1. INTRODUCTION

Agri. Tourism is defined as the experience for visitors and a source of income generation for the farm owners for multi-purposes related to agriculture sector". Agri. tourism provides many social and economic as well as educational benefits to the owner/producer, visitor/consumer and all other communities. It also provides a lot of incentives to stay in the agriculture sector to the farm owner or producer. Agri. tourism supports farmers and farming communities by providing solutions of problems related to production, marketing, input resources and challenging environment. It creates jobs for the communities and provides economic benefits.

Eco. Tourism involves visiting natural areas with the objectives of learning, studying or participating in activities that do not bring negative effects to the environment. It is mostly based on beauty, type of landscape and culture or traditions of any region. IUCN (2003) reported that eco. Tourism in Pakistan is heavily based upon the outstanding landscape and dramatic mountain scenery of Northern areas, which have unique cultural and archaeological heritage. This region has a very good potential for international and domestic tourism. Tourism opportunities here are diverse ranging from mountaineering, trekking, sightseeing, sports tourism and trophy hunting.

Ahmed (2003) stated that more than 50% of the international tourists arrived in Pakistan to visit Northern areas for tourism purpose which is one of the major contributors to the economy of the Northern Areas (NAs). Tourism is developed in an ecologically, environmentally and culturally friendly manner with optimal economic gains. In the light of above narrated facts, this study is designed with the following objectives:

- 1. Explore the potential of Agri. and Eco. Tourism in Pakistan
- 2. Identify the problems and challenges of tourism in the country
- 3. Identify the opportunities of Agri. and Eco. Tourism opportunities in the area of Gilgit-Baltistan
- 4. The role of ZTBL to promote Agri. & Eco. Tourism in Northern Areas

2. BRIEF HISTORICAL BACKGROUND

Historically, tourism in the hilly areas of the Indian subcontinent was initiated by the British forces. They usually travelled to summer resorts during summer seasons due to extreme heat and humidity in plain areas. These hill resorts were constructed in the vicinity of the main and strategic towns. There were about 80 such stations when the British left the Indian subcontinent and were primarily serving as summer resort for the British forces and officers of the civil administration.

In beginning, Gilgit and Hunza were the main and first destination of foreign tourists for recreational purposes. After that, tourism activities were developed in Baltistan region in 1980s, where tourists started to visit Baltistan region for climbing and trekking on hilly areas (Kreutzmann, 1996). In 2004, according to the World Tourism Organization, countries made more than six hundred billion dollars from their tourism industries. In Pakistan, the growth rate of tourism was derailed after Russian interference in Afghanistan, happening of

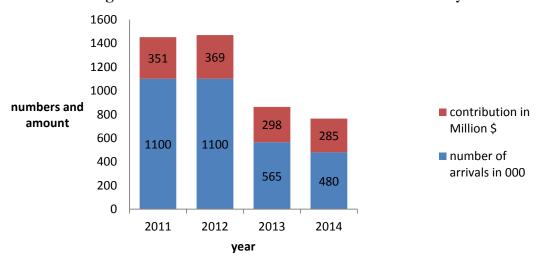
9/11 event and latestly war against terrorism. Now this industry is again growing at the rate of ten percent internationally. Pakistan's earnings are around \$190 million out of an industry of six hundred billion dollars, around hundredth of a percent. Although, it is growing at a healthy rate in the last few years, the overall amount is still very small even compared to countries like Sri Lanka and Maldives (Hussain, 2006).

3. PAKISTAN'S TOURISM INDUSTRY AND GILGIT-BALTISTAN (GB)

In Pakistan, tourism mostly rely on the vast region of GB, formerly known as the Northern Areas (NA). This part of the country is famous for its snowy mountains, lush green valleys, mighty rivers, plentiful wildlife and beautiful lakes. The World Wide Fund for Nature Pakistan (WWF-P) has been a pioneer in introducing sustainable ecotourism initiatives in GB. The WWF-P is working closely with the local communities, private sector and regulatory bodies in the region. Tourism Development Board of NA, training centers for ecotourism porters and guides are the outcomes of WWF-P initiatives.

The tourism industry in Pakistan has gone through period of robust growth and bust, from its heyday during the 1970s, when the country received unprecedented amounts of foreign tourists. The industry faced a downward trend due to war on terror during 2001. An Earthquake on 2005 also severely influenced the activities of tourism. After that, in order to promote various cultural heritage, and tourism in Pakistan, the Government launched the "Visit Pakistan" marketing campaign in 2007. This campaign involved various events throughout the year including fairs and religious festivals, regional sporting events, various arts and craft shows, folk festivals and several openings of historical museums.

In 2009, The World Economic Forum's Travel & Tourism Competitiveness Report ranked Pakistan as one of the top 25% tourist destinations for its World Heritage sites. During the year 2017, more than 1.75 million foreign tourists visited Gilgit Baltistan as compared to 0.5 million tourists who visited during corresponding period last year. The tourists' visits brought Rs. 300 million revenue to the local economy during the last couple of years.



Foreign Tourist arrivals and their contribution in economy

3.1. Tourism Share in Gross Domestic Product (GDP)

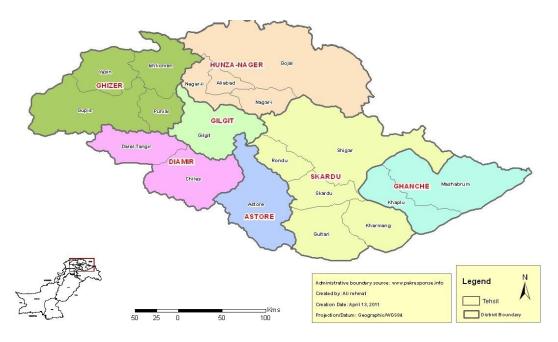
Pakistan's travel and tourism industry is booming after significant improvement in the security situation. According to the World Travel & Tourism Council, Pakistan's travel and tourism industry has contributed more than 7 percent to GDP with the worth of PKR 2,452 billion in 2018. It includes foreign and domestic travel and tourism spending amounting to Rs. 115 billion and its contribution in creating 3,850 employment opportunities in the country. Almost 1.4 million foreign tourists are projected to visit Pakistan in 2019.

