

# **Impact of Trade Liberalisation on Lives and Livelihood of Mountain Communities in the Northern Areas of Pakistan**

## **Research Report**

Dr. Abid Qaiyum Suleri  
Shafqat Munir  
Syed Qasim Shah

**Published by:** Sustainable Development Policy Institute (SDPI) under the Regional Program on Farmers' Rights to Livelihood initiated by South Asia Watch on Trade, Economics & Environment (SAWTEE) in the Hindu Kush Himalayan Region.

**Supported by:** Ford Foundation, India and ActionAid, Nepal

**Copyright:** **SDPI, 2002**  
The material in this publication may be reproduced in whole or in part and in any form for educational or non-profit use, without special permission from the copyright holder, provided acknowledgement of the source is made. The publisher would appreciate receiving a copy of any publications, which use this publication as a source.  
No use of this publication may be made for resale or other commercial purposes without prior written permission of the Sustainable Development Policy Institute.

**Citation:** SDPI. 2002. Impact of Trade Liberalisation on Lives and Livelihood of Mountain Communities in the Northern Areas of Pakistan.  
Sustainable Development Policy Institute, Islamabad.

**Available from:** Sustainable Development Policy Institute (SDPI), 3-UN Boulevard, Diplomatic Enclave 1, G-5, Islamabad  
Tel: 2278134 Fax: 2278135  
Email: main@sdpi.org

# Table of Contents

Foreword.....	i
Acronyms.....	iii
Executive Summary .....	iv
Part I History of Northern Areas .....	1
Part II Methodology.....	2
Part III Agricultural Sector in Northern Areas of Pakistan .....	3
Part IV Livelihood Strategies of Local Communities .....	6
Part V Results.....	11
Part VI Discussion.....	15
Part VII Recommendations .....	17
Annexure	
Annex I .....	21
Annex II .....	25
Annex III .....	31
Annex IV .....	35

## List of Tables

<u>Table 1:</u> Ecological Zones in Northern Areas of Pakistan.....	3
<u>Table 2:</u> Summary of present land use in Northern Areas (000 hac) of Pakistan.....	3
<u>Table 3:</u> Crops and Zone-Wise Cropping of Pakistan .....	4
<u>Table 4:</u> Vegetable production in Northern Area of Pakistan .....	4
<u>Table 5:</u> Fruit Production in Northern Areas of Pakistan.....	5
<u>Table 6:</u> Number of Livestock and Poultry Birds by District .....	5
<u>Table 7:</u> Area Coverage by Natural Forests in Northern Areas .....	9

## FOREWORD

Mountains first time appeared on the political agenda of the United Nations Conference on Environment and Development held in 1992 in Rio de Janeiro. Prior to Rio, there was no mention of mountains in the UN agenda. Mountains are as vulnerable and deprived as other marginal areas like deserts, tundra region, islands and coastal areas. These areas have almost similar characteristics of marginality, diversification, fragility, inaccessibility and niche. But one thing that distinguishes mountains from other such areas is their verticality or altitudinal variation.

Some of the famous mountain ranges of Pakistan are Himalayas, Karakoram, Suleman, Hindu Kush, Toba Kakar, Kirthar and Salt range. Among them, Hindu Kush is the most important in the Sub-Continent regional context. Local communities of Hindu Kush Himalayas (HKH) region subsist on the agro-pastoral economy to a considerable extent. The zone is excluded from the country's staple foods due to low local production, high transport cost and restricted food access to many areas (such as Chitral) during the snow season. Sparsely populated, those food deficit areas are inaccessible in severe weather. Another cause of acute poverty in mountainous regions is that products in local use are also not marketed horizontally; they often first travel down to market towns in the plains and then up to more difficult locations in the mountains. Thus people in mountain areas suffer from both low prices as producers and high prices as consumers. With little flat land and extreme weather, the livelihood strategies of the people are largely affected by the policies that are formed from time to time, mainly under the influence of external pressures.

According to food insecurity zoning maps of Pakistan prepared by the United Nations World Food Program, Northern Areas of Pakistan are among the most food insecure areas. Hence, the study titled "Impact of trade liberalization on lives and livelihood of mountain communities" was carried out in Northern Areas of Pakistan under the "Program for securing the livelihood rights of farmers in the HKH region".

The study has indicated that major stakeholders (including the government officials as well as the development practitioners) in Northern Areas of Pakistan are neither ready to face challenges, nor are they in a position to tap the opportunities offered by current trade liberalization regime.

Findings of the study would help the readers, particularly the policy makers, to understand that agriculture is fundamental to food sovereignty, rural employment and sustainable livelihood. It is vital and crucial for the people living in under-developed areas, such as Northern Areas of Pakistan, where small farmers are dependent on agriculture for their livelihood and food security. So, agriculture is not just a trade activity, it is also a means to an end.

To ensure that multilateral trade rules promote the right to food and support development goals in the least developed areas, the study recommends that the Agreement on Agriculture (AoA) and Trade Related Intellectual Property Rights (TRIPs) should be renegotiated to ensure food security, livelihood security, poverty alleviation, and equitable development in fragile areas. The TRIPs agreement should be made consistent with the Convention of Bio-Diversity (CBD) and patents on the seeds of food crops should not be allowed to multinational corporations.

The study also recommends that there must be a provision of domestic and export subsidies to agriculture in mountain areas along with an immediate implementation of the existing tariff reduction commitments by the developed countries to ensure greater market access for the products from mountain areas. We must lobby for a duty free access for all products originating from mountainous areas of under-developed countries without any quantitative restrictions.

I am grateful to Dr Saba Gul Khattak, Executive Director SDPI, for her all out support for this study. My thanks are due to SDPI's research and support team, especially Syed Qasim Shah, Faiza Farooq, Roshan Malik, Arshad Khursheed and Nasir Khan, for their hard work in finalization of this report.

I would like to acknowledge that Mr Shafqat Munir and media network Journalists for Democracy and Human Rights (JDHR) provided support in terms of outreach to all stakeholders including communities and policy makers through media. I am also thankful to SDPI's advocacy unit headed by Syed Sajid Kazmi for nice advocacy for the program.

Dr. Abid Qaiyum Suleri  
Head, Sustainable Agriculture Unit, SDPI

## ACRONYMS

AKRSP:	Aga Khan Rural Support Programme
AMHRWO:	Alpine Medicinal Herbs and Rural Welfare Organisation
AoA:	Agreement on Agriculture
CAF:	Corporate Agriculture Farming
CBD:	Convention on Biological Diversity
CITES:	Convention on International Trade in Endangered Species
EU	European Union
GATS	General Agreement on Trade in Services
G & F:	Grain and Fodder
Hac:	Hectare
HKH:	Hindu Kush Himalayan range
IPR:	Intellectual Property Rights
IFIs	International Financial Institutions
IUCN:	International Union for Conservation of Nature
LDAs:	Least Developed Areas
LDCs:	Least Developed Countries
NA:	Northern Areas
NAADP:	Northern Areas Area Development Project
NAFD:	Northern Areas Forest Department
NASSD:	Northern Areas Strategy for Sustainable Development
NGOs:	Non-Governmental Organisations
SAWTEE:	South Asia Watch on Trade Economics and Environment
S & D:	Special and Differential Treatment
SDPI:	Sustainable Development Policy Institute
Spp:	Species
TRIPs:	Trade Related Intellectual Property Rights
UN:	United Nations Organisation
WTO:	World Trade Organisation
WWF:	World Wide Fund for Nature
ZBTL	Zarai Taraqati Bank Limited

## EXECUTIVE SUMMARY

The unique feature of the current globalisation process is the “liberalisation” of national policies and governance mechanisms. National policies (economic, trade, political, governance, social, cultural, and the technological areas) that until recently were under the jurisdiction of States and people within a country have increasingly come under the influence of international agencies and external factors. This has narrowed the ability of governments and people to make choices from options in livelihood strategies. Market forces are determining the fate of common livelihood assets such as usage of forests, non-timber forest products, water and grazing lands etc. Trade liberalization may bring some benefits but rapid liberalization without proper preparation and groundwork under the influence of international financial institutions (IFIs) is disastrous and threat to the very basis of livelihoods.

Ideally trade liberalization should be the “mean” to secure sustainable livelihood and not an “end” in itself. Unfortunately, this is not the case in many under developed countries including Pakistan and the end objective seems to be rapid liberalisation instead of development. Hence, the brunt of further economic liberalization and increase in trade facilitated by various WTO agreements (in force or under negotiation) is always and would be on the marginalized sections of communities such as farmers and women who are already vulnerable and cannot absorb the shocks of globalisation. The things become even worst when the vulnerable communities are located in fragile areas (such as mountainous areas).

In this backdrop, a need was felt for a study in Hindu Kush Himalayan (HKH) region, which is facing new challenges of multi factor market. This is a three years program, funded by the Ford Foundation and ActionAid. The program is being carried out by South Asian Watch on Trade, Economics and Environment (SAWTEE) partners in Pakistan, Bangladesh, India, Nepal, and Sri Lanka. It aims to identify not only the impacts of economic liberalization (under WTO regime) on farmers’ rights, but also to suggest the coping strategies. The idea is to put people at the centre of development and analyse the possible “opportunities for” and “threats to” the farmers of the HKH region within the multilateral trading system. Sustainable Development Policy Institute (SDPI) is undertaking this program as a regional partner of SAWTEE in Pakistan. The first research conducted under this program was to study the impact of trade liberalization [Agreement on Agriculture (AoA); and Trade Related Intellectual Property Rights (TRIPs) of the World Trade Organization (WTO)] on livelihoods of the people living in HKH region of Pakistan.

At practical level the study:

- started with an analysis of people’s livelihood assets (rural factor markets) and how those had been changing over time under the influence of AoA and TRIPs;
- assessed general awareness level of the community members about WTO and its various agreements;



- focused on the impacts of latest policy and institutional arrangements upon people/households and upon the dimensions of poverty they define;
- highlighted the importance of influencing these policies and institutional arrangements to ensure that livelihood of common masses is not threatened;

The impacts of AoA, and TRIPs were analysed indirectly with reference to risk vulnerability, access to public services, rural factor market, and political economy. Community mapping, focus group discussions, and individual interviews were used as tools to collect the data for this study.

The study was carried out in the districts Gilgit, Diamer and Sakardu of Northern Areas of Pakistan. The Northern Areas of Pakistan comprising of HKH region have a long and rich history and a unique status in the prevalent administrative set-up. Although under the control of the State of Pakistan in 1949, the status of the region within the confederation of Pakistan remains unresolved as long as the State of Jammu and Kashmir remains a disputed territory. This unique political status has increased the fragility of the area.

