



c- Medicinal Plants

- 1) *Product*
- 2) *Production and Collection*
- 3) *Marketing*
- 4) *Sale and Distribution*
- 5) *Gender Equality*
- 6) *Support Mechanism*
- 7) *Issues and Concerns*

ACRONYMS

| | |
|-------|---|
| CBOs | Community Based Organizations |
| CCBs | Citizen Community Boards |
| CCBs | Citizen Community Boards |
| CDG | Chitral District Government |
| CDG | Chitral District Government |
| CEO | Chief Executive Officer |
| CIADP | Chitral Integrated Area Development Programme |
| COO | Chief Operating Officer |
| COs | Community Organizations |
| FGDs | Focus Group Discussions |
| ICDP | Integrated Chitral Development Programme |
| IDIs | In-depth Interviews |
| KPK | Khyber Pakhtun khwa |
| LGO | Local Government Ordinance |
| LPs | Livelihood Programs |
| LSOs | Local Support Organizations |
| NGOs | Non-Government Organizations |
| PRC | Pakistan Research Council |
| TOR | Terms of Reference |
| VC | Value Chain |

VCA Value Chain Analysis

VOs Village Organizations

YSDO Young Star Development Organization

ACKNOWLEDGEMENT

The Value Chain Assessment Studies were sponsored by CIADP, a project of Thrive Pakistan. The purpose of this assignment is to identify the key product of Chitral and neighbouring valleys, the potential of these products with associated issues. The studies will also provide an insight of these products and key recommendations to boost their brands and sales for an improved livelihood of the locals.

We would like to take this opportunity to convey our sincere thanks to the Thrive Management, Mr. Aazir Ayaz Mr. Asfandyar Khan and his team in Chitral for their valuable support, encouragement, cooperation and constructive criticism throughout the duration of this project. In addition to this, we would like to extend our sincere gratitude to the members of the LSOs, Local Supports Organization including ICDP, YSDO, QASADO and BLSO that provided excellent support and input in various ways.

Last but not least, we would like to thank all the virtual resources, including project, institutional, organizational and other websites consulted for guidance during the preparation of these assessments.

We have put all our effort into organizing this document as an error-free product, with due acknowledgements to sources we have consulted. Any errors that remain are our own.

Shahzad Bukhari

Team Leader

Shadab Fariduddin

Research Lead

BACKGROUND

This chapter is dedicated to the description this chapter is dedicated to description of profile of Chitral district, covering its demography, culture, environment, the administration and the state of donor interventions.

Chitral is home to over one dozen different cultures with more than 14 languages spoken, yet with multiple dialects. It has an extremely peaceful environment which is evident from the coexistence of diversified cultures on one hand and admixes of religious beliefs on the other. For example approximately 70% of its population consists of Sunnis and 30 % of Ismailis with Kalash being a small non-Muslim minority. Chitral is rich in natural resources but its non-replenished utilization has put it under sustained pressure and hence the region is prone to frequent natural disasters. The district carries low health and education indicators which add to its developmental backwardness.

By the same token, Chitral District Government (CDG)'s technical capacity is non-facilitative to its proactive development agenda and also the vision. However, the level of citizen participation and mobilization remains high which is largely indebted to civil society engagement. The civil society, which houses 500 Citizen Community Boards (CCBs) functions under the Local

Government Ordinance (LGO - 2001). The LGO2001 aims at engaging the citizens in the process of local development.

The experts expect Chitral to become a regional connector in coming years. Thus it will be linked with Central Asian States, Afghanistan and China through the channel of Northern Areas. The upcoming Lowari Tunnel will also unleash its nationwide connectivity. Such developments and those brimming out of these developments will offer several (opportunities to CDG in terms of preservation and strengthening of its peculiar natural resources, culture, economics and infrastructure. The negative effects of such developments if any would certainly be undermined by the overwhelming positive influences of the same.

However, the developments will not take place effortlessly; instead the development to take place will demand partners to pool in their resources, both technical and financial. This congregation of resources would help capacitate CDG and the people of Chitral so as to cast its overarching impact on the endeavors concerning poverty alleviation and other similar right- based developments.

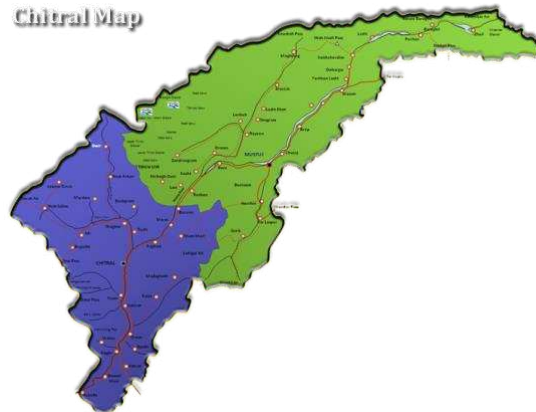
Chitral has been facing challenges like inadequate infrastructure, minimal of cultivable land (2%), poor market access and inadequate access to extension services which are in turn limited as well. At the same time these are some of the key factors which are constraining growth of agriculture sector in the area. Although Chitral is suitable for a variety of high value crops but the area has not been able to capitalize on its cultivable potential due to above noted challenges and predicaments. Similarly, these challenges have taxed and degenerated the capabilities of Chitralis and have at the same time exacted a severe toll on the resources, economic growth and development agenda of the Chitral district.

About Chitral Integrated Area Development Programme (CIADP):

The Chitral Integrated Area Development Programme (CIADP) has adopted a multidimensional intertwined approach to build the resilience of the people of Chitral and its institutions to safeguard their interests, environment and culture from the expected influx of capital, migrants and the resultant pressure on its natural resources.

CIADP in its last more than 4 years' operations has undertaken several NRM and Non-NRM interventions e.g. Social Farm Forestry, Mini Orchards, Wheat & Maize Demo Plots, Backyard Poultry, Livestock Extension Workers Trainings, Fruit Processing, Honey Bee keeping etc. Most of CIADP activities are undertaken by women and are major source of improving livelihoods of the marginalized.

Chitral Map



The mutual aim of participatory development and collaboration in Chitral took two years to get crystallized. In this regard, the Norwegian initiative to facilitate this process has not only been locally appreciated but has also been well received by other donors that have expressed their interest to join the process. The development programme under discussion was funded by the Norwegian Embassy.

