Traditional Grazing System and Seasonal Pasture Use in Upper Mustang, Nepal

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Abstract

This research was undertaken from March 2006 to October 2006. The main aim of this research was to analysis the grazing system and seasonal pasture use in the selected VDCs of Upper Mustang. Ground truthing data of the two VDCs were collected to identify the seasonal pasture type and units. The pasture units were delineated in Topographic map by observing the pastures from vantage points. Key informants were consulted at field for this pupose. In addition, focal group discussion and interviews were taken with the village elite, herders and grazers for assessing grazing rights and use patterns. The result of this study reveals that the pastures lying in political boundary of one VDC are not necessarily being used by the same VDC. People have been practicing the traditional use right irrespective of the political boundary. On the basis of seasonal use, 7 different seasonal pasture types have been identified in the pastures used by Chhoser VDC and 6 different seasonal pasture types in Chuksang VDC. Livestock compositions in the two VDCs are different. The density of livestock in Chhosher VDC is 35.74 per sq. km. whereas it is only 15.69 per sq km. in Chhuksang VDC. The grazing system and the use of resources are also different in these two pastures.

Keywords: Conservation, Grazing system, Pasture conflicts, Rangeland, Seasonal pasture use

Introduction

Upper Mustang has its own significance in terms of socio-cultural biological and geomorphologic diversity. Economically the people of Mustang rely on agro-pastoral system. However, agricultural production has been limited due to lack of sufficient water for irrigation and harsh climatic conditions (Kunwar, 2003). Animal husbandry is one of the main sources of earning livelihood. Grazing land comprises of 55.65% (Pokharel, 2006b). The average number of animals reared in 2002 in Upper Mustang was 36,503 (MIS, 2002). Cattle, vaks, dzos, sheep, goats, horses, mules and donkey are reared. Goat and sheep trading from China is also a common practice among the local population. The pastures available in the area

are the only feeding source for the animals. So it is very important to make plans for the rational use of the rangeland so that sustainable use of the resources can be achieved. Indigenous rangeland management activities are practiced in Upper Mustang like rotational grazing, levying of fines for herders caught grazing outside their designated village grazing areas. But the traditional management system alone is not adequate to produce more forage in overgrazed and overpopulated rangeland (Thapa, 1990). Researchers have identified that overstocking (overgrazing) in the rangelands is the main factor causing deterioration of rangelands (Miller, 1996; Schaller and Gu, 1994; Wang et al., 2002). In addition, in case of Upper Mustang, uprooting of shrubs of Caragana and Lonicera spp. instigated the degradation of the rangeland. According to Pokharel (2006), uprooting is practiced in 47.62% of the area and dung collection in 38.26% of the total area of pastures. Craig (1996) also stated that the traditional livestock management system in Upper Mustang tends to fall out side the carrying capacity concept. But till date no systematic study has been conducted to find out the exact area covered by the pastures of Upper Mustang. Unless the exact area covered by the pasture land is sorted out, accurate carrying capacity cannot be determined. Therefore, it is essential to conduct systematic research before proposing any interventions in the name of progress (Goldstein and Beall, 1990). The categorization of the rangelands based on seasonal use and grazing pressure in the study area provides essential base line information for developing future management strategy. The main aim of this paper is to analyse the seasonal pasture use and grazing rights of the two VDCs in Upper Mustang. This type of research has not been reported elsewhere and is a part of boarder research on pasture mapping in Upper Mustang.

Study Area

The present study was conducted in the two selected VDCs (Chhuksang and Chhosher VDCs) of Upper Mustang (Figure 1). Chhuksang VDC lies between 28°47'51.11"-29°02'37.81"N and 83° 32'53.24"-84°03'6.57" E whereas Chhosher VDC lies between 29°04'33.07"-29°18'3.18"Nand 83°57'39.83"-84°12'10.60"E in Mustang district. Chhuksang VDC receives more precipitation compared to Chhosher VDC in terms of rainfall. The climate of the area is cold, desiccated by strong winds and high solar radiation. The climate is

sub-alpine, and has a maximum temperature of 18° C in July and a minimum of -12° C, in January. The whole area remains under snow for 4-5 months from November to March. Total annual rainfall is less than 200 mm and more than half of the total precipitation occurs as snow during the winter months (Chetri and Gurung, 2004).

