattle	Yak	Buffalo	Sheep	Goat	Horses	Donkeys	Poultry	Total
Gilgit and Hunza/Nagar	128,148	2,022	383	169,704	322,253	109	7,940	141,182	771,742
Ghizer	61,871	2,504	120	47,616	79,439	526	3,623	116,645	312,344
Skardu	125,865	7,186	183	170,117	252,573	708	903	139,368	696,903
Ghanche	48,868	3,807	18	75,889	96,080	2,276	1,028	47,391	275,357
Diamer	86,620	1,122	2,148	45,869	201,783	1,574	8,469	109,645	457,230
Total 2016	451,372	16,640	2,851	509,197	952,129	5,194	21,962	554,230	2,513,576

Source: Based on projections for 2016 with 2006 as the base year; data provided by the GB Livestock Department

⁵⁸ https://frieslandcampina.com.pk/pdf/Colours_of_deosai.pdf

⁵⁹ <https://medium.com/@jasminetours9/deosai-national-park-d040c3686940>

⁶⁰ MICS Survey 2017.

Fish Farming

Fish Farming especially trout farming in Gilgit Baltistan holds significant potential, capitalizing on the region's pristine landscapes and abundant water resources. The cold, clear waters of the rivers and streams that traverse this picturesque region provide an ideal habitat for trout, making it an excellent location for aquaculture ventures. The favourable climate and high-altitude terrain contribute to the creation of optimal conditions for trout farming, ensuring the production of high-quality and sought-after fish. The table on the right shows the richness of Gilgit Baltistan for fish farming.

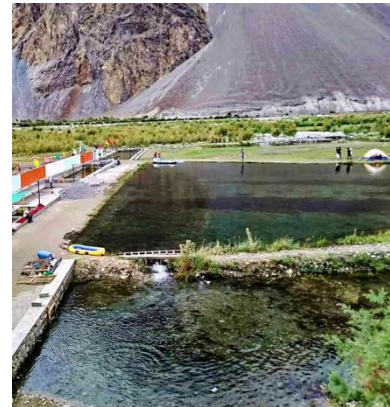
Lakes	1300 Hectares
Streams/Nallah	1760 Km
Rivers	1500 Km

Source: Fisheries Department, GB

The cultivation of trout not only addresses the growing demand for quality seafood but also opens avenues for employment, skill development, and entrepreneurship. Moreover, trout farming can contribute to food security in the region by offering a locally produced protein source. The potential environmental impact of trout farming in GB is also noteworthy. Sustainable aquaculture practices can be employed to minimize the ecological footprint, ensuring that the delicate aquatic ecosystems of the region are preserved.

Additionally, the development of trout farming can foster a sense of environmental stewardship among local communities, encouraging the responsible use and conservation of natural resources. To unlock the full potential of trout farming in Gilgit Baltistan, it is crucial to invest in infrastructure, provide training for local farmers, and implement effective regulatory frameworks. By doing so, the region can harness its natural advantages to build a thriving and sustainable trout farming industry that benefits both the economy and the environment.

Nature has bestowed Gilgit-Baltistan with abundant freshwater resources that are best suited for trout fish farming. Trout farming offers a potential source of income especially during the summer times when the region receives thousands of domestic and international tourists. Trout farms are cropping up in Gilgit-Baltistan, where rapidly warming glaciers form cold water reservoirs – a key breeding ground for trout. Nearly 411 fish farms have been set up across the province in less than 10 years, with new farms appearing every month with a total annual production of 616 tons per year as of 2018.⁶¹



A fish farm in Ghizer district.

⁶¹ Fisheries Department, GB 2024

Varieties of Fish in Gilgit Baltistan

The cold, freshwater environment of GB is renowned for harbouring 29 distinct species of freshwater fish, comprising 17 native varieties and 12 exotics⁶². Few of the types can be seen below.



BROWN TROUT



COMMON CARP



GOLDFISH



RAINBOW TROUT



KAMLOOP



BLACK SPOT
BROWN TROUT

Source: Fisheries Department, GB

Investment Opportunities

Brownfield Investment Opportunities

Horticulture crops and agroforestry: The agro-climatic conditions of GB are highly conducive for horticulture crops (fruits, vegetables & flowers), and agroforestry. The geographical landscape permits only small-scale agriculture (small farms, terraces).

