

Provincial profile for

- Wardak -

1. Natural resources

Wardak province has less mineral and forests but enough water resources. Minerals such as gems and marble are found the mountains of provincial centre and Nerkh districts. Recently the government has banned the extraction of these resources. Wild almond forests are found in three villages in the districts of Nerkh and Jalriz districts. Three rivers flow through Wardak province i.e. Helmand river, Logar river and Maydan river. There is one dam called Chak dam on Logar river at Chak (currently producing 3300 Kilo Watt electricity) as two of its turbines not working and only one is operational. Recently a water reservoir by name of Band Dana in Jaghathu districts has been repaired.

There are no major developments in other sectors except agriculture in last 20-30 years. Wardak is famous for its quality apples introduced about thirty years ago by Dr. Wakil, who was also from Wardak. Now in Wardak half of the irrigated land is occupied by orchards and is a major source of income. In the past thirty years there is a shift from traditional crops like rice, maize and wheat to vegetables and orchards growing. Also access to improved seeds, fertilizer and agricultural machinery has increased significantly during the past 30 years.

2. Human Resources

According to a rough estimate 80% of the people mostly from the provincial centre and adjacent districts migrated during the war to Iran and Pakistan. Almost half of the migrated people have returned on the hope of better employment but the dreams of the most of retunes did not come true.

Kochis stay in Syed Abad, Daymardad, Nerkh districts during summer (April-September). Traditionally Kochis would spend summer in upland pastures of Hazaragat (Hesa Awal Behsood and Hesa Dom Behsood districts) but they are not allowed anymore in these areas as the Kochis misused their traditional rights during Taliban time. Recently, government has given land to 600 Kochis near provincial centre to settle down permanently.

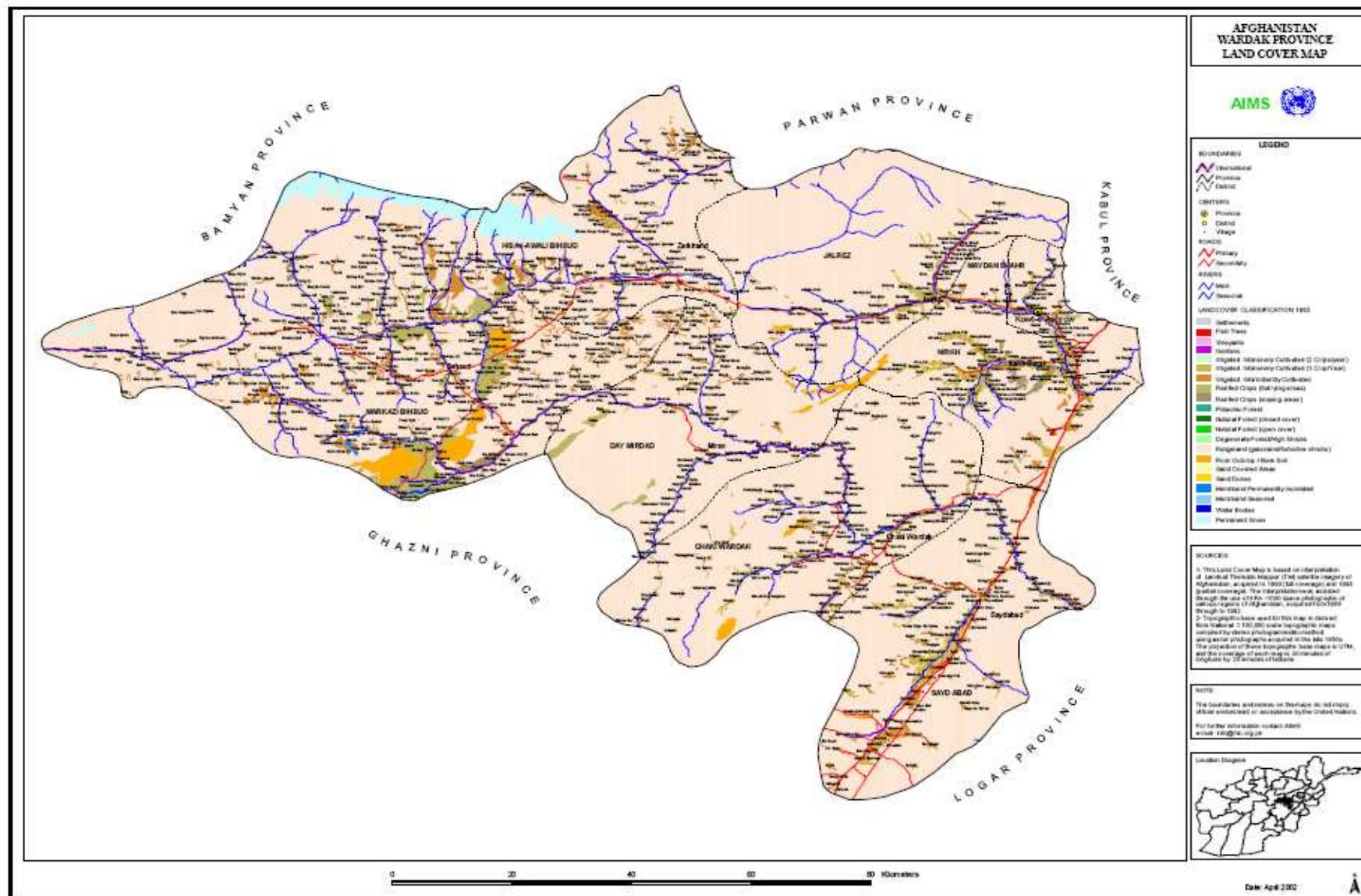
The literacy ratio (30-40 % of the population is educated) is relatively better in Wardak compared to other parts of the country. A significant proportion of the population is doctors, engineers and graduates from Agriculture faculty. There are 39 high schools, 67 middle schools, 157 primary schools and 78 village schools in the province. Currently 90,170 male and 24, 570 females are enrolled in these schools. There is no accurate estimate of religious schools but Wardak is also famous for its religious education and an example of this is one well know religious institution at Syed Abad on the main road from Kabul to Qandahar.