Materials and methods

The pasture units (patches of pasture with specific name given by locals) used by the VDCs were identified by observing from the vantage points and the corresponding boundaries were delineated in the Topographic map published by the survey department of HMG. Nepal in 2001. Local names of the units based on key informant's information were recorded. The information so obtained was cross checked with reference to 3-D model of the VDC prepared by the project. Map of the pasture units was prepared using the GIS softwares: Cartalinx. Arc view 3.2 and Arc GIS. The boundary of the pasture units delineated on topographic map in the field was digitized on screen using digitized topographic map of the area from secondary source in Arc view 3.2. It was then imported in Cartalinx and the map was edited and finalized. Again by exporting it to Arc view 3.2 and Arc GIS, the attributes of each of the pasture units gathered in field were joined and area calculation was done. Area calculation of the pasture units was done following the political boundary and the use right of the VDCs. Information regarding the pasture rights and use patterns were collected through focal group discussion and key informants.

Results and discussion

Traditional Grazing System

People in Upper Mustang have been practicing their own traditional rotational



Figure 1. Location of the VDCs of Upper Mustang



Figure 2 Seasonal pasture units used by Chhosher VDC

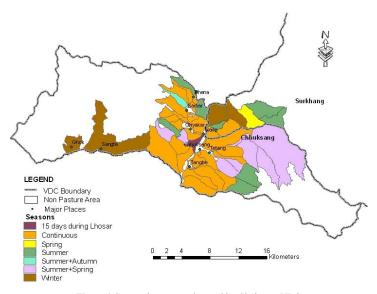


Figure 3 Seasonal pasture units used by Chuksang VDC

Table 1. Seasonal pasture types used by VDCs

	Chh	Chhosher		Chhuksang		
Seasonal pasture type	Area (sq km)	%	Area (sq km)	%	pasture area of two VDCs (Area sq km)	%
15 days during Lhosar*	-		2.06	0.80	2.06	0.48
Autumn+Spring	3.79	2.20	-	-	3.79	0.88
Continuous	41.97	24.36	102.39	39.89	144.36	33.65
Spring	3.59	2.08	6.01	2.34	9.6	2.24
Summer	65.65	38.11	35.51	13.83	101.16	23.58
Summer+Autumn	0.26	0.15	2.71	1.06	2.97	0.69
Summer+Spring	-	-	64.55	25.15	64.55	15.05
Summer+Winter	18.46	10.72	-	-	18.46	4.30
Winter	38.56	22.38	43.45	16.93	82.01	19.12
Total	172.28	100.00	256.68	100.00	428.96	100.00

^{*} Lhosar festival is observed in January.

Table 2. Area and livestock density on the pastures

			Pasture		Area of	% of		
		VDC	area	% of	pasture	pasture		Livestock
		Area	within	pasture	used by the	area used		density
		(sq	the VDC	area in	VDC (sq	by the	Livestock	(number/sq
SN.	VDCs	km)	(sq km)	VDC	km)	VDC	number	km)
1	Chhoser	345.67	326.79	94.54	172.28	12.06	6,157	35.74
2	Chuksang	491.74	217.25	44.18	256.68	17.97	4,028	15.69