- The potential lies in the growing of high value of crops (medicinal herbs and spices), fruits, vegetables, seeds, and flowers.
- Over the years, the potato has proven to be a major cash crop that still has high prospects of expansion (ration potato and seed) in the GB region. The best option for investment is contractual farming (communities are mobilized in many potential areas), where the investor can negotiate with the community and establish a supply chain to the target market by selecting the most appropriate commodity to be cultivated and marketed with the best return margins.
- Organic fruits and vegetable production has enormous potential for reaping economic benefits. Walnuts, apricots, and cherries are examples of organic production. The segregated valleys and difficult terrain provide an ideal environment for organic fruits. The use of fertilizers, pesticides, and weedicides for vegetation purposes is only limited to the crops and vegetable fields (especially potatoes).

Upgradation of traditional techniques

In Gilgit Baltistan, predominantly traditional and antiquated agricultural methods prevail. For instance, apricots are sun-dried using age-old techniques, leading to contamination and subpar quality output. This situation presents an opportunity for investment in modernizing agricultural practices.

Livestock Breed Improvement: Investing in livestock breed improvement programs through the introduction of superior breeds, artificial insemination services, and genetic selection to enhance livestock productivity and quality.

Greenfield Investment Opportunities

⁶² Fisheries Department, Gilgit Baltistan 2024.agri

Processing & Value addition The most promising sector in agribusiness is a value addition to the raw materials and enhancing the value in the market. Most fruits are marketed without any good marketing sense which results in meagre earnings from the sources. Key areas for targeted value addition include:

- a) Grading of raw materials
- b) Drying and dehydration
- c) Extraction of oils
- d) Packaging and labelling
- e) Bottling and canning
- f) Processing new products of high returns

a) Grading of Raw Materials Grading enhances the value of a commodity by providing options of choice to the consumer depending on purchasing power. It provides the best options for the producer to harvest maximum market potential.

b) Drying and Dehydration Under the prevailing agro climate of GB, drying and dehydration of fruits and vegetables is a golden opportunity investment if carried out while observing all safety and quality protocols. The improved solar dehydrators/dryers are becoming more popular, and this ensures the good quality of the product. The dry products of fruits and vegetables have high demand globally and currently, a sizeable number of dry fruits especially apricot is exported to Europe, Middle East, and Japan. The variety of products may include dry apricots, dry apple slices, tomato powder, dry onions, figs, raisins, nuts, and dry vegetables (okara, brinjal, green leafy vegetables, etc.)

c) Oil Extraction Edible or cosmetic oils have a high demand in the local and international markets. Almond, apricot, and walnut oils are highly important for their nutritional value and health benefits due to their high concentration of Omega 3 fatty acid profiles. Such oils reduce cholesterol and are used by patients with heart and cardiovascular diseases. These oils have also enormous cosmetic value, and their demand is always on the rise in the national and international markets. Oil extraction has untapped potential for GB.

d) Packaging and Labelling A profitable investment option also lies in packaging technology. The beneficial indigenous spices can be marketed with proper packaging and labelling. These commodities have high demand in the local, national, and international markets. In recent years, dairy breeds are being imported and dairy farming gaining popularity in the region. Thus, there are ample opportunities for the marketing and production of dairy products.

e) Processing new products of high returns Value addition to the products, for example, making Jams and extracting oils from the fruits is also an investment opportunity. The local oil extraction from apricot and walnuts can be improved using new technologies and the cholesterol-free oil can be sold in local and international markets. This also includes processing juices and soft drinks, pickling and concentrated products, and local products like Kilao, etc.

High-Tech Greenhouses Investing in high-tech greenhouses equipped with climate control systems, irrigation technologies, and automation to extend the growing season and improve the quality and yield of crops.

Development of Barren Lands An investment opportunity awaits in the development of barren lands in GB through water uplift using Solar PV is now a reality. The developed barren lands can be used for agricultural purposes, especially for trying new vegetables and fruits. Another important use of the developed land can be for seed farming, to provide quality seeds to the farmers in GB.

Fish Farming and processing Gilgit Baltistan (GB) offers significant investment opportunities in fish farming and processing, leveraging its unique geographical features and abundant water resources. The region's cold, pristine rivers and streams create an ideal environment for freshwater fish farming, particularly trout.

Cold Storage and Warehousing Investing in cold storage and warehousing facilities to preserve perishable agricultural produce such as fruits, vegetables, and dairy products, and prevent post-harvest losses.