World Economic Forum also reported that Pakistan has been able to improve its ranking on tourism competitive index after taking necessary security measures. The country was at 124 out of 136 countries in 2017, while it was at 125 in the year 2015, which shows an improvement by one point in the overall performance of the industry.

3.2. Gilgit Baltistan

Gilgit Baltistan is considered to be the capital of tourism in Pakistan. It has the range of some of the highest mountains in the world, including K2, which is the second highest mountain in the world. Presently, accommodation facilities in GB consist of approximately 140 hotels of various grades with an overall capacity of 2600 rooms, 30 Government Rest Houses and 3 Tourist Facilitation Centers at entry points.

According to GB Tourism Department Statistics, the growth in foreign and domestic tourists that visited different areas of GB had been increased by 25% as compared to last year owing to effective measures taken by the government to improve law and order situation in the province. However, it is observed that tourism has also resulted in creating adverse effect on the eco-system and biodiversity of the region due to the lack of consideration of the environmental issues.



4. SOURCES OF ATTRACTION OF ECO. TOURISM

The GB has very much to offer in four seasons with highest plateaus including Deosai, cultural sites including Altit and Baltit forts in Hunza, Shigar Fort and Khaplu Fort in Baltistan, Waterfalls of Skardu region, ancient rock art carvings and inscriptions along KKH in District Diamer, lush green meadows and lakes in district Ghizer and Astore, Rakaposhi, Diran Peak and Hopper glacier in Nagar, rich culture, dry fruits and hospitality of Hunza that attract tourists to Gilgit-Baltistan.

Gilgit-Baltistan region is now divided into two sub-regions i.e. Gilgit-Hunza and Baltistan. Most of the beautiful sites are within a range of few kilometers from the main roads. Similarly, ethno-linguistic diversity in the region is exhibited in the distribution of ethnic and linguistic groups. This variety and diversity in physical and anthropogenic environment provides stimulus for the attraction of foreign tourists. There are many places to visit, some are given below:

a) Hunza Valley

Hunza Valley is a mountainous valley located in Gilgit, under the Governance of Pakistan. It takes almost 560 km distance from Islamabad via Naran-Babusar Top and 620 km from Besham-Dasu-Chilas. It has numerous breathtaking spots like 3M, Riakot, Babusar Top, Gilgit. The main town of Hunza, Karimabad (formerly known as Baltit) is the capital as well as most popular tourist destination of Hunza. As famous as the valley is for its beauty, the people of Hunza are also well-



known for their friendliness and hospitality. Hunza's tourist season is generally from May to October, because in winter the Karakoram Highway is often blocked by the snow.

b) Fairy Meadows

Fairy Meadows are famous for its beautiful lush green plateaus and World's ninth biggest mountain Nanga Parbat (the Killer Mountain) located in Diamer District of Gilgit-Baltistan region, Pakistan. At an altitude of about 3,300 meters above the sea level, it serves as the launching point for trekkers. This place had been declared as National Park in 1995 by the Government of Pakistan. Fairy Meadows are also called "Heaven on Earth" due to their matchless beauty. The best time to visit Fairy Meadows is between end of June and middle of August.



c) Phandar Valley

This valley is situated at 61 kilometers (38 miles) from the valley of Gupis, in District Ghizer of Gilgit-Baltistan, Pakistan. A twisting road passing through lush green fields and forests with a view of flowing river and icy peaks will lead you to this charming valley. Weather of Phandar valley stays very pleasant between June and July and this is the best time to visit this valley because the beauty of this valley goes at its peak during these months.



d) Gupis (Goopechh) Valley

This valley is located about 112 kilometers in west of Gilgit on the bank of River Gilgit, Yaseen Valley, District Ghizer, Gilgit-Baltistan, Pakistan. The turquoise water of river flowing along the road and surrounding fields and forests presents are very charming for tourists. Villagers of Gupis valley can earn their livelihood through the cultivation and farming of animals including Marco Polo sheep, ibexes, and yaks. Major tourist



attractions include points such as Gupis fort, Khatli Lake, stone circles of megaliths, Shingalote village and many more.

e) Shandur Top

Shandur Top is situated at an altitude of 12,500 feet (38,10 meters) above sea level. It is sometimes called Roof of the World. It is located in District Ghizer, Gilgit–Baltistan, Pakistan. Shandur can be reached from Gilgit and Chitral. It is far about 197 kilometers (122 miles) from Gilgit and 147 kilometers (91 miles) from Chitral. Many charming valleys like Gahkuch, Gupis, Phandar and beautiful lakes can be seen



during visit from Gilgit side. While beauty of Mastuj and Surlasp valleys can be enjoyed from Chitral side.

