

Provincial Profile

- Badakhshan -

1. Natural Resources (ANDS Sector 3)

Two of the five *watersheds* in the Amu Darya River Basin, the Panj and Kokcha watersheds, are located in Badakhshan. The Panj watershed, which originates from the high Pamir, drains many rivers on its route. The Ab-i-Pamir and the Wakhan Rod combine to form the Panj river which is also fed by the Sheva, Darwaz, Kufab and Ragh rivers in Badakhshan. The largest lake of the Panj watershed is the Sheva lake, which covers an area of 5.67 Sq.Km. The rangeland, which accounts for about 64 percent of the watershed dominates the Panj watershed. Permanent snow cover accounts for about 26 percent. The irrigated land accounts for about 0.7 percent of the watershed. The Kokcha drains from the high Hindu Kush Mountains of the Kuran wa Munjan district of Badakhshan. The Tagab-i-Anjuman and the Tagab-i-Munjan combine to form the Kokcha. The Warduj river joins Kokcha below Baharak. The Kishim river joins Kokcha, which eventually joins the Amu Darya at Takhar. Rangeland dominates this watershed too, accounting for about 60 percent. Permanent snow cover accounts for 12 percent. Irrigated land accounts for 3 percent and the rain-fed cultivation accounts for 18 percent.

Afghanistan uses only a small portion of its entitlement in the Panj River. Any expansion of the development activity, resulting in increased use of its entitlement, would have an impact on the water availability in the Amu basin. This would have an impact on the Aral Sea conservation mechanism that is in place. In the context of the Aral Sea conservation initiative, the catchment area of Pamirs has attracted attention. Wakhan is home to five mammal species; Snow leopard, brown bear, wolf, Marco Polo sheep and Siberian ibex. Most of them are listed in the IUCN's Red List of Endangered Species. Furthermore, the region hosts a number of indigenous plant species, birds, insects and other animals that are of high scientific interest, be it for their local specificity or their coping capacity with the harsh living conditions.

The Tugai *forest*, an important and characteristic wetland ecosystem of the dry lands of central Asia, is found in Kuran Munjan district and stretches along the Kokcha river. This ecosystem consists of reeds (Phragmites) interspersed with the Tamarix and Salix trees. The Tugai forest also has potential for eco-tourism.

Of the 73 million *coal reserves* identified in the country, part of it is reported to be in Badakhshan. However, there has been no major commercial mining of coal in the province. Wood products meet the bulk of the energy needs, leading to a severe deforestation.

Badakhshan is a *major source of gems and mineral*, most importantly Lapis Lazuli.

Badakhshan has relatively cold climate, allowing for only a single crop in many areas.

Badakhshan has the highest seismic risk in the country. The region is also prone to flash floods and landslides. This has an impact on livelihood opportunities.

2. Human Resources

The population of nearly one million in Badakhshan, resides in 1460 villages and few towns. The density of population is 16.23 persons per square km, ranking 7th from the bottom. Badakhshan's ethnic groups include Tajiks, who form the majority followed by Uzbeks. The Ismailis form a sizeable number in the districts bordering Tajikistan. The Krygyz and Wakhis are the other distinct ethnic groups, numbering about 11,000, who live in the Wakhan corridor.

Overall, the *human capacity in the region is poor*. The long years of the war are an important reason for this. There has been a sharp decline in the number of Badakhshis pursuing higher education. In 2005, only one

person was admitted in the Medical College and 13 joined the engineering course. 30 percent of those pursuing higher studies opted for education, possibly due to the easy access to TTCs.

The *literacy* rate in Badakhshan is 42 for male and 21 for female. Badakhshan has the second highest female literacy rate in the country. Enrolment in schools is increasing and the highest secondary school enrolment occurs here (NRVA 2003). The gender gap in both primary and secondary school enrolment is low. However, enrolment from the poor is still low. Cost of education is believed to be a deterrent for the poor. Distance is another factor. For nearly 50 percent of the students, travel time is anywhere between 2 to 5 hours. In the last few years, there has been an improvement in school infrastructure, including access to water and sanitation. The quality of education in schools is still an issue. The capacity of the teachers and poor availability of teaching and learning materials are an issue as well.

