Baluchistan District Gazetteer Series.

VOLUMES VI, VI-A, AND VI-B.

SARAWAN, KACHHI AND JHALAWAN.

Text and Appendices



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PREFACE.

It was originally intended that the District Gazetteers of the Native States in Baluchistán should be in four volumes, vis., (I) Sarawán and Kachhi, (II) Jhalawán, (III) Makrán and Kharán, and (IV) Las Béla. But owing to want of time it was subsequently decided to curtail the scope of the work, and to embody in one Volume the Gazetteers of the Districts of Sarawán, Kachhi and Jhalawán in the Kalát State.

At the time of the inception of the Gazetteer operations our knowledge of the country was somewhat limited owing to its remoteness from headquarters. Sets of questions were, therefore, sent to selected officials in the various niábats in Sarawán and Kachhi. This method of collecting information required, was not found to produce satisfactory results. Munshi Abdul Majid and Mirza Shér Muhammad of the Gazetteer staff were, therefore, deputed to collect information locally and to verify and supplement the reports received from the niábats. The former spent about eleven months in Sarawán and four months in Kachhi, and the latter about fourteen months in Jhalawán, and collected much useful information on the various subjects dealt with in the Gazetteers. Lála Himmat Rai of the Gazetteer staff also worked in Kachhi for about two months.

As in many respects the conditions obtaining in the Quetta-Pishin District coincided with those obtaining in the Districts dealt with in this Volume, a good deal of material was reproduced with the necessary local adaptations, from Mr. Hughes-Buller's Gazetteer of the Quetta-Pishin District.

The articles on Geology were kindly supplied by Mr. E. Vredenburg of the Geological Survey of India, and notes on Botany were furnished by Major D. Praine, late Director of the Botanical Survey of India.

These Gazetteers, like those of all other Districts in Baluchistan, were commenced by Mr. R. Hughes-Buller, I.C.S., who, after visiting parts of Sarawan, Jhalawan and Kachhi, wrote the whole of Chapter III, and the greater part of Chapter II of the Sarawan Gazetteer; the section on Agriculture in Chapter II and parts of Chapters III and IV of Kachhi; and the Physical Aspects, History and Appendix II of the Ihalawan Gazetteer. The remaining sections in Chapter II of the Sarawan Gazetteer were written by Major A. McConaghey. The Jhalawan Gazetteer was put together by Rai Sahib Jamiat Rai, Special Gazetteer Assistant, from material collected by Mirza Sher Muhammad, and was revised by Lieutenant H. R. Lawrence, Assistant Political Agent, Kalát. The material for the greater part of the Sarawan and Kachhi Gazetteers was collected, as already mentioned, by Munshi Abdul Majid, and Chapters I and IV of the former and the major portion of the latter Gazetteer were also compiled by Rai Sahib Jamiat Rai and afterwards revised by me. The drafts of these two Gazetteers were examined by Major R. A. E. Benn, C.I.E., Political Agent, Kalát.

Much useful information has been derived from reports written from time to time by Major H. L. Showers, C.I.E., late Political Agent, Kalát.

The Gazetteers now published are the first which have been compiled of these Districts, and the work cannot hope to be in all respects complete and accurate. As our knowledge of the country expands, more definite and detailed information will be available and defects and deficiencies in the present work cannot fail to come to light for rectification in later editions.

C. F. MINCHIN, Major.

July, 1907.

Baluchistan District Gazetteer Series.

VOLUME VI.

SARAWAN.

Text and Appendices.



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TABLE OF CONTENTS.

SARAWÁN GAZETTEER.

: CHAPTER I.—DESCRIPTIVE.

•						J
PHYSICAL ASPECTS—					1	Page
Situation, dimensions a	nd orig	in of	name	•••		4
Boundaries	•••	•••				ib
Northern boundary	•••	•••				ib
Eastern boundary	***	***				2
Southern boundary		1	•••		···	ib
Western boundary	•••	. '				3
Configuration	•	•••			•••	iò
Hill ranges	•••					. ` '4
Nágáu hill		•••			• •••	ib
The Bangulzai and Kúr	d hills		•••	•••		,5
The Harboi hills		***	٠			7
Sárún hills	***	•••				8
Ko-Siáh range				·		ib
Koh-i-Márán and Mélbi	hills	••.		•••		٠9
Siáh Koh and Zibra hil	ls	•••		-6-		ib
Zahri-ghat	•••	•••	***			10
Chhuttok	***	•••		* ***	•••	ib
Píhunalath range	•••	•••	′	••		11
Garr hills	•••					12
River system		•••	•••	•••		13
Sarawán river	•••			•••	· · · ·	ib
Shírínáb river	•••		•••		•••	14
Gurgina stream	•••					15
Chiringi river	•••	•••	***	•••		ib
The Chauki river		•••	•••	٠.		16
Geology	•••	•••				ib
Botany	•••		***			19
Wild animals				·		21
CLIMATE, TEMPERATURE AND R	LAINFAI	T-7				
Seasons	••	***		·•	•••	ib
Winds	4	.:.	•••	•••	100	22
Earthquakes and cyclo	nes		••		,	ib
•						

•	-,				r	AGE
HISTORY	***	•••	•••	•••	•••	23
Greek period	•••	•••		•••	***	$i\check{b}$
Séwa dynasty	***	•••		•••	•••	ib
Arab period	***	***	•••			ib
Ghaznavid dynasty		***	•••	•••		24
Ghorids, etc		•••	• • •	•••	•	ib
The Arghúns	•••		•••	•••		ib
The Mughals		***		•••	•••	25
Rise of the Bráhuis	•••				•••	26
Ahmadzai family	•••			•••	•••	27
British connection	•••	•••	•••	•••	•••	31
List of Political Agents	•••		***		•••	41
Archæology		•	•			•
	•••	•••	**,*	••		42
Population—	•					
Ethnographical history			•••			44
Density					•••	ib
Towns and villages	•••	•••	•••	•••	•••	ib
Migration		۸.			•••	45
Immigration	•••	•••		•••	•••	46
Age statistics, vital stat		infar	nt mo	rtality	and	
infirmities	***	•••			•••	ib
Comparative numbers of				ivil co	ındi-	,
tion ···			***			ib
Marriage customs, etc.	***		•••		•••	47.
Language	***	•••				ib
0 0				***		49
Main divisions or Palav		,	•••	١		50
Fission			•••	•••		ib
Raisáni tribe	•••		•••	-41		ib
Rustamzais				•••	. 49	·52
Sheikh Husainis			•••		***	53
Sháhwáni tribe	,	-				ib
Umaránis					•••	55
Bangulzai tribe	•		•••			ib
Muhammad Sháhi tribe		4				57
' Ihikko Muhammad Shail		•••		•••	•••	59
Kúrd tribe			***			ib
Sahtakzais		***			•••	61
Lahri tribe		•••		,		62
, Sarparra tribe		•••	•••			64
Rodéni tribe	•••	•••	•••	•••	•••	65
Lángav tribe	***	•••		`	•••	66
TT 11.		٠	,			` 68-
~ .			٠.			69
Dehwars	•••		***	•••	•-•	7
					•	

Popu	LATION—contd-						` •	PAGE
*	Saiads		••	•••			•••	71
	Loris and servile	depen	dants	•••	•••	***		72
	Hindus	•••	•••		٠.	***	. ,	ib
	Religion and occ	upatio	n		-64	•	***	73
	Sheikh Rajab	••••	***	•••	****		ž	74
	Bíbi Sáhib	•••	•	•••				ib
	Sháh Mardán	•••	•••	•••	***		•••	75
	Sakhi Patehán					,	•••	ib
	Sháh Abdulla	•••	•••		•••	•••	•••	ib
	Names, Title, &	C	***			•••	•••	· 76
				 .				•
	CHAPT	ΓER	II.—I	ECOL	MON	IC.	. :	
Agric	CULTURE				•			
	General conditio	ns	***	***	***			. 77
	Soil		•••	••	•••		***	78
	Rainfall	•••	•••	•••	•••	•••		79
	Population enga	ged in	and de	pendei	nt on a	gricul	ture.	80
	Seasons of the ye	ear	***	·		•••		ib
	Principal crops	•••	•••.		•••		***	81
	Staple food-grain	s. W	heat	***		•••		82
	Subsidiary food				•.•	•••	•	84
			***		•••	444	٠	. 85
	Zurrat or júari	•••		•••		:		ib
	Millets (prísh)	•••		:	1		•••	86
	Rice (brinj)			•••		•••	•••	ib
	Pulse (mung) (Pi				٠	•••	•••	87
	Shirr (Lens escul				sum a	rvense		ib
			Nicotia					88
	Export		•••				•••	90
	Preparing tobacc	o for s	nuff-m	aking		•••		ib
	Experiments in I				***			ib
	Bhang		•••	***			***	91
	Poppy (Koknár)		•••			•••		Ъ
	Fodder crops, I			•••	•••	•••		92
	Fruit and vegeta				***			93
	Sweet melons		***		•••	•••		ib.
	Water melons	•••	***		•••	***	***	94
	Pumpkins	•••	•••		•••	•••	***	ib
	Methods of cultiv		***	•••	•••			ib
	Potatoes (Solanu				***		***	
	Carrots				•••			97 98
	Onions (Allium a	epa\		•••			•••	99
	Coriander	· pu	•••		•••	***	:	99 ib
		ano (E	 Ludia ti	nctoru		***		ib
	Manure and rota	tion		***	<i></i>	•••	•••	100.
					•••		•-•	****

AGRICULTURE—contd.—	-						
Vegetable produ	ction	•••	-01				
Fruit gardens	•••		•••	•••	•••		
Extension of and	l impr	oveme	nts in	cultiva	tion	•••	
Agricultural imp				•••		•••	-
Agricultural ad	vances	and	indebte	edness	of c	ultiv-	
ators				•••	•••	•••	
Mortgages	•••				·		
Domestic anima	ls			٠.	•••		
Horses			•••	•••	•••		
Camels		• • •		***		•	
Cattle	•••		***	•••	•••	•••	
Donkeys		•	•••	•••	••	•••	
			•••	`	•.	•••	
Pasture grounds	and d	ifficult	ies of f	eeding	cattle		
Cattle diseases	•••	•••					
Irrigation. Gen	eral c	onditio	ons	·		•••	
Kárézes	,		•••	• ,			
Method of constr	uction	of ká	rézes .		\ •••	•••	
Maintenance of A	káréses				•••		
Streams	•••		•••	•••	•••	•••	
Division of water		•••	***	•••	•••		
Water-divides		A		•••	•••		
Division of flood	water		•••		•••		
Watermills	***	•••			•••		
RENTS, WAGES AND PE	RICES-				-		
Method of distrib			duce in	irrios	ted lar	ads	
Special rates on o				•••	•••		
Dry crop lands	,,,		•••	***		•••	
System of produc						•••	
Wages	•••	· · · ·		•••	•••		
Agricultural labo				•		***	
Camel-herds		•••	•••		•••		
Village servants			•••	•••	•••		
Prices			•••		~-		
		•••	•••		•••		
WEIGHTS AND MEASURE		,					
			•••		***	***	
Measures of grain		•••	***	***	***	***	
Miscellaneous me			140		***	. •••	
Liquid measures		,	***		•••		
Linear measures		***		•••	***		
Superficial measu				***	•••	••-	
Measures of time		•••	***	***	•••	***	
Currency	•••	•••	***	••••	•••	•••	
MATERIAL CONDITION		•••	*	•••			

									PAGE
Fores	TS	•••	•••	•••	•••	•••	•••	•••	129
	Tribal meas	ures of	prote	ction		,·-•			130
	Minor forest	t produ	cts		•••				131
	Cumin (Cun	ninu m	cymini	$\iota m)$		•••		•••	132
	Asafetida (h	ing)	***	•••	•••	•••		•••	ib
	Liquorice (A	Khuzhd	ár) (G	lycyrrh	isa gla	ibra)	•••	•••	133
	Hyssop (zúf	a) [Ne]	peta ci	liaris]	•••	•••		•••	ib
	Other produ	cts			•••	• • •	•	•••	ib
Mines	and Miner	ALS							
	The Digári					•			ib
	Method of w			•••	•••	•••	•••		135
	Coal in othe	-			•••				ib
	Other miner	•		•••	•••			•••	ib
			•••	•••	•••	•••	•••	•••	
ARTS	AND MANUF								
	Embroiderie	sand	carpet	S .	••.		•••	•••	136
	Felts	•••	•••	•••	•••	•••	•••	•••	ib
	Dyeing	•••		•••	•••	•••	•••	•••	ib
	Leather wor	k	•••	•••	•••	•••	•••	•••	ib
	Khár	•••	•••	•••	•••	•••	•••	•••	137
	Sericulture	•••	***	•••	•••	•••	•••	•••	ib
Сомм	ERCE AND TI	RADE						•	
	Historical	•••		•••	•••			•••	138
	Existing tra	de	•••			•••			$\cdot ib$
	Trade with	British	Distr	icts					ib
	Trade with	Quetta	a		•••	•••	•••	•••	ib
	Trade with	Nushk	i <i></i>	•••	•••		•••		140
	Trade with	other p	arts o	f the K	Kalát S	state.	•••		ib
	Trade with	Kachh	i		•••	•••	•••	***	ib
	Trade with	Makrá	n		•••	•••	•••		ib
	Trade with	Jhalaw	án and	l Khár	án		•••		ib
	Internal tra	de		•••	•••	•••		•••	-141
	Octroi (Sun,	g)	•••	•••		•••	•••	•••	ib
	Octroi rates	on im	ports i	n Mast	tung	•••	•••		ib
	Octroi in Ka	alát	•••		•••			•••	142
MEAN	s of Commun	ICATIO	N						
	Railways	•••							ib
	Roads	•••			•••		•••		143
	Quetta-Kala			•••			•••	•••	ib
	The Bolán I								ib
	Quetta-Nus				•••	•••		•••	ib
	Other routes		•••	•••	•••			•••	ib
	~		•••	•••		•••	•••	•••	144
	Post and tel				•••	***		•••	ib
		0 1.		-					

			· .						PAGE
FAMINE	***	***	•••	•••			•••	•••	144
Hi	story of	periods	of sca	rcity		, ,		•••	145
Pr	otective 1	measur	es		•••	•••	•••	•••	ib
, (СНАРТ	ER I	II.—.	ADM	INIS	– STRA	ATIV	E.	
	RATIÓN A			١					146
	ternal tri			ation		•••	•••	•••	150
JUDICIAL		•••		•		•••			151
_	cal jirga.		•••	400	•••		•••	•••	153
	rgas	***	•••		•••	•••	•••	•••	- ib
•	evalent o	rime		•••	•••	···			ib
	portant (f crim	е			•••		156
Q d	sis		•••	· `	***	•••	•••		157
FINANCE			•						-
In	come	•••	•••	***	•••				ib
Ex	penditur	e	***	•••	•••	•••		•••	158
E	penditur	e incur	red by	the B	ritish (Gover	nment	4	ib
LAND R	EVENUE	•••				•••		***	159
	e gham		s dist	ibutio	n arro	ng th	e Muh		-37
	mad Shá				•••	•••			161
	e gham a								163
	odern rev					•••	***	•••	ib
	hnak set		-				•••		164
	nd tenur			•	•••				165
	venue fr				•••	•••	•••		166
	e origin				ropriet	tary ri			169
	rms of p			_	•••	•••			170
H_{ℓ}	add-shari	k	,**	•••	•••	•••	***	•••	ib
D^{a}	nghári	•••	•••	••• '					171
Ka	lang sha	rík			•••	•••		• • • •	ib
Já	vi	•••	•••	•••	•••	•••			172
Sa	rdári	•••	•••	•••	•••	•••	•••	•••	173
R	isi or m	aliki	••	•••	• •••		•••		ib
·Cu	istom of	period:	ical di	stribu	tion		•••		ib
Te	nants an	id tena	nt rig	hts	•••	•••	•••		174
Te	nants in	unirri	gated	tracts		•••	•••		ib
La	th Bazge	v	•••		•••	•••	•••	•••	ib
H_{ϵ}	add-shari	k bazg	ar	•••	•••	***	Ness	•••	175
	iádi bazg					•••			ib
Mo	odified for	rms of .	Lathba	nd ten	ancies	in the	. Kúrd	arèa	176
	isal batér		•••	***	•••	•••	•••	•••	ib
` Ti	ne shat-be	asgar ·	•••	***	•••	•••	•••	•••	ib
	iswál		***		•••	•••	٠	• •••	ib
H	eadmen a	nd the	ir rem	unerai	ion				· 177

T	Revenue-c	am#d _							PAGE
LAND	KEVENUEC	oniu							I AGE
	Remuneration						•••		177
	Mastung nic	ibat	***	***		•••	****		178
	Remuneration	n to r	aises,	&c., ir	dry c	rop ar	eas	•••	ib,
	Character of							··· ⁴	179
	Irrigated ar	eas.	The a	ssessn	nent in	Kalát	t. <i>So</i> :	wári	
	wa begár			•••		•••	•••	***	ib
	The barazad	syste	m	***	•••	•••			180
	The assessm	ent in	Mastr	ung;	A b-0-20	imín 0	r Aoza	ımín	ib
	Fixed assess	ments	s. Za	ri wa	kalang	•	•••		ib
	Mahsúl and	takhta	bandi			•••	•••		181
	The takhtaba	indi sy	ystem	of ma	hsúl		-		182
	Ijára	•••		•••				***	ib
	Appraisemen		•••	•••		•••		•••	ib
	Batái	•••		•••					i
	The various					•••	,	•••	183
	Rates of rev					•••	•••	•••	ib
	Rates in cro					***	•••	. 4.4.	184
	Rates levied							•••	ib
	Assessment						`	•••	ib
	Character of								
	Cesses			•••	orop (•••	***	ates.	ib
	Cesses in th					•••	•••		186
	Cesses on cr				+	•••	•••		187
	Cesses in ar						•••		ib
	Cesses on ga				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	••••		•••	188
	Revenue sys				•••	•••			ib
	Special kind					•••	•••	***	ib
	The system						•••		ib
	Transport o						***	•••	
	Rates of rev					•••			189
	Special pays						istant		ib
	Hait			-		***	***		190 ib
	Sursát		•••		***		••••	•••	
		•••	***	•••	•••	***		•••	ib
	Mehmáni	•••	•••	•••	•••	•••	*** '		191
,	Kái-choi	•••	•••	•••	***	•••	•••	•••	ib
			•••		•••	•••	•••	•••	192
	Special serv		•		•	_		***	ib
		•••	***	•••		•••		•••	193
	Distribution				nt in	Mastu	ng ni	ábat.	ib
	Government	_	own la	-		•••	•••	, •••	194
	Watermills	•••	•••	•••	••• • •	•••	•••	••	195
	Cattle tax	•••	•••	•••	•••	***	***	•••	ib .
	Revenue f							s of	_
	revenue a	nd gra	ain allo	owance	es, &c.		•••	***	196

Land	REVENUE-	contd.		,				F	AGE	
	Grain allow	ances	•••			•••		••	196	
	Tribal system of collecting revenue									
	Revenue levied by chiefs and headmen									
	The Lánga	v chie	f's mál	ia	••.				198 ib	
1	Kullois of M			• • •		•••		•••	ib	
	Mália receiv	ved by	the he	adman	of the	Shád	izai cl	an of		
	the Láng	av tri	be	••	•••				199	
	Revenue of	the M	(uhamı	mad Sh	áhi ch	ief	•••	•••	ib	
	Revenue le	vied b	y the L	Jmarár	ni head	man	in Kl	nad	ib	
•	Khaf levied	l by t	the Ba	ingulza	i chie	fand	Sháh	wáni		
	headman	***	•••	•••	***	***	•••	•••	200	
Misce	llaneous R	EVEN	JES-							
	Octroi	•••	***		•••		•••		ib	
	Intoxicating	g drug	s	•••	•••				ib	
	Consumers	and c	onsum	ption	•••	•		•••	201	
	Cultivation	of por	ру .		•••	•••	•••		202	
	Hemp drug	s	•••	•••	•••	•••	•••	•••	ib	
	Stamps	***	•••	•••	•-	•••,	***	•••	203	
	Salt	•••	•••	•••	•••	•••	•••		ib	
	Town Dues	·		•••	•••	•••	•••	•••	204	
	Miscellaneo	us re	ceipts	•••	•••	•••	•••		205	
Locai	Funds		•••			•••	••	•••	ib	
Publi	c Works		••	•••	•••	•••		•••	206	
Army				••		•••		•••	208	
Levie	S	•••	***		•••	•••	•••		209	
	Allowances	paid	to Sa	rawán	chiefs	by	the	British	_	
	Governm	ent		••	•••	•••			ib	
	Other allow	vances	to hea	ıdmen	•••	•••	•••	• • • • • • • • • • • • • • • • • • • •	210	
	Levies mai	ntaine	d by th	ie Khái	n	•••	•••		211	
	The amla		`	•••			•••	***	213	
,	Pay and all					evies	•••		214	
٠,	Amla unde	r the	Politica	al Advis	ser	•••	***	٠	ib	
JAILS-	- :					•				
	Jail Admin	istrati	on	•••	•••	•••	•••	•••	215	
	Cattle-pour	ıds		•••		•••	•••		· ib	
EDUC	ATION	•••	•••	•••		•••	•••	•••	- 216	
MEDI	CAL-									
	The Kalát	disper	nsary	•••	•••	•••			ib	
	The Mastu	-		у	•••	·	,		217	
	Prevalent d	isease		••	•••		. :	•••	ib	
	Epidemics			•	• • •	•••	٠٠٠.		218	
	Vaccination	n an d	inocula	ation	•••		١		219	
	Indigenous	reme	edies			111			220	

Medic	AL—contd.	_							F	AGE
	Charms	•••		••	•	•••	•••	•••	•••	ib
	Indigenou	s med	icines			•••		•••	***	221
	Working	of the	pice t	acket	tsyst	tem o	f sale	of quin	ine,	ib
	Village sa	nitatio	n and	wate	ersup	ply	•••	•••		222
SURVE	ys	:	***	••	•	•••	•••	•••	***	ib
CH	APTER	IV.	– MI	NIA	TU	RE	GAZ	ETT	EER	s.
CII			•							
			.—							•
	Brinchinn	au	•••	•••		•••		***	•••	224
	Iskalku	•••	•••	***	•••	***	•••	•••	***	225
	Isplinji		•••	•••	***	•••		400		ib
	Johan	•••	***	•••	***	. ***	***	***		227
	Kahnak	•••	•••	•••	•••		•••	***	***	228
	Kalat	***	***	•••	•••	***		•••	***	230
	Maray or	Marao	•••	•••	***	•••	. ***		***	232
	Mastung	•••	•••	•••	***	***	***	***	•••	233
	Narmuk	•••	•••	•••	***	•••	•••	900	***	236
	Shirinab	***	•••	***	•••	•••	***	***	•••	238
	Zard •	***	•••	•••	***	•••	***	***	***	239
Bibli	OGRAPHY	***	•••	••	•	•••	***	***	•••	240
APPE	NDICES	***	•••		••	•••		***		241
	Appendix	I.—A	lphab	etical	list	of Ag	gricult	ural,	Flock-	
	owners									
	and Jha					***				243
	Appendix			nent	shou	vino	Kárba	e Sn	ringe	-73
	etc., in					••••	***	,p.	ungs	ara
	-								•••	259
	Appendix							Mastu	ng, by	
	Major					(, I, E		***	***	261
	Appendix					•••		•••	***	266
	Appendix	: V	-Trav	ellers	' bu	ngalo	ws, e	etc., in	the	
	Sarawa	án Co	untry	(1905	()	•••	***			277
	Appendix	vI.	-Instr	uction	ns de	aling	with	the c	luties	
	of the									9
	relatio									278
	Appendiz									270
•	supplie Distric		ine	Dial	ıuı (m u	e sar		0
			~	• •		•••	***		***	283
	Appendix						g rate	s of re	venue	
	paid in	vario	us cro	wn la	inds	•••	***	•••	***	285

CHAPTER I.

DESCRIPTIVE.

The Sarawán country is the northern of the two great highland divisions of the Kalát State as distinguished from the southern or Jhalawán division. It lies between north latitudes 28° 57′ and 30° 8′, and east longitudes 66° 14′ and 67° 31′. The greatest length from north to south, is about 90 miles and the greatest breadth from east to west about 80 miles, and its total area is 4,339 square miles. The district takes its name from its situation to the north of the Jhalawán country, the names Sarawán and Jhalawán being derived from two Baluchi words, viz., sar meaning above or to the north, and jahl meaning below or to the south.

The boundaries of the district have never been delimited. Boundaries. Roughly, the Sarawán country meets the Quetta-Pishín and Sibi districts on the north, the Jhalawán country on the south, the Bolán pass and Kachhi on the east, and the Chágai and Khárán districts on the west. For administrative purposes, rough boundary lines are recognised as follows:—

The northern boundary commences from the junction of the Northern Kardgáp valley with that of the Shorarúd in the Quetta-Pishín boundary. District at a point to the south of the Sháh Nawáz village and crosses the valley to the neighbourhood of the Kalán Bárak pass, and then northwards along the crest of the Mashélakh Range and across the head of the Dulái valley to the Chiltan Range. Crossing the latter eastwards, it proceeds to the south of the Mián Ghundi hill by the hillock known as the Bhalla Landao at the foot of which a pillar was erected in the course of the Quetta tahsíl Settlement (1892—1896), thence along the northern bank of the Chhalri torrent (Chhalri-na-Jhal), crossing the Railway line under bridge No. 294 (mile $\frac{527}{21}$) about midway between the Sariáb and Spézand Railway stations, until it joins the Murdár hill. Turning north-eastwards, the boundary crosses the Dokán Narai to which point the Sahtakzai country extends and thence it

PHYSICAL ASPECTS.

runs south-eastwards to a point above Pír Ismáil where it meets the Sibi District.

Eastern boundary. On the north-east and east, the Bolán pass district meets the Sarawán country, and in the latter are included the whole of the hills on either side of the pass which are possessed by the Sahtakzais and Kúrds. The actual line of boundary is, however, unsettled. It encloses the area possessed by the Kúrds and Phugs and passes to the west of Bibi Náni which is in the Bolán district, and then runs southwards along the eastern slopes of the Zámuri, the Bhaur, and the Nágáu hills to a point close to Tírkási hill. The three hill ranges just mentioned divide Sarawán from Dádhar and Sanni and Kachhi. The country possessed by the Koh Kullois and Jatois of the Lop valley is thus included in Sarawán; while the Dádhar niábat and the country of the Jatois of Sanni is included in Kachhi.

Squthern boundary.

At Tírkási, the boundary line meets the Jhalawan country, and runs westwards, the tracts held by the Jattaks, the Gazgis, and the Nicharis lying in Jhalawan. From Tirkasi, the possession of which is (1905) disputed by the Jattaks of Jhalawan and the Lahris of Sarawan, the line runs along the southern slopes of the Gurgína pass and, including the southern spurs of the Sárún hill, runs over the Rúshi hill north-west of Gazg and then across the Tahlgán valley into the Harboi hills. From Tahlgán, the line is defined by the watershed of the Mehnaz and the Bell rivers, and thence passing through the Harboi hills the line divides the Shahwani (Sarawan) and the Nichari (Jhalawan) tribal areas above the Sohr valley, leaving to the south Kakku owned by the Báránzai Méngals of Jhalawán. Shahwani tribal area includes in Sarawan the Ali Dasht valley and comes to Kalát over the Záwa hill south of that place. From here the watershed between the valleys of Kalát and Rodénjo marks the boundary between Sarawan and Jhalawan. Due west of Kalat, the boundary runs straight into the Garr hills passing along the watersheds between Chháti and Dasht-i-Gorán and between the Hapursi and the Pahrod rivers; farther west in the Garr hills, parts of the latter known as the Shur, Garr, Anguri. and Nalli all lying to the south-west of the Nimargh valley are

included in Sarawan. The south-western boundary of the dis_ Physical trict has lately been disputed by the Khárán Chief who claims (1904) the Garr hills as far as the Chiringi river. It may here be mentioned that it is doubtful whether the valley of Nimargh which is divided from Gurgína by the Kamund watershed should form part of Sarawan or Jhalawan but for purposes of the Gazetteer it has been treated in the former.

On the west, the boundary between Chagai and the Sarawan Western country was delimited in March, 1903, and the watershed of the Garr hills was established as the line of division between the two districts. The boundaries of the Quetta-Pishin, Chagai, and Sarawan districts unite in the hills west of Kardgap and are assumed to be formed by the watershed of the Singbur Chaman.

The general character of the district is mountainous, consisting Configuraof a series of parallel mountain ranges, running north and tion. south and enclosing valleys, sometimes of considerable extent. which lie at an elevation of from 5,000 to 6,500 feet above sea level. In the western portion of Sarawan the principal valleys are Gurgina with Kardgap, Mungachar, Chhappar, and Kalat. In the north is the large valley of Mastung with its two branches the Khad and the Shirinab running southwards, and the valley of Kahnak with Dulái running northwards into the valley of Aghbarg in the Quetta tahsíl. East of a line drawn between Kalát and Mastong the valleys are smaller and include the Morgand, separated from Mungachar by the Mélbi hill: Kúak and Kábo east of Khad; the small valley of Johán with Isplinji and Marav to its north, and, lastly, the two larger northern valleys of the Dasht known as Bhalla Dasht and Gwanden, respectively. The Bhalla Dasht includes the Zarakhu valley stretching as far as the Sor Range in the extreme north. Narmuk and its connected valleys of Drang and Lop in the south-eastern corner of the district are isolated and surrounded by lofty hills.

These valleys, some of which are intersected by numerous learézes, consist mostly of alluvial soil in the centre with a pebbly slope of varying length rising on either side to the surrounding mountains and present distinct features. Those on the west are long and of level surface; but not so broad as the central valleys PHYSICAL ASPECTS.

which possess considerable tracts of good culturable soil; the valleys in the east are usually hemmed in by hills and consist of small cultivated tracts of terraced fields along sources of perennial water; such are the valleys of Iskalku, Shékhri, Kishán, Johán, Robdár, Jam Bárari, Khajúri, and, finally, Lés in the extreme north. Nimargh in the extreme south-west is another instance of this class of valley. Another feature of the eastern valleys is their deep depression in the earth and their having no exit drainage; in the latter category may be classed the valleys of Kúak and Marav. There are also large tracts, sometimes cultivated, situated on the tops of mountains, such as the plateau of the Sárún, the Tahlgán, and Pusalak in the Harboi hills, the Dashturi south-east of Isplinji and the Ali Dasht plateau east of Kardgap. With the exception of a small area in the south-west round Nímargh of which the drainage runs into Khárán, the country ascends from north to south up to the southern boundary of the district, the line of which, roughly drawn east and west through Kalát, marks the watershed between Sarawán and the Jhalawán country.

Hill ranges.

The hill system of the district forms the middle portion of the great Central Bráhui Range. The hills are composed of a succession of parallel mountain ranges, which, rising from the plains of Kachhi, gradually increase in height in successive steps to the central ridges, from where they again decrease in height westwards. Their general direction is from north-north-east to south-south-west, and this uniformity of strike is wonderfully preserved throughout. As a rule, the hills are fairly accessible and present few difficulties to footmen. Foot-paths lead over them east and west, and easy tracks run north and south, traversing the valleys.

Nágáu hills.

Commencing from the east, the first range is the Nágáu which extends from Gazg in the south as far as the Bolán Pass on the north, with a total length in the district of about 55 miles. This range borders on Kachhi and continuations of it to the south run under different names through the Jhalawán country as far as the Múla. The northern extension of the range includes Bhaur (7,220 feet) and Zámuri (4,962 feet), while an offshoot, the

Dojhampk, skirts round the north of the Lop valley and unites with PHYSICAL the Bangulzai hills; the Wáro (3,360 feet) is another offshoot on the east of the Jam Bárari valley. The Nágáu forms a formidable barrier between the plains of Kachhi and the Sarawan highlands. It is a precipitous range more especially on the eastern side, and is rocky, rugged, and barren throughout with the exception of a small portion called Dombak east of the Kaltách valley, which contains a pistachio forest. The highest point is the Nágáu peak proper standing in the centre, 7,920 feet above the sea; to its south the height decreases gradually from 7,800 feet east of the Daráj valley to 7,000 feet near Tírkási. Northwards, the range descends to 7,220 feet at Bhaur and to 3,360 feet at Waro opposite Bíbi Náni in the Bolán. The eastern slopes are intersected by numerous hill torrents which debouch into the plains under different names. On the eastern side, opposite Sanni in Kachhi, ferrous sulphate is found. Five tracks lead from Narmuk to Kachhi over this range, viz., the Bhaur leading to Dádhar, the Judusk, the Zágh-na-Kasar, the Hurro or Rodh-na-Kasar, and the Nalani, all leading to Sanni. All of these are unfit for pack animals except for donkeys. There are no permanent inhabitants. Small patches of dry crop area exist which, after rains, are cultivated by the Kullois of Lop, and by the Zahris and Jattaks.

West of the Nágáu hills is a long range belonging to the The Bangul-Bangulzais, Kúrds, and Sahtakzais. It is about 80 miles long hills, and lies between Narmuk in the south and the southern slopes of the Zarghun in the north. The upper portion of this range encloses the Bolán pass on either side and, after skirting round the head of the Bolán pass, extends in an easterly direction as far as Mach in the Bolán. These hills form a single system, but bear separate names in different localities, the best known among them heing the Taláng, a huge flat massive hill in the extreme south, lying between Robdár and Narmuk, the Moro or Morav north-east of Johan, the Dilband (8,770 feet) with its northern peak the Kandahár, Ispéd (8,219 feet), Airo (5,853 feet), Pandar Gat (7,521 feet) and Sakht (7,345 feet), all lying in the Bangulzai tribal area east of Isplinji and, still further to the east, the Rúshi (7,626 feet) west of Khajúri. North of this, the hills

Physical Aspects. east of Marav and Gwandén valleys belong to the Kúrds and include the Taláng (8,110 feet), Sharru (7,206 feet), Trakko (6,899 feet), Kulli (7,341 feet), Marzubán (7,536 feet) and the following in the Sahtakzai country:—Zén (8,331 feet), Shúg (10,300 feet), Nodgwár (10,390 feet), Pír Mard (8,150 feet), Kandahár (6,265 feet), Gundaghar (7,780 feet), Chichob, and the Hapursia or Shahr-na-Lath east of Lés. Lastly may be mentioned the Sor Range which lies between the Murdárspur of the Zarghún and the range of hills under description, and is well known for its coal mines, a description of which is given in Chapter II.

The whole range is, perhaps, the most difficult in the district; it is precipitous and intersected by gorges, the most important being those of the Moro and the Parri. The former is known from the Moro hill through which it runs and consists of a series of deep gorges, absolutely impassable, commencing from east of Johán till the exit of the Sarawán river into the Jam Bárari valley. The Parri gorge is a huge ravine dividing the Rúshi on the north from Dilband in the south. Both of these hills present lofty, unscaleable cliffs and are equally inaccessible. range can be crossed into the Bolán at several points. The passes include the Pandar Gat east of Isplinji, the Machhi Khand east of Marav, and Gishtari Khand east of Gwanden. The first named is impracticable owing to a landslip which, about 1861, blocked the bed of the Parri river along which the track formerly ran. An alternative foot-track leads to Jam Barari over the Dilband but presents great difficulties. From Maray, three footpaths lead over this range into the Bolán, viz., the Rúshi-na-Kasar and Kunj-na-Kasar leading to Khajúri, and the Wáro-na-Kasar which going via Tunitok meets the Bolán road. From the Gwandén valley two footpaths over the Gishtari pass lead into the Bolan; they are fairly easy and are called Gishtari-na-Kasar and Bagg-ráhi. The Sahtakzai hills are crossed at four points, viz., between Zarakhu and Dozán over the Dozán Khand and three tracks between the Les valley and Mach, locally known as the Kuchh, Bangu, and Uzhbásh, all leading over the Shúg hill.

For the most part the hills are barren and bleak, but some of those forming part of the Bangulzai and Sahtakzai country are well wooded with pistacia khanjak, pistacia mutica, juniper, and PHYSICAL wild almond; and cumin, hyssop, and asafetida are also found. The game consists of the murkhor (Capra falconeri) found on rocky heights and the gadh (Ovis Blandfordii) which are numerous. A large population consisting of Mazaráni Marris, Pahlwanzai Mengals, Jhikko Muhammad Shahis, and Sahtakzai nomads with their flocks is found during the summer, east of Isplinji and in the Sahtakzai hills.

South of the Bangulzai hills is the fine Harboi range about The Harboi 9,000 feet high, which lies partly in the Jhalawan country. A hills. description of this portion of the range will be found in the Jhalawan Gazetteer. The portion of the range in Sarawan is that part of it which is held by the Shahwanis and the Lahris, and lies roughly between the Surkhen valley in the south to Johan in the north. Among the highest points may be mentioned Hamandu Kushta 9,040 feet high, a splendid rocky prominence lying to the west of the Laur valley, Zendáni (9,424 feet) on the east of the Laur, Kakku (9,830 feet), Sirka-kohi (9,530 feet), Hinar (8,095 feet), Déhza (8,680 feet), Chhab (8,150 feet), Dímboi (9,075 feet), and Gish (9,000 feet) opposite Johan. A bungalow was built in 1904 on the Gishk hill for the summer residence of the Political Agent, Kalát.

The ravines and water courses are numerous and very deep. The drainage is carried northward by the Sarawan river which rises in these hills, and partly also by the Sukléji on the east and the Shirinab on the west. The cultivated tracts include several small valleys on the side of Nichara, and others in the Sarawan portion of the hills include Pusalak and Tahlgan on the range itself and the picturesque valleys of Iskalku, Shékhri, and Kishan below the western slopes. There are two fine gorges in the Chháb and the Múmi rivers, respectively. The track which rans through these gorges between Shekhri and Gazg is extremely difficult and is impassable for laden animals. Another track between Kalát and Níchára lies via the Ali Dasht valley and Sanjarkushta and Sarisher passes. A third crosses the hills by a short cut from Ali Dasht into Surkhén, but is practicable only for footmen and donkeys. An account of the geological formaPHYSICAL ASPECTS. tion and of the fauna and the vegetation of the Harboi range written by Mr. Hughes-Buller, will be found in the Jhalawan Gazetteer. Abundant pasture is available during the summer, at which season the hills are grazed over by numerous flockowners of the Shahwani, Pandrani, Lahri, Jattak, and Baranzai Mengal tribes. The only places which have settled inhabitants are Iskalku, Shékhri, and Kishan.