Introduction of Chitral

Chitral, a princely state (merged with Pakistan in 1969) with its unique socio-cultural and religious characteristics, is the largest district in Khyber Pakhtun Khwa (KPK) province of Pakistan in terms of geographical stretch as depicted in the map in figure 1. The local people of this area speak Khowar language which is also known as Chitrali (Haserodt, 1996). The valley of Chitral has a captivating and enchanting landscape which is surrounded by the mountainous ranges of Hindukush which also include part of Pamir Mountains (Screenland & Lie shout, 1995). As shown in figure 1, the west border of Chitral valley touches Afghanistan, Wakhan Corridor lies in the north and Chitral is the only district of Pakistan which remains isolated from the rest of the country for several months due to heavy snowfall at the Lowari Pass during the winters.

Cultural Landscape

Life in Chitral dates back to around 4,000 years. Chitral occupies a unique place in Pakistan by enjoying religious and cultural coexistence where more than 14 languages are spoken and several dialects are used. There are more than a dozen

ethnic groups. Due to its rich history and linkages with different parts of the world, the culture of Chitral is very rich in terms of the mores which have high traces of the Tatar, Turks, Mongolian and Greek cultures (Nüsser, 2001).

Chitrali society consists of two very different social and cultural groups, the Kalash and the Khow. Culturally, the Chitrali women remain engaged in making dairy products, honey bee keeping, picking fruits, doing kitchen chores, gardening, producing silks, making woolen handicrafts, carpets, sweaters, surband, Chitrali caps, and waistcoats. An analysis of their lifestyles also reveals that there prevails gender equality in the region. The population of Chitral includes Muslims, non-Muslims, Ismaili's and Kalash people (Marsden, 2008). With respect to the use of natural resources by the local people, the non-replenished utilization of abundant natural resources leads Chitral to become victim of extreme disasters. The development indicators have also rated the area low in health and education facilities.

Importance of Women in the Chitrali Culture

Historically, women have enjoyed a high status in Chitrali society. This fact can be proved by one of the old saying of the locals, that is, “Khowistanauratabad” meaning the land of Kho is prosperous owing to the ability and skills of its women. Another famous local saying that reinforces the fact is; “harchamoto tan hunar” (each finger has a skill). The fort Chitrali women have ability to effectively use the finances and to better manage the resources; one of the resources is locally known as Madiri. The pages of history unfold that women have inherited property and managed large estates. During the reign of Chitral's former rulers, the Mehtars for example, the women of the ruling family played an important role in statecraft.

The southern region of Chitral is not favorable for the involvement of women in development initiatives mainly due to prevalence of strict cultural constraints. However, the women living in upper Chitral enjoy the liberty to participate in

development of the area. To address the extreme poverty in Shishi and Birir in Chitral district, various Livelihood Programs (LPs) are being run by various organizations. But at the same time, owing to limited access to the area relative to other cities of Pakistan, many organizations find it hard to provide their developmental services.

The landmark Lowari tunnel of Chitral has connected the valley with the rest of Pakistan reducing the distance of Chitral and Dir by about 50 %. This tunnel, after its complete operation, will help to link Pakistan to various international borders like Afghanistan, Central Asian States and by far to China (PRC Engineering, 1988). This will certainly open doors to economic development but at the same time will also be a threat to socio-cultural values of the area, since the evils of the advance international cultures will also inadvertently creep in.

The limited agricultural land; that too constrained due to the vagaries of weather, poor infrastructure and lack of trade linkages is the major cause of under-development and persistence of poverty in the area. Historically, the locals have been facing these problems since ages. On the other hand, the high value fruits, dry fruits, handicrafts, gems, stones, therapeutic plants and honey—are the products which if developed on modern lines can turn around the destiny of Chitralis. This dream can only come true if the pertinent development process is properly planned and executed and then the local farmers are linked to the major national and international markets. Similarly, there is a dire need to build the capacity of the people in general which will certainly help in developing Chitral even further and faster. However, there are various challenges which tend to hinder the development process but their impact can certainly be minimized, if not eliminated.

There are no monsoon rains in the valley and hence the weather is dry throughout the year. The economy of Chitral is mainly based on natural resources and people search for their livelihood mostly in forests. Unfortunately Chitral is prone

to natural disasters like terrible snowfall and flash floods; therefore its isolation during the winter season casts adverse effects on every aspect of life. This may include; restricting the mobility of labors, disrupting agricultural exports, meddling with imports of grain, livestock feed and agricultural inputs. To add fuel to fire, the scarcity of agricultural land and poor irrigation facilities restrict landholding of small level farmers, who are plenty.

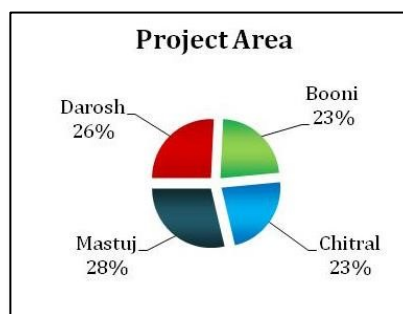
It is pertinent to highlight the pivotal role that civil society has played in mobilizing the inhibitors and

in the development of the area. In a sense one can proclaim the civil society has literally complemented the district government's endeavors that fell short of meeting developmental needs in the hands of scarcity of resources, and expertise. Today some 500 Citizen Community Boards (CCBs) under Local Government Ordinance (LGO) 2001 harnessing their resources in the development process. So much so, the civil society is helping the district government in providing health and education facilities to the citizens especially when it comes to be providing the same at their door steps.

BRIEF ABOUT THE ASSESSMENT AREA

There are different valleys and areas in Chitral¹. The district of Chitral comprises of two Tehsils, 24 Union Councils and 99 Village Councils.

The sampling technique was kept uniform across the four areas so that a consistent analysis of value chain could be ascertained. The representation of men and women was also ensured at all level.



1. Chitral

The only district which is cut off from rest of the Pakistan is Chitral. This is due to the closure of Lowari tunnel during heavy snows. Main source of food in this area is livestock. It is estimated that about 700,000 head of livestock (75% goats and sheep) are present in the district. Forests cover 70,045 ha in the area Chitral and Daroosh area, out of which 25,000 ha is considered suitable for commercial harvesting.

Despite widespread hunting by the local people, the remote mountain valleys of Chitral are home to a considerable variety of wildlife.



¹ The word Chitral in the report will represent the Upper Chitral, Lower Chitral including all valleys.

2. Daroosh

It is a small town of Chitral District as shown in figure. It is located at an altitude of 1,100 m (3,609 ft.). This town has been under governor rule since 1860s. In 1870, Shahzada Kohkan Baig was the Governor of Daroosh. After that Shahzada Shahi Mulk took over as Governor of Daroosh from 1870 to 1892. The time when Shahzada Shahi Mulk was the governor of Daroosh, the valley was extended from Broze to Chaqansarai (in Afghanistan).