Table 3. VDC areas and other users of the pastures

	User VDC							
Location VI	Location VDC		Chuksang	Lomanthang	Surkhang	Total		
	Area							
	(sq km)	32.41	-	-	-	70.25		
Chhonhup	%	46.13	-	-	-	-		
	Area							
	(sq km	139.87	-	152.74	34.18	326.79		
Chhoser	%	42.8	-	46.74	10.46	-		
	Area							
	(sq km)	-	217.25	-	-	217.25		
Chuksang	%	-	100	-	-	-		
	Area]						
	(sq km)	-	39.43	-	-	472.57		
Surkhang	%	-	8.34	-	-	-		
Total	Area (sq km)	172.28	256.68	258.91	461.83			

grazing practices. Each VDC has their own system and a set of rules and rights for the use of pastures that has been set already from last few generations. Mukhiya system still prevails in the area. Mukhiya is known as Dhongba in local language. The role and responsibility of the Dhongba is being defined within the set of rules provided by their forefathers. The tenure of the Dhongba is generally of one year and recruited according to rank, based on seniority in the village. Mukhiya has the rights in leveying taxes for grazing in the pastures. Depending on the livestock types, taxes vary and the herders/owners have to pay on monthly or annual basis. Rotational grazing rules exist in all the VDCs. However they are not strictly followed in some VDCs by the villagers. But such rules are strictly followed by the nomads. Nomadism is an age old practice existing in the high altitude pastures of Upper Mustang. Presently 9 families of nomads are residing in the area. Total population is 44 with an average household size of 5. They move to different pastures in different seasons: summer, autumn, winter and spring. Nomads do not need to pay any tax to the VDC for using the rangeland but they are not allowed to use winter pasture (Pokharel 2006a). Their livestock freely roam in the pastures without any herders and are monitored at least once in a month. Herders who use the pasture of other VDC without any permission from the Dhongba of the concerned, have to face penalty as decided by the Dhongba. But the punishment is relatively less severe in case of people of same village. In this regard the traditional grazing system is becoming weak day by day. Traditional rotational grazing system if followed seriously can be an effective tool for maintaining the rangeland health and biodiversity that thrive in the area.

Pasture units and seasonal pasture

On the basis of seasonal use, nine different seasonal pasture types have been identified in the study area (Table 1). In Chhosher VDC, the highest proportion (65.65%) of the pasture is used during the summer (65.65%). In comparison to other pasture use patterns least area are reserved for spring and summer plus autumn. In comparison to summer pasture area, the winter pasture is low. This has caused a serious problem in the food shortage for livestock during the winter. Caragana and Lonicera spp. are uprooted by the villagers to meet the energy demands. This has also reduced the bush layer in the pasture which is the food for sheep and goats for the winter. In case of Chhuksang VDC, the highest proportion of the pasture is open to all seasons (39.89%). It was interesting to note here that one pasture unit of Chuksang VDC is used only for 15 days during the Lhosar festival which is observed in January. Of the total area of the two VDCs. higher proportion of the pasture are utilized for continuous grazing (33.65%) and a low proportion (19.12%) are utilized for the winter grazing. Looking at the overall area of the pasture of Upper Mustang (1428.33 sq km), Pokharel (2006b) estimated that the highest proportion is shared by the summer pasture i.e. 40.97% followed by winter pasture, 21.96%. Overall assessment of the pasture also indicates that there is a shortage of winter pasture area in upper Mustang. However, the utilization and the division of the pasture vary according to VDCs.

Pasture used by Chhosher VDC vs. Chhuksang VDC

In Chhoser VDCs, bulk of the livestock population comprises of sheep and goats. The population of yaks is very low in comparision to other livestock. But in Chhuksang VDC, Yaks are not reared by the local communities. Table 2 represents the livestock density (number/sq km) of the two VDCs. In comparison to area, higher number of livestock is reared by the local people of Chhosher VDC. This is mainly due to limited agricultural land to sustain. In addition, the quality of pasture land in Chhosher VDC is as good as majority of the pastures abutting to the border of Tibetan Autonomous Region, China. Livestock distribution and types also vary among the VDCs. Pokharel (2006b) estimated the average livestock density in the whole pastures of seven VDCs in Upper Mustang is 26.64 per sq km.