Besides formal literacy, non-formal literacy for adults and women is making a significant head way in the region. A large number of girls and boys are taking advantage of the computer courses that are being offered in Baharak, Shegnan and Ishkashim. Many vocational courses, such as carpentry, auto mechanic, and tin smithing enable the youth to take advantage of emerging opportunities in places like Baharak, Ishkashim and Shegnan.

The number of people migrating to neighbouring countries for employment has declined sharply since 2001. However, sizeable *migration* within the province is reported. Many persons from Wakhan migrate to Baharak, Jurm, Argo and other places for wage labour. The high labour need for poppy cultivation in parts of Badakhshan is one of the reasons for internal migration. Migration occurs from the beginning of May to the end of June every year. With the initiation of the development activities in Wakhan, the seasonal migration is believed to have declined. Many of the migrants to the neighbouring countries are returning back. The majority of the *returnees* belong to Kishm, Shar-e-Buzurg, Jurm, Ishkashem and Shegnan. These returnees get some assistance from UNHCR.

Opium addiction is a major issue in Wakhan and Shegnan. Besides the health aspect, opium addiction is also pushing many families into poverty.

For the majority of Badakhshis, cultivation and livestock don't provide for the entire household. Many rely on *wage labour*. Wage labour accounts for about 50-70 percent of the annual household income of the poor.

3. Agriculture (ANDS Sector 6)

3.1 Overview

Within Badakhshan, there are *diverse agro-ecological* zones. Consequently, the farming systems and the agriculture calendar are also diverse. For instance, the harvest season in Baharak and in Jurm valley starts in late May and continues till the end of July. In the higher altitudes of Khash and Jurm, harvest begins in July and ends in September. In many of the border regions, harvest occurs very late in September/ October. Similarly, while Baharak, Jurm Valley and Kishim are very fertile; Wakhan is very poorly endowed. The farm production in Wakhan accounts for barely about 6 months of annual household consumption.

There are *no major irrigation systems* in Badakhshan. Irrigation is done by diverting the river or the springs through intakes into channels. Although, the irrigated area is rather low, Badakhshan has the advantage of being upstream in the irrigation system.

The last few years have seen a significant improvement in the farming system in the region. The *use of quality seeds and fertilisers has increased* substantially. The irrigation infrastructure, in the form of channels, has also improved, due to the support from the NSP.

The *pasturelands* dominate the province. According to MAI, there are 2,800,601 hectares of pastureland in the province. Forests account for 906,009 hectares. The irrigated land accounts for 302,544 hectares.

3.2 Crops

Wheat is the staple crop, in the region. It is cultivated both as irrigated and rain fed crop. As the altitude rises, the cropping calendar for wheat, changes from being autumn sown to partly autumn and partly spring sown and then to mainly spring grown in the highest valleys.

Within Badakhshan, there are *niches where certain crops and varieties are specialised*. For instance, paddy is grown more in Kishm. Jurm and Baharak provide an ideal place for dry fruits. Pistachios are best grown in Shar-e-Buzurg, Argo and Kishm. Walnuts are a speciality in Shahada, Wardooj, Yamgan and Shegnan. Kishm, Jurm and Shegnan, provide a good environment for growing Mulberries. Developing the niche segments into clusters and encouraging agro-processing industries is an option.

The crop yields have increased over the years. There has also been an increase in the cultivation and use of *vegetables*. Plastic tunnels have enabled a higher yield of vegetables in Shegnan and Darwaz. Vegetable cultivation has involved women and this is a positive externality.

The cultivation of *poplar and willow trees* is undertaken along water courses and also in plantation. Poplars are the main source of timber for construction in the region. The growth of poplars in plantation could be encouraged.

Poppy is also an important crop grown in the province. Badakhshan Province is currently the fifth largest poppy cultivating province in Afghanistan.

3.3 Livestock

According to an FAO survey, the average cows per family is 1.1 and the average milking cows per family is 0.7. This is higher than the national average. This is despite the fact that the drought of 2000 had significantly depleted the livestock base in the region. The young to adult cow ratio is 1.3. Though, higher than the national average, the reproduction rate is low and hence it would have an impact on restocking of the depleted livestock in the region.