3. Mastuj

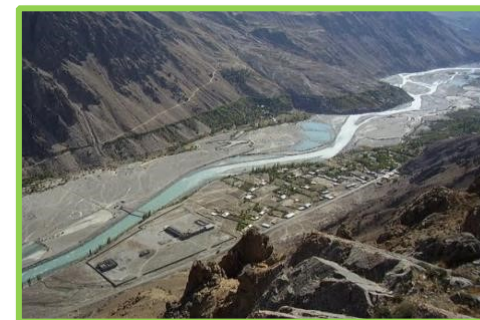
Mastuj valley lies in between latitudes 30°-2 to 36°-57N and longitudes 72° to 37°-58 E. It has a population of more than 34000 individuals distributed in more than 4500 houses. About 85% of the population depends upon forests and rangeland resources including herding of livestock. It is drained by Yarkhun (Mastuj) and Laspur rivers. The climate of the area is arid temperate to alpine in the upper reaches with mild summers and snowy cold winters. The valley is snowbound from November to March in the lower



reaches while upper parts are covered by snow till June. The scanty rainfall is mostly received from December to March along with snow. This botanically unexplored valley is rich in traditional knowledge.

4. Booni

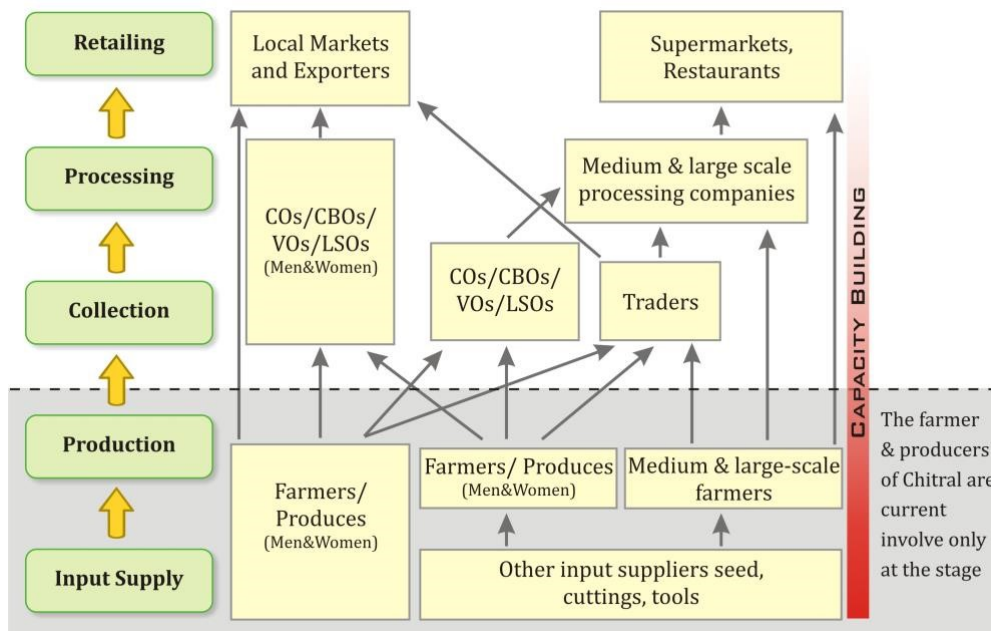
Booni is a town and Tehsil of Chitral District. It is located at 36°17'0N 72°31'0E with an altitude of 2359 meters (7742 feet).The main villages include Mastuj, Reshun, Parwak, Kuragh, Charunoweer. Booni is situated 80 kilometers to the north of Chitral town. It is famous for the fruit-laden orchards where for example apricot, mulberry, grapes, peaches and apple trees are abundant. The area is also endowed with fresh water, grasses and cool shadows. The area is also famous for honey. Nevertheless, the medicinal plants of Booni attract researchers and tourists equally.



Value Chain Analysis (VCA) is defined as continuous development of strategic learning at enterprise level, where the components of the chain process range from the step of obtaining inputs and finally delivering the finished good to the end consumer. In VCA an enterprise is not considered a single, isolated and independent entity rather a part of a long integrated chain

which has its linkages with all the stakeholders. In our context, the Value Chain Studies based on VCA serve as an effective tool since they would be helpful in designing and devising development plans, all converging to a single objective: exploring strategic alternatives for poverty reduction.

Ideal Value Chain Map



02

Chapter

ASSESSMENT METHODOLOGY

Research Methodology

The VCA Research Process was designed to serve as a guideline for generation and analysis of data for the Project. The research process was divided into two main components, namely, the Desk Information Review and the Primary Data Collection. Several sub-components and activities were identified under each stage was guided through the TOR as follows:

Desk Information Review

The information is extracted from previous research results, especially 2007 Chicken survey conducted by 13th Young Graduate; under the guidance of Dr. Yang Sain Koma. The secondary data were used for the report which stemmed from CEDAC's published action research documents.

After looking at the points of analysis in the TOR, we screened the existing data which had not

been necessarily collected through our surveys or our Focus Group Discussions with the producers.

The research tools were developed on needbase.

Sampling

The sample consisted of all stakeholders like the producers, traders, exporters, LSOs, NGOs and Government officials, and nevertheless the consumers. The VCA process was clearly delineated after conducting a two-day' session in Chitral city. After that, the LSOs and their enumerators were briefed and trained by research team about value chain concept and how to use the tools. It was ensured that the LSOs and their enumerators completely and clearly understood the concept of VC and also the tools.

(The sample/mapping of the FGDs and IDIs is attached as annex 01)

For quantitative data, the enumerators were asked to conduct IDIs with producers and consumers of their respective territories. For qualitative data, the LSOs were required to conduct FGDs with shopkeepers, exporters, NGOs and government officials. The FGDs with producers, traders and LSOs were however conducted by the research team in all four areas: Chitral, Daroosh, Booni and Mastuj.

The judgmental sampling technique was used to reach the respondent of producers, traders, LSOs, shopkeepers, NGOs and government officials. The research team members moved out to remain vigilant about collection of quality data. During these interfaces, the respondents were cross-questioned where the objective was to find out whether they professionally knew about their own business or not. The respondents were those ones who showed great interest in the VCA.

Development of IDI and FGDs Tools:

The IDI and FGD tools were designed after screening the existing reports, articles and other relevant materials about Chitral and its products. As discussed below, the research tools were designed for the producers of honeybee, fruit/agricultural product, handicraft, medicinal plants and gems and jewelry from Chitral,

Daroosh, Booni and Mastuj; and also for consumers from the same areas.

