

NON-TIMBER FOREST PRODUCE

for improved livelihoods in Hindukush region

A case study in District Chitral,
North West Frontier Province, Pakistan

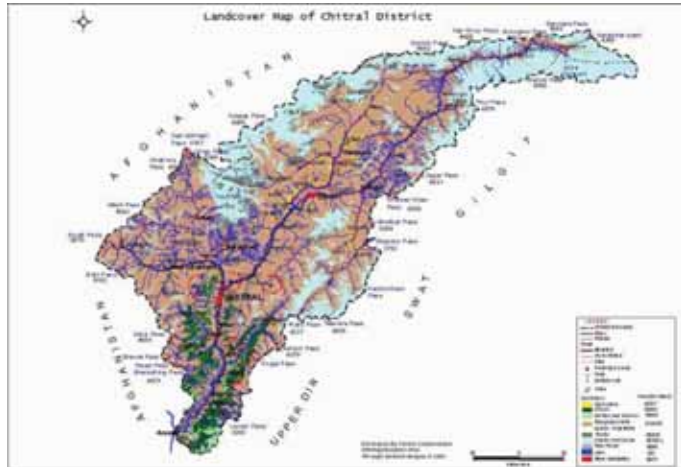
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Introduction

Chitral District the loftiest mountainous region of Pakistan was also known as Chitral and Qashqar. It is in the northern most district of the North Western Frontier Province (NWFP) and is situated at a distance of about 322 kilometers from the provincial capital of the province. Due to its unique geographical location it has special strategic importance in the area. Chitral spans a region of 14850 square kilometer, boarding China and Afghanistan. In Pakistan it bounded with Dir and Ghzir Districts of Northern Areas (NA) and Swat. The district is divided in to two tehsils, Chitral and Mastuj, and is administered through the district government system



The district mostly comprises of mountainous tracts. These mountains range from 3500 feet in the extreme south at Arundu to 25263 feet at Trichmir. The district is made up of several valleys including Broghil, Laspur, Mulkhow, Torkhow, Trich and Mastuj. The district contains numerous peaks over 20,000 feet, Trichmir being highest with an altitude of 25263 feet and is also considered as important watershed of the Chitral River. The early tributaries or the river run through the mountains in, narrow, steep sided valleys, and play a pivotal role in the ecology and the land use of the region.

The unique climatic conditions and extreme variation in altitude and aspect has resulted in diverse ecosystems and vegetation zones. The diverse range of vegetation and ecological zones also support a rich floral and faunal diversity. These areas also provide refuge to the national animal, tree, and the bird. The dry temperate coniferous forest is found on the lower and inner slopes of the district between 1,500 and 3,000 meters while the oak scrub forest are found between 1,500 to 2500 meters. The vegetation is dominated by *Cedrus deodara*, *junperus excelsa* and *Quercus incana* etc while scattered trees of *Quercus* spp can be seen on the lower slopes. Some important cold resistant aromatic species like sea buckthorn bush, hawthorn, low shrubs, sage brush,

wormwood, Iris, low laying cushion plant and Artemisia are other worth mentioning species found in the area. Non-timber Forest produce are goods of biological origin other than wood, derived from forest, other wooded land and tree outside forest.(FAO) Non-timber forest products (NTFPs), another term frequently used to cover this vast array of animal and plant products. The total forest area of District chitral is 4.5 % of the total land area. Forest resources contribute about 80 % to the livelihood of people living in extreme poverty.

Statuses of Non-timber forest produce in the study area:

The potential Non- Timber Forest Products collected from the dry temperate forest of chitral are; morels, honey, fruits and nuts, vegetable, condiments and spices, silk cocoon, and many other. Ajaz, 2007, reported 3 species of edible mushrooms in the District and 50 % of the local people are dependent on Non Timber Forest Products (NTFPs) for income generation. Local people rely on their indigenous knowledge for collection, processing, packing, drying, marketing and consumption of various NTFPs especially mushrooms. Mushrooms, after collection and processing are sold to the middleman who then sells in the main market. More than 65 % of the product is lost on the way to main market of finished product.

Non-Timber forests Produce are All Biological Resources other than timber extracted from the forest for human welfare.