Horticulture and Floriculture: Investing in horticulture and floriculture avenues to cultivate high-value fruits, vegetables, flowers, and ornamental plants for local and export markets.

Livestock and Dairy Farming Establishing modern livestock and dairy farms equipped with improved breeds, feeding systems, and health management practices to increase milk and meat production and improve livestock productivity.

Investible Projects

Seed Potato Farming

Sector: Agriculture

Location: All valleys above 8000 Ft. across Gilgit Baltistan.

Project Location Map



IRR	13%
NPV	\$ 2324192 Million
Payback	03 Years
Concession Period	02 years
Development Period	6 Years

Prospective investors are advised to undertake their own preliminary feasibility assessments.

Business Opportunity: Financers/Investors

Project Status: Feasibility Studies ready needs to float EOIs Inviting private sector investors for partnership.

Description: The potato crop is sown on an area of 195,537 hectares with an annual seed demand of 488,842 tons. Use of poor-quality seed is the main reason of low national yield. Imported certified seed potatoes, mainly from the Netherlands, is very costly (Rs.440/kg). Climatic conditions and altitude of various valleys are highly suited for seed potato production for plains being free from virus vectors. It can be a lucrative and competitive business for the investors on one hand and a source of employment and additional income to the poor rural farming communities of GB.

Corporate Structure of the Project: To ensure sustainability and competitiveness, the Public-private-partnership (PPP) model is recommended where public and private cash and in-kind resources under a well elaborate and agreed upon partnership deed/agreement.

Indicative Government Support & Guarantee: Department of Agriculture GB has three potato tissue culture labs, greenhouses, screen houses, seed stores, seed farms, trained staff/HR in various valleys and these infrastructure and HR resources can be offered as public sector share of the partnership under PPP arrangement. Moreover, ETIGB has organized farming communities into legal farmer cooperatives and constructed Seed potato Sellers (semi-underground stores), and these organized communities to ensure volumes and uniformity of the produce can be a source of contribution to the partnership.

Expected Implementation Schedule:

1. Preparation: 2023 – 2024
2. Investor Solicitation: 2023 - 2024
3. Construction: 2023 – 2024
4. Operation: 2024

Impact Outcomes of the Project

- Outcome 1: Import substitution of seed potato and saving to the national exchequer
- Outcome 2: Increased yields ensured premium prices and employment opportunities to the poor rural farmers of GB.
- Outcome 3: Contribution to potato yield increase on national level
- Outcome 4: Private sector investment leverage through PPP approach

Catch Culture Intervention
Sector: Fisheries
Location: Blind Lake, Shigar

Project Location Map



Key Indicators:
 Project Cost Estimated: PKR 70 Million
 IRR 20%
 NPV \$ 3000
 Payback 3 Years
 Concession Period 12 years
 Development Period 03Years

Prospective investors are advised to undertake their own preliminary feasibility assessments.

Business Opportunity: Financers/Investors
 Project Status: Feasibility Studies ready needs to float EOIs Inviting private sector investors for partnership.

Description: Blind lake Shigar is land locked water bodies covering an area of 1.5hectors. The site is 20Km away form main Skardu City on the foot of Shigar Velley.it lies next to famous Sarfranga cold desert. The physicochemical characters of water are ideal for Trout culture. Currently the site is being used @10% area for Catch culture and remaining 90% area is used as open water capture fisheries. This site is also used for arranging Fish angling Festivals mainly for the promotion of Sport Fishing and re creational Fisheries. The site is most potential for development of Catch culture interventions, capture Fisheries and eco-tourism.

Corporate Structure of the Project: Please mention investment modalities (PPP, BOT, BOOT, Direct Investments, Partnership with local business/Communities): This project can be executed on PPP mode, by direct investment or partnership with local communities.

Indicative Government Support & Guarantee: Please mention which are applicable (Licensing support, NOCs, Land provision, Approved PPP Act, Approved GB Fisheries Policy, Provision of enabling overall investment environment, Tax incentives)

Expected Implementation Schedule:

1. Preparation: 2023 – 2024
2. Investor Solicitation: 2023 - 2024
3. Construction: 2023 – 2024
4. Operation: 2023

Impact Outcomes of the Project

Impact Outcomes of the Project
 Outcome 1: Local Economy (Money flow in the Local market)
 Outcome 2: Recreational opportunities on Fisheries Resources
 Outcome 3: Aesthetic improvement (Infected Gene Pool, Land Scape)
 Outcome 4: Infrastructure Development (Building and Cages)

Sogha Crystal Lake and Resort

Sector: Agriculture (NRM)

Location: Sogha, Ghanche.