FGDs Tools: The FGD tools were developed to gain information from the producers, traders, exporters, LSOs, NGO and Government officials: detail needed as given in case of IDIs. The FGD tool was developed to find out people engaged in VC of products, beneficiaries of VC of products, training capacity building, marketing links, branding, facility level for availability of VC product, institutional support, health issues, middle-men's role, quality, demand and supply levels, price system, and problems of men and women involved in VC product.

Further, it was also aimed to dig out problems of exporters (and importers), role of exchange rate, problems of logistics, government quotas and access to international markets. The nature and significance of LSOs and NGOs was also explored through these FGDs. Nevertheless, the role and limitations of government was also brought to light and how can the concept of PPP (public private partnerships) evolve. Added by AP

IDI Tools: The IDI tool was developed for honey producers in order to find out nature, types, quality, production, packing, machinery tools used, transport facility/issues and other relevant problems related with the product of honey. The IDI tool for fruit/dry fruit producers was designed to seek information about nature, types of fruits, nature of customers, market links, machinery/tools used, issues, women involvement, and institutional/state support. The IDI tool for handicraft was developed to get data about types of handicrafts, marketing strategy, demand and supply situations, price system and the government support. The IDIs for gems/jewelry was developed to find out information on types of jewelry/gems, nature of buyers, communication channels, demand and supply situation, machinery/tools availability, training, packing and women's role. Finally, the IDI of medicinal plant was conducted to get information on types of plants, weather impact on them, their availability, communication issues, demand and supply forces, packing, training problems, and women's role. The IDI of consumer was meant to find out buying behavior, price mechanism, product availability, packing, and packaging and satisfaction levels.

MEDICINAL PLANTS PRODUCTION

1. Product

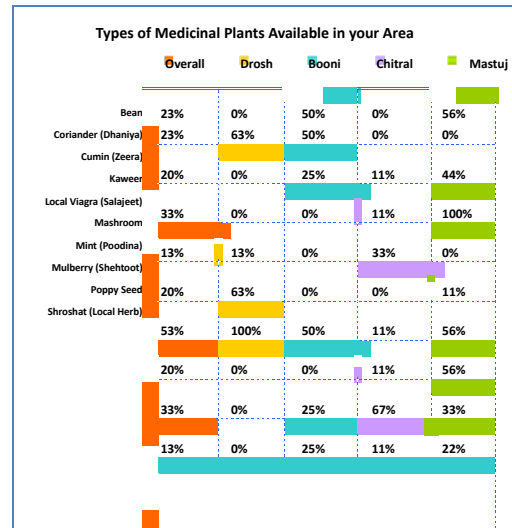
It has been found that there are 22 species of medicinal plants which pharmaceutical industry use very commonly, are present in Chitral². District of Chitral offers a great diversity of medicinal plants and many endemic and endangered medicinal plants are known to this area. Some most popular plants such as Delphinium nordhagenii and barszczewskii are found nowhere in Pakistan except Chitral. The main medicinal plants found in the district of Chitral are Capparisspinosa (Kaveer) also termed as magical plant of Chitral, Mooruk (Glycyrohizaglabra) and Ishpaar (emod). The mentioned plants are of superb qualities whose annual produce have been estimated to be more than 8 tons each. These plants are being overexploited for their medicinal value as the local population collected them in unscientific manner and threatening their further growth. It is also noted that far flung and remote villages of the district are still depending on wild Medicinal plants for their various needs and purposes. Continuous increase in population and free grazing in the area are resulting the loss of medicinal plants diversity in the area. Due to high demands of medical plants, erosion of forests has started. This phenomenon needs to be stopped at once.



For example local people harvest 100% Cones from the Chilghoza Pine as a result of

which the natural regeneration of this valuable species has been badly affected. The species like Capperisspinosa, Glycyrohizaglabra, and Rehumemodi are regenerated and conserved in the Moleen Gol, Momy, Bomburate, Parsan and Birir in the conservation areas designated by NTFP Directorate, and grazing has been banned in the designated Conservation areas with the active participation of the local communities. It has been studied that Mastuj is under heavy biotic pressure due to deforestation for fuel and overgrazing by livestock, which has promoted soil erosion. Many species, such as Juniper, have drastically reduced over the past few years. Most of the medicinal plants are also used as fodder and firewood. It therefore, seems appropriate to provide fuel energy facilities and to manage the grazing system. Every household has to depend on local plant resources for winter heating and livestock feeding (Hussian et al, 2007)

Main Herbs of the area



The VC products of medicinal plants include Salajeet. Bean Black Cumin (Zeera), Kaweer, Mashroom, Mint (Poodina), Poppy Seed Mulberry (Shehtoot), Shareen kaf (Local Herb), Allium sativum (Local name Wrezhnu) Amygdalus communis L (Local name Badam), Arcethubium oxycedri Local M(local name Sarooz partung) Artemisia parviflora Roxb

² Non-Timber Forest Produce (NTFP) of the environment department,

Government of KPK, 2013

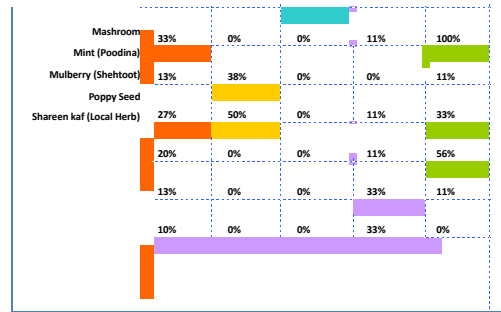
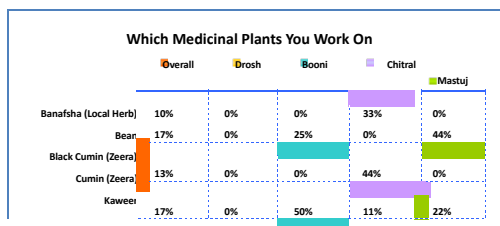
(Local name Kharkhaliech), *Astragalus amherstianus* Bth. (Local name Garmenzu) Roots of the plant are used as tooth brush (miswak).