3. Agriculture

According to the figure provided by Direcorate of Agriculture in Wardak approximately 32691 Ha of land is irrigated and 11120 Ha is rainfed.

The major sources of irrigation are Karezes, rivers, springs, wells and tube wells. It is note worthy over here that the majority of the irrigation (80%) in eight districts of the province is done through Karezes and springs. Three rivers (Logar, Maydan and Helmand) run through five districts of the province. Approximate length of the Logar river in the province is around 350 Km while that of Maydan river is 240 Km and provides irrigation water to provincial centre, Jalriz district and part of Nerkh district. Helmand river only runs through Hazargat (Hessa Awal Behsood and Hessa Dom Behsood). According to Directorate of Irrigation and Water Resources there are almost 1500 small and medium canals and 700 major canals on river Logar and Wardak. Most of these are damaged and are in urgent need of repair.

Figure 1 Land use map of Wardak Province (Source: AIMS, 2002)



The growing of traditional crop like rice before war and drought indicates the abundance of water at that time. The effect of drought is more pronounced than war. During the drought the water in rivers, Karezes and springs has reduced by 90%. This drought has forced the people to install private tubewells since Taliban time. There is no restriction or rule where to install the tube wells as certain rules prevalent for Karez construction. This has led to mushrooming of private tube wells which has pushed down the water table. According to officials of Directorate of Irrigation and Water Resources, the government has realized this grave issue and recently banned the installation of private tube wells but this order has not been implemented yet. Now only water can be found at a depth of unprecedented 50 meters depth and the average rate of buying water from tube well is Rs.150/hour.

Apples, apricot, beans and potato are the major cash crops of the area which are sold to Kabul market and also to Pakistan but there is very poor marketing system. Mostly traders from outside buy the produce from the farmers at their farm on a very low rate compared to market. So the maximum benefit goes to the middleman i.e. outside trader.

3.2 Crops

Wheat is mostly grown on rainfed land and on irrigated land wheat, potato, maize, rice, barley, beans, onion, carrots, tomato and fodder like barseem, clover, sorghum are grown. Approximately on 50% of irrigate land orchards are grown. Apple is the most common fruit tree grown and other fruit trees are peach, pear, quince, grapes and plum.