The report in hand comprises the study findings along with the recommendations for a possible mitigation. Part I of the report provides an overview of the History of Northern Areas. Part II of the report outlines the methodology followed to carry out the study. Livelihood strategies of the local communities, along with an introduction of agricultural sector are discussed in Part III, whereas livelihood assets of the communities are discussed in Part IV of the report. This part provides the reader enough information, enabling him/her to evaluate the field reports of present study in the context of the interests and conflicts of the actors and factors involved. Part V evaluates the field reports. Observation from the field journals of the research team and output of the focus group discussion is discussed, followed by a discussion on some interviews with the selected development workers and community members. Lastly analysis of the interviews is linked to the findings of focus group discussion. The last part of this report deals with the discussion on issues emerging from field reports in the context of various provisions (commitments as well as flexibilities) of AoA, and TRIPs followed by suggestions and recommendations to protect the livelihood options for affected communities.

Some of the observations include:

1. Majority of the people living in study area were deprived of basic human needs.
2. Their perception of poverty is lack of employment opportunities as well as lack of financial resources.
3. There is no direct agricultural subsidy or government grant available in this area.
4. Use of natural resources (land, forests) are being influenced by market forces.
5. People are not aware of various agreements of WTO.
6. People want the government to provide link roads to markets; storage, grading and packaging facilities; and processing plants.
7. Quite a few of them were not happy with the attitude of government agencies.

8. They perceive interventions of different Non-governmental Organisations (especially Aga Khan Rural Support Program) as a kind of blessing for them.
9. AKRSP has started a marketing program in some areas to safeguard people from the exploitations of the middlemen, people want the government agencies to replicate such interventions.
10. The community owned forests are being over exploited in Diamer district.
11. Medicinal plants of the area are being over exploited.
12. People from out side are getting control over local resources.

## HISTORY OF NORTHERN AREAS

***HKH is one of the most isolated, pristine and fabled regions in the world. Yet at the same time, its people are among the most neglected.***

***Maharaja of Kashmir was consulted in matters relating to the succession of local rulers and was allowed to accept tributes from them whereas the sovereign authority in the region rested with the British Crown.***

The Northern Areas of Pakistan are located between 35-37 N and 72-75 E. The majority of the area is mountainous and covers over 72,496 square kilometers with a population of one million in 831 villages scattered all over the area (Population density is 14 persons/km<sup>2</sup>). Human settlements are on alluvial fans and terraces from 4000 ft to 11500 ft elevation on either side of the Indus and its tributaries where water is available for agriculture. These areas are historically known as Boloristan. This is one of the most isolated, pristine and fabled regions in the world. Yet at the same time, its people are among the most neglected.

Fifty years have passed since it came under the control of the Government of Pakistan but the constitutional status of the territory is still undefined. Historically northern areas were not formally recognized to be a part of the territory of the State of Kashmir. However, the Maharaja of Kashmir was consulted in matters relating to the succession of local rulers and was allowed to accept tributes from them whereas the sovereign authority in the region rested with the British Crown. This system was formalised in 1935, when the British government signed a lease agreement with the State of Kashmir granting a sixty-year lease to the state over Gilgit Wazarat.

With the signing of the lease the Maharaja's powers of suzerainty were confined to the boundaries of the Gilgit Wazarat, and the rest of the regions in northern mountains became a comprehensive unit, known as Gilgit Agency. The Agency was administrated by a Political Agent who was the sole representative of the British government and the local head of the civil government, the military and the judicial powers. In June 1947, British Government handed over the entire Agency (and not just the Wazarat) to the representative of the Maharaja of Kashmir.

After partition there was a revolt in the northern areas over the issue of accession to Pakistan or India. There was a military operation against the Maharaja's representatives and in November 1947 a

provisional government was formed in Gilgit. By the time the ceasefire of January 1949 came into force, the Political Agent of the Gilgit Agency was in control of the Gilgit subdivision as well as the states of Hunza and Nagar as well as the districts of Skardu, Astore and Chilas. The northern mountainous region thus came to be the part of Pakistan's territorial landmass. However, the status of the region within the confederation of Pakistan remains unresolved as long as the Kashmir issue is not resolved.



***Status of the region within the confederation of Pakistan remains unresolved as long as the Kashmir issue is not resolved.***

## METHODOLOGY

The impacts of AoA and TRIPs were analysed indirectly with reference to risk vulnerability, access to public services, rural factor market and political economy. Community mapping, focus group discussions and qualitative interviews were used as tools to collect data for this purpose.

Three districts of the Northern Area; Gilgit, Diamer and Skardu covering fifteen villages were selected to carry out the study. Field team comprised of three researchers, one from SDPI and the other two (one male and one female) from Northern Areas. The team members from Northern Areas were trained at SDPI for three days and that was followed by a pre-test pilot study of the field modules prepared for this purpose. Both the members administered community questionnaires and held focus group discussions. Since the focus of the study was not quantitative, the sample size was not statistically important and contained very useful qualitative information based on the interview modules and general observation of the field team. Team members maintained their individual journals that included their general observation about the household and the community.

***Three districts of the Northern Area; Gilgit, Diamer and Skardu covering fifteen villages were selected to carry out the study.***

## AGRICULTURAL SECTOR IN NORTHERN AREAS OF PAKISTAN

**Only one per cent area is under agriculture, double of this is arable, four per cent under forest and the rest is covered by range lands, glaciers and mountains.**

Based on the elevation, Northern Areas of Pakistan are divided into 4 ecological zones (Table-1). Agriculture is irrigated owing to scanty precipitation and subsequent aridity all over the mountain region. In order to grow arable crops and fodder, farmers divert water from glacial rivers onto their fields through a complex system of irrigation channels. . As far as the land usage is concerned only one per cent area is under agriculture, double of this is arable, four per cent under forest and the rest is covered by range lands, glaciers and mountains (Table-2). Consequently the agricultural land holding is very small (1-2 kanals or 0.073 to 0.074 ha/capita). Seventy five percent agricultural land in single cropped area and 25 percent in double-cropped area in the arid mountains confine the production below subsistence level (Table-3).

**Table 1:  
Ecological Zones in Northern Areas**

Zone	Location	Characteristics
I	At the base of valleys near the Indus river: with compact winter village	Elevation 1900 m: double cropping zone with typically wheat as a winter crop and maize in summer; about one third of cultivated area
II	At the middle and higher reaches of the valleys: usually with dispersed settlements	Elevation 1900 to 2300m marginal single cropping zone which can be converted into double cropping zone with early maturing wheat and barley varieties like FSD-83, Chakwal 86, Parwaz-94 etc.
III	High elevated valleys	Elevations 2300m to 3000m single cropping zone.
IV	High pastures	Elevations above 3000m alpine pastures, no cultivation, snow bound in winter.

Source: NASSD 2002

**Table 2:  
Summary of present land use in Northern Areas (000 hac)**

S. #	Type of Land	Area	Percentage
1	Mountains/Lakes/Rivers/Glaciers	4,810	66
2	Forest:		
	a). Protected = 65	1%	
	b). Private = 219	3%	
	c). Social Agro/Farm = 62	5%	
	<b>Total Forest = 646</b>	<b>9%</b>	
3	Rangeland	1,646	23
4	Cultivated area	58	1
5	Cultivable waste	90	1
6	<b>Grand total</b>	<b>7,250</b>	<b>100</b>

Source: NASSD 2002

**Table 3:  
Crops and Zone-Wise Cropping:**

District	Double Cropping Zone	Marginal Single Cropping Zone	Single Cropping Zone
Gilgit	Wheat (70%) Maize (G&F) Barley Potato (table) Vegetables Millet, Oats, fodders	Only Rabi crops, e.g. wheat, maize, buck- wheat, peas, potato, barley	Barley, wheat, potatoes, peas
Skardu	Due to snow fall only single cropping system is practiced	Wheat, barley, maize, buckwheat, potato, small grain millet.	Wheat, potato
Diamer	Rabi (below 1,800 meters) Wheat (70% Area) Potato Barley Peas Kharif Maize Beans (cash crop)	At 1800 meters to 2400 m only Rabi crops, wheat, maize buckwheat, vegetables, small grain millets	Barley, wheat, potato, peas, other vegetables, maize

Source: NASSD 2002

*The region is deficient in food grains and from one quarter to a third of Northern Area's food grain requirements are met from produce bought in from the plains*

The farming system here is highly integrated in nature with a high degree of inter-dependence between arable cropping, forestry, fruit growing and livestock production. Summer is the main agricultural season when maize, barley and vegetables are sown and fruits are picked and stored. To avoid crop damage livestock are taken to high altitude alpine style pastures during the summer months. Wheat is grown up to an elevation of 2300 meters only. The region is deficient in food grains and from one quarter to a third of Northern Area's food grain requirements are met from produce bought in from the plains (NASSD 2002).



The region has emerged as an important producer of fruits and vegetable. The vegetables cultivated in the area include potato, tomato, peas, carrots, Chinese cabbage and onion. Area under potato has been on increase since its introduction in the area. Most often seed potato is grown, however table potato cultivation is also getting popular in the area. Due to lack of storage facilities the produce is marketed at nominal prices, even then some part of the produce is remained un-sold and the

percentage of wastage for perishable commodities such as cabbage and tomatoes is quite substantial (Table-4).

**Table 4:  
Vegetable production in Northern Area**

Crop	Area (Ha)	Production (T)	Wastage (T)	Consumption (T)	Marketed (T)
Total	5245	108494	3366	30948	74180
Beans	272	3991	-	942	3049
Cabbage	296	3627	288	3113	226
Others	29	864	50	700	114
Peas	395	1494	-	400	1094
Potato	3045	76125	2166	6318	67641
Tomato	481	7853	778	5175	1900
Turnip	727	14540	84	14300	156

Source: NASSD 2002

*Due to lack of storage facilities the produce is marketed at nominal prices, even then some part of the produce is remained un-sold or wasted.*

The important fruits produced in the area include apricots, grapes, cherry, almond, pear and apples (Table-5). However other fruit trees such as mulberry, oranges, peaches, pear and plum are also found in the region.

**Table 5:**  
**Fruit production in Northern Areas**

Fruit	Cropped Area Hectares	Production in Tons
Total	7029	170680
Almond	309	883
Apple	1635	24442
Apricot	6368	60305
Cherry	334	1862
Grapes	396	34500
Mulberry	1127	18225
Others	145	53
Peaches	303	4449
Pear	403	4128
Plum	52	3060
Pomegranate	182	2221
Walnut	802	6552

Source: NASSD 2002



*Livestock is a salient feature of agro-pastoral agriculture.*

Livestock rearing is a salient feature of agro-pastoral agriculture. Large herds of yaks, cattle, sheep and goats are found in the area. Poultry birds are kept to meet domestic requirements of eggs and meat (Table-6).