2. Production, Collection & Process

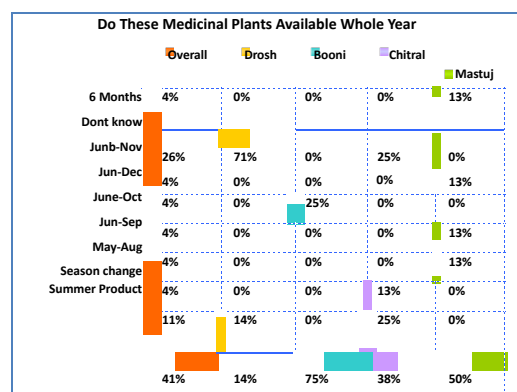
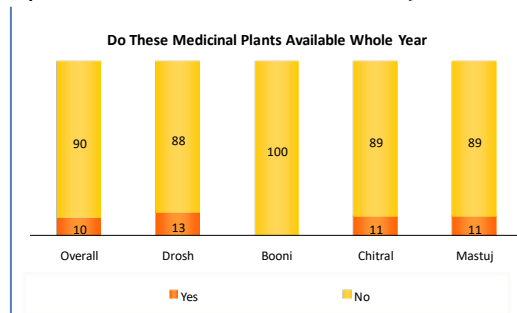
Chitral is the hub of hundred kind of different medicinal plants but a few people are involved in this value chain. They do this because of their parents were relevant involved in it. There is no technology and modern techniques available to utilize medicinal plants at big level. The producers are also traders. There is no proper machinery and tools for medicinal plants. They have their own tools.

Mostly men are involved in medicinal plants but women are also involved.



Use of Medicinal Plants by Locals

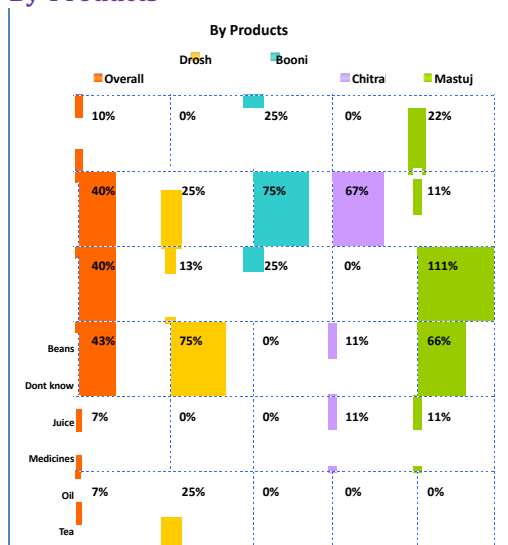
Like other areas caper or Kaveer is used traditionally since old time as food and especially as medicine in Chitral. The areas famous for these plants are the upper Chitral especially arid dry zone of Kaghlasht, Kushum, Surwaht, Ujnu, Saroza, Shahgram etc. The best time to collect the mature fruit is in late July. The collected fruits are stored in a big pitcher after washing and when the pot is full than the processing began. For this purpose the pot is partially filled with water and then a cap is placed to make it air tight. The pot is left for a week for fermentation; after a week this pot is opened and the fruits dried carefully in the sun.



Booni shows the availability of plants whole year. But in general 90% shows the available of plant whole year. The availability in their view is also including the stored medicinal plants at

household level. As far as the fresh collection is concern, it is only available only in summer; due to snow the plants are not available for collection. The only herbs available in winter are the peel of walnuts plant which is used for teeth polishing and cleaning, etc.

By-Products



Get the idea of bi-products from the table, some are grind and used for medicines. Some converted into useful oils and some are used as herbal teas (Joshanda) for flue and influenza.

Use of Medicinal Plant (Kaveer, Capers – case study)

Traditionally kaveer is consumed in food with mutton especially soup or local Kari.

In Chitral kaveer has long been used as antipyretic to cure all pain, fever and flu especially typhoid fever. It is a local myth that on roots of kaveer presents "PARPI" which is cure for every disease.

The opened fruit called "CHANTIQ" used as cosmetic by ladies on faces. The irony is that this rich nutritional and high medicinal value plant is losing its importance and it is now hard to find good quality of Kaveer. This is high time for government and research institutes to take the challenge to come forward and do research on this magical plant so the people can be more benefited from the kaveer.

Use of Medicinal Plants in Food Industry

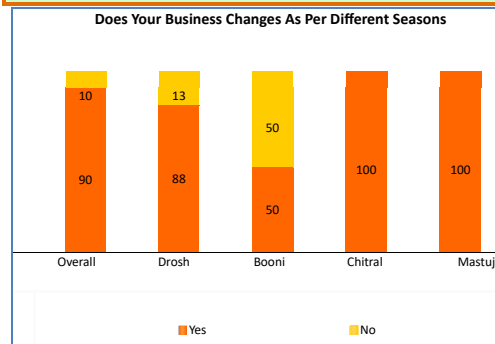
Capers are essential for several Mediterranean cuisines and are mostly associated with Italian (and Cypriot) foods. They are mostly applied to tomato or wine sauces and fit well to poultry and fish. Furthermore, they are popular with cold meat and frequently used for Italian pizza. Capers harmonize with most other Mediterranean spices (basil, oregano and garlic, just to name a few) and are frequently combined with pickled olives.

The cuisines of Central and Northern Europe with their general preference for lightly flavored foods have come to use capers, too; the main applications are cold dishes (fish salads, minced meat and savory vegetable salads). Capers can today be found growing wild all over Mediterranean, and are frequently cultivated (e.g., in France, Spain, Italy and Algeria; furthermore, Iran, Cyprus and Greece produce significant amounts); their origin is, though, supposed in the dry areas of Western or Central Asia.

Use of Medical Plants in Pharma Industry

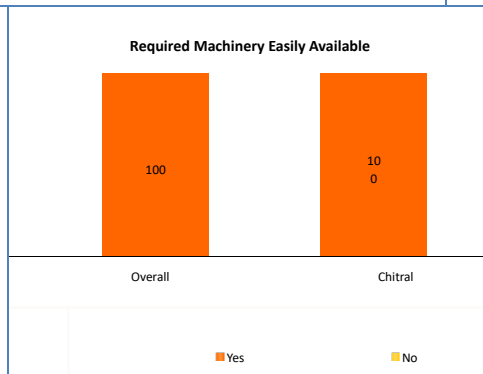
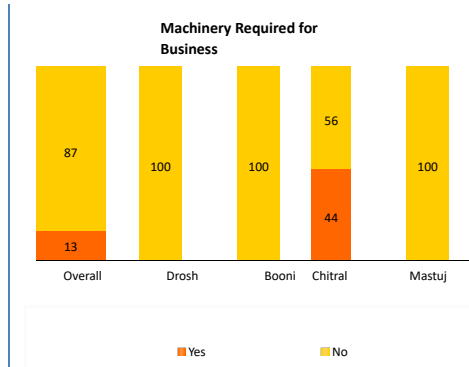
It has been suggested that Capers have been used or are still being used in reducing flatulence, in the treatment of rheumatism, anemia, arthritis and gout. Capers are said to reduce flatulence and to be anti-rheumatic in effect. In ayurvedic medicine capers (Capers=Himsra) are recorded as hepatic stimulants and protectors, improving liver function.