Chhoser VDC uses 29 pasture units (Figure 2). The sum total of the pasture land in the political boundary of this VDC is 326.79 sq kms which constitutes 94.54% of the VDC area. Of this area, 42.80% is used by Chhoser VDC, 46.74 by Lo Manthang VDC and 10.46% by Surkhang VDC (Table 3). The total area covered by the pasture used by the VDC is 172.28 sq kms which account for 12.06% of the total area of the pastures of Upper Mustang. The livestock density is 35.74 per sq. km (see Table 2). Along with pasture within the VDC boundary, it also uses some areas of Chhonhup VDC (see Figure 2 and Table 3).

Chuksang VDC uses 51 pasture units (Figure 3). The total area covered by the pasture used by the VDC is 256.68 sq kms which accounts to 17.97% of the total area of the pastures of Upper Mustang (Pokharel, 2006b). The total area of the pasture land within the boundary of this VDC is 217.25 sq kms which constitutes 44.18% of the VDC area and the livestock density is 15.69 per sq. km (see Table 2). Beside the pasture

lying within the VDC, it uses some area of Surkhang VDC (see Figure 3 and Table 3).

Altogether 80 different pasture units have been recorded to be used by the two VDCs. People have been following the traditional use right irrespective of the political boundary in using the pastures. So a number of pasture units lying within these VDCs are used by other VDCs. Description of each of the units is given in Annex 1.

Conclusion

The rangeland in Upper Mustang region is unique in the sense that it is directly correlated with the annual climatic patterns. Timely rainfall and snowfall always make rangeland visibly green and productive. However, within a week the pasture may get changed if the northern wind blows continuously for few days. Highly variable climate makes the area more and more fragile and this has direct impact on the rangelands. In addition, the weakening of the traditional rotational practices and uprooting of shrubs for fulfilling energy requirements is another crucial issue. The use of pasture varies according to VDCs and has been practicing the traditional use right irrespective of the political boundary. Pastures lying in political boundary of one VDC are not necessarily being used by the same VDC. On the basis of seasonal use, nine different seasonal pasture types have been identified. Future studies which will document the carrying capacity for ensuring range production sustainable biodiversity conservation are felt necessary.

Acknowledgements

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Annex 1: Pasture unit profile of Chhoser and Chhuksang VDC Pasture units used by Chhoser VDC