The traditional crops of the province were maize, wheat, rice and barley. Orchards were introduced by Dr. Abdul Wakil in the province around 30 years before and now it is the major source of income for the farmers. According to an estimate one jerib of apple orchards produce 8400-11200 Kgs of apples and the current price for 560 Kgs is 12,000 Pak. Rs. So it means the income from one jerib of apples is 180,000 – 240,000 Pak Rs. During the last five there is a growing trend of growing cash crops especially vegetables like beans, potatoes, onion and tomatoes. The drought during the last six years has reduced the production significantly. ZOA and French cooperation office has recently introduced saffron in the province mainly provincial centre. Mechanization and use of improved seeds and fertilizer has significantly increased during the past five years.

3.3 Livestock

According to a rough estimate provided by Directorate of Agriculture, there are 18,000 cows, 170,000 sheep, and 130,000 goats in the province but even the director of Agriculture believe that these figures are not true and the livestock population can be much higher than this. Most of the livestock is found in Hazaragat (Hessa Awal Behsood and Hessa Dom Behsood) and livestock is their major source of income as the land holding is small and not much productive in the area.

In Hazaragat the sale of livestock products is more compared to other districts of the province. In Hazargat woolen rugs like *Glem* and *Namad* are produced. The milk products like Qrooth, chaka and butter are sold. A project funded by FAO has established four milk collection centres i.e. two in provincial centre and two in Nerkh district. The farmers bring the milk to these points which are bought by the staff of Guzargah milk processing centre at Kabul. The project also provides training for farmers in animal husbandry and also inputs like fodder seeds. This project is very popular among farmers and the number of cows has increased significantly due to this programme. The farmers in other districts are demanding for extension of this project to their districts and increase the number of the milk collection points.

3.4 Fisheries

Local varieties of fish are found in the three rivers. There are no commercial farms but there is a potential for future in this sector.

3.5 Land tenure

According to a rough estimate 10% of the people in the province are landless. Big farmers (having more than 50 jeribs of land) are 2% percent, 15 % medium farmer (having land between 20-50 jeribs) and remaining 83 % farmers are small farmers (having land less than 20 jeribs). In plain areas of the province land holding is larger while it is very small in Hazargat due to rough terrain.

The most common sharecropping system for crops is 1/3rd i.e. all the inputs by owner and labour by sharecropper and 1/3rd of the produce goes to the sharecropper and rest to the owner. In orchards the sharecropping system is 1/4th or 1/5th as less labour is required. Agricultural labour on yearly basis is also prevalent. The rate for an agricultural labour on yearly basis is 1.5 ton of wheat.

Leasing of land is very less and for one jerib of irrigated land situated upstream 420 Kg of wheat is paid per year and almost less than half of that for the rainfed land. Mortgage is common in area as most of the people are below poverty land and the land and livestock are the only safety nets in the time of need.

3.6 Agriculture support services and input supplies

Nine different departments of Agriculture and Livestock Directorate in Wardak are mainly responsible for providing different agriculture support services as shown in the following table.

Table 1: Different departments in Directorate of Agriculture and Livestock, Wardak and extent of services provided in the province

S.No.	Name of the department	Extent of services
1	Forests	Only in provincial centre
2	Agriculture Cooperatives	Only in provincial centre.
3	Land Management	One person each for nine districts of the province.
4	Plant Protection	One person each for six district of the province.
5	Agriculture Extension	Two person each for nine districts including centre
6	Animal Husbandry	Provincial Centre only
7	Artificial Insemination	Provincial Centre only
8	Veterinary	Service available in four districts only including centre
9	Administration	Provincial centre only

French Cooperation office provides most of the support to the Directorate of Agriculture and Livestock. They have upgraded the office of the Directorate by providing furniture and also a vehicle and other agricultural inputs. The French Cooperation Office in cooperation with Directorate of Agriculture work in provincial centre and Nerkh district and have trained and provided inputs to the farmers and have also established 11 nurseries. Recently they have introduced saffron in the province and also working on their marketing.