Polo is the most favorite game in Gilgit-Baltistan region of Pakistan. Shandur Polo Ground is naturally designed to be a polo ground. Small hills are on all four sides of rectangular ground, where spectators can sit and enjoy the match. Shandur Polo Festival is continuously being held each year since 1936, and is now a very famous event for tourists throughout the

world. Now activities like paragliding, folk music and dances are also held along with polo, making it even more enjoyable for tourists. Pakistan Tourism Development Council (PTDC) and other tourism companies establish a tent village for the tourists during the event.

f) K2 Mountain

K2 is also known as Chhogori which means "King of Mountains", is the second highest mountain in the world, after Mount Everest and the highest peak in Pakistan at 8,611 meters (28,251 ft) above sea level. It is located on the China-Pakistan border between Baltistan, in the Gilgit-Baltistan region of northern Pakistan, and the Taxkorgan Tajik Autonomous County of Xinjiang, China. K2 is the highest point of the Karakoram range and the highest point in both Pakistan and Xinjiang. It



is more difficult and hazardous to reach the peak of K2 from the Chinese side, so it is usually climbed from the Pakistani side. The adventure lovers from all over the world try to take new and diverse routes to conquer the mountain. K2 can be reached from the hilly town of Skardu which is well linked with Islamabad (the capital of Pakistan); both by road and air.

g) The Hopar Valley

Hopar valley is a scenic portion of the Nagar Valley in northern Pakistan. It is about 10 km away from Nagar Khas, the principal city of the Nagar Valley. Hopar Valley is the site of the Spantik and Hopar (Hopper) glaciers. Hopar Valley is a cluster of villages around a natural bowl at a bend of Bualtar Glacier. This valley has many natural resources and natural beauty but ignorance by the government and local politicians contributes to it not being realized for its potential.



While Hoper valley is far away from Gilgit main city but very charming and tourists attraction spot and ancient history belongs to this land. There are still ruins of old kingdoms and settlements ruins of ancient life. Hoper inn and a guest house of Forest and Power and

water department serve the national and international tourist too.

h) Skardu Valley

It is located in Gilgit-Baltistan, Pakistan. This valley is about 10 km wide and 40 km long. It is at the confluence of the River Shigar and River Indus. It



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surrounded by the large Karakoram Range. The mountainous terrain of the region, includes four of the world's 14 Eight-thousander peaks, attracts tourists, trekkers and mountaineers from around the world. The main tourist season is from April to October; except at this time, the area can be cut off for extended periods by the snowy, freezing winter weather.

5. CHALLENGES/PROBLEMS OF TOURISTS

With the passage of time tourism in Gilgit-Baltistan regions have suffered heavily due to following reasons:

- 1. Lack of sufficient accommodation facilities
- 2. Lack of electricity and less number of flights to GB
- 3. Dilapidated conditions of Karakorum Highway (KKH) are major problems being faced by the tourists in GB.
- 4. Geopolitical and security situation at global, regional and local levels.
- 5. The deteriorating law and order situation persisting at Gilgit town following the 1988 Shia-Sunni conflict and the ever-widening tension between the two sects within Gilgit-Baltistan region (Kreutzmann, 2008)
- 6. The impacts of boarder tensions with the neighboring countries. Like the incident of 9/11 not only changed the pattern of tourists at global level but it has also badly affected tourism sector of the developing countries including Pakistan (Goodrich, 2002).
- 7. The negative impacts of the America led war on terror on international tourism and associated activities.

6. AGRI. TOURISM OPPORTUNITIES

Opportunities of Agri. tourism in Northern Areas are virtually endless and can take the form of providing accommodation, entertainment, educational activities and outdoor recreation. A myriad of farm activities, special events, festivals and demonstrations are also possible in GB. Direct sale opportunities also exist in the form of U-pick, road side stands, farm stores and food services. Morever, it also provide employement for family members.

Venues and events regarding Agri-tourism provide supplemental income to farmers and the rural communities that they live in, as well as help to preserve and sustain family farm income. Agri-tourism also adds value to crops, livestock and the natural resources that a farm has to offer, and offers an opportunity to build a bridge between the agricultural community and the local tourism industry by incorporating tour groups, educating school children and hosting civic events.

Agri-tourism gives an opportunity to better understand and appreciate the skill and hard work that go into producing the food and fiber. There are several aspects to agri-tourism that are highly essential for an existing or a potential operator to be knowledgeable about: economic, legal, marketing, educational, retailing and financing.

6.1. Potential of Agriculture in Gilgit-Baltistan

Agriculture sector in Gilgit Baltistan has huge potential for the investment because of the availability of a very hardworking human resource. The main strength of economy of Gilgit-Baltistan mainly depends on fruits and horticulture (vegetable production). Horticulture and dry fruit sector can earn millions of rupees as revenue, which are being neglected due to lack of interest of public sector administration as well as improper transportation system and storage system.

This area is not only gateway to China and Central Asian States but also has an ideal climatic conditions and abundant water resources, which are calling huge investment opportunities in the value added sector and medicinal herbs. Both the sectors have marvelous chances for vertical and horizontal expansion but unfortunately these sectors could not be developed to the desired levels for want of due participation of the private sector.

A distinct feature of GB is that over 90% of the households own some agricultural land as compared to 52% in rest of the country. The ownership of cattle, goats and sheep is also almost 30% higher than rest of the country. This fact has significant bearing on overall equality in the society and individual empowerment IFAD (2015).

GB is producing 169,000 tons of fresh and dry fruits out of which only 10,119 are being marketed in mostly low end markets and a huge volume equal to 57,178 tons is wasted due value chain issues. Similarly, in vegetables, against the production of 152,000 tons, around 12,000 tons goes waste due to connectivity problems and lack of infrastructure and storage facilities.

6.2. Crop Diversity

Gilgit-Baltistan is particularly well-suited for the production of deciduous fruits and nut crops. It also lies close to the two major centers of fruit diversity, namely Central Asia and China. Wheat, barley, triticale, maize, millet, potato, pulses, buckwheat and several fodder crops are grown here.

Total area under cereal crops and fodder was 49,317 hectares with a production volume of 137,944 Metric Tons (MT). Wheat is the major crop grown across GB for household consumption followed by maize barley and buckwheat. Most of these crops are consumed 87,903 MT at household level while very little quantity of maize, barley and buckwheat 7,598 MT is marketed¹.