Fárún hills.

The most conspicuous hill in the Harboi Range in its physical features is the Sárún, an offshoot of the main range, overlooking the Narmuk valley and forming a huge wall many miles long, running from Johan to Gazg. On the top is a lofty, plateau with a general elevation of 7.000 feet. It is almost surrounded by steeply scarped sloves, which, viewing it from the valley, give it the appearance of a huge bastion. The summit is undulating and intersected by many torrents draining off south-west and is a favourite pasture ground for the Lahris in the summer. On the top there is a stone enclosure used as a mosque and erected by Nasír Khán I, and there is also a large pool known as kar in the centre of the cultivated portion of the plateau where water collects after heavy rains and is utilised by flockowners and cultivators. The juniper and mashmonk (Prunus eburnea) grow Sárún and the southern slopes opposite Gazg, and parts of the hill west of Nigaur contain a fair sprinkling of pistachio. most part, however, the mountain is rugged and barren. The best path to its summit leads from Takht and is practicable for pack animals. Footpaths lead to the top from Hasanjoi, Doséh. Hanári, and Gurgína.

Koh Siáh range. A continuation of the Harboi hills runs northward in a thin ridge as far as the Darwáza pass parallel with and west of the Bangulzai hills. It bears several names. The southernmost hill is the Koh Siáh (10,210 feet) so called from its colour. It is well known locally from the cumin seed produced on it. Northwards, the hills are Garro (7,585 feet), which has two small plots of cultivated land west of Isplinji; Ispéd, on each side of which are the two passes known as Tang, leading to Isplinji; Khap and Kádugar between which is the Játu pass (7,265 feet) and, lastly, the Dhík hill west of Gwandén, which has a few juniper trees, but the remainder of the range is devoid of any verdure.

West of the Harboi and dividing the latter from the valleys of PHYSICAL Kalát and Mungachar is a small range, the most important hills Koh-i-Márán of which are the Koh-i-Maran or "hill of snakes," and the and Melbi Melbi, which derives its name from the melab (Corylus colurna) plant which grows on its top. Between the two, stands a small hill called Pad-i-Márán, 8,820 feet high. Next to Chiltan, the Koh-i-Márán (10,730 feet) is the highest mountain in the whole of the Central Bráhui Range. It stretches northwards into the Kúak and Kábo valleys and its base is higher than that of any other mountain in the district. The eastern slopes are extremely precipitous and full of ravines and caves which abound with wild sheep and Sind ibex, and Nasír Khán I is said to have undertaken many a shooting excursion to this mountain. Juniper and olive occur in profusion on the high cliffs and cumin grows after good rains. The Mélbi (9,180 feet) continues in a ridge to the south of Kalát. The principal hills are Joghéno (7,045 feet), Girda (7,198 feet), Panjlaki and Zawa (7,903 feet), the last named resembling the hump of a camel. Tracks from Mungachar and Kalát cross the range at several points, viz., over the Sheh Háji and Maki Sham passes between Mungachar and Johan; via Bolkhé between Kalát and the Morgand valley; through the Iskalku gorge between Kalát and Iskalku; and lastly over the Panjlaki pass from Kalát to Níchára. The Maki Sham pass derives its name from a ferrous sulphate mine found close by at the northern end of the Melbi hill. The Melbi hill is fairly well wooded with juniper and olive, and on its western face are several caves which are

The outline of the hills in the neighbourhood of Mungachar Siah Koh and Kalát is very broken and uneven, a continuous line being and Zibra seldom distinguishable. The two chief hills are the Siáh Koh west of Kalát and the Zibra between Kalát and Mungachar. Both are isolated. The Zibra (8,400 feet) is a huge hill more or less round in shape and remarkable only for its barrenness. Through the Lágháni pass (6,870 feet) over this hill lies the old Kalát road now abandoned. The Siáh Koh is 7,850 feet high and forms a background for a series of low broken hills running southwards and dividing Kalát from the northern head of the valley of Rodénjo.

occupied during the winter by Pahlwanzai Mengal flockowners.

The rest of the range is bare of vegetation.

PHYSICAL ASPECTS. On one of the spurs of this range, called Sháh-i-Mardán, 7,150 feet high, stand the citadel and town of Kalát. The main hill consists of dark-grey limestone, excessively hard. Owing to the difficult and inaccessible nature of the Siáh Koh, the mountain forms the abode of a number of wild sheep, Sind ibex, hyena, and wolves. A sprinkling of juniper is found on some of the cliffs, as well as of pipal (Daphne oleoides) and mashmonk (Prunus eburnea) and on the western slopes a few pistachio trees grow.

Zahri-ghat.

The Zahri-ghat ridge commences from the Chiltan * hill which partly lies in the Quetta tabsil, and, skirting the Mastung valley to the east, terminates in Mungachar; it divides Mastung and Khad on the west from the valley of Bhalla Dasht and its offshoots on the east, The principal peaks are Kumbéla (8,401 feet), Amach (8,800 feet), Zindan (8,100 feet), Zahri-ghat (8,810 feet) Ab-i-Gul (9,220 feet), Jumi (8,745 feet), and Marghi (8,990 feet). The range consists of hard rock and is a difficult one. Dr. H. Cook writing in 1860 describes the hills round Mastung as "extremely hard and fine in texture, veined with thin seams of carbonate of lime." The passes include Nishpa and Lakk connecting the Chiltan with the main range. north of Mastung, Surkh Bajo between Bhalla Dasht and Mastung, and Ab-i-Gul over which runs a path from Mastung to Maray and Isplinji. All are fit for laden camels Over the Lak lies the metalled road from Quetta to Mastung. At Ab-i-Gul a coal seam occurs and there is also a small bit of land cultivated by the Kúrds. For the most part the range is barren; the Sunchok, Zahri-ghat, and Ab-i-Gul hills are well wooded on the higher cliffs with juniper and pistachio; wild almond and olive are also occasionally met with. Round Marghi and Ab-i-Gul chikor abound.

Chhuttok.

The Chhuttok is a narrow range about 30 miles long separating Khad from Shirinab and terminating in Mungachar opposite to the southern end of the Zahri-ghat range. The principal heights are Khaleghai (8,474 feet) in the extreme south, and Chhuttok

Gasetteer, pages 8 and 9. ...

(7,967 feet) in the north. A track from Kanéti in Shírináb crosses PHYSICAL : these hills through the Chhuttok pass to Mastung. Chhuttok is ASPECTS. fairly well covered with pistachio forest belonging to the Shahwanis. The rest of the range shares the barrenness common to There are several ravines and most of the hills in the district. caves on the western face, the most important cave being the one near Kanéti from which the latter place derives its name.

The next ridge is a continuation of the Mashelakh range in the Pfhunalath Quetta-Pishin district and runs southwards for about 90 miles range. throughout the length of the Sarawan country, uniting ultimately with the Garr hills, south of Nimargh. It runs in the usual northnorth-east to south-south-west direction and divides Shorardd from Mastung; Kardgáp and Gurgína from Mungachar; and Nímargh from Chhappar. At its northern end in Sarawan, the range is known as the Bárak from the two passes called kalán or long and khurd or small Bárak, which cross it. Southwards, it is known by several names in different localities, but the best known name is Pihunalath. The range is quite narrow and is somewhat precipitous on its eastern sides. The elevation gradually increases from north to south. The mean height is 5,899 feet near the Kalán Bárak south-west of Kahnak and the highest point is Istrák 9,099 feet), in the extreme south, south-west of Chhappar. Other principal points are Lohra (8,181 feet) east of Nimargh, Umraráhi (7,634 feet) and Morinko (8,197 feet) west of Mungachar, and Már (7,935 feet) east of Kardgáp. The range is crossed by several passes; the principal ones from north to south are Shaho Kushta leading from Dulai into Shorarud, Kalan Bárak and Khurd Bárak; Hillhi and Ali Dír connecting Mastung and Kardgáp, Rodangi west of Kanéti (Shírináb); Píráni Sham west of Khúni (Shírináb), Umraráhi west of Kárchháp (Mungachar), and Pihi or Nimargh-na-khand west of Chhappar. Except the Umraráhi, all are fit for laden camels. Two other footpaths known as Garai and Joak lead to Kardgap from Shirinab over the range. The Sheikh Wasil gorge between the two Baraks is a large defile enclosed by peaked rocky hills for the exit of the Shirinab river into the Shorarud. The Quetta-Nushki Railway runs through this gorge. East of Kardgap on the top of the hill

Physical Aspects. is a large uncultivated tract called Ali Dasht which is drained off northward by the Túrai river. Another important stream which rises from these hills is the Sarband with its source at the Piráni. Sham pass through which lies the old road between Kalát and Kandahár. On the western side of the range opposite Kardgáp grows a good deal of pistachio belonging to the Sarparras, and the high hills of Morinko, Lohra, and Istráb are well wooded with juniper. The Istráb produces also a little cumin.

Garr hills.

The westernmost hills, called the Garr, separate the Sarawán country from the Nushki district and are practically a continuation of the Khwája Amrán, uniting with the Sarlat hills north of the Galangúr valley. These hills run south-south-west skirting the Sarawán country for about 60 miles. The crest maintains a fairly uniform height. The principal hills include Múdenak (5,990 feet) west of Kaftári in Kardgáp, Rodangi (6,250 feet) south-west of Gurgína, Chinnav (6,625 feet), Garr proper (6,770 feet) and Lamboi-na-tavík west of Nímargh. The Gori-Brát valley lies along the stream of the same name and a few flats in it are occasionally cultivated. In the neighbourhood of Nímargh there are several ravines which contain a good deal of cultivation.

. For the most part the hills are bare of vegetation, but, round Nímargh, pistachio is of considerable importance to the Sásolis, Sumaláris, and other tribesmen, who occupy these hills during the summer with their flocks. In addition to pistachio, asafœtida and liquorice were formerly produced in these hills in considerable quantities, but the production of the two latter commodities has fallen off greatly in recent years. The principal routes crossing the range in the district are the Quetta-Nushki road, over the Galangur Kotal; the tracks via Mudenak, Bundi and Rodangi which join the above road at Kishingi from Gurgina; the Páchnán track from Nimargh to Kishingi via Somálo Hinár; and the Nímargh-Nushki track via the Zéni Khand pass and Munjro. The route from Mastung to Khárán lies through the bed of the Chiringi and also traverses the Garr hills. All are fit for laden camels except the Páchnán which is practicable only to footmen and donkeys.

The drainage of the district is carried northward by the Shírínáb Physical and Sarawán rivers, which drain nearly the whole catchment area River system. of the country. Only small tracts in the south-east, south-west, and north-east are drained by other streams of which the most important are the Sukléji, the Chiringi, and the Chauki-na-jhal. A description written by Mr. Hughes-Buller of the characteristics of the rivers of the Jhalawán country will be found in that Gazetteer at the commencement of the section on "River system," and is equally applicable to the rivers of Sarawán.

The Sarawan river is formed in its upper part by the junction of Sarawan the Bel and the Morgand, the former rising in the Harboi hills river. near Réjái and Kargaz and the latter in the eastern slopes of the Mélbi hills. Its total length to Bíbi Náni where it joins the Bolán is about 75 miles. The river runs through a most difficult and mountainous country. It is called the Sarawan after the confluence of the Bél and the Morgand; about 5 miles east of Johán on entering the Moro hills, it changes its name to the Moro and after its exit into the Jam Bárari valley becomes the Dárdán under which name it joins the Bolán at Bíbi Náni. For about the first 25 miles of its course the direction of the river is from south and south-west to north-east and thence due east as far as the Moro bills where it again turns north and north-east through a series of difficult gorges formed by high, steep, rocky banks. For a considerable portion of its course the stream is perennial but appears and disappears at intervals. It first appears in the Bél about 2 miles south of Kishan where it irrigates the flats known as Ahmad Band and after disappearing for a short distance re-appears near Kishan. Here a large spring augments the water supply which is utilized for irrigation in the Morgand valley. Further down, the small flats known as Sarawan, midway between Sháh Mardán Ziárat and Johán are irrigated. On reaching Johán the volume of water increases and most of the irrigation at that place is done from the river. On emerging from the Moro hills, the river again irrigates a considerable area in Jam and Bárari, but the water disappears before reaching the Bolán. The bed is throughout stony, and at places full of boulders. Near Johán and Jam Barari a pretty thick growth of oleander (Nerium odorum) covers the bed. The road from Kalát to Bíbi Náni crosses and

PHYSICAL ASPECTS.

recrosses the river bed from Morgand to Johán and again in the Jam Bárari valley. A sudden flood in these parts is very dangerous. The principal confluents are the Sinjdi and Katki from the Koh-i-Márán; the Khaisár and Shíshár from Koh-i-Siáh; the Pashak from the Bangulzai hills; the Sopak from the Harboi range; the Púdgili and Nágáu-na-jhal from the Nágáu hills, in conjunction with several torrents from the Sárún; the Robdár-na-jhal from Robdár; and, lastly, the Parri which meets the main river to the north of Bárari. By far the largest of these are the Pashak and the Parri which drain the Bangulzai hills in the north and south, respectively. Of all these the Robdár-na-jhal alone has a perennial flow of water which irrigates lands in Robdár.

Shirinab river.

The Shírínáb river rises about 22 miles south-east of Kalát in the Harboi bills and joins the Shorarúd in the Quetta-Pishín district under which name it eventually falls into the Pishin Lora, Its total length in the district from its source is about 100 miles. As far as the north of Kalát, where it is called Kalát-na-jhal, its course is past Malkhi and Ziárat whence the stream divides itself into two branches, which flowing each side of the Chhappar hill again join each other north of Purdu; the western branch in the meantime is met by the Rod from Chháti. The course of the river then runs north through Mungachar, Zard, and Shírínáb. After its exit from the Shírínáb into the Mastung valley the stream turns to the left through low hills and flows westward across a portion of Kahnak, finally piercing the Sheikh Wasil gorge into the Shorarud plain. In its upper part as far as Kulu Kalát in Chhappar, the bed is a dry stony watercourse about 100 yards wide but the rest is marked by the absence of shingle and stone, lying as it does, some distance from the hills, and through the centre of alluvial valleys. The perennial stream first appears near Zard and, with short intervals, where it disappears underground, continues throughout. Permanent irrigation is taken from it only in the village called Shirinab at the northern end of that valley. The bed is full of saline efflorescence and is covered with tamarisk from Karbukha in Mungachar downward, the tamarisk growth being especially thick from Rodangi in Zard northward. The bed greatly varies in depth and breadth. While in places in alluvial soil, floods have excavated a deep bed with banks 15 to

20 feet high, at others the stream flows over the hard surface, the PHYSICAL channel being indistinguishable. Such is the case near Togau in Chhappar and at Kur in Mungachar where, whatever amount of flood water may come down, is taken up by the small distribution channels constructed by cultivators. A flood, therefore, unless unusually violent, seldom travels any great distance without being taken off for cultivation purposes in such localities. Beyond these localities the river bed is again formed and soon assumes considerable dimensions. The principal tributaries of the Shirinab are the Iskalku-na-jbal from the Harboi through the Iskalku valley; the Garrári-na-jhal from Garrári; the Lágháni and the Pinzai from Mungachar; the three rivulets which afford considerable permanent irrigation in the Mastung valley, viz., the Rod-Sariab about 32 miles long coming from Khad, the Pashkaram, and the Mobi about 13 and 20 miles long, respectively, coming from the Zahri-ghat range, and lastly, the Turai, a hill torrent about 20 miles long, draining the hills east of Kardgap and which joins the main river near Sheikh Wásil.

The Gurgina stream rises in the Kamund watershed and, Gurgina draining the hills bordering the Gurgíns-Kardgáp valley, empties Stream. itself into the Shorarud in the Quetta-Pishin district. It runs for about 40 miles in the Sarawan country. The banks are well defined; the water is brackish and the bed comparatively free from stone and covered with tamarisk from the Daulat Khan village downward. A perennial stream appears from Táj Muhammad village northward and a number of artificial open channels have been led from the bed to irrigate the lands called Thal Gwanden. The flood water is utilized only in southern Gurgina by small temporary dams.

The Chiringi, known in its upper reaches as the Umrarabi, Chiringi is formed from numerous torrents descending from the Garr and Pihunalath hills and its watershed marks, the parting line of drainage between the three districts of Sarawan, Jhalawan, The stream runs in a south-west direction to Khárán and forms one of the affluents of the Baddo river. The bed is stony and covered with tamarisk. The principal tributaries are the Somálo Hínár, the Zéni and the Gor-i-Brát from the north, the Hapursi from the south, and the Bubaki

PHYSICAL ASPECTS.

and Dúshai from the east. Perennial water is found in the Hapursi in the neighbourhood of Nímargh where some flood cultivation is done; a little cultivation of a similar nature is also met with in the Gor-i-Brát, the bed of which contains a large tamarisk jungle known as Shéh Muríd-na-jangal. The Mastung-Khárán road runs along the bed of Chiringi river. A track to Nushki crosses the river bed west of Nímargh.

The Chauki

The Chauki river rises at Dokán Narai and collects the drainage of the southern slopes of the Zarghún. The Lés stream joins it from the south at Dobandi and, lower down, the Narwári from the west at Pír Ismáíl. Permanent irrigation is taken off in the Lés valley, at Chauki, and Astangi. The river enters the Sibi District at Pír Ismáíl under the name of the Sángán river as a tributary of the Nári. East of Chauki, the passage is through difficult gorges, the principal of which are the Ar-Rakhshán, Sam Rakhshán, Survikán, and Tiri tangi. In these parts the bed is covered with tall reeds.

An account of the Sukleji river will be found in the Jhalawan Gazetteer.

Geology.

The following account of the geology of the district has been written by Mr. E. Vredenburg of the Geological Survey of India, who visited the Sarawan country in 1905:—

"The eastern border of the rectilinear Gurgína valley divides Sarawán in two very unequal sections belonging to different geological regions. The western section, of which only a comparatively narrow strip is included in the district, consists of a monotonous succession of greenish sandstones and shales known as the Khojak shales which are of oligocene age, and correspond with the oligocene 'flysch' of Europe. These beds are particularly well exposed in the hills that rise west of the valley of Gurgína.

"The eastern and larger portion of the province exhibits an extensive succession of strata ranging in age from carboniferous to plioceue, the predominating formation being the jurassic.

"Unlike what one usually observes in countries where denudation has followed a more normal course, it is the anticlines that

constitute the ridges, the synclines forming the intervening Physican valleys. This results, partly from the deficient rainfall owing Aspects. to which denudation has remained in a rudimentary stage, partly owing to the prevalence of calcareous rocks through the fissures of which the rain water at once sinks to the low level of the narrow and deeply encased river gorges, before it has time to gather in floods of sufficient volume on the hill-slopes to produce any appreciable erosion.

"The formations met with in eastern Sarawan may be tabulated as follows :--

Geological Composition of Strata.

Principal Exposures.

and Lower Pliocene.

Upper Miocene "Siwalik" beds, consisting of conglomerates, sandstones, and gypsiferous clays.

Foot-hills along the border of the Kachhi plain at the easterng boundary of the district.

Oligocene.

"Nari" beds, gypsiferous clays, sandstones, and limestones, identical in age with the Khojak shales of the western part of the district, containing the fossil foraminifera Lepidocyclina and Nummulites intermedia which characterise the oligocene in Europe.

Some of the foot hills bordering the Kachhi plain, foot-hills west of the Shirinab and Mungachar valley; Drang and other synclinal valleys west of the Nágáu Range,

"Upper" and "middle Khir thar." Massive limestones with Nummulites aturica, N. laevigata, N. (Assilina) spira.

Mélbi hill, ranges east of Kalát, Sárún plateau.

"Lower Khirthar." Thinbedded shales, limestones and sandstones of flysch facies, with N. laevigata and N. (Assilina) exponens, underlaid by massive black limestones containing N. irregularis.

The "flysch" facies is observed principally in the south-eastern part of the district. The lofty Nágáu range consists of the massive limestone.

Middle Eocene.

"Laki" beds, shales, gypsiferous clays, sandstones, and occasionally coal seams and limestones, with N. aturica and N (Assilina) granulosa; underlaid by a massive black limestone containing the same species of nummulites.

Northern underscarp of the Sárón plateau, plains of Johán and Narmuk, underscarp of Mélbi hill.

PHYSICAL ASPECTS. Geology.

Geological Age.

Composition of Strata-

Principal Exposures.

Upper Senonian (Upper Cretaceous).

Sandstones, shales, and limestones, containing Hemi-Radiolites, and pneustes, other upper cretaceous fossils; they are often accompanied by beds of volcanic material corresponding in age with the Deccan Trap of the Indian peninsula.

These rocks constitute the Morav anticline east of Johan, and occupy large areas in the synclinal valleys between the great anticlinal ridges of Jurassic rocks.

Lower Cretaceous.

beds." Porcellanic. regularly bedded, white limestones.

The outcrop of these cocks forms belt of concentric steep ridges surrounding most of the Jurassic anticlines.

'Belemnite beds." splintery shales containing belemnites.

Callovian

nian

and

Bajo-

cian.

"Polyphemus beds." Alternations of rather thin bedded limestones and shales named after the gigantic ammonite species Macrocephalites polyphemus which occurs in them. They correspond in age with the strata exposed in the Sembar pass, Sibi district, and with the Chari group of the Kachh peninsula.

The core of the Morav anticline east of Johán.

Middle Jurassic.

Massive, grey limestone of Bathoenormous thickness (several thousand feet).

The Chiltan Range, the ranges east of the Mastung valley, the Koh-i-Maran, most of the hills bordering the Bolán die trict.

Lias (Lower Jurassic).

Regularly stratified dark grey limestones, several thousand feet thick, inter bedded with black splintery shales, and containing crinoids and many other fossils.

Eastern underscarp of Chiltan; ranges enclosing the Munga-char and Shírináb valley to the east and west; the Siáh range west of Kalát.

Carboniferous.

Limestones with Productus. Orthoceros and other fossils.

Some hills at the southern end the Mungachar valley. north-west of Kalát.

"The coal-bearing series ('Laki beds') occurring in this district contain coal-seams, the value of which has not yet been tested.

"Detailed geological accounts of this district have not been published."

The only literature on the botany of the district is a letter by Physical Mr. J. E. Stocks, M.D., F.L.S., describing his trip to Baluchistán ASPECTS. in 1850, published in Hooker's Journal of Botany, Volume II, 1850. The botany resembles that of the Quetta-Pishin District-The following account is extracted from a note supplied by Major D. Prain, late Director, Botanical Survey of India:-

"The flora of the mountain mass already alluded to as stretching from Kalát to Pishín, or roughly from 29° N: to 31° N. is of a quite different type from that just described.* The long flat valleys, 5,000 feet or more above sea level, have, for the greater part of the year, a monotonous covering of Artemisia and Haloxylon Griffithii as their most conspicuous feature, diversified where there are streams with tamarisks, and species of Salsala, Arenaria, Halocharis, etc. On the surrounding hills, up to an elevation of about 7,000 feet above sea level, are to be found species of Acantholimon, Acanthophyllum, Salvia, Perowskia, Amygdalus, Ephedra, Spiraea, Gentiana, Onosma, Paracaryum, Arnebia, Eremostachys campanula. Pistachio trees associated with ash, wild olive, and Daphne are also common. Myrtle is occasionally found. in the valleys.

"At higher elevations, Juniperus macropoda and Prunus eburnea are abundant. Other plants quite common at these altitudes are Lonicera quinquelocularis, L. hypoleuca, Abelia triflora, Caragana ambigua, Berberis vulgaris, B. Lycium, Spiraea Brahuica, Rosa Beggeriana, Cotoneaster nummularia, Ribes orientale, Buddleia paniculata, Salvia Cubulica, Berchemia lineata, Viola Kunawarensis, Leptorhabdos Benthamiana, Pennisetum orientale, P. flaccidum, Stipa capillata.

"With the coming of the spring a host of bulbous and other herbaceous plants, which have lain perdus throughout the winter, send forth leaves and flowers and for a few weeks make the valleys. and hill sides gay with blossoms of divers hues. Such plants are Iris stocksii, I. sisyrinchium, I.. ensata, I. falcifolia, Ixiolirion, montanum, Hyacinthus glaucus, Muscari racemosum, Tulipa

^{*} This refers to the country south and east of Kalat .- Ed.

[†] In the Sarawan country myrtle occurs only at Johan, -Ed.

PHYSICAL ASPECTS. Botany. chrysantha, T. montano, Fritillaria, Eremurus Persicus, E. aurantiacus, Papaver cornigerum, Matricaria lusiocarpa, Malcolmia Bungei, Cheiranthus stocksianus, Isatis minima, Campanula Griffithii, Delphinium Persicum, several species of Alyssum and many species of Astragalus. In swampy grass lands, spring up Ononis hircina, Ranunculus aquatilis, Lotus corniculatus, Lepidium crassifulium, Plantago major, Calamagrostis lanceolata, Phragmites communis, Eragrostis cynosuroides. Weeds of cultivation are Adonis aestivalis, Hypecoum procumbens, Fumaria parvifora, Malcolmia Africana, Sisymbrium sophia, Lepidium draba, Silene conoidea, Holosteum umbellatum, Malca rotundifolia, Erodium cicutarium, Veronica agrostis, and many others.

"This many-coloured carpet of flowers endures for all too brief a season, for under the intolerable heat of the summer sun it speedily shrivels up and disappears."

The hills, for the greater part of the year, have an extremely barren appearance.

Orchards containing mulberry, apricots, peaches, pears, apples, almonds, and grapes abound in the valleys near villages. quus hortensis, called locally sinjid, also occurs in the valleys; nomegranate is found in gardens, but is abundant only in Johan. Poplars and willows grow wherever there is water, and tamarisk is plentiful in the river beds. In the underground water channels. maiden-hair fern is found. Besides pistacia khanjak, other wild trees bearing fruit and found occasionally in the hills are the wild fig and birori (Alhagi maurorum). Wild rose (Rosa damascena) is met with in the hills. The plants of economic value, dealt with under Forests include cumin, hyssop, asafoetida, and Glycyrrhiza glabra, all found in the hills. The commonest plants in the spring in Mastung, Kalát, and Mungachar are Sophora Griffithii and Orthonnopsis intermedia, the latter extending up to 9,000 feet above the sea. Camel thorn (Alhagi camelorum) is abundant in the central valleys and in Gurgina-Salsolaceous plants are luxuriant in Zard and Gurgína; the best known species is Suaeda monoiea from which carbonate of soda is manufactured. Mati, another poisonous plant, which yields carbonate of soda, is peculiar to Khad and Marav where it occurs in great profusion.

The wild animals of the district are much the same as those Physical found in other parts of the upper highlands of Baluchistán and include the wolf (kharma); the jackal (tola); the fox (shok); the hare (muru); and hyena (kaftár). The leopard (khalégha) is found occasionally in the Koh-i-Márán, Sárún and Harboi hills. Wolves are common and do much damage to flocks. Foxes are caught for their skins. The mountain sheep and straight-horned márkhor (mat) are fairly plentiful in the hills, especially in the Harboi, Koh-i-Márán, Mélbi, Bangulzai hills, and Istráb. Of game birds, the chikor and sisi are numerous in the hills, the best places for sport being the Zarakhu springs, Lés. Marghi near Kúak, and Chhuttok springs west of Khad. Wild duck come in winter and are found chiefly in Chhappar. Sandgrouse and bustard are plentiful in autumn as also blue pigeon in the kárézes in Zard and Mungachar.

Among reptiles are snakes, lizards, and scorpions. None of the species appear to have been identified. The native names for the best known snakes are sidhmár, surghmár, shéfk, garr, gwrámár and gwand. The last named is the most dreaded of all.

The climate of the whole district is, generally speaking, dry and CLIMATE, TEMPLEAtemperate. None of the different parts of Sarawán present any TURE, AND
marked variations but Kalát owing to its higher elevation is cool-RAINFALL.
er than the rest of the district.

The year is divided into four seasons: spring (hatam), from Seasons-March to May; summer (tirma), June to August; antumn (sohēl), September and October; and winter sēlh, November to February. The spring is a most delightful time of year in the district. From April to September the climate is dry, bright, bracing, and healthy. Narmuk is slightly warmer than the rest of the district but, except near Bárari and Khajúri which are opposite the Bolán, the heat in summer is nowhere intense. In autumn, the nights become cold and are sometimes frosty, though by day, the sun is still warm. The winter especially round Kalát, which receives heavy falls of snow, is severe. In October, the Bráhuis migrate to the plains of Kachhi en masse.

The rain and snowfall occur generally in winter from January to March, but like other parts of Baluchistán, the district lies

CLIMATE, TEMPERA-TURE AND RAINFALL. outside the sphere of the monsoon currents and the rainfall is irregular and scanty. The average fall is about $7\frac{1}{2}$ inches, of which some 6 inches are received in winter and $1\frac{1}{2}$ in summer. Variations in temperature are caused by the presence or absence of winds. No reliable statistics are available.

Winds.

The mountainous character of the country affects the direction and force of the winds, which in many places partake largely of the character of draughts, traversing the funnel-like valleys.

The principal winds known to the natives are the gorich which blows from the north-west; the nambi from the south-east; the , garro or west wind (known in Mungachar as kháráni); and the gazgi or east wind. The nambi or the wet wind, as its name implies, and the gazgi have a different effect on the weather from the gorich and the garro; while the two former are pioneers of rain and collect clouds, the latter act differently. The garro is known to the shepherds as a wind of ill luck. Cold and piercing in winter, it causes mortality both among men and animals; while in summer it disperses clouds and is, therefore, styled kamér kash, i.e., a wind which warns the cultivator to take off the iron shoe of his plough as rains, on its approach, become distant. Similarly the gorich disperses clouds and no rain may be expected while it blows. In June and July, however, if the gorich blows up to 10 A. M. it is favourable for rain, whence the saying: Sobah na gorich basham na gushi, the morning gorich is the lover of the rainy season.

Earthquakes and cyclones. Slight shocks are occasionally felt but not sufficient to do any harm. The only shocks of any intensity were felt in Kalát in 1870, in Mastung about 1884 and at Johán about 1892, though none of them caused any damage. That of 1884 produced the spring known as Púdgili Káni near the Suféd Bulandi mound in the Mastung valley, while the earthquake of 1892 made a fissure at the foot of the hills on the southern bank of the Sarawán river opposite Johán. The fissure is a small one and is still visible (1905).

HISTORY.

The earliest history of Sarawan is buried in obscurity and very little definite information regarding the country is avail-

able before the conquest of Baluchistan by the Ghaznavids HISTORY, about 977 A. D.

It seems possible that a part of the army of Alexander the Greek period. Great traversed the country about 325 B. C., for when the conqueror was in the Indus valley near what is now Upper Sind, he despatched Krateros with the heavy transport to march via the Helmand and meet him in Persia. If Krateros marched, as is supposed, via the Múla pass and Quetta he must have passed through Sarawán. Tradition speaks of a Hindu dynasty, Séwa by name, having ruled in this part of the country and Kalát itself is still known to this day as Kalát-i-Séwa.

History shows that Muhammadan dynasties ruled Baluchistán Séwa dynasty, from about the 7th century; the Séwas, therefore, probably belonged to an earlier period and may have been connected with the Rai dynasty of Sind, whose genealogical table includes two rulers of the name of Síharas and whose territories are said to have extended as far as Kandahár, Seistán, and the Sulaimán and Kaikánán hills. The exact position of Kaikánán has not been determined, but it was somewhere in the neighbourhood of Kalát.

Tate, however, considers that "the Sewas may have obtained possession of Kalát upon the decline of the authority of the monarchs of Delhi, the successors of Sultán Feroz Sháh (who died on the 18th Ramadán 790, or 22nd August, 1388, A. D.), when the Samma tribe rose to power in Sind. The Sewas are called Hindus, but it does not imply that they professed Hinduism, but merely that they were descended from an ancient tribe who originally were Hindus (the Gichkis of Kéj and Panjgúr are to this day called Hindus owing to their descent from an Indian stock, and from ancestors who were of that religion). They were deprived of power, judging from the legends existing in the country, some time before the advent of the Rinds under Mir Chákar into Sind, or about the middle of the 15th century."

About the year 658 A. D. during the Caliphate of Ali we read Arab period. of the Arabs under their general Taghár-bin-Dáir with Makrán

^{*} Kalit: A Memoir of the Country and Family of the Ahmadzai Kháns of Kalát, p 18.

as a base, attacking and reducing Kaikanan," and of subsequent operations in that country with varying success. About 664 A. D. the Arabs captured Khuzdár and occupied the surrounding country of Túrán or Jhalawan. In A. D. 711, the first Muhammadan invasion of India took place under Muhammad Kásim. the Arab general of the Caliph Walid. The country up to and including Multan was conquered by the Arabs and the Hindu dynasty of Sind and probably also the Séwa dynasty of Kalát came to an end. The Arabs appear to have remained in occupation of the country till the rise of the Ghaznavid dynasty, the parts best known to them being Túrán (Jhalawán) with its capital at Khuzdár and Núdha or Búdha (Kachhi).

Ghaznavid dynasty.

About the year 977 A. D., Nasíruddín Sabuktagín, King of Ghazni, conquered Baluchistán as far south as Khuzdár, as detailed in the history of Jhalawan. He was succeeded by his son Mahmud of Ghazni, and the Sarawan country appears to have formed part of the Ghaznavid empire till its downfall.

Ghorids, &c. then passed into the hands of the Ghorids and about 1202 A. D. Shahabuddin is mentioned as conferring the government of Sarawán and Makrán on his favourite slave, Táj-ud-dín Eldoz. About 1219 A. D., Sarawán, like the rest of Baluchistán, must have formed part of the kingdom of Sultán Muhammad Khán of Khwárizm (Khiva) and have been conquered about 1223 by the Mongols under Chagatai, son of Chingiz Khán, who penetrated as far south as Makrán and Jhalawán.

> About 1225, Sarawán like Jhalawán probably came temporarily under the rule of Sultan Altamsh of Delhi, reverting again to the Mongols.

The Arghuns.

At the end of the 14th century, Sarawan appears to have formed a portion of the kingdom of Kandahár which was taken by Amír Timúr and conferred by him upon his grandson, Pír Muhammad. Kandahár remained in the hands of Timúr's successors till about the year 1470 A. D. when it was taken by Sultan Husain Mirza of Herát and by the latter subsequently conferred upon Amír Shuja-ud-dín Zunnún, Arghún, together with the territories of Shal, Mastung, Pushang, and Siwi with their different dependencies. After his death, these territories passed to his son,

^{*} Elliot's History of India, Vol. I., P. 421, et seq.

Sháh Bég. Arghún, who in 1511 A. D. moved from Kandahár to HISTORY. Shalor Quetta and in the next few years made frequent expeditions against the surrounding country including an expedition in 1517 A. D. into Zahri in Jhalawan. Meanwhile, the Baloch had been gradually extending their power eastward from Makrán and during the 15th century took possession of Kalát. At the same time also the Bráhuis had been gaining strength till finally in the course of the next two centuries they consolidated the whole of western Baluchistán into one State under the Ahmadzai Kháns of Kalát, the present ruling family. The Mírwátis, from whom the Ahmadzais are descended, claim Arab descent and according to their earlier legends lived at Súráb in Jhalawán south-west of Kalát; thence they extended their power in wars with the Jadgals or Jats, whom ultimately they finally overthrew. We read in 'Tate' that the Mirwaris took possession of "Kalat of the Baluchis," and that authority over the country was exercised by Mír Umar Mírwári. Afterwards the Baloch under their national heroes, Mír Chákar Rind and Gwáhrám Láshári, whose exploits form the theme of many Baloch ballads, ousted the Mírwáris temporarily from Kalát and Mír Umar was killed. His son, Mír Bijjár, fled to Mastung, but eventually returned and retook Kalát, Súráb, and Wad and ejected the Baloch from his territories. These events would appear to have taken place towards the end of the 15th century, during the time that Mír Zunnún Bég. Arghún, was Governor of Baluchistán. Mír Bijjár's exploits are commemorated in a well known poem, a translation of which has been given in Appendix II of the Jhalawan Gazetteer.

From the Arghúns, the country passed to the Mughals and The Mughals, between 1530 and 1545 the Province of Kandahár was in the possession of Mirza Kámrán. It was during this period, in the summer of 1543, that Humáyún came to Shál-Mastung via Sibi, on his retreat from India. While encamped in a garden, apparently close to Mastung, the news of the approach of Askari, who was holding Kandahár on behalf of Kámrán, was brought to Humáyún by Chupi Beháder, an Uzbek, who had formerly served under Humáyún in Hindustán. Humáyún placed the Empress Hamída. Begum hurriedly on horseback, and rode off with his attendants, but left his son, Akbar, who was only a year old, under the care of

Mír Ghaznevi (afterwards known as Atkeh Khán) and other attendants thinking that the infant prince would be unable to support a rapid journey in inclement weather through a desert and waterless waste. Humáyún himself with his party escaped via Nushki to Garmsél and Herát. Mirza Askari took the greatest care of the young prince and carried him to Kandahár in December, 1543, where he delivered him to the charge of his wife, Sultánum Begum, who tended him with a mother's affection. An account of Humáyún's journey through Nushki is given in the Gazetteer of the Chágai District. †

On Humáyún's return, two years later, Kandahár again passed under his rule, and on being acknowledged Emperor he bestowed the districts of Shál and Mastung on Lawang Khán, the Baloch, but who Lawang Khán was, history does not relate. Between 1556 and 1595, Kandahár and its dependencies remained under the Safavid kings of Persia and in the latter year were again acquired by the Mughals.

In the reign of Akbar, Mastung formed part of the eastern division of the Kandahár Sarkár, one of the Sarkárs into which Akbar's dominions were divided and the Ain-i-Akbari mentions Mastung as having a mud fort and paying an annual revenue of "10 tumans and 8,000 dinárs in money and 470 kharwárs in grain," and as furnishing a contingent of 100 horse and 500 foot. The same history also relates that in 1585 A. D. Akbar had to send an expedition against the Baloch with the result that the rebellious Chiefs, Gházi Khán, Wájhiyah, and Ibráhím Khán, were brought to the capital to pay their homage. The decay of the Mughal power was followed by the rise of the Bráhuis to a position of greater or less independence till

Rise of the Brahuis.

^{*} Gul Badan Begum, daughter of the Emperor Bábar, in her memoirs of Emperor Humáyún (Humáyún náma) describes this incident as occurring at a village named Bani (or Bali) near Shal-Mastán. She gives a somewhat different account of Akbar's desertion. "The Emperor mounted the very moment the alarm was given and went off. He went two arrows flight and then sent Khwaja Muazzum and Bairam Khán to fetch Hamida-Baná Begum. They went and mounted her, but there was not a chink of time in which to take the Emperor Jalal-ud-din Muhammad Akbar."