- Chilghoza pine
- Wild Mushroom
- Honey
- Sericulture
- Wild Vegetables
- Gums etc
- Wild fruits and nuts
- Fodder

Objectives of the Report:

- To identify the impact of non-timber forest produce intervention / extension on the local communities of district chitral.
 - To identify the role on non-timber forest produce on the livelihood promotion of the local communities.
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Materials and Methods

The study was conducted through field research. Primary data was collected from in depth conversational interviews from the people who are successfully implementing whatever they learnt during the trainings and other services provided by Directorate of non-timber forest produce, NWFP Forest Department, Field Office Chitral.

Secondary data was collected from the non-timber forest produce related documents and progress reports of the Directorate on non-timber forest produce, NWFP Forest department.

Results

1. It was consummate from the study that the motivation /extension services provided by the Directorate of Non-timber forest produce, in chitral are keenly adopted by the local communities and are getting extra income from the non-timber forest produce.
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Success stories:

Case study No: 1

Bee Keeping.... As a Tool for Poverty reduction in Chitral:

Mr. Mehoboob Ali of village Goldor Chitral a serving police department chitral as a constable and the sole supporter of eight family members, having no cultivable landholding in his possession always wanted to earn some extra money to support his extended family. And when the Non-timber forest produce field staff first came to his area, he very receptively followed their trainings instructions in honey bee keeping. As honey bee keeping occupies only a small space was very ideal source of



additional income for him. He joined the NTFP promotion Committee Gouldor Chitral along with other his interest group and was trained by Directorate of Non-timber forest produce, NWFP Forest Department Chitral and bee boxes were also provided to him on subsidy rate.

He takes very good care of his bee boxes due to the training he received from the NTFP Department. In the first year he collected 12 kg of honey and out of which he sold 8 kg in a local market at Rs: 600/- per Kg and earned Rs.5000/- with which he paid off his daughter school fees which was due on him. Now his young daughter also helps him in the management of honey bees.

Mr. Ali is planning to buy 10 more bee boxes this year and wants to establish a farm near his house. **As, Mr. Ali said, “beekeeping is a good business and brings in good profit as bee flora is abundant in the surrounding area”.**

Case study No: 2

Medicinal plants as a source of livelihood promotion

Dilshad Bibi a poor widow of 60 years of age with four daughters and two sons lives in a small house in the remote village of Bomburat kalasha valley Chitral. Dilshad was trained by Non-timber forest produce, Office Chitral in medicinal plants collection and its storage during valley training program in kalash valley. After receiving the training Dilshad was motivated enough to such an extent that in July 2008 Dilshad she borrowed an amount of Rs. 2000/- as loan from a local shopkeeper in Bomburate to open a small store in her house. With the amount she purchased all the medicinal plants that the villagers collected. She repaid back the whole amount well before the repayment date and borrowed another amount worth Rs.5000/-. **“I have earned a profit of Rs.5000/- from the sale of the medical plants in Drosh market”**, as she said. She apart from her this source of income also sells basketry products in the local shoppes.

Now she is not an active member of NTFP promotion Committee Bomburat herself but also motivates other women of the area to adopt NTFP activities to earn income. Now she is very well established in her life and is really thankful to NTFP Department for extending help in such a way that taught her to catch the fish and made her independent and not dependent on any one else to support her family.

Case study No 3

From timber to non timber, through proper motivation

Gingerate village is situated about 16 Km from the Main Drosh Bazaar. The soil of the area is very fertile and agriculture is the main source of livelihood of the area. The area being rich in forest resources also has become vulnerable to timber trade where people are involved in illegal cutting of the forest for sale purposes to earn a living.

Once a NTFP Field staff visited the area and arranged a meeting with the community on the non-timber forest produce as an alternate source of income to forest logging. They people accepted the fact of the forest of the area being under immense pressure

due to over harvesting and the reason they cited were lack of employment opportunities. The forest protection member pointed out the names of those



involved in timber trade and was causing great damage to the forest. Mr. Subaddar was one of them, being involved in timber trade had also established a mini timber depot at his home and was selling timber in Drosh market at a very high price. When the Staff of Non-timber forest produce Directorate NWFP Forest Department Chitral contacted him and tried to motivate him that forest being a very important source of

survival of people and the removal of vegetation could cause high flood and erosion and can cause great damage to his area.

