

## ROLE OF VILLAGE ORGANIZATION IN THE SUSTAINABLE MANAGEMENT OF NATURAL RESOURCES AND THEIR CONSTRAINTS IN VILLAGES (LILOWNAI, CHORBUT AND NOREPEZW) OF DISTRICT SHANGLA, KPK PAKISTAN

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### ABSTRACT

The paper is presented to study the village organisations in the three villages of Lilownai, Chorbut and Norepeza. These village organization (VO) are involved in hill side management, being their major Natural resource. Apart from hill side management, these VO are also working on village development as a whole. These VO will be under taken various developmental activities in their villages, through donor financial support on cost share basis as well as on self-help basis. These VO are implementing the "Nagha" system for the protection of their hill side, till now, even after the withdrawal of SRSP assistance since July/2006 and have employed Chowkidars on self-help basis. All the villages are diverse in land use and type having different categories of stakeholders for Natural resource. The study conducted to explore the role of these village organizations in conservation of natural resources in the study area. The main objectives of this study were to: Compare the role of Village Development Communities Lilownai (VDCs) in sustainable management of natural resources with the past tradition systems. The constraints explored of VDCs Lilownai in Natural Resource Management.

**Keywords:** village organization, sustainable management, natural resources, District Shangla, KPK Pakistan.

### INTRODUCTION

Forests are precious natural resources granted to humanity as a reward from God Almighty. This natural resources would be meaningless if we are unable to properly maintain and use it (Kurniawan, 2020). In Pakistan, the traditional hierarchical management of forest resources has performed well within its limits, but the population has increased rapidly after the independence, and the demand for products and services such as timber, fuelwood, and grazing has also increased (Khan & Khan, 2021).

It is believed that any protection measures without the participation of the people are futile. Learning from the experience and lessons of neighboring countries such as Nepal and India, KP Province introduced the concept of joint forest management (Mazhar & Ahmad et al., 2013). Pakistan's forest management policies generally follow traditional methods and do not consider the role of local community participation. In Khyber Pakhtunkhwa, Pakistan, Joint Forest Management (JFM) was launched in 1996, and local communities are actively involved in sustainable forest management and community livelihoods (Sheikh et al., 2019).

Community involvement is one of the few practical approaches to tackle the problem of the degradation of natural resources in the area occurs as a result of competing demands of local people (Medrilzam et al., 2014). Establishing a degree of mutual co-operation in the local communities may make it possible to organize concerted action to protect these resources (Nagendra & Ostrom., 2012). A Hungry man will least bother about preserving his natural resources rather his first priority will be to satisfy his immediate needs through every possible means. These statements are true in a community where awareness level is zero and a common man is hopeless of getting any benefit from such resources (Carandang et al., 2006).

Institutions and organizations play important role in sustainable management of renewable natural resources (Upriy., 2008). Although in the past renewable natural resources like natural forests, wildlife, communal lands, range lands, have been treated under strict rules and regulations for their conservation but due to the change from autocratic to democratic style of government, population explosion coupled with expanding industrialization and diversification of local needs, the traditional ways of managing natural resources are becoming obsolete and ineffective (Ojanen & Zhou et al., 2017). Similarly, the globalization of the social interaction resulting change in Socio-Political structure and disappearance of traditional rules and regulations for the management of the land and its natural resources, have made traditional leaders and elders helpless to enforce regulations of land management (Chobotova & Kluvankova-Oravska, 2011). This has resulted in uncontrolled use of the renewable natural resources (Oduro-Ofori et al., 2015).

## MATERIAL AND METHODS

### Study Area

Shangla District is a hilly area account for Besham, Shahpur, Aloch, Chakesar, Damorai and Olander sub tehsils, with 34, 31 to 33°, 08° N latitude and 72, 33 to 73°, 01° E longitude, at an elevation of 2000 to 3200 m above sea level with a total area of 1586 square kilometers, located in the north of Peshawar the capital of Khyber Pakhtunkhwa province Pakistan.



Figure 1. The total area of the district is 1,586 square kilometres having population of 757,810 with population density of 480 persons per square kilometre. 44,405 hectares area is covered by forest.

### *Description of the Sample Villages*

In all the three villages of Lilownai, Chorbut and Norepeza village organization (VO) are involved in hill side management, being their major Natural resource. Apart from hill side management, these VO are also working on village development as a whole. These VO will be under taken various developmental activities in their villages, through donor financial support on cost share basis as well as on self-help basis. These VO are implementing the "Nagha" system for the protection of their hill side, till now, even after the withdrawal of SRSP assistance since July/2006 and have employed Chowkidars on self-help basis. All the villages are diverse in land use and type having different categories of stakeholders for Natural resource.