Project Location Map



Key Indicators:

Project Cost Estimated:	PKR 200 Million
IRR	25%
NPV	\$1.5 Million
Payback	12 Years
Concession Period	30 years
Development Period	03 years

Prospective investors are advised to undertake their own preliminary feasibility assessments.

Business Opportunity: Financers/Investors

Project Status: Locations are identified based on technical grounds.

Project Advisor / Consultant: Salman Ahmed Lodhi, Karachi (Kista Farms Pvt Ltd)

Description: Development of Fish and flowers in the Sogha village, Where the Agriculture Department has 30 kanal land plus 5 kanal lake. The freshwater source is also available as spring present in the bottom of the lake. This village has many water springs in private and most of the Farmers are engaged in fish farming. So, it is suggested to Brand this village as Fish Village and the project name will be **"Sogha Crystal Lake and Resort"** This facility has tremendous investment Potential and outcome.

Corporate Structure of the Project: The project will be supervised by Agriculture Department, and it shall be implemented by private firm under PPP mode. The private firm will invest in the project to develop the whole area as per instruction of the department. Initially the proposed site will be outsourced for a period of 30 years.

Indicative Government Support & Guarantee:

Licensing support, Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act, Approved GB Tourism Policy, Provision of enabling overall investment environment)

Expected Implementation Schedule:

1. Preparation : 2024 – 2025
2. Investor Solicitation: 2024-2025
3. Construction : 2025 – 2026
4. Operation : 2026-2027

Impact Outcomes of the Project

- Outcome 1: Boost the Local Economy
- Outcome 2: Promote of Local tourism
- Outcome 3: Local Employment
- Outcome 4: Improve the Infrastructure condition.
- Outcome 5: Promote Trout Fish Farming

Dairy Farming

Sector: Natural Resource Management

Location: Peri Urban areas of District head quarter cities of GB i.e. Gilgit, Gahkuch, Aliabad, Sikandarabad, Gilgmit, Skardu, Khaplu, Shigar, Chilas, Edigah, Gorikot etc.

Project Location Map



Key Indicators:

Project Cost Estimated: PKR 66.6 Million

IRR 35%

NPV \$212951 Million

Payback 1.5 Years

Concession Period 01 years

Development Period 6 months

Prospective investors are advised to undertake their own preliminary feasibility assessments.

Business Opportunity: Financers/Investors

Project Status: Locations are identified based on technical grounds.

Project Advisor / Consultant: Salman Ahmed Lodhi, Karachi (Kista Farms Pvt Ltd)

Description: Dairy Farming is need of time for milk, milk products and by products production and sale in available market. Calves are also marketable.

Corporate Structure of the Project: Dairy Farming Direct Investments, Partnership with local business/Communities)

Indicative Government Support & Guarantee: Available Local market, Tax incentives

Expected Implementation Schedule:

1. Preparation: 2023 – 2024
2. Investor Solicitation: 2023 - 2024
3. Construction: 2023 – 2024
4. Operation: 2024

Impact Outcomes of the Project

- Outcome 1: Local Economy
- Outcome 2: Food Security
- Outcome 3: Minimizing import of dairy products from down-country

YAK Farming

Sector: Natural Resource Management

Location: Phander Valley, upper Gojal Valley, Haramush, Baltistan Division, Astore, Nagar

Project Location Map



Key Indicators:

Project Cost Estimated: PKR 40.6 Million

IRR 40%

NPV \$ 8872 Million

Payback 2.5 Years

Concession Period 1.5 years

Development Period 1 Years

Prospective investors are advised to undertake their own preliminary feasibility assessments.

Business Opportunity: Financers/Investors

Project Status: Feasibility Studies ready needs to float EOIs Inviting private sector investors for partnership.

Description: Yak has multiple marketable products like Yak meat, Milk, Hair, Mohair. Calves are also marketable.