In Wakhan, animal husbandry is an important livelihood strategy. However, there is a huge disparity in the ownership of livestock between the rich and the poor¹.

Improved Australian alfalfa, introduced in parts of Badakhshan, has been accepted by the community, owing to its higher yield compared to the local variety.

3.4 Fisheries

Significant opportunities exist for developing fisheries in the province. However, no efforts have been made for commercial fishing. The potential needs to be examined.

3.5 Land tenure

The average farm size is between one and two hectares. Absentee landlords are common and share-cropping is expanding in most areas.

3.6 Agricultural support services and input supplies

There has been a significant improvement in the use of quality seeds and inputs in the region. However, the *quality of seeds and inputs available in the private market is poor*. The seed contract growers were introduced in parts of Badakhshan to ensure availability of good quality seeds, and this has had a good impact. The lack of entrepreneurial behaviour and cultural issue of “profit” is a constraint in certain parts of Badakhshan and limits the expansion of this activity. However, in certain parts, such as Jurm and Baharak,

¹ The rich group in Wakhan owns, on an average, about 500 to 600 sheep, 200 to 250 goats, 50 to 60 cattle, numerous yaks and about 10 camels. On the contrary, the poor own a small number, about 10 to 15 sheep and goats groups and couple of cattle.

the contract grower system holds promise. There are individuals who are willing to set up enterprises for providing agricultural inputs and services. The start up capital to establish these enterprises is an issue.

The Ministry of Agriculture, along with AKF, is revamping the *extension system* in Badakhshan. The establishment of the research station in Baharak, Faizabad and Kishm would help to significantly strengthen the agricultural system in the region. This should also give a fillip to the private sector to provide the agricultural input and services.

The provision of *livestock services*, specifically the vaccination services, as paid services, through Paravets and Basic Veterinary Workers (BVWs) has been encouraging. Potential for expanding this service exists, although, there is a need to motivate the community for vaccination. Potential also exists for improving the quality of livestock, as a paid service, through cross breeding. The introduction of the Swiss brown bulls in parts of Badakhshan indicates that this service could be expanded to other parts.

3.6 Agricultural structures (farmer groups/organisations/larger farmers etc)

There are no formal farmer groups in the province.

Some of key segments of the farming community who could be targeted are:

- Seed growers especially in Jurm, Baharak and Ishkashim area.
- Orchard owners in Baharak and Jurm.

3.7 Agriculturally related businesses

The agricultural related businesses that hold a promise in the region are:

- Honey
- Dry fruits
- Silk weaving
- Cashmere weaving

Honey extraction is already done by many. Services to establish honey extraction enterprise are available in the region. The results indicate the feasibility of expanding this enterprise. The activity could be concentrated in the districts of Shuhada, Baharak, Wardooj, Jurm, Kishm. The advantage of this enterprise is the low start up capital required. This activity could be undertaken by the poor as well. However, quality packaging and marketing are issues that need attention. Business association of honey bee growers is being considered.

Silk and Cashmere could be niche products developed in Badakhshan. However, capacity building for these enterprises needs significant time and investment. Training on silk and cashmere weaving are ongoing. There is a need to build on these initial efforts. However, capacity building for weaving silk and cashmere require significant time and investment. The expansion of training opportunities has to be considered. The raw materials and markets for these enterprises also need attention. In the short run, it would be useful to procure raw materials from outside. In the medium to the long run, efforts may be made to improve the raw material availability and quality.

The majority of the population have skills in making **Namad** (coarse woven rugs made from wool), **Geleem and wool processing**. However, the demand for their products in the main markets has been reduced to almost zero due to the increased import of very cheap Iranian and Pakistani carpets to Badakhshan. As a consequence people use these wool products only in their own houses, and the limited demand gradually leads to a loss of skills. For several decades, indigenous practices of cloth, shoe and domestic material production (within the domestic arena) has withered as cheap machine made alternatives flood the market, usually originating from the cheaper mass-produced markets of china etc.

Wool products, such as Tthan and Namad, can be developed into a major enterprise, especially along the border regions. The demand for these products has declined due to the influx of cheap Iranian and Pakistani carpets. Consequently, there is a gradual erosion of the skills. Skill building of the community for the wool

products is currently on-going in many of the border districts. This needs to be expanded. The quality woollen products could be sold as niche products of Badakhshan.