#### **Lilownai**

VO constituted	=	2006(year)
VO members	=	33
<b>Total area of the village</b>		
Conifer forests	=	1359 acres
Broad leaved forests	=	780 acres
Agriculture	=	135 acres
Gross land	=	332 acres
Total	=	2606 acres
Total households	=	193
Main stake holders	=	Shamat Khel, Udan Khel, Boe khel

#### **Norepeza**

VO constituted	=	2007 (year)
VO members	=	27
<b>Total area of the village</b>		
Conifer forests	=	1573 acres
Broad leaved forests	=	735 acres
Agriculture	=	127 acres
Gross land	=	300 acres
Total	=	2731 acres
Total households	=	165
Main stake holders	=	Shamat Khel, Bot Khel, Cheles Khel

#### **Chorbut**

VO constituted	=	2007 (year)
VO members	=	32
<b>Total area of the village</b>		
Conifer forests	=	1443 acres
Broad leaved forests	=	700 acres
Agriculture	=	133 acres
Gross land	=	457 acres
Total	=	2703 acres
Total households	=	139
Main stake holders	=	Bot Khel, Daman Khel

#### **Tools Used for Exploration**

- Village Organization meetings in the villages.
- Village Organization office record.
- Identification of the key user groups of Natural resources in the village.
- Transect walk in the village to cover as much as bio physical diversity as possible.
- Questionnaire. A questionnaire will be developed on the basis of the objective of research, which was pretested and modified as per requirements. Around 30 diversified respondents were interviewed in all the three villages. Respondents will be selected randomly from amongst the VO members, Gujars, elders, non-owner users.

- Interview: In order to explore past management history and hidden realities, open ended and semi-guided interview will be conducted from few selected elders in the villages.
- The data obtained will be mostly in qualitative form, being social values and hence not liable to any statistical tests and calculations. Information will be explored and arranged in an unbiased order. The results thus obtained will be used for extrapolation. (Khan et al. 1999).

### Analysis of Data

#### Type of Family

1		2	
Joint		Nuclear	
No.	%	No.	%
27	45%	33	55%

#### Family Members

1		2		3	
Less than 5 members		Above 5 members		Above 10 members	
No.	%	No.	%	No.	%
7	11.66%	22	36.66%	31	51.66%

#### Tenural Status

1		2		3		4	
Owner		Owner <u>Cutemant</u>		Tenant		Land less <u>Labour</u>	
No.	%	No.	%	No.	%	No.	%
25	41.66%	13	21.66%	0	0%	22	36.66%

#### Land Holding

1		2		3		4	
Land less		Less than 10 Acres		More than 10 Acres		More Then 20 Acres	
No.	%	No.	%	No.	%	No.	%
31	41.66%	8	23.33%	8	13.33%	13	21.66%

#### Education

1		2		3		4		5	
Less than Matric		Matric		FA/F.Sc		BA/BSc		MA/MSc	
No.	%	No.	%	No.	%	No.	%	No.	%
14	23.33%	16	26.66%	12	20%	8	13.33%	10	16.66%

#### Member Ship of VDCs

1		2	
Yes (Member)		No (Not Member)	
No.	%	No.	%
33	55%	27	45%

#### Meeting of VDC'S

1		2		3		4		5	
Democratic		Consensus		Authority decision		By NGO's		With no option	
No.	%	No.	%	No.	%	No.	%	No.	%
12	20%	7	11.67%	41	68.33%	0	0%	0	0%

#### Identification of Problems and Decision Making

1		2		3		4		5	
Government Job		Livestock		Farming		Shopkeeper		<u>Labour</u>	
No.	%	No.	%	No.	%	No.	%	No.	%
18	30%	14	23.33%	13	12.67%	6	10%	9	15%

**First Major Source of Income**

1		2		3		4		5		6	
No Meeting		Monthly		In 2 Months		In 3 Months		In 6 months		Yearly	
No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
20	33.33%	22	36.67%	0	0%	0	0%	6	10%	12	20%

**Second Source of Income**

1		2		3		4	
Less than 10 thousand		Above 10 thousand		Above 20 thousand		Above 30 thousand	
No.	%	No.	%	No.	%	No.	%
0	0%	28	46.66%	19	31.67%	13	21.67%