Capers have reported uses for arteriosclerosis, as diuretics, kidney disinfectants, vermifuges and tonics. Infusions and decoctions from caper root bark have been traditionally used for dropsy, anemia, arthritis and gout. Capers contain considerable amounts of the anti-oxidant bioflavonoid rutin. Caper extracts and pulps have been used in cosmetics, but there has been reported contact dermatitis and sensitivity from their use.

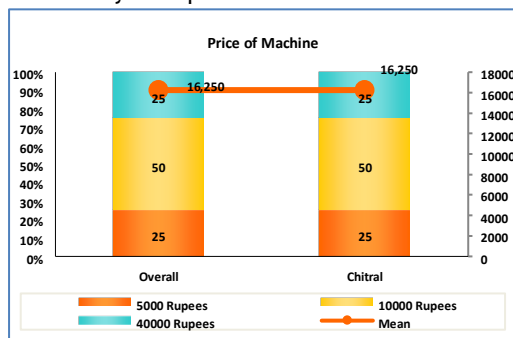


Depends on the products, if the products are from the trees upper area e.g. walnut and pine it is available whole year.

The pure herbs as mentioned in the table above does affect with the change of weather.

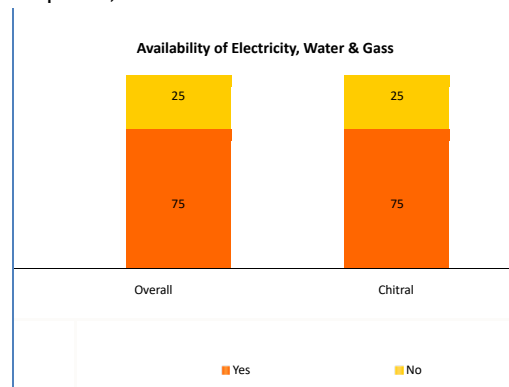


The only machinery used in this business is the juicer blender and grinder which are used at household level. No other machinery is required

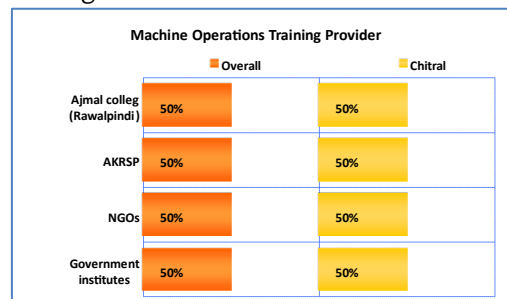


Regular price as household items. No complexity in the machine purchase, installation, etc. Even every household member can buy a good machine from the market. No calibration or specification required at this level. Yes, if the business is functional at mass level, bigger machinery

(de-hydration and grinding plants) would be required, which is not seen in the area.



For daily use they also use, natural water sources for example fresh and spring water. e.g.



Basic trainings on collection and grinding, making jam or other items are being provided by the organizations like Ajmal College, Rawalpindi, AKRSP, NGOs, and Government Institutes. Each of these benefits the Chitral district to the tune of 50%... Most of the institutions are in Chitral, no training facility or institutions are available in other areas like Mastuj, Booni and Daroosh. It's easy for Daroosh people to go to Chitral for availing of these facilities and getting trainings. But the long distance disallows masses to do so. Especially during winter, Mastuj and Booni are totally detached and people remain handicapped in terms of their personal mobility.

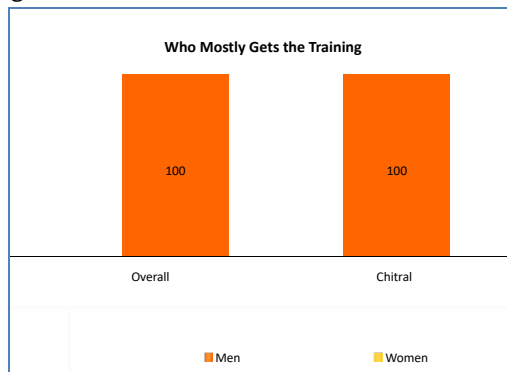
Capacity Building

There is no training facility for this VC product. Only one AKRSP representative showed a bit of interest in their training, he asked a couple of medicinal questions as well but nothing

happened practically. Mr. Gizri is a big businessman who has been working on medicinal plants for many years and extracts the juice of medicinal plants and sells in Chitral also. This is the source of his livelihood. Mr. Gizri also told that The Qarshi group of Medicine Company contacted him but later on no one came to contact.

KPK arranged extensive training for more than 150 people in the year 2013. Thus, with the help of the acquired technical knowhow, the collectors improved upon their collection practices and earned a handsome amount through their respective pastures. It is noted that it was the first time that the local residents were linked to traders of the national market. Some plants in the region are such that they could be brought to the market in raw form where they would be purchased by traders or pharmaceutical companies at cheap rates. Instead, these species needed proper processing before they were sold as they fetched more dividends after such value addition.

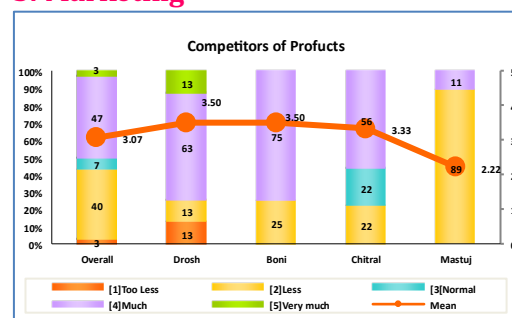
In a nutshell, there is nothing for capacity building in the region, neither at governmental level nor at institutional level.



Men and women both have equal employment and training opportunities. The cultural constraints e.g. “Parda” prevails, but as men are involvement in cultural hobbies e.g. polo, poetry, hunting, etc. this forces women to take part in livelihood activities and earn bread.

It is suggested that collection of medicinal plants could provide employment opportunities to thousands of unemployed youth in the district and it is due to this reason that his department has attached great importance to their capacity building which will continue in the coming years as well. The department of environment has undertaken a number of steps on emergency basis to check the over exploitation of the wild medicinal plants in the higher altitude forests as many of them had been declared to be as endangered species by the world conservation body (IUCN).

3. Marketing



Provide a competition analysis....

Booni is most high in competition because it is a small area, (less people and fewer products).

Mastuj has shown less completion/ competition due to low awareness and interest in this business

Daroosh is also close to Chitral and is the first city after entering the Tunnel from Dir, so it is the nearest location for the venders, contractor for trading of these products. The people of Daroosh seem more aware of these products. The one of the reason is the comfort offered by weather, which is this is the first city where snow starts melting. Therefore, this provides longer period where people can move around and work.

