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Indigenous land tenure system in the Hindu-Raj Mountains, Pakistan: development, transformation and implications

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Abstract

In mountainous areas, land tenure systems are mostly introduced by local inhabitants in accordance with the prevailing physical and anthropogenic conditions of the area. The locally introduced land tenure system has played a vital role in the integration of the society and natural resource management in the mountainous areas of Pakistan. However, due to the complex nature of the system and remoteness of the area, there is a lack of organized research on the subject. An attempt has been made to explore and analyze the mechanism, effectiveness and transformation of traditional tenure system. The study is entirely based on qualitative information collected through; Key Informants Interviews; and Focused Group Discussions (FGDs). The study reveals that the natural resources are kept and managed under the traditional tenure system called *wesh*, which was temporal in the initial times and transformed to the permanent tenure late on. Both the systems have their own strengths and weaknesses regarding their effectiveness in the sustainable management of natural resources.

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Introduction

In mountainous regions, the available natural resources such as agricultural land, water and natural vegetation provide a base for organizing local economy and food security. Due to mountain specificities (Jodha, 1992), these resources are characterized by vertical distribution, spatial segregation and seasonal productivity and have relatively low per unit and per capita production (Ehlers, 1995, 2008). Mountain communities partially depend on these resources for their subsistence survival and have devised complex management and utilization mechanisms for longterm sustainability.

These practices are collectively known as creative adjustment and have been widely documented in almost all the mountainous regions of the world (Fürer-Haimendorf, 1971, Rhoades and Thompson, 1975, Guillet, 1983, MacDonald, 1998, Ehlers and Kreutzmann, 2000, Messerli and Ives, 1997). The discrepancy between demands of users regeneration capacity of natural resources is increasing as the population grows, and in many cases the locally developed institutions (Prakash, 1998) for maintaining equity are under considerable stress.

Among the locally developed mechanisms, indigenous tenure systems play a pivotal role in natural resource management. Tenure system is the approach through which the land and other property is allotted, owned and/or held [by an individual or group] (Pyne, 2004. 169). The implication of tenure system to regulate and manage natural resources is widely studied in general (Robinson et al., 2013; Walter, 2012; Carr, 2006; Ostrom, 1990; Bromely, 1991; Kakembo, 2001; Sjostedt, 2011; Netting, 1976), and with reference to Pakistan (Nafees et al., 2009; Zarin and Schmidt, 1984; Fazlur-Rahman, 2007; Staley, 1969). In mountainous areas, the indigenously developed tenure systems vary from village to village depending on the number of users, population characteristics

and availability and production capacity of natural resources.

These local institutional mechanisms are dynamic and keep changing with time and in response to population pressure and other changes in the socioeconomic setup (Fazlur-Rahman, 2007, 2009). These institutional transformations are not always sound ecologically and may lead to the degradation of natural resource base.

The northern mountainous region of Pakistan has a complex physical and anthropogenic setup. This region is quite rich in forest resources and provides water for irrigation and hydro-centricity generation to the lowland. However, the productivity of the former considerably varies with space and altitude. Contrary to the plain areas, cadastral survey has not been carried out in most parts of this mountainous region and here natural resources are usually held, utilized and managed under de facto ownership. For this purpose, the local communities have developed indigenous tenure systems which vary widely from valley to valley and tribe to tribe. According to the colonial sources (Government of the Punjab, 1898; Caroe, 1958; Barth, 1956; Spain, 1973) in most parts of Khyber Pakhtunkhwa province - the then North West Frontier Province (NWFP) - resources were owned and managed under the traditional tenure system known as wesh. (Note: All the local terminologies in this paper are given in italic font. These terminologies are elaborated in Text Box 1). The present study conducted in Roghani Valley northern Pakistan, aims on exploring the mechanism of indigenous tenure system, its transformation and effectiveness in natural resource management on a micro level.