**Table 6:**  
**Number of Livestock and Poultry Birds by District**

	Gilgit	Skardu	Diamer
Mules	6	96	311
Camels	78	15	0
Horses	104	1,261	3,624
Buffaloes	171	440	5,579
Donkey	655	1,970	13,142
Yaks	1,982	7,045	184
Domestic poultry	27,166	169,201	638,234
Cattle	114,286	106,867	165,240
Sheep	161,958	177,104	65,912
Goats	288,798	239,430	384,242
<b>Total</b>	<b>595,204</b>	<b>703,429</b>	<b>1276,468</b>

Source: NASSD 2002

## LIVELIHOOD STRATEGIES OF LOCAL COMMUNITIES

***After 9/11 tourist flow to the region has almost completely stopped.***

The level of access to resources and livelihood opportunities is different among various vulnerable and settled groups in northern areas. The resources are unevenly distributed among communities and hence the livelihood opportunities of the marginalized sections are threatened. Both agriculture and livestock shape the means of sustenance for the people living in these high mountainous areas. During summer the communities living around tourist resorts depend on tourism, whereas seasonal employment in agricultural sector during summer is also common. Remittances sent by male community members working as unskilled labourers in the planes as well as in some Gulf countries also contribute towards livelihood options. Trading business is another source of livelihood. More recently there is trend to collect medicinal plants and other herbs that are not only sold in the local markets but also in other parts of Pakistan through the middlemen. The closing down of the only winter land-route from Chitral to Peshawar through Afghanistan after September 11 events have created obstacles in the transportation of essential commodities and hampered the flow of people travelling to down-country areas for employment and other reasons. Due to these events, tourist flow to the region almost completely stopped, having significantly negative impact on the local tourist industry (AKRSP 2001).

The check posts at Pak-China border over the Khunjerab pass has resulted in a decrease of Pak-China trade of goods and services, and severely affected livelihood of local people engaged in the trading business. Subsequent to the tragic events in September 2001.

#### **Livelihood assets of local communities: Rural factor markets**

***Impact of various policies on local resource bases or rural factor markets was studied in the project area.***

Local livelihoods and state policies have a dual interface. Firstly, policy changes impact rural livelihood practices, informal local institutions and on people's coping strategies. Secondly, these changes do impact resource use sustainability as local livelihoods are embedded in the local resource base. These resource bases or factors such as human, social, natural, physical and financial together formulate the overall livelihood assets of any community. Any policy or reform process either global or national that affects the access to any of the livelihood assets also affects the overall livelihood strategy. It was in this context, that impact of various policies on local resource bases or rural factor markets was studied in the project area. The livelihood assets of local communities were broadly divided into following categories.

1. Rural Land Markets
2. Rural Water Market
3. Rural Forest Market
4. Rural finance
5. Non Timber Forest Products





Any changes in the access of these assets were studied over time through secondary data and through focus group discussions.

### Rural Land Markets

***The tenancy system in study areas can be divided in four categories.***

In study areas particularly, and in the Northern Areas generally, most of the landowners cultivate their land themselves. However, in some areas tenancy system also prevail. The tenancy system in study areas can be divided in four categories;

1. Hijra
2. Dehqani
3. Ashr
4. Qalang

“Hijra” system is a flexible one where terms and conditions including the duration of the tenancy are established by mutual consent of both the parties. Owner provides seed, animals for ploughing and food for tenant in “Dehqani” system. Depending upon the land whether irrigated or rain fed, tenants get 1/4<sup>th</sup> or 1/3<sup>rd</sup> of the produce in this system. In “Ashr”, tenants do selective work and get a share in the produce on a profit loss-sharing basis. The last category, Qalang is leasing out of land to tenants for a specific period of time against a specific amount of money.

***Area is developing at a slow pace due to inherent constraints of poor communication infrastructure and narrow resource base.***

Economically, the area is developing at a slow pace due to inherent constraints of poor communication infrastructure and narrow resource base. The cultivated area of Gilgit is 11,900 Hectares and that of Skardu is 15,200 Hectares. The situation may be improved if 18073 hectares of cultivable waste land present in Gilgit and 20859 hectares cultivable waste present in Skardu is brought under cultivation. Government of Pakistan has recently introduced a new strategy to attract foreign investment in agriculture sector i.e. Corporate Agriculture Farming Plan. Under this strategy the government has planned to sell out the available cultivable wasteland to foreign investors (mainly multinational corporations). There is an attractive package for investors such as tax exemptions on income, no land transfer duty and import duty exemption on import of new agricultural machinery. Under this plan,

agriculture has been declared as an industry, a concept totally contradictory to the traditional role of agriculture in the society. This situation does not seem to bring any positive change but will threaten the entire livelihood pattern and social structure in the area. It would also increase the sense of deprivation among the marginalized communities of the area.

### **Agricultural Water Markets**

***Water supplies either for irrigation or domestic use is entirely from surface water sources.***

The low rainfall and aridity are the two major characteristics of the Northern Areas. Therefore, water supplies either for irrigation or domestic use is entirely from surface water sources i.e. rivers, springs and streams, which are fed by melting of snow in the mountains or through glaciers. The average monthly and annual rainfall in the area ranges between as low as of 125 mm to 500 mm. This amount is too meager to fulfill the water requirements. Spring water is also limited and available under localized conditions. Therefore, stream flow is a major source of water in the Northern Areas. Stream flows are diverted from streams and channels, which contribute to the tributaries of the upper Indus River (NASSD , 2001).

***All irrigation is done through Kuhls, small, often-lengthy channels usually constructed and maintained through the collective efforts of farmers and villagers.***

In the rugged mountains of Pakistan's HKH region, nearly all irrigation is done through *Kuhls*, small, often-lengthy channels usually constructed and maintained through the collective efforts of farmers and villagers. *Kuhls* carry water directed through a crude intake structure from mountain streams fed by snowmelt, glacial melt, and/or springs for distribution through watercourses to clusters of small, often terraced fields, planted with food grains, vegetables, fodder, orchards, and trees. The familiar *Kuhl* systems are increasingly restricted to higher elevations and the upper ends of those favorably exposed tributary valleys where small perennial water sources are most likely to exist. Under NAADP, AKRSP-sponsored participatory development approaches the communities have been encouraged to use pipe flow irrigation system rather than open channels to avoid damages from land sliding and to reduce the maintenance cost. Contrary to other parts of the country the maintenance of water channels (*kuhls*) are carried out by the communities using traditional systems called "Alla shery". AKRSP has provided assistance to bring 19,000 hectares of new, and 23,000 hectares of rehabilitated land under irrigated cultivation (UNDP, 2001).

***Urban centers depending on surface supplies face moderate to acute shortage of water during the winter.***

The water supply systems in the urban centers of the Northern Areas are based primarily on the utilization of surface waters. Groundwater use for domestic water supply is not common except in the low lying settlements in Gilgit town and a few riverside villages in Skardu, where people draw water from shallow wells. Most of the urban centers depending on surface supplies face moderate to acute shortage of water during the winter months when the snow and glacier melt is reduced. To cope with this shortage, people store water in underground pits which is later consumed. According to the credible sources EU has requested for privatization of the water market under General Agreement on Trade in Services (GATS) of WTO. Advocacy groups in Pakistan are concerned that it may entail privatization of water sources in Northern Areas of Pakistan. However the government agencies and general masses in the area seem to be unaware of any such development.

## Rural Forest Market

Forests occupy 9 percent of the total area of Northern Areas (Table-7). The forests in Northern Areas are mostly found in southwestern parts of NA in the districts of Diamer, Gilgit and Gahkuch.

**Table 7:  
Area Coverage by Natural Forests in Northern Areas**

	Natural Coniferous Forests			Natural Scrub Forests	Total
	Protected Forests	Private Forests	Total		
Area in ha	64,512	217,088	281,600	381,200	662,800
Percent	0.911	3.09	4.0	5.4	9.4

Source: ASSD 2001

***Both the public and private forests are important to local communities for timber, fuel wood, grazing livestock, and collection of minor forest products such as mushroom, medicinal plants, pine nuts from chilgoza pine etc.***

Almost all forests in Diamer District except forests in Astore, which are protected forest, are owned by communities but their official nomenclature is "Private Forests" as opposed to state-owned Protected Forests elsewhere that have been designated under the Pakistan Forest Act, 1927. The forest department manages protected forests. According to forest laws, communities have rights to grazing, firewood collection and fodder collection in protected forests. According to one report protected forests in the region are protected in name only. Private Forests on the other hand, are regulated under the Gilgit Private Forests Regulation, 1970. In accordance with the Accession Deed the tribal communities of Chilas, Darel and Tangir in Diamer District own the private forests. However, these are to be managed by the Northern Areas Forest Department (NAFD). Both the public and private forests are important to local communities for timber, fuel wood, grazing livestock, and collection of minor forest products such as mushroom, medicinal plants, pine nuts from chilgoza pine etc. The important tree species found in Sub Tropical Forest are Chir pine & Blue pine. On some lesser heights moist temperate forests contain Deodar, Fir, Alder, Spruce and Oak spp (NASSD 2001).

***Farm planting is an old practice in NAs, especially in wood-deficit areas***

Farm planting is an old practice in NAs, especially in wood-deficit areas such as Hunza, and Ghanche, Skardu and Ghizer Districts. However, it got a big boost with the support of AKRSP. AKRSP took lead in farm forestry by raising nurseries and promoting farm plantation through the village organizations. Plantation of fast growing timber, firewood and fodder species in the agricultural fields has been undertaken on a large scale.

## Rural Finance

***ZBTL is the largest lender in agriculture sector.***

Zarai Taraqiati Bank Limited (ZBTL) is the largest lender in agriculture sector. ZBTL has been working in the area since 1970. It is working with its 5 branches, 4 field offices along with 24 mobile credit officers in the area. It is providing loan with only 14-16 percent mark up. ZBTL has allocated Rs. 250 million for

disbursement in Northern Areas for year 2001-02. The formal rural finance market in the area is dominated by some NGOs working on micro-credit schemes. Moreover there are Small and Medium Enterprises Bank, First Women Bank, Khushali Bank and newly introduced First Micro-Finance Bank. Some of the organisations like AKRSP, and First Women Bank are not only financing in agriculture sector but also imparting trainings to enhance entrepreneurial skills of the credit recipients. AKRSP started its Credit Programme in 1983 since then it loaned out a total amount of Rs. 1,568 million (AKRSP, 2001).