[†] Chagai District Gazetteer, P. 33.

finally they ousted the Mughal Governor of Kalát and called on HISTORY. Mír Ibráhím Khán, Mirwári, who appears to have been living in the Jhalawan country, to nominate one of his sons as their Chief. Ibráhím Khán sent them his grandson, Mír Hasan, and he and his successors are said to have held Kalát, Súráb, Wad, and Mungachar for twelve generations till the rise of Mir Ahmad, from whom the eponym 'Ahmadzai' is derived. Mír Ahmad, who ascended the Amadza masnad in 1666-7, defeated Agha Jáfar, the Mughal Governor who had marched on Kalát, and took Mastung from him. He also took Khuzdár, Bághwána, Karkh, and Chaku.

Mír Ahmad died in 1695-6, and was succeeded by his son, Mír Mehráb, who reigned for less than two years. Two brothers of the Kalhora family of Sind, Núr Muhammad and Dáúd Khán. appear to have sought refuge in Baluchistán at this time. On receipt of peremptory orders from the Mughal Governor of Multán. not to give them passage through his country, Mir Mehráb took steps to stop the advance of the fugitives and in the encounter which took place near Chaku in Jhalawan, Mir Mehrab was killed. This happened in 1697-8. Mír Samundar, Mír Mehráb's eldest nephew, who was placed on the masnad in falfilment of the dying request of the deceased Khán, brought the Kalhora brothers as prisoners to Kalát, whence they were ultimately allowed to depart to their native country on receipt of orders from the Mughal emperor to that effect.

Local records speak of a Persian commander, Tahmasp Beg, having led an invasion against Kalát in the reign of Mír Samundar. The latter appears to have been away on a visit to the Mughal Governor of Multán at the time, but managed to reach his capital by the time Tahmasp had got to Mastung, and in the battle which ensued, the Persians were severely defeated, Tahmasp being slain by the Khán's own hand. Mír Samundar during his reign raided and plundered the districts of Zhob, Bori, and Thal-Chotiáli, and levied an annual sum of Rs. 40,000 from the Kalhoras of Sind.

Mir Ahmad II, Mir Mehráb's son, who was a minor when his father died, succeeded his cousin, Mír Samundar, in 1713-4. His younger brother, Mir Abdulla, however, on whom he had

conferred the district of Quetta, revolted against him, and in a battle which took place apparently near Mastung, Mír Ahmad was worsted and had to fall back on Kalát. The brothers were reconciled, but Mír Ahmad's death in 1715-6 is said to have been compassed by his brother.

Mír Ahmad was succeeded by Mír Abdulla, a man noted for his daring valour. After raiding Kachhi and Déra Gházi Khán, he led a successful expedition into Makrán, and finally captured Pishín and Shoráwak from the Ghilzai rulers of Kandahár. Sháh Husain Ghilzai from Kandahár and Núr Muhammad Kalhora from Sind appear to have made common cause against Mír Abdulla and the allied forces invested Quetta, which was, however, stoutly defended by the Bráhui garrison. Mír Abdulla, using Mastung as his base, harassed the besiegers and finally, with the advent of winter, the allies were obliged to raise the siege and return to their respective countries.

Mír Abdulla was eventually slain in a fight with the Kalhoras at Jándrihar near Sanni in Kachhi and was succeeded by his son, Mír Muhabbat, in 1730-1.

At the instance of Akhund Muhammad Sáleh, who played an important part in Kalát politics at this juncture, Mir Muhabbat assigned the revenues of Mastung for the support of his two brothers, Mír Iltáz and Mír Nasír Khán, and their mother. Two years afterwards, the intrigues of Mír Lashkari, Raisáni, brought about a revolution in the capital, which resulted in Mír Iltáz being placed on the masnad. Mír Muhabbat was put into prison, but was released by the Shahwanis of Iskalku, and fled to Wad in Jhalawan. Eventually, he surrendered to Mir Iltaz. He appears to have ingratiated himself with the leading Brahui Chiefs who, on the other hand, were disgusted with the vicious conduct of Mír Iltáz. At this juncture a summons arrived from Nádir Sháh from Kandahár for the Khán of Kalát to attend at that place and make his submission. Mír Iltáz proceeded to Kandahár taking with him Mír Muhabbat and the Sarawán and Jhalawan Chiefs. Mir Nasir Khan, being too young to accompany them, was left behind. On arrival at Kandahar, the Brahui Chiefs petitioned Nadir Shah to appoint Mir Muhabbat as their History. Khán in place of Mír Iltáz, whose vicious excesses tendered bim unfitted for the position. This request was complied with. Mír Iltáz was put into confinement and Mír Muhabbat with a force of 500 horse under Lutf Ali, a Persian, returned to Kalát in A. D. 1736. From there he sent his younger brother Mir Nasír Khán with the latter's mother and also Murád Ali, son of Mir Iltáz, to Kandahár as hostages, and the district of Quetta was assigned to them for their support by Nádir Sháh. While the two brothers were in Nádir Sháh's camp, Mir Iltáz was killed by Mir Nasir Khán in the course of a quarrel, but Nádir Shah's enquiries Laving shown that the fault lay with Mir Iltaz. Mír Nasír Khán was exonerated from blame. In 1740 A. D. after the invasion of India by Nádir Sháh, the latter compelled the Kalhora ruler of Sind, Mián Núr Muhammad, to cede Kachhi to Mir Muhabbat in compensation for the death of Mir Abdulla and his followers at the hands of the Kalhoras. Mir Muhabbat is also said to have annexed the State of Las Bela to Kalát.

Mír Muhabbat's tyrannical conduct gradually alienated the attachment of his Chiefs and finally he drew upon himself the anger of Ahmad Sháh Abdáli, the successor of Nádir Sháh.

A force was despatched against Mastung in 1749 and in the battle which took place Mir Muhabbat was completely defeated. He eventually surrendered himself with his family to Ahmad Shah and was put in prison at Kandahár, where he was eventually beheaded, Mír Nasír Khán being nominated in his stead, From this time till the accession of Shah Nawaz Khan in 1839, the Khanship remained in the younger branch of the family. Nasír Khán I ruled for 44 years from 1750-1 to 1793-4 and is the historical hero of the Brahuis by whom he is known as "The Great." He was by far the most distinguished of the Kháns of Kalát. His rule was vigorous, although his political position was that of the head of a confederacy of Chiefs and not that of a despotic ruler. During his reign be rendered much assistance to Ahmad Shah in his numerous expeditions to Persia and India and the districts of Quetta, Mastung, Harrand, and Dájal were bestowed on Nasír Khán by Ahmad Sháh. On his own part Nasír Khán led nine

11.3

HISTORY.

expeditions into Makran, which he subjugated, and obtained from the Gichkis the cession of half the revenue of the country. An account of the events, which led to the reduction of Makrán and of Nasír Khán's expeditions to that country, will be found in the Gazetteer of Makrán. Nasír Khán asserted his authority over Panjgúr, Kéj, Kasarkand, Dizak, and Khárán. He also strengthened his connection with Las Béla and wrested the Port of Karáchi from the house of Sind. Only once, in 1758, did he waver in his allegiance to Ahmad Sháh when, exasperated by the constant demands made on him by that monarch for tribute and military assistance, he refused to obey a summons to the presence of the Shah. The latter marched against him and an engagement was fought at Mastung in which the Afghans were at first worsted but afterwards advanced on Kalát which they besieged without success. Eventually, Mír Nasír Khán made his submission and was honourably received and a treaty was concluded according to which Nasír Khán acknowledged Ahmad Sháh's suzerainty and agreed to furnish a contingent of troops, whenever the Afghan monarch made war beyond the boundaries of his kingdom. In return, Nasír Khán was to receive a sum of money and munitions of war. was also stipulated that Nasir Khan would not in any way help fugitive Saddozai princes and would not take part in the internal quarrels of Afghánistán. To cement this alliance, Ahmad Sháh married his son, Timúr Sháh, to Nasír Khán's niece. Nasír Khán was exempted from the tribute previously paid to Ahmad Shah and the districts of Quetta and Mastung were ceded to him. Towards the latter part of his reign, Mir Nasir Khan rendered material assistance to Timur Shah, son and successor of Ahmad Shah, in several expeditions into Sind. Of these only one in 1781, was attended with success.

Mír Nasír Khán died at Ganjáwa in the spring of 1794 and was succeeded by his eldest son, Mír Mahmúd Khán I, who was then only seven years of age. His succession was disputed by his cousin, Bahrám Khán, grandson of Mír Muhabbat, who took possession of Kachhi. The Wazír, Akhund Mullá Fateh Muhammad Khán, who appears to have conducted the administration during

the minority of Mahmud Khan, invoked the assistance of Shah History. Zamán, the ruler of Kandahár, which was given eventually about A. D. 1800. Bahrám Khán was defeated and fled to Sind where he died. Mír Mahmúd Khán placed his forces on a number of occasions at the disposal of the rulers of Kandahár in expeditions to Sind and elsewhere. In 1810, Pottinger visited Kalát in disguise and has written an account of his experiences.*

Mahmud Khan was a weak and incapable ruler. His reign was distinguished by little else except revolts until he was left with nothing more than Jhalawan, Sarawan, Kach Gandava. Kalat. and Harrand under his rule. He died in 1816-7 and was succeeded by his son, Mír Mehráb Khán.

The latter's accession was speedily disputed by Ahmadyár Khán, son of Bahrám Khán, who intrigued with the tribes and caused a revolt in Sarawan which was not put down without some trouble. Ahmadyar Khan was eventually taken prisoner and put to death at the instigation of Daud Muhammad the Khan's minister. To this man are attributable the difficulties in which Mehráb Khán subsequently became involved. He was a man of low extraction for whom Mehráb Khán sacrificed the hereditary minister, Fatch Muhammad. Dáúd Muhammad proceeded to compass the death of all the chief men in the State whose influence he feared. The result was complete disaffection and dislocation of authority throughout the country; Dáud Muhammad's influence continued till about 1833, when he was murdered by Mulla Muhammad Hasan, son of Fatch Muhammad, who succeeded him as minister. The change, however, did no good and the Chiefs still continued in a state of more or less open rebellion.

In 1838, when it was determined to march troops into British con-Afghánistán to support the cause of Sháh Shuja, it became necessary to secure the good-will of the Khán of Kalát, and Lieutenant Leech visited Mehráb Khán at his capital. No good resulted from this visit owing to the intrigues of Mullá Muhammad Hasan, who in order to avenge himself on Mehráb

nection.

[•] Henry Pottinger, Travels in Balushistan and Sinds. London: 1816.

Khau for the death of his father, contrived to create a dislike between the Khan and Lieutenant Leech. He further caused it to be believed that the Khan had seized and destroyed grain collected on the line of march for the use of the British troops. When Shah Shuja with Sir W. Macnaghten and the British Army arrived in Sind, Mehráb Khán desired to send envoys to express his good-will, and Mulla Muhammad Hasan contrived to have himself selected for this duty. Muhammad Hasan met Sir W. Macnaghten at Bhag in Kachhi, and white giving himself out as most devotedly attached to the British, represented his sovereign as harbouring injurious designs. He was received as a fast friend by Sir W. Macnaghten and dismissed with bonour to Kalát, where he represented to his master that the English were determined to ruin him and that his only chance of safety lay in open hostility. Having the seal of the Khán in his possession, he affixed it, without the Khan's knowledge, to letters written to various Chiefa of predatory tribes, directing them to barass the convoys of the army and to give the British officials all the annoyance in their power. Many of these letters fell into the hands of Mr. Ross Bell, the Political Agent in Sind, and were received as conclusive evidence against Mehráb Khán. From Quetta Sir Alexander Burnes was deputed to Kalát to allay the supposed hostility of the Khán and to conclude a treaty with him with the view of keeping communication through Kachhi safe and free. Sir A. Burnes was accompanied to Kalát, by Saiad Muhammad Sharif and there a treaty was negotiated and signed by the Khán and it was arranged that the Khán should proceed to Quetta to pay his respect to Sháh Shuia. Sir A. Burnes preceded him. The intrigues of Muhammad Hasan and Muhammad Sharif were again at work and the Khán was made to believe that he would be imprisoned at Quetta under a plotorganised by Muhammad Hasan, while Sir A. Burnes was waylaid on his way to Quetta and robbed of a sum of money together with the draft of the treaty agreed to and signed by Mehráb Khán. This was represented as the act of the Khán. The latter was now looked upon as an avowed enemy and it was resolved that nofurther negotiations should be held with him, but that he should

be punished at the first opportunity. All this while, Muhammad HISTORY. Hasan carried on secret correspondence with the British officers. while assuring his master that his cause had been hopelessly ruined and that the only course left him was to raise his forces and oppose the British. Accordingly, when Sir Thomas Willsbire's brigade was returning to India from Kábul in 1839, a force was ordered to turn off from Quetta and attack Kalát. The place was taken by assault on the 13th of November, 1839; Mehráb Khán and several of his principal Chiefs being slain. From papers found in the fort, the treachery of Mulla Muhammad Hasan was fully revealed and he was made a prisoner. Shah Nawaz Khan, a youth of 14, descended in the direct male line from Mír Muhabbat Khán, was with the British troops. This youth and his brother, Fatch Khán, had been imprisoned by Mehráb Khán but had effected their escape from Kalát. Sháh Nawáz Khán was appointed, by the British Government, as Khán of Kalát, but the districts of Sarawán and Kach Gandáva were annexed to Kábul and placed under the administration of British officers. Lieutenant Loveday was appointed Political Officer at Kalát. Before the attack on Kalát, the late Khan had sent away his son, Mir Muhammad Hasan (afterwards Nasír Khán II), to Nushki in charge of Dárogha Gul Muhammad and the fugitives eventually found shelter with Azád Khán of Khárán.

The installation of Sháh Nawáz was soon followed by a rebellion of the Sarawán Sardárs. The insurgents having summoned Nasír Khán from Khárán, proclaimed him as their Chief and made themselves masters of Mastung. From this place they marched on Quetta, but their internal dissensions did not admit of their plans being carried out successfully and the young Khán was reconducted to Mastung by Azád Khán and another force having been raised, a bold bid was made for the throne by an investment of the capital.

Sháh Nawáz does not appear to have been very popular and, Masson, who had already made two journeys to Kalát in the years 1831 and 1832, when Mehráb Khán was on the masnad and who arrived in Kalát from Sonmiáni just before the insurgents reached there, has left an interesting account of the siege,* which

[·] Narrative of a Journey to Kalat, by Charles Massou, 1843.

shows that the efforts of the besieged were paralysed by the divided counsels that prevailed and the lukewarm attachment of the garrison to their Khán. They allowed themselves to be shut up within the town by a force very little superior to them in numbers, while the forty sepoys of the Shah's service, which Lieutenant Loveday had with him, could not relieve the situation. After repulsing several attacks, Shah Nawaz surrendered to his adversary, and was permitted to depart unmolested. This happened in 1840. Both Lieutenant Loveday and Masson were taken prisoners and subjected to great indignities. The insurgents taking both the Europeans with them marched back upon Mastung and from here negotiations were opened with Captain Bean at Quetta. Masson was despatched with letters for that officer but his mission proved unsuccessful as he was placed in confinement on his arrival, Captain Bean suspecting him of being a Russian spy. Disappointed at the result of their attempts to open negotiations, the insurgents, after an attack on Aghbarg in which they defeated Lieutenant Hammersly's Kási Irregular Horse, but were beaten off by the villagers themselves, retired on Dádhar. Meanwhile General Nott's brigade had arrived at Quetta from Kandahár and orders were issued to him to march to Kalát and re-occupy it. This was done on November 3, 1840, the Bráhui leaders, making for Kachhi carrying Loveday still a prisoner with them. The account of their dispersion by a detachment of troops near Dádhar and their eventual murder of Lieutenant Loveday will be found under the History section of the Kachki District Gazetteer. Kalát was occupied and Colonel Stacy of the 43rd Native Infantry was appointed to the political charge of the Khan's capital. This officer opened up negotiations with Nasír Khán who was at Zídi in Jhalawán.

Nasír Khán was induced to make his submission and, as the only means of quieting the country and doing tardy justice to the memory of the unfortunate Mehráb Khán, the British Government reversed its policy and Nasír Khán was installed on the masnad at Kalát by Major (afterwards Sir James) Outram in October, 1841. Sarawán and Kach Gandáva which

had been annexed to Kábul in 1840 were restored to Nasír History. Khán. A treaty was also concluded with him on the 6th of October, 1841. This treaty, however, became a dead letter after the withdrawal of the British army from Kábul. In 1854 in consequence of the European embroglio with Russia and in order to strengthen British influence on the frontier, a fresh treaty was made. By this the former treaty was annulled and the Khán agreed to act in subordinate co-operation with the British Government; not to enter into negotiations with other States without its consent and to allow British troops to occupy such positions in his territory as might be thought advisable by the British authorities. The British Government on its part agreed to pay the Khán an annual subsidy of Rs. 50,000 on condition of his reducing his transit dues to a uniform rate, of his preventing outrages within or near British territory, and of his protecting merchants and permitting no exactions on trade.

Quarrels had meanwhile broken out between the Khán and his Chiefs, and led to Nasír Khán raising a small body of mercenary troops, a step which was strongly resented by the Chiefs and regarded by them as a serious encroachment on their power.

Nasír Khán died or was poisoned in 1857 and was succeeded by his half-brother, Khudádád Khán, then a lad of sixteen. He was selected by the Chiefs, but soon embroiled himself with them. At the outset of his reign, Mír Khudádád Khán fell under the influence of two counsellors, both of whom were bitterly hostile to the British Government. These were the Dárogha Gul Muhammad Khán and a Hindu employé named Ganga Rám, who had contrived to usurp to himself the authority of Wazír, though it does not appear that he was ever appointed to that office.

Shortly after the accession of the young Khán, the Sardárs with the Jám of Las Béla at their head, came to Kalát in order to obtain redress for their grievances, and they soon found that the power possessed by the Dárogha and Ganga Rám was exercised in a manner adverse to their cause. Either party was jealous of the other and attached much importance

to preventing its rival from obtaining a preponderating influence with the Khán. In these circumstances an open rupture was only too probable, and finally under the orders of Dárogha Gul Muhammad the Khán's forces attacked the Sardárs on the 17th of September, 1857, while encamped near the city of Kalát, and taking them by surprise, drove them out of the valley of Kalát with their grievances unheard and their discontent aggravated. In this way commenced the struggle between the Khán and his Sardárs, which lasted, with brief intervals of peace, for nearly 20 years.

In 1858, through the influence of Sir H. Green, then Political Agent at the court of the Khán, Dárogha Gul Muhammad and Ganga Rám were excluded from power and Sháhghássi Wali Muhammad, an honest and able man, was appointed Wazír.

In 1859 the British Government gave the Khán Rs. 50,000 annually for four years in addition to the subsidy paid under the treaty, to enable him to strengthen his hands and meet the cost of reducing the Marri tribe who had harassed the British frontier. Little good, however, resulted from this additional grant. The history of the next few years is the history of rebellion and anarchy; the discontent of the Chiefs, fomented by the intrigues of the Jám of Las Béla and Azád Khán of Khárán, from time to time broke into active opposition. In all these intrigues Sardár Mullá Muhammad, the Raisáni Chief, appears to have played an important part. In 1862 the Khán insulted Táj Muhammad, Zahri, the Jhalawán Sardár, as has been related in the Jhalawan Gazetteer, and in the following year the Sardárs broke into open rebellion, defeated the Khán who took refuge in Sind and installed his cousin Shérdil Khán as Khán of Kalát in his stead.

Shérdil Khán enjoyed his dignity for only about a year. He was murdered by his own guards in May, 1864, and Mír Khudádád Khán was reinstated, mainly through the influence of the Sarawán Chief, Mullá Muhammad, Raisáni, who however became his most persistent opponent in after years owing, it is said, to the Khán having made him promises conditional on

his reinstatement which afterwards he failed to keep. Khudá-History. dád Khán was recognised by the British Government as Khán of Kalát, and the payment of the subsidy of Rs. 50,000, under the treaty of 1854, which had been suspended during the disturbances in the country, was renewed.

The country remained fairly quiet for nearly a year after the Khán's reaccession, but in March 1865, Sardár Mulla Muhammad made common cause with Taj Muhammad, the Zahri Chief, and attempted an insurrection in Kachhi with the assassination of the Khan as its object. The rebels were, however, surprised by the Khán's forces, Táj Muhammad was made a prisoner and Mullá Muhammad fled to Kandahár. In July of the same year the Jam was again in rebellion, in concert with Núruddín the Méngal Sardár. Their forces were defeated and they were both made prisoners, but were shortly afterwards pardoned and released. For the next two years there was peace in Baluchistán, but in October, 1867, Mullá Muhammad Raisáni returned from Kandahár and again stirred up an insurrection in which he was joined by the Sarawan Sardars, Adam Khan Bangulzai, Alladina Kúrd, and Muhammad Khán Lahri. The revolt was, however, promptly checked by the Shahghasi Wali Muhammad, who attacked and completely routed the rebellious Chiefs. Mullá Muhammad Khán took to flight and sought an asylum among the Marris. Early in 1868 Sir H. Green, then Political Superintendent on the Upper Sind Frontier, arranged a meeting at Jacobábád between the fugitive Sardár and Sháhghássi Wali Muhammad and a temporary settlement between the Khán and the Chiefs was effected, but afterwards came to nothing.

Fresh troubles broke out towards the close of 1868, between the Khán and the Jám of Las Béla and others, an account of which will be found in the Jhalawán Gazetteer: as also of Captain Harrison's negotiations with the Chiefs in 1869, when the latter marched up to Kapoto in Jhalawán with the fixed determination of demanding the disbandment of His Highness's regiment, and the dismissal of Sháhghási Wali Muhammad, who had made himself highly unpopular with them. Sar-

dár Mullá Muhammad appears to have faken a prominent part in these events, and in the subsequent troubles in Las Béla at the end of 1869, after which he again fled to Kandahár and laid his grievances before the Amír, Shér Ali, who addressed the Government of India on the subject.

The discontent among the Chiefs continued to increase and eventually in 1871 a revolt of the Sarawan tribesmen took place. The latter were severely defeated by Shahghasi Wali Muhammad at Khad near Mastung, but the rebellion day by day assumed increased vigour. Mullá Muhammad Raisáni returned from Afghánistán and placed himself at the head of the insurrection being joined by Sardárs Alladina Kúrd and Adam Khan, Bangulzai. They over-ran Kachhi and captured Bhág and Gandáva. Hostilities also broke out in Las Béla and elsewhere, and nearly the whole country fell into the hands of the revolted Sardárs. The main causes of their discontent were the resumption by the Khán of their hereditary lands and the introduction of changes which deprived them of their due share in the administration. The Khán finding himself unable to make headway against the rebellion, asked for British aid and both parties agreed to submit their differences to the arbitration of the Commissioner in Sind. In March, 1872, a settlement was effected by Sir W. Merewether at Jacobábád, the Khán being represented by Shahghasi Wali Muhammad. The Khan was to restore to the Sardárs their confiscated lands, to grant them the allowances customary in the time of Mír Nasír Khán the younger, and to allow them to live on their estates so long as they paid him proper allegiance. They, on the other hand, were to restore all the property plundered during their rebellion, the Khán consenting to forego all claims in regard to his own property.

These arrangements, however, were distasteful to the Khán who, under the influence of unworthy favourites, came on the 14th of June, 1872, to an open breach with the Sháhghássi Wali Muhammad, resenting the part taken by him in promoting the settlement at Jacobábád. He refused to carry out the agreement arrived at, or to conform to the advice of the Political Agent, Major Harrison. The latter was directed to return to British territory from Kalát and was on the point of doing so, when

at the parting visit paid to him by Major Harrison on the 15th History. of September, 1872, the Khán yielded, dismissed his evil advisers, reinstated his Wazir and entered into a written agreement to abide by his treaty engagements. Finding, however, that his efforts to procure the recall of his favourites, who were detained at Jacobábád were unavailing, the Kbán placed himself in opposition to the Political Agent, and ceased to take any interest in the administration of his State. In March, 1873, therefore, the Political Agent accompanied by Wali Muhammad, withdrew from Kalát territory, the payment of the annual subsidy to the Khán was withheld and he was informed that his obligations under the treaty of 1854 to protect trade and secure the peace of the frontier remained unaltered and that in the event of any disturbances taking place on the frontier, the British Government would be compelled to take its own measures for preserving order.

In 1875, however, the state of anarchy prevailing on the frontier had become so intolerable that the Government of India decided to depute an officer, Captain Sandeman, to Kalát to effect, if possible, some settlement between the Khán and his Sardárs. Captain Sandeman's first mission was not entirely successful but the hopes of a satisfactory settlement between the parties appeared so promising that in the spring of 1876 he was again deputed to Baluchistán, and, at a darbár held at Mastung on the 14th of July, 1876, he effected a formal reconciliation between the Khán and his Chiefs. In the agreement drawn up, the Sarawán and Jhalawán Sardárs declared their submission to the Khán, the latter, on his part, restoring them to their ancient rights and privileges, and promising to treat them with kindness and consideration so long as they remained loyal and faithful. Sardár Asad Khán was confirmed by the Khán as Chief of Sarawán.

In December, 1876, Mír Khudádád Khán met His Excellency the Viceroy (Lord Lytton) at Jacobábád, and on the 8th of that month a new treaty was concluded. This re-affirmed the treaty of 1854, and provided for the location of troops in, and the construction of railway and telegraph lines through, Kalát territory; Political officers with suitable escorts were to be posted in the Khán's dominions; the Kháu's subsidy was raised to one lakh of rupees, and

in addition a sum of Rs. 20,500 was to be paid annually for the establishment of certain posts and for the development of traffic on the trade routes running through the Khán's country. The Khán loyally acted up to his engagements and for his services during the Afghán war was awarded the order of the G. C. S. I. and a bonus of three lakhs of rupees. Sardár Asad Khán, Chief of Sárawán, was also granted the C. I. E., and received for three lives a rent free jágír of 1,425 acres in Sind.

In the second Afghan War, the Sarawan Chiefs rendered great service in guarding communications and providing supplies, in recognition of which the British Government granted personal allowances to some of them. The subject is futher dealt with at length in Chapter III. under the Section Levies.

In March, 1893, the Mastaufi or chief accountant, with his father, his son, and a follower were murdered by the orders of the Khán, who said that the Mastaufi had made an attempt on his life. Khudádád Khán's abdication in favour of his eldest son, Mahmúd Khan, the present ruler, was accepted by the Government of India and he was shortly afterwards removed with his second and third sons to Loralai and is now (1906) living in Pishín.

Mahmúd Khán was installed as Khán in a darbár held at Quetta by Sir James Browne on the 10th of November, 1893, but his reign has been distinguished by few events of importance. He was created a G. C. I. E. in 1894. In 1897, the wave of unrest, which passed down the frontier, made itself felt in Baluchistán, where a movement among the Sarawán Chiefs, which might have had serious developments, was nipped in the bud by the arrest and imprisonment of two of the ringleaders, namely, Mír Mehrulia Khán Raisáni and Sardár Yár Muhammad Kúrd.

The staff of officers posted in the Khán's territory has lately been increased. Consequent on the reduction of the Judicial and Administrative work in the Bolán Pass District, the Native Assistant formerly in the Bolán Pass was transferred in June, 1902, to the headquarters of the Kalát Agency as Native Assistant Sarawán. In the following year an Assistant Political Agent was

also appointed and he assumed charge of his duties in the HISTORY. month of October. The duties of the officers are described in the section on Administration and Staff in Chapter III.

List of officers who have held the appointment of Political List of Political Agents. Kalát:—

- Lieutenant W. Loveday—1839-1840: murdered near Dádhar. He was assistant to Captain J. D. D. Bean, Political Agent in Shál (Quetta).
- Captain Henry Green appointed in 1856, but was soon after placed on deputation in connection with the Persian Campaign. Resumed duty again in November 1857, and remained as Political Agent, Kalát, till 1860.
- Lieutenant Macaulay -1856 to November 1857.
- Captain Dickenson-1861-1862.
- Major Malcolm Green—May 1862 to February 1867; went on sick leave to England. During his absence in 1868, Colonel Phayre, late Quartermaster-General in the Abyssinian Campaign, was placed in charge of the border.
- Captain Harrison—1869 to 1873. In March 1873, Major Harrison, as related above, was withdrawn from Kalát owing to the attitude assumed by the Khán. The Agency was not re-established till 1877.
- Surgeon-Major O. T. Duke-21st February 1877 to 14th May 1877.
- Captain H. Wylie-15th May 1877 to 18th December 1877.
- Surgeon-Major O. T. Duke-19th December 1877 to 1st March 1884.
- Captain T. Hope-22nd December 1884 to 9th May 1885.
- Captain H. M. Temple—9th May 1885 to 30th April 1887. (Also took over charge of the Bolán from the Political Agent, Quetta, on 15th April 1886.)
- Lieutenant L. S. Newmarch—6th May 1887 to 29th November 1887.

- Captain H. M. Temple—29th November 1887 to 20th March 1895.
- Lieutenant P. T. Spence—21st March 1895 to 2nd April 1895. (In addition to his own duties as Second Assistant to Agent Governor-General.)
- Lientenant E. LeMesurier—2nd April 1895 to 22nd November 1896.
- Lieutenant R. A. E. Benn—22nd November 1896 to 24th December 1896. (In addition to his own duties as Military Adviser to His Highness the Khán.)
- Lieutenant E. LeMesurier-24th December 1896 to 1st March 1897.
- Lieutenant S. G. Knox-7th April 1897 to 25th November 1900.
- Khán Bahádur Kázi Jaláluddín Khán—26th November 1900 to 28th December 1900.
- Captain H. L. Showers—29th December 1900 to 26th September 1902.
- Khán Bahádur Kázi Jaláluddín Khán—27th September 1902 to 26th October 1902.
- Major H. L. Showers, C. I. E.—27th October 1902 to 3rd October 1904.
- Captain A. B. Drummond—4th October 1904 to 16th November 1904 (in addition to his own duties).
- Major A. McConaghey—17th November 1904 to 3rd April 1905.
- Major H. L. Showers, C. I. E.—4th April 1905 to 31st March 1906.

ABCHÆO- The only remains of archæological interest consist of dambs or mounds, ruins of old buildings, gabrbands or dams, graveyards, kárézes, and water channels.

The most noteworthy mound is the Sampur, which lies about 4 miles west of Mastung, and is believed to be the remains of a city

ARCHÆO-

founded by Sám, grandfather of the Persian hero Rustum. Other mounds include Saféd Bulandi and Damb-i-maliko in Mastung, those in Karbukha, Saiad Maurez, Mahmud Gohrán, Zahrazai, Patehánzai, Kulloi, Kárchháp and Sohr in Mungachar; Togau, Kullo Kalát and Dan Khushkába in Chhappar; Khad-Kohing, Damb-i-Khwája Zober and Malagari in Kalát; two in Isplinji and six in the Gurgína Kardagáp valley. These mounds are strewn over with pieces of old pottery and beads and large earthen jars are occasionally found.

The ruins of old buildings include: Takht-i-Sulaimán or throne of Solomon situated on a hill about 3 miles east of Johán, another on a hill north of the Hasanjoi village in Narmuk, and a third near Púdgili south of Narmuk. These buildings were constructed of mud and stones and seem to have been of considerable dimensions.

A detailed account of the gabrhands or "dams of the Zoroastrians or fire worshippers" written by Mr. R. Hughes-Buller, C.S., is published in the Report on the Archæological Survey of India for 1903-4, page 194, et seq. The ruins of such bands or irrigation dams are found in the Narmuk valley, and on the road between Robdár and Jam Bárari, and a few in the Chhappar valley.

The most important graveyards are those in the Johán valley in which are found long graves of the type of those known as Turka-na-Hadiraghák near Sárúna and described in the Jhalawán Gazetteer. Similar graves are found in the Lop in the Marav valley. The Ahmadzai cemetery which lies east of the Kalát town contains among others the tombs of Mír Samundar Khán, Mír Nasís Khán I, Mír Mahmád Khán I, and Mír Mehráb Khán II.

Many of the kárézes in the district are ancient and nothing is known about their builders but they are invariably ascribed to the Arabs. The Arabi Káréz in Mandeháji in Mungachar which was excavated some years ago, receives its supply of water from an ancient káréz now in rains. Traces of ancient water channels have been found in Khajúri and Zarakhu. In the former place, a drain was apparently constructed of lime and concrete to carry water of the Pír Gháib spring to the Khajúri lands, a distance of about 2½ miles. The Zarakhu drain was constructed of clay pipes

Archæology, embedded in concrete and it carried the water of the Zarakhu spring to an old village in the Pingav valley, a distance of about 4 miles.

Population. Ethnographical history,

Nothing is known of the ethnographical history of the district. At the present day all old mounds, etc., found in the country are commonly attributed by the people to the Rinds, a tribe of the Baloch, who are comparatively recent immigrants. As has been said in the Jhalawan Gazetteer, the Jats appear to have constituted the earliest population of which there is any authentic record. Who their predecessors were is a subject which is buried in obscurity. That some of the earliest inhabitants were Zoroastrians by religion may be inferred from the prevalent tradition as to the construction of the gabrbands which are found in the country by the Gabrs, but their nationality is not known.

The nucleus of the Dehwars, who are the oldest of the present inhabitants, is said to have come from Balkh or the ancient Bactria. Dehwars are stated to have replaced a tribe called the Chamkazais, who were in occupation before them; some of the Chamkazais are found at the present time amalgamated with the Dehwars. We first hear of the Brahuis in the 15th century. when according to traditional accounts, they dispossessed the people known as Jats or Jadgáls, a Scythian race now found in Kachhi and Sind. The Baloch, who originally came from Makrán and Persian Baluchistán to the south of Kirmán are described as having been in power previous to the rise of the Bráhuis, and as having given way before the latter and passed on eastwards to Kachhi. Traces of them are now found in several of their clans which became amalgamated with the Bráhui tribes. The oldest of the Bráhui tribes are the Muhammad Sháhis and Kúrds.

Pensity.

The first census of the district was carried out in 1901, when estimates of population were obtained through the Chiefs and headmen of the Bráhui tribes, some of whom showed a tendency to exaggerate the numbers of their tribes. The results gave a total of 176 villages, 14,548 houses or families, and 65,549 persons, or 13 persons per square mile.

Towns and villages.

The number of permanent villages now (1905) is 301, including the towns of Mastung and Kalát. The country is very

sparsely ropulated and there is only one village in every 15.8 square Population. The number of villages has, however, largely increased in recent years and almost all of those found in dry crop areas have sprung up since the British advent. Previously the majority of the Bráhui population used to live in tents, and villages existed only in important irrigated localities. Besides Kalát and Mastung, the most important villages are the following:-In the Mastung nidiat, Ghulám Prinz (70 houses), Shaikha (100 houses), Kárézi-Sultán (65 houses), Pringábád (200 houses), Tíri (150 houses), Kandáwa (150 houses), Kahnak (130 houses), Shahr-i-Sardár Ghaus Bakhsh (100 houses), Bábkári (150 houses), Dulái (52 houses); Kanéti in Shírínáb valley (60 houses); Shahri-Ghulám Ján (55 houses) in Zard; Brinchinnau (50 houses) and Mandeháji (150 houses) comprising several hamlets in Mungachar; Togau and Ziáratin Chhappar; and Chashma (200 houses), Kohing (80 houses), and Malghozár (40 houses) in Kalát. In the western valleys the important villages are Nimargh (80 houses); Murád Khán Murrai (42 houses) and Kaftári (35 houses) in Gurgina; and Kardgap (130 houses). In the east of the district the villages include Iskalku (150 houses), Shékhri (50 houses), Johan (70 houses), Isplinji (200 houses), in group of two villages and several hamlets, Marav (120 houses) comprised in three hamlets, Khajúri (50 houses) and Omar Dhor in Bhalla Dasht comprising a group of several hamlets (90 houses). Lastly may be mentioned Robdár (100 houses), Rékgwásh (50 houses). and Sakht Muhammad Khán (50 houses) in Narmuk.

With the exception of the Dehwars of Kalaf and Mastung, some Migration of the Langavs of Mungachar, the Johanis of Johan, the people of Jam Barari, Robdar and Khajuri and the Sarparras of Gurgina and Kardgap, all Brahuis migrate annually during winter, taking with them their flocks and their families and children. The tide of migration is entirely towards the east to the plains of Kachhi, where some of the tribesmen possess land, but the majority go to pasture their flocks. While in Kachhi these nomads engage in cropcutting, camel-hiring, and other labour, and many find their way to different parts of Sind, visiting especially Jacobabad and Larkana. The migration commences at the end of October and almost all the people have moved down by the end of November after

POPULATION. sowing the spring crop, returning again to the highlands in March. when pasture is abundant and the crops are coming up. The route followed is through the Bolán, but well-to-do families make use of the railway for both the journeys. All dry crop tracts, especially the eastern valleys and parts of Mungachar and Chhappar, are left absolutely uninhabited during the winter months. A few people from the western part of the district, especially the Langava visit Nushki during the spring for pasture, and large caravans go from Mastung and Mungachar to Panigur for date in the winter.

Immigration.

The periodical immigrants are the flockowners of Jhalawan who enter the district early in the spring in search of pasture and return by the middle of summer after selling the wool and other produce of their flocks. The principal localities visited by them include the Harboi and Garr hills, the valleys of Mungachar, Chhappar, and Kalat. The immigrants are generally Summalaris, Muhammad Hasnis, Chángas, Channáls, Báránzai and Pablwánzai Méngals, Jattaks. Nícháris and Pandránis. No restrictions of any sort are imposed on them with regard to pasture. The Taraki Afgháns visit parts of Gurgina and Kardgap in some years, entering the district from Shorarud with their flocks late in the autumn, and penetrate sometimes as far as Mungachar resuming their return journey to Afghánistán on the approach of spring.

Age statistics, vital stamortality and infirmities.

No detailed record of age was attempted in the census but meretics, vital sta-tistics, infant ly a classification into adults and minors, i.e., over or under the marriageable age of 12 years. The results gave: adults 24,301 males and 18,826 females; minors 12,065 males and 10,357 females. Nor is there any record available of vital statistics, infant mortality, or infirmities. Longevity appears to be infrequent owing to constant exposure and bad nutrition. Medical treatment is generally difficult to obtain and diseases, such as small-pox, cause every now and then great infant mortality.