Similarly, during the spring, more plants grow in this area.



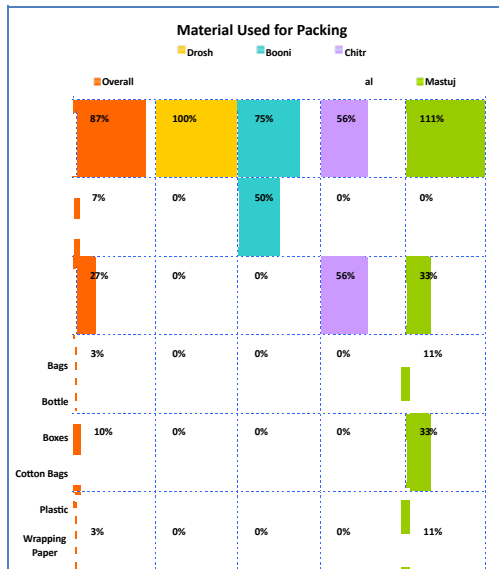
not an issue, the responses in affirmation range between 63 % to 100 %.

4. Sales and Distribution

The link between producers and the community is very poor, the reason being the patronization either owned by government or by civil society.

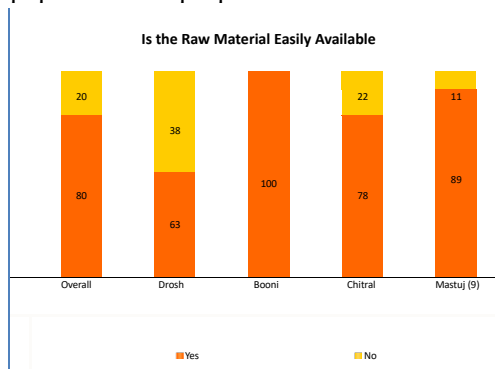
Community Satisfaction with current Market Linkages and Role of Middleman....

- Product development training should be given
- Medicine/ pharmaceutical companies should take interest
- Government should patronize the producers.
- The producers should be exposed to national markets (mainly in Islamabad, Peshawar, Karachi)

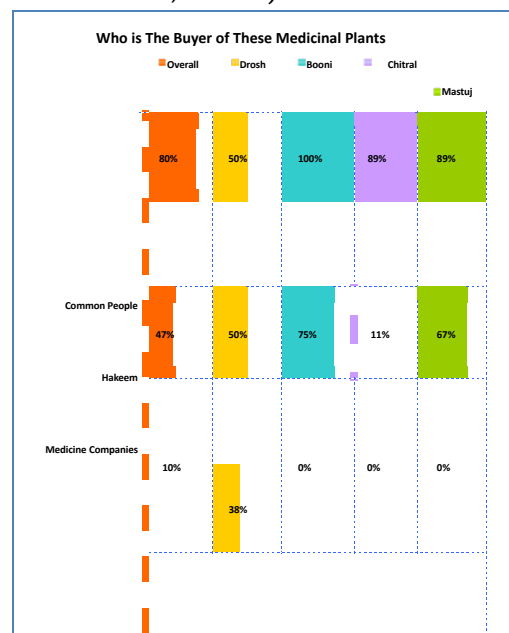


No sophisticated technique is used for packing, only plastic and cotton bags are used. The overall use of bags is 87 %, in Daroosh 100, Booni 75 %, Chitral 56 % and in Mastuj 111 %.

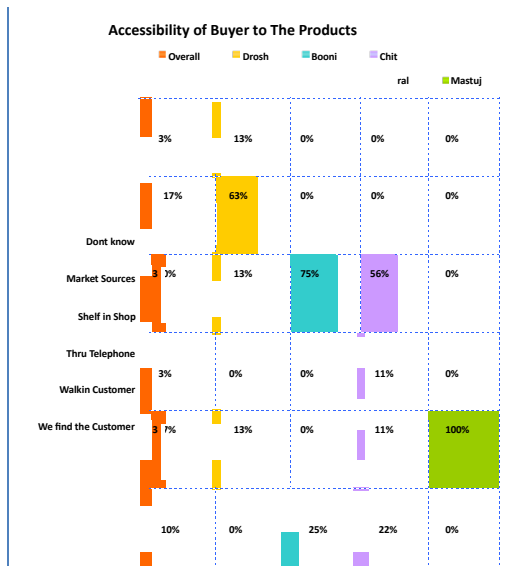
Bottle and other material are also used in some cases, depending upon the product. The producers use plastic or wrapping papers for this purpose.



Since no special material is required, therefore the availability of raw material is



Since mostly these products are not recognized by national and international vendors or users, so the only users are the locals, or to some extent hakeem or in even lesser number the medicine companies. The medicine companies are mostly interested in “Salajeet”, Capper (Kaveer) or White Mint (Sufaid Poodina).



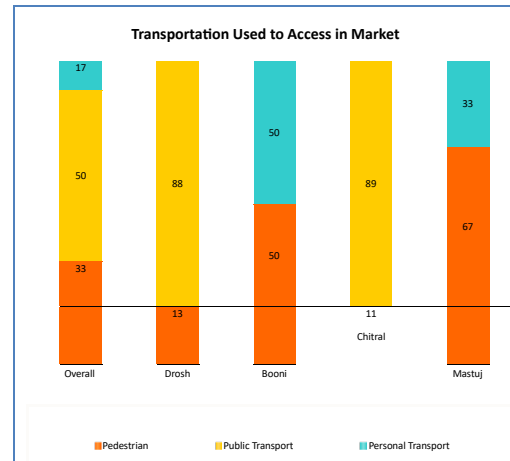
As far as marketing or sale is concerned, the traditional marketing techniques are used by the producers. They either leave the products at the local shop and wait for the sale, or they sell them to local shopkeeper at relatively lower prices. However, no other source like telephonic marketing etc. serves the purpose.



- Since the products are collected and sold at local level, simple and local packing material is used for delivery.
- Mastuj is more productive (100%) in terms of delivery of medicinal plants (due to favorable weather conditions). The area has larger number of walk-in customers as well who get the medicine wrapped up in

old newspaper, cotton bags, paper bags and shoppers bags

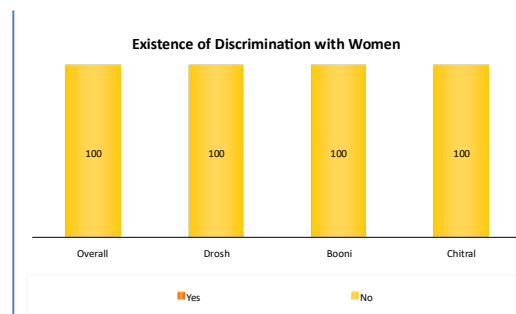
- Since Chitral is more modern because many tourists visit it, superior packing material is used for distribution and sales in Chitral.
- The other two cities are far from Chitral, and mostly locals use these products, which require no sophisticated packing or branding.