SN	Pasture Name	Location	Total area	Grazing	User	Animal type using the
511	(Local name)	VDC	1 otal al ca	season	VDC	pasture
1	SAKAU	Chhoser	3.41 Km ²	Continuous	Chhoser	Lulu, Goat, Sheep,
1	SAKAO	Cilliosci	3.41 KIII	Continuous	Ciliosci	Donkey
2	GHOMBO LHA	Chhoser	8.57 Km ²	Continuous	Chhoser	Lulu, Goat, Sheep
3	BHUMBA RAHA	Chhoser	8.88 Km ²	Continuous	Chhoser	Goat, Sheep, Horse
4	KIMBU	Chhoser	8.02 Km ²	Continuous	Chhoser	Goat, Sheep, Horse
5	CHHEGAM	Chhoser	14.45 Km ²	Summer	Chhoser	Goat, Sheep, Horse
6	NGILE KARCHUNG	Chhoser	19.02 Km ²	Summer	Chhoser	Goat, Sheep, Horse
7	KAMLUNG	Chhoser	4.70 Km ²	Winter	Chhoser	Goat, Sheep, Horse
8	SETE RHAWA	Chhoser	11.88 Km ²	Winter	Chhoser	Goat, Sheep, Horse
9	TUNG	Chhoser	9.73 Km ²	Winter	Chhoser	Goat, Sheep, Horse
10	JHIMJHANG	Chhoser	12.89 Km ²	Winter &	Chhoser	Goat, Sheep, Horse
10	JHIMJHANG	Cilliosei	12.89 KIII	Summer	Cilliosei	Goat, Sheep, Hoise
11	MAATHI GHYAMO	Chhoser	0.53 Km ²	Continuous	Chhoser	Lulu, Goat, Sheep,
11	WELTHI GITTING	Cimosci	0.55 Km	Continuous	Cimosci	Horse
12	SEUTHANG	Chhoser	12.25 Km ²	Winter	Chhoser	Goat, Sheep, Horse
13	RHAJUNG	Chhoser	5.57 Km ²	Winter &	Chhoser	Goat, Sheep, Horse
15	idi Borio	Cimosei	3.37 14111	Summer	Cimosei	Gout, Sheep, Hoise
14	CHHYUKU MHAU	Chhoser	7.31 Km ²	Summer	Chhoser	Goat, Sheep, Horse
15	CHHOYALING	Chhoser	1.54 Km ²	Continuous	Chhoser	Lulu, Goat, Sheep
16	GIBU CHHIRE	Chhoser	1.61 Km ²	Continuous	Chhoser	Lulu, Goat, Sheep,
						Horse
17	SALINDE	Chhoser	3.75 Km ²	Continuous	Chhoser	Goat, Sheep
18	BHAAMAMO	Chhoser	3.79 Km ²	Autumn &	Chhoser	Goat, Sheep, Horse
				Spring		
19*	KHUKYU	Chhoser	1.98 Km ²	Summer	Chhoser	Goat, Sheep, Horse
19*	KHUKYU	Chhonhup	1.58 Km ²	Summer	Chhoser	Goat, Sheep, Horse
20	PHORA	Chhonhup	6.16 Km ²	Summer	Chhoser	Yak, Goat, Sheep,
	GHYAPCHA PANG					Horse
21	CHHORTEN	Chhonhup	13.98 Km ²	Summer	Chhoser	Yak, Goat, Sheep
	MARKOK		2			
22	CHHYAMKI	Chhonhup	1.18 Km ²	Summer	Chhoser	Yak, Goat, Sheep,
	THANKA	~		~ .		Horse
23	KYUCHHU	Chhonhup	0.54 Km ²	Continuous	Chhoser	Yak, Goat, Sheep,
2.4	NAAMA	611 1	0.06.77	~ ^	CI I	Horse
24	NAMA	Chhonhup	$0.26~\mathrm{Km}^2$	Summer &	Chhoser	Goat, Sheep, Horse
2.5	DHONGDHONG	611 1	2.50.77	Autumn	CI I	77.1.0
25	JHOGLE	Chhonhup	3.59 Km ²	Spring	Chhoser	Yak, Goat, Sheep,
26	CHYALANC	Chhamba	1.02 Km ²	Cantinua	Clabaras	Horse
26	GHYALANG	Chhonhup	1.02 Km	Continuous	Chhoser	Lulu, Goat, Sheep
27	BHAAMA MAATANG	Chhonhup	1.51 Km ²	Continuous	Chhoser	Lulu, Goat, Sheep,
21	RINGMA	Cnnonnup	1.51 Km	Continuous	Cnnoser	Lulu, Goat, Sheep, Donkey
20	DHEELU KHOLA	Chhanh	0.33 Km ²	Continuous	Chhoser	Lulu, Goat, Sheep
28	KIRI	Chhonhup Chhonhup	2.25 Km ²	Continuous	Chhoser	Lulu, Goat, Sheep Lulu, Goat, Sheep
29	KIKI	Unnonnup	2.23 KIII	Continuous	Chhoser	Luiu, Goat, Sneep