Corporate Structure of the Project: Yak Farming Direct Investments, Partnership with local business/Communities

Indicative Government Support & Guarantee: Available Local market, Tax incentives

Expected Implementation Schedule:

1. Preparation: 2023 – 2024
2. Investor Solicitation: 2023 - 2024
3. Construction: 2023 – 2024
4. Operation: 2023

Impact Outcomes of the Project

- Outcome 1: Local Economy
- Outcome 2: Food Security
- Outcome 3: Minimizing import of meat products from down-country
- Outcome 4: Production and marketing of organic meat, milk, hair, and mohair

Establishment of Fruit Processing Unit

Sector: Agriculture

Location: Chilas and Skardu

Project Location Map



Prospective investors are advised to undertake their own preliminary feasibility assessments.

Business Opportunity: Financers/Investors

Project Status: Pre-feasibility.

Description: Skardu, being situated in a mountainous region, may have a favorable climate for the cultivation of a variety of fruits. Establishing a fruit processing unit would allow the local community to harness the abundance of fresh fruits, preventing wastage and promoting sustainable agricultural practices.

Corporate Structure of the Project:

PPP, BOT Investments

Indicative Government Support & Guarantee:

Licensing support, Sovereign Guarantees, NOCs, Permits, Land provision, Approved PPP Act, Provision of enabling overall investment environment, Tax incentives)

Expected Implementation Schedule:

1. Preparation : 2024
2. Investor Solicitation: 2024-2025
3. Construction : 2024-2025
4. Operation : 2026

Impact Outcomes of the Project

- Outcome 1: Local Economy
- Outcome 2: Revenue Generation
- Outcome 3: Employment opportunities
- Outcome 4: Infrastructure Development

Catch Culture Intervention
Sector: Fisheries
Location: Kachura, Skardu

Project Location Map



Project Status: The feasibility of the project has been completed and a small unit of cages is already installed. A prefabricated office is already established.

Description: Upper Kachura Lake Skardu is land locked water body covering an area of 1 hectare. The site is 30Km away from main Skardu City in the middle of Kachura Valley. It lies next to famous Shangrila Resort. Currently, the site is not used for any fisheries related interventions. The site is most potential for the development of catch culture interventions, capture Fisheries and Fishing Tourism.

Corporate Structure of the Project: This project can be executed on PPP mode, by direct investment or partnership with local communities.

Indicative Government Support & Guarantee:

Expected Implementation Schedule:

1. Preparation: 2023 – 2024
2. Investor Solicitation: 2023 - 2024
3. Construction: 2023 – 2024
4. Operation: 2023

Impact Outcomes of the Project

Impact Outcomes of the Project
Outcome 1: Local Economy (Money flow in the Local market)
Outcome 2: Recreational opportunities on Fisheries resources
Outcome 3: Aesthetic improvement (Intected Gene Pool, Land Scene)
Outcome 4: Infrastructure Development (Building and Cages)

6. Policy and Legal Environment

Gilgit Baltistan Public-Private Partnership (PPP) Act.

The Gilgit-Baltistan Public-Private Partnership (GBPPP) Policy Framework is established under the authority of The Gilgit-Baltistan Public-Private Partnership Act, 2019, aiming to facilitate private sector involvement in financing, constructing, developing, operating, or maintaining infrastructure, development projects, and related services through concession contracts. This framework, designed to regulate, monitor, and supervise the implementation of public-private partnership contracts, signifies the commitment of the Government of Gilgit-Baltistan to foster collaboration between the public and private sectors.

Public-Private Partnerships (PPPs) are contractual arrangements where the public sector (Government Agency) collaborates with the private sector (project company/SPV) for the delivery of assets and services. The private sector is responsible for delivering the agreed level of service over a specified period, contributing technology, expertise, and financing. The primary objectives of PPPs include risk transfer, cost-effectiveness evaluation, value for money (VfM) assessment, long-term contractual arrangements, and the introduction of private sector resources and expertise for infrastructure development.

PPP projects in Gilgit-Baltistan can be financed through various arrangements, including tariff-based PPPs, unitary/annuity types, and projects requiring subsidies. The implementation of PPP can take on various modes, such as Build and Transfer (BT), Build, Operate, and Transfer (BOT), Joint Ventures (JVs), and more. The selection of the appropriate mode depends on the nature of the project and the desired outcomes.

An organizational framework is established to ensure effective governance, including a PPP Policy Board, Chief Minister, PPP Unit (Finance Department), Department PPP Node, Line Departments, District Administration, and a Project Implementation Unit within the Government Agency.