Comparative numbers, of the sexes, and civil condition.

Of the total population censused in 1901, there were 36,366 males and 29,183 females or a disparity of 7,183 females; an examination of the figures shows that on the whole the variation between the number of males and females is very small, the Bráhuis and the Dehwars who form the bulk of the population having 914 and 811 females, respectively, to every thousand males. POPULATION. Among the Lángavs and the Bangulzais who are the two largest tribes in order of numerical strength, the proportion of females to every thousand males was 809 and 807, respectively.

With slight local modifications which are unimportant, the usages and customs of the tribesmen in Sarawan as to marriage, customs, etc. divorce, status of women, and inheritance are those prevalent among their Bráhui compatriots in Jhalawan which have already been described in the Gazetteer of that district.

Marriage

Urdu forms the medium of correspondence by officers of Government as well as in the State offices under the control of the Political Adviser. It has made some progress in recent years and is understood by many among the indigenous population especially those who come in contact with Government officials. The language of the Khan's court is Persian, and the people conduct their correspondence and write all documents in that language.

Language.

The principal dialects spoken are Bráhui, Baluchi, and Dehwári. the last named being used by the Dehwars and limited to Mastung It is a corrupted form of Persian with many words. and Kalát. especially verbs, formed from Bráhui words but originally derived The eastern form of Baluchi as distinguished from Western Baluchi or Makráni is spoken by the Lángavs, the Khurásánis and Kullois living in Mungachar; the Jatois and Kullois of Lop Valley; the Mandwanis and Mughundois of Robdar; the Puzh of Bárari; the Phugs of Khajúri, the Mazaráni Marris living in the neighbourhood of Isplinji; the Garránis of Mastung and Bála Nári in Kachhi and the Raisáni Sardár Khéls. Western Baluchi or Makráni is spoken in the Khán's household. The Loris ordinarily speak Baluchi among themselves but have a secret language of their own spoken in the presence of strangers and known as Lori chini or mokaki which consists generally of inverted forms of Baluchi, and sometimes also Urdu, Sindi, and Punjábi. Elsewhere Bráhui prevails and is the prevailing language of the district Sarawan Brahui is considered a purer form of the language than the dialect spoken in Jhalawan, the latter being largely mixed with Sindi words.

POPULATION.

The philological classification of the Bráhui language has been much disputed and the enquiries conducted by Dr. Grierson resulted in his placing it among the Dravidian languages. Mr. Denys de S. Bray, I.C.S., in his book on the Bráhui language confirms this conclusion and says*:—

"The Brahui language is agglutinative and in this aspect it belongs, speaking in the broadest sense, to the same stage of development as the Dravidian language group. This, indeed, proves little or nothing; but the argument of kinship rests on a surer foundation than a casual analogy of structure. The grammatical relations of the noun in Brahui are shown, as in Dravidian, by means of suffixes, and most, if not all, of the suffixes, whether expressive of case-relations or of plural number, are traceable to the same source as Dravidian. Even more direct is the evidence of the pronoun, that faithful repository of the secret of a language's origin. Of the personal pronouns, the pronoun of the second person in both numbers is in essentials the same as in Dravidian, and a Dravidian relationship is discernible in the pronoun of the first person, despite the ravages wrought by phonetic decay. The reflexive in Brahui and Dravidian has preserved one uniform type with singular consistency, while the Brahni demonstratives are only explicable in the light of their Dravidian counterparts. The family likeness is but thinly disguised in the interrogatives, and several of the indefinite pronouns are stamped with the same birthmark. The Dravidian relationship of the first three numerals, often, though perhaps erroneously, regarded as only less significant witness to the origin of a language than the personal pronouns, is hardly open to question, and it is interesting to find that Brahui and Dravidian, in the absence of an ordinal proper formed from the first cardinal employ the same device and even, it would appear, the same root to express it. The case of the verb is naturally more complex, but the evidence cannot be gainsaid. The most palpable analogies are to be found in the pronominal terminations of the plural, in the formation of the causal and above all in the organic negative

^{*} The Brahui Language, Part I, Introduction and Grammar. (In the Press.)

conjugation. These do not, however, exhaust all the relevant Population. points in the evidence; indeed though the Brahui verb is not devoid of characteristic peculiarities of its own, it may safely be aid—and the remark applies with equal force to the language as a whole—that a full understanding of it would be impossible without the help of the Dravidian languages.

"There can be but one verdict on this evidence. This verdict is not that of Caldwell, who summed up his final position in the words: The Brahuî language, considered as a whole, seems to be derived from the same source as the Punjabî and Sindhî, but it evidently contains a Dravidian element, but the converse, first suggested by Lassen in the early days of the study of the language and re-asserted by Trumpp a quarter of a century ago. The Brahui language is sprung from the same source as the Dravidian language group; it has freely absorbed the alien vocabulary of the Persian, Baluchi, Sindhi, and other neighbouring languages, but in spite of their inroads its grammatical system has preserved a sturdy existence."

The following table shows the strength of the principal tribes Races and as censused in 1901 in the district of Sarawán itself:—

٠ (Raisáni 2,381
•	Shahwani 6,278
	Bangulzai 9,017
*	Muhammad Sháhi 2,820
Bráhuis	Sarparra 885
. [Kúrd 3,036
	Lahri 5,385
	Lángav 17,004
į	Dehwár 7,445

The population may be divided into three groups, viz., the Bráhui tribes of the Sarawán division who formed 77.8 per cent. of the total population in 1901; the Khán's ulus or the groups directly under the Khán of Kalát and cultivating His Highness's lands; and thirdly the miscellaneous population including Saiads and Hindus. The Dehwars, who constitute the greater part of the Khán's ulus, formed 10.2 per cent. of the total population in

POPULATION. 1901. The strength of the Hindus and Saiads is insignificant. being at the census of 1901 only 1.28 and 0.67 per cent., respectively, of the total population.

> As will be seen, the Brahuis are by far the most numerous and are the dominant portion of the population. An account of the constitution of a Bráhui tribe will be found in the Jhalawan Gazetteer and applies also to the tribes in Sarawan.

Main divi-Bions or palan sharik.

Constituted as the tribes are for purposes of offence and defence. mention may be made of the intertribal combinations. Thus, the Raisanis, Kurds, and Langavs combine into one group; the Shahwanis. Muhammad Shahis and Sarparras into another; and the Lahris and the Bangulzais into a third. These combinations known as pallar sharik are usually based on old traditions, and similar combinations exist in each tribe among the clans and sections. The Dehwars unlike the Brahuis have no political constitution, the different groups being generally descendants of separate ancestors having no common interest except the occupation of a common locality, tract, or káréz. Their relations are directly with the Khan whose lands they cultivate, and their chief headman is known as arbab under whom are the maliks, who, in their turn, have raises and mehtars subordinate to them.

Fission.

Disintegration or fission, followed by absorption into another group, generally takes place on the following lines. A group, or in some cases an individual, dissatisfied with its surroundings, breaks away from the parent stock and either settles with some section of another tribe or sets up an independent position under a separate Chief. So long as the new comers remain with the adopted group, they must undertake their share of its good and ill. Of important cases of fission may be mentioned those of the Rustamzais and Siáhizais from the Raisáni tribe, the Taingzais from the Badduzai clan of Bangulzais, and the Sahtakzais from the Kurd tribe.

An account of each of the principal Brahui tribes is given below in order of their social position as generally recognised:-

The Raisanis are the most influential among the Brahui tribes. Raisani tribe. their Chief being the head of the Sarawan division of the Brahni

confederacy. In 1901 they numbered 2,402 * in the whole of the POPULATION. Kalát State: 1,289 males and 1,113 females, the number of adult males being 881. The principal sections into which the tribe is divided are the Sarájzai, Rustamzai, Ráhusainzai, Isjáni, Mehráni, and Pandráni. With the exception of the Sardár Khéls, who live at Mithri in Kachhi and the Jogézai Rustamzais who live at Mandeháji in Mungachar, the main tribe lives in Kahnak and Dulái. The Lahrkis, a section owing allegiance to the Rai sáni Chief, live at Lahr in the Jhalawan country. They do not hold any share in the tribal land. The nucleus of the tribe originally came from the Spin Tarin Afghans of Ahmadun, in the Sibi District. Their progenitor named Rais had four sons-Saráj, Rustam, Ráhusain, and Siáhi. From the first three sons the sections mentioned above are called; the descendants of the fourth son. the Siáhizais, joined the Méngal tribe in the Jhalawan country and have settled at Wad. The remaining sections joined the tribe as new comers (barok) in later times. The Raisanis appear to have been in the country before the Brahuis rose to power in the 15th century, and according to tradition assisted the latter in conjunction with the Dehwars to conquer Kalat from the Baloch. The tribe appears first to have acquired land in Mungachar and Chhappar and were afterwards granted revenue-free grants in Kahnak and Dulái by the Ahmadzai Kháns of Kalát. By their close connection with the latter, the Raisanis have always held a dominant position in the Brahui confederacy, and the Sarájzais, the section of the Chief, have been conspicuous for the part they have played in Kalát history. In former days the Shahwani tribe were the head of the Sarawan division of the Bráhuis but were ousted by the Raisanis, who have ever since held the premier position and the privilege of carrying the flag (bairak) of the Sarawan tribes on all occasions. Great rivalry has always existed between the Chiefs of these two tribes on this account. The principal revenue-free grants in Kachhi held by the Raisanis are in Bala Nari and in the niabats of Dadhar and Bhág.

^{*} This included 1,391 Sheikh Husainis described further on and excluded the Raisanis found in British Baluchistan, i. e., in Quetta-Pishin 1,551, Thal Chotiali 147, Marri-Bugti country 21, and Chagai 37.

POPULATION.

The part played in the history of Kalát by Sardár Háji Mullá Muhmmad, the grandfather of the present Chief, Sardár Sir Ghaus Bakhsh Khan, K. C. I. E., has been related in the section on History. In 1876 he abdicated in favour of his son, the late Sardár Sir Assad Khán, K. C. I. E., who also played a leading role in Kalát politics till his death in 1894 when he was succeeded by his son, the present Chief. Mulla Muhammad died in 1896. Other leading members of the family are Mír Mehrulla Khán, C. I. E., at present (1907) the Khán's Názim in Makrán, Mír Azád Khán, náib of Bhág, Mír Abdur Rahmán, and K. B. Mír Rasúl Bakhsh. The Raisáni Chief is in receipt of a political pension of Rs. 400 per mensem and of a sum of Rs. 100 per mensem on account of sardári allowance from the Bolán Levy Service. Other allowances from the Bolán Levy granted to the Raisanis are described in the Bolan Pass District Gazetteer.

Rustamzais.

. The Rustamzais, a section of the Raisanis, have long been at feud with the main tribe and have now to all intents and purposes set up themselves under a separate Chief. The Raisan family by a long course of systematic intrigue and oppression had contrived to drive Sardár Allahyár Khán, father of Sardár Bakhtiár Khán, the present Rustamzai Chief, over the border into Afghánistán together with most of his tribesmen. In December, 1896, these men returned to Baluchistán and through the intervention of the British authorities were restored to their rights in spite of strong opposition on the part of the Raisanis. The vexed question of Allahyar Khan being recognised as a Chief was settled, and in 1898 he was declared Sardár of the Rustamzais and was allotted the fourth seat in darbar. In 1901 the Rustamzais numbered 348 in Kalát (193 males and 155 females); 108 were found in Quetta-Pishín. 14 in Thal Chotiáli, and 37 in Chágai. They hold land side by side with the Raisanis and their principal sections are Gul Muhammadzai, Jogezai, Isuffkhánzai, Akhtarzai, Gowáhrizai, and Sheakzai. Except the last named, all are descended from a common ancestor. The Sheakzais are of Baloch descent and joined the tribe as new-comers (barok). The Rustamzai Sardár is in receipt of an allowance of Rs. 300 per mensem from the Kalát District Levy Service, and his brother, Mír Hásil Khán has been

granted service in the Quetta-Pishin District and is (1906) POPULATION. Jemádár in charge of the Kuram post in Shorarúd.

In 1901, the Sheikh Husainis who numbered 1,391 in Kalát Sheikh (755 males and 636 females) were inaccurately classed as a section of the Raisani tribe. They are really a branch of the Hárúni section of the Muhammad Hasni tribe in the Jhalawan country, but have settled in the Sarawan district and afford an illustration of the process of fission among the tribes. Living as they do with the Raisanis, they join with the latter in good and ill but have no share in tribal land. The Sheikh Husainis have embanked the Raisanis' lands in Dulai and cultivate them as tenants. Their headman, Jemadar Ata Muhammad, lives in the Quetta tahsil.

In 1901, the Shahwanis numbered 6,318 in Kalat (3,508 Shahwani males and 2,810 females, the number of adult males being tribe. 2.378). The tribe occupies the mountainous strip of country running from a point south-east of Kalát to Johán in the north and also holds land in Khad south of Mastung. The main divisions consist of seven sections, the Ramadánzai, Alízai, Hasni, Súrizai, Kisháni, Siáhizai and Ghul, each of whom is again sub-divided into a number of sub-sections. The Kishánis live at Shekhri; the head-quarters of the Alizais are at Iskalku, where the bulk of them are to be found, the rest living in the neighbourhood of Mastung, Pringábád, and Khad. Outside the district. the Shahwanis are found in the Quetta-Pishin District (1,675 persons), Sibi (82), and Kachhi (11). The nucleus of the tribe the Ramadánzai and Alizai sections, is said to be of Baloch or Afghán origin, while another story is to the effect that they came from Sharwan in the neighbourhood of the Caspian. All the remaining sections are of alien origin. The Súrizais are said to have come from the Zagar Méngals of Nushki; the Siáhizai from the Mírwáris of Kolwa; and the Ghuls from the Méngals of Jhalawan. As has already been mentioned, the Shahwanis occupied the foremost position among the Sarawan Brahuis till they were ousted by the Raisánis. Háji Sardár Muhammad Khán, Shahwáni, who lived in the time of Nasír Khán I, greatly distinguished himself by his services and was given by Nasír Khán the title of yár-i-wafádár,

POPULATION.

"faithful friend," a mode of address still used in communications from the Khán to the Shahwani Chief. The record of his services is preserved in a sanad dated the 16th Rajab, 1186 H. (1675 A.D.) issued by Nasír Khán I, which mentions the various battles fought by the Shahwanis on behalf of the Khan and the number of their tribesmen killed; and in return for which the tribe was granted the revenue-free and proprietary rights in 15 kárézes in Sariáb near Quetta, 6 kárézes in Mastung and Mungachar, a piece of unirrigated land in Mungachar, the lands in Khad and those at Eri, Háji and Mahésar in Kachhi. Large tracts of revenue-free grants are held by the tribe in Bála Nári, in Bolán* lands and in the Dádhar niábat in Kachhi; those enjoyed by the Hásilkhánzais in the last-named two localities were originally granted by Nádir Shah for services rendered to him and confirmed from time to time by the Khans of Kalat. The tribesmen are mainly engaged in agriculture; in 1901 they were recorded as landholders, tenants, camel and cattle breeders and traders; many of those living in Mastung cultivate the Khán's lands and also act as tenants of one Some of the sections are flockowners and these include another. the Sháhozai and Kallozai branches of the Alízai clan, the Súrizais and the Ghul. The present Chief, Sardár Rashíd Khán (1906) who belongs to the Hájizai section of Ramadánzais, was elected Chief in 1892 on the termination of the direct line of the Chief's family on the death of Sardar Muhammad Khan in 1891 and was given the title of "Sardar Bahadur" in 1906. He is in receipt of an allowance of Rs. 300 per mensem from the British Government. He lives at Mári near Mastung. Other leading men in the tribe are: Khán Bahádur Mír Azím Khánt of Iskalku, headman of the Alízai section: Wadéra Adam Khán Kisháni of Kishán; Badal Khán Hasni and Shafi Muhammad Sháhozai, both living in Mastung; Saádulla Khán Hasni and Wali Muhammad Mírozai both of Sariab near Quetta and Mír Ahmad Khán Hásilkhánzai of Ghulam Prinz near Mastung. The latter is a descendant of Mir Qaím Khán otherwise known as Sultán Qáím Khán who held a high position in the Kandahar court and received the title of

^{... *} That is to say the lands in Kachhi watered by the Bolán river and situated east of Sanni.

[†] Azím Khan and Adám Khán died in 1907.

Sultán. Mír Ahmad Khán has inherited from his ancestors an Population: extensive jágír in Dádhar.

In 1901, 546 Umaránis (320 males and 226 females) were Umaránis. enumerated in Kalát as a section of the Shahwani tribe. are scattered in different parts of the country and are a branch of the clan of the same name found in the Jhalawan country with the Méngal tribe. They consist of the following sections: Shér Muhammadzai living at Iskalku; Kaisarzai, Zahrozai, Balochzai, and Gazainzai all living in Khad. A few families also live at Dhingarh and Dulai near Kahnak and work as tenants. The headman, Mír Dád-i-Khuda, belongs to the Shér Muhammadzai section and resides at Iskalku, where he has acquired land by purchase. The Shahwanis have given the Umaranis land in Khad and the latter also enjoy a share in land with their clansmen in Kapoto. The control of the Sarawan Umaranis has always been disputed between the Shahwani chief and the Umarani headman. the latter claiming an independent position. The Umaránis own many flocks.

In 1901 the Bangulzais numbered 9,487 in Kalát (5,285 males Bangulzais and 4,202 females), the number of adult males being 4,010. In tribe. addition to these, 866 were enumerated in Quetta-Pishín and 791 in Thal Chotíáli. The tribe proper is composed of $7\frac{1}{2}$ takkars or sections closely allied to each other and distinguished from the rest by their being in possession of a common tribal land. They include the Saidzai, Guhrámzai, Bijjárzai, Dínárzai, Shoránzai, Badduzai, Garráni and Sháhozai (half takkar). Besides these, eight other clans, though holding no share in the tribal land, own allegiance to the Bangulzai chief and are considered branches of the tribe to all intents and purposes. They are the Mandwáni, Mughundoi, Báránzai, Mazaráni, Shadiáni, Puzh, Pug and Lángay.

The head-quarters of the tribe are at Isplinji, where the Saidzais, the Dínárzais, and a few Badduzais, Sháhozais, and Shoránzais are settled. A few Guhrámzais live at Khaisár near Johán, and some are to be found in the Sibi tahsíl and in Mastung, but most of the Guhrámzais with the Gartánis have permanently settled at Gádi in Kachhi. Nearly all the Shoránzais and the Gwand section of the Badduzais are

Population. found in Pringábád, Tíri, and Mastung where they have purchased land. The Koh Badduzais cultivate the lands of the Kúrds in Kábo as tenants; they are also flockowners. The Sháhozais, Bijjárzais, and Báránzais have settled in the neighbourhood of Quetta where they have purchased land. The Mandwánis and Mughundois live in Robdár, the Shadiánis and the Puzh at Jam and Bárari, respectively, the Pug at Khajúri, all being in possession of good irrigated lands; the Lángavs live in Bhalla Dasht where they cultivate lands as tenants. The Mazaránis are entirely nomads and roam about with their flocks in the Bangulzai hills east of Isplinji.

The tribe has been largely recruited from outside. The nucleus consists of the Guhrámzais, Bijjárzais, Dínárzais, Shoránzais and Sháhozais, all descendants of a common ancestor named Bangul whow as a Rind Baloch. The chief's clan, the Saidzais, also claim their descent from Bangul, but are invariably said to be of Afghan extraction and derived from the Saidzai section of the Sárangzai Kákars of Sháhrig. The Badduzais' name has suggested to them to claim descent from the Baddus (Bedonins) of Arabia The Báránzais are an offshoot of the Báránzai Méngals of Jhalawán, the Mazaránis are Marris and the Lángavs are freed slaves of the Saidzais, while the rest are remnants of the Bind Baloch who settled in the district after the expulsion of their main body in the fifteenth century. They still retain Baluchi as their tongue. The Lángavs on account of their position as freed slaves, though theoretically considered of an equal status with the other tribesmen after affiliation. are still bound to furnish certain menial services such as supplying firewood and water to the Saidzais on occasions of deaths and marriages and are also required to cook food and dig graves.

Bangul, the ancestor of the Bangulzais, is said to have originally lived at Hamíri near Níchára. His descendants took Isplinji from the Kúrds and settled there. In Kachhi the Bangulzais hold revenue-free grants at Chandhar (Deh Bárán) in Bála Nári and also in the two villages Dádh Garráni and Dádh Baddúzai in the neighbourhood of Shorán.

Agriculture combined with flock and camel owning is the chief Population. occupation of the tribe. The Badduzais and Mazaránis are flockowners.

The tribe holds service in the Head-Quarter Levies attached to the Hon'ble the Agent to the Governor-General and in the escorts of other Political Officers in charge of Districts. The Chief, Wadéra Núr Muhammad Khán, is in receipt (1906) of an allowance of Rs. 300 per mensem as a political pension from the British Government. His brother, Mír Shádi Khán, who is married to the Lahri Chief's sister, is a Thánadár at Mungachar. Other leading members of the family are Mír Fateh Khán and Mír Pasand Khán, resáldár and jemadár, respectively, in the Head-Quarter Levies (1906), and Mír Yusuf Khán Saidzai. The principal headmen of clans and others are Ahmad Khán and Malik Khán Badduzais; Izzat Khán Bijjárzai; Qádir Bakhsh Báránzai, and Misri Khán, Shéru and Shérán Garránis.

The Chief's family are noted for their generosity and are held in great respect. Owing to one of their ancestors named Sakhi Patéhán having gained a reputation as a saint they are known as pírkhána of all the Sarawán Bráhuis and as such apart from their tribal status are accredited with a position of religious sanctity.

In 1901, 181 Dháhizai Nícháris (97 males and 84 females) were enumerated as a section of the Badduzai clan.

These Nicharis live with the Koh Badduzais in Kabo and Kuak, where they cultivate lands of Kurds and Muhammad Shahis as tenants and have also acquired land by purchase from the latter. Theoretically they are subject to their own Chief at Nichara, but practically they look to the Bangulzai Chief in all matters.

The total number of Muhammad Sháhis enumerated in Kalát Muhammad in 1901-was 2,821 (1,570 males and 1,251 females, the number Sháhi tribe. bf adult males being 1,033), in addition 174 were censused in Quetta-Pishin. The tribe consists of the following six main livisions: Sámézai also called Sámakzai, Bambkázai, Súrozai, Khédráni, Dodai, and Gwahráni. The Sámzéai are further sub-livided into the important Ahmadkhánzai, Hájizai, and Ráhatzai

ropulation. sub-sections. Some of the tribe are found in different parts of Mastung, Pringábád, Tíri, Kahnak, Dulái, and Khad as tenants of the Khán or other tribesmen. The Chief and a few other individuals hold revenue free grants in the Mastung niábat from the Khán. The rest of the tribe are found in the Shírínáb valley, where live branches of Súrozais, Dodais, Khédránis and Hájizais, and in Zard and Mandeháji in Mungachar where the Ráhatzai, Sámakzais, and Sewázai Khédránis have settled respectively. Some Gad Kush Khédránis live at Abád in Kardgáp and a few Súrozais at Malghozár and Garrári near Kalát where they hold lands. During the spring, most of the Muhammad Sháhis, especially the Súrozais, Gwahránis and Bambkázais from Mastung, move to Kúak and remain there with their flocks as long as pasture is available, and if there has been a good rainfall, a large population of all sections also gathers there for cultivating their lands.

The Muhammad Sháhis, according to local accounts, are some of the oldest inhabitants of the district. The nucleus of the tribe consists of the Sámézais, Súrozais, and Bambkázais, all descended from a common ancestor named Muhammad Sháh. Of the remaining sections, the Khédránis came from the Jhalawán Khédránis and the Dodais and Gwahránis are said to be of Baloch origin. The tribe first acquired lands in Mungachar and subsequently added other localities to their possessions. The lands in Kalát niabat are said to have been acquired in compensation for 40 Muhammad Sháhis killed in old idays by the ruler at Kalát.

The tribal area of the Muhammad Sháhis includes the valleys of Kúak, Shírínáb and parts of Mungachar including Zard. In Kachhi they hold Zardád in Bála Nári. The principal occupation of the tribe is agriculture combined with flock and camel owning. The Súrozais are the largest flockowners and numerically the strongest clan in the tribe. The leading men in the tribe include the Chief, Sardár Samandar Khán, a young man, who succeeded his father, the late Sardár Muhammad Azím Khán in 1904; Muhammad Amín Khán, uncle of the Chief and now Subedár in the Makrán Levy Corps; Mír Ghúlam Ján, Ráhatzai of Zard; Mír Ahmad Khán, Ahmad Khánzai of Pringábád father-in-law of the Rustamzai Chief; Mír Hazár Khán Dodai

thanadar of the Wali Khan Post, and Lashkar Khan Hajizai and Population. Allah Dinna, Bambkazai, both of Mastung.

The Chief belongs to the Ahmad Khánzai sub-section of the Sámézais. He receives a monthly allowance of Rs. 300. The Muhammad Sháhis also hold service in the Khán's Levies at the Wali Khán post.

A large section called Jhikko, numbering about 100 families, Jhikko own allegiance to the Muhammad Sháhi Chief, though they Muhammad Sháhis. have no share in the land of the tribe. They are entirely flockowners and live a nomadic life throughout the year in the Bolán hills, occasionally visiting Zarakhu, Mungachar, and Shorarúd. Their three principal branches are Shimmálzai, Shahdádzai and Bahádurzai, and their present headman (1906) is Dád Karím.

In 1901, the Kúrds including the Sahtakzais (1,278) numbered Kúrd tribe. 3,130 (1,697 males and 1,433 females, the number of adult males being 1,112). In addition to these, 626 were censused in Quetta Pishín and 198 in Las Béla. The Sahtakzais will be dealt with later; the remainder of the tribe is composed of 9 takkars, viz., Madézai, Zardárzai, Shudanzai, Shádizai with Muhammadzais (2 takkars), Phullánzai, Masudáni (2 takkars), and Gorgézai. The Chief belongs to the Khoedádzai branch of the Madézai clan.

The habitat of the tribe is the tract of country including the valley of Bhalla Dasht, Gwandén Dasht, and Marav. The Chief resides at Gwandén, but other members of the sardárkhél family live in Marav, the permanent tribal headquarters. The Shudanzais have bodily settled in the neighbourhood of Quetta. Small groups belonging to different clans are settled in Mastung, Pringábád, Dingarh, Khad, and outside the district in the Kási and Sariáb circles of the Quetta tahsíl where they hold lands. The Kúrds of Bághwána in the Jhalawán country and those in Las Béla have nothing in common with the main tribe living in the Sarawán country. The Kúrds are, without doubt, descended from the Kúrds of Kurdistán in northern Persia, but they appear to have early migrated southward and we hear of a portion of

POPULATION. them inhabiting Kirman in 934 A. D.* According to tribal accounts they came into Baluchistán with the Baloch of whom they claim to be a branch. They say they left the Rinds in Kachhi when the latter proceeded to the Punjáb. From Kachhi one of their branches joined the Mazári tribe of the Déra Gházi Khán District. The nucleus consisted of the Madézais, Zardárzais, Shudanzais, Shádizais, Muhammadzais and Phullánzais under the leadership of a Madézai named Tauko. The feud between the Kúrds and Sahtakzais is said to be of very old standing and to have arisen from a quarrel between Mazári, a former Sardár of the Kurds and Jadgal, then headman of the Sahtakzais. The Kúrds were at first worsted, but finally completely defeated the Sahtakzais. The Kuchk Baloch who then occupied Marav and had refused assistance to the Kúrds against the Sahtakzais, finding the former once more powerful, evacuated Marav and passed down into the Bolán for fear of vengeance.

In the meantime, the Bangulzais had seized Isplinji which was the joint possession of the Kúrds and the Ahmadzai branch of the Sahtakzais, and a feud commenced between the Kúrds and the Bangulzais which continued till the time of Nasír Khán I, by whom the feud was settled. The permanent division of land and the organisation of the tribe into its present form took place in the reign of Nasir Khán I, when Malik Dínár, Khoedádzai Madézai, was Sardár of the tribe. It was at this time that the two alien groups, the Gorgézai and Masudánis, joined the tribe, the former from the Gurgejzai Dombkis and the latter from the Sarparras, Jatois, Méngals, Mughundois, and Dehwárs.

The importance which the tribe acquired among the Bráhuis is due to its position at the head of the Bolán pass. Their Afghán neighbours, the Yásínzais of Hanna and Dumars of Zarghún have, in the past, joined hands with the Kúrds in times of emergency and still take their side in tribal feuds. The occupation of the tribe is agriculture supplemented by the produce of their flocks and camels. The tribal land in Kachhi is situated at Tákri in Bála Nári. The Chief of the tribe Háji, Sardár Yár Muhammad Khán, abdicated in favour of his eldest son, K. S. Mián Kháu, in 1906.

^{*} Kalat, by G. P. Tate, page 11.

Mián Khán's two brothers are Mír Wali Muhammad, Deputy Populat Inspector in the Quetta-Pishín Police, and Mír Shér Zamán. The Chief receives an allowance of Rs. 300 per mensem from the British Government. The badrakka and other services granted to the Kúrds from the Bolán are described in the Bolan Pass District Gazetteer. The tribe also holds levy service under the Political Agent, Kalát. Other leading members of the sardárkhél family are K. B. Mír Daurán Khán, thánzdár of Mastung, K. B. Mír Yusuf Khán and K. S. Rahím Khán. Among other notables may be mentioned Táj Muhammad, Madézai; Shakar Khán, Zardárzai; Mírsi Khán, Shudanzai; Muhammad Khán, Sánwánr Khán and Zamán Khán, Masudánis; and Mehr Dil and Allah Bakhsh, Gorgézais.

The Sahtakzais, the largest clan enumerated with the Kurds in Sahtakzais. 1901, numbered 1,278 in Kalát (682 males and 596 females, the number of adult males being 457). In addition, 80 were censused in Quetta-Pishín and 12 in Thal-Chotíáli. Their position in regard to the Kúrds has always been very indefinite and their feud with that tribe has been of long standing. Five sections constitute the clan, viz., Dríszai, Rahmatzai, Báhdinzai, Ahmadzai, and Khákizai. The first two formed the nucleus and are a branch of the Mirzai section of Sanzar Khel Kakars. They came from Kazha in Hindubágh, Zhob, thirteen generations ago under Sultán, son of Pasin, son of Nukra Din, the ancestor of the Driszais and fought with the Kásis at Gadazai in Quetta-Pishín District. Sultán's son Sahtak, whose grave is on the Marav Khand, was the eponymous ancestor of the Sahtakzais. His grandson Jadgál fought with the Kurds at Siahpusht and the feud has continued up to the present day. The remaining sections have been recruited from outside: thus the Báhdinzai are derived from the Zagar Mengals and Jatois, the Ahmadzais came from the Mengals of Jhalawan; and the Khakizais are an affiliated section (burok) from the Langav tribe. The Driszais, to which section the headman belongs, have affiliated several sub-sections from the Hálázais of Khárán and Panjgúr, from the Pírkáris and the Chhalgari Afgháns and from the Dehwars. In early days the Sahtakzais were occasionally at feud with their neighbours, the Báruzai and Sodi Pannis and the Kuchk Rinds. They occupy

POPULATION. the valleys of Zarakhu, Lés, Astangi, and Chauki, in each of which they do a small amount of cultivation, but the tribesmen are mostly flockowners and live a nomadic life throughout the year. During the winter they generally move down the Bolán hills, and are to be found with their flocks in the neighbourhood of Matháwanri while some penetrate eastward towards Sángán and others descend to the plains. The Sahtakzais are one of the tribes responsible for the protection of the Bolán and an account of the services allotted to them on this account is given in the Gazetteer of the Bolan Pass District. In Kachhi they hold land with the Kúrds at Tákri in Bála Nári. The headman, Sardár Baháwal Khán, belongs to the Kutab Khánzai branch of Dríszais. at Zarakhu during the summer and at Sariáth in the Bolán during winter. The only other influential man in the clan is Sabzal Khán; an old man living at Lés (1906).

Lahri tribe.

The Lahris enumerated in Kalát in 1901 numbered 5.420... (3,031 males and 2,389 females, the number of adult males being 2,109). In addition to these, 791 were censused in Quetta-Pishín. 39 in Thal-Chotiáli, and 11 in Chágai. The tribe occupies the south-eastern part of the District consisting mostly of hills bordering on the plains of Kachhi. It is divided into six sections. viz., Bráhímzai, Haidarzai, Zobéráni, Khalécháni, Shadiáni, and Shangrani. The first two formed the original nucleus of the tribe and belong to the Dombki stock of the Baloch. All others are of alien origin: the Zobéránis are Puzh Rinds; the Khaléchánis claim to be Baloch; the Shadianis came from the Zagar Méngals and the Shangranis are Afghans. In Narmuk, the tribal headquarters, live most of the Bráhímzais, Haidarzais, Zobéránis, and Shadiánis.

Branches of the Brahimzais and Haidarzais and nearly all the Khaléchánis and Shangránis are settled in Mastung and in the neighbourhood of Quetta, where they have acquired land by purchase or are camel-owners. Elsewhere the tribesmen hold land in Tahlgán in the Harboi hills and at Gazg and Hamíri.

The tribal land in Kachhi is at Hánbi (Túk) in Bála Nári, where certain Brahimzais also hold half revenue-free (nisf ambar) rights with the Khán in several villages; the Lahri Chief has

purchased land at Sachu, also at Sanni. The principal occupation POPULATION. of the tribe is agriculture combined with flockowning. Some Lahris have permanently settled in the Jhalawán country in the neighbourhood of Zahri, Gidar, Zídi, Wad and Sárúna, and in the Hab valley, but these have no connection now with the Lahris of Sarawán.

The early history of the tribe is identical with that of their neighbours, the Bangulzais. Many generations ago, Bráhim and Haidar, the progenitors of the two clans bearing their names. lived in Hamíri near Nichára in the Jhalawán country, whence their descendants came to Narmuk which was then occupied by Mandwanis and the Puzh, Kulloi, Godri, Ghulam Bolak, and Siáhpád Rinds. After some time the Lahris, as their strength grew, ousted these Rinds. The first sardar of the tribe was Muhammad Khán, who lived fifteen generations ago, and it was in his time that the permanent division of land took place among the tribe. Tribal accounts tell us that Kákar Khán, the Lahri Sardár, a contemporary of Mír Abdulla Khán of Kalát (1715-1730) and ninth in descent from Muhammad Khán, fought against the Kalhoras near Bíbi Náni in the Bolán on their way to attack Kalát; in this fight Kákar Khán was killed and it was in consequence of his death that the subsequent raids were made by the Bráhuis against the Kalhoras ending in the final overthrow of the latter's power in Kachhi. In later times, the Lahris were constantly at feud with the Marris, the Afghans of Harnai, and the Jatois of Sanni and rebelled against Mír Khudádád Khán, Khán of Kalát, who more than once sent troops to Narmuk. Jahángír Khán, the grandfather of the present Chief, was killed in the battle of Khad. His son, the late Sardar Dost Muhammad Khan. died in 1904 and was succeeded by his son Sardár Bahrám Khán. Dost Muhammad Khán was one of the best Bráhui Chiefs, loved by his tribesmen and much respected for his integrity.

The old tribal headquarters is the village of Takht, commonly known as Takht-i-Muhammad Khán, but the late Sardár Dost Muhammad Khán, on account of his differences with the rest of his family, came to Hasanjoi and built a village there. The Chief is in receipt of a monthly allowance of Rs. 300 from the British

POPULATION. Government. The leading members of the Chief's family (1906) are Mír Khair Bakhsh Khán, uncle and guardian of the Chief; Mír Kamál Khán, son of the late K. B. Mír Samundar Khán; Háji Abdul Karim: Mír Itbár Khán, náib of Lahri niúbat: Mír Madad Khán and Mír Murtza Khán. Other influential men in the tribe are Shahbaz Khan, the headman of the Shangranis; and his sonin-law, K. S. Abdur Rahmán, resáldar in No. 58 Silladár Camel Corps. The Lahris as a tribe have an indifferent reputation. They are proverbial for their folly and are styled as khosha-duzd. stealers of crops, by other tribes.

Sarparra. tribe.

In 1901, the Sarparras in Kalát numbered 885 (467 males and 418 females, the number of adult males being 299), and there were 55 Sarparras in Quetta-Pishin and 49 in Chagai. The tribe is composed of seven sections, viz., the Shambadai, Súmárzai, Adamzai, Notakzai, Járzai, Murrai and Rodénzai. The last named live mostly in Kahnak and are sometimes confused with the Rodénis. Sarparras occupy the long strip of country along the western border of the district including Gurgína and Kardgáp. A. few families of Súmárzais also live at Pringábád in Mastung and some Murrais at Maray. Outside the district, branches of the tribe are found in Shorawak and Rek in the Amir's territory and in Seistán. All these are generally flockowning sections from among the Shambadais, Adamzais, Járzais, and Murrais. With the exception of those in Seistan, they occasionally return to Gurgina and Kardgap and, as many of them still continue toenjoy their lands, they are required to share all tribal responsibilities. The tribe is partly of Baloch and partly of Afghan origin. The Shambadais, the oldest section, are descendants of one named Shambada, son of Devad, a Rind, who lived thirteen generations ago. The Súmárzais and the Járzais came from the Yusufzai Afgháns, many generations ago, via Zhob. The Murrais came seven generations ago from the Lotáni Zahris of Jhalawan under the leadership of Shádi Khán; the Rodénzais are descended from one named Umar, who came from the Dumar Kakars, eleven generations ago. The nucleus of the Adamzais and Notakzais is of Baloch stock, but they have also been joined by Afghans from Pishin and Shoráwak.

The Shambadais, Adamzais, and the Notakzais first lived in POPULATION. Nimargh, which was partly in their possession, and then occupied Gurgina and Kardgáp, most of their lands in Nimargh being subsequently sold to Sásolis and others. The Gurgina Káréz in Gurgina, the oldest source of water supply in that valley, was equally divided among the above three sections, and others received shares subsequently as they joined. The Shambadais were joined by the Rodénzais and Murrais; and the Adamzais and Notakzais by the Súmárzais and Járzais. The tribe was now divided into two divisions, viz., the Shambadais, Rodénzais, and Murrais occupying Gurgína; and the Adamzais, Notakzais. Súmárzais and Járzais occupying Kardgáp. The tribe occupies an important position owing to their close proximity to the Afghan border and were, in former times, constantly at feud with the Baréchis of Shoráwak. They are notorious for quarrelling among themselves and it is said that they will fight with each other even over a dog or a cat. The Murrais, who are dominant in Gurgína. are the most turbulent of all the clans. The Rodénzais, though enjoying lands with the Sarparras in Gurgina, are practically independent of the control of the Sarparra Chief and the same is the case with the Kahnakis and the Shamezais of Kahnak, who commonly style themselves as Sarparras, but hold no share in the tribal land and to all intents and purposes form a part of the Khán's ulus.