Fodder crops include Lucerne, shaftal, vetch, berseem (introduced), rye, white clover and sweet clover (which also occurs in the wild). Approximately 500 wild relatives of cultivated

¹ Book on Women Agriculture in Pakistan, Food And Agriculture Organization of The United Nations Islamabad, 2015

crops and fruits have been discovered in Pakistan, many of which are found in Gilgit-Baltistan. Commonly grown pulses include lentils, black gram, peas, chickpeas, broad beans, moth bean (a wild type of soya bean) and beans.

6.3. Fruit Crops

Gilgit-Baltistan has a favorable climate for producing diverse fruits, particularly apricots. For centuries, the farmers of the region have been practicing horticulture as part of their livelihoods management strategy. Horticulture contributes about 83 percent of the entire income generated from agriculture. Similarly, within the horticulture, fruits contribute 60 percent. There are about 5.749 million fruit trees (3.653 million fruit bearing and 2.096 million non-fruit bearing) with a total production volume of 169,373 tons produced over an area of 25,012 hectares. Major fruits produced in the area include apricot, apple, grapes, pears, peaches, pomegranate, cherry, mulberry, walnut and almond. Details of some important fruits along with their value addition are given below:

a. Apricot

In Gilgit-Baltistan, the most of growing fruit is apricot but due to low shelf life and lack storage systems, the fruit can't be transported to distant areas where its demand is high. In GB fresh apricots are rarely transported but dried apricots are sometime transported to local and distant markets through their own effort and risk. Apricots are of different types and have many varieties like 'margholam' 'halman' 'sharrakarfo' 'doso' and many more².

b. Apple

Second most important fruit is apple which is grown mostly in the east of Skardu. Variety of apples are famous in all over Gilgit-Baltistan due to its taste and appearance. 'Saspolo'a variety of apple (is very soft, delicious, and tasty and blood red in color) is famous and its demand is also high as compared to other varieties of apple. In the south west of Skardu the Shangarilla, farmers grown different varieties and sold their produce to tourists and in local market.

c. Grapes

Grapes were cultivated in high quantity at a time but now people are not grown them as much as they should, due to lack of their interest and problems. However, it is being grown highly in Sakardu and Hunza-Nagar.

d. Mulberry

Mulberry is the most common fruit in GB and the most delicious one. There are two prominent type 'shahtoot' and 'bidana'. Shahtoot is of two colors, black and red while bidana is white in color. The other variety is 'karfoosay' which is not eaten as fresh but dried and stored for winter. The main problem for mulberry is wind because its fruits stalks are very delicate and a slow wind can break them and the fruits fall on the ground and don't remain eatable.

² Common and popular varieties of Gilgit and other areas

e. Cherries

Cherries are also grown in this area for sale in local market. Red cherries and Black cherries are the two prominent types and grown almost in all parts of Gilgit-Baltistan (Sajjad et al, 2018). The most common problem for cherries is lack of harvesting tools. People harvest them by hand, so most of the fruits are damaged. There is also the chance of attack of birds and they can destroy the whole fruits of a tree. Cherries are also eaten as fresh and dried.

f. Walnuts and almonds

Walnuts and almond are the most popular dry fruits of this region. People mostly sell them to the local markets and from there they are transported to other regions.

6.4. Livestock Rearing

Livestock in GB plays a central role in the rural economy as rural farmers use livestock for both dairy and meat production. They also use the manure, skins, and hides for income generation. Livestock contributes 35-40 percent to the overall agriculture income³. The production potential of livestock is too low to meet the demand of meat and dairy products. This Gap is filled from importing meat from other parts of the country. As a part of subsistence farming, every household rears some kind of livestock.

Many different breeds of sheep, goats and cattle are found in Gilgit-Baltistan. Sheep breeds include the Baltistani, Gojali and Kohai Ghizar varieties. Goat breeds include Baltistani, Pamiri, Gojali, Kohai-Ghizer, Jarakheil, Gaddi and Kaghani. Farmers also keep cattle, yaks and various cross breeds of the two known as zo/zomo. Yaks are typically kept in the high regions such as Gojal, Baltistan and parts of Ghizer District. Preferred animals are yaks (*Bos grunniens*), Zo (cross infertile breeds of yaks and domestic cow), and Zomo (female fertile breed). Zo are used as source of meat or sold to meet domestic requirements. In addition, each household maintains local breeds of cows for subsistence milk production.

These are highly valued animals and very important to the local economy as they provide milk, wool, draught power and manure. Yaks are physically well-adapted to high altitudes. Their heavy wool and other thermo regulatory mechanisms enable them to tolerate extreme weather conditions.

6.5. Forestry

Forests in GB cover an area of 281,600 hectares. Majority of these are found in the districts of Diamer, Baltistan, Gilgit and Ghizer. The forests provide timber, firewood, torchwood, grazing land and medicinal plants.eg. kuth (*sassuria, lappa*) black cumin, and other non-timber forest products (NTFP) including pine nuts (chilghoza), mushrooms, honey, berries of sea buckthorn, and animal products. The forests are important watersheds for the downstream population. Many species of wild animals and plants depend on these forests for survival.

³ High-Altitude Rangelands and their Interfaces in the Hindu Kush Himalayas, 2013, ICIMOD

Fuel wood is the main resource harvested from the forests, followed by timber. The young branches of trees provide an important fodder source from March to May, when other fodder sources are scarce. Fuel wood is collected from low and high pastures, private land, fruit trees, and purchased from local markets. Generally, fuel wood is collected in spring and autumn and is stored for use during winters. Wood is also harvested to make agricultural and household tools and utensils while some types of bark, leaves, and berries are widely used for medicinal purposes.