**Monthly Income from first Source**

1		2		3		4		5		6	
No Meeting		Monthly		In 2 Months		In 3 Months		In 6 months		Yearly	
No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
20	33.33%	22	36.67%	0	0%	0	0%	6	10%	12	20%

**Monthly income from second source**

1		2		3		4	
Less than 10 thousand		Above 10 thousand		Above 20 thousand		No income from 2nd	
No.	%	No.	%	No.	%	No.	%
17	28.33%	23	38.33%	10	16.67%	11	18.33%

**Communal Assets**

1				2			
Agriculture and forest				Others %			
No.		%		No.		%	
60		100%		0		0%	

**Nature of Communal Assets**

1		2		3		4		5		6	
Farming		Firewood sale		Agriculture		Livestock		Shopkeeper		Nothing	
No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
13	21.67%	13	21.67%	9	15%	7	11.67%	7	11.67%	11	18.33%

**Mechanism of benefits distribution of communal Assets:**

1		2		3	
Jirga		Share		Any other	
No.	%	No.	%	No.	%
8	13.33%	43	71.64%	9	15%

**Training Received**

1				2			
Received				Not Received			
No.		%		No.		%	
49		81.67%		11		18.33%	

**Name of Sector of training**

1		2		3		4		5		6	
Forestry Sector		Livestock		Community organization		Health Sector		Any Other		Not received in any sector	
No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
12	20%	12	20%	22	36.67%	0	0%	3	5%	11	18.33%

#### Training Used

1		2	
Used		Not Used	
No.	%	No.	%
32	53.33%	28	46.67%

#### Training Beneficial

1		2	
Beneficial		Not Beneficial	
No.	%	No.	%
29	48.33%	31	61.67%

#### Training Given By VDC'S

1		2	
Given		Not Given	
No.	%	No.	%
33	55%	27	45%

#### Action on advice

1		2	
Interaction		No Interaction	
No.	%	No.	%
26	43.33%	34	56.67%

#### Present status of Forest

1		2		3	
Good		Bad		Same (%)	
No.	%	No.	%	No.	%
22	36.67%	21	35%	17	28.33%

#### With VDC's and forest Department

1		2	
Forest Department		VDC's	
No.	%	No.	%
33	55%	27	45%

#### Real Stake Holders

1		2		3	
Mian		Gujars		Shalmani	
No.	%	No.	%	No.	%
52	86.67%	8	13.33%	0	0%

#### Best system for conservation of Natural Resources

1		2	
Traditional System		VDC's System	
No.	%	No.	%
30	50%	30	50%

#### Conflict between communities on benefit sharing

1		2	
Occurred		Not Occurred	
No.	%	No.	%
34	56.67%	26	43.33%

#### Conflict between communities on benefit sharing

1		2	
Conflict		No Conflict	
No.	%	No.	%
33	55%	27	45%

Conflict between VDC's and Forest department

1		2	
Conflict		No Conflict	
No.	%	No.	%
32	53.33	28	46.67%

Awareness by VDC's about Natural Resources

1		2	
Awarad		Not Awarad	
No	%	No	%
33	55%	27	45%

## RESULT AND DISCUSSION

The data given in the table for natural resource accounts for agriculture field forest area, stream area, waste land pasture area, mineral area and settlement area is estimated as 53.1 percent, 49.9 percent, 1.1 percent, 0.1 percent, 9.9 percent, 0.1 percent and 5.8 percent, respectively above mentioned data draws conclusion that forest cover is comparatively more as compared to agriculture field but the local are dependent on both the resources. Data collected shows that joint family consists of 45 percent where as nuclear family is 55 percent. So we can say that most of the people prefer to leave independently. Number of family member less than five calculated 11.66 percent above than five member calculate 36.66 percent, where as No. of family member above than ten calculates as 51.66 percent. The above mentioned data estimates that population ratio of family members is high. Tenural status provides data of owner having land, owner cutement, tenant and land less labour estimates as 41.66 percent, 21.66 percent, 0 percent, and 36.66 percent, respectively this draws conclusion that people living in Village Lilownai District Shangla are mostly owner of the land where land less labours are inhabited by the lands of the owner of area. Landless people are 41.66 percent, owner having less than 10 acres of land is 23.33 percent, where as owner having greater than 10 acres of land is 13.33 percent, and owner constituting more than 20 acres of land is 31.66 percent, it means that owners are greater in number. Literacy rate gives the productive capacity and development of the area. People having education less than Matric, Intermediate, Graduate, Post Graduate is 23.33 percent, 36.66 percent, 20 percent, 13.33 percent, 16.66 percent, respectively. This estimation gives conclusion that most of the people are literate. As literacy rate is comparatively good enough that is why most of villagers are members of Village Development Committes (VDC).