Unlike other Bráhuis, the tribe does not resort to the periodical migration to the plains. The principal occupation is agriculture; some of the Shambadais and Járzais possess large flocks of sheep and goats. The tribal grant in Kachhi is situated at Gogro in Bála Nári. The present (1907) Chief is Sardár Imám Bakhsh who lives at Kardgáp. Other leading men are: Mír Táj Muhammad Adamzai; Adam Khán, formerly Jemadár in the Chágai Levies; Bráhim Khán and Sánwal Khán Súmárzais; Lashkar Khán and Murád Khán Murrais; Allahyár Khán Notakzai; Badal Khán, Járzai; Dil Murád Shambadai and Hamíd Khán Rodénzai.

The Rodénis who, in 1901, numbered 1,978 in Kalát. 1,090 males Rodéni tribe. and 888 females (the number of adult males being 821) are a

POPULATION.

Jhalawan tribe with their head quarters at Súráb, but the bulk of them reside in the Kardgap valley where they hold lands, which they are said to have obtained as compensation for Baté Khán, one of their ancestors, who with seven others was killed in a fight near Kili Murád Khán. The Sarparras claim to assert authority over the Rodénis on the ground that the latter hold land in their tribal territory but have never been able to enforce their rights. The Rodénis are descended from Rodén, one of the seven sons of Bráho, the reputed ancestor of the Bráhuis. Five sections of the tribe reside in the district, viz., Dinárzai, Zahrozai, Somálzai, Shahakzai, and Pírkáni. The first four are the descendants of Rodén. The Pírkánis number about one thousand families and are said to be descended from Pirrik, a slave of the Naushérwanis: they hold land in Kardgáp and Táj (Kachhi), but are chiefly found in Goari in the Sarlath Range. The principal headman of the Sarawan Rodénis is (1906) Mír Bahawal Khan who lives at Kili Murád Khán in Kardgáp. The headman of the Pírkánis is Muhammad Khán Hasanzai-

Lángav tribe.

The Lángavs are the most numerous of all the Sarawan tribes. In 1901 they numbered 17,004 in Kalát (9,430 males and 7,574 females, the number of adult males being 5,331), besides which there were 614 in Quetta-Pishin, 246 in Thal-Chotiáli, and 586 in Chágai. The tribe is composed of two divisions, viz., Ali and Shádizai also called Shádi. The former comprises the following nine principal sections: Alamkhánzai; Zahrazai; Gáházai; Allahyárzai; Jamandzai; Sálárzai; Somáilzai; Brátizai; and Sháhozai. The Shadizais include Shahalizai; Khatizai; Malangzai; Zakarzai; Tallikozai; Isazai and Núr Muhammadzai. Each of the foregoing sections is divided into a number of sub-sections, and several of these are by themselves so large or otherwise of such local importance that they are better known by their own names. Lángavs cultivate the Mungachar valley, in which they principally live, on behalf of the Khán, the Raisánis, and the Muhammad Sháhis. Elsewhere they are found in Mastung, Gurgina, Isplinji, Marav, and Dasht-i-be-Daulat where they cultivate lands either as tenants or have acquired land by purchase. In the Jhalawan country, branches of the tribe live in Dashti-Gorán, Mámatáwa, Nál, and Wad. The nucleus of the tribe

is descended from Háji, a Rind follower of Mír Chákar who POPULATION. lived in Grésha near Nál. Háji had two sons, Omar and Mando. and one daughter. The latter is said to have been married to Mír Kaisar of Kalát and the result of this union was Mír Abmad II. Mando lived at Gaiwandaragh near Kalat and was killed by the Khán. His son Allahyár was given land in Mungachar in compensation for the life of his father. His direct descendants are the Alam Khánzai Zahrozai; Gáházai; Allahyárzai; and Jamandzai among the Ali Lángavs; and the Núr Muhammadzais among the Shádizais. Round these the present large tribe was formed. The tribe is composed of a multitude of alien groups. There are outsiders in each section. sub-section and even families. Thus, the Alis contain among them Notáni Chhuttas of the Hab, Númrias of Las Béla, Rakhshánis of Khárán, Afgháns from Kandahár. Sannáris and Muhammad Hasnis from Jhalawan, Kakars from Hanna and Pishín, Kásis from Quetta, Mírwáris from Kolwa, and Zagar Méngals from Nushki. The Shádizais include among them Dombkis from Kachhi, Hárúnis, Kalandránis, Méngals, Bangulzais Afgháns, Zagar Méngals, and Rakhshánis. The Lángav Chief takes revenue (mália) from his tribesmen. The principal headman (takari) of the Shádizai division also makes certain recoveries from his clan. These are described in Chapter III. By old custom the tribe is bound to cultivate the Khán's lands and provide certain other services of a peculiar kind, an account of which will be found in Chapter III. Hence among the Brahui tribes, the Langavs have always been looked upon more or less as a subject race. Their Chief is not on an equal footing with the rest of the Sarawan Chiefs. Their main occupation is agriculture and some of them are professional karéz diggers. They supply labour as tenants in different parts of the district. A good many cultivate the Khán's lands in Chhappar. As camel breeders, they have acquired a great reputation and engage in transport work in different parts of the Agency. Caravans of Lángavs proceed every year to Makran for dates. Most of the tribesmen who are dependent on dry crop areas, possess large flocks of sheep and goats. The tribe has prospered greatly of late years and a great portion of the rights in land in Mungachar, belonging to the Muhammad Sháhis, has been purchased by them.

POPULATION.

The Chief of the whole tribe is Sardár Rasúl Bakhsh who succeeded his brother Safar Khán in 1877. He belongs to the Mírkhánzai section of the Alis. As the Lángav tribe are found scattered over large tracts of country, the Chief has a very difficult duty to perform. The next man of influence in the Chief's family is Mír Pír Muhammad, nephew of Rasúl Bakhsh. Other leading men in the tribe are Azád Khán and Háji Karím Bakhsh, principal headmen of the Ali and Shádizai divisions respectively. The Sheikhzais of Rodangi in Zard, the Malangzais of Mandeháji and the Sheikhzais of Chhappar are accredited with religious sanctity.

Two important sections living with the Lángavs are the Khurásánis and Kullois. The former consist of about 150 houses scattered in different parts of Mungachar and Gurgína. They cultivate lands on behalf of the Khán and the Muhammad Sháhis and also possess a large number of camels. Those living in Gurgína have acquired shares in kárézes. The Khurásánis are descendants of prisoners of war brought from Meshed by Nasír Khán I, who released them on his return. Formerly the Khurásánis looked to the late Mustaufi Fakír Muhammad and his father Náib Abdul Azíz, as their head, but they are now disunited. The principal headmen are Dád Muhammad, son of Ata Ján, once the Khán's Náib of Quetta, Mulla Ghulám Rasúl and Rahmán all living in Mungachar, and Haibat and Nabi Dád living in Gurgína.

Kullois.

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The Kullois living in the district are a branch of the Kulloi Rinds of Kachhi and settled in Mungachar many generations ago. Their total population is about 90 houses; and the principal sections are the Músazai, Karímzai, Sámézai, Hasanzai, Hairozai and Jalálzai. The Kullois hold land in Mungachar and their position with regard to the Lángav Chief has in the past been a bone of contention, they being often claimed as a section of the Lángav tribe. Reference will be found in Chapter III to the annual malia of Rs. 100 paid to the Lángav Chief by these Kullois, who are, however, exempt from all the other services to which the former are liable. For tribal purposes the Kullois are considered a section of the Rind tribe and acknowledge the Rind

Chief of Shorán as their Sardár. The local headman is Allah POPULATION. Bakhsh of the Músazai section who lives in Zard and is an influential man.

In 1901 the Dehwars in Kalát numbered 6,727: 3,709 males and Dehwars. 3,018 females; the number of adult males being 2,628. Besides these, 273 were enumerated in Quetta-Pishin and 18 in Chágai.

The Dehwars are an industrious and inoffensive people, whose name is derived from the fact that they live in dehs or collections of mud houses. They do not migrate annually to the plains like the Brahuis among whom they live. They furnish no quota of troops to the Khan of Kalat, but tacitly accept a position of subordination to the Brahuis. The nucleus of the tribe is undoubtedly of Tajik origin and like the Tajiks they all speak Persian.

Tradition says that it was chiefly through the assistance of the Dehwars of Kalát that the Ahmadzais acquired Kalát. They killed the governor, named Mandav, whose tomb is situated opposite the Mastungi gate at Kalát and invited Mír Ibráhím Mírwári to occuppy the masnad. The latter sent his grandson Mír Hasan.

The tribe consists of two divisions, one living in Kalát and the other in Mastung, and each division is under a separate arbāb. Nearly all are cultivators of the Khán and for purposes of administration are treated as purely State subjects as distinguished from Bráhuis. The Kalát Dehwárs consist of five sections, viz., Dodaki, Rais Tok, Tolonti, Alizai, and Mughalzai; all are bound to serve the Kbán without pay, provide his guests with necessaries such as fuel and grass and furnish messengers. The subject has been dealt with in Chapter III.

The Dehwars of the Mastung valley are known from the localities occupied by them thus: Mastungis, Pringábádis and Tírchis. The Mastungis include the Khwájakhél, Sheikh, Sárang, Hotizai, Saulai, Abizai, Zarkhél and Dádizai. Other minor units which are reckoned with the Dehwars of Mastung are the Qúzizais, Jola, Chamakazai, and Goharazai. The Khwájakhéls are said to have come from Shíráz in Persia. The principal headmen are (1904) Arbáb Imám Bakhsh, the Arbáb of all the Dehwars in the

POPULATION. Mastung, Valley, Maliks Abdur Rahmán and Shádi Khán. The Sheikh are a large section descended from two brothers named Sheikh Taghe (Taqi) and Sheikh Ali, who were Alizai Afghans from Zamindáwar in Afghánistán. The shrine of the former is situated near Mastung and is held in great reverence by the people. The principal headman of the Sheikh is (1904) Azíz Khan. Another influential man in the clan is Rais Muhammad Khair, a large landowner, living at Sultan Karéz. The Sarangs are an offshoot of the Ishákzai Durránis of Afghánistán. present headmen are Rais Méwa and Dur Muhammad. Hotizais consist of two sections, Hotizai and Rindak; both claim a Rind Baloch origin from two ancestors named Hotan and Rindak. The headmen are Kadir Bakhsh, Abdul Hamid and Rahím Bakhsh. The Saulais claim descent from a Shahwani named Amír Khán. The present headmen are Gulshér and Gul Ján. The Abizais, who also include the branch named Bádinzai. claim an Arab descent from two ancestors named Abid Khán and Bádín. The present headmen are Háji Abdur Rahmán and Rais Badal. The Zarkhéls claim a common descent with the Zarrakzai Zahris of Jhalawan and are Tarin Afghans. They are very old inhabitants of the Mastung valley and played an important part in the early history of the Brahuis : Mir Bijjar Mírwári, who drove out the Jadgáls, was born of a Zarkhél mother and the Zarkhéls are described as having helped the Mirwáris against the Jadgáls. The present headmen are Lál Muhammad, Adam Khán. Faiz Muhammad and Mustafa. The Dádizais claim to be of Rind Baloch origin. The headmen are Ali Mardán and Shakar Khán.

The Pringábádi Dehwárs comprise four sections, viz., Yusufzai, Buddazai, Turrazai also called Tuhránzai, and Muhammadzai, all being of Afghán crigin; the Yusufzais and Buddazais are said to have come from the Pesháwar District; the Turrazais from Persia and the Muhammadzais from Kábul. The malik of the Yusufzai section takes precedence among all the Pringábádis and the present malik (1904) is Pír Muhammad; other men of note are Malik Rasúl Bakhsh Yusufzai, Pír Bakhsh Buddazai, Muhammad Akbar and Sháh Husain Turrazai, and Murád Khán Muhammadzai.

The Tírchi Dehwárs who live in Tíri are a separate unit like POPULATION. those of Pringábád and most of them are of Tájik origin though in recent times outsiders from Afgháns, Baloch, and Bráhuis have joined them and an instance is found of a small branch known as Kashmírzai who are said to have come from Kashmír. They are particularly good cultivators, and their lands extend as far as Kahnak. The principal sections of the Tírchis are Anázai, Pír Walizai, Músa Khánzai, Amadúni, Mehr Alizai, Husain Khánzai, Mandauzai, Zakriázai and Sanjarzai. The head malik belongs to the Anázai section; the present malik is Badal Khán, an influential man and a large landowner. Other leading men are malik Saifulla, and Sádat Khan, Husain Khánzais; and Rais Káim Khán, Músa Khánzai.

Anthropometrical measurements made in 1903, showed that the Dehwars had broad heads, medium noses, and varying stature. The average measurements of those examined were as follow:—

Average Cephalic index		•••	•••	81.7
71	Nasal "	•••	•••	74.3
,,,	Stature	•••	•••	164.2 c. m.
" Orbito-nasal index		•••	46.	118.

The Saiads numbered 442 in 1901: 223 males and 219 females. Saiads. Most of them live in Mastung and Kalát, but some are also found in Tíri, Pringábád and Mungachar. The Mastung Saiads are known as Yakpásizai from the surname of their ancestor Khwája Ibráhim, Yakpási, so called because any prayer made to God through him was fulfilled within a pás or a period of three hours.

They are collaterals of the Chishti Saiads of Kiráni and Dádhar. All hold lands and supplement their income from the offerings they receive from the people in the shape of alms (thuk) and inoculation fees (tukka) for which they visit remote parts of the district. The Saiads of Mastung once held large revenue-free grants of land, most of which have been sold by them to other tribes. The present leading men among them are Saiad Vakíl Sháh, Saiad Gházi Sháh, Fázil Sháh, Dád Muhammad, Nazar Sháh, Nihál Sháh and Háji Sháh of Mastung; Saiad Muhammad Zamán Sháh of Tíri and Saiad Salím Sháh of Mungachar. The

Population last named possesses considerable influence among the Lángavs and is well known for his hospitality. Saiad Muhammad Sharif, father of Saiad Muhammad Zamán Sháh of Tíri, figured conspicuously in the intrigues against Mehráb Khán II, and a reference has been made to him in the section on History.

> The Saiads of Kalát are Chishtis and Gílánis (also called Jílánis). Among the Chishtis the leading position is held by a lady, known as Bibi Sahib, who is greatly respected and carries on a large inoculation practice with the help of one of her attendants called khalifa. The present Bibi Sáhib is Bibi Maryam. Chishtis of Kalát are distinct from those of Mastung. nis are very often absent in Jhalawan and Sind collecting alms: from their followers. The leading man among them is Saiad Jahán Sháh.

> About ten or fifteen families of Shadizai Saiads live in the Saida-ta Shahr in Kahnak and in Tíri. They are an offshoot of the Shádizai Saiads of Pishín and hold revenue-free lands in The principal man among them is Saiad Páind Ján.

Loris and dants.

A description of both these classes will be found in the Jhaservile depen- lawán Gazetteer. In 1901 they numbered in Sarawán 1,978. Of the Loris, the largest groups are found in Mungachar, Mastung and Kalát. Their headman, who styles himself sardár, lives in Mastung and the present (1906) incumbent is Dost Muhammad. Some of the servile dependants have acquired land and maintain themselves by agriculture.

Hindus.

The Hindus found in the district are immigrants from Shikarpur in Sind, from Déra Gházi Khán in the Punjab and from Kachhi. A few Sikhs are also found among them. In 1901 they numbered 841:493 males and 548 females. Most of them live in Kalát, Mastung and Mungachar, a few being found at Johán, Pringábád, Tíri and Kahnak. There is at Kalát a Hindu shrine of Káli. They are all engaged in trade and during the summer, Hindus from Dádhar, Sanni and Bhág in Kachhi, come to sell their wares in all cultivated localities and several Hindu fakirs of Márwár also visit the district. In recent years many of the Hindus of Kalát have settled at Quetta where they are known as Kaláti Hindus. The Hindus have always been well protected and among the Population. Bráhuis, Baloch and Afgháns, there was an unwritten law that in the course of raids and counter-raids, Hindus were not to be molested. They have of necessity been obliged to conform somewhat to their entirely Mussalmán surroundings and do not scruple to drink water from a Mussalmán's water skin or use his griddle to bake bread on.

According to their ancient custom, the Hindus usually affect red trousers and a red cap or turban, and their shirt is buttoned on the left instead of the right shoulder; but in other respects their dress, both for men and women, is similar in pattern to that worn by the tribesmen.

An annual fair of the community takes place at Gédbast kumb, also called Indrapuri, near Kishán on the bisákhi festival.

There are panchayats at Mastung and Kalát to govern the social affairs of the community and to control trade. At the head of these panchayats is a mukhi who exercises great influence among his co-religionists and is officially recognised as their spokesman.

The present mukhi of Kalát is Gédu Mall, grandson of Díwán Bacha Mall, who was Financial Minister to Mehráb Khán II and fell fighting at the storming of Kalát in 1839. Other leading men are Diwán Mohan, Kárdár Toru Mall and Chéla Rám of Kalát and Díwán Chúhar of Mastung.

The accounts of religion and occupation given in the Jhalawán Religion and Gazetteer refer also to Sarawán. The rules as to social life and Occupation. social precedence, custom of hál, hospitality, food, dress, dwellings, disposal of dead, amusements and festivals are also the same as in Jhalawán. The Ahmadzais, as members of the ruling family in Kalát, take precedence above all others; among the tribes, the Raisánis as the head of the Sarawán division of the Bráhui confederacy have social precedence; while among the Chiefs of the different tribes the question of precedence in darbárs and jirgus, is often a debateable one, generally the Shahwáni Chief takes the second place followed in succession by the Rustamzai, Bangulzai, Muhammad Sháhi, Kúrd, Lahri and Lángav Chiefs. The Sarparra Chief, together with the Chief of the Zagar Méngals of Nushki

POPULATION. and the Rind Chief of Shorán in Kachhi claims precedence above the Bangulzai sardár. The Lángavs, Loris, Dehwars and Khánn'záds (freed slaves) are treated as socially inferior.

The indigenous Muhammadan population, who represent about 99 per cent. of the total, are Sunni Muhammadans, but upsesrtitions prevail among them as among the tribesmen of Jhalawán. A Raisáni of whatever position or rank would pass the night in the house of a neighbour, should he happen to return from a journey to his village or encampment. There are numerous shrines in the country, the most important ones being those of Sheikh Rajab also called Sheh Rajab at Nímargh, Bíbi Sahib at Ziárat; Sheikh Taghe in Mastung; Sháh Mardán north of Kishán; Sakhi Patehán at Khaisár; and Sháh Abdulla in Narmuk.

Sheikh Rajab.

Sheikh Rajab, who was a Barijah of Sind, came to Nimargh and married a daughter of Saiad Kalan. The latter's descendants are now known as Saiad Kalanis and live in Shorarud and in the Sarlath hills on the Afghan border. Sheikh Rajab's shrine is visited by the people of western Sarawan, and those of Jhalawan and Shorarud. After the wheat harvest each year, a date is fixed for a fair to be held at the shrine of which the news is sent abroad to all the followers of the saint who assemble with their offerings of sheep and goats. These animals are killed and distributed among the assembly. The people of Nimargh who pay one-fortieth of the produce of their lands as thuk contribute the flour and cook the cakes and distribute them.

Close by the shrine of Sheikh Rajab is that of Pír Jalái one of the followers of Sheikh Rajab, whose daughter was married to Páind, the progenitor of the Páindzai Sardár Khél Zagar Méngals, to whom the Pír gave a portion of land now known as Páindwal as her dower. After Sheh Rajab's death, Páind appropriated more land, whereupon Pír Jalái cursed him; Páind shortly after died from an ulcer in the throat and, tradition reports, all those of his followers also who had accompanied him to Nímargh.

Bībi Sáhib.

The shrine of Bibi Sahib, a pious lady, whose real name was Bibi Nékzan and who along with her maid sank into the earth when persecuted by some infidels, lies at Ziarat in the neigh-

bourhood of Kalát. The shrine is visited by persons bitten by Population. rabid dogs, and all persons who pay fixed contribution to the shrine thereby secure immunity from cholera.

The most important shrine in the Shahwani tribal area is that Shah Mardan. called Shah Mardan-na-Ziarat situated between Kishan and Johan on the Kalat-Bolan road. Tradition says that Ali, known to the people as Shah Mardan, came to the spot where the shrine exists in pursuit of infidels. Here a fight took place and it is said that the camel which Ali was riding climbed over the rock in two jumps. and a spot is pointed out which shows the foot prints of the camel The shrine consists of a stone enclosure erected at the foot of the rock. It is greatly venerated by Brahuis who visit it with all sorts of prayers and a large number of animals are sacrificed at the shrine during the year.

Sakhi Patehán was one of the ancestors of the Saiadzais, the Sakhi family of the Bangulzai Chief. His generosity won him the title Patehán. of sakhi meaning generous. His shrine is situated at Khaisár near Johán. Local accounts state that Sakhi Patehán and his followers once fought with Mír Zarrak, the ancestor of the Zarrakzai Chief of Zahri, and when defeated by the latter, Patehán laid on him the curse that his successors in the chiefship should never have more than one son each. The shrine is respected by all the tribes generally and by the Bangulzai tribe in particular who take oaths in his name. The wife of Sakhi Patehán, Bíbi Lálén, is buried at Isplinji.

The shrine of Shah Abdulla is situated in the Drang valley in Shah Abdul. Narmuk. On the birth of a male child, the Lahris sacrifice a goat or sheep on this shrine and on a similar occasion in the family of the Lahri Chief a bullock is sacrificed. Every cultivator in Narmuk pays thuk to the shrine in the shape of one chotra of grain. Shah Abdulla's father was Shah Jáfar, brother of Bíbi Nani and Pír Gháib, whose shrines are situated in the Bolán and at Khajúri respectively. The shrine of Shah Jáfar is at Robdár, where he is said to have killed a snake which was a terror to the people. He married a daughter of the headman of Robdár and the result of the union was Shah Abdulla.

Among minor shrines may be mentioned the following: At Johán the shrines of Bíbi Názo, Shah Dáho, Bughdi Shahíd

POPULATION. and Chillinga. That of Bibi Nazo, a Saiad lady of Mastung. is resorted to by persons bitten by rabid dogs. It is a memorial shrine erected over earth brought from the place where the dead body of the lady was washed. The shrine of Shah Daho, a Kahéri of Kachhi, has the power of averting natural calamities from the crops of its votaries. At Khajúri is the shrine of Pír Gháib, said to be a brother of Bíbi Náni, whose shrine is in the Bolán. Pír Gháib produced the spring at Khajúri. South of Púdgili in Narmuk is the shrine of Pír Jongal who was a Kahéri of Kachhi and one of the family of the Haft Walis of Bhathari near Shorán. At Kalát are the shrines erected in the name of the famous Muhammadan saint Pír Dastgír of Baghdád, and the shrine of Pir Chatan Shah, a local Saiad of old days who is said to have produced the large spring called Chashma at Kalát. Chhappar are the shrines of Pir Chandram and Sheikh Shaban near Chháti. In Mungachar are the shrines of Saiad Nauroz, Mahmúd Gohrán and Sheh Háji. In Mastung are the shrines of Khwaja Ibrahim Yakpasi, the ancestor of the Chishti Saiads of Mastung, Sultán Samarkund Bukhári, of Sheikh Lango at Kandáva near Tíri and of Sheikh Wásil (a memorial shrine) at the place of that name; and Sheikh Toghi, an Alizai Durráni, in Mastung whose descendants are known as the Sheikh Dehwars. In Kardgáp is the shrine of Fakír Hotak, a Sumalári Méngal who was an attendant of the shrine of Sheikh Husain in Nushki about four generations ago. He is believed to possess great influence over snakes, and khúrda or dust taken from his shrine and applied

Names, title, to the wound cures snake-bite. etc.

The account of names and titles, rules of honour, system of reprisals, and blood compensation given in the Jhalawan Gazetteer applies also to Sarawán.

CHAPTER II.

ECONOMIC.

THE presence of vast mountainous tracts which can never AGRICULbe made capable of cultivation and the absolute General necessity of perennial irrigation to ensure a harvest are two conditions. of the principal features which present themselves when considering the general conditions under which agriculture can be carried on in Sarawán. Permanent irrigation, again, is almost entirely confined to the valleys in the west and west-central parts of the country. Of these, the western valleys are less favourably circumstanced than the west central, among which Mastung, Mungachar and Kalát are prominent. The centre of the country, viz., the plains of Bhalla Dasht, Gwandén and the neighbouring country, are remarkable for the great depth at which water is found and the consequent impossibility of bringing it to the surface for cultivation at paying rates, while, in the cultivable tracts situated in the eastern hills, cultivation is almost completely dependent on rainfall, and the distance of these places from markets would probably preclude much progress, even if perennial water were available. Where, again, permanent water is available, at such places as Kishán, Johán, Jam and Barari, the quantity of land is too limited to admit of the whole being successfully utilised.

The proportion of dry crop land, therefore, is enormous when compared with the tracts subject to permanent irrigation. On the east are the valleys of Narmuk, including the Lop, and Morgand; in the centre, Kúak, Kábo, Isplinji, Marav and the two northern valleys of Bhalla Dasht and Gwanden with their offshoots; in the western part of the centre, large parts of Chhappar, Mungachar and Mastung, the latter including Khad and Dulái, lie unirrigated; while on the west are the dry crop tracts of the Gurgina-Kardgap Everywhere, too, the stony slopes at the foot of the

AGRICUL-TURE. mountains are useful only for grazing, nor, even when rains are abundant, are the valleys cultivated in their entirety.

It follows that though the district, through its possession of the central strip of irrigated country, is the best protected part of the Kalát State, cultivation is only secure in a comparatively insignificant area. The bulk of the population is dependent on dry crop areas from which a full crop cannot be expected oftener than once in about five years. Indeed, it is said, that, during the decade ending in 1904, a full crop has nowhere been obtained from dry crop lands. "Khushkáva gor ná shikár e" i.e., dry crop cultivation is like hunting the wild ass, is the common saying of the country-side:

Soil

The soil of the district is fertile both in irrigated and unirrigated tracts. Mastung is especially famous for its fertility, and all crops produced here, but notably wheat, are of excellent quality. Among unirrigated tracts, the soil of Narmuk is most fertile; in the rest of the district it may be regarded as of fairly uniform quality throughout.

No scientific analysis of the soil in the district has ever been made, but the people divide it into various categories. The best is a reddish clay called matt or matmál, also known by some as hanaina, or sweet soil. It is largely mixed with silt and also contains some sand, and is to be found in the centre of all dry crop valleys. Next comes siáhzamín, a dark loam generally found in the irrigated areas at Kalát, Iskalku, Johán, Isplinji, and some parts of Mastung. Next to matt it is best adapted for the cultivation of wheat. It withstands cold and frost well and retains moisture for a long time.

Soil which has a large admixture of sand is known as réki. It is found in different parts of Mastung, but especially round Tiri and Pringábád, where the moving sand has rendered several tracts incapable of cultivation. Soil containing a moderate quantity of sand is well suited for lucerne and melon growing.

Other well-known soils, but of inferior quality, are karkat, thathakhári or sári, yall or khér, korki and dági. Karkat, also known as kharraina, or bitter, resembles the sarh or kharch soil of Kachhi, and is to be found along water channels, and in places where water has ponded for a time. The

AGRICUL TURE.

surface becomes stiff and hard and loses most of its good qualities. The thathakhári is a hardish clay of dark red colour mixed with sand and rubble. Stony soil is known as vall, and all hill skirts are known as khér. Yall is a good soil for grape growing, an industry which could probably be developed at Les, Chauki, and Astangi in the Sahtakzai country where this soil is extensively found. Korki and dági are unsuitable for cuitivation of any kind. The former has a thin layer of clay on the surface but a hard sub-soil. whence the name, which means "blind." Dági is white clay which is only useful for plastering houses.

Land bearing salt efflorescence is known as kallar, kallarbast, shorawazm or shorabast. Kallar tracts are extensive in Kahnak, Shirinab, Gurgina, and in the Mandéháji, Brinchinnau and Zard circles of the Mungachar valley. Kallar is either deep or shallow. Successful cultivation in the former is almost impossible, but in the latter a grain crop generally does well after it has once germinated.

Inferior soil, which is otherwise unfit for cultivation, is improved in Mastung by artificial deposits of good earth. This is done by excavating the good soil in the proximity of narrow water channels, into which the water from a large kárés is then lead, the earth thereby being carried to the desired locality. As much as a foot of earth is sometimes deposited in this way. Soil, thus improved, is called brusht.

The uncertainty of the rainfall, the average of which is Rainfall. about 71 inches, 6 being received in winter and 11 in summer, is a most important factor in agricultural life. good rainfall," wrote Mr. J. A. Crawford about the adjoining District of Quetta-Pishin, "naturally affects not only the amount of rain crop cultivation, but also the irrigated land, and the springs, streams and kárézes which supply the water for irrigation. For a really good harvest, rain or snow before the end of December is required. This enables a large amount of rain crop land to be brought under cultivation, and replenishes the streams, springs and kárézes."

Almost more important, however, than a good rainfall. is a heavy snowfall. Heavy rain drains off rapidly in floods and, though useful for flood and dry crop cultivation. has not the same effect in supplying the deficiencies in the

AGRICUL-TURE. natural sources of irrigation as a heavy covering of snow. Reference has already been made to the importance of the kárés as a source f irrigation, and in years in which the snowfall has been small, the supply of water in them almost always shows a large decrease. The effects of deficiency in rain and snow fall in a series of years is to be seen in the fact that while there were 141 running káréses in Mastung in 1904, there were 76 dry ones and that many of the latter had ceased to run within recent times. The heavy snowfall of 1905, on the other hand, resulted in several káréses (which had become dry) beginning to run again, while in others the flow of water increased.

For dry crop cultivation, the most important rainfall is that which falls in summer (bashshám) and fills the embankments. The land is then ploughed and smoothed to retain the moisture till the time comes for sowing. Sowings on the winter rainfall (sélh kish) in dry crop lands seldom produce much straw, though a fair out-turn of grain may be expected.

The arrival at maturity of all dry crops is dependent on good rain in early spring, and irrigated crops are also much benefited by it.

In parts of Kalát and Mungachar, in Khad Dulái and—most important of all—in Bhalla Dasht and the neighbouring valleys, a system, known as garar, is followed in dry crop lands, the soil being prepared in September and October and the seed sown without moisture, after which it is left till the winter rains cause it to germinate.

Population engaged in and dependent on agriculture. The whole of the population, except the Hindu traders, is engaged either in agriculture, or in flock and camel owning. Most of the proprietors are themselves the tillers of the soil, but in some cases members of one tribe cultivate land belonging to another as tenants. The best cultivators are those in possession of irrigated land, chief among whom are the Dehwars of Mastung and Kalat, the Langavs of Mungachar, the Johanis of Johan, the Khurasanis of Mungachar and Gurgina, and the Dinarzai Bangulzais of Isplinji. Few of the Brahuis proper are good cultivators.

Seasons of the year.

The year is ordinarily divided into four seasons, viz. bashshám or the season between June and August when rain may be expected; sohél or the autumn, comprising September

AGRICUL'-TURE.

and October: selh or winter, November to February; and hatam or spring, from March to May, the beginning of which is known as karrai. Winter and summer are known as zimistán and tábistán respectively to the Lángavs and to the Dehwars of Kalat. By most of the cultivators and flockowners, a chillas or periods of 40 days, are recognised. They begin in November with the chillá-i-khushk which is followed by the chillá-i-tar, the rest being known as siáh, sabz, zard, ahar, sáwanr, sohél and naft.

Two principal harvests are recognised: the khushbar or spring harvest, which includes the crops sown between October and March and reaped by the month of July; and the sabsbar or saozbar, the autumn harvest, which includes the crops sown from May to July and reaped by the month of November. In Mastung, Mungachar and Kalat, the Dehwars and Lángavs sometimes call the khushbar by the name of jopák and the sabsbar by that of hámén or ámén,

The following are the chief crops produced at each Principal harvest :-

crops.

KHUSHBAR.

Wheat (Triticum sativum). Barley (Hordeum vulgare). Shirr (Lens esculenta). Matar (Pisum arvense).

SABZBAR.

Lucerne (Medicago sativa). Cucurbitaceous crops generally known as palésat.

SABZBAR.

Tobacco (Nicotiana rustica). Prish (Panicum milioceum). Gálicha (Panicum frumentaceum). Mung (Phaseolus mungo). Potatoes (Solanum tuberosum). Juári (Andropogon sorghum). Vegetables.

The crop which is most extensively cultivated is wheat and it forms the staple food grain of the inhabitants. Of cucurbitaceous crops, the most important is the melon. Vegetables are not largely grown, but the cultivation of the potato appears to be on the increase. vegetables include the egg-plant (wángun); spinach (pálik); cauliflower (gobi); the turi; the vegetable marrow (kadu); the bitter gourd (karéla); tinda; méthi (Trigonella fænumgræcum); the radish (turb or múli); the onion (pimás); the turnip (shalgham); and carrots (gajjir or gasir). Lucerne (Medicago sativa) is classified as a sabzbar crop, but really belongs to neither category, as it is generally sown either in the spring or autumn and is cut from May to October.

AGRICUL-TURE. The dry crop areas generally produce only wheat, barley, and melons in a few cases, and it is principally on the khushbar crop, therefore, that the cultivator of such tracts relies. Sabzbar crops are raised only in irrigated lands. Certain localities are specially well known for the growth of their sabzbar crops, e.g., Johán, Shírináb and Zard in Mungachar for tobacco, and Mastung, Kalát and parts of Mungachar for lucerne. The importance of autumn crops will increase with the opening of the Quetta-Nushki Railway, and the cultivation of fruit appears likely to develop.

Staple food grains. Wheat, Mastung wheat is the best in Baluchistán, its excellence being due to the quantity of glutinous matter which it contains. Of wheat grown in dry areas, that produced in Bhalla Dasht and its vicinity is greatly in request.

The wheat grown is of several varieties which are known as rú-rod, pambri also called ispékut, shoráwaki or daiak, pésar, shobi, garmséli and shutar dandán. Rú-rod is said to be the indigenous variety and is preferred for domestic consumption owing to its nutritious properties. It is a red wheat and grows with little moisture and is therefore extensively sown in dry crop lands. Pambri is a white beardless wheat for which Mastung is especially famous. It is largely cultivated in irrigated lands. It fetches high prices in the market. Daiak, also known as shoráwaki owing to the fact that it is imported from Shoráwak in Afghánistán, is a late variety, useful for sowing in dry crop tracts, after ru-rod sowings are over. The grain is red and small and the production, both of grain and straw, is inferior. Pésar, shobi, garmséli, and shutar dandán are all white varieties sown in small quantities in irrigated lands. Pésar is distinguished from pambri by its bigger grain and a red short beard. It is used for parching (dánku) and a furrow or two of this variety, if sown with another kind of wheat, is believed in Mungachar to bring blessings on the crop and to protect it against disease. Zhobi and garmséh are varieties imported from Zhob and Garmsél in Afghánistán. The former, which has a thick ear with a long dark beard, is cultivated in Gurgina, while garmséli is to be found in different parts of Mustung. Shuttar-dandan or "camel's teeth" is the largest local variety. Except daiak, which

matures in three or four months, all other varieties ripen in about nine months.

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Sowing in rich soil, which possesses a sufficient supply of water, is broadcast, the process being locally known as chhat, while that in poor soil, with an insufficient supply of moisture, is by means of the drill and is called sund; other systems are known as khil or kara, and garar. By the khil system, the seed is sown twice; first broadcast, after which the soil s harrowed and then ploughed, the second sowing being in the furrows thus made. It is much in vogue at Kalát, the advantages being the replacement of failures among the seeds sown broadcast and the greater expansion of the plants than in the case of those sown with the drill. For the garar system which has been referred to already, the seed is sown with the drill in dry land before rain has fallen and left to its fate.

Land to be tilled with wheat is ploughed once only in April. This ploughing is called shom. It is not essential, and in some cases autumn ploughing only takes place. When Canopus (sohėl) appears in September, the land is watered for the first time. When the surface of the soil has dried and has assumed a whitish appearance, the land is ploughed once or twice, and harrowed each time; the seed being afterwards either sown broadcast in irrigated land or drilled in. If, as above mentioned, the soil is rich and has a sufficient watersupply, the seed is sown broadcast. The sowing season in irrigated lands ordinarily closes about December 10, but daiak sowing can take place up to the time of the Holi festival in spring.

After sowing, the land is harrowed and divided into beds (kurda).

The first watering, called shomparosh, shom shikast or paun, takes place about 40 days after sowing; and the second watering is given about a fortnight later, generally in the last week of December.

After the second watering, the crop requires no further irrigation for about two months, during which time browsing by sheep and goats is allowed to strengthen the growth of the plants. The third watering takes place about the middle of April, and is very beneficial.

· Henceforward, water is given regularly at intervals of a

AGRICUL-TURE. fortnight or three weeks until the grain has formed. The water which is not required for irrigating wheat in January and February is utilized by some people, especially by the Khán's cultivators in Mastung and Kálat, for irrigating dry crop areas in which daiak wheat is sown. The crop is harvested in June and July. The stalks are cut close to the ground, as the straw is highly valued everywhere, while a good deal is exported to Quetta from the valleys in the northern part.

Threshing, which is done in the usual way by driving two or more bullocks round a long pole to tread out the grain, is known as govat, govat, or go-at. Winnowing (taho-tining) or (dransag) is next commenced with the winnowing fork (chár shákha).

The wheat disease, which is most dreaded, is known to the people as surkhi or ratti, and appears to be a kind of rust which attacks the crop when in ear. A south wind (nambi). blow ng in cloudy weather when the field is under irrigation. is believed to be one of the causes of the disease. The ear becomes pale in colour and the grain dry; it smells so bad that even cattle will not eat it. The disease sometimes spreads to large areas. The only thing which stops it is a north or north-west wind (gorich). The aid of Saiads and mullás is also invoked who walk round the fields with the Korán in their hands or sprinkle enchanted earth on the crop. Other diseases are known as pútk, bor, and rishkuk. Pútk causes the plant to become black and withered and the grain to turn into dust. Bor and rishkuk are due to attacks from insects at the roots, and occur in years of scanty rainfall.