6.6. How is Agricultural tourism beneficial to rural areas?

The idea of Agri Tourism is likely to address and provide solution to a number of problems faced by the agriculturists and the community and society as a whole. Following are the main areas that we are highlighting in Agri-Tourism;

- 1. Well-developed agricultural tourism systems in rural areas have the potential to reverse negative economic trends by bringing in visitors and creating new jobs and local business ventures for rural residents
- 2. It offers to earn additional farm income, diversify products and marketing, build relations within the community
- 3. Adding farm recreational activities and entertainment has been a successful strategy for increasing customer traffic to existing farm retail outlets.
- 4. It creates awareness about food quality to ensure general health of the consumer and counter the diseases spread through eating contaminated food stuff.
- 5. Bringing educated people to Agri. business by making it a productive and entertainment and profitable as well.
- 6. It also minimizes the role of middle man that would in turn assure better income for growers/cultivator/farmer and would also decrease rates of agri products is open market.
- 7. New agri techniques and methods and train farmers about on-farm value-addition and conservation of their crops which lead new entrepreneurship.
- 8. To curtail massive migration of rural to urban centers that would in turn decrease the burden on large cities and would help develop new business centers in rural area opening up venues for investments in other sectors as well.
- 9. Agri tourism is an alternative for improving the incomes and potential economic viability of small farms. Agri Tourism would thus contribute not only to the stability of the agriculture and tourism by also of other related services industries of Pakistan.

6.7. Potential Target Markets of Agri. Tourism

- School Teachers/ School Group
- Garden Clubs / Horticultural Societies
- Business Group/ FCCI
- NGO's / Bankers
- Birthday Party and Weddings
- Married Couples
- Local Families with kids

- Families on Vacation
- Business Travelers
- Landscape and wild life photographers
- TV and Film Media shooting
- National and Multinational companies

6.8. Some Agri Tourism Parks in Pakistan

- 1- Qadir Bakhsh farms! A horticultural park Faisalabad
- 2- Al-Bari agri tourism park Jarawala
- 3- Rana Quoum grapes farm shangla hill station
- 4- Ranjha Agri Tourism Park Sargodha
- 5- Mestic Medos Murree
- 6- Sumreen Agricultural Park Faisalabad

7. POTENTIALS FOR TOURISM UNDER CPEC

According to the Ministry of Planning, Development and Reforms, GB is fully included in the CPEC through various infrastructure and energy projects. These include the expansion of Karakoram Highway (KKH), KKH Phase 11 (Thakot-Havalian Section, 118 km) and KKH (Thakot-Raikot N35, 136 km). These improved logistic facilities and revamped highways will benefit the region and will have multiplier effects for the agri. tourism of the area in particular and overall economic growth in the country in general.

According to an article published by the Asian Development Bank, farmers in Gilgit-Baltistan produce over 100,000 metric tons of fresh apricots a year. Setting up of the fruit processing industry in the region would help boost the country's fruit exports and hence considerable growth in their per capita income.

Improved infrastructure facilities under the CPEC will create a broad range of economic opportunities for the region's traders. The corridor will prove to be a historic milestone and it will also promote tourism in GB, which would ultimately benefit the local people. According to the Asian Development Bank (ADB) report, the CPEC will boost tourism over an area extending for 73,000 sq kms, which is called a paradise for mountaineers.

The region is also rich in fruits production. As reported by ADB, GB is the producer of over 100,000 metric tons of fresh apricots annually, an estimated 4,000 tons of cherries and 20,000 tons of apples. Keeping this in view, the officials in Pakistan have formulated some agro based projects, which would be included in the long term plan under the CPEC. According to the plan, food processing plants would be set up near Gilgit, Skardu and other areas to enhance the export of fruits produced in the region, which would require lands to be purchased from the locals to set up the plants. Such eco-friendly economic projects would help in providing better livelihood opportunities to the local people along with the protection of their natural resources and biodiversity.

8. INITITATIVES OF GB'S GOVERNMENT

- In terms of law and order, the GB government through deployment of special patrolling forces along KKH and Babusar-Naraan road named Karakoram Task Force has made the KKH safe for all tourists visiting GB by road. Additionally, the establishment of Rescue 1122 and its ambulance and car rescue services had improved tourist services being provided to visitors.
- On the other side, communities have also been sensitized about the positive role of tourism in the area. In return, community volunteer groups have been developed by relevant communities which assist the tourists by apprising them of all precautionary measures while travelling on KKH and Babusar-Naraan Road.
- Gilgit-Baltistan is a living museum. It harbors rich diversity of flora and fauna including 230 species of birds, 54 species of mammals, 23 species of reptiles, 20 species of fish and 6 species of amphibians; mostly rare, endangered and endemic to Karakoram-Himalaya-Hindu Kush highlands. The government has established a network of 19 Protected Areas and 26 Community Managed Conservation Areas (CMCA) covering about 28 percent of the total area to protect and manage the precious wild resources of the area.
- The Gilgit Baltistan government is working on different projects to promote winter tourism in the province, keeping in view of world tallest mountains of K2, Nanga parbat and others peaks offering a lot of challenges for mountaineers and adventures.
- The GB Government in consultation with authorities in Islamabad has expedited work on formulation of policies to promote tourism industry in the Province. Tourist Facilitation and Information Centers (TFIC) have been set up at Gilgit and Sakardu airports besides in all major cities of GB help to educate and guide the visitors about tourist sites, valleys and other potential areas of tourism.
- Arrival of 1.75 million international and 38.8 million domestic tourists to Pakistan, successful holding Peace Cup 2017 in Miranshah North Waziristan, Asia Peace Festival, Pakistan Motorcar Rally from Khunjrab to Gawadar, establishment of Counter Terrorism Force and rehabilitation of Temporarily Displaced Persons have clearly showed that peach and normalcy was fully returned to the country besides enhanced its soft image of being tourists and sports loving country.