MADERA is working in Hazaragat in livestock and agriculture sector but has currently suspended their activities due to the disappearance of their staff in the area. ZOA is working in Syedabad district in livestock sector, bee keeping and saffron growing. Last year the farmers growing saffron with help of ZOA have got an income of 800 US\$/jerib. DACAAR working in Jaghato district have stopped their activities due to security situation and attack on their office. CoAR is working in syedabad district mainly in agriculture sector. Swedish Committee have handed over their agricultural activities to CoAR and only involved in NSP now. FAO is working Hazargat on food security and has milk collection centres in two districts.

3.7 Agriculture structures

There are 37 cooperatives having 7000 members in it in all districts except Jaghato district. The number of members in each cooperative ranges from 30-900. The agricultural inputs are distributed by Directorate of Agriculture and other Organizations among the cooperative members on preferential basis. Shoras (not the one formed by NSP) are present in the villages where there are no cooperatives. CoAR, SCA and MADERA have also formed some seed growers associations.

3.8 Agriculture related business

Wardak is famous for producing quality apples which are sold to other parts of the country and also exported. Vegetables especially beans and potatoes are also sold to outside market. Selling of milk to FAO collection points is also a major business activity in the livestock sector while the sale of livestock products from Hazargat is also significant.

4. Other business activities

A significant proportion of the people (almost 15-20 %) from Wardak go to other countries for work mainly to Iran, Pakistan and Gulf counties. The people from wardak are also expert in Karez cleaning and repair and go to other parts of the country for this purpose. Stone quarrying is also a growing business in the area. There is one marble factory in Nerkh district and the marble mines in the provincial centre and Syedabad districts.

5. Security

Security is not good in the province except Hazaragat but again you have to pass through unsafe districts to reach there. The recent disappearance of the MADERA workers in the area and attack on MADERA and CARE offices speaks for itself about the worsening security situation in the province.

6. Physical infrastructure

The main road from Kabul to Qandahar bisects Wardak province and most of the villages lie on the either side of the main road. All the district centres are connected by dirt road from provincial centre. There are fewer roads in Hazargat due to rough terrain as compared to flat parts of the province. Almost 80% of the villages are accessible by road. Narekh to Deh Mirdad road which is fifty kilometers long is under construction.

Power is only available to almost 15% of the population. Chak dam only provides electricity to Chak district as 2 of its turbines are not working and only one is operational. Previously it used to supply electricity to provincial centre and also to Kabul. The total number of micro hydro power station ranges from 40-50. In Hazargat there are relatively more micro hydro power stations providing electricity to the locals. One micro hydro power station also exists in Nerkh district constructed by American during Taliban time. Some of the people also get electricity from NSP installed diesel generators and from private generators.

The major source of drinking water is wells and a lot of work is going on for installing more wells. There are six hospitals in the province (one each in centre, Hazaragat, Chak, Jaghato, Narkh and Syed Abad) and clinics at village level which provide the basic medical services.

7. Institutional constraints

Security and the poor infrastructure is the main issue hindering development and business activities in the province. Lack of human and financial capacity in government departments is a major obstacle in their performance. Moreover, the lack of skilled labour locally is also a major constraint. Some of the warlords from the past are also hindering the working of institutions. The lack of awareness among the public and misconceptions about different institutions also hinder the development activities.

8. Credit

Informal credit is common mostly in rural areas. There is no microfinance programme in the province. According to officials of MRRD, BRAC started some activities earlier but are no more active. The people are not willing to accept the microfinance programme due to interest involved which they think is against Islamic principles and also the tough repayment procedure.

9. Stakeholders

The following table gives a brief description of each stakeholder

Stakeholders	Rank	Comments
National authorities	3	Have limited presence in the centre only.
Regional and local	3	Although structures are there but not functional due to security situation and lack of resources
Regional and local organizations	2	Cooperative which have recently started working but no very active.
NGOs/CBOs	2	Limited presence of the NGOs mainly in centre, Hazaragat but deterioration security situation is forcing the NGOs to move out of the province.
Religious organizations	1	The existence of religious institutions seems to be strong tin the areas
Traditional organizations	1	<i>Shura</i> is one of the most strongest and oldest institution in the area
Commercial and business groups	3	No significant commercial and business groups.
Groups defined by beneficiary status, social analysis, rural appraisals or gender analysis	3	Due to prevalent security situation the rights and voices of such groups are not heard
The press	3	Press is almost non-existent in the province
Donors	2	The role of donors is also limited because of security situation implementation of proposed activities is not easy.
Warlords	1	Existence of warlords in some parts of province to dictate things has worsened security situation.