***These credit programmes are not able to address the basic problems of the communities***

Although considerable work has been done in Northern Areas by the governmental and non-governmental organisations to enhance accessibility of cheap credit for the rural populations. However, these credit programmes are not able to address the basic problems of unemployment, health and poverty. Their stereotype model of development and income generation has disturbed the traditional social structure and has created a small class, which has become dependent on NGO's intervention. Through this system of lending, many have become defaulters by receiving unplanned credits at high mark-up rates of 22 per cent for their domestic use.

#### **Important medicinal plants**

***Medicinal plants are an important source for the treatment of various ailments of human kind as well as for the livestock.***

Medicinal plants continue to be an important source for the treatment of various ailments of human kind as well as for the livestock. Northern Areas are rich in biological resources and house a large number of plants of medicinal value.

Astore is the most famous town in this regard and is known as 'store house of medicinal plants'.

***These plants are collected without any consideration for their conservation and sustainable use.***

This area is abound in *Artemisia spp*, *Podiphyllum emodi*, *Ephedra spp*, *Glycyrrhiza glabra*, *Picrorhiza kurrao*, *Aconitum heterophyllum*, *Ferula foetida*, *Ferula narthex*, *Onosma spp*, *Podophyllum emodi*, *Rheum emodi*, *Swertia-chiretha*, *Thymus serpyllum*, *Valeriana wallichii*, *Viola-Serpans*, *Hippophae rhamnoides*, black cumin, salajit and sea buck thorn. However all these plants are collected without any consideration for their conservation and sustainable use. At present all these plants face a number of threats including that of loss of habitat either due to climate change or due to increased human encroachments. Moreover, there is already a move going on for patenting active ingredients of some of the medicinal plants found in the area such as *Artemisia* and *Ephedra spp*.

## RESULTS

The study area comprised of the following villages:

- *Sultanabad*, Shimshal valley, Roshan abad, Nulter, Galiane, *Jaglot*, *Karim Abad*, *Gulmit*, and *Gulmat* in District Gilgit;
- Astore, Thore, Zian, Chongra in District Diamer.
- Arund and Mehndi in District Skardu.

***There are no provisions of cold storage, or processing units even in the district head quarters.***

Aga Khan Rural Program and other non-governmental organizations are operational in Sultanabad, Jaglot, Karim Abad, Gulmit, Gulmat, Astore, Arund and Mehndi. Due to project's interventions the basic facilities of health and education are available in these villages. The rest of the villages face problems of accessibility; lack of marketing facilities, health and education facilities, unsustainable forest utilization and other similar aspects. Family size is too large. The literacy rate is not very high in the project areas. There are no market committees or other bodies for assistance in marketing of local produce. There are no provisions of cold storage, or processing units even in the district head quarters.

#### Field Report Evaluation

***The people were ignorant of the emerging threats of trade liberalization.***

In the community discussions it was observed that most of the people were ignorant of the emerging threats of trade liberalization, including a large number of government officials and development workers. People were critical of government role and openly expressed their resentment over lack of any government support for marketing their fruits and vegetables. They were of the opinion that they are never consulted and decisions are imposed on them. Some of the respondents were aware that the area was abundant in biological resources. However, they were not able to understand the TRIPs agreement and patenting regime. Most of the respondents, while commenting about the climate change pointed out that the winters are much shorter now and the amount of snowfall is decreasing over time.

Summary of various interviews and group discussions is reproduced here. The questions are divided in two categories, one related to WTO and other to policy issues.

#### 1. *What do you know about WTO?*

***Few government officials were perceiving WTO as a sort of monster that would destroy everything***

Most of the government officials and development practitioners were not familiar with WTO and its various agreements. Few of them were aware to the extent that WTO was established. However, they were not aware of the implications of various agreements. One government official from the agriculture

department told that he was aware of WTO, but did not know what were its objectives and how did it work? Few perceived WTO as a sort of monster that would destroy everything.

## **2. What are the important products of the area?**

Respondents identified that fruits, Salajit and medicinal plants were important products from export point of view. One of the development workers told that apparently a Turkish firm was marketing apricots under the trade name of "Hunza Apricots". This proves that products of this area have export potential but there is a need for a serious effort to explore the potential. One respondent from Shimshal valley told that gold mines are present in the valley. He added that Salajit, a mineral compound, is smuggled through out the world from the valley. Another potential product, which has a greater demand in the market, is embroidery work carried out by women of the area.

***Turkish firm was marketing apricots under the trade name of "Hunza Apricots".***

## **3. Where do you market the produce and do you get any support in marketing from any external agencies including government?**

The response was that markets are located in the big cities of the area. Due to lack of infrastructure they have to sell their products to the middlemen in the smaller markets where they do not get fair price for their produce. In some areas Aga Khan Rural Support Program has started its marketing program. There was no facilitation from any government department in marketing their produce.

***Due to lack of infrastructure they have to sell their products to the middlemen***

## **4. Is there any role of middleman in marketing of the produce?**

Most of the community members told that merchants from the down country or their agents buy every thing at very cheap prices and sell them at much higher rates in the down market. One of the farmers told that he has sold 120 kgs of potatoes for Rs. 900 while the buyer would sell the same quantity for Rs. 2800 in down country markets. Another respondent told that buyers from the down country buy one foot wood for Rs. 110 and sell the same for Rs. 300 in big cities. However a development practitioner was of the view that there was a need for an increased role of middleman to promote local products and enhance trade.

***One of the farmers told that he has sold 120 kgs of potatoes for Rs. 900 while the buyer would sell the same quantity for Rs. 2800 in down country markets.***

## **5. Do you get fair price for your products?**

The common view was that they do not get fair price for their produce. However, some were satisfied that low prices were better than no business at all.

***Common view was that they do not get fair price***

## **6. If not what are the reasons for under pricing?**

Those who were complaining about under pricing were of the view that due to higher supply in harvesting season, the demand reduces and lack of storage facilities force them to sell the produce at a much lower rate. To them, absence of grading and

***Higher supply in harvesting season, lack of storage facilities and pressure to repay the loans forces them to sell their yield at low prices.***

packaging facilities was another factor for low prices. Some respondents informed that in the absence of government subsidies on inputs they had to buy seeds and fertilizers on credit. Hence after harvesting, they were not able to wait for price stability and were compelled to sell at whatever price was offered to them to pay off the loans.

#### **7. How government can support you?**

**Government should construct link roads, provide storage facilities and employment-generating activities**

The common demand was that government should construct link roads, provide storage facilities and employment-generating activities in the area. They also thought that people of the area were more poverty-stricken and should be offered some assistance in production and marketing of their products.

#### **8. Did any pharmaceutical company or any person in her/his individual capacity visited the area for conducting survey on medicinal plants?**

**An Italian has visited the valley to collect information about medicinal plants and their usage by local communities.**

Most of the people replied no, if some one had been there, s/he was either accompanying a governmental official or coming through some development organization. However one respondent from Shimshal valley told that some years back an Italian had visited the valley to collect information about medicinal plants and their usage by local communities.

#### **9. How many medicinal plants with an economic importance are found in the area and in what ways these are collected?**

**Kuth a his prohibited item for commercial exploitation due to part of CITES list, is being exploited to the extent that, it is now available only in far off valleys.**

People of various areas came up with number of plants which they were using for curing malaria, pneumonia, cough and cold etc. The most important plant they mentioned was Kuth (*Saussurea lappa*) [which is prohibited for commercial exploitation due to part of CITES list], which is exploited to the extent that it is now available only in far off valleys. People told that once people came to know of its commercial value, it was smuggled in bulks at very low rates. This overexploitation of medicinal plants is very common in the area.

#### **10. Is there any effort to conserve the medicinal plants of the area taken either by communities or individuals or NGOs?**

**Organizations such as WWF, AKRSP and IUCN are promoting cultivation of many of the medicinal plants with economic value on the agricultural land.**

Most of the people informed about an initiative taken by an individual with the assistance of IUCN AKRSP, WWF and many other donor organizations. Mr. Iqbal Hussain has founded an organisation "Alpine Medicinal Herbs & Rural Welfare Organisation (AMHRWO). AMHRWO has started cultivation of medicinal plants such as Kuth (*Saussurea lappa*), *Aconetum nepellus* and *Artemisia* in Nulter valley. Under Mountain Area Conservation Project, organizations such as WWF, AKRSP and IUCN are promoting cultivation of many of the medicinal plants with economic value on the agricultural land.

#### **11. Have you heard of TRIPs or Plant Breeder's Rights Act of Pakistan?**

No.

**12. From where do you get the seeds?**

**Seed is often managed from the previous year's stock.**

Seed is often managed from the previous year's stock. However, Jaffar Brothers (for many years) and Monsanto (which started its intervention in year 2001 mainly dealing in maize seed) are also a source of seeds and fertilizers.

**13. Do you know about government Corporate Agriculture Farming Plan?**

**Many people were ignorant of Corporate Agricultural Farming Plan.**

Many people were ignorant of this plan also. One of the respondents from Agriculture Department informed that he had provided the advice to the government on the issue and was of the view that the plan was not practicable in the area. One of the forest department official was also of the view that CAF is not practicable in the area. He added that every piece of land where agriculture was possible, was already under cultivation. However another respondent was of the opinion that government should allow foreign companies to invest in the area, as it would develop the area and people would get employment opportunities.

**14. Have you ever told the government agencies about your problems and what was their response?**

**When they informed the minister about their miseries, he asked that why not they abandon living in such a remote valley.**

They were not very happy with the government agencies' attitude towards them. Most of the people commented that when they informed the minister about their miseries, he asked that why not they abandon living in such a remote valley.

**15. Any agency in the area, which provides small loans for starting home based business?**

**Credit facilities are only be beneficial to large farmers.**

Most of the non-governmental organizations are providing loans to the farmers, but the interest rate is too high. Now some governmental agencies are also providing credit facilities to the farmers but this facility can only be beneficial to large farmers.

**16. Are there any imported products available in the market and what do you prefer local stuff or the imported one?**

They informed about availability of Chinese products in the market and also about their preference to Chinese products over the local ones.

**17. Are you happy that Asian Development Bank is providing loans in agriculture and forestry sector**

Yes it would help in the development of the area.

**18. Do you know the conditionalities of such loans. Government is unable to provide many subsidies due to the loan conditions?**

No we have never heard of it.