9. ROLE OF ZTBL IN GILGIT-BALTISTAN

Zarai Taraqiati Bank Limited (ZTBL) is catering the credit needs of farming community in Gilgit Baltistan Zone through its zonal office and the 11 branches. The Bank has disbursed an amount of Rs. 371 million to 1,573 borrowers in the year 2018. The Bank is disseminating latest agriculture information through a chain of ZTBL Model villages renamed as "Farmers Training Centers" in all the four provinces including Gilgit-Baltistan and Azad Kashmir.

These Farmers Training Centers conduct field days, workshops and seminars to disseminate the latest agriculture information, success of modern techniques applied in agriculture through its force of Mobile Credit Officers (MCOs).

9.1. Role in Agri. tourism Sector

The Bank jointly arranged a Two Days National Mushroom Festival with the Agri. Tourism Development Corporation (ATDC) of Pakistan on March 30-31, 2019 at ZTBL Farm Islamabad. Main objective of the event was to create awareness about mushroom's health and benefits. Hunting, cultivation and cooking of Mushrooms were arranged in the event. The Bank and ATDC Pakistan mutully agreed that both organizations will arragnge festivals for promotion and cultivation of Cherry and Apple at Shigar, Gilgit Baltistan in future.

The Bank participated 2nd National Agri-tourism Conference. Which was held at Pir Mehr Ali Shah Arid Agriculture University Rawalpindi (PMAS-AAUR) on February 18-19, 2019. The conference was organized by PMAS-AAUR Department of Horticulture in collaboration with University of Baltistan, Agriculture University Faisalabad, Alpine Club, Agri. Tourism Development Corporation Pakistan (ATDC Pakistan) and Tourism Department of Gilgit Baltistan (GB). The main purpose of the event was to promote agritourism business development ideas and to cope with the entrepreneurship opportunities by counterfeiting the challenges for the exposure & rural development.

Farmers of GB are also served by the Bank through its two Farmers Training Centers. During the year 2018, these centers arranged 8 times demonstrations or workshops on crops' production technologies and provided solutions of challenges encounterd by farmers. Morever, these centers created awareness among farming community by establishing 40 field days to adopt latest agriculture technologies.

9.2. Lending Products

Production Schemes

a) Sada Bahar Scheme (SBS)

In order to facilitate the farmers to have easy access towards credit with the facility of one time documentation for three years period, wihthdrowal of loan amount as per their requirements and deposit the same as and when funds are available with them. Bank has revived Sada Bahar Scheme. The scheme primarily caters to the financing requirements for working capital as well as input needs to all elidigble fresh & existing famrers across the country. Loan would be disbursed against tangible properties/securities owned by the borrowers as per policy of the Bank. Financing limit is upto Rs. 0.700 million per borrower/party.

b) Kissan Dost Scheme (KDS)

Financing for crop production loans to fresh/new borrowers on seasonal basis without revolving facility on oncessional rate of markup is provided. Loan is disbursed against tangible properties/securities owned by the borrowers as per policy of the Bank. Financing limit is upto Rs. 0.100 million million per borrower/ party.

Development Credit Schemes

1. Launching of Special Products/Schemes for Gilgit Baltistan

During the year 2012, following four special products under said scheme were introduced by the Bank for uplifting farmers' level in Gilgit Baltistan Area:

- Trout Fish Farming: Keeping in view of scarcity of productive land in GB and to increase business opportunities in the area, financing for trout fish farming was started by the Bank under special package for GB.
- ➤ Yak Farming: In order to overcome the dairy or meat requirements in GB, the Bank had started financing of Yak farming in the northern hilly areas. Yak is reared for both milk and meat purpose, which has an ample demand in local market.
- Cultivation of Sea Buck-thorn plant: Various precious items like oil, jams and jelly are produced from the seed of sea Buck-throne plant. In order to utilse, its potential in the area, loan facility was extended for its cultivation and processing of seed to earn maximum income and foreign exchange through exports of its product.
- Hybrid Popular: In order to raise the cultivation of popular in areas of Gilgit Baltistan, the Bank has been offering credit to farmers for its cultivation.

2. Tahafuz-e-Ajnas Scheme (Scheme for De-hydration of Fruits & Vegetables)

The scheme is applicable across the country to promote the capacity building in shape of storage facility for the establishment of small godowns in order to prevent the wastage of farm produce. Loan would be disbursed against tangible properties/securities owned by the borrowers as per policy of the Bank. Financing limit is up to Rs. 1.500 million per borrower party.

3. Asan Qarza Scheme

Youth are the major segment of rural population in Pakistan and to engage them in national development, raise their living standard and check their migration to urban areas, Asan Qarza scheme has been launched by the Bank to finance Agri. business under variety of agro-based activities. Financing limit is up to Rs. 0.200 million per borrower/party.

4. Khawateen Rozgar Scheme

As per charter of the Bank, special emphasis has been made to empower the rural women so that they may play a significant role not only to increase the family income but also to contribute towards GDP of the country. For that purpose the titled scheme has been launched by the Bank for variety of Agri. activities. Financing limit is up to Rs. 0.200 million per borrower/party.

Newly launched Schemes

1. Financing of "Oil Expeller Unit"

Oil Expeller Unit/Machine has an important role in extracting oil from raw materials. It can process a wide range of plant seeds such as canola, rapeseed, sunflower & soyabean etc. The chief purpose of the scheme is to use seeds of different commodities for economical purposes by extracting edible oil. In addition, the scheme could also generate revenue having value added characteristics i.e. processing/selling seed residuals for a number of economical purposes. The scheme is applicable in all Branches of ZTBL throughout the country. Maximum loan limit under the scheme is Rs. 0.800 million per borrower/party.