10. Summary of key potential development opportunities

Following key potential development opportunities are recommended for the province and districts.

1. As agriculture is the backbone of the economy. So for the revival of agriculture sector and mitigate the effects of drought following are recommended.
 - Making of water reservoirs for water harvesting as sufficient water is available from Dec- April.
 - Repair and desiltation of already existing Chak dam and construction of other new dams both for power generation and irrigation purposes.
 - Repair of already existing infrastructure for irrigation especially to reduce the loss of water from Karezes by lining it.
 - To divert river Helmand river to irrigate other parts of the province. This was planned earlier but could not be implemented due to unknown reasons.
2. Further strengthening perennial horticultural especially the apple production sector. Enough care should be taken in introducing exotic crop verities without trials
3. Processing of fruits and vegetables should be introduced like jam, marmalade, juice and pickle making plants to absorb the surplus production and provide employment.
4. The already initiative of milk collection and processing centres taken by FAO project is very successful and such efforts should be replicated in other parts of the province especially to Hazaragat area as they are highly dependent on livestock production.
5. To further develop the wool products from Hazarghat.
6. To introduce fish farms in the provinces through which rivers flow
7. To streamline the business of marble extraction and also stone quarrying. Some marble mines exist in Hazargat but these are not accessible. So this potential need to be further explored.
8. To upgrade road from the province to Bayman which is a tourist attraction will bring some benefits for the locals.

Annex 1**Provincial Data Base****Province: Ghazni**

Programmes/projects		Agency/donor	Approx Value US\$m	Comment, significance
No	Completed			
1	Water supply	Different NGOs but administered by MRRD	Not known	24 Wells for Kochis in centre. 40 wells in Daymardad district by ARO.SCA has dug 80 wells in Hesa Awal Behsood, 70 wells in Nerkh and 80 Wells in Jaghato.
	Ongoing/planned			
1	Water supply and sanitation	ZOA	Not known	Upgrading 1000 latrines in Syedabad district in 25 villages and digging 47 wells
2	Agriculture and livestock	MADERA, French Cooperation office, CoAR, ZOA, FAO	Not know	Working in different districts.
3	NSP	SCA	Not known	Implementing in five districts
4	Emergency irrigation rehabilitation project	World Bank	Not known	Irrigation structure repair.
5	Food security	FAO and WFP	Not know	WFP working on food security of children in Jalrez and Hazargat.
6	Roads repair and construction	Mili Rah Sazi	Not known	Constructing Narkh to Deymirdad road which is about 50 Km

Annex 2

Working methodology used:

DACAAR was working in Jaghato district of the province but due to security situation has stopped its activities. So the basic information about the province was collected from the DACAAR staff who worked in Jaghato and desktop research. The Senior Advisor for the project visited Wardak on 26 September to collect the primary data from different sources in the province. Senior Advisor met with officials of Directorate of Agriculture, MRRD, Irrigation and water resources and Energy departments.

Security was a real concern during the field visit as the vehicles traveling from Kabul to Wardak comes under frequent attacks. Discussion with different authorities revealed that very less documented information is available about the province. Unfortunately it was difficult to trace some of the officials due to the meeting of all heads of the departments and NGOs with provincial governor on the day. Due to time limitations and month of Ramazan it was not always possible to meet a substantial number of key informants.

Annex 4: List of persons/agencies visited/contacted

Name	Position/agency	Topic discussed	Date
Fazal Umar	Deputy Director Agriculture and Livestock Directorate	Agriculture, Livestock and irrigation	26 September 2006
Abdullah, Mansoor and Abdul Karim	MRRD	MRRD activities and other developments in the province	26 September 2006
Director and Deputy Director	Irrigation and water resources Department	Irrigation structures, problems and ongoing and proposed projects	26 September 2006
Director	Energy Department	Dams and power production in the province	26 September 2006