## DISCUSSION

***Inhabitants are vulnerable not only because of the conflict between India and Pakistan, but also due to the reason that they are simply unaware of the trade liberalisation era.***

The unique political status of the Northern Areas of Pakistan has increased their fragility manifolds. The inhabitants of these areas have become extremely vulnerable not only because of the conflict between India and Pakistan, but also due to the reason that they are simply unaware of the trade liberalisation era. Most of them are not aware of WTO and even those who know have no idea about the implications of its various agreements. They are critical of lack of government support. However, they don't know that Government of Pakistan is unable to provide them any subsidy or direct grant due to the "WTO plus" restrictions of international financial institutions.

***Few plants are getting rare, as they are being collected and sold out to pharmaceutical companies at cheap prices and in a very un-sustainable manner.***

This area is a rich source of floral biodiversity. Many of the plants of this area exhibit medicinal properties. Poor patients of the area used to rely on the medicinal properties of these plants. However, quite a few plants are getting rare, as they are being collected and sold out to pharmaceutical companies at cheap prices and in a very un-sustainable manner. Collection and selling out is not the only problem. The real problem would emerge when multinational companies would patent the medicinal properties of those plants under TRIPs agreement of the WTO. At that time the use of plants for medicinal purposes by indigenous communities would be perceived as violation of patent law, adding to the miseries of poverty ridden communities. The provisions of the TRIPs also clash with Convention on Biological Diversity (CBD) that ensures equal benefit sharing among communities.

***Government of Pakistan is obliged to protect the IPR of the seeds marketed by the companies. This protection would be granted under proposed "Plant Breeders' Rights Act".***

Moreover, seed companies such as Monsanto and Jaffer Brothers are already active in the seed market of Northern Areas. Under the TRIPs Agreement (Article 27.3 (b)), Government of Pakistan is obliged to protect the IPR of the seeds marketed by the companies. This protection would be granted under proposed "Plant Breeders' Rights Act". The issue of patents of seeds coupled with technologies such as "terminator" technology would have a drastic effect on subsistence farmers through out the developing world in general, and on the farmers of fragile areas such as Northern Areas of Pakistan in particular.

***To promote of organic agriculture would not only enhance the export potential but would also be a blessing for the subsistence farmers who has to buy inputs on credit.***

Last year Aga Khan Rural Support Programme exported some 60 tons of organic apricots to Switzerland against the demand of 400 tons. That indicates a trade niche as the demand for organic produce is growing rapidly in developed countries. However, lack of accreditation labs and certification authorities make it difficult for the producers to get their produce recognised as "organic". There is a sheer need for such authorities followed by a campaign to promote organic agriculture. It would not only enhance the export potential but would also be a blessing for the subsistence farmers who buy inputs on credit.

***Government of Pakistan should seriously explore the export potential and make arrangements for storage as well transportation of fruits for exports.***

There is no direct export subsidies for the export of fruits such as cherries, apricots, pears and apples. The perishable nature of fruits requires either immediate export of these fruits, or proper storage and transportation chain, and without government support local communities cannot accomplish both of these tasks on their own. Most of the fruit such as apples, apricots, and cherries as well vegetables like potato and Chinese cabbage are lost due to non-availability of storage facility in the vicinity in NA. Mostly merchants from the down country buy fruit trees and pay a lump sum amount to the farmers; the same is the case with vegetables. As a Special and Differential Treatment, Pakistan is still allowed to provide domestic transport and freight charges under AoA. Government of Pakistan should seriously explore the export potential and make arrangements for storage as well transportation of fruits to the export ports. It will not only lessen the miseries of the people living in Northern Areas but would also help to gain market access in developed countries' markets.

***The human and social development indicators for people living in LDCs and those living in Northern Areas correspond and technically we can declare these areas as "least developed areas" (LDAs).***

Under the AoA, developed countries were committed to reduce export subsidy volume by 21% and export subsidy expenditure by 36% by year 2000. Developing countries must reduce the volume of export subsidies by 14% and the expenditures by 24% by 2004, the least developed countries (LDCs) are exempted from reduction commitments under AoA (Article 15:2 of AoA). The socio-economic conditions in Northern Areas are not very different from least developed countries (LDCs). These areas are placed at the lowest ranking of economic and social development indicators. According to the United Nation's World Food Programme, among districts of Pakistan, Gilgit district is placed at 106 in economic development ranking, and 96 in social development ranking. The human and social development indicators for people living in LDCs and those living in Northern Areas correspond and technically we can declare these areas as "least developed areas" (LDAs).

Hence Government of Pakistan should try to make the most of provisions of "Special and Differential Treatment" for these fragile and Least Developed Areas. We should also struggle to get a special concessions within WTO agreements for these areas.

## RECOMMENDATIONS

***Federal Government should define the status of Northern Areas and development funds should be allocated according to the formula applied for the other four provinces.***

Lack of awareness on WTO issues in Northern Areas of Pakistan reflects the state of preparedness to accept the challenges of globalisation. Unique political status of NA is already creating the sense of deprivation among the general public. They would feel themselves even marginalized and helpless once the implementation period on various WTO agreements approaches. It is about time for Federal Government to define the status of Northern Areas and development funds should be allocated according to the formula applied for the other four provinces.

***Specific needs of the local communities should be assessed before making any development decision and local communities should be consulted while formulating strategies for sustainable development.***

Specific needs of the local communities should be assessed before making any development decision and local communities should be consulted while formulating strategy to achieve a specific objective. Local wisdom can enhance the ownership of the process as well as the increased sustainability of the programme. This general principle is equally valid for the Northern Areas as well. Devolution of power plan through elected district and tehsil assemblies (as in the case of rest of the Pakistan) can be one way of doing it. The participatory bottom-top approach would give a sense of ownership and inclusion to the people of this area. Corporate Agriculture Farming Plan may be taken as a case study in this regard and government should get it debated at grass root level to ensure that the livelihood options of the communities are not threatened.

***WTO capacity building initiatives should be diverted towards these areas.***

Moreover, Ministry of Commerce should divert some of its WTO capacity building initiatives towards these areas. The enhanced capacity would enable the local communities to come up with their own plan of action to tap the opportunities and to face the challenges of market forces mechanisms.

***The developmental expenditures should be increased to improve infrastructure facilities in the area.***

The area has a great potential for fruit exports which needs to be taken care of at national-level policy formulation. The developmental expenditures should be increased to improve infrastructure facilities in the area. An improved infrastructure would increase mobility and trade flow from the area. There is also a dire need for making arrangements of storage and packaging at least at district headquarter level. Besides this, efforts must be done to increase the literacy rate. An increased literacy rate would positively affect the social and economic development and would result in poverty reduction.

***Export Promotion Bureau should also find the markets for the agricultural products of NA.***

Export Promotion Bureau should also find the markets for the agricultural products of NA as it does for other products specially mangos, rice and orange produce in various areas in Pakistan.

**We should lobby duty free access for all products originating from mountainous areas of under developed countries**

Federal Government should lobby in WTO for a duty free access of all products originating from mountainous areas of under developed countries without any quantitative restrictions. Besides this, the measures should be taken to enhance the export competitiveness of the products of mountainous areas by providing them with technical and financial assistance. For better S&D treatments we must demand that “Least Developed Areas” of HKH should be offered treatment not less than that of LDCs.

**Government should provide special assistance to the communities for registering their plants herbs, fruits & vegetables.**

The government should provide special assistance to the communities for registering their plants, herbs, fruits and vegetable varieties as the area is rich with floral biodiversity. Otherwise, there is a possibility that under TRIPs regime, these may be pirated and patented by the bio pirates.

**AoA and TRIPs should be renegotiated to ensure food security, livelihood security, poverty alleviation, and equitable development in fragile areas.**

To ensure that multilateral trade rules promote the right to food and support development goals in least developed areas, it is recommended that the AoA and TRIPs be renegotiated to ensure food security, livelihood security, poverty alleviation, and equitable development in fragile areas. There must be no patenting on life forms and TRIPs should be made consistent with CBD.

**Nothing in the WTO agreements should affect the livelihood of farmers living in HKH region.**

At a regional level, there must be a moot from the countries falling in HKH region that nothing in the WTO agreements should affect the livelihood of farmers living in HKH region.

**There must be a provision in WTO regime for domestic and export subsidies to agriculture in mountain areas**

On a general level there must be a provision in WTO regime for domestic and export subsidies to agriculture in mountain areas of under developed countries along with an immediate implementation of existing tariff reduction commitments by developed countries to ensure greater market access for the products from mountain areas.

**None of the agreement with any international financial institute should affect the food sovereignty and special and differential treatment**

Finally it is recommended that none of the agreement with any international financial institute should affect the food sovereignty and special and differential treatment allowed to the developing countries under AoA.

### **Words of Thanks**

We are thankful for different organisations and persons who in their individual capacity helped us in carrying out this research. Our special thanks are due for:

- AKRSP NRM Division, Enterprise Development
- IUCN Northern Areas NASSD Programme
- IUCN Northern Areas MACP
- WWF Northern Areas
- Conservator Forest, Northern Areas
- Mr Iqbal Hussain Chief Executive AMHRWO

### **Bibliography**

AKRSP Annual report 2001  
<http://www.northernareas.org.pk/nassd/backgroundpapers.htm>  
NASSD Background Papers on Agriculture and Food Security 2002:]  
<http://www.northernareas.org.pk/nassd/backgroundpapers.htm>  
NASSD Background Paper on Forestry 2001:  
<http://www.northernareas.org.pk/nassd/backgroundpapers.htm>  
UNDP 2001, <http://www.undp.org/seed/pei/share/community.htm>

# **Annexure**

These articles were published in a Mountain Special Supplement in Pakistan's largely circulated English daily ***The News*** on 15-12-2002, written by SDPI Research Team.

## Investing in sustainable mountain development

*Shafqat Munir*

Investing in people, particularly the vulnerable segments, could contribute much towards sustainable human development. Being the poorest of the poor, the mountain communities are vulnerable to natural and man-made disasters and miscalculations. The mountain people, despite living mostly in natural atmosphere, otherwise suitable for better health, lead tough and unhealthy life on less than \$1 a day as their earnings. Some in remote mountainous villages just earn 20 cents or so.

The sufferings of the mountain communities are gradually rising and their standard of living is declining because of their neglect at policy and practice levels by the governments as well as international monetary and trade organisations. They largely depend on agriculture for livelihood that happens to be unsustainable at the moment. Particularly, under the WTO agreements, farming communities in mountain areas along with their counterparts in plains are being put under risk of deprivation of their local knowledge system. Their right to store, reuse and share their plant and seed varieties is being snatched away as they have no means to check bio-piracy. Monopolies and patents on life forms by multinational corporations (MNCs) have put them in trouble.