Then he said, “I have no other source of income and therefore had to get involved in timber trade”.

At this the NTFP staff briefed him about different NTFP and its market value. After an extensive meeting with him he agreed to leave this profession and start the cultivation of medicinal plants in his farm land, and also demanded for bee boxes. And the said person has a huge number of wild olive that can be utilized as source of income.

Now Mr. Subaddar is an active member of NTFP promotion committee. They local communities are very much happy at this achievement of NTFP department and also requesting for the engagement of the other similar people in NTFP activities and involve them in income generating activities and thus save the valuable forest resources.

Cases study No 4:

Sericulture can be a source of Economic Empowerment for Marginalized women in Chitral

Ms. Habiba, a 30 year old poor woman of village Awi, a remote village of district chitral, proudly admits and has proved herself as a rural women entrepreneur by successfully completing silk worm rearing at her home. She got 5 packet of silk worm from NTFP field staff chitral. M.s Habiba was trained by NTFP chitral on Sericulture. Her total production of cocoons reached 7kg and were purchased by NTFP department for Rs.4000/-, with her this hard earned income she paid off the school fee of her daughter. She has a planning for future in her mind to increase the production up to 20 kg. The local support organization working in the area gave away an appreciation award to Ms Habiba for her achievement in generating a source of income for herself in an innovative manner. Ms. Habiba is very obliged to NTFP Department for technical support and Karimabad Area Development Organization (KADO) for the appreciation award.

Case study No: 5

Identification and Promotion of Local Hakims:

Mr. Abdullah of Mori village of district Chitral has got four children of his own and lives in a joint family, being an old man he used to collect medicinal plants from pasture for his household consumption, as villagers in these areas usually depends on medicinal plants for traditional treatment and these are also used as spices in food.

One day the NTFP department field staff went to the Village Mori for having meeting with the community, Abdullah being present in the meeting listened very enthusiastically to the sustainable utilization of medicinal plants, and also shared with the NTFP staff his knowledge on these medical plants and told them that he has never in his lifetime been to any hospital for treatment of any sort.

As he said, "I also cured the injury in my daughter's leg with a medicinal plant without taking her to a doctor."

NTFP Department chitral

identified the local hakims like Abdulallah and has trained them in collection of the medical plants their storage and cultivation in an appropriate manner. Nadir Shah was also motivated to come to Chitral market and open an outlet there. He was also provided with some plastic bottles for storage of the recipes safely. At the moment he has got 43 samples of different species, which can be used in the treatment of various diseases, like blood purification, injuries and gastric etc.

As the local Hakim says, "I am treating 10 to 20 people daily with herbal medicine and am earning handsome amount".



Case study: 6

. Molen Gol Water Shed Area, Formation of Groups for the conservation of forest in general and Chilgozha forest in particular.

Chitral is a poor district with high poverty level, and limited resources to earn livelihood, the local Community remains with the only option to earn from the forests. Their unawareness and lack of understanding is resulting in the degradation of their natural resources in general and forests in particular. To promote sustainable forest use, and generate income from non-timber forest produce,



capacity building of the local community in realizing advantages of their area other than timber from forests is of crucial importance. Like other part of chitral, in Molen Gol Watershed area Chilgozha pine is a valuable non-timber forest product of the area and is serving as a good source of income for the local community. But due to the lack of proper knowledge and awareness the local



community is unsustainably using these resources; the local community removes 100% cones from the Chilgozha tree during collection, and cut its branches in order to collect the pine nut. Due to this the natural generation of this valuable species is badly affected. According to an estimate about 10-15 tones of pine nut is collected from the area by the local community.

In view of the fact, the Non-timber forest produce, NWFP Forest department went to the area and held meeting with the local community on the issue and formed Chilgozha Conservation and promotion group in the area by involving the local community, Wildlife watcher of the area, Forest guard and NTFP Staff.