Pasture units lying in Chhoser VDC but used by other VDCs

S	Pasture Name (Local	Total area	Grazing	User VDC	Animal	Remarks
N	name)		season		type using the pasture	
1	MARCHUNG (Sakau)	2.37 Km ²	Winter	Lo Manthang	Goat, sheep, horse, lulu	-
2	DHARCHONGOMB A	3.91 Km ²	Winter	Lo Manthang	Goat, sheep	-
3	RHIJIPHUWA	24.46 Km ²	Winter	Lo Manthang	Yak, goat, sheep	Political boundary of Chhoser VDC but Lo Manthang nomads are using
4	CHUJUNG (Yaja)	52.08 Km ²	Summer	Lo Manthang	Yak, goat, sheep	Political boundary of Chhoser VDC but Lo Manthang nomads are using
5	MUKCHUNG	34.08 Km ²	Summer	Lo Manthang	Yak	Political boundary of Chhoser VDC but Lo Manthang nomads are using
6	MARCHA	1.75Km ²	Spring	Lo Manthang	Yak, goat, sheep	-
7	DHALUNG	34.09 Km ²	Summer	Lo Manthang		Political boundary of Chhoser VDC, used by Chhoser horses as well, traders' route, conflict between Samjung and Nomads of Lo Manthang and also Chinese nomads
8	MUKCHUNG	13.58 Km ²	Summer	Surkhang	Yak	-
9	TAAPKE PEKANG	15.41 Km ²	Summer	Surkhang	Yak, Dzopa	-
10	PANGA	4.06 Km ²	Summer	Surkhang	Yak	-

Pasture Units used by Chuksang VDC

S	Pasture Name	Location	Total area	Grazing	Animal type	Remarks
N	(Local name)	VDC		season	using the	
					pasture	
1	CHHYUME	Chuksang	7.19 Km ²	Continuous	Lulu, Goat,	Keep goth in
	DANDA				Sheep, Horse,	summer
					Mule, Dzopa	
2	CHHYUME	Chuksang	4.27 Km ²	Continuous	Lulu, Goat,	Keep goth in
	THANKA				Sheep, Horse,	summer
					Mule, Dzopa	
3	SANO CHHYUME	Chuksang	6.64 Km ²	Continuous	Lulu, Goat,	Goth in Winter. Jhong
					Sheep, Horse,	of Muktinath VDC
					Mule, Dzopa	also uses this pasture.
4	THULO	Chuksang	3.57 Km ²	Continuous	Lulu, Goat,	Goth in Winter.
	CHHYUME				Sheep, Horse,	Jhong of Muktinath
	(MIULA)				Mule, Dzopa	VDC also uses this

						nactura
5	NHERIK DANDA	Chulman	5.70 Km ²	Summer	Il. Cast	pasture. Jhong also uses this
)	NHERIK DANDA	Chuksang	3.70 Km	Summer	Lulu, Goat,	
					Sheep, Horse,	pasture. Litting fire
					Mule, Dzopa	is not allowed while
	DUD COLUDANDA	CI I	2.56 17. 2	G .:	G , G1	keeping goth.
6	PUMCHI DANDA	Chuksang	2.56 Km ²	Continuous	Goat, Sheep,	Tetang also uses but
					Horse, Mule,	goth keeping is not
\vdash					Dzopa	allowed.
7	KYONJEGHANG	Chuksang	4.04 Km ²	Continuous	Lulu, Goat,	-
	A				Sheep, Horse,	
			,		Mule, Dzopa	
8	DHOBANANG	Chuksang	0.61 Km ²	Continuous	Goat, Sheep,	-
					Horse, Mule,	
			_		Dzopa	
9	CHUMBAK	Chuksang	3.63 Km ²	Summer+Spr	Goat, Sheep,	-
				in	Horse, Mule,	
					Dzopa	
10	TOMAGHYAM	Chuksang	4.23 Km ²	Continuous	Lulu, Goat,	-
					Sheep, Horse,	
					Mule, Dzopa	
11	IKJUPHU	Chuksang	2.96 Km ²	Summer	Lulu, Goat,	Ghyakar can also use
		_			Sheep, Horse,	for grazing but goth
					Mule, Dzopa	with fire is not
					, 1	allowed. Ghyakar uses
						for dung collection.
12	KHERKU	Chuksang	2.06 Km ²	Summer+Spr	Lulu, Goat,	-
				ing	Sheep, Horse,	
				8	Mule, Dzopa	
13	KHOLAPARI	Chuksang	3.86 Km ²	Continuous	Lulu, Goat,	-
	GOTH / BAN				Sheep, Horse,	
	001117 25111				Mule, Dzopa	
14	GHELDHUNBUK	Chuksang	13.84 Km ²	Continuous	Lulu, Goat,	-
					Sheep, Horse,	
					Mule, Dzopa	
15	JHONG	Chuksang	2.06 Km ²	15 days	Lulu, Goat,	_
13	3110110	Chuksang	2.00 Kili	during	Sheep, Horse,	
				Lhosar	Mule, Dzopa	
16	GHUNSA	Chuksang	26.05 Km ²	Winter	Goat, Sheep	
17	GHOK	Chuksang	4.97 Km ²	Winter	Yak, Lulu,	Sangta village shifts
1 /	UHUK	Chuksang	4.9/ KIII	vv iiitei	Goat, Sheep,	
						here in winter. Way
					Horse, Mule,	to Dolpo.
10	NHARIK	Chulman	6.48 Km ²	C	Dzopa	Thomas also some
18	NHAKIK	Chuksang	0.48 KM	Summer	Lulu, Goat,	Jhong also uses
					Sheep, Horse,	occasionaly for
					Mule, Dzopa	grazing but keeping
						goth and litting fire is
						not allowed. Nomads
\square		ļ	2			used in the past.
19	GHEYUK	Chuksang	2.28 Km ²	Summer +	Lulu, Goat,	Goth is in cave
				Spring	Sheep, Horse,	
					Mule, Dzopa	