In dry crop areas wheat sowings take place in September, if the embanked fields have been filled by floods in the preceding summer. The sowing season, however, extends from September to about the middle of December, but the daiak variety may be sown up to March.

Subsidiary food crops. Barley. Barley, known to the Bráhuis as sa and to the Dehwars as jau or jav, is sown both in irrigated and dry crop land, the usual sowing season extending from early in December to the end of January. Occasionally, however, sowing is done in February and March. The ground to be tilled is ploughed in the autumn and then harrowed, after which the

seed is sown with the drill, both in irrigated and unirrigated land. In other respects the system of cultivation resembles that of wheat. Barley sown early is watered when the leaves have formed and browsing by cattle is allowed up to about the middle of March when the second watering is given. The third watering takes place about the end of April and the crop is ready for cutting by the end of May. Rain is required in April for a barley crop cultivated in dry land.

AGRICUL-TURE

The grain is chiefly used for horses, but the poorer classes grind it into flour and make cakes of it. Barley is also given as green fodder to bullocks and horses. seed generally sown is indigenous to the district. variety, known as jau-lúshtak or brehna jau, i.e., naked barley, is sown to a small extent in irrigated land. of this variety is smaller, the beard less coarse, and the grain softer.

Maize is grown more for fodder than as a grain crop, Maize. and culdvation is only carried on in irrigated land, chiefly in Mastung and Kalát. It is of three varieties, the first or indigenous kind being known as walayati, the second as shobi, having been introduced from Zhob, and the third as The walayati is most extensively cultivated; it has a small grain of a light yellow colour and only grows about breast high. Zhobi grain is of a brighter yellow tinge and makes good growth. Hindustáni maize is inferior, but, as it is a heavy cropper, it is cultivated for green fodder. Hindustáni matures in six months, zhobí in five, and walávati in four. Watering is required at intervals of about 25 days. Sowings, which are broadcast, commence about May and continue in June when water can be spared from the wheat crop. The harvest takes place in September, the stalks being cut and the ears (khosha) removed subsequently, after which they are spread out to dry. The green stalks are considered superior to bhúsa as fodder for bullocks.

Andropogon sorghum is known to the Brahuis as surrat and Zurrat or to the Dehwars as juári. There are two varieties, white juári. and red, the latter being called sor-bijj. The red variety, which has a coarse red ear and a long stalk, is sown in dry crop areas in the Kurd country and grows well even with t tle moisture. In irrigated land the crop is cultivated

AGRICUL-TURB. generally for green fodder; it is sometimes also sown with maize, in which case the juari is pulled when half ripe. The crop when sown on late spring rain, depends for its maturity on the summer rain, and if this fails, it is only useful as fodder. The seed is drilled in irrigated land and sown broadcast in dry crop areas unless the moisture has sunk so deep as to necessitate sowing with the drill. Sowings commence in May and the crop ripens in September. An insect known as tidd sometimes damages the plants when young. Another disease which turns the grain into black dust is known as putk.

Millets.

The cultivation of millets is small, and confined to irrigated holdings in which it is desired to raise more than one crop from the same land in one year. Millets are not popular as they take much nourishment out of the soil. Prish is known to the Dehwars as gal and to the Langavs as arean. It is most extensively cultivated in Mungachar. If no other land is available, it is sown in land from which barley or wheat has been harvested. Sowings, which are generally broadcast, except when there is little moisture, in which case the drill has to be used, take place during June to July and the crop is harvested in September. Gálicha, a variety of millet, is grown in irrigated land in Mastung, Mungachar and Kalát. A good deal of Prish is bartered for salt in the proportion of 2 to 1.

Rice (brinj).

Rice is the principal autumn crop cultivated on irrigated land at some of the places on the east of the district where the climate is hot and the watersupply plentiful. include Jam Bárari, Khajúri, Sariáth and Khaisár. Two varieties of seed are known. sukhdási and Sukhdási rice is small, while harnái, a variety introduced from the place of that name, has a bigger grain and is yellowish in colour. Owing to the limited amount of land available for rice cultivation, the same land is tilled every year and the fields are not permitted to lie fallow, thus causing much exhaustion of the soil. Wheat and barley are also raised from the same land as a spring crop. Sowing takes place at the beginning of May. The fie is watered and ploughed once or twice, while the water is still standing in the field, after which the leaves and stalks of the kisánkúr plant (Peganum harmala), which have been previ-

AGRICUL-TURE.

ously dried, are spread over it as manure. The seed, which has been previously wetted, is next sprinkled in the standing water, after which the soil is well stirred with a pronged implement called katáwa. Sprouting commences as the field dries, after which watering takes place weekly. Another system of sowing, but less common, is in seed beds, the seedlings (pánéri or tughmi) being afterwards transplant-The produce in this case is said to be larger. plantation is called rambo or nishasta and the work is done by men, women and children. Harvesting takes place in October. The ears are cut off near the top of the stalk and are spread on the ground to dry. The stalks called lizzi are cut later for fodder.

Mung is also called másh. The cultivation is limited to Pulses. irrigated land in Mastung, but mung is sown occasionally in Mung Kalát and Mungachar. Most of the local requirements are mungo. met by mung imported from Zahri and other places in Ihalawan. Mung is sown broadcast in June on land from which the spring crop has been reaped. The seed sprouts in about a week and the crop receives its first watering when it is kachh-i-chotéli, i.e., the size of a lark. Subsequent waterings follow at intervals of about 10 days, the grain maturing in about three months. Threshing is done by shaking the plants with the fork called chárshákha, or by bullocks if the heap is a large one. The chaff, called katti, is excellent fodder for sheep and camels, but produces itch if eaten by horses. The grain is used as a pulse and is specially relished when cooked with the dried meat known as khadid or khadit, when it is known as khadít páti.

Shirr and matur are spring crops sown both in irrigated Shirr (Lens and unirrigated lands, but more generally in the former. esculenta) The cultivation is small, the only area where these crops are (Pisum cultivated to any extent being part of the Khán's crown arvense). lands in Chhappar and Ziarat. The sowing season commences in November and lasts to the middle of December. The seed is sown broadcast, the land being subsequently ploughed and harrowed smooth. Sprouting commences about ten days after sowing, but watering is deferred until the end of February; if done earlier it damages the plants. The crop ripens in April. Threshing is done in the same way as in the case of mung; the chaff is also of the same quality.

AGRICUL-TURE. Stimulants. Tobacco (Nicotiana tabacum). Tobacco is an important crop in Sarawán and its popularity appears to be increasing. Two kinds are cultivated: mastungi, also known as waláyati or sári, and léwana; but the latter, which is also known as kandahári, is now more extensively sown. Léwana or kandahári tobacco is said to have been introduced in the country before the time of Mír Khudádád Khán by traders from Kandahár. It is extensively cultivated in Mastung, Mungachar, Kalát and Johán, and to a more limited extent at Iskalku, Isplinji and in Gurgína. The best quality is that produced at Johán.

The cultivation of tobacco requires much care and attention at every stage of the crop. First of all the seedlings have to be prepared. From the end of April to the close of May the seed is sown in small patches of land generally near a running stream so that they may be conveniently watered when required. The seed beds are ploughed dry once or twice or are dug over with the kulang. The seed is then sown broadcast and on the same day the plot is watered. Sometimes the seed is thrown into the water The plot is watered standing in the bed. 5 days after, and the third watering takes place days later. Watering continues fortnightly till the plants have three leaves, when they are ready for transplantation. In Mungachar, the dry leaves and fruit of the Kisánkúr plant and at Johan those of the myrtle are sprinkled in the seed beds when the seedlings are about three inches high to cause a strong and healthy growth. .

Before transplantation, the fields are well manured, a donkey load of manure being used at every 5 paces, if possible. Two or three ploughings are given, after which the clods are broken and crushed and the soil smoothed. After the last ploughing, the field is divided into plots lengthwise and sub-divided into beds called *chari pushta* or *chaman* with the *dhall*. Transplantation follows and has to be done quickly before the roots of the seedlings have dried. The plants are placed at intervals of 12 inches. Four or five days after the transplantation, the field is examined to see if the young plants are flourishing, and those which have failed (nagha) are taken out and replaced by fresh ones, after which the bed is again watered. The earth round each plant is loosened when it is of the size of a pigeon (kapoti), to allow it

AGRICUL.

to develop with ease and weeding is done with the *lashi*, to be followed by another watering. The soil is again loosened and afterwards banked up round the plants, whenever they are observed to be making slow progress and until they are about a foot high. A second weeding follows about three weeks after the first. In Mastung, a few days before the second weeding, half a handful of earth brought from places where human excreta and other refuse have been collected, or from the sites of old houses, is deposited round the roots of each plant, thereby greatly improving its growth. Good cultivators, especially those of Johán, take much trouble about thinning the leaves, superfluous ones being plucked every fortnight, a process which causes the remaining leaves to spread and improves their quality also.

The flowers, called chichik, appear in July and August and are cut off as they damage the growth of the leaves. A clove inserted in the cut thus made is believed to give a special flavour to the leaf. With the advent of September the plant develops and the leaves grow thick, but the cold of early autumn sometimes causes damage and reduces the weight. The plants mature about the end of September, and the harvest continues till November. A slight touch of frost on the leaf decreases the bitterness of the leaf and adds to its sweetness. Those who prefer strong tobacco, therefore, begin harvesting operations earliest. Tobacco for chewing or for snuff is not usually plucked till the end of October.

The custom is to cut the plants as close to the ground as possible. They are then laid out on a clean smooth piece of ground (bártám), and exposed to the sun for four or five days, until one stalk beaten against the other will separate the leaves. The leaves are then stripped off the stalk (put), or are beaten off slowly with the chárshákha. The leaves, after being stripped, are again dried. At Johán, unlike other places, three crops are obtained in one year, owing to the slightly warmer climate and the careful system of cultivation. The first crop is ready at the end of September and beginning of October. This is harvested and the root stalks are watered for the second crop which is plucked at the end of November. The third is obtained shortly afterwards, but is very inferior.

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On the whole, Sarawan tobacco is very healthy. Occasionally, the roots are attacked by a black insect and sometimes creeping weeds, especially those called machochak and pichli, interfere with the growth in poor land. Constant smoking is universal throughout the country, some of the women also indulging in it. As a rule the hukah is used, but nomads use pipes (shúkar) made of clay. Chewing is also common, the leaf of the tobacco being mixed with lime or with ashes of the naromb plant (Ephedra pachyclada). The use of snuff is not so common as either smoking or chewing.

Export.

Tobacco is exported in large quantities by railway to Sind via Kolpur, and to Panigur by road. A good deal is also taken to Kachhi during the winter. The export from Kolpur amounted to more than 12,000 maunds in 1904. Some of the Sheikh Dehwars have taken Mastung tobacco to Déra Ismáil Khán, Multán and Déra Gházi Khán in the Punjab in recent years, where it fetched good prices varying from Rs. 7 to 9 per maund. That prepared specially for snuff sold at still higher rates varying from Rs. 10 to 15 per maund. Tobacco in Mastung, in ordinary years, sells at Rs. 3 to 5/8 per maund, while at Karáchi it is sold at Rs. 5 to 7/8 per maund. Johán tobacco sells at Karáchi for Rs. 1 to 1/4 more than Mastung tobacco. tobacco fetches Rs. 6 to 8 per maund in Panjgur, Rs. 4 to 5 per maund at Nushki and Rs. 6 at Nál and Wad.

Preparing tobacco for sauffmaking.

Snuff is largely manufactured at Koláchi in the Déra Ismáil Khán District and by the advice of some of the snuff traders, a method of specially preparing tobacco leaves intended for snuff has been adopted by the Sheikh Dehwars of Mastung. The stalks when cut are laid in the sun for about 8 days on a piece of swampy ground which is artificially prepared. The leaves, which become very pale, are now stripped and spread in a dry place, but are covered by a rug or carpet for three days more. They are next spread in the sun for another three days to dry off finally.

Experiments in English tobacco.

At the instance of Major Showers, the Political Agent, Kalát, the náib of Mastung made some experiments in 1904 with foreign tobacco. The kinds selected were Florida; Tuckáhoe; Gold leaf; Granville; Sterling; Burley White;

Pennsylvania; Yellow Prior; Connecticut; Virginian; Maryland: Havannah: Kentucky: and Cuba. Gold leaf. Granville, Sterling, Connecticut, Virginian and Maryland all grew successfully, but the rest failed. The experiments made were on a limited scale, and more seed has since been obtained for cultivation in the Khán's crown lands in Mastung. The two varieties first named grew exceptionally well and reached four or five feet in size with abundant, healthy foliage.

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Bhang is an autumn crop and is cultivated on irrigated Bhang. land at Kalát, Iskalku and Mastung. The cultivation is small except at Pringábád in Mastung, which is the only place at which it is grown otherwise than for domestic use. Sowing takes place in February and March, when the land, which has been already twice ploughed, is watered and the seed sown broadcast after the moisture has been sufficiently absorbed. The seed germinates after 15 days and the field is watered when the plant is about an inch high. Subsequent waterings take place fortnightly and the plant matures in · about four months. Any male plants in the field are take 1 out when the crop is about waist high. The male plant can be easily distinguished from the female by its scantier foliage and the early fall of its leaves. By leaving the male plants in the field, the flowers and the twigs of the female fail to become charged with the narcotic principle. In June and July the female plants begin to lose their leaves, and this is the sign for reaping. The stalks are cut and taken to a clean place where they are allowed to dry for four or five days. They are then collected and beaten with a stick, chars being subsequently obtained from the leaves and fruit. The method of manufacture of chars and the rates at which the various drugs made from bhang are sold have been described in the section on Miscellaneous Revenues.

Poppy, known to the people as koknár, is grown on irri- Poppy, gated land, in Kaiat, Mastung and Mungachar and reference (kokndr). will be found to it in the section on Miscellaneous Revenues. Opium for sale is manufactured only by the Sheikh Dehwars of Mastung. The crop is usually sown with onions in March and the peds (gogro) are incised between July and September for the extraction of the drug.

AGRICUL-TURE. Fodder crops. Lucerne.

The only crop grown specially for fodder is lucerne, (isbust) (Medicago sativa). It appears to be in ligenous to the country and was undoubtedly cultivated in district long before the British advent in Baluchiston. The largest cultivation is to be found in Mastung, Mungachar, Chhappar, Ziárat and Kalát. Sowings take place from March to the midde of September; those in the earlier part of the year are most common. Previous to sowing. the land is manured, watered and well prepared. It is then divided into long plots with the dhall and the seed is sprinkled broadcast, irrigation taking place immediately afterwards. This is repeated after three or four days and the crop sprouts within seven days of sowing. Subsequent waterings take place at intervals of 10 or 15 days. If the seed is sown in September, as is generally done in Mungachar, the cold stops the growth after two leaves have appeared. In March, the growth recommences and by the end of April or beginning of May the crop is ready. Lucerne sown in March is ready a few days later than that which was sown in September. Subsequent cuttings take place at intervals of about a month, the field being watered after each cutting. The last cutting takes place in September. The first and fourth, or August cutting are most nutritious and for this reason are only digested easily by horses and donkeys. usual number of cuttings is five, but in strong well irrigated land as many as nine cuttings are known to have been obtained. Lucerne intended for seed is not cut till June. The seed when once sown, lasts from three to five years, and when the period for cropping has finished, the roots are dug out and given as fodder to cattle. Land which has been cropped with lucerne is very productive; if possible, it is not again cropped with lucerne for two or three years.

It lucerne is not regularly watered, it is attacked by a white insect (puh) which produces a kind of gum on the leaves and stops their growth. A crop so affected is immediately cut and dried, and the next is generally found to be free from the disease. Moist, cloudy, windless weather brings small locusts called tidd, which do much damage. Cutting and drying is the only remedy for this also.

Green lucerne is given to horses and cattle sometimes alone, and sometimes chopped and mixed with bhúsà,, and

tender leaves are also used as vegetables. Care should, however, be taken as to the quantity of green lucerne given to cloven footed animals, cows and camels in particular, as they relish it so much that they overeat themselves and burst, unless promptly treated. For use during the winter, lucerne is dried and made into wisps (mora). are sold by the cultivators to one another in a few cases, the rates varying from 25 to 40 wisps per rupee.

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The cultivation of cucurbitaceous crops (pálézát), which Fruit and term includes various kinds of sweet melons (kharbúsa or vegetable galau), water melons (kútikh), cucumbers (bádring), snake cucumbers (chambarkhiál), and pumpkins and gourds (kadu), is indigenous to the country, but its extent was limited in pre-British days, when such crops were grown chiefly for domestic consumption. For some time past, however, the cultivation has received a great stimulus, as the produce, especially that from Mastung, finds a ready market in Quetta, whence sweet melons, especially of the sarda variety, are exported to various parts of India including Calcutta, Simla, and Bombay. Melons are cultivated both in irrigated and unirrigated land, chiefly on the former.

production.

The two best known varieties of sweet melons are the Sweet These names are derived from the melons. garma and sarda. seasons, i.e., the hot or cold weather, when they mature: the former ripens in summer and the latter in autumn. Both kinds are equally popular among the people, but some of the garma varieties possess most flavour. The best kinds of garma are tár-i-múi or tármi; patadár; alif kháni; sulémáni, and shoráwaki.

Of sardas, or cold weather melons, four varieties are known: sarda surkh or the red sarda: sarda satéd or the white sarda: sarda garri, and the heráti sarda. The skin of a sarda is hard and rough to the touch and bears raised lines. The pulp is firm, possesses good flavour, and improves with keeping. It is the most easily preserved of all melons. Heráti sardas are of three kinds: sard, saféd and saha.

A third variety of the melon is the dastamboh, i.e., the melon to be carried in the hand. It is not eaten but is cultivated for its pleasant odour. Three varieties are recognised and known as kharwari or patadar dastamboh, a large round AGRICUL-TURE, kind, mathéri, a smaller variety of similar shape, and doryai which is large and oval. The two former are of reddish green and last for about 3 weeks; the doryai is bright red with yellow stripes and lasts for a week.

Water melons. Five distinct varieties of water melons are known:—Malangi, nabowála, khátúnki, kadúi and pishingi, of which khátúnki is regarded as the best. Water melons grown on the Rod-i-Pashkaram, in Mastung, are renowned for their sweetness and flavour. Dry-crop melons are always very sweet, but those grown in Bhalla Dasht are superior and extensively cultivated by the Kurds.

The cucumber (bddring), which is said to have been known in the district from early times, is of three varieties:—kandahári, hindustáni, and waláyati. It matures earlier than melons and is generally eaten raw with salt, but is sometimes also used as a vegetable. Kandahári is the largest in size and is most extensively cultivated. Hindustáni is a good cropper and is also largely cultivated. The indigenous variety (waláyati) is to be found in Kahnak.

Pumpkins,

The pumpkin (kadu), though a vegetable, is recognised as a pálésát crop. Several varieties of pumpkins are raised and many of them grow to an enormous size, weighing as much as 30 seers. The commonest are kaláti, a large round indigenous variety, and hindústáni, which is long and oval, and has recently been imported from India. Another kind, called kadu choi, is of the shape of the figure 8 and is made into snuff cases. Most pumpkins are eaten fresh, but the kaláti variety, which remains in good condition for 8 or 3 months, is preserved for use as a winter vegetable and also for making a pudding with molasses.

Methods of cultivation.

Ordinarily, the principal pálésát crops, sweet and water melons, are sown in fields specially assigned to them. Gourds and cucumbers are sown in those parts of the same fields which would otherwise lie idle, such as the banks of water channels and embankments.

The methods of cultivation are those known as chhat, kara, khaddok and pushia, the first three being indigenous to the country and now only adopted extensively in dry crop areas, though the chhat system is still in vogue to some extent in Kalát and its neighbourhood. For chhat cultivation, the land is ploughed once or twice and then irrigated.

AGRICUL-TURE.

When the land has nearly dried, the seed is sown broadcast and the field is re-ploughed and harrowed, the land being again watered a week later. For kara cultivation the ground is prepared and watered in the same way as for chhat, after which furrows are made with the plough and three to five seeds are dropped in the furrow at intervals of two feet apart. The khaddok system is now confined entirely to dry crop land and is the best of the three indigenous systems. The land is ploughed and harrowed smooth, and a few seeds are put into holes (khad) at intervals of about 3 feet and are then covered with earth.

The best way of growing melons, however, is in trenches, bushta, a system introduced from Afghánistán. Land for pálézát crops must be prepared in January and February, and the season for sowing is the chilla-i-sabz, i.e., March and the first 10 days of April. Crops cultivated later are liable to attacks from insects, except in the case of the heráti variety of sarda and water melons kútikh, the season for sowing which extends up to the end of May. The field is ploughed twice after it has been well irrigated, and is then divided into trenches with the dhall, the ridges being beaten firm to prevent the escape of water when the trenches have been filled. As soon as the trenches are ready, water is admitted, but about three inches of the top of the trench is left dry. The seed is sown to or 15 days later when the moisture has sufficiently dried. Seed meant for cultivation in irrigated land is first put into bags mixed with a little asafetida or carbonate of soda, and steeped in water for a night, after which the bags are placed in a trench between bundles of busunduk (Sophora alopecuroides). The trench is filled with earth and seed is left in it for about a fortnight. thus prepared is then sown on the top of the pushta, four seeds being rlaced at intervals of 3 feet and covered with a small quantity of dry earth. The plants show above the ground on the eighteenth day, and fresh seed is sown to replace any plants that may have failed. Irrigation is done at intervals of 15 or 20 days, but in Mastung, whence large quantities of melons are exported to Quetta, irrigation takes place weekly in order to increase the weight of the fruit. When the plants are seen above the ground a small amount of earth is put around each group of plants, khákdast, and

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after another 5 or 6 days' thinning, called yakka, has to be carried out. Only single plants, the most healthy, are henceforth allowed to remain. Ten days later, when the young plant is about the size of a pigeon (kachh-i-kapot or kapot gad). the heads of the plants are nipped off to cause them to spread, a process known as sarták. About the same time small excavations, ghamcha, are made in the sides of the trenches close below the roots and are filled with fresh This not only strengthens the growth of the plants but helps to retain the moisture round the roots. As it matures, the plant usually produces three shoots (ták), and when they are about two feet long, the central one is cut off, this process being known as lagha. The plant and the remaining shoots are trained over the level ground above the pushta and the roots covered with earth to retain the moisture. When the plants are in bloom in June, all small and poor flowers and superfluous trails are taken off and thrown away. Only the best flowers, at the point of the trails, are retained. The small melons, which appear about this time, are liable to injury from a fly, and are therefore covered with earth, but are exhumed when a little bigger, as at this stage the fly does no harm. Generally two melons are allowed on each plant as more do not grow to full size. When melon crops are in flower, women are not allowed in the field and red clothes are considered very injurious, causing the flowers to fall.

The plucking season of the different pálézát crops lasts from June to September, the cucumber being ready first of all in June. It is followed by garma melons and snake cucumbers which last from July to the end of August. Water melons and gourds are plucked between July 20 and the end of August, but if carefully preserved, they are available for winter use and up to the following spring. Similarly, sardas can remain in good condition for more than three months.

Melon plants require great attention and are very susceptible to disease. Late frosts and cold winds in the spring cause the young and tender plants to wither, while heavy rain or the prevalence of a south wind (nambi) damages the fruit when half ripe and causes the pulp to putrif. The growth of the plants is sometimes much hindered by a

two worst AGRICUL. machochak. But the weed known as enemies of the melon are insects, kirm or púh, which eat up the roots, and internal worms (kirm-i-andruni) which are generated by a yellow fly (Carpomyia parctalina) visiting the young fruit when of the size of a walnut. Other diseases, due to poorness of soil, are known as zardoi and balkh, a plant so affected making poor growth and gradually withering.

Potatoes, known to the people as patáta, have been in- Potatoes troduced since the arrival of the British. They are now tuberosum). extensively cultivated at Mastung and Kalát, and occasionally at Ziárat, Chhappar, Iskalku, and Maray, and the cultivation appears to be rapidly increasing. Four varieties are grown: -domáhi, or two-month, sehmáhi also known as bádrai orthree-month, shashmáhi, or six-month, and láhauri, a recent introduction from Lahore. The first three varieties are sown between February 20 and the end of March. The shashmáhi potatoes, which were the first to be introduced into the country, are a white small variety, but the produce is large, from 2 to 4 seers per plant. The two-month and three-month varieties are reddish in colour and large in size, each plant producing one to two seers. If there have been winter rains and the land in which potatoes are to be cultivated is moist, it is manured and ploughed two or three times; but if there is not sufficient moisture, it is manured, watered and then ploughed. The soil which is preferred for potato growing is soft and sandy, from which either a crop of wheat or lucerne has previously been taken. The potato eyes, or small potatoes, are planted, about 9 inches apart, on either side of ridges which are raised about six inches above trenches made on either side. Formerly it was usual to plant the potatoes on the top of the ridges and cover them with earth, but the present system is said to give larger produce. When the plants have sprouted after 10 or 12 days, the field is watered and irrigation is continued thenceforward at intervals of 10 days, except in the case of domáhi variety which requires watering once every six days. The plants are banked up when they are some six inches high. .

A few of the people eat potatoes, which are either roasted in the embers, boiled or stewed with meat, but most of the AGRICUL-TURE. produce in Mastung is sold, in situ, to dealers from the Quetta bazar. The usual price is about Rs. 6 per bag, which contains about 2½ maunds. Camels are fond of the potato stalks.

Carrots.

Carrots (Dancus carota) (ver. gajjir or gasir) are cultivated extensively in Mastung and to a limited extent in Mungachar and Kalát. They are of two varieties, purple and white, the former being more common than the latter. They are best suited in a soft and sandy soil which has been left fallow for one year (soi). Sowing takes place in Mastung at the end of April or during May and later in Kalát. After the land has been prepared and divided into plots, the seed is sown broadcast and covered with earth with the help of the branch of a tree. Irrigation follows immediately and is repeated each week. Subsequent waterings take place at intervals of 10 or 15 days. The roots mature in August and may be dug up to the end of November. Weeding and the extraction of the male plants (nar-gasir) is carried out at Mastung in June.

The seed is of two kinds and known as pisicha or pishicha and khudrau. In Mastung it is obtained in two different ways. For pisicha, the roots are protected from frost and are allowed to remain in the ground curing winter. They are dug at the time of the holi festival when the lower portions are cut off and the upper parts planted in the embankments of the plots. They seed in July. Khudrau seed, which is inferior, is obtained from roots which remained in the ground during the winter, but have not been transplanted as described above. They sprout in the spring and seed in July. Mastung seed is much sought after by people from Quetta.

Carrots are generally eaten raw, while some, especially the local Hindus, pickle them (áchár). Well-to-do Dehwárs cook them with molasses, and the poorer classes eat them after roasting them in the embers. Camels, bullocks and sheep are fond of the leaves. A black dye is said to be obtained from carrots in Kandahár.

In the Mungachar district, carrots are preserved in the following manner. A trench is dug, a layer of carrots is then placed in it, then a layer of earth, a second layer of carrots and so on. In this way the carrots are kept fresh for a considerable period.

Onions (pimás or piás) are cultivated largely in Mastung Agricul. and Kalat and to some extent in Gurgina. The cultivation TURE. Onions (Alis apparently on the increase. Two varieties are grown, lium cepa). white (saféd) and red (surkh), the former being the indigenous variety, and the latter imported from Kandahar. For cultivating onions, land, which has remained fallow for a year (soi), is ploughed and harrowed at the end of February. which is broadcast, takes place in March and the soil is then turned over with a branch. The beds are now filled with water and irrigation is repeated after three days, before which, however, manure has been sprinkled in the beds. Manure sprinkled in this manner is called kaftarak. Until germination, which takes place 27 days after sowing, watering is required every fourth or fifth day, and, after germination, every tenth or twelfth day. Watering continues till the appearance of Canopus at the beginning of September and the crop is ready for digging in October. Onion seed, like that of carrots, is also of two varieties, pisichá and khudrau, and is obtained in the same way. Onions from Mastung are bought by dealers from Quetta, and at harvest time the price varies from Rs. 2 to 3 per bag of about 21 maunds.

Coriander (gishnis, gishnich or dhanran) is grown in small Coriander. quantities for home consumption on irrigated lands at Kalát and in its neighbourhood, in Mungachar, Gurgína and Mastung. The seed is sown broadcast about March and reaped in June. In Mungachar it is usual with some people to raise two crops of gishnis in one year, the second, which is sown in June, being harvested at the beginning of August.

Local Hindus purchase coriander from the cultivators by. barter for wheat in the proportion of one to two. A little Mastung coriander goes to Khárán.

Madder (rodang) was largely cultivated in former times in Dye crops. all irrigated areas, especially in Mastung and Kalat, but Rodang (Rubia tinconly a few patches of land are now under it in Gurgina and torum. Kardgáp, where the total annual produce was estimated in 1904 not to exceed 100 maunds. Tiri in Mastung was once specially famous for its madder. The seed, which has been soaked for two or three days, is sown broadcast in a wellprepared and manured field, and is immediately irrigated. subsequent waterings taking place weekly. The crop stands

AGRICUL-TURE. in the ground for about 18 months, after which the roots mature, but if they are allowed to remain in the ground for another twelve months, the dye produced is of a finer quality. On being dug the roots are dried in the sun and protected from cold during the night by a felt. Prior to the advent of the British, there was a large export of madder to Shikarpur, and much madder was also brought from Kandahar for export to Sind via Kalat and Karachi. The madder now produced in Sarawan is exported by the local Hindus to Nuski, whence it finds its way to Kharan and to Rék and Rod in the Amír's territory. The local rates per maund vary from Rs. 9 to 12; in former days they were as high as Rs. 15 to 18.

Manure and rotation.

Manure, as already mentioned, is only occasionally used for the principal crops, and in tracts generally close to villages.

No regular system of rotation is followed in irrigable land, but successive crops of lucerne are not sown on the same ground. Lucerne and potatoes are followed by wheat, barley or maize. Tobacco, onions and, above all, lucerne improve the soil greatly. Juári and prish, on the other hand, tell very heavily on the soil, and wheat is not sown on land from which these crops have been reaped until at least one year's fallow has been allowed, and it has, if possible, been manured. Pálézát crops take more nourishment out of the soil than any others, and a minimum period of three years should elapse before it is again cropped with pálézát; although after a year's fallow and manuring, wheat or barley can be cultivated.

Vegetable productions.

Most Bráhuis are entirely ignorant of the use of kitchen vegetables.

The wild plants called garbust (Lepidium draba), sáreshko (Eremurus velutinus) and pichli (Portulaca oleracea) were and still are used as vegetables, and the consumption of the shoots of lucerne has already been mentioned. The only indigenous vegetables formerly grown in irrigated lands in Mastung and Kalat were pumpkins, cucumbers and carrots.

Spinach (pálik), radish (turb), egg plant (wánganr), méthi (Trigonella fænumgræcum), turnips (shalgham), turi, bitter gourds (karéla) and cauliflowers (gobi) have since been introduced and are now grown chiefly for domestic consumption, though small quantities are also available for sale in the

bazars at Mastung and Kalát. Beet root, known to the Agricusnatives as lablabu, is also grown at Kalát and Mastung and is much relished. A class of donkeymen (kharkár) at Kalát export it to Zahri and other places. The malik of Tiri made an experiment in 1903 in the introduction of a vegetable called gandána from Kandahár. It is sown in spring. and with plenty of irrigation is ready for use in 20 days after which it can be plucked at ten days' intervals till November: the plants are said to continue cropping for 7 years.

Kalát and Mastung possess some of the finest gardens in Fruit Baluchistán, but in no part of the district is the same amount of care and attention paid to fruit production as has been the case in recent years in Quetta-Pishin. opening of the Quetta-Nushki railway fruit culture will probably develop as an industry. The most important fruit trees are mulberries (tút), apricots (zardálu), almonds (bádám), and grapes (angur), the first two preponderating everywhere. In Mastung and Kalát, peaches (shaftalu), apples (sof), plums (alúcha), damsons (alubukhára), the Trebizond date (Elæagnus angustifolia), pomegranates (anár) and quinces (bíhi) are also to be found. Date trees grow at Jam, Bárari and Khajuri. The last named place contains the largest number of trees, about 300, the best variety being known as dodafari. The dates ripen in August and the season lasts till the close of September. Bráhuis from various parts of the district resort to these places for the fruit. It is not of good quality, but is relished by the people of the country.

Mulberries are generally of the white variety and the best of them is the bédána or seedless kind. Bédána mulberries and also apricots are dried by the people and exported to Kachhi where they are bartered in equal proportions with wheat. They are also exported to Shikarpur, Sukkur and other places in Sind. Almonds, especially the kághasi variety from Mastung, fetch good prices and are exported to different parts of India.

There can be no doubt that a great change has come Extension of over the agricultural conditions of the country in the and improvelast 30 years. When Sir Robert Sandeman came Baluchistán, the dry crop areas were everywhere lying uncultivated and cultivation on irrigated lands was only in patches. Many of the people were leading a pastoral

to tivation.

AGRICUL-TURE. life and only sufficient grain was produced for local requirements owing to the absence of inducements to larger production. The constant struggles between the Khan and the tribesmen or between the tribesmen themselves permitted little attention to be devoted to agriculture.

All this has now been changed; land is highly valued, large tracts of land have been brought under cultivation; the nomads are taking to agriculture; and even isolated tracts in the hills are not allowed to remain untilled. A ready market is, moreover, available in Quetta and other places for all the produce which the cultivators can grow.

When Sir Robert Sandeman first visited Mastung, the area under cultivation was estimated at 6,000 acres, whereas in 1800 it was found that the area cultivable in Kahnak alone, excluding the villages liable to pay revenue to the Khan, was more than 19,000 acres, and assuming that onethird of this area is cultivated every year, the cultivated area is more than that estimated in 1876 for the whole of Such figures speak for themselves. Mastung. decades ago, too, the Bhalla Dasht or great plain at the head of the Bolán was known to travellers as the Dasht-ibé-daulat, or plain without wealth, but this is now quite a misnomer, good crops being gathered from this dry crop area nearly every year. No less progress has been made in irrigated areas, many new káréses, especially in Mungachar, Gurgina and Kardgáp, having been excavated in recent years, and the same tendency to open new sources of irrigation being observable in far less promising areas such as Narmuk, Shékhri and Isplinji. At Isplinji and Marav, the Persian wheel has also been introduced. Again, new and more profitable crops, such as potatoes and onions, have replaced madder, and the cultivation of such paying crops as lucerne and tobacco is constantly extending.

Agricultural implements.

The principal implements include the plough, which is known as langár, the plank harrow or scraper (kén), with which embankments are made, and the clod crusher or log used in place of a roller for breaking clods and smoothing the ground, known as mála. Among minor implements may be mentioned the ramba or weeding spud; the kodál or mattock; the dhall or wooden spade worked by two men with

a rope for making small embankments; the sickle (lashi) for reaping; the four or two-pronged fork (chárshákhá or doshákha); the dhalli or wooden spade for winnowing; and the rake (pháori) for collecting the grain and straw scattered on the threshing floor. There has been no appreciable improvement in these implements, but rakes, axes, hand saws and knives of English manufacture are now sometimes used and the use of iron for agricultural work is more general than in former days. A list of principal agricultural and flockowner's terms used in the district will be found in Appendix I.

No system of making agricultural advances exists in the Agricultural The Political Agent occasionally advances small and indebtloans to deserving individuals from the Kalát State funds edness of for agricultural purposes and without interest. Advances have also been occasionally granted by the British Government for political reasons to headmen and others. of the most important are an advance of Rs. 12,000, bearing interest at 5 per cent. repayable in 12 years, made to Mir Muhammad Hasan, son of the late Khán Bahádur Allah Dád Khán, Taingazai, and one of Rs. 7.000 bearing interest at 4 per cent, and repayable in annual instalments of Rs. 600 made to the Rustamzai chief and his brother.

No systematic enquiries into the conditions of the cultivators have ever been made, but, so far as the information available goes, there appear to be no signs of a general agricultural indebtedness. The only data consist of the figures collected during the survey operations in the Kahnak valley during 1899 and 1905 which may be taken as a fair index of the conditions prevailing in other parts of the district. Here, out of a total number of 375% shabanas recorded in 8 villages, 6 shabánas, 11 pás or about 11 per cent. were found to be mortgaged for a sum of Rs. 3,598, while sales of only 4 shabanas, 43 pas or about 1 per cent. had taken place.

In years of drought or abnormal failure of crops, those people who depend largely on dry crops incur debt, but such debts do not remain unpaid for any length of time. irrigated land the cultivators occasionally find it necessary to raise small loans for cleaning and repairing káreses, but unless these projects are unsuccessful, which is seldom

AGRICULA TURE.

cultivators.

AGRICUL-TURE. the case, they are not seriously handicapped by such loans. Loans obtained from Hindus are generally repayable at harvest and the usual rate of interest is 4 annas per rupee per annum or 25 per cent. In all tribal areas, except Mungachar, the maximum interest allowed is 8 annas in the rupee or 50 per cent. on the total amount of the loan after two years. At Kalát and Mastung, where the circulation of the money is more extensive, exorbitant rates of interest are sometimes charged varying from 25 to 75 per cent. per annum. Loans for short periods are generally advanced by verbal agreement either on personal or other security. Few mortgages are held by Hindus, and in such cases the mortgage is nearly always without possession, the Hindu receiving a share in the produce as interest so long as the principal remains unpaid.

Mortgages.

For the most part, mortgages of land are arranged between the cultivators themselves, and in all such cases the mortgagee enters on possession. The terms are always committed to writing. Three forms are known:—gáhv or rahn, baiwafa and ijara. Under the first and the commonest system the land remains with the mortgagee, who takes the produce as interest, until redemption. Under the baiwafa system, the mortgage is regarded from religious motives as a temporary sale, and the use of the word "mortgage" is scrupulously avoided in the agreement. The conditions ordinarily provide that a certain piece of land is sold for "a certain period for such and such amount and that the seller (who is virtually the mortgagor) abandons all his rights to the land for this period." Should the land not be redeemed after the lapse of the term a fresh agreement is entered into. The mortgagee takes the whole produce of the mortgaged land. Ijára is not as common as other forms. When a loan is advanced under this system, the land forming the security is handed over to the mortgagee for a certain number of years, during which the produce is taken by the latter in repayment both of principal and interest.

Domestic animals.