The GB-PPP Act 2019 outlines the structure for formulating and implementing the PPP policy, promoting, and facilitating PPP development, assisting in preparing and executing mega projects, acting as a catalyst for PPP, and establishing units for each concession contract to oversee day-to-day implementation. This comprehensive framework is designed to encourage private sector collaboration, enhance infrastructure development, and ensure the effective implementation of PPP projects in Gilgit-Baltistan, promoting economic growth and sustainable development. The indicative project timeline provides a structured approach from pre-qualification to financial close, though these timelines are subject to change based on the feasibility study.

Gilgit Baltistan Board of Investment (BOI)

The Gilgit-Baltistan Board of Investment has been established by the GoGB with oversight provided directly by the Chief Minister (CM) of GB. The board comprises members including Secretaries from various departments such as Planning and Development, Finance, Law & Prosecution, Water and Power, Minerals, Industries, Commerce & Labour, and Tourism, along with the Chief Secretary of GB. Additionally, the vice chairman of the board will be the minister for the Planning and Development Department. Representing the public sector, the Managing Director of the Northern Areas Transport Corporation (NATCO) and the CEO of the BOI will also serve as board members.

The primary focus of the BOI GB will be to identify investment prospects, foster a conducive business atmosphere, and actively promote these opportunities to attract potential investors.

Recently, the Chief Minister of Gilgit-Baltistan has named Fateh Ullah Khan, a member of the GB Assembly, as the Chairman of the GB Board of Investment. Previously serving as the Minister of Planning and Development in the GB's former government, his appointment raises expectations for enhanced efforts in creating improved investment opportunities and facilitating investors on behalf of the Government of Gilgit-Baltistan.

7. Risk Mitigation

Risk	Likelihood	Mitigation measures
<p>Institutional Capacities and Governance: Government institutions may face challenges due to nascent structures and limited experience in implementing large-scale, multifaceted investments.</p>	Medium	Strengthen institutional capacities through targeted training programs, and technical assistance from international partners with expertise in similar investment transactions. Establish clear governance structures and procedures to enhance accountability and effective investments execution.
<p>Security and Stability: Regional instability and security concerns might impact investment implementation and the safety of personnel.</p>	Medium to High	Collaborate with local law enforcement and security agencies to develop and implement comprehensive security plans. Monitor security situations closely and adjust strategies as needed. Include community engagement strategies to build local trust and support.
<p>Interdepartmental Coordination and Public Staffing: Potential for interdepartmental conflicts and challenges in attracting and retaining qualified government staff for key positions.</p>	Medium to High	Establish interdepartmental committees to ensure coordination and collaboration among various government entities. Implement competitive, transparent recruitment processes and provide adequate training to public sector employees. Consider incentive structures to attract and retain talent.
<p>Achieving Programmatic Goals within Government Frameworks: Ambitious targets may not align with government timelines and bureaucratic processes, leading to delays and unmet objectives.</p>	Medium	Set realistic timelines and flexible milestones considering government processes. Engage in continuous dialogue with all stakeholders to ensure alignment with national priorities and regulations. Apply an adaptive management approach to adjust targets and strategies as needed.
<p>Geographical Spread and Accessibility: The vast and mountainous terrain of Gilgit-Baltistan may pose significant logistical challenges, impacting the delivery of resources and services.</p>	High	Develop a comprehensive logistics and transportation plan tailored to the region's topography. Utilize local knowledge and technology such as GIS for route optimization. Consider establishing local coordination hubs to manage and distribute resources effectively. Invest in infrastructure development where necessary to improve accessibility
<p>Climatic Conditions and Natural Disasters: Harsh and unpredictable weather patterns, along with the risk of natural disasters like landslides and floods, can significantly disrupt program timelines and activities.</p>	High	Incorporate climate-resilient designs in infrastructure projects and agricultural practices. Establish early warning systems and disaster response plans. Conduct regular climate risk assessments and adapt strategies accordingly. Engage with local communities to develop and implement culturally appropriate and sustainable climate adaptation measures.

National Banks in GB



National Bank of Pakistan
نیشنل بینک آف پاکستان



Soneri Bank



Useful Links

<https://gilgitbaltistan.gov.pk/>
<https://visitgilgitbaltistan.gov.pk/>
<https://iclgb.gov.pk/projects/>
<https://wpdgb.com.pk/>
<https://gbinvest.org/>
<https://gbit.gov.pk/>
<https://gba.gov.pk/>
<https://fwegb.gov.pk/>
<https://kana.gov.pk/>