				T =		
20	KYUHEN DANDA	Chuksang	5.20 Km ²	Summer +	Lulu, Goat,	-
				Spring	Sheep, Horse,	
					Mule, Dzopa	
21	KYUTEN	Chuksang	2.52 Km ²	Continuous	Lulu, Goat,	-
		_			Sheep, Horse,	
					Mule, Dzopa	
22	NUNKHANI	Chuksang	4.74 Km ²	Continuous	Lulu. Goat.	_
44	DANDA	Chuksang	4./4 KIII	Continuous	Sheep, Horse,	-
	DANDA				I * '	
			2		Mule, Dzopa	
23	HASISICHYA	Chuksang	7.70 Km ²	Summer+Spr	Lulu, Goat,	-
				ing	Sheep, Horse,	
					Mule, Dzopa	
24	TAKCHENEN	Chuksang	7.87 Km ²	Summer +	Goat, Sheep,	-
		_		Spring	Horse, Mule,	
				1 0	Dzopa	
25	SUKCHINEN	Chuksang	35.81 Km ²	Summer +	Goat, Sheep,	-
23	BORCHINEL	Charsang	33.01 Km	Spring	Horse, Mule,	
				Spring	Dzopa	
26	CHEPTIGHANG	Charles	1.20 Km ²	Continuous		_
26	CHEPTIGHANG	Chuksang	1.20 Km	Continuous		-
					Sheep, Horse,	
\sqcup					Mule, Dzopa	
27	BHRIGULHA	Chuksang	8.66 Km ²	Continuous	Lulu, Goat,	Tetang can also use
					Sheep, Horse,	for grazing but
					Mule, Dzopa	cannot collect dung
28	CHYOGAAM	Surkhang	3.26 Km ²	Continuous	Lulu, Goat,	Chaile can also use
		~			Sheep, Horse,	for grazing but
					Mule, Dzopa	cannot collect dung.
29	TARAHAUWA	Surkhang	6.94 Km ²	Winter	Lulu, Goat,	Chaile also uses this
29	TAKAHAUWA	Surkilalig	0.54 KIII	Willer		
					Sheep, Horse,	pasture
—					Mule, Dzopa	
30	SANGBA	Surkhang	1.64 Km ²	Summer	Lulu, Goat,	Chaile can also use
					Sheep, Horse,	for grazing but
					Mule, Dzopa	cannot collect dung.
31	POGO CHHYUME	Surkhang	4.78 Km ²	Continuous	Lulu, Goat,	Chaile can also use
					Sheep, Horse,	for grazing but
					Mule, Dzopa	cannot collect dung.
32	PUNAMLHE	Surkhang	5.49 Km ²	Winter	Lulu, Goat,	Chaile can also use
52	. C. WHILLIE	Curkining	2.17 18111		Sheep, Horse,	for grazing but
					Mule, Dzopa	cannot collect dung.
22	HIONICHIMAB	C1-1	6.01 Km ²	Carrier a		Chaile can also use
33	JHOKICHHYUMB	Surkhang	0.01 Km	Spring	Lulu, Goat,	
	A				Sheep, Horse,	but cannot keep
\perp					Mule, Dzopa	goth
34	IMBUK	Surkhang	7.28 Km ²	Summer	Lulu, Goat,	-
					Sheep, Horse,	
					Mule, Dzopa	
35	JHACHIU	Surkhang	4.93 Km ²	Summer	Lulu, Goat,	Tange also uses but
					Sheep, Horse,	not allowed to keep
					Mule, Dzopa	goth.
36	KYUTEN 1	Chuksang	1.15 Km ²	Continuous	Lulu, Goat,	Chaile can use and
30	KIUIENI	Chuksang	1.13 KIII	Continuous		
					Sheep, Horse,	can also keep goth
1 1					Mule, Dzopa	