2. Financing scheme for "Milk Chilling Unit"

The prime objective of the scheme is to promote the dairy/livestock sector as a large number of farmers are involved in dairy milk collection business and its distribution. Further in order to get more earning through this sector by establishment of small Milk Chilling Units in the country, the Bank has launched the subject scheme for the dairy/livestock farmers. This scheme is applicable in all over the country including Gilgit Baltistan. The maximum loan ceiling under the scheme would be up to Rs.1.500 million per borrower/party.

3. Financing For "Establishment of Silage Units"

Silage is fermented, high moisture stored fodder, which is used to feed dairy/livestock and other animals in dry season. To preserve & protect silage nutrients from field losses, it is essential that silage units are to be established by the farmers. For that purpose, ZTBL can play its role for promotion of dairy/livestock sector by facilitating the farming community to provide loans for establishment of silage units in this regard. Keeping in view the captioned benefits of the product, the Bank has introduced to introduce the titled scheme for the farming community. The maximum loan ceiling under the scheme would be up to Rs.1.000 million per borrower/party.

9.3. Initiatives Need to be Taken in Future

9.3.1. "Kissan Sahoulat Scheme (KSS)"

Most of the farmers of Gilgit Baltistan are serving in various Government Departments to supplement their Agriculture income. The operational area of Gilgit-Baltistan is scattered in far-flung hilly areas, which discourages process of mortgaging process of borrowers due to lengthy and time consuming process. Therefore, most of farmers are reluctant to avail credit facility from ZTBL by indulging in this lengthy, costly and time consuming process.

In order to facilitate all such farmers who are also in Government service, a special product with title of "Kissan Sahoulat Scheme (KSS)" may be included in the Bank's financial

Inclusion Program.⁴ Under this scheme, farmers can avail Agri. credit against their salaries as collateral/security in loan able items like cherry marketing, bee keeping, and vegetable cultivation. This will save time and will increase repaying capacity of borrower, rate of recovery of disbursed loan and deposit for the Bank.

9.3.2. Scheme for fruits & vegetables

a) Machinery for drying and storage of fruits

It would be a good initiative if the Bank introduce any scheme similar to dehyderation of fruits & vegetables. The Bank may provide machinery and equipments required for drying, storage, packaging and transport of the apricots, apple, cherry and mulbary for maintaining their taste and quality without use of chemicals.

b) Transport and Mangement of fruits

Farmers are also facing huge post harvest lossess due to lack of storage and transport facilities for above mentioned fruits like apple, cherry, mulbary and peach. Farmers earnings can be increased many folds by provision of incentives to farmers and proper management. Provision of loans with low interest rates for cherry orchards and transport will help the farmers to ameliorate their current condition.

c) Orchard Plantation

In addition every year almost 1.5 M tourist visit Gilgit Baltistan who are very interested to eat cherries. Keeping in view the interest of tourists, the Bank may provide credit to cherry growers for orchard plantation. It would facilitate both growers and tourists simultaneously by enjoying and selling of cherry fruit.

d) Loan Sanction Limit Under Sada Bahar Scheme

Most of the potato growers are facing problems while applying advance for potato seeds as they do not have enough land to fulfill the criteria of Sada Bahar Scheme of the Bank. They are producing more than 100 mounds per acre, but the loan sanctioning limit for one acre is only about Rs. 51,000/- due to which farmers are unable to apply for Sadda Bahar Scheme. The loan for production may be increased by increasing the per acre value of agriculture land.

e) Dry Fruit Shop

Farmers of Gilgit Baltistan are being exploited by intermediaries due to non availability of outlet to market/sell their dry fruits. If bank consider dry fruit shop as loan able item, then it would help them to establish their own outlet for marketing of their dry fruits.

⁴ A proposal was sent by Branch Manager of Gilgit Branch, ZTBL.

9.3.3. Schemes for landless Farmers

- Applying loan is very difficult for farmers due to complex and lengthy revenue documents procedure. In GB the first Micro Finance Bank and KCBL are providing loans on personal surety of any Government employee. It is easy for farmers to avail loan if they don't have enough agriculture land under their possession. Launching of such scheme may be helpful to achieve targets of disbursement, deposit and recovery simulataneously.
- The Bank may provide credit to landless farmers against house and building in shape of security/mortgage to strengthening ZTBL's Program of financial Inclusion.

9.3.4. Schemes for Women

Wood Carvings

While visiting the GB, tourists show keen interest in wood made products such as spoon, plate, cups, key chains etc. Mostly farmers are unaware that wood carving is loanable item of the Bank. Hence if Bank promote credit facility for wood carvings among women then it will act as supplement for household income.

9.3.5. Schemes for Rural Youth

a. Guest Houses and Tea Shops

There are 614 villages in 10 districts of GB zone. Totoal population of GB is only 2 million and 1.5 million visit annually. Unfortunately there is no proper facility of accommodation arranged by Pakistan Tourism Development Council (PTDC). It has been obsreved that in summer due to shortage of hotels a major segment of tourist do leave in school, buildins, dispensaries and most of guests spends nights at parks, roads and open air.

To address this shortage of accomdation, ZTBL may offer loans to youth of the area for construction of guest houses on existing terms and condition of the Bank. This activity provides a self employement opportunity and promote agri. tourism and spiritual tourism.

b. Car Repairing Workshop/Tyre Repair Shop

Business of Car and Tyre Repairing workshop in Gilgit Baltistan has wide business opportunity. The Bank has it as loanable item under financial inclusion program which is neeed to promote among habitants of the area to increase Bank's business. Besides, ZTBL has already introduced following loanable items in AJK which has same demand in Gilgit Baltistan.