- The public transport is mostly used to transport these medicines
- The transportation can be enhanced and improved provided there is more business activity with respect to these medicines (government and NGOs need to play their role).

5. Gender Equality

Parada and mobility of women to market these medicines

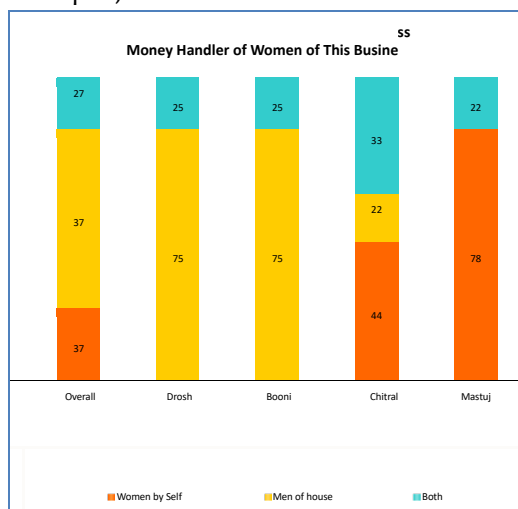


As mentioned earlier, women go shoulder by shoulder with men during all phases like products farming, plant collection, and

plant processing. No discrimination is found at any stage.

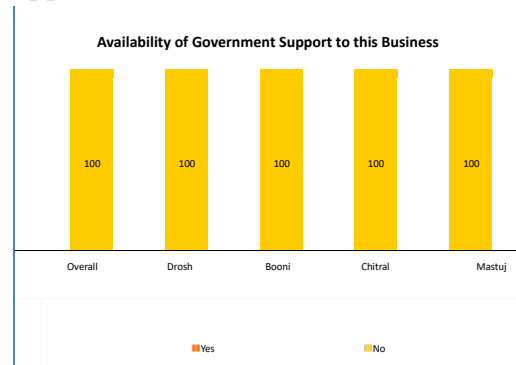


So for a lot of discrimination can be seen except in Booni. However the real problem is people are generally unaware about the value and right pricing of the product. Once this is open, discrimination would redouble.

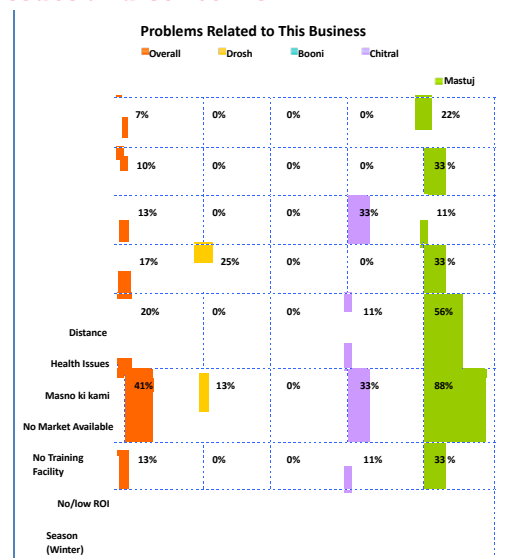


It's a culture that money is handled by men, even if the entire value chain is looked after by the women. Chitral shows multi-dynamics due to its geographical location and moderation. Since the Mastuj is more close to Dir and is first city on the way to Chitral, the women here handle money (78 %).

6. Support Mechanism



7. Issues and Concerns



The following are the key issues identified by the local producers, vendors, contractors and civil society members.

- The distance from the market
- The weather which affects the produce and the product itself
- Lack of market linkages
- No training or capacity building institution is available (except few for other products) to train the locals regarding good and healthy production, generating new varieties, processing techniques, packing and packaging skills and

other marketing and selling techniques.

Role of provincial government in enhancement of medicinal plant production/ collection and sale:

Keeping in view the existing volume of the most sought-after medicinal plants, the capacity of the collectors was built in the areas of sustainable collection, storage and processing.

- None of the cities shows any government support for production, marketing or capacity building.
- The government support is even not available at Research and Development level. The Agri research centers are available in couple of cities e.g. Chitral and Daroosh but the support is not there anymore.

RECOMENDATIONS

- A comprehensive research is required by botanists to only safeguard the secure and enhanced production of these plants and identify the additional medicinal plants available in this sector.
- New and modern preservation technique should also be adopted, where international standard can be followed for the promotion of these plants to other countries of the world.
- The local communities should be mobilized, thus village management committees must be formed / activated to train and build capacities of the local community members.
- The producers and collection should be trained in sophisticated trends and techniques to collect these plants on international standards. ○ The culture centers cum display centers should be established at village level for the display and promotion of the local products.
- The government should take initiatives to organize local healers and arrange the knowledge management, this would add to marketability of these plants. (Medicinal Plant)
- The District of Chitral is bubbling with valuable plants as its land and weather conditions are also supportive. However, the government or donor support would be required to carrying forward the products on modern scientific and commercial basis. Through such initiatives, not only the sector will develop but the livelihood of the locals will also enhance.
- The district Chitral is a cultural valley with an historical background. The tradition and culture preservation is the need of the time.
- Government should patronize this area and arrange training centers for gem professionals Government must intervene in Gilgit-Baltistan and Chitral as they are rich in mineral resources but the federal as well as provincial governments have not taken serious steps to exploit them to reduce poverty and unemployment in the two povertystricken regions.

REFERENCE & CREDITS

Source:

- ✓ www.fitday.com/fitness-articles/nutrition/healthy-eating/myth-or-fact-fresh-fruit-is-better-than-driedfruit.html#b
- ✓ www.akdn.org/rural_development/pakistan.asp
- ✓ www.ehow.com/list_6837590_list-pakistani-gemstones.html#ixzz2wtRlxOC8
- ✓ [www.pakbs.org/pjbot/PDFs/39\(2\)/PJB39\(2\)339.pdf](http://www.pakbs.org/pjbot/PDFs/39(2)/PJB39(2)339.pdf)
- ✓ www.fitday.com/fitness-articles/nutrition/healthy-eating/myth-or-fact-fresh-fruit-is-better-than-driedfruit.html#b

✓

✓

Image Credits:

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