Village Development Committee members is 55 percent, and non-VDC members is 45 percent,. This provides evidence that NGO's are not involved in Community Development and Natural Resource Conservation. People attending the meetings of Village Development Committee monthly is more as compared to people attending meeting of VDC's yearly according to data identification. According to data the identification of problem & its decision making are 20 percent democratic, 11.67 percent concensur, 68.33 percent with by authority decision, 0 percent by NGO's and 0 percent with no option so it means that more of the problems identification & its decision is are not involve in this area. The major source of income is 30 percent people from government jobs, 23.33 percent from livestock, 21.67 percent are dependent on farming, 10 percent are shopkeepers and 15 percent work as labours. It means that mostly people are depent on livestock and on agriculture crops.

Government servant work second time so the 21.67 percent are farmers, 21.67 percent are fire woud saler, 11.67 percent are shopkeepers and 18.38 percent don't work second time the government employers work second time pays dual tribute for development of area. According to data the monthly income from first source less than ten thousand is 0 percent, more than ten thousand are 46.66 percent, more than 20 thousand are 31.67 percent and more than 30 thousand are 21.67 percent. So the people earning above ten thousand are more as compare to other. Whereas the monthly secondary income is 28.33 percent people earning less than 10 thousand, 38.33 percent people earning above ten thousand, 16.67 percent people earning 20 thousand and 18.33 percent, people do not work second time so they earn no money. The people earning above ten thousand per month from second time job is more as compared other. Communal assets are the agriculture and Forest and these are counts 100 percent. These two only are communal assets. According to data the mechanism of the benefits distribution which come from communal assets 13.33 percent by Jarga, 71.64 percent by share, 15% by other methods it means that mostly the benefices are divided by share and upto some extent by jarga and somehow by other methods. Training received by people 81.67

percent and 18.33 percent people haven't received training through received training through VDC's. Thus mostly people are trained through VDC's. Data assure that 20 percent people are trained forestry sector, 20 percent people are trained in livestock, 36.67 percent in community organization, 0 percent health sector, 5 percent in other and 18.33 percent not trained. This proved that mostly people are trained in community organization sector. Community keep different perception about these training 53.33 percent opine that these training are useful while 46.67 percent, says that these training are useless. So majority of the people it considered it to be useful for Conservation of Natural Resource.

Perception of community varies from person to person so 30 percent people says that action is taken on their proposal, while 70 percent people says that yet no action has been take on their people thus majority proposal are not satisfied. According to data 43.33 percent people have interact with VDC's and Forest Department while 56.67 percent people have not interaction and co-operation with VDC and Forest Department. This ensures that mostly people are aware from importance of VDC'S and forest department. From data the present status of forest cover as compared to past is 36.67 percent people says good, 35 percent says bad & 28.33 percent says both present and past status is same. It means that forest cover have good status . so VDC's improved the status of Forest cover. Data indicates that real stake holders of village are Mian family because 86.67 percent are Mian family, 13.33 percent are Gujar & 0 percent are Shalmani Family. So percentage of wise Mian are domianant in village. According to data 56.67 percent people says that changes have taken place in conversation of Natural Resources while 43.33 percent people says that there are no changes take place in conversation of Natural Resources. So the VDC's proved success in their objectives. From data 55 percent people opinion is this that Forest Department is the best managers of forest while 45 percent opinion is about VDC's. it mean that Forest department is best according to the opinion of more peoples. The 50 percent people says that tradition system is best for the conservation of nation resources while 50 percent say that VDC's are best. So it means that both have same values on their part. But traditional system mostly preferred by illetrate people of community. According to data 55 percent people says that there lies conflict between community on sharing benefits while 45 percent people says that there lies no conflict on these benefits sharing. The majority suggest of conflict on sharing of benefits. From data 53.33 percent people says that there lies conflict between VDC's and Forest Department on natural Resource Conservation prominently on Forest while 46.67 percent says that there lies no conflict between VDC's and Forest Department but according to managerial point of view it is necessary that there will be Coordination with each other.

## CONCLUSION

Awareness remained a key source for updating Natural Resource Conservation. 55 percent of people are of view that they have achieved information on development of community and new technologies followed by VDC's for conservation of natural resource while 45 percent people are not support of VDC's . Thus on majority basis people have become aware about Conservation of Natural Resources.

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