Horses, camels, bullocks, donkeys, sheep and goats are the principal domestic animals. Fowls are also reared, and fetch 4 annas to 8 annas each, according to size. Eggs cost from 3 annas to 6 annas a dozen. Nearly every household possesses a shaggy sheep dog for purposes of protection, some of which are very savage. Greyhounds for coursing are kept by the rich. AGRICUL-TURE.

Horses.

Information about the different breeds of horses in Baluchistán, their rearing and training and the system of breeding adopted by the Army Remount Department will be found in a monograph published in 1905 under the authority of the Revenue Commissioner in Baluchistán.* Breeding from Government stallions is now popular, although the people still prefer local bred animals for their own riding. The principal breeders are the Khán of Kalát, the Shahwánis and Garráni Bangulzais of Mastung, the Lángavs of Mungachar, a few Saiadzai Bangulzais of Isplinji, the Sarparras of Gurgína, the Rustamzais of Kahnak and some of the Saiads of Mastung.

The Mastung and Mungachar horses are big, powerful animals, and a good many animals are owned half and half with people living in Kachhi, the latter feeding them in winter and the highland owners in summer. The bulbul breed of the Shahwanis and the atlas breed belonging to the Khan are the best known local breeds in the district.

The price of horses varies considerably, good ones fetching Rs. 300 to Rs. 500 or more. Mares are generally more expensive than horses.

The following statement gives statistics of branded mares, etc., in Sarawan on the 31st of March, 1904. The stallions are only located in the district in the spring and summer. In winter they are removed to Sibi, Kachhi and Sind.

Name of stand.	No of stallions.	No. of branded mares.	Colts by Government stallions.	Fillies by Government stallions.	Geldings .	
Mastung.	8	179	- 65	54	93	
Kalát	4		•••	r	•••	
Total	T 2	179	65	55	93	

Baluchistan Monograph Series: Horses, Horse Breeding and Horse Management in Baluchistan by R. Hughes Buller, I.C.S., with appendix by Major H. M. Patterson, Army Remount Department,

AGRICUL-TURE. Camels. The camel is the most common transport animal everywhere. It is not only useful to the people during their migrations but adds considerably by its earnings to their means of livelihood. Sarawán camels not only provide transport for the local trade between Quetta, Kalát and places in Jhalawán and Panjgúr, but also work on the Nushki-Seistán trade route, on the Harnai-Fort Sandeman road; and in carrying coal from the Sor Range mines to Quetta. When in Kachhi they are engaged in carrying merchandise for short distances on a system called *kaléti*, and they sometimes go as far as Sind in search of work. The Lángavs are the most enterprising of those engaged in the carrying trade.

Male camels vary in price from Rs. 60 to Rs. 120; female camels fetch from Rs. 40 to Rs. 80.

No statistics are available, but the total number of camels in the country was estimated at about 10,000 in 1904 including not more than 1,500 females. The principal owners are the Lángavs: the Shahwanis of Khad, notably the Surizais, Kishanis, Shahozais, Umaranis, and Ghul, and the Kishani Shahwanis of Kishan, more particularly the section known as Kabbarzais; the Bangulzais, especially the Gwand Badduzais living in Mastung, the Koh Badduzais of Isplinji, and the Bijjárzais; the Kúrds, chiefly the Madézais and Masúdánis of Dasht, the Zardárzais of Marav, the Shudanzais of Quetta and the Sahtakzais of Zarakhu; Khalicháni and Shangárani Lahris of Mastung; the Bambkazai Muhammad Sháhis of Shírínáb and the Súrozai Muhammad Sháhis of Kúak; and lastly the Murrai Sarparras of Gurgina and the Rodénzai Sarparras of Kahnak. Large herds of camels belonging to the Ubbuzai section of the Murrai Sarparras are to be found in Chagai and in Rod in Afghan territory. Among other owners may be mentioned the Kullois and Khurásánis of Mungachar, the Sheikh Husainis and Summaláris of Kahnak; the Nicháris of Kúak and the Kambránis of Mungachar. Except in the neighbourhood of Narmuk, where water is scarce and pasture comparatively scanty, camels may be found from April to October in all parts of the district. The best known localities are Mungachar, including Chhappar, Mastung, including Khad, Kuak, and Bhalla Dasht; owing to the abundant growth of the righit plant (Suæda monia) in recent years, which is a favourite camel fodder, large numbers of camels from all parts of the district flock to the Gurgina valley between March and September. The district is almost entirely deserted in the winter.

AGRICUL-TURE.

The breed indigenous to the district is known as pashmi or khurásáni. Sind camels are known as léri and other breeds are ihalawáni, kháráni and makráni. The last named are used almost entirely for riding purposes. In some of the dry crop tracts, especially in Bhalla Dasht, Khad and Gurgina, camels are employed in tilling the soil. In ploughing with camels two men are required, one to lead the animals and the other to follow the plough.

The bullocks bred in Bála Nári and Bhág Nári are well Cattle. known as suitable for agricultural, siege-train and army transport purposes, and they are much sought after in all parts of the district. Cows are also obtained from the same locality and some are good milkers. Few cattle are kept for breeding, the cultivators preferring to replace their losses with animals bred in tracts where fodder is less expensive. The milk supply of the inhabitants is obtained almost entirely from sheep and goats.

The price of a pair of bullocks varies from Rs. 70 to Rs. 180 and of a cow from Rs. 30 to Rs. 80.

The donkey is to be seen in almost every Brahui encamp- Donkeys. ment; donkeys are also kept by the local Hindus for transport and riding, while many are owned by the Khan. Some of the Dehwars of Kalát, called kharkar or donkeymen, keep good. donkeys for transport between Kalát and Zahri or Quetta, the usual rate charged being Re. 1 per maund. Before the North-Western Railway was opened, the kharkars used to travel so far afield as Shikarpur. The usual load carried by donkeys is not less than three maunds and sometimes 4 maunds and more. The Mungachar breed is the best and the largest in the district and much sought after by the Afghán labourers employed at Quetta. Since 1904, encouragement has been given by Government to donkey breeding on the same lines as to horse breeding and two donkey stallions were stationed at Mastung and Kalát respectively during 1905.

The price of a donkey varies from Rs. 30 to 100.

AGRICUL-TURE. Flockowning.

The subject of flockowning, etc., has been fully dealt with in the Ihalawan Gasetteer. Though not so important as in the Jhalawan country, flockowning is, nevertheless, very extensively followed as an agricultural pursuit and the products of the flocks constitute a large part of the food of The principal flockowning sections are:--Koh the people. Badduzai, Gohrámzai and Mazaráni among the Bangulzais; Kallozais, Sháhozai and Súrizai among the Shahwanis; Bráhimzai, Haidarzai, and Zobéráni among the Lahris; Súrozai among the Muhammad Sháhis; Madézai among Kúrds; Járzais and Murrais among Sarparras; and many sections of the Langav tribe, especially Zahrazai, Purduzai, Summakzai, Durrakzai, Malangzai, Sheikhzai and Koharizai. Sheep fetch from Rs. 4 to Rs. 7, lambs Rs. 2 to Rs. 3, goats Rs. 3 to Rs. 5, kids about Re. 1-8-0. Owing to the large demand for sheep, goats, lambs and kids in Quetta, prices have risen considerably in recent years.

Pasture grounds and difficulties of feeding cattle. Lucerne, both fresh and dry, is the best fodder available for horses and bullocks, and reference to its use has already been made. This fodder is, however, expensive. The green stalks of maize and juár are also used as fodder for cattle and horses, while the straw of mung and peas is a favourite food with camels. Wheat bhúsa is, however, the principal fodder of all the larger animals.

Sheep and goats roam over the hills and valleys and find abundant pasture in most years. The principal pasture grounds (káhchar) in the district are Dombán in the Harboi; Bolkhé and Morgand to the north of Kalát: Purdu, Dábar and Dallo in Chhappar; Sohr and Kúr in Mungachar; the watershed separating Mungachar from Khad Kuák; the southern parts of the Gurgina valley; the Shìshar valley near Isplinji; Khar in Marav; and Zarakhu to the north of Spézand. Except the Dombán, which has long been reserved by the Shahwanis, no restrictions are imposed by one tribe against the pasturage being utilised by members of another. In Mungachar, Chhappar and round Kalát, the Khán in some years reserves a tract for his own flocks of camels. The Lángav Chief also reserves a small tract in Mungachar, The Dehwars of Kalat cut green ihir or bútav and make wisps of it for use with bhúsa. Shahwanis cut grass from the Domban, the total outturn

during the year being estimated between 600 and 700 camel- AGRICUL-Gwasht, havé, dabb, haddén, káshum, kaj and katal TURE. are the principal grasses of the district, but they seldom grow in sufficient quantities to admit of their being profitably cut for cattle feeding.

No scientific enquiries into prevailing cattle diseases have Cattle ever been made. The following notes of these diseases, diseases. their characteristics, and local remedies have been compiled for the purposes of the gazetteer, chiefly with the object of assisting any expert who may undertake the study of the subject in the future.

The most dangerous diseases are considered to be rikho in sheep; busmarg and garr in goats; chálri in cattle; kullok and garr in camels; and sargir and khúkak in horses. Except kullock and sargir, all are infectious, and segregation is immediately resorted to.

Diarrhœa (rikho) prevails among sheep and goats in the spring when the pasture is new and the animals over-eat. The usual remedy is to mix dry apricots with water and administer the preparation. Fresh milk with ghi is also sometimes administered. The symptoms of busmarg, also known as pifuk (possibly pleuro-pneumonia contagiosa), are discharge of fluid from the nose, loss of appetite, and eruptions on the lungs. A kind of inoculation is practised by taking a portion of the lung of a diseased animal and inserting it in a slit made in the right ear of each of the remainder of the flock. In garr or itch, a curious remedy is resorted to. A snake is killed and roasted with mustard oil. A slit is made at the end of the tail of each goat and the incised part is dipped in the boiling oil. When camels suffer from itch, an application of coal tar and kerosine oil or of a paste made of the ashes of the kirar tree is useful. Chálri appears to be a kind of foot and mouth disease and is common, too, among sheep. The usual remedies include the application of pounded capsicums on the affected parts, or the inhalation of smoke from a donkey's hoof or from burning tamarisk wood.

Kullok is peculiar to camels, the symptoms being a cough and discharge of fluid from the eves and nose. The remedies include branding round the ears and between the forelegs, and a dose of country liquor mixed with powdered

AGRICUL-

ginger. Sargir is an acute cough; khúkak is marked by shivering fits, cough and the appearance of a gathering in the throat.

Other diseases from which sheep suffer include páséchav or páséchau, the symptom of which is a flow of liquid from the nose; phihi or pihi, an internal ulcer; and drikkok or staggers. Sheep and goats suffer from a disease of the liver (jaghar karam); cattle from dysentery (séhr or sédai); and camels from inflammation of the chest (sinapa), a less aggravated form of itch called rush, and colic (khalh). In nearly all cases a charm by a Saiad or other person of religious sanctity is regarded as a specific. In cases of pox (putav) among sheep, goats or camels, inoculation is done by the same classes.

Irrigation. General conditions. The necessity of irrigation to ensure a crop, owing to the precariousness of the rainfall, has already been explained, and it is from these circumstances that the kárés derives its importance as a source of irrigation. Other sources of supply are springs and streams, the perennial flow of which is diverted into artificial channels for purposes of irrigation. The statement given in Appendix II shows that in 1903 there were 381 káréses in the district, of which, however, only 250 were running; 87 springs and 12 streams. The largest number of káréses is found in the Mastung niábat which had no less than 141 running in 1903. Next follow Mungachar, Kalát and Gurgina with Kardgap.

Of the springs, the largest are the Chashma at Kalát, the Dudrán irrigating the Chhappar valley, the Bhalla Chashma at Iskalku, two springs at Kishán and Shékhri, and the three springs known as Chashma Kahnak Khali, Chashma Shamézai and Chashma Babri in the Kahnak valley. Of the streams, the largest are also to be found in the Mastung valley, viz., the Rod-i-Sariáb, Rod-i-Pashkarm, Rod-i-Shírínáb, and the Mobi; the Sarawan river supplies irrigation in Johán, Jam and Bárari.

The area irrigated by an average spring or kárés may be judged from the figures collected during the survey operations of Kahnak conducted in 1905. The irrigable area surveyed

amounted to 9,629 acres, including 69 acres under gardens. Of this 1,648 acres, including 6 acres under garden, was irrigated by four springs, giving an average of 412 acres to each spring. The remaining 7.081 acres were irrigated by 26 káréses or an average of about 306 acres to each kárés. The largest káréz in Kahnak is Guldahan, which irrigates 635 acres, and the largest spring is Kahnak Khali, irrigating 025 acres. But, while the figures given above may be taken to indicate the mean area cultivated by a kárés or spring, much more copious sources of supply are known to exist than even the largest found in Kahnak. Among káréses the Bahrám Sháhi and Tindlán in Mastung and among springs the Chashma at Kalát and the Dudrán in Chhappar, may be mentioned.

AGRICUL-TURE.

Kareres, or underground water channels, are an important Karezes. source of irrigation. A scientific explanation of the karéz written by Mr. R. D. Oldham, A.R.S.M., F.G.S., of the Geological Survey of India, will be found on pages 143-46 of the Ouetta-Pishin Gazetteer.

The only kares diggers living in the country are people Method of from Mungachar, chiefly Langavs belonging to the Dingan-construction zai and Báikhánzai sections, Zagar Méngals, and Khurásánis. A few Dehwars of Mastung and Máli Méngals of Dasht-i-Gorán have also learnt the art. Ghilzai Afgháns. who visit the district in winter, were formerly much sought after, when work was to be undertaken, but the Lángavs have now supplanted them in nearly all cases.

of kárézes.

The work of kárés digging or repairing is done by parties of four, each party being technically known as a charkh. The name is derived from the "windlass" which forms the most important part of their equipment. The work is occasionally done by contract, but the usual method is piecework, the rates for which vary according to the nature of the soil. It is also customary for the employers to supply food, which generally consists of from 7 to 10 kásás of wheat, I seer of salt, \frac{1}{2} seer of tobacco, and R. I on account of meat per man per mensem. The owner also supplies the windlass and all necessary tools, oil for lamps,

AGRICUL-TURE. and loin cloths (lánki). The cash rates for sinking wells in ordinary soft soil vary from Ans. 1-6 to Ans. 3 per Kandahári* yard and an enhanced rate of Ans. 4 per yard is given when the soil is hard and stony. The rate for excavating tunnels varies from Ans. 5 to Rs. 3 per yard according to the nature of the soil. Open channels are paid for at rates varying from Ans. 8 to 1 rupee.

The usual payment for cleaning (laikashi) wells and tunnels is Ans. 4 per day in addition to food.

The excavation of a kárés is an expensive business and it is therefore generally constructed by joint capital and owned by several co-sharers. Reference has been made in the section on Land Revenue to the forms of proprietorship called kalang shartk or lichikhi, jávi and daghári which have resulted from such co-operation.

Passage for a kárés through land belonging to a stranger is allowed on payment of compensation either in the form of a share in the kárés or of cash. That it is unusual to refuse the passage of a permanent source of water supply is indicated by the saying of the countryside: "Dír-é-arwat aré na niám án kasar é"; i.e., the water must have its course, even between husband and wife, and "Gwas zágh é khap kék"; a gwas must divide even the cleaned grain heap on its way.

In selecting a site for a kārés the excavators are guided solely by experience and have no scientific knowledge. A site is generally taken along the banks of a hill torrent or where such a torrent debouches from the mountains into the valley. Note is also taken of the appearance of moisture after rain and of the presence of moisture-loving shrubs and grasses. The next step is to dig one or two trial wells (gomāna), and if they prove successful, other wells are dug and connected by tunnels (nambūr) until the water reaches the surface.

In order to increase the supply of water, it is sometimes found necessary to construct several branches at the top of the kares. The wells which are sunk at the upper end in the water bearing strata are known as ávidún, those near the mouth as topaki, and the open channel at the end as roina. Open channel work is generally done in the spring and summer. Tunnel work is done in autumn and winter: it cannot be executed during the summer on account of the gas which accumulates.

AGRICUL-TURE.

The cultivators lay much stress on a moderate distance being maintained between a new kárés and an existing one. It is never less than 40 yards, but is generally more. There is no recognized custom about the distance to be observed and it depends a good deal on the nature of the locality. In Zard, kárés wells may be noticed in close proximity to one another, while in other well cultivated places, such as Mastung. the distance is generally 200 to 250 yards or more.

The cost of the construction of a kárés varies with its length and the nature of the soil. Usually it is from Rs. 2.000 to Rs. 20,000 and in special cases it may be higher. The kárés in Marav is said to have cost the Kurds nearly a lakh. All the western and west central part of the District is admirably adapted for the extension of the kárés system. Khad is said to be too level for káresés to be excavated with success but wells might probably take their place.

The rais of the kares makes the necessary arrangements Maintenance for its repair and supervises the work. If the work is heavy and especially if tunnels and wells have to be cleared (lai or . lai kashi), the services of professional kárés diggers are engaged, and the cost is found by the co-partners in proportion to their shares in water. For work which require no special skill, especially the clearing of the open channel, chhér-the labour-is provided by the co-partners.

The water from streams is generally raised by means Streams. of certain dams (gandho) thrown across the bed. The dams are of a temporary character and have to be reconstructed after heavy floods. The supply of water in almost all places where irrigation is taken from streams is abundant and exceeds what the land requires.

The only large dam which has ever been constructed .

'Agricul- in the District, was one made by the Langavs about 1890 across the Shirinab river in the Mungachar valley near the lands called Dáhbar in Brinchinnau. It was carried away by a flood about two years after its construction and has not since been replaced.

water.

Division of Permanent sources of water, except when the water available is more than the land requires, are divided into a number of shares, the principal share being the shavana or the flow of a day and night. The minor divisions of . a shavána are ordinarily the ním or half shavána, also called bel, táh, kíla, wakht or waghd representing the flow of a day or night (12 hours); ním bél the flow of six hours: pás equal to three hours; and nim pas equal to 11 hours. In · Kalát the pás and ním pás are equal to 6 and 3 hours respectively, while in Mungachar and Gurgina it is the practice in some káréses to denominate the ordinary pás of 3 hours as a bisuna pás or pakka pás and the ním pás of 1} hours as a khám pás or kacha pás.

> For practical purposes the smallest measure in use is the pás, and where individuals hold smaller shares than this their turn is postponed until a full pás, or, if the supply is a small one, until half or even a full shavana has accumulat-The actual distribution is conducted by the rais or other person charged with the work. The system of division is rude and not so elaborate as in some places, such as Níchára, in the Ihalawán country. It is done during the day by dialling and during the night by reference to the stars. The four pás of the day are known as the awaliko pás; the nimroch or swár-ná pás; the péshim-ná pás, and the dígar; those of the night are khuftan, nan-náním, sahúr, and dé-tik. The first pás of the day generally commences about the time of the mulla's call to the morning prayer, or, as the people say, when an old man's beard can be distinguished from a young man's. It is over when a man's shadow reaches a distance equivalent to that of ten bare feet from him. If the pas commences at sunrise, as is the case at Isplinji, it will be over when the shadow has receded to a distance of seven bare feet from the man. The

AGRICUL-

second pas is completed at noon when the body throws no shadow, and the third and the fourth pás are over when the shadow has reached points at a distance of 5 and 18 bare feet from the man. At Isplinji the third pás is over when the distance is 7 bare feet, and the fourth lasts till sunset.

In the division by night, the stars, which are used as a guide, are changed about once a month. In July at Iskalku those used are the roshan istar; the paur; and the tir-band. The first pas is over on the disappearance of the first; the second and third pás are completed when the paur and tir-band appear in the East, while the fourth lasts till the mulla's call to prayer.

Arrangements for the distribution of the water among the cultivators are made by mutual consent early in the spring of each year. The turn of each of the shareholders is fixed by casting lots (tir), and the arrangement is considered absolutely binding, and hence the saying: "Deh tira, nind dira," put in your lot and sit at a distance. The turns continue throughout the year. A man who possesses, say, onesixteenth of a shavána in a kárés having a course of 15 shavánás does not necessarily receive 11 hours of water daily, but he has to wait, as already explained, till a pás or more has accumulated.

The only stream in which an artificial water divide is water used is the Chashma at Kalát. At a distance of about 20 yards from the spring a wooden divide, called taghar is placed across the stream, dividing it into 41 streams, called Bun-i-Koh, Rais-tok, Joi-Ghulaman, Joi-Tút, and Gom. The two last named belong to the Khan, and are taken off at the first divide. The remaining streams run together until they are separated by a second divide about 150 yards lower down. Exchanges of water to suit the convenience of the Khan and the Dehwars of Kalat are not infrequently made between the different streams.

In order to distribute the water of hill torrents proportion- Division of ately among units of a tribe or among individuals, a small flood water. embankment is thrown across the bed of each important one, as soon as it leaves the mountain slopes. The water having

AGRICUL-

been thus diverted into a common course, is then taken off in smaller channels called *gwas*. The place of distribution is known as *búhari* and further sub-division is, if necessary, carried out by constructing minor channels, also called *gwas*.

Watermills.

Mills, locally known as asiáb, are worked on the permanent supplies of water, and reference to their number and the localities where they are found has been made in the section on Land Revenue. They are ingeniously, though simply and roughly, constructed on the same principle as those found in India. A position is selected where a sufficient fall can be obtained by making an artificial embankment (tarai) and the flow of water reaches the mill through a water shoot (másu). A wooden shaft furnished with horizontal flanges (charkh) is placed in position beneath a platform on which are two mill stones (pur), the lower being fixed and the upper one or runner, attached to the shaft. Over the mill stones is fixed a wooden receptacle (dol) for the grain, of the shape of an inverted cone which is connected by a trough with a hole in the upper mill stone through which the grain passes. The revolutions of the mill stone cause the small trough below this receptacle to vibrate and shake the grain into the mill. The vibrations can be regulated by an ingenious string arrangement.

The mill stones are surrounded by a low mud wall (árd) khána) for catching the flour which is removed at intervals with a long handled wooden spade, called páhori. Over all, is constructed a mud roof as a protection from the weather, Mill stones are generally obtained from the Band mountain near Gidar and occasionally also from the Singindáz portion of the Sháh-i-Mardán mountain near Kalát. The cost of a pair varies from Rs. 22 to 28. Loris and the owners themselves import the stones.

Mills are generally constructed by the owners of the land and water, and the expenditure varies from about Rs. 200 to 300. The miller (asiabán) receives wages generally in the form of a share in the corn ground and a tip, called shagirdána. Thus, at the Dudrán water mills, the wages

consist of one-tenth of the total corn ground plus two seers of flour on every 50 kásás of grain. Hindus pay cash rates for milling at the rate of 4 annas for every three local maunds ground plus one seer of flour on account of shagirdána. The outturn of a mill varies with the water power and management. It is estimated at 5 to 12 maunds in different places.

AGRICUL-TURE.

Reference to the forms of tenancy and tenures will be RENTS, WAGES AND found in the section on Land Revenue in Chapter III. PRICES. Rent everywhere is paid in kind, and a division of the total produce of the crop is made between the landlord and the In some cases where the Khan's lands are cultivated by his dependants, the latter who supply labour only, receive subsistence allowances of grain and a cash allowance every half-year.

The common system on irrigated lands is known as the Method on séhak, in accordance with which the landlord supplies the of produce seed and manure, and the tenant has to find the plough lands. bullocks and to arrange for the transport of manure to the The landlord, who is usually responsible for the payment of the revenue, receives two-thirds of the total produce, the remaining one-third forming the share of the tenant. In a few cases the revenue share is paid from the common heap and is borne by both the landlord and the tenant, this system being known as the har tomaka-tá niám an, or har do sari. In the Chashma lands at Kalat, the tenant receives one-fourth of the total produce, whilst in Mastung this division of one-fourth and three-fourths is applied only to the autumn (sabsbar) crops, the spring crops being subject to the usual conditions, viz., the division of produce between the tenant and the landlord in the proportion of one-third and two-thirds respectively. rates of rent which include revenue on the Crown lands are described under Land Revenue and Appendix No. VIII shows the rates prevailing in different parts of the country.

distribution

When the tenant supplies seed, labour and bullocks, the usual rent paid to the landlord is one-fourth of the total produce, while in some cases it is also as much as one-half.

RENTS, Wages and Prices. But if only labour is found by the tenant, and the landlor supplies seed and bullocks, the usual share received by the latter is five-sixths and sometimes also seven eighths, the remaining one-sixth or one-eighth being paid to the tenant. At Johan the landlord and the tenant supply the seed in equal shares and the bullocks are found by the latter. One-sixth of the produce is first set aside as payment for the labour supplied by the tenant, and the balance is divided equally between him and the landlord. At Isplinji, where the owners of water are not necessarily the owners of the land, it is usual for the owner of water to supply the seed, labour and bullocks and pay one-sixth of the total produce to the land owner.

Special rates on certain crops.

For crops which require special care and attention, the rates of rent vary. In pálésát the produce is usually divided into five equal shares; one share is set apart for the tenant (basgar) who has ploughed and prepared the land for cultivation, and the remaining four shares are divided equally between the landlord and the páléswán. The latter provides the seed and is responsible for the crop. When the tenant supplies the seed, and acts as páléswán, the landlord receives two-fifths of the whole. At Kalát these rates apply also to tobacco, carrots, onions and potatoes.

Dry crop

According to the system prevailing in dry lands the tenant (lath-basgar) provides the seed, labour and bullocks and pays one-fourth on account of rent. In Gurgina and Kardgap he pays one-third under the same conditions, but the more common practice in these localities is that, in addition to supplying labour and bullocks, the tenant must also provide half the seed; in this case he is entitled to one-half of the total produce. In Narmuk, where the tenants are chiefly tenants-at-will, one-sixth of the total produce is set apart for the tenant's labour in connection with the crop, and the remainder is divided equally between the landlord and the tenant, on the condition that the latter provides bullocks and half the seed. In other parts of the district, the tenant-at-will's share is usually one-sixth, and he is only required to give labour, all other requisites being provided by the landlord. In Mungachar, Kalat and its neighbourhood and also at Iskalku, Shékhri and Kishán, where the landlord supplies the seed, the tenant is responsible for labour and bullocks only, and the outturn is equally divided between them; but in the same circumstances at Nimargh, Gurgina, and Kardgap the rent paid by the tenant to the landlord is two-thirds.

RENTS, WAGES AND

The land tenures prevailing in the Kurd tribal area are System of complicated and not very clear, but as far as information is rents in the available, the following appears to be the system in vogue.

Kúrd tribal

A reference has been made in the section on "Tenants" to the forms of tenancy, which are known locally as charik, séhak, and níma shashik. Under the chárik system the proprietor receives one-fourth of the produce as rent, while under the séhak system he receives one-third. With regard to the nima shashik system it would appear that if the tenant (lath-basgar) himself cultivates the land, he must supply bullocks, labour and half the seed; the other half of the seed being found by the proprietor (bohtár). When the produce is divided, one-sixth of the total outturn is first set apart for the tenant on account of what is known as the luth-ná-hak. the remainder of the heap is then divided in equal shares by the bohtár and the lath-basgar. But should the lath-basgar introduce a sub-tenant (fasal batera) to cultivate the land, he is only entitled to receive one-sixth on account of his lathná-hak and the remainder of the produce is divided equally between the bohtár and the fasal batéra, the latter supplying half the seed. If the fasal batéra is employed by the bohtár, one-twelfth of the produce only is paid to the lath-basgar on account of lath-ná-hak. This would appear to be the origin of the term nim shashik, which literally means half one-sixth, i.e., one-twelfth.

Under the charik and sehak systems it is usual for the fasal batera to join the lath-basgar in supplying half the seed and to receive one-half of the total produce. Under the nima shashik system, if, as a matter of convenience, the whole of the seed is supplied by the lath-basgar in addition to the bullocks and labour, which he is bound to furnish, the rent received by the bohtár is one-fourth of the total produce.

The following statement summarises the shares due various parties under the different conditions

Rents, Wages and Prices.

mentioned above, it being assumed for purposes of convenience that the total produce is divided into twelve equal shares:—

_	Name of system.	A Proprietors' shares.	B Tenants' shares.	C Sub-tenants' shares.	
1.	Chárik	3	9,		In this case the tenant supplies seed, bullocks and labour.
2.	Do	3	3	6	The tenant and sub- tenant supply the seed, bullocks and labour in equal shares.
3-	Séhak	4	8	_	The tenant supplies seed, bullocks and labour.
4.	Do	4	. 2	6	The tenant and sub- tenant supply the seed in equal shares, and the sub-tenant the bullocks and labour.
5.	Nima	•		•	
	shashik	5	2 lath-	ná-hak. 5	The landlord and tenant supply the seed in equal shares and the tenant cultivates the land with his own bulcks. The tenant has a permanent occupancy right and cannot be ejected without reasonable cause.
ſ •	Do	5	2	Do. 5	In this case the sub- tenant is engaged by the tenant, who retains his occupancy right. The landlord and sub-tenant supply the seed in equal shares.
7.	Do	5	•	Do. 6	The sub-tenant is engaged by the landlord and both supply the seed in equal shares. The tenant retains his occupancy rights.

In irrigated lands it is a part of the duties of the tenants to transport the landlord's share of produce to his house, to give one or two bullock loads of firewood during the year, to carry his corn to the mill, and to help him with

materials that may be required for the construction or repair of buildings.

Rents, WAGES AND PRICES.

There is no regular cooly class or any regular tariff of WAGES. wages; but it would appear that there is a tendency towards a general increase in the rates during the last few years, this tendency being especially noticeable in the centres of trade and population. The classes engaged in local handicrafts receive no fixed wages, and their remuneration is usually determined by mutual agreement. When felts are given out for manufacture, the wages vary from Ans. 8 to Rs. 2 per yard according to the quality of the design. Goldsmiths receive ans. 4 and ans. 8 on every tola of silver and gold respectively used in making up the ornaments; and it has been estimated that shoemakers, blacksmiths and brick-layers at Kalát can earn from ans. 8 to ans. 10 per diem.

Labourers engaged for reaping crops (láigar) include men Agricultural and women, and their wages (lat) consist of one-twentieth labourers. of the crop harvested, and their children are also permitted to glean the fields (khosha-chini). Women who are engaged by cultivators to help in collecting, cleaning and winnowing the threshed crop receive half a kása of wheat per day. Labourers employed in constructing embankments are paid at rates varying from ans. 4 to ans. 6 per day, the bullocks, tools and other requisites being supplied by the employer.

Herds of female camels are usually entrusted to the Camel-herds. Jat graziers of Kachhi, who receive R. 1 per annum for every animal placed in their charge. Camelmen (sárwán) receive from 1 to 1 of the hire, the cost of the feed of the camels being borne by the owner. It is not usual for the camel driver to purchase a share in the camel, which for this purpose is divided into four shares, a leg being the unit. In this case the driver receives the hire of his share in addition to his wages. There is a regular trade between Makran and Kalat in wheat and dates, the former being exported to Makran and dates brought back in exchange. Camel-owners engaged in this carrying trade receive onehalf of the dates, and this system of payment is locally known as gwáchi.

The regular village servants other than those already Village mentioned in the section on Land Revenue are car- servants.

RENTS, WAGES AND PRICES. penters, blacksmiths, and crop watchers (toho). greater part of the district the work of blacksmith and carpenter is performed by the Loris. Each worker has his own circle, and the appointment is generally hereditary. The remuneration is usually paid in kind and varies in different parts. In the Mastung valley it consists of 2 kásás of wheat and 2 kásás of barley from each shabána or division of water. The crop watchers are appointed for special crops and their payments vary in different localities. Thus, for instance, at Isplinji they are appointed only for the juár crop and they receive one-twelfth of the total produce as In Mungachar they are engaged for both the wheat and barley crops generally for three terms aggregating about 51 months and receive 11 kásás on each shabána in addition to a small quantity of grain (1 kása) from every heap of grain separately threshed by the cultivator.

Mullás, who are for the most part Afghans, are not numerous. Those who are attached to the chiefs, generally receive fixed stipends, but those in charge of villages are maintained by fees, alms and by the tithes (sakát) subscribed by the villagers, generally one-tenth (dáhak) of the produce of the lands and a proportion of the flocks.

The middlemen or agents employed in the purchase of wool and ghi receive a commission of 5 per cent., this payment being known as rahdári.

PRICES.

Wheat is the staple grain of the country. The prices vary according to the conditions of the seasons; the average rate in Kalat in 1853, the first year for which figures are available, was 2 maunds 8 seers; in 1874 it was 1 maund 4 seers, while in 1879 it was 5½ seers. Since then the rate has varied from 11 to 27 seers, it being 13¾ seers in 1902.

In places near Quetta which are affected by its market, there has been a general rise in the rates of both grain and fodder, but the prices are steadier and the fluctuations are less marked. Thus in Mastung, where wheat was sold in 1871 at 1 maund and 26 seers for the rupee, the average rate during the past few years has varied from 12 to 14 seers.

The prices in the district are also affected by the harvests in Kachhi, where large numbers of Brahuis migrate during the winter.

A seer containing 88 tolas, and known as Kaláti sér, is in general use throughout the district, and the weights in MEASURES. common use are the nem ser (44 tolas), páo (22 tolas), nem páo (11 tolas) and ána (51 tolas).

WRIGHTS AND

At Kalát and Mastung, British Indian standard weights and balance scales are kept by some traders for use in furnishing supplies to Government officials. Local weights, however, are in general use when dealing with the natives of the country.

The weights used by goldsmiths are those common to Troy other parts of India. The table is as follows:-

8 ratti = I másha 12 másha - 1 tola

Grain is sold everywhere by wooden measures, the Measures of most common one being kása or sark. Those in use by traders in the towns of Kalát and Mastung are generally marked with the State seal. The cultivators use their own kásas which contain about one chittack more than those used by traders. The different measures in ordinary

- use are shown below, the lowest unit being the chotra: = 1 Yakman (also called vagman). 2 Chotra
 - Yakman 1 Kása or sark.

 - 50 Kása
 - = 1 Kharwár.

The gwála and kharwár are merely nominal, the kása and chotra being those actually in use. The yakman is only a domestic measure, a copper or other utensil being used for the purpose.

In Jam, Bárari and Robdár Kachhi measures are in use, the smallest unit being the pinrki:-

- 4 Pinrki I Topa.
- 4 Topa ı Kása.
- 60 Kása = t Kharwár.

The capacity of a kása varies slightly in different localities and also with the different kinds of grain for which it is used. The grain always used for testing that of a new

Weights and Measures kása is mung. The following table shows the equivalent of kása of wheat in standard seers in different localities:

			S	eers.	Ch.			S	eers.	Ch.
	•••		•••	5	9	Shírináb	***	•••	5	8 3
_	char :					(Kanéti vi	illage)			
(i)	Zard	(Músa·	•							
	zai vil	lage)	•••	5	6	Kúrd area	•••	•••	5	72
(ii') Shahi	г								
		m Ján	•••	5	2	Isplinji	•••	•••	5	_
(iii	i) Brin	-								
	ching	au	***	5.	_	Johán, Iska	lkư,			
(i v) Ziárat				Shékhri,	Kishán)				
and Chhappar 5		5	131	and Nar		•••	5	8		
Khad	•••	•••	***	5	10	Robdár, Jai	m			
Mastu	ng	***	•••	5	5	and Bára	ri	•••	6	8
Nímar	gh	•••	•••	5	61					
Gurgii	and and	Kardg	áp	5	9 1					

Articles other than grain which are measured with the kása are salt (about 6 seers to the kása), cumin seed and pistachio fruit.

The State officials in Mastung keep two kinds of kása, known as the kalangi kása and the ijára wa batái wála kása for measuring the revenue grain. The former is smaller than the latter, and is used for receiving the fixed revenue grain (kalang) from the cultivators. It contains 5 seers 3% chittacks standard in wheat and 3 seers 14 chittacks in barley. The ijára wa batái wála kása contains about two chittacks more than the kalangi kása. It is used for receiving revenue grain fixed by contract or levied by division of the produce.

Miscellaneous measures, Onions and potatoes are generally sold by the bag (guni) which contains about a to a = 1 maunds. Firewood and bhúsa are sold by the load, generally the camel load. Green fodder, such as lucerne, is sold by plots (kurda) or by the set of plots (takhta). Wisps of dry lucerne (mora) are sold by number at so many for a rupee; and sheep's wool is also made into parcels (kas), each of which contains the wool from one sheep, and which are sold in the same way.

Indefinite measures of grain known in the household are bá-ná-phak, a mouthful; churu, the contents of four fingers; khafo, a handful; chank, a double handful; and sisér, a domestic measure containing about 1½ chotra. Other terms

used by the cultivators in connection with the crops are muth, a fistful: púli or báhu, a bundle of sheaves; bhánkur or khumb, the quantity that can be carried in two arms; badd, a man's load; jowál, a sackful; and tarangar, a netful.

WEIGHTS AND MEASUR RS.

Ghi when purchased by the banias is measured with the Liquid chotra, which holds about 11 seers of liquid phi.

In Mastung and Kalát, the shopkeepers keep standard Linear vards made of iron of 16 girhas or 36 inches, but they are measures. only used for measuring expensive cloths, such as silk. commonest measure and the only one understood by the people is the harish or arish, an indefinite measure varying with the stature of the customer. It is measured from the projecting bone of the customer's elbow round the end of the middle finger, when extended straight, and back to the lower knuckle joint. The kandahári vard, which is equal to about 3 feet 6 inches. is used for measuring kárés tunnels.

During the survey operations in Kahnak and Tiri, the Superficial measures adopted were acres, roods, and poles, but the measures. people do not understand them. Distances on the ground are measured by the pace (gám or kadam). Irrigated land is recognized by the proportion of water attached to it. and for this purpose every source of irrigation is divided into shares representing the flow of water for so many days and nights.

The term jora is frequently used both in irrigated and unirrigated land, but has no definite value. It represents the land which can be brought under cultivation during the year by a pair of oxen. Cultivators also sometimes estimate the extent of a plot by the quantity of seed which can be sown in it.

In the Pringábád circle of the Mastung niábat the flow of certain káréses which is divided into the ordinary shavánas and pás, receives a different nomenclature for revenue purposes. Thus, a shavána in some of the large sources of irrigation, such as Káréz-i-Kandaki and Káréz-i-Kalán, is divided into dáng and nákhun, 6 dáng making I shavána and 12 nákhún making 1 dáng. The flow of other sources is reckoned, in the same way, as equal to so many dángs of the large kárés. In Tíri, a shavána of the Rod-i-Mobi is reckoned as equal to 32 dáng, each dáng consisting of 12 nákhun.