A detailed lecture on the importance and sustainable harvesting of Chilgozha pine was delivered to them. The Group then identified 23 collectors from the area, and these collectors were duly trained by the NTFP staffs in the proper way of collection and sustainable harvesting of Chilgozha Pine nut.

Now this group is working in the area for the conservation of forest in general and Chilgozha forest in particular.

Case study: 7

. Cultivation of Medical Plants..... An extra source of income

Mr. Rasheed, Belongs to Gingerate, Drosh in southern Chitral. He completely dependent on his land to earn living and support of his extended huge family. But due to old methods of farmer and non availability of certified seeds his production was less.

When the Directorate of NTFP Forest department Chitral Field staff visited the area and arranged a meeting with the local community for the promotion of livelihood, then Mr. Rasheed showed his willingness for the cultivation of medicinal plants but has no idea about their cultivation and seeds of the plants.

Then the NTFP Staff trained him in the cultivation and propagation of medicinal plants and also provided him seeds of medicinal plants to cultivate on his farm land.

Now 6 species of medicinal plants spp grows in his farm land, like Saffron, Banafsha, Alsi etc. and he has also gained a lot of knowledge and experience in the cultivation of the medicinal plants.

He has also placed a request for the grafting of his wild olive tree surrounding by his house in order to get more income from it too.



Case Study: Awareness Rising Session on the Marketing of Their non-Timber Forest Produce

The Village Khourkashandeh is situated near the Chitral Gol National Park in Chitral Town. Before the NTFP department intervention in the area they used to sell their *morchella esculenta* to Mr. Hakim Khan of Dir District for the last so many years. This year when Mr. Hakim again came to the village to purchase the *morchella esculenta* as usual, the collectors as being not satisfied with the price he was offering started bargaining with him. As he was offering them Rs.400/per Kg. But as the collectors already are being informed by NTFP field worker about the price of *morchella esculenta* being Rs.5800/Kg in swat market returned him empty handed. These collectors later on sold the *morchella esculenta* in the Chitral town market for Rs.5700 per kg. It is all due to the timely awareness program of Non-timber forest produce Department that the collectors are not only informed about actual price and usage of products but their bargaining power has also increased bringing them financial benefits and has stopped their exploitations.

Discussion-

District Chitral is a very remote and isolated area of NWFP Pakistan, where opportunities for livelihood promotion are very less as compared to other area.

The forest of the whole Chitral District is estimated to be 41,949 hectares. Forest is mainly used for timber extraction. Annually 25 thousand metric tones of fuel wood are used as fuel wood. Almost 13% of the population is related with the forest for generating their first hand money. Additionally 80% of the local people, in one-way or other, are dependent on Non-timber Forest Produces. NTFPs are mostly obtained from the forest. Status of NTFPs in the livelihood strategies of forest households highlighted by the very favorable income returns to the time spent in collection and stability of NTFPs. The Afghan refugees, from Afghanistan who are residing in the area more than 20 years, are also collecting NTFPs from the forest area to sustain their daily needs of the households. .

The price of NTFP The price of NTFPs also raise on the basis of market demands and supply, usually secondary collector sale NTFPs to the tertiary collectors with 15-20%. The tertiary collectors sell the NTFPs at 3-4-5 times more price than that of secondary collectors. The present status of knowledge, assess the availability and proper utilization of these materials is poor. Value addition, quantification and proper market survey and value chain are pre-requisites for the proper utilization of this amount of natural wealth. Now it is the time to take necessary decisions at proper level and formulate a Management plan for sustainable exploitation of NTFPs from the protected forest of District Chitral.

Recommendations:

- Trainings on beekeeping, mushroom cultivation and basketry are needed to conduct in chitral.
 - Well-defined areas be declared as reserves where harvesting of NTFPs is prohibited for a period of long period to have desired level of regeneration.
 - Provision of maximum bee boxes on subsidies rate for local communities
 - basketry should promote as a handicrafts
 - Provision of marketing facilities for the sale of NTFP
 - Training of the local community regarding ex-situ and in-situ conservation and pre and post harvesting of medicinal plants must be arranged regularly.
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Note:

Title Photo: Chitral Gol National Park, Chitral NWFP Pakistan,
Photo by Ajaz Ahmad

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