37	CHHUNSI DANDA	Chuksang	3.55 Km ²	Summer	Lulu, Goat, Sheep, Horse, Mule, Dzopa	Chaile can use and can also keep goth. Near to Chhunsi Gomba.
38	TAMSYAL	Chuksang	0.92 Km ²	Continuous	Lulu, Goat, Sheep, Horse, Mule, Dzopa	Chaile can use and can also keep goth. Location of old chuksang village.
39	СННҮИМЕ	Chuksang	3.69 Km ²	Continuous	Lulu, Goat, Sheep, Horse, Mule, Dzopa	Chaile can use for grazing and cutting fuelwood.
40	VENYA	Chuksang	2.10 Km ²	Continuous	Lulu, Goat, Sheep, Horse, Mule, Dzopa	Chaile can use for grazing and cutting fuelwood.
41	TALLO VENYA	Chuksang	0.86 Km ²	Continuous	Lulu, Goat, Sheep, Horse, Mule, Dzopa	-
42	RUWARUWA	Chuksang	2.06 Km ²	Continuous	Lulu, Goat, Sheep, Horse, Mule, Dzopa	-
43	GHOKETHANG	Chuksang	1.59 Km ²	Continuous	Lulu, Goat, Sheep, Horse, Mule, Dzopa	-
44	KHELCHYANG	Chuksang	1.64 Km ²	Continuous	Lulu, Goat, Sheep, Horse, Mule, Dzopa	-
45	LUNGSUNG	Chuksang	1.92 Km ²	Continuous	Lulu, Goat, Sheep, Horse, Mule, Dzopa	-
46	GHYAKARKHOL A	Chuksang	0.84 Km ²	Continuous	Lulu, Goat, Sheep, Horse, Mule, Dzopa	-
47	SYAPCHIPU	Chuksang	1.54 Km ²	Continuous	Lulu, Goat, Sheep, Horse, Mule, Dzopa	-
48	CHYOHAR	Chuksang	2.71 Km ²	Summer + Autumn	Lulu, Goat, Sheep, Horse, Mule, Dzopa	-
49	HYULKI PANGA	Chuksang	5.18 Km ²	Continuous	Lulu, Goat, Sheep, Horse, Mule, Dzopa	-
50	TAALAM	Chuksang	3.82 Km ²	Continuous	Lulu, Goat, Sheep, Horse, Mule, Dzopa	-
51	PIRI	Chuksang	2.96 Km ²	Summer	Goat, Sheep, Horse, Mule, Dzopa	Commonly used by Chuksang and Ghami VDC. The word PIRI implies common in local language.

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