Description of the study area

This study was conducted in Roghani Valley located between 34°54'33" to 35°00'28" N latitude and $71^{\circ}55^{'}35^{''}$ to $71^{\circ}00^{'}13^{''}$ E longitude. The valley is located on the boundary of Lower and Upper Dir districts in the northern part of Khyber Pakhtunkhwa Province. Elevation of the valley ranges from 500 m above mean sea level in to over 3,000 m. The whole valley is divided into altitudinal belts locally known as tal and eleven villages (Fig. Each segment/altitudinal belt comprises of one or more villages. The lower part of the valley consisting of five villages, (Shalfalam, Mano, Khararai, Shalkani Bala and Payeen) are part of the Lower Dir district while the remaining six villages including Umarkot, Shahkani, Naseerabad, Gato, Samai and Jailar are under the jurisdiction of the Upper Dir district. A natural watershed divides the valley into two distinct and diversified parts i.e. the upper and the lower part. The natural resources of the study area are distributed quite unevenly attributed to the sharp altitudinal variations (Haq et al., 2011; Haq, 2012; Haq et al., 2012).

The Roghani Valley is predominantly inhabited by the people of Roghani Tribe. The Tribe consists of four major clans each further divided into three sub-clans i.e. a total of 12 groups (Fig. 2). The members of the two clans (Mahmood Khel and Yaqoob Zai) are

dispersed throughout the whole valley, while the other two clans are concentrated in certain villages. The decedents of these 12 groups are the de facto owners having equal shares in all kinds of natural resources (land, forests, water and rangelands) located in the valley. Nevertheless, there are some non-bona fide residents as well, including the villages' blacksmiths (ingar), those who lead prayers and funerals (pesh imam) and villages' barbers (nayi). Such people only have usufruct rights restricted to agricultural land and irrigation water, allotted to them in return for their services (Sultan-i-Rome 2005, 2007).

Materials and methods

As in other parts of the mountainous regions of Pakistan, cadastral survey and settlement records cannot be found in the study area. In the absence of cadastral survey l and land records the local inhabitants had developed different indigenous mechanisms for the management and appropriation of natural resources including wesh system.

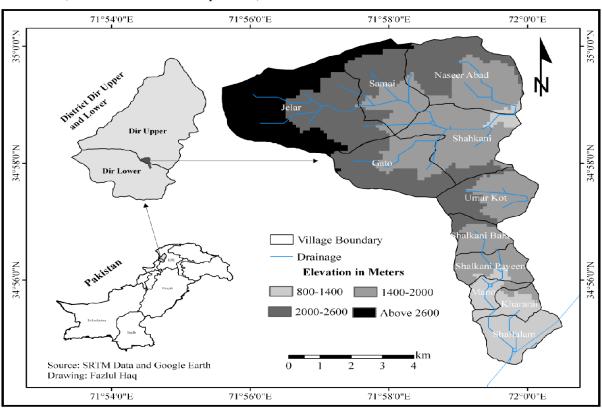


Fig. 1. Location and physiography of the study area.

The rules and regulation of this tenure system (wesh) were locally formulated and orally passed from one generation to another without any proper documentation. To explore and document the system and analyze its effectiveness, the researcher was exclusively dependent on the elders of the study area and hence this study is based on qualitative information collected through Key Informants Interviews and Focused Group Discussions (FGDs).

Key Informants Interviews

Wesh system is very old and the procedure adopted resource appropriation has been complicated and only a few elders in the study area know the whole process. Eleven such elders were searched out and consulted, one in each village of the valley and interviews were scheduled with them. Initially, all the elders were asked similar questions for the basic information about the evolution, mechanism, effectiveness and transformation of the wesh system in local language (Pashto). The interviews were recorded in a voice recorder and compared with each other. Then four elders - one from each clan - were consulted frequently for an indepth analysis of the system. The recorded information was discussed with them again and again until the ambiguities were made clear.

Focused Group Discussions (FGDs)

Focused Group Discussions were arranged in each tal To cross check and substantiate the collected

information through interviews. The FGDs were kept open for all the inhabitants of the valley in order to collect authentic information through maximum participation. However, to avoid any biasness, the representation of major clans and villages in each tal was made mandatory. The discussions conducted in these open forums were mainly focused on the temporal changes in land tenure system and the opinion of people regarding the appropriation of available resources. Both the unstructured interviews and focused group discussions were translated into English which provided the base for the current discussions.

The allocation of shares among the clans - according to the wesh system - is presented in the form of tables.

Results and discussion

History of Wesh

The northern parts of Pakistan are predominantly inhabited by egalitarian communities where equality is one of the important elements of the societal setup. To retain the system on strong footings the local inhabitants adopted an indigenous tenure mechanism (wesh) for equitable distribution of natural resources. Initially this system was introduced in the territory inhabited by Yusufzai Tribe to ensure egalitarian society through equity in entitlement to natural resources as also found out by Spain, (1973) and Nichols, (2001).