4. Other business activities (ANDS Sector 8)

There is no major industrial activity in the region. All enterprises are small scale or informal in nature.

Poultry is emerging as a significant enterprise in the region. The services for establishing poultry units are available in Baharak, Jurm and Ishkashim. In this district, the poultry units have eliminated the imports and increased the availability of poultry products in the market. The ongoing efforts on poultry need to be expanded.

The **tourism** industry has potential for growth in the province. The marketing of niche tourism in Wakhan has indicated the growth potential. The marketing of Wakhan as a tourist destination has had a good impact on services such as guesthouses, cooks, guides and transport industry. There are other destinations in Badakhshan, which could be marketed both for internal and foreign tourists. Expansion of tourism will also provide a market for many of the niche products of Badakhshan.

With the onset of the **road** construction in the region, the construction industry also holds promise. This sector also needs attention.

Badakhshan is a major source of **gems and mineral**, most importantly Lapis Lazuli. However, there is no value addition of this precious resource. Consequently, only about 10 percent of the ultimate value of the lapis is received. Training in gem cutting and polishing is ongoing. This enterprise has a scope for providing significant opportunity for employing locals and contributing significantly to the local economy.

Technical personnel are also required to repair photocopying machines, refrigerators, electrical fittings, and motor cars. These are emerging opportunities in the region. Carpentry is another enterprise that holds promise given the increasing construction activity in the region. A number of auto mechanic shops have been set up in Faizabad, Baharak and Kishm. This sector holds promise due to the increasing number of private vehicles. The number of petrol stations has increased over the last year in the region.

Weekly markets at three border crossing points provide an opportunity for cross border trade. Efforts are currently in place to improve the cross border trade. This holds promise for marketing the products of Badakhshan.

The **Chamber of Commerce**, long dormant, was reactivated in 2004. It has 9 permanent members, of whom 5 are from Faizabad, 1 from Argo, 2 from Baharak and 1 from Jurm. The chamber however, hasn't been able to provide any significant support to the members, who are the petty traders and the shopkeepers. It has, however, been lobbying for the establishment of the custom facility at Ishkashim, to facilitate cross border trade. In 2006, the chamber managed to get visas for 10 businessmen from the region and also enabled the transfer of 10 truckloads of Chinese goods through Tajikistan.

5. Security (ANDS Sector 1)

Compared to other regions in the country, the security situation in Badakhshan is better. With the NSP programme, and the emergence of the CDCs, the institutional forms for governance have undergone significant change. The NSP, by facilitating the prioritisation of development needs and their execution by the community has significantly eroded the power of the traditional leaders. This has considerably improved the security context in the region. However, the poppy cultivation and the reported large increase in the number of Ulemas, trained in the neighbouring country, are believed by many to be potential security threats.

6. Physical infrastructure (ANDS Sector 8)

Badakhshan is the **most inaccessible part of Afghanistan**, with very few all weather roads. The road access to Faizabad, the headquarters of the province, is difficult thus considerably increasing the cost of materials. However, the access is expected to improve significantly with the ongoing construction of the road from

Taluqan. The access through air is often difficult during the winter months. Many of the border districts do not have access for the better part of the year, thus increasing their vulnerability. The only reliable access to these border districts is through Tajikistan. This considerably limits the enterprise opportunities. Many productive infrastructures such as bridges and roads have been built in the region, considerably improving access. For instance, the districts of Jurm and Yamgan are now connected year round to Faizabad. Efforts are in place to improve access to Ishkashim as well.

Lack of adequate availability of electricity is another major constraint. Overall there has been an improvement in the electricity with the establishment of many micro hydel projects. These however, meet the domestic needs and at best meet the needs of household enterprises. The provision of electricity from Tajikistan to the border districts could provide a fillip to enterprise activities.

Only about 10 percent of the community has access to safe *drinking water*. Many have to travel long distances to access water.

Access to health is a major constraint. About 90 percent of households travel between 3 to 12 hours to access health facilities. There has, however, been a significant increase in the number of health facilities in the last few years.