**Poverty eradication only through converting developmental challenge of mountains into opportunity through increased investment as part of national and regional development agenda**

This article discusses how the mountains are generally considered among the last on the list for investment, whether by the public or the private sector. This is true in developing countries where mountains are neglected in national development plans. This step-motherly treatment is meted out to the communities despite the fact that practically mountains are the sources of uncompensated resources to feed the valleys and cities. And in turn, they have less to get in terms of sustainable development as their share in the national development.

Dr Maharaj Muthoo, a researcher based in Italy, has analysed the situation of mountains' ecosystems in his paper "Investing in Mountains" with special reference to Mountain Environment of Developing Countries. He underlines the fact that there is a severe paucity of poverty and human development data for mountains. This needs attention in future research and development. I myself faced a lot of difficulties for data collection

regarding the net share of mountains in the national economy of Pakistan for a policy paper on farmers' rights in the upland areas of Pakistan. The government of Pakistan's (GoP) agencies involved in the Northern mountainous regions of the country only provided some data regarding development schemes, such as water, sanitation and some other local level development related schemes. They could not provide in a nutshell the real economy of mountains, as probably they by certain misconceptions did not give importance to these areas. It seems that government officials, with this belief that generally mountainous regions are used for illegal cross-border trade among the bordering countries and communities, do not give priority to cater to the developmental needs of the mountain communities and hence do not bother to document their trade and investment-related activities in national data-base.

The target of poverty eradication of the Millennium Summit can be achieved well if the developmental challenge of mountains is converted into an opportunity through increased investment as part of national and regional development agenda. The integration of mountains and plains could contribute to the shared goals of various conventions and agreements reached at Rio in 1992 and for good global governance. The UN Conference on Environment and Development in Rio de Janeiro, Brazil adopted Agenda 21. The Chapter 13 of this Agenda titled "Managing Fragile Ecosystems: Sustainable Mountain Development" has identified two main platform areas:

- a) Generating and strengthening knowledge about the ecology and sustainable development of mountain ecosystems
- b) Promoting integrated watershed development and alternative livelihood opportunities.

**Investment in basic infrastructure, telecommunication, power generation mechanism, construction of roads, housing units, food-processing industry, medicine industry and seed and plant varieties production units would generate ample opportunities for employment and revenue. These opportunities would empower the mountain people and make mountains more attractive for tourism.**

Though substantial progress has been made with respect to the first programme area and some investments by international agencies are pouring in the watershed management and alternative livelihood opportunities in mountain areas, yet much more needs to be done to really uplift the upland areas to making them at par with the plains. The Rio Earth Summit led to a solid scientific foundation that underlines importance of mountain ecosystems for conservation and sustainable development.

Mountains cover over 25% of the Earth's land surface, and more than 50% of the world's population depends on mountains for fresh water. Mountains provide a substantial portion of the world's timber and minerals and their environmental services are critical to the sustainability of their lowland plains. Above all, the environmental goods, protection, and services provided by mountainous regions are critical to the survival of the human species, both upstream and downstream. The developmental and investment activities in the areas of poverty eradication, health, ecosystems management, finance, infrastructure, governance and technology transfer must focus the mountain communities and these activities should be readjusted according to their needs and requirements.

Mountains have merited attention, not only at Kathmandu Asia High Summit (May 2002), Johannesburg Summit (August 2002)



and Bishkek Summit (October, 2002) but also at all other international forums to achieve the goal of sustainable development. Dr Muthoo in his paper enlists five major benefits to be derived from enhanced investment in mountain areas. They are:

- To avert and mitigate natural and man-made emergencies;
- To sustain water towers on which half of the humanity depends;
- To reduce the flow of ecological and economic refugees from mountains;
- To prevent and control drug and human trafficking;
- To empower mountain people and to convert them into gainfully employed citizens.

These benefits could be achieved through better management of mountain resources be they tourism, trekking, hydro-power, plant and animal products, genetic material for medicines and food security. Investment in basic infrastructure, telecommunication, power generation mechanism, construction of roads, housing units, food-processing industry, medicine industry and seed and plant varieties production units would generate ample opportunities for employment and revenue. These opportunities would empower the mountain people and make mountains more attractive for tourism.

Another advantage of investing in mountains could be the possibility of rooting out the terrorist outfits taking refuge in the mountains. Tora Bora and other mountains of Afghanistan have recently been identified as hubs of terrorism. Terrorist outfits are also using some mountainous regions in Central and South Asia. So, through investment in mountains' infrastructure, we could overcome the problem of inaccessibility of law enforcement agencies towards terrorist camps in remote mountainous areas by making them accessible through road links and other communication networks.

Peace and security are the pre-requisites to ensure an investment-friendly environment in the mountainous regions. Unfortunately, no serious effort has so far been made in this regard thus allowing conflicts to emerge in the mountainous areas. Economic disparity, marginalisation and sense of deprivation fuel social tension among mountainous communities. Moreover state's control over resources in the mountains has distanced the community from the sources of livelihood. Livelihood insecurity has developed economic deprivation. This sort of state interference mars the investment climate. It is a fact that the conflict ridden, disadvantaged and marginalised people are vulnerable to the forces of evil design.

Pakistan has a diversified landscape as at one hand, it has agriculture rich plains and water starved deserts and on the other hand, it has natural resources-filled lush green hills and mountains and some dry ranges of mountains. Himalayas, Korakoram and Hindu Kush mountain ranges pass through Pakistan. The northern mountains of Pakistan include the Malakand Division, Hazara Division, Northern Areas and Murree-Kahuta covering 96,340kms and they have a population of over 8m. Land in this region is used either for arable farming, pasture or forestry. The Tirichmir, Qashqar, Gojal and Nanga Parbat and adjoining valleys and areas are a mix of

peoples, languages and cultures. Major ethnic groups include the Shin, Yashkun, Balti and Pathans. Minority groups include Kalash, Dom and Gujar communities.

Agriculture and livestock productions provide the main source of livelihood for communities, accounting for some 60% of household income. Remittances from migrant labour account for approximately 15% of net income. The income is also generated from employment in or ownership of small enterprises like small roadside shops, hotels, and tourism. Per capita income in Pakistan is \$460 while it ranges between \$100-150 in the Himalayan Korakoram Hindu Kush mountainous areas of the country.

Pakistan's mountainous areas are rich with the products of nature, be it precious stones or food. Pakistan's trade is linked to mountainous areas in two ways, i.e., the trade potential spreading over Central Asia via China and Afghanistan through Silk Route and the potential of natural produce, which could be traded in the international market. So, if under WTO regime any trade mechanism is imposed, it would have direct bearing on the mountainous areas of Pakistan. And that is why it is necessary that these areas should be considered as direct stakeholders in any future WTO trade talks.

Clearly, more protection for the subsistence farmers and the small and medium enterprise in the mountainous areas is necessary. Agreements that spill over from those areas would need to be accompanied by technical assistance and investment for harnessing those sectors and furthermore, building their export capacity through increased market access. Also, there is a need to enable and empower the poor to innovate with protection for traditional knowledge.

The people in mountainous region are already being deprived of basic necessities of life. To protect folk knowledge from bio-piracy we would have to reject patents on life forms. We should not accept the principle of intellectual property systems on life forms and private monopolies over genetic resources. Rather we should call for strengthening the Convention on Bio-Diversity (CBD) to avoid any sort of bio-piracy and patents on life forms. It is against moral and cultural values of our people, and directly threatens food security and the livelihood strategies of farming communities. There is a need to focus on pro-poor policies in the WTO agreements, linking poor policies to weak sectors and weaker economies. Any future investment in the mountains must ensure sustainable human development so that the food security and livelihood of the farmers and local producers could be ensured.

The Agreement on Agriculture: a threat to the food security of people in Hindu Kush Himalayan region of Pakistan

*Abid Qaiyum Suleri*

Mountains first time appeared on the political agenda of United Nations Conference on Environment and Development held in 1992 in Rio de Janeiro. Mountains are as vulnerable and deprived as other marginal areas like deserts, tundra region, islands and coastal areas. These areas have almost similar characteristics of marginality, diversification, fragility, inaccessibility and niche. But one thing that distinguishes mountains from other such areas is their verticality or altitudinal variation.

Some of the famous mountain ranges of Pakistan are Himalayas, Karakoram, Suleman, Hindu Kush, Toba Kakar, Kirthar and Salt range. Among them Hindu Kush is the most important in the Sub-Continent regional context. The Hindu Kush Himalayas region cover approximately 3.4m square kilometres from Afghanistan in the west to Myanmar in the east, encompassing the territories of eight countries with an estimated population of about 140m. This range encompasses territories of Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal and Pakistan. In Pakistan it enters from Pamir and goes up to the interior NWFP.

Local communities of HKH region subsist on the agro-pastoral economy to a considerable extent. The majority of the population is subsistence farmers meeting only the barest needs of food, fodder and fibre for the household. The average landholding per household rarely exceeds one hectare. Cropping pattern varies with altitude. The most widely cultivated crop is maize followed by wheat, millet, barley, buckwheat and rice. Alfalfa is the main fodder crop, while the area under potato crop is increasing every year. The growing of fruit trees, establishment of orchards is also a common practice. Livestock farming has traditionally been more important than farming, with the high pastures playing a central role in resource use pattern.

The zone is excluded from the country's staple foods due to low local production, high transport cost and restricted food access to many areas (such as Chitral) during the snowy season. Sparsely populated, those food deficit areas are inaccessible in severe weather. Another cause of acute poverty in mountain regions is that products in local use are also not marketed horizontally; they often first travel down to market towns in the plains and then up to more difficult locations in the mountains.

Thus the people in mountain areas suffer from both low prices as producers and high prices as consumers. With little flat land and extreme weather, the people in these areas face acute food insecurity; removal of all kinds of subsidies from agricultural inputs has worsened the situation.

### **Agreement on Agriculture (AoA)**

In theory, the Agreement on Agriculture describes a one-dimension model for agriculture, to increase trade in agricultural products through progressive liberalisation. The agreement says that the members must undertake specific binding and reduction commitments in the areas of:

- Market access (increased market access through the reduction of the import duties or tariffs);
- Domestic support (reduced domestic support through reduction in trade distorting production subsidies); and
- Export subsidies

This initial reform of trade in agriculture will be made over an implementation period of six years for developed and ten years for developing countries. Least-developed countries (LDCs) are exempted from undertaking reduction commitments in any area of the negotiations.

The socio-economic conditions in mountain areas of many developing countries are not very different from LDCs. Among districts of Pakistan and Azad Jammu & Kashmir, the mountainous districts are placed at the lowest ranking of economic and social development indicators. According to the UN World Food Programme, Gilgit district is placed at 106 in economic development ranking, and 96 in social development ranking in Pakistan. Likewise these figures are 88 and 111 respectively for Kohistan (another mountainous district of Pakistan).