WEIGHTS
AND
MEASURES.

Distances are known by such indefinite standards as horse or camel stages (misil or maisil), more generally the latter. Camels travel during the whole night in summer and from sunrise to sunset during winter, and a march is usually about 15 miles.

Measures of time.

Chiefs and others who have dealings with Government officials know the English months, but the names used in documents are those of the Arabic months, viz.;—Muharram; Safar; Rabi-ul-awal; Rabi-us-sáni; Jamádi-ul-awal; Jamádi-us-sáni; Rajab; Shábán; Ramsán; Shawál; Zikád; and Zilhaj. The nine chillas or periods of 40 days into which the year is divided by the cultivators have been detailed in the section on Agriculture.

The days of the week are those recognised by Muhammadans, Saturday called shamba or awal hafta being the first day. The remaining are yak shamba, Sunday; do shamba, Monday; seh shamba, Tuesday; chár shamba, Wednesday; panj shamba, Thursday; and juma, Friday. The day (dé) and the night (nan, also called shaf or shab) are divided into the following parts:—

VERNACULAR	R NAM	ES.		EXPLANATION.
Sáf	•••	***	,	The period about dawn.
Sobh	•	•••	•••	Morning.
Dé-tik	•••	•••	*	Sunrise.
Chasht or c	hást		:	About two hours after sunrise.
Sowára	•••	•••	•••	The morning meal time about 3 hours after sunrise.
Ném-roch				Noon.
Péshim	***	•••	•••	The hour of afternoon prayer, between 2 and 4 p.m.
Kazá péshir	n '	•	•••	A little after 4 p.m.
Burz-digar		•••		About 5 pm. in winter and be- tween 5 and 6 p.m. in summer.
Dígar	•••	***	•••	5 p.m. to sunset.
Dé-kiahling	•••	•••		Sunset.
Shám		•••		Soon after sunset.
Khuftan	•••	•••	***	9 to 10 p.m. in summer and 8 to 10 p.m. in winter.
Ném-shaf or Nan-ná-ném				Midnight.
Sahúr (also called bhalla sobh; or kukkur ná báng)				The period some 2 hours before dawn.

Currency.

Previous to the commencement of British relations with the Kalát State, the coins most generally current were those of the Afghan rulers. They were either silver or copper, the silver ones being known as Zamán Sháhi and Karímkháni, and the copper coinage as Mansúri. These coins have been replaced by British Indian coins to which the following terminology is applied. The pie is actually known to few people.

WEIGHTS
AND
MEASURES.

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ENGLISH NAME.
 LOCAL NAME.
                     Pie.
Pái
Paisa or dabal...
                     Pice.
Takka or doda-
                 Half anna.
  bali ...
                     Two-anna piece.
Sháhi ...
                 - Four-anna piece.
Páwali or Páoli
                     Eight-anna piece.
Ném rupai
Rupai ...
                 _
                     Rupee.
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The Kalát State never appears to have possessed a regular coinage, but the ex-Khán, Mír Khudádád, struck a copper pice, roughly circular in shape, at the beginning of his rule in the name of his son Mír Mahmud Khán, the present Khán. It is now equivalent in value to a pie, and its use is limited to the towns of Kalát and Mastung. The obverse bears the words Zarb Mahmud Khán and the reverse Fulus Kalát with the date.

The simplicity in which a Brahui formerly lived, is illustrated by his saying: Two sticks and one blanket (do lakkari, hikk tarappari). Some of them can still boast of little more in the shape of worldly possessions and the standard of comfort is nowhere high, but, throughout central Sarawan, the improvement of communications and the proximity of a large market at Quetta has resulted in a distinct and very noticeable improvement of the material condition of the people.

Pottinger, who visited Kalat about 1810, described the Brahuis as more unsettled than the Baloch, changing their immediate place of abode many times every year in quest of pasturage for their flocks, and that their food and dress were of a very simple nature. Thirty years later, Masson noticed no change in their style of living.

There can be no doubt of the difference between the state of things described by Pottinger and Masson and the present. Large areas of land have been brought under cultivation, new villages have grown up in all parts of the district and,

MATERIAL CONDITION.

MATERIAL CONDITION.

though the trade of Kalát has diminished, the local products viz., ghi, wool, cereals and tobacco, are carried to distant marts where they fetch good prices. On every side there are signs of a general improvement in the material condition and standard of living both of Bráhuis and Dehwárs. The felt cap has given place to the turban, and for the coarse cloth. known as jori and manufactured in Kachhi, English manufactures are in use. A general rise in the prices of land and the small indebtedness of the people are other factors which indicate a gradually increasing prosperity. In the midst of general progress the condition of only one class, the Bábi Afgháns of Kalát, who carried on a large trade in former times, has declined, and since the present Khan came to the masnad most of them have emigrated to On the other hand, some classes have made greater strides in the path of progress than others, especially the industrious tribe of Lángavs.

As might have been expected, the rise in the standard of living which has taken place, has shown itself in the case of the cultivator rather than with the flockowner, and a general preference for cultivation rather than flock-owning is now making itself observable.

There are few, if any, really rich men, though some of the Sardárs in receipt of allowances are able to save money, and the poor still form the great majority of the population.

The population may be divided into three classes: the higher class, consisting of the headmen of the tribes including those in receipt of allowances from Government and the more well-to-do landlords; the middle class comprising those cultivators in possession of a fair quantity of irrigated lands, chiefly the Dehwars of Kalat and Mastung and the Johanis of Johan, the more affluent flockowners and camel owners such as the Koh Badduzais, some of the Shahwanis and the Langavs; and finally the poor classes which include the rest of the cultivators and the majority of the flock-owners.

Outside of these groups are the Hindus, who, as a class, have prospered in Mastung but have suffered at Kalat on account of the diversion of trade from that place to Quetta.

Reference has already been made to the introduction of the turban and better cloth for the dress of the people.

MATERIAL CONDITION.

Embroidered lungis and conical caps (kulla) are also popular, and every Brahui desires to be possessed of a waist-coat embroidered in gold and of a coat, though the latter is only within the reach of the wealthy. Pattus from Kashmir and Amritsar, and Afghan postins are also highly prized. The sandal is being supplanted by Kandahári shoes, and boots are now worn by those who can afford them. The long shift which is still worn by the women is now profusely embroidered, even among the poorest, and the rich provide their women with silk trousers and satin shifts. The women, too, are given new shifts more frequently than before; in the olden days it was proverbial that one shift had to do duty for seven weddings, the people being too poor to get a new one for each occasion and the same shift being lent to friends. ments are more numerous than before, and the fashions in different kinds are changing to those introduced by Punjábi and Kandahári goldsmiths. No change of note has taken place in the character of the food, except the introduction of tea, the consumption of which has become almost universal among the higher and middle classes. The former class is also developing a taste for good. cigarettes.

FORESTS.

The best wooded tracts lie mostly in the hill ranges in the centre and north-eastern parts of the district. The principal trees are pistachio (gwan) and juniper (hapurs or apurs). Among other forest growths of less importance may be mentioned the mountain ash (shishar) (Fraxinus xantho-xyloides); the tamarisk (Tamarix articulata); the kasúr (pistachia mutica); olive (khat) (Olea cuspidata); mashmunk or mashmunk (Prunus eburnea); archin; sárch (Berberis vulgaris); pipal (Daphne oleoides); bhirari; the wild fig (kohi-anjir); and mélab (Corylus colurna).

The Mélbi hill takes its name from the last named tree where it is said to grow without irrigation. If so, it appears to be a valuable asset in Baluchistán forestry. The pistachio is found in lower hills than those which contain juniper and mostly occurs in the eastern and western parts of the district. The best pistachio tracts include those at Shishár near Isplinji; on the Koh-i-Siáh mountain to the west of the Shishár; at Dashtari, Kargazáni, Rúshi,

FORESTS.

Parri and Taláng in the Bangulzai hills; at Gwanipira and Pírmard in the Sahtakzai country; on the Sárún to the west of Narmuk and at a place to the south of Púdgili in the same locality and at Dombak in the Nagau hills. On the west, the Garr hills, the Pihu-ná-lath, and the Chhuttok hill, all contain pistachio. The pistachio tracts on the Garr hills include Tump, Mughbali and Shur to the west, of Nimargh, and Bhalla Rastari and Chuna Rastari to the west of Kardgáp. The pistachio tracts in the Píhu-ná-lath are Morinko, Patki or Patkin, and Daranjan, and Garri, Chhori, Shur, Khumai, Alidir, Rungi, and Hilhi opposite Kardgáp.

The juniper forests, which require a higher altitude than pistachio, are situated in the central hills. The largest juniper tracts are on the Harboi, and about 12 to 16 acres of the forest round the Harboi rest-house are being protected against cutting of green trees. Others are situated round Chuka on the Sárún; on the Mélbi and Koh-i-Márán; in the parts of the Zahrighat range, known as Kamar, Gaddigar and Ab-i-gul; at Istrab at the southern end of the Pihu-nalath, especially the parts called Shishari, Duni, Maholan and Dasht; at the southern end of Chiltan; and finally on the hills at the head of the Bolán known as Kulli, Zén, Shug, Hapursia-lath (also called Shahr-ná-lath) and Nodgwar.

Tribal protection,

No measures for reserving any forests in the district have measures of yet been taken by the State, but restrictions have been imposed by some of the tribesmen, to which reference will be made presently. As a result, the tracts in the neighbourhood of thickly populated places on which some forest growth exists are being rapidly denuded.

> The tracts known as Dhuk and the Dombán in the Harboi hills have been for many years strictly reserved by the tribesmen, the former by the Nicharis and the latter by the Shahwanis, primarily for pasture but also for fodder. In a jirga held at Kalát in 1903, it was also arranged that the cutting of green juniper in an area of about 44,000 acres on the same hills should also be stopped, guards being appointed to see that the decision was carried out.

> Great importance is attached by the people to the preservation of the pistachio tree for its fruit, a valuable product with the Brahuis. The felling of a green tree is

FORESTS.

considered a very great offence and not infrequently leads to disputes, resulting in bloodshed. The different localities where pistachio grows are held by tribal sections and the produce is divided among individuals according to their recognised shares. Guards are appointed when the fruit is ripening, and they receive a share in the total produce varying in different parts from one-seventh to onesixth, one-fourth, one-third, one-half and three-fourths. Labourers engaged for the collection of the fruit, receive one-twentieth of the total produce, but guards employed for this purpose receive one-half or one-third.

From the juniper tracts, large quantities of firewood are exported by the people to distant centres such as Mastung. Formerly firewood was exported Mungachar and Kalát. to Quetta from the north and north-eastern parts of the district but the Bangulzai, the Kúrd and the Sahtakzai chiefs have recently (1905) prohibited this and no fuel now goes to British territory except from Chiltan. The Shahwani headman at Iskalku restricts the export of firewood to Kalát by persons other than the members of his own tribe by claiming half the amount realized as the price of the wood. When the Government buildings at Kalat were built, the Shahwanis are said to have charged Ans. 4 on every camel load of wood. The Muhammad Shahis and Pahlwanzai Méngals have been known to object to the Lángavs of Mungachar exporting firewood from the Mélbi hill. impost of 4 annas per camel load is levied by the Muhammad Shahis on every camel load of tamarisk exported from Shirinab. All tribesmen in their own country are permitted to take as much wood as each man requires for building purposes, for agricultural implements, and for fuel.

Among minor important products may be mentioned Minor forest cumin, asafetida (hing), khushdar (Glycyrrhisa glabra) and products. hyssop called sufa (Nepita ciliaris). Dwarf palm called pish (Nannorhops ritchiaana), a good deal of which was formerly exported to Kachhi, grows in the ravines of the north-eastern hills such as the Kirkanr, Ar-Rakshan, and Survikán, but its place has been taken recently by pish from Harnai which is carried by railway. In former times the Sahtakzais were in the habit of deputing men known as

FORESTS.

badrakka to levy an impost of R. 1 per camel load from persons taking pish.

Cumin (Cuminum cyminum). Cumin is called *riza* by the Bráhuis. In the Harboi it grows only on the Rúshi hill and in the Tahlgán and Pusalk valleys, but it is also found in the Bangulzai, Kúrd and Sahtakzai areas and in the Zahrighat range.

Cumin grows well after good winter rain and snow. herb becomes green in early spring and about the end of March the stem appears and is followed by white flowers. The seed ripens in June when men, women and children repair to the hills and pull or cut the plants which are collected in a heap to dry, after which threshing is done with Much damage is sometimes caused by cutting when the fruit is half ripe. The Bangulzais, the Kurds and the Sahtakzais all take measures to reserve the crop, but the most effective are those taken by the Sahtakzai headman, who permits no flocks to enter the tract where the plant grows, and appoints guards who receive one-third or onefourth of the total produce. As a medicine, cumin seeds are considered aromatic, carminative and stimulant. also stomachic and astringent and useful in dyspepsia and diarrhœa. The principal use of the seed, however, is in the shape of spice.

The greater part of the produce is obtained from the Sahtakzai and Kúrd areas, the local Hindus and banias at the railway stations in the Bolán Pass deputing middlemen to collect it. At harvest time the fresh seed generally sells at about 1 kása of about 4 seers per rupee, but when the plant is dry, the rate rises to 2 or $2\frac{1}{2}$ seers per rupee. The Sahtakzai headman levies Ans. 8 or R. 1 per bag when the seed is exported by banias.

Asafetida (hing).

Asafetida is found on the parts of the Garr hills called Tump, Mughbali, Shur, Garr and Lamboi-na-tavfk; in the Bangulzai hills; in the Sahtakzai country; and on the part of the Harboi, called Shur. The Garr hills were at one time very famous for the plant.

The juice is sometimes extracted from the stem by Afghans from Ghazni and Kandahár. There are no restrictions on their movements in the Garr hills, but in the Kurd and the Sahtakzai countries the permission of the local chiefs has to be obtained. A lump sum, generally Rs. 15 to 20, is paid to the Kurd chief for the right to collect asafetida from the hills to the east of Marav, while in the Sahtakzai area

each collecting party has to pay I seer of hing to the Sahtakzai headman and Rs. 3/- in cash for the season. The cash is divided equally among the headmen of sections from whose country the hing is collected.

Khuzhdár is found only in the Garr hills which were Liquorice formerly as famous for this plant as they were for asafetida. (Khushdar) Unfortunately in consequence of the reckless treatment the glabra). plant has received at the hands of the Bráhuis, it has been almost exterminated. There is now no production of the drug, but the plant is still to be found. Formerly, when the roots were exported, they were dug in November and sold at Rs. 1-8 or 2-8 per maund.

Hyssop grows in years of good rain and snow fall in the Hyssop hills of the Sahtakzai country principally on Murdár, Hingi, (Sufa) (Nepeta Hápursia-lath, Bangu, Nodgwár, Shúg and Zén. It sprouts ciliaris). at the beginning of April and is gathered about the end of May. No restrictions of any kind are placed on the collectors, who are generally shepherds. It is exported by Quetta banias, the usual price being Rs. 3 per bag containing about 20 seers. The herb is used as a cooling beverage in cases of fever and is well-known to native physicians.

Finally, mention may be made of the plants known as Other prokisánkúr (Peganum harmala) and panérband (Withania ducts. coagulans). The former grows in great abundance in all parts of the district to the west of the Nágáu and Bangulzai Its fruit, called harmal, is largely used in India as a disinfectant and as a medicinal drug, but this has not been realised so far by the Bráhuis, and little attention is paid to it except for manuring rice seedlings, for which purpose the plant is cut green and dried.

Panerband grows in the warmer parts of the country. The fruit is used by the natives as a rennet, and large quantities are exported to Kachhi and thence to Sind, where the fruit is used as a medicinal drug possessing cooling properties.

The mineral wealth of the district has never been fully MINES AND explored; the only mineral of commercial value that has MINERALS. been worked is the coal at Digari (locally called Dagari) at mines. the extremity of the Sor Range.

The Sor Range is a curved ridge some 20 miles in length, along the whole of the north-eastern face of which an outcrop of a seam of true coal, averaging about 31 feet thick. has been traced. At the southern end of the ridge is a sharp FORESTS.

The Digari

MINES AND MINERALS. curve and here the coal is found on the western face of the hill. This is Digari.* The coal seam dips into the hillside at an angle of 35° to 45° from horizontal. The coal obtained is clean, good looking and dead black; it burns readily with little ash, but has little heating power. The Digari coal, however, is of better quality, and is harder and less crumbly than that found in other parts of the Sor Range, but the mines are further from the market, an important consideration where only camel carriage is employed.

The coal at Digári was discovered in June 1889, and rights to mine were granted to Baháwal Khán, the Sahtakzai headman, and to another Sahtakzai, Khushdil Khán, in 1891, but both concessions were subsequently cancelled in 1894 in consequence of the non-fulfilment of the mining conditions by the grantees. A fresh agreement was entered into with Baháwal Khán in 1894 allowing him to extend his workings to a total length of a quarter of a mile and a concession was also granted to Sorábjee & Co., of Quetta, in the same year to mine for quarter of a mile.

The question of the proprietary right in the coal had meanwhile come into prominence and fresh leases were granted to Baháwal Khán and Sorábjee & Co. in 1898. The document executed with Baháwal Khán granted him and his heirs in perpetuity the proprietary rights over the coal outcrop for one mile, 3,870 feet, and within this area he was permitted to mine a quarter of a mile, in consideration of his being the headman of the tract and in acknowledgment of his being instrumental in discovering the coal. Neither of the rights can be alienated, nor can any money be raised on either of them, and in the event of the grantee failing to work the quarter of a mile to the satisfaction of Government, the Agent to the Governor-General has the right to enter into possession and make such arrangements for working as he may consider best in the interests of the The payments which the grantee, as holding the proprietary right, may claim from persons working the coal are limited to 8 annas per ton on all coal extracted.

O Note.—The boundary of Sarawan and Quetta-Pishin has never been defined. Mr. Barnes in his letter No. 819-C, dated the 26th of July, 1900, to the Government of India, stated that it was always assumed that the northern (north-eastern) slope of the Sor Range was in Quetta limits.

Two mines are now (1905) being worked, supervision being exercised by a mining overseer under the orders of the local Government. All coal extracted pays I anna per ton as royalty. The yearly output from the Digari coal mines is about 1,000 tons.

MINES AND MINERALS.

Mr. Oldham, of the Geological Survey Department, has computed the amount of coal available at 200,000 tons.

Method of working.

In 1901, when the mines at Digari were inspected, the method of working of Baháwal Khán's mine was found to be haphazard and without any definite scheme. Some thirty or more dip places (stentons) had been made into the outcrop, none of them being more than 100 feet in depth. no tram line and no circulation of air. It was recommended that he should not be allowed to continue mining except on more scientific lines, which have now been adopted to some The adits which are being driven (1905) have been limited to a quarter of a mile of the outcrop, and arrangements have been made for proper ventilation and the provision of sufficient timbers.

At Sorábjee's mine, advantage has been taken of a nullah to save long adits, and coal levels have been driven at various depths along the seam and connected by cross stentons about 40 feet apart, the coal being thus split into pillars about 40 feet square. The roof and floor are good. Seven feet has been advised as a suitable maximum width for the roads, in which case little or no timbering is required.

Traces of coal have been found at Ab-i-Gul in the Zahri- Coal in other ghat Range to the south-east of Mastung, but the seam is narrow. The presence of a ferruginous carbonaceous shale has been noted near Rodangi and the Joak spring, to the west of Kanéti in the Shirinab valley. In the former place the outcrop is about 3 feet thick and 27 feet long.

Ferrous sulphate (ságh) is met with in the Maki Sham Other hill near the Sheikh Haji shrine east of Mungachar.* súgh mine is also well known on the eastern slopes of the Nagau Range, facing Sanni in Kachhi, and small quantities of the mineral are extracted from it. No special rights the deposits have hitherto been recognised, and no

minerals.

[•] A paper by Mr. D. Hooper on the occurrence of melanterite, or native ferrous sulphate, in Baluchistan will be found in the Journal of Asiatic Society, Bengal, Vol. LXXII, Part II, No. 4, 1903.

MINES AND MINERALS. restrictions on persons taking the mineral are imposed by the tribesmen within whose area the hills are situated. The mineral is used for making a black dye and graining swords.

Mak (apparently alunogen or "hair salt") which is mixed with willow leaves for the manufacture of a yellow dye, is found in the Shug mountain about 5 miles to the north of Dozan.

Finally, mention may be made of the presence in the Pashak stream near Johan of calcareous clay nodules enclosing marcasite (iron disulphide). According to native accounts they are obtainable in large numbers.

Lime is burnt from stone taken from the vicinity of the Sakhi Patéhán shrine near Johán, from the Rabáb hill to the west of Chhappar, and from the Bába Wali hill near Kalát and is used as a mordant in dyeing.

ARTS AND MANUFAC-TURES. There are no important industries in the district, and arts and manufactures are chiefly confined to embroideries, rough felts and carpets and leather work.

Embroideries and carpets. A full account of embroideries and of carpets will be found in the Jhalawán Gazetteer. The best rugs are manufactured by the Badduzai section of the Bangulzais.

Felts.

Felts made of sheep's wool and known as tappur or thappur are also manufactured in most parts of the district, the best being made at Ziarat near Kalat and by the Badduzais. The prices depend on the quality and weight, but an ordinary rug 3 yards by 1½ costs from Rs. 4 to 8. The colours generally used are crimson, green, black and yellow, and the designs are simple, consisting chiefly of squares and diamonds.

Dyeing.

At places within touch of Quetta and other trading centres, the former primitive dyes are being rapidly displaced by European colours and aniline dyes. The local dyes still used in more remote places are:—khisun or deep red obtained from madder, pushkun or yellow dye made from a decoction of apricot and willow or pistachio leaves, mon or siáh, a black mineral dye, and kharrun, a deep green prepared from Dádhar indigo.

Leather work. Leather work is confined chiefly to the manufacture of shoes and sandals. The work done at Kalát is of superior quality and has a good local reputation. The different kinds of shoes are the sanbak embroidered with gold wire

and silk, the yakh embroidered with gold wire only, the ARTS AND daski worked with designs in thread, and the sáda or plain TURES. leather shoe without any embroidery. The price of these varies from Rs. 5 to Rs. 12.

Ordinary sandals, water skins (khwa) and leather bags for holding ghi and flour, which are known as sik and kit respectively, are made locally.

The manufacture of sajji or khár, a species of carbonate Khár. of soda, has developed in recent years. It is impossible to form an accurate estimate of the total outturn, but from such figures as are available it appears that in 1903 about 6,000 maunds were exported to Quetta, and the railway returns show that in 1904 1533 maunds were despatched from Kolepur by rail to Sind. The price varies from 12 annas to R. 1-2-0 per maund. The bushes from which it is made are known as mati and righit (Suaeda monoiea), which are found in large quantities in the neighbourhood of Khad and The tracts on which these plants in the Zard valley. and the produce is usually found are reserved. divided in the following proportions:- being paid to the landlord, $\frac{1}{4}$ to the manufacturers and $\frac{1}{4}$ to the tenant. The manufacture is carried on principally by the Langavs, Summaláris and Muhamad Sháhis.

The bushes are cut in August to October, dried, and are then buried in the ground and burnt. The sap which exudes is then allowed to cool and takes the form of hard lumps of carbonate of soda. It is estimated that a bullock. load of green bushes produces about 5 seers of khár.

Attention was first called to the prospects of sericulture Sericulture. in Baluchistán by the Financial Member, Sir Edward Law, whilst on a visit to Quetta in 1903. Experiments were started at Mastung in 1904 with four ounces of silkworm eggs obtained from Kashmir. The results were satis-The produce per maund of the cocoons was estimated by the Kashmír Durbár to be the same as that obtained from a similar quantity in Kashmír. produced was of excellent quality and sold in England at 13 shillings and 2 pence per pound. Major Showers, the Political Agent, during his leave to England satisfied himself that Kalát silk was of high commercial value and was, on his return, placed on special duty to visit the Táta

ARTS AND MANUFAC-TURES.

COMMERCE AND TRADE. Historical. experimental farms at Bangalore to study the methods followed there. Major Showers' report on the subsequent operations carried out in 1906 will be found in Appendix III.

Little is known of the early commercial history of Kalát prior to the Ahmadzais, but with the development of their power the country became an important centre of trade for caravans from Central Asia on one side and South and Western India on the other. The principal routes used by the caravans were the Kohan Wat, which passes through Wad to Béla and the Patháni Wát which leads to Karáchi through the Levy Tracts and the Jhalawan country. Horses, tobacco and madder formed the chief exports, and in return cloth and other piece-goods were imported from The Bábi Afghans and the Hindus, who formed a large portion of the population of Kalát, were the principal traders, the purely local trade being mostly in the hands of the latter. The trade was liable to changes and vicissitudes; and Masson describing his second visit to Kalát in about 1840 says that the condition of the country and trade at that time presented a melancholy contrast to the tranquil and flourishing condition in which he had seen it ten years ago. It would nevertheless seem to have been of some importance, as the receipts from octroi, which was levied at the rate of R. 1 per maund, amounted for the year 1840-41 to Rs. 89,325 at Kalát; Rs. 9,066 at Mastung including Tíri, Rs. 21,434 at Sháwl Kot (Quetta), and Rs. 1,191 at Nushki.

Existing trade.

In more recent times since the opening of railways, the importance of Kalát as a commercial centre dealing direct with distant places in India has declined, and the bulk of the trade has been diverted to Quetta. The majority of the Bábi Afgháns have left Kalát and the number of the Hindus has greatly diminished. The present trade may be divided into three classes each of which will be dealt separately, namely, (a) trade with British Baluchistán, Sind and other parts of India, (b) trade with other parts of the Kalát State and (c) internal trade.

Trade with British Districts. Trade with Quetta. The first is principally with Quetta, and prior to the opening of the Quetta-Nushki Railway the greater bulk of it came by road and was registered at the Mián Ghundi Levy post on the border of the Quetta-Pishin District.

The following table gives the value of the trade with COMMERCE Quetta in the year 1903-4, the imports being estimated at AND TRADE. Rs. 1,26,570 and exports at Rs. 1,40,931:—

Imports.		Exports.			
Articles.	Value,	Articles.	Value.		
	Rs.		Rs.		
Total	1	Total	1,40,931		
Cattle	. 224	Animals, living, for sale-			
Sheep and goats	1 6				
Apparel	. 628	mules	3,800		
Coal and coke	5,350	(b) Sheep and goats	2,424		
Cotton—	1	Coal and coke	, 99		
(1) Twist and yarn	,	·			
European	. 60	Drugs and medicines—			
(2) Piece-goods, Indian	51,040		8,000		
Drugs not intoxicating	2,422	(2) Not intoxicating	600		
Dyeing materials—	1	Fruits, all kinds	17,532		
(I) Turmeric	336	· ·			
(2) Other kinds	420	Grain and pulse—			
Fruits	360		30,447		
Grain and pulse—		(2) Other spring crops.	2,839		
(1) Wheat	20,890	(3) Other rain crops	46		
(2) Gram and pulse					
(3) Other spring crops.	367	Hides and skins—	,		
(4) Rice husked	10,526	·(a) Hides of cattle	2,272		
(5) Other crops	5,670		230		
Hides	. 550	Gunny bags	108		
Gunny bags		Brass and copper	125		
Leather, manufactured	1,378				
Liquors		Provisions—			
Mats	100		2,940		
ron	64	Other saline substances	11,760		
Oils—	1 1	Seeds of other kinds	178		
(I) Petroleum		Tobacco	18,060		
(2) Other kinds	3,308	Wool, raw	36,380		
Provisions -		i i			
(1) Ghi	1,980				
(2) Other kinds Silk raw	1,042	Unmanufactured	3,071		
Culan-	100	Manufactured	20		
Sugar—	2 35	- (
(i) Referred					
(a) Handard	5,558	1			
Tea-	8,084	1			
(1) Indian		1			
(2) Foreign	240	1			
Tobacco	40				
Snuff	70	1			
Woolmanication	100	i			
All other articles—	94	i			
Unmanufactured	0.	į			
Manufactured	89				
mandactured	338)	i i			

COMMERCE AND TRADE. In dealing with these figures, it must be remembered that a considerable amount of piece-goods and articles for domestic use are imported by the Bráhuis from Kachhi and Sind on their return from their annual migrations; for these no figures are available. There is, in addition, a considerable amount of direct trade by rail through Kolepore, which is not registered. The exports to Sind and the Punjab through this source consist chiefly of wheat, wool, tobacco, almonds and *khár* (carbonate of soda), and the imports of piece-goods, sugar, oil, hides and articles for domestic use.

Trade with Nushki. The transit trade between Quetta and Nushki passes through the north-west corner of the district, but need not be dealt with here. The local exports are confined to wheat, wool, tobacco and small quantities of madder, and the imports to salt and cloth, which is purchased by the inhabitants of the western border of Sarawán.

Trade with other parts of the Kalát State. Trade with Kachhi. The greater part of the trade with other parts of the Kalat State is carried on by the people themselves.

Trade with Kachhi consists mainly of commodities purchased by the Bráhuis on their return in spring. The principal routes are the Bolán, the Múla pass, and the chief centres of trade in Kachhi are Dádhar, Bhág, Sanni, Shorán, Gáján, Kotra and Gandáva. The imports include salt manufactured in Kachhi, country and English cloth, other piece-goods, molasses, sugar, country oil, shoes, iron, juári, gram, spices, and occasionally cattle from Nári and camels. The exports consist of tobacco from Johán and Mastung, khár, wheat, carpets and rugs, pistachio, dried fruits and medicinal drugs of different kinds known as panérband, khartusa, mátétav, purchink and mármutk.

Trade with Makrán. Caravans for Makran laden with tobacco, wheat and cloth regularly leave Mastung, Mungachar and Kalat in autumn and return in winter with dates. Other articles of import are medicinal drugs and more especially those known as gurdir or gulgidar, and articles made from the dwarf palm. Camels are also occasionally imported from Makran. The principal classes engaged in this trade are the Langavs of Mungachar and Muhammad Shahis of Mastung.

Trade with Jhalawán and Khárán.

The northern portion of Jhalawan is supplied with articles of foreign manufacture and produce chiefly through Kalat, and it is estimated that the value of the annual exports amounts to about Rs. 57,600, the details of which are given COMMERCE AND TRADE. below :--

Piece-good	is	•••	•••	•••	Rs.	40,000
Sugar	•••	•••	•••	•••	**	9,000
Tea (green	1)	•••	•••	•••	. ,,	600
Molasses	•••		•••		,,	1,000
Oil -	•••	•••		•••	,,	3,000
Rice	•••		•••	•••	,,	4,000
			7	Cotal	Rs.	57,600

Sarawan tobacco is also exported to different parts of Ihalawan and to Kharan. Wool, wheat, and ghi are the chief imports.

The internal trade is insignificant and is carried on by the Internal Hindus. It consists chiefly of the barter of agricultural produce with cloth, dates, gur, salt, spices and other groceries. A class of hawkers known as kharkar I donkevmen) also do a small trade in the villages. The Hindus usually work through middlemen who receive a commission on the purchases.

Octroi (sung, also called mahsúl-i-chungi) is levied by the Octroi State at Mastung and Kalát. Arrangements are also made at Chháti in the Chhappar valley to recover the duty from káfilas which have evaded payment at Kalát. The levy of the duty is generally leased to contractors.

At Mastung the sung is levied on all imports in accord- Octroi rates ance with a schedule of rates framed by the State. When on imports in Mastung. levied ad valorem the minimum rate is 3 pies per rupee on such articles as copper and brass vessels, and the maximum rate is I anna per rupee on silk cloth of all kinds. The prevailing rate is 6 pies per rupee on other goods such as cotton and woollen cloth of all kinds, leather, spices, crockery, tea, carpets and building materials. The rates on. maundage vary from a minimum charge of 9 pies per maund on barley and juári to a maximum of Rs. 10 on snuff. Some of the other rates are: -R. 1 on ghi, 12 annas on sugar, 8 annas on wool, 6 annas on dates, 1 anna on grain and 1 anna 6 pies on flour. Animals imported for sale are taxed at the rate of 8 annas for a horse, mule or camel, 4 annas for a donkey and 1 anna for a sheep or goat.

COMMERCE AND TRADE.

Octroi in Kalát. At Kalát octroi is levied on both exports and imports, the rates are levied on maundage and the principal import duties are as follows:—iron, cloth and piece-goods 9 annas 6 pies a maund, sugar 12 annas, spices and molasses 11 annas, rice 4 annas, and dry fruit 12 annas.

Exports from Kalát to British territory or to areas not subject to the Khán's authority pay 9 annas 6 pies a maund on wool, Rs. 2-4 on ghí, R. 1-3 on wheat, and 8 annas 6 pies on tobacco and madder.

Means of Communication. Railways.

The Quetta-Nushki Railway, on the standard gauge, starts from Spézand, 16 miles south of Quetta, and runs west to Nishpa (mile 5) when it passes through a tunnel half a mile long, and follows the hills running south-west to the Mastung Road Station (mile 13), which is about 6 miles from the town of Mastung. Continuing across the Mastung valley it reaches Sheikh Wasil, a narrow gorge about 5 miles long (mile 27), at the eastern end of which is the Sheikh Wasil Station. The line thence runs south to the Galangur Kotal or Sohro Sham (mile 53) where it enters the Chagai. Kishingi, near which a steep descent District. From begins to the Nushki plain, the line turns south and slopes down along the broken hillside for about 7 miles. length is 82 miles and the estimated cost less than one lakh per mile. The line was completed in 1905 and opened for traffic on the 15th of November of the same year. steepest gradient is between Nushki and Kishingi, where it is I in 50. The principal works are the Nishpa tunnel through hard rock and a short tunnel 365 feet long in the Sheikh Wasil gorge. The only important bridges are two over the Mobi and two at Sheikh Wasil, the largest of the latter having four spans of 60 feet girders.

The *Mushkáf-Bolán Railway touches the north-eastern extremity of the district, when after leaving Kolepur it passes into the Gwandén valley and enters the Bhalla Dasht through Darwáza.

^{*} A description of this line is given in the Gasetteer of the Bolán District.

A list of the more important routes is given in Appendix Means of The means of communication have been much im- COMMUNICATION. proved in recent years in all parts of the district and several Roads. new roads have been opened out. As the ranges of Sarawan generally run in well-defined parallel lines from north to south, the routes which follow this direction and lie along the valleys of the plateau are, as a rule, considerably easier than those which cross the transverse line of the ranges from east to west, when in many places the only means of communication are through difficult gorges. descent into the plains of Kachhi on the east and into Nushki on the west also lie through rough and difficult country.

The principal road is the Quetta-Kalat road (883 miles) Quettawhich was completed in 1897. It takes off from the Quetta- Kalát road. Bolán road at Sariáb 8 miles from Quetta, and is metalled and bridged throughout, with the exception of some 8 miles between Mungachar and Kalát. The original cost amounted to Rs. 3,10,620, the funds being provided by His Highness the Khan of Kalat. Further improvements were effected in 1903-4 at a cost of Rs. 20,766. At the present time (1905) the first 19 miles from Quetta, including the portion over the Lak Pass, are maintained from Provincial Revenues. Rest-houses are provided at Mastung, Guru, Mungachar and Kalát.

A portion of the Bolán road, between the Quetta-Pishín The Bolán boundary (mile 121 from Quetta) and Kolepur, lies in the Military road. district. After leaving the Quetta boundary the road runs along the Bhalla Dasht and passes through Darwaza and crossing the Gwandén valley enters the Bolán Pass at Kolepur.

An unmetalled road taking off from the Quetta-Kalat road Quetta-below the Lak Pass and passing through the villages of Nushki road. Tiri, Dhingar, and Sheikh Wasil, where it joins the Quetta-Nushki trade route, was made by the railway authorities during the construction of line. From Tiri onwards it runs parallel to the railway and is fit for light wheeled traffic.

The other principal routes, all of which have been recently Other routes. improved, are between (1) Mastung and Kolepur over the Surkh Bázho (or Bájo) Pass; (2) Mastung and Marav via the átu Pass and Ab-i-Gul; (3) Mungachar and Johán; (4)

Means of Communi-Cation. Mungachar and Kardgáp over the Sarband Pass; (5) Kalát and Kolepur via Johán, Isplinji and Marav; (6) Kalát and Khuzdár; (7) Kalát and Nímargh over the Píhi Khand; and (8) Kalát and Níchára via Gíshk in the Harboi Range.

A list of the rest-houses is given in Appendix V.

Transport.

Tum-tums from Quetta ply for hire on the Quetta-Kalát road, and country carts are sometimes used between Quetta and Mastung, but the camel is the principal means of transport throughout the district. Bullocks and donkeys are also largely employed for the carriage of local produce and merchandise.

Post and Telegraph Offices. Combined post and telegraph offices managed by the Postal Department are maintained at Kalát and Mastung. There are also railway post and telegraph offices at Kolepur on the Mushkáf-Bolán line and at the stations on the Quetta-Nushki Railway.

There is a daily mail service carried by postal levies between the Mastung Road Station and Kalát. There is also a regular service six times in the month between Kalát and Khuzdár in the Jhalawán country.

FAMINE.

The country is liable to frequent scarcity, but, owing to the considerable amount of permanent irrigation, it is the best protected part of the Kalát State and actual famine is practically unknown. The sources of irrigation are, however, much affected by rain and snowfall, and in years of scanty rain their irrigating capacity is largely reduced. A large area of land, moreover, is dependent on the autumn and winter rains while flockowners look to them for their supply of grazing and fodder. The primary cause of scarcity, therefore, is the failure of the autumn and winter rains, and if such failures continue for two or three years, the scarcity will intensify and even famine may result. A very important factor is the condition of the crops and grazing in Kachhi, where the majority of the Bráhuis own land and to which they emigrate with their families, flocks and herds during the winter months. Other causes of agricultural loss, which if combined with other influences may cause scarcity, are the visitations of locusts and the appearance of surkhi or rust in the wheat crop. Flockowners not infrequently suffer heavy losses by the mortality among their animals due to the severe cold in the winter and spring,

and this was notably the case in 1904-5 when the winter was abnormally severe.

FAMINE.

Of the two harvests the most important is that reaped in spring. It consists principally of wheat, and in the greater part of the district a good spring harvest after a winter which has enabled the cultivation of dry crop lands is sufficient to carry the population through the year.

The first famine of which local tradition speaks, occurred History of in 1856, the year in which Nasir Khan II died. It is still scarcity. remembered on account of its exceptional