The *public transport system* is functional in Faizabad and recently the public transport system has begun to connect districts like Baharak to Faizabad. However, there is a large private transport system that provides access both within the province and also to Kabul. The private transport system is regulated more by the operators themselves.

7. Institutional constraints (ANDS Sector 8)

Barter is still prevalent in many regions. Full monetisation of the economy is expected to take time. The entrepreneurial behaviour and skills are not widely present. Many still view profit making from their own community as an abhorrent practice. Charging interest is also culturally not acceptable to many.

It is estimated that about 60 percent of HH are poor. More than 15 percent are very poor. Fifteen percent of these poor households in Badakhshan are headed by women. This has an impact on addressing poverty as the majority of women, bound by culture, are kept out of the labour market.

The quality of human resource, as mentioned above, is a constraint. Though there have been many activities, such as vocational training, that are ongoing to improve the quality of human resource.

There is *no judicial system for arbitrating commercial disputes*. The system of contracts and agreement has no validity as they are not endorsed by any government authority.

The *near absence of financial institutions* is another important constraint.

An agreement signed in 2005 between Afghanistan and Tajikistan to *facilitate access for communities in the border districts* exists. Though it had improved access, often the interpretation is done on an episodic basis. The establishment of a Tajik consular service in Badakhshan is necessary to facilitate cross border trade and access to services in Tajikistan.

8. Credit

Informal credit arrangements are widely prevalent in the region. Arrangements such as Salaam are exploitative and push many into debt traps. The ARMP and the micro finance have introduced products such as loans for traders, re-conversion loans, which are non-abusive and to stimulate entrepreneurial behaviour in the region. The Self Help Groups (SHGs) formed in Jurm and Ishkashim by AKF have revealed the potential for mobilising resources through savings to provide affordable and non-abusive credit for trading and agricultural purposes. The funds mobilised through SHGs could replace part of the informal credit systems that push many into debt traps. The other advantage of the SHGs is the empowerment of women.

9. Stakeholders

Provincial authorities: <ul style="list-style-type: none"> • Governor • Head of provincial planning • Head of Economics • Head of MRRD • Head of Agriculture • District Governors 	Key stakeholders. Given the provincial planning process, all development activities need their approval. (1)
Members of Parliament	Exercise influence in the region
Donors <ul style="list-style-type: none"> • USAID • GTZ • DANIDA 	Financial support
NGOs: <ul style="list-style-type: none"> • AKF • Mission East • Afghan Aid • Oxfam • Concern 	Many interventions started by these NGOs. Their knowledge and reach would be very helpful in any activity.

10. Summary of key potential development opportunities

<i>Agriculture and allied initiatives</i>	
Seed growers and agriculture services	The initial results of this initiative are encouraging and this could be undertaken in the entire province to improve the quality of seeds and inputs leading to increase in yield
Facilitating cultivation and marketing of niche crops	<ul style="list-style-type: none"> a) Fruit orchards, marketing of fruits and processing in districts such as Jurm and Baharak b) Promotion of dry fruits cultivation and marketing in Jurm, Baharak, Shahada, Wardooj, Argo, Kishm and Shar-e-buzurg c) Liquorice in Wakhan and Ishkashim d) Asfoetida in Ghoran, Kuran and Zebak
Livestock services	Vaccination and cross breeding as paid services in the entire province
Honey bee	Significant potential. Private sector services available for the establishment of honey bee enterprises
Wool products	Skill development for niche wool products such as Tthan and Namad ongoing. To build on these efforts, improve quality and promote marketing
Cashmere	A specialised wool product. Capacity building is on going at Ishkashim.
Silk weaving	Significant potential exists. Capacity building for weaving currently on going
<i>Other enterprises</i>	
Poultry	Private service providers for establishing poultry units available in Jurm, Baharak and Ishkashim. Significant potential exists for expansion
Tourism	Promotion of Wakhan and other places as tourist destinations. On going efforts. Significant positive externality on transport, guest houses, and services such as cooks and guides.
Gems	Value addition activities in gems will increase employment opportunities and also contribute to local economy. Master trainers for gems cutting and polishing available in Badakhshan.
Technical skills	Significant emerging opportunities for auto mechanics, technical persons for providing services.