The human and social development indicators for people living in LDCs, and those living in fragile areas such as HKH region correspond and technically we can declare these areas as "least developed areas" (LDAs).

Under the AoA, interests of developing countries were recognised by emphasising that within the negotiation for continuing the reform in agricultural trade, members are to take into account special and differential (S&D) treatment to developing country members. Similarly there are provisions of special safeguard measures and special treatment under certain carefully and strictly defined conditions up to the end of the implementation period. However, S&D provisions are not directed at rectifying the inherent inequities in the multilateral trading system. Similarly most of these commitments are not legally binding and the best endeavour clauses in WTO agreement are not operational; finally, the problems encountered in the implementation of the existing S&D provisions under various agreements are not taken up in WTO as a matter of priority.

The above discussion reflects that::

- first, there can be LDAs, such as mountains, resembling economically and socially to LDCs within the developing countries;
- second, the concessions and flexibilities for developing and least developed countries are inadequate and insufficient. They are unable to rectify the adverse impacts of multilateral trading system on small economies as well as on large economies of the developing countries in general. Buying the argument that S&D are insufficient in general, they are extremely insufficient for fragile and LDAs (such as mountains) in developing countries.

One needs to analyse this situation in broader multilateral trading system, where the players and economies are highly unequal. Many developed countries have devised their "legal" way outs to soften their reduction commitments under AoA and many studies reveal that level of protectionism in agricultural trade has gone higher in the developed world despite the fact that their reduction commitments are (apparently) high. According to Organisation for Economic Co-operation and Development (OECD), developed countries spent \$360bn on agriculture in 1999 (about seven times more they gave poor countries in international development assistance).

***The level of agriculture protection in developed countries has not fallen since the end of Uruguay Round trade negotiations in 1993. Subsidies and protection continue to ensure over-production in EU, Japan and the US. Thus developed countries continued to support their mountains; for instance Switzerland provides 100,000 Swiss Franc subsidies to its mountain farmers per annum, to shield its own food and farming sectors from competition. Whereas, the developing countries, on the other hand, either under the pressure of IFIs or due to lack of resources are not able to offer any differential treatment for these regions.***

The level of agriculture protection in developed countries has not fallen since the end of Uruguay Round trade negotiations in 1993. Subsidies and protection continue to ensure over-production in EU, Japan and the US. Thus developed countries continued to support their mountains; for instance Switzerland provides 100,000 Swiss Franc subsidies to its mountain farmers per annum, to shield its own food and farming sectors from competition. Whereas, the developing countries, on the other hand, either under the pressure of IFIs or due to lack of resources are not able to offer any differential treatment for these regions.

Thus in practice, the AoA is not only creating inequalities between countries that can give substantial support and protection to their agricultural sector (the developed countries)--and those that do not or cannot--the (developing and least developing countries), but also between the developed and marginalised areas within the same developing country, and this anomaly results in a vicious cycle of poverty that has engulfed the HKH region of Pakistan too.

### **Tariffs**

The AoA was supposed to deliver a simple "tariff only" regime for world trade. But tariffs in the agricultural sector have become increasingly complex, with an increasing number of tariff lines designed to accommodate a series of different tariffs applicable to the same product. These include seasonal, in-quota, and above-quota tariffs, as well as the frequent use of non-ad-valorem tariffs (fixed charge per unit of product imported).

Moreover, health and quality standards by developed nations (sanitary and phyto-sanitary provisions), along with tariff levels limit market access for the products from developing countries in general and those of HKH regional exports in particular.

Treating the LDAs similar to LDCs, the market access for the exports from LDAs must be ensured and such exports must be protected against Contingency Protection Measures (Safeguard, Countervailing & Antidumping measures) as in case of export from LDCs. It would be in line with Part IV of GATT 1994 rules, which visualise that the contributions of developing countries should be related to their stage of development.

### **Domestic supports**

Under the AoA, all forms of support to domestic producers are subject to certain rules. There are two basic categories of domestic support: support classified as having no, or minimal, distorting effect on trade (Green Box and Blue Box measures) and trade-distorting support (Amber Box measures). Green box measures are exempted from reduction commitments and can be increased without any financial limitation. These include domestic food aid programme; public stockholding programmes for food security, agricultural research programmes, training programmes, and pest and disease control programmes etc.

Amber Box or the aggregate measure of support (AMS), on the other hand, covers direct payment to producers which may be "commodity specific support" and other price distorting measures. WTO member states had to quantify and give monetary value to the total level of such subsidies during the Uruguay Round negotiations the resulting value being their base AMS. Base AMS figures were subject to reduction of 20% by 2000 for developed countries, and 13.3% by 2004 for developing countries. LDCs are exempt from reductions.

At the time of establishment of WTO, in 1995-96 AMS support in Pakistan-either product specific or non-product specific-was negative (equivalent to zero technically speaking, from AoA view point) for all the crops. Like Pakistan, most developing and LDCs have no AMS reductions to make because they had few subsidies in place when the Uruguay Round assessments were made and ended up with very low or zero Base AMS figures.

This also means that they can never introduce any price support unless it falls within the exemptions from subsidy rules in any part of the country. The EU and US have been able to avoid genuine reduction in agricultural subsidies by playing a sophisticated number game with the current and base AMS calculations. Buying the argument that fragile areas must be treated as LDCs for implementation of various WTO agreements, there must be provision of domestic support measures for these areas.

### **Export subsidies**

Export subsidies are used to deal with over-production in the domestic market, maintaining high prices for farmers in the home country by ensuring surplus crops find a market abroad. Only 25 of the WTO's 145 members have the right to use export subsidies and it gives the rich countries a tool to prop up their protectionist agricultural policies (it is comparable to dumping). All other WTO members are prohibited from introducing export subsidies in future.

Pakistan, too, has notified to the WTO secretariat that it was not providing any kind of export subsidies in the base period of 1986-88, so accordingly cannot resort to them in future. Due to these bindings Pakistan is not able to introduce any export subsidies for the export of fruits such as cherries, apricots, pears, apples. The perishable nature of the fruits requires either immediate export of these fruits, or proper storage facilities and without government support; local communities cannot accomplish both of these tasks on their own. Much of the fruit like apples, apricots, and cherries as well vegetables like potato, Chinese cabbage is damaged due to non-availability of storage facility in the vicinity in northern areas.

The GoP needs to seriously look in to the possible export potential of the fruits and vegetables produced in the area. Pakistan can earn a lot of foreign exchange by the export of products if proper storage facilities are provided to the poor folk in the area. Pakistan still has the right to provide transport and freight charges that lies under the export subsidies; if government seriously explores the potential and makes arrangements for storage as well transport of bulk of fruits for marketing internationally, it will not only lesser the miseries of the mountainous people living in Northern Areas but will also help to penetrate developed markets.

Although Article 20 of the AoA mentions the need to consider non-trade concerns, which include food security and environmental considerations, these are not central to the text. This article also committed members to continue the reform process through a second phase of negotiations. During this phase of negotiations developing country members can bring the issue of vulnerable and fragile areas in the context of food security and environmental considerations as well.

In Pakistan, in some parts of HKH region Like Swat, Kohistan people used to grow poppy crop in the past to secure their livelihood. Under the AoA Article 6.2 developing member countries are provided with the facility to provide domestic support either in the form of input subsidies or investment subsidies in these areas.

GoP used to support the poppy farmers to grow alternative crops. Although according to the official stance there is no poppy cultivation in Pakistan now. However, there are some independent reports that in remote areas some farmers have again started poppy cultivation, as it is more profitable than growing traditional agricultural crops. In these circumstances, it is important for the government to carry on providing some sort of domestic support to the farmers in this region to curb narcotics.

### **Recommendations**

Agriculture is vital to food sovereignty, to rural employment, and sustainable livelihood. It becomes even vital and crucial for people living in under-developed areas such as HKH region where the small farmers, in most of the cases have land holdings less than one hectare, are dependent on agriculture for their livelihood and food security. Hence agriculture should not be treated like other activities.

To ensure multilateral trade rules promote the right to food and support development goals in HKH regions, it is recommended that:

The re-negotiation of the AoA to ensure food security, livelihood security, poverty alleviation, and equitable development in fragile areas such as HKH region through:

- a) Introducing a clause in "Development Box" that will not only benefit developing countries and LDCs in general but should bind governments to offer special and differential treatments for the people living in mountainous areas to protect their livelihoods
- b) The provision of domestic and export subsidies to agriculture in mountain areas
- c) The immediate implementation of existing tariff reduction commitments by developed countries to ensure greater market access for the products from mountain areas
- d) We want duty free access for all products originating from mountainous areas without any quantitative restrictions
- e) Reforms to deal with tariff escalation and tariff peaks in order to increase market access for value added products from HKH region, as well as technical assistance to meet the food security requirements of mountain communities.
- f) LDAs of HKH should be offered treatment no less than that of LDCs.
- g) Technical assistance provided under WTO should also address the needs of mountain communities.



## Rethinking the rights of mountain people

*Babar Shahbaz*

As the UN's International Year of Mountains 2002 draws to an end, the mountains and mountain people of Pakistan still stand at the crossroad of hope and despair. Our mountains are rich in biodiversity, minerals, forests and water, yet their inhabitants are among the poorest and most disadvantaged.

One reason for this disparity is that the economic wealth and resources that exist around them are viewed as national or provincial assets to be exploited and controlled by those at the centres of power, far from mountain communities. As a result, mountain resources are often extracted with little regard for the rights of local property owners or the impact on poor local populations. Living far from the centres of commerce and power, they have little influence over the policies and decisions that influence their lives and contribute to the deterioration of their mountain homelands. The voices of the mountain people generally go unheard.

**One reason for their poverty is that the economic wealth and resources that exist around them are viewed as national or provincial assets to be exploited and controlled by those at the centres of power, far from mountain communities**

Mountain regions constitute a considerable part of the world's land area and occupy about one fourth of the Earth's surface, they are home to approximately one tenth of the global population, and provide goods and services to more than half of humanity. Accordingly they received particular attention in Agenda 21, programme for sustainable development into the next century adopted by United Nations Conference of Environment and Development (UNCED) in June 1992 in Rio de Janeiro.

One of the most significant decisions regarding mountains taken by the UN General Assembly in November 1998, was designating the year 2002 as the International Year of Mountains. The importance of mountain issues has been recognised by the international community as one of the world's most vulnerable bio-geographical areas susceptible to land degradation, having variable climates, heterogeneous habitats often with unique fauna and flora.