- Potato Chips Manufacturing Unit
- Solar Dehyderation of Fruits and Vegetables
- Garments Making
- Carpets and Rugs Making
- Quilt Making
- Furniture Making
- Crate Making
- Processing of Medicinal Crops
- Stationary and Book Shops

9.3.6. Promotion of Medicinal Plants

a. Sea Buckthorn cultivation

Sea buckthorn plant is famous for its multipurpose qualities. It is nutritious and has medicinal, efficacy, ornamental beauty and environment friendly. It has a great potential to become cash crop and to create off-farm employment and support cottage industry in the region. The Bank is financing for cultivation of this plant as mentioned above, however disbursement under the scheme is negligible as farmers are facing problems in availing loans due to less land holding. Morever, farming communities of GB are unwilling to adopt this natural resource due to its difficult and time consuming manual harvesting techniques due to dense arrangement of fruits among the thorns on each branch.

The Bank may launch awareness campaigns with the Agri. Extension Department to adopt sea buck thorn as a cash crop among local farming community. Farmers who are already growing plants should be encouraged by giving incentives in terms of credit at subsidized rates. There is needed to run projects involving the local communities. Seed, softwood or hard wood cuttings, suckers and meristems culture should be used to stimulate further propagation on large scale to export raw material and semi-finished products to down cities and abroad.

Value addition

A variety of products can be prepared from this plant which are given below:

- 1. Jams, jellys, syrup, squash, and shampoo can be prepared from the plant.
- 2. It is used for curing pain, support digestion and strengthen blood circulation and to get rid of cough.
- 3. The pulp or seed is used for oil extraction, which is recommended for external usage in case of skin complications.
- 4. The waste material of sea buckthorn, such as leaves, fruits and seed residues from juice and oil extraction, could be used to develop value added nutraceutical products for animals.

b. Cumin

Cumin is very famous in Gilgit Baltistan and even in the whole country and has a considerable potential in the economy of the country. Gilgit Baltistan's weather encourages its production due to high snow fall and rain throughout the year. Unfortunately, it is not being cultivated at commercial level due to minimum resources. This crop can be cultivated at commercial level, if the Bank provides credit to small farmers for the period of 3 years with the support of Gilgit Baltistan's Government. This would also help to decrease the rate of unemployment.

c. Mint

Mint is also being cultivated at subsistence level in the Gilgit Baltistan. This herb is also being used for cooking and medicinal purpose. The Bank may include this crop in its lending program and provide credit to small farmers at subsidized rates.

d. Fileel

It is also very common and easily available in market of Gilgit Baltistan. It is mostly grown at moist places i.e. near of streams and rivers. It is used for medicines for the treatment of fever, cough, and abdominal disorders.

e. Buckwheat

It is a crop with high medicinal value. It is highly effective for the patients of sugar and it can be used in replacement of wheat for diabetic patients. Any agricultural loan scheme for buck wheat production can help in increasing awareness as well as production of buckwheat.

f. Tobacco

Tobacco was the major crop of the Gilgit Baltistan and were grown at huge level in past. According to locals, this crop has potential to compansate the needs of the habitants, but also can be exported to other parts of the country. Hence, the Bank may promote its cultivation of this crop to reduce the poverty level in the area.

g. Baklah

Baklah is a similar type of peas and was consumed as bread. Unfortunately, its cultivation has been reduced to an extent level, which may be increased through promotion of cultivation of the crop. This crop can be utilized for treatement of Gastro disease.

9.4. Potential of Trout Fish Farming

A study was carried out by Hassan *et. al* (2007) regarding potential of trout fish farming in the northern areas of the country at the Trout Fish Research and Multiplication Centre (TRMC), Jaglote and the private farmers ponds to estimate cost of and return from trout fish farms. They concluded that Northern Areas of the Pakistan are technically sound for trout fish farming. Trout fish farming provides a great opportunity for exploiting the abundant source of cold water in Northern Areas. However, a market should be established before promoting trout production. The demand for trout fish exists in Northern Area and also in the other parts of Pakistan. In this regard, the Bank can promote trout fish farming through following suggestions with the collaboration of Government:

i. Training in trout fish farming be imparted through its training Centers to the interested farmers/entrepreneurs.

- ii. Make availability of credit for fingerlings in the area to the farmers.
- iii. Availability loans for quality feed in the market be assured.

10. GENERAL RECOMMENDATIONS

The area has high potential of natural resources, which can promote Agro. Tourism and Eco. Tourism in Gilgit Baltistan. Many tourists visit this area every year, which can be increased through further development and provision of basic facilities for the tourists through construction of hotels, roads, transports, electricity, hospitals and awareness among common people by the government and NGO's.

- The Federal Government and Government of GB should establish a Tourism Development Cell (TDC) to coordinate tourism related activities in northern areas.
- Marketing and promotional activities should be undertaken through publications, broachers and developing websites, incentives should be given to the private sector in tourism promotion activities.
- The state of poor infrastructure should be improved especially the communication, transportation, operation of direct foreign flights to Skardu and Gilgit, and solve power problem.
- The silk route festival should be made a regular event of the Northern areas. Government should have to arrange some local festivals for the advertisement of the areas culture heritage and handicrafts to the tourists
- There should be a museum in northern areas to display and promote the artifacts and relics discovered from archaeological sites in Northern areas.
- A participatory approach should be adopted where the local community should be taken in confidence at every step in the development of Eco tourism as after all it is them who can make a move successful or otherwise.
- Given the potential role of Northern area in the development of tourism, it is recommended that tourism training institutes should be established. The institute should offer degree, diploma and certificate courses in Ecotourism Management and planning, and hotel Management. Training of local mountaineers and trekkers, and guides should also be given or otherwise PFI can offer these courses.
- The Government should take strict measures for maintaining law and order situation in the area to ensure security for tourists. The forest Department should make a strategy for rotational grazing and improvement of ranges.
- Deforestation should be controlled by providing alternatives of fuel wood.

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