Table 1. Units of Roghani Daftar.

Motai	The whole daftar is divided into 100 units called motai. It is the largest unit of Roghani daftar.
Paisa	It is 1/30 th part of a <i>motai</i> i.e. 3000 th part of the whole <i>daftar</i> .
Pawo	It is 1/4 th of <i>motai</i> and consists of 7.5 <i>paisa</i> .
Tiraw	It is $1/3^{rd}$ of <i>motai</i> and consists of 10 <i>paisa</i> .
Kasira	It is 1/4 th of <i>paisa</i> , 1/120 th of <i>motai</i> or the 12,000 th part of the whole Roghani <i>daftar</i> .

The term wesh literally means distribution, allotment, or division. It is a complex term and in the present case it implies the procedure adopted for the periodic change in the usufructuary right of natural resources amongst the co-owners. The entitlement to resource units can be either on temporary/circulatory basis (garzinda wesh) or defined permanently (qati wesh). Initially entitlement to resources was defined on

temporary basis among the co-owners and after the stipulated time is over, the allotments were redefined and the inhabitants occupying relatively infertile areas in the previous tenure were shifted to fertile areas in the following phase. In this way the coowners were getting equal opportunities to periodically utilize all types of land and resources. The conferring of use rights and appropriation mechanisms had been vividly explained in colonial documents and according to the Government of the Punjab, (1897: 148):

The land to be divided is first marked off into compact blocks called vand, each of which is subdivided into the required number of allotments. After the measurement and primary division of vand, its distribution is regulated by lot, or, as it is termed, casting the pucha or hissah.

Table 2. Value of Each Tal in Motai.

Tal Name	Included Villages	Shares of Individual Villages	Total
Jailar <i>Tal</i>	Jailar	24	24
Samai <i>Tal</i>	Samai	08	
	Naseer Abad	16	24
Shahkani <i>Tal</i>	Shahkani	16	
	Gato	08	24
	Shalkani Bala	06	
Shalkani <i>Tal</i>	Shalkani Payeen	06	
	Mano, Khararai	06	24
	Shalfalam	06	

Source: Field Survey, 2011.

The representative of each of the khels to share in the distribution selects a private mark (a piece of wood, or a rag, a grain of maize or pellet of sheep's dung or a stone, or any substance near at hand) which, in the presence of all, he hands over to the 'greybeard' appointed to cast the lot, declaring it to be his token. The 'greybeard' having collected all the tokens walks round the vand, followed by the assembly, and throws the first token that comes into his hand on the plot. The several plots then become the possession of the khels severally represented by the token thrown out on them. Each plot is then successively divided and allotted in a similar manner to the divisions of the khels and their several respective families.

Table 3. Village-wise Shares of the Major Clans.

<i>Tal</i> Name	Villages	Values (motai)	Share of each Clan (motai)				
			A	В	С	D	
Jailar <i>tal</i>	Jailar	24	6	6	6	6	
Shahkani <i>tal</i>	Shahkani	16	4	4	4	4	
	Gato	8	2	2	2	2	
Samai <i>tal</i>	Samai	8	2	2	2	2	
	Naseer Abad	16	4	4	4	4	
	Shalkani Bala	6	1.5	1.5	1.5	1.5	
Shalkani <i>tal</i>	Shalkani Payeen	6	1.5	1.5	1.5	1.5	
	Mano, Khararai	6	1.5	1.5	1.5	1.5	
	Shalfalam	6	1.5	1.5	1.5	1.5	
Total		96	24	24	24	24	

Source: Field Survey, 2011

A=Mahmood Khel; B=Kwade Zai; C=Enazai; D=Yaqoob Zai.

Each vand is known by separate name, just like a farmer's fields at home, mostly expressive of some quality of the soil, or position, (as irai vand, shigai vand, 'the ash field,' 'the sand field) the division of the land gives each section or tribe or clan a fixed possession in the soil. It will also be observed that each individual's share is not in one unbroken plot but scattered according to lot in the different vands. This is necessary so that each shall share alike, as far as possible, in the good and bad land. Very often, and beyond the British border always in one tribe where the several khels possess lands of varying quality the lot some having fallen on good and of others on inferior land, it is customary to exchange places at fixed periods of five, ten or more years. In these exchanges between the tribes only the houses are left standing, and often these are deprived of their timber.

Table 4. Village-wise Shares of Clans after the Shares Exchange.

Tal Name	Villages	Values (motai)	i) Share of each clan (motai)			
			A	В	С	D
Jailar <i>tal</i>	Jailar	24	6	6	0	12
Shahkani <i>tal</i>	Shahkani	16	4	4	8	0
	Gato	8	2	2	4	0
Samai <i>tal</i>	Samai	8	2	2	0	4
	Naseer Abad	16	4	4	0	8
	Shalkani Bala	6	1.5	1.5	3	О
Shalkani <i>tal</i>	Shalkani Payeen	6	1.5	1.5	3	О
	Mano, Khararai	6	1.5	1.5	3	О
	Shalfalam	6	1.5	1.5	3	0
Total		96	24	24	24	24

Source: Field Survey, 2011

A=Mahmood Khel; B=Kwade Zai; C=Enazai; D=Yaqoob Zai.

This system was initiated in this region by the famous tribal elder Sheikh Mali sometime in 16th century and with the passage of time due to changes in political organization, demographic development and socioeconomic transformation the old practices were replaced by permanent tenure system. However, the former system is still practiced in many remote valleys of the province.

Mechanism of Wesh in Roghani Valley

Roghani people were given this valley by another tribe as reward for supporting them in a battle. When the people of Roghani tribe came and settled in the area, they had to handle the problem of resource appropriation. Due to the vertical extension of the valley, altitudinal variations and uneven distribution of natural resources on the one hand and the clanwise complexity of the tribe on the other hand, the inhabitants had to have an effective mechanism for the allocation and distribution of resources. The already scarce resources were to be handled in such a way that all the individuals can get equal benefits from the available resources as well as their future sustainability may not be threatened. For this purpose the inhabitants adopted the indigenous tenure system or wesh.

Circulatory/Temporal Tenure System (Garzinda or Netadar Wesh)

Initially, the people of Roghani valley adopted the traditional circulatory tenure system (garzinda wesh), which was in common practice in most parts of Khyber Pakhtunkhwa Province (Ahmed, 1976; Barth, 1956; Spain, 1973). The process/mechanism of this system was nearly like the one already practiced since history in the other surrounding regions of Dir,

Kohistan and Swat etc. (Zarin and Schmidt, 1984).

Under this system the whole Roghani valley including all resources - was considered as a collective common property of the tribe. No one had permanent entitlement to any resource or any area. For the procedure of wesh, the whole valley including eleven small villages was divided into four major vertical belts or tal. Each of the four major clans was

allotted one tal through khasanry system. The villages located in each tal were allotted to the subclans through the same method. In the same manner, the property was distributed among the sub-clans, lineages and families. In this way, the property and resources were distributed among the inhabitants one by one – first the clans, then the sub-clans and finally the individual households- and the process was concluded for one phase.

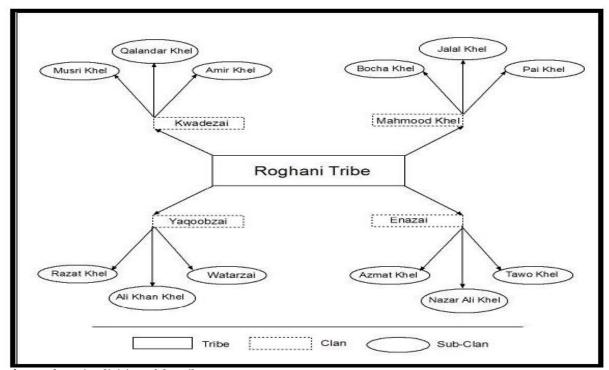


Fig. 2. Clan-wise division of the tribe.

The allotment made in one phase was for a fixed period after which the utilization right used to expire, and re-allotments were obligatory because during the lapse period of the wesh nobody could till the agricultural land. This compulsion was imposed to minimize the gap between two allotments. The allotments were to be made again and the rights of users were circulated. The rotation was made in such a way that each of the clans moved to the next altitudinal belt – one degree higher than its previous position - in the next phase. In this way, each clan moved through the four belts in different phases and reached to its starting position after completing the cycle of four phases (Fig. 3). Similarly, the villages allotted to the sub-clans were also shuffled and the ownerships were rotated within the same belt. Each of the sub-clan must move to the next position in the next phase (Fig. 3). The rotation cycle of the sub-clans used to be completed in the third phase as each of them consists of three sub-clans.

The rotation of usufracturay rights amongst the inhabitants (clans, sub-clans and households etc.) was one of the most important characteristics of the garzinda wesh system. Because of this rotation, every shareholder had the opportunity to utilize the resources of different altitudinal belts in the cycle of four phases. Neither the allottees of the most favorable areas were left to become rich and nor the users of the unfavorable localities were left for impoverishment for a longer period. Thus, opportunities as well as the constraints were equally shared to keep the society egalitarian. There was no predefined time interval between two phases of garzinda wesh; instead it used to depend on the will and consensus of the tribe. For example, the initial phase of garzinda wesh, had been formulated for twelve years. After successful completion and revision fifteen years interval was fixed for the next phase and on this interval, it was revised many times. Then the wesh period was extended for twenty years and before changing the tenure it was extended to twenty-five years. Since then the interval prolonged for several years and it was not possible to resume the system again.

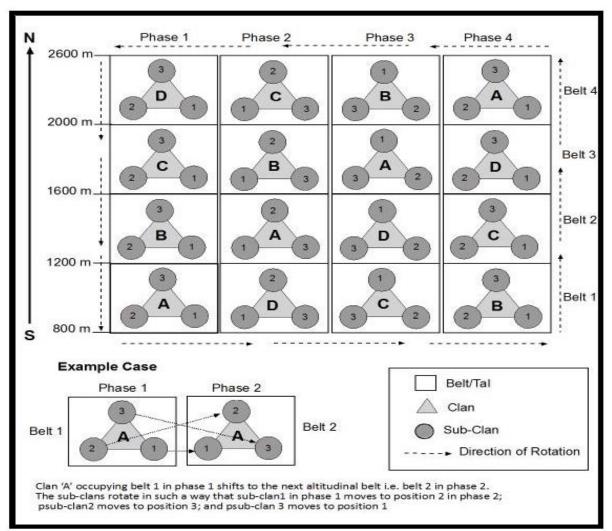


Fig. 3. Mechanism of Circulatory Tenure (Garzinda Wesh) System.

Weaknesses Garzinda Wesh and its Transformation

Garzinda wesh has played a key role in the proper management and conservation of natural resources in Roghani valley and elsewhere for a long period of time. However, due to political changes and demographic factors it was abolished in 1890s. The same findings were also reported by Haq et al., (2012)

and Rahmanet et al., (2014). The major factors responsible for the weakening of that system include; The system failed to sustain and continue with the continuously increasing number of users. According to the elders, in the beginning there were a few families inhabiting the area and it was easy to practice garzinda wesh. The process became complex, time consuming and conflictive with increasing number of shareholders.

One of the major drawbacks of that system was the ban on the cultivation of agricultural land during the transitional period between two allotments. Initially the transitional period was limited, and re-allotments were regularly carried out. Later, due to absence and unwillingness of few coowners the predetermined wesh period of 25 years was increased to more than four decades. Consequently, the cultivated land became barren, the infrastructure also collapsed, and many families left the area. Since there were uncertainties in the wesh and the inhabitants were intending to get hold of the relatively better areas in terms of productivity and altitude. As a result, they were unable to decide about the re-allotment process and the transitional period was lengthening.

The periodic shifting of large number of families from one belt to another was difficult and time consuming. The people were not willing to occupy the newly allotted areas because of their affiliation with locality and neighbors. Moreover, they must establish everything in the new location because the out-going families were leaving only the walls of the buildings. According to the elders, the people particularly women and children used to cry while leaving their place of residence where they have settled once, even if the new area was better than the previous one.

Due to temporal nature of tenure the inhabitants were neither investing in the village infrastructure nor not taking any interest in soil conservation and resource sustainability. They were constructing road, paths and irrigation channels only for a single season. Even houses were not constructed for longer period. Mostly they were interested in getting maximum benefits from all the available resources during their tenure. Consequently, agricultural land and infrastructure were degraded, and forest resources were also overexploited. Collectively the above-mentioned factors resulted into the weakening of garzinda wesh and led towards its abolishment.

Permanent Tenure System (Qati Wesh)

Because of the prolongation of the last tenure for over forty years, the inhabitants realized that the system needs some modifications. After long thinking and discussions, the elders reached to the conclusion that instead of temporal allotments, the resources should be privatized and distributed among the shareholders permanently. As a result, about a century ago the periodic re-allotment was abandoned and replaced by permanent tenure locally known as qati wesh. However, keeping the general characteristics of the study area it was quite difficult to divide the daftar among the clans and sub-clans of the Roghani tribe. A well reputed and respected religious scholar (Aalim), with the consensus of local inhabitants, formulated the basic structure of qati wesh. That was implemented and still functioning even today.

Mechanism of Qati Wesh

For permanent distribution of shares among the coowners the entire Roghani daftar, was divided into 100 units locally known as motai, which was further divided into smaller units (table 1). These units were used for the appropriation of shares in daftar and do not bear any fixed values. The land and other resources are divided among the co-owners proportionately to their shares defined in the above units. For example, one motai share in daftar means that the incumbent has user rights of 1% of all resources of daftar. Similarly, someone who has one paisa share in daftar holds the rights of 1/3000th part of all the resources in daftar.

Division of the Valley and Specification of Values

In first step of qati wesh, fixed values were assigned out of the 100 motai for the existing villages in the daftar based on resource potential, soil fertility, availability of water for irrigation, altitude and geographical area. Thus, villages having fertile land enough water and forest cover were given higher motai values (table 2). Jailar village was given highest value of 24 motai despite its uppermost altitudinal (2000 meters) location (Fig. 1). Moreover, this village has a rough topography and is remote in terms of distance from the main road and accessibility to market and other facilities. However, this village is richest in terms of natural resources among all the villages of the valley, which determines its highest unit value. Umarkot village with a value of 4 is almost equal in area to Samai (8 motai) and larger than Shalkani Payeen and Bala (6 motai each). Here in this case the main factor is acute shortage of water. Mano and Khararai each were given 3 motai and considered a single village of 6 motai.

In the second stage of resource appropriation and for the sack of convenience all the villages were grouped into four altitudinal belts (tal) based on their respective values. However, due to scarcity of water and remote location Umarkot village (with 4 motai) was kept as common (qaumsaray) and therefore not included in any tal, (table 2).

Distribution of Shares among the Clans

This was one of the major tasks in the process of permanent tenure system. The ten villages located within the territorial limits of Roghani daftar (excluding Umarkot) with unevenly distributed natural resources, and other physical characteristics were to be divided among the major clans in an equitable and acceptable manner. For this purpose, the daftar (96 motai) was equally divided among the four clans each getting 25% i.e. 24 motai share. However, since ownership of resources was permanently defined and there was no periodic reallotment; therefore, each of them was given equal shares in four tal and ten villages (table 3). The share of each clan was further divided among the sub-clans, lineages and finally households. Nevertheless, this is an unending process and the shares are divided and sub-divided from generation to generation. As mentioned earlier, these shares only define user rights of the shareholders in daftar and bear no fixed values in terms of land measurements. During the practical distribution of any part of the daftar at a village level, first land of serai and other common uses (road, paths, mosques etc.) were set aside and excluded from the distribution. The remaining land is then divided among the co-owners according to their proportional shares in daftar.

On the one hand, this allocation ensured equal distribution of resources among the shareholders, but on the other hand it created complications as well. The most important problem was the distribution of clan shares in all the villages and tal. This was not confirming to the distribution of clan-wise population and proper management of agricultural land became not only difficult but also impossible. Similarly, forest patches of a clan located away from their own villages became open access to the nearby households. Later, the clan groups solved this problem through mutual exchange of their respective shares and the original allocation of resources at village as well as tal level was also modified (table 4). This mutual exchange took place between two clans whose population was not distributed in all the tal.

Land Specified for Public Servants (Serai)

The tradition of keeping public servants such as artisans and mulian is quite old and commonly practiced by most of the communities inhabiting the northern mountains region of Pakistan reported by several studies (Fazlur-Rahman, 2007; Janjua, 1998). These servants used to provide certain services to the inhabitants of the village and as a return they were allotted a piece of cultivated land locally known as serai. It is usually the best part of cultivated land with well-structured fields, fertile soil and irrigation facilities. There were several types of serai in Roghani daftar named based on the associated services.

Mosques (Jumat Serai)

This type of serai is allotted to the people who perform religious duties. Generally, the mulian who are currently performing the relevant duties can own and utilize it is subject to the performance of services they are appointed for. Otherwise, they have no right to own and use the land of serai. In the beginning jumat serai were allotted temporarily to the mulian who were performing the duties, but later on, these were permanently occupied descendants irrespective of duty performance.

Blacksmith (Ingar Serai)

The land allotted to the village blacksmith is called ingar serai. In early times, the village community used to hire a blacksmith who served for the inhabitants of the village and in return the concern person was awarded land ingar serai. Though the trend of keeping village blacksmith has ended, but the serai specified for them still exist. Those lands are considered communal and will be distributed among the inhabitants of the villages.

Barber (Nayi Serai)

Like the blacksmith, a barber was also kept by the inhabitants of every village. The barber used to perform several services for the village community, like hair dressing, circumcision, and playing drum during various circumstances etc (Janjua, 1998: 416). In return the nayi was given a piece of land for cultivation, which is called nayi serai. Although this type of serai is found in almost every village, but the tradition of keeping village barber is no more practiced nowadays. The barbers are paid in cash for the services usually on the spot. The lands allotted to them have been reclaimed and kept as communal land.

Troop Commander (Tugh Serai)

Tugh means the banner or flag of the fighting troop. The people, who used to command the troops during fight and carry the flag, were allotted lands as a reward for their bravery and risky services. These lands were known as tugh serai. According to the elders this type of serai has been disappeared and no one knows who has occupied it.

Weaver (Alaji Serai)

This type of serai was allotted to the operators of a tool known as alaji, used for weaving clothes. There were few experts who were performing this service for the people of the whole valley. Though this tradition is not in practice now, however, the serai still exist in few villages and kept as common property.

Underlying Issues: Shortcomings of the Permanent Tenure System

The sub-clans are further divided into several lineages and households. The shares of clans in daftar are divided and transferred to the sub-clans, lineages and then the individuals (household or a person) by inheritance. During this process due to fragmentation the shares decreased and became uneconomical. The shares of all households are clearly known and generally depend on the number of off-springs.

Land and resources under the ownership of a person are fragmented and divided among his descendents in the next generation, according to their respective shares. This practice has resulted into very small holdings per owner in land and other resources. Cultivated lands particularly, have been fragmented to such a level, that neither the size of landholdings per household nor the field size is capable of further fragmentation. Several brids (boundary stones) are erected in the fields dividing a single plot into several small fragments.

The forest resources have no exception. In past, the forests were divided into barkha which were owned by individual owners, but now the scenario has changed. The forest barkha are now replaced by number of trees per individual or household. In Shalkani Tal the situation is somewhat dramatic as in a few cases a single pine tree is owned by two or three owners. In this tal the forests as well as the cultivated lands can no more be fragmented or divided. In such a scenario - what the situation of cultivated lands and forests in would be the coming few generations - and for how long the present tenure system well persist are the key questions.

Conclusion

The spatiality, seasonality and availability mountains resources on the one hand, and the egalitarian nature of the communities necessitated the introduction of such a system under which all the users may have equal access to different resources. As a result, the indigenous tenure system or wesh was introduced. Wesh is one of the important social institutions, which perform a central role in the management of natural resources. This system has evolved in two stages. In first stage, some 300 years ago the system was circulatory or temporal in nature known as garzinda or netadar wesh. Under this system, the resources were considered as commons for the whole group and the allotments among the coowners were made on a temporal basis for a specified period. The equity of users to the spatially segregated and seasonally productive natural resources was the most important characteristic of the circulatory tenure system. However, there were certain drawbacks in this system.

The major drawback of garzinda wesh was the ban on the cultivation of agricultural land during the lapse between two successive phases of wesh. Similarly, the people didn't care for the conservation of forests, maintenance of agricultural land, fields' structures and irrigation networks etc resulting into the degradation of natural resources at a very alarming rate. Ultimately, this system was transformed into permanent tenure or *qati wesh* system. To maintain equity among the shareholders, the clans were given equal rights in all the villages located at different altitudes. The shares of clans are divided among the sub-clans, which are transferred to the descendants based on inheritance. Land and resources under the ownership of a person are extensively fragmented and divided among his descendents in the next generation, according to their respective shares resulting into very small holdings per owner. This aspect is the major weakness threatening the sustenance of the permanent tenure system.

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