Pakistan is the meeting point of three great mountain ranges: the Himalayas, Korakorams and Hindukush. In Pakistan there are five mountains over 8,000 metres, 29 over 7,500 metres and 108 over 7,000 metres. Peaks between 4,000 metres and 7,000 metres are countless. They bring with them an incredible wealth of biodiversity: extreme differences in altitude and climate make them a comfortable home for numerous kinds of plants and animals.

In the foothills are humid tropical forests, at the peaks, cold deserts. There are alpine meadows, conifer forests, and vast stretches of glacial ice. These are the sources of mighty rivers that provide life-giving water to all of Pakistan. However, lack of land use planning and land use control, uncertain land tenure and uncertain policy on sustainable development in mountain areas are some of the many factors causing insecure livelihood of the mountain communities.

The mountain areas under cultivation suffer soil and water erosion. They have limited infrastructure and market facilities. Some forestry and agricultural practices that are unsustainable contribute to deforestation by increasing hillside erosion, threatening mountain biodiversity and impairing the natural processes of forest ecosystems.

Life for the people in the mountain villages is not always easy. The climate is extremely cold in winter, with temperature far below freezing. The terrain is rugged, with steep, rocky mountains reaching up towards the sky. The rivers are narrow and shallow, with swiftly flowing water that rushes at a fast pace.

Mountains, which are among the world's harshest environments in which to live, are often left to the marginalised people, such as indigenous communities and cultural minorities. Many mountain people can barely scratch out a living as they struggle to grow crops on steeply sloped fields with fragile soils and short growing seasons. Some mountain people survive as herders, nomads and foragers. Others work as day labourers for commercial forestry and timber contractors that profit from mountain resources. However, a growing number of mountain men are migrating to cities in search of jobs, leaving women, children and the elderly to maintain the homestead. As a consequence, mountain poverty has become increasingly the territory of women.

Like other rural areas of Pakistan, the women of mountain communities have always taken charge of farm activities. But today, with fewer male family members present, women's burdens have increased substantially. Despite their traditional responsibilities and dependence on farming income, few women are given title to mountain farmland, and fewer still have access to financial credit. In most of our mountain societies, women's movements and acquaintances are restricted, preventing them from benefiting from educational and extension opportunities. For example, mountain men often have opportunities to attend school and learn the national language, while mountain women become further marginalised because they speak nothing other than a little-known tribal dialect. Each of these factors places the greatest burden of poverty on mountain women.

The significant role that women play goes largely unacknowledged in our mountain societies. Women carry a heavier workload than men in mountain regions. While women share agricultural and livestock tasks fairly evenly with men, they also collect water, fuel wood and fodder as well as process food, cook, and care for

children. There are no laws that protect women's rights or allow them to own land and participate in resource planning and management. Issues of gender equity should be addressed in all policies and laws.

Women are vital to the sustainability of mountain communities and play a prominent role in agricultural production, resource management and the household. Yet little information exists about the status of women and gender relations in mountain regions. Mountain women's lack of control over productive resources means they cannot raise collateral for bank loans, and hampers efforts to improve or expand their farm activities and earn cash incomes.

***Women are vital to the sustainability of mountain communities and play a prominent role in agricultural production, resource management and the household. Yet little information exists about the status of women and gender relations in mountain regions. Mountain women's lack of control over productive resources means they cannot raise collateral for bank loans, and hampers efforts to improve or expand their farm activities and earn cash incomes.***

Forests are an integral part of daily life of mountain people. They provide food, wood, fodder, fuel, medicine and many more goods and services to the rural people of these areas. The policies and decisions concerning the management of mountain forests are made from afar, leaving those who live in mountain communities with the least amount of power and influence. This is one of the reasons that large numbers of mountain people live in poverty. According to the World Bank, one quarter of the world's poor depend directly or indirectly on forests for their livelihood.

Health remains a neglected issue in mountain development. Malnutrition and food insecurity in our mountain regions contribute to increased disease and disability. While hospitals are accessible in some areas, mountain women generally have less access to medical care, family planning or female doctors. Most mountain communities lack access to adequate water supplies and proper sanitation facilities, raising the risk of sanitation related illness. Women, as the primary water carriers and users, are in constant contact with polluted water, increasing their vulnerability.

Involving the mountain people in governance, ensuring their participation in policymaking and putting power back into their hands are important steps towards alleviating their poverty and, in turn, protecting mountain forests. Recognising local land rights and decentralising decision-making processes will not only empower mountain people but help support long-term conservation of mountain areas.

People and mountain-friendly policies and laws are vital to protect mountain ecosystems and support mountain people. Little effort has been done in developing specific policies to address the needs of these unique regions and peoples. Our government applies policies and laws created for lowland areas that do not take into account the fragility of mountain environments nor the singular needs, interests and priorities of their people.

In most of our mountain areas the local people do not have land ownership or user rights. The mountain resources fall under the authority of Provincial Government. Policies and laws that recognise local property rights are essential for sustainable

mountain development. Mountain communities need decision-making control over the use of local resources, as well as incentives to manage them.

At the same time, government should reconsider who profits from mountain resources. For example forest, grazing leases, licenses fees for mountaineering expeditions, access to national parks and licenses for tourist operations are all potential sources of income for mountain communities.

The mountain people stay poor because they have insufficient rights to manage their resources, including forests. Evidence increasingly shows that transferring or returning ownership of forest assets to poor people, and securing long-term access and control rights, are politically feasible and cost-effective strategies for poverty reduction.

Good laws and policies would enable the action to be taken, but political and administrative will to take requisite actions is a must. The will would be created by an attitudinal change--perhaps even a change of mindset in the officials who are the actual implementers of policies and laws.

## International commitments to mountain development

*Qasim Shah*

Mountains are decisive for life. According to one estimate, mountains cover one-quarter of the world surface and are home to one in ten people. Mountains are the source of world's great rivers providing fresh water to drink, grow food and generate electricity. Mountains are sanctuaries for an innumerable variety of plants and animals and are precious niche of biological diversity for food and medicine.

A number of goals were set for sustainable mountain development at the Rio Summit in 1992, many of which remain unachieved even today. During the current year, several events were arranged to celebrate the International Year of Mountains and to discuss ways for a sustainable development of fragile ecosystems. The Bishkek Global Mountain Summit, 29th October-1st November in the capital of Kyrgyzstan was one such event. Around 600-700 participants including heads of state from the Central Asia region, as well as ministers and senior government officials from around the world participated in it. Other esteemed attendees included Prince Karim Aga Khan, executive heads and senior directors from a number of UN organisations, and representatives of non-governmental organisations and indigenous mountain communities.

**A number of goals were set for sustainable mountain development at the Rio Summit in 1992, many of which remain unachieved even today. Whether events celebrated this year have made any indent in the international scenario remains to be answered**

The objective of the summit was to strengthen International Partnership for Sustainable Development of Mountain Regions recently established at WSSD in Johannesburg. It provided an opportunity to bring together mountain stakeholders from around the world and to create alliances for development of these resource-rich but poverty-stricken areas. It drew together the ideas and recommendations generated by previous events, from all levels and sectors of society into proposals to concrete actions, to ensure sustainable development and management of mountain regions in the 21st Century.

The basic principles, recommendations and commitments set forth to be the ultimate outcome of the conference was built upon the declarations of previously held meetings, conferences and workshops around the globe. The foremost basic principles as mentioned in the preliminary documents of the workshop called for co-operation, decentralisation, equity, holistic approach and continuity for a sustained development programme in mountains. It requested to all the actors in development especially States, United Nations Organisations, NGOs and private sector to support local, national and

international programmes and projects resulting from these consultations held in year 2002 through voluntary financial contributions.

Para 40 of the unedited text of declaration adopted by the world community in the recent World Summit on Sustainable Development at Johannesburg containing implementation plan for mountain development is in the preamble of the Bishkek Declaration. It states: "Mountain ecosystems support particular livelihoods, and include significant watershed resources, biological diversity and unique flora and fauna. Many are particularly fragile and vulnerable to the adverse effects of climate change and need specific protection." It also specifies some actions required to be promoted at all levels for mountain development, including:

- (a) Development and promotion of programmes, policies and approaches that integrate environmental, economic and social components of sustainable mountain development and strengthen international co-operation for its positive impacts on poverty eradication programmes, especially in developing countries;
- (b) Implementation programmes to address, where appropriate, deforestation, erosion, land degradation, loss of bio-diversity, disruption of water flows and retreat of glaciers;
- (c) Development and implementation, where appropriate, of gender-sensitive policies and programmes, including public and private investments that help eliminate inequities facing mountain communities;
- (d) Implementation of programmes to promote diversification and traditional mountain economies, sustainable livelihoods and small-scale production systems, including specific training programmes and better access to national and international markets, communications and transport planning, taking into account the particular sensitivity of mountains;
- (e) Promotion of full participation and involvement of mountain communities in decisions that affect them and integration of indigenous knowledge, heritage and values in all development initiatives;
- (f) Mobilisation of national and international support for applied research and capacity-building, provision of financial and technical assistance for the effective implementation of sustainable development of mountain ecosystems in developing countries and countries with economies in transition, and addressing the poverty among people living in mountains through concrete plans, projects and programmes, with sufficient support from all stakeholders, taking into account the spirit of the International Year of the Mountain 2002.

**Governments are always vocal in such international summits, however all these voices become silent once the meetings finish. A lot has been worded since Rio but not much has changed in the mountains. The challenges are still there, while the situation has worsened. The best way to empower mountain communities is development of strong and accountable local institutions to ensure that local needs and priorities are not ignored in the transition to sustainable development.**

The BGMS preliminary declaration took several recommendations from Tokyo Declaration on the IYM in Japan, 2002, Proceedings of the World Mountain Symposium, Switzerland, 2001, Declaration of International Seminar on Mountain Ecosystems, Peru, 2001, Declaration of the Second World Meeting of Mountain Populations, Ecuador, 2002, Nepal declaration on Mountains, 2002, Declaration of International Conference on Sustainable Agriculture and Rural Development in Mountain Regions, Switzerland, 2002, Declaration of Celebrating Mountain Women, Bhutan, 2002 and Recommendations of High Summits held in Africa, Latin America, Europe and Asia in 2002.

Whether these events have made any indent in the international scenario remains to be answered. Governments are always vocal in such international summits, however all these voices become silent once the meetings finish. A lot has been worded since Rio but not much has changed in the mountains. The challenges are still there, while the situation has worsened. The best way to empower mountain communities is development of strong and accountable local institutions to ensure that local needs and priorities are not ignored in the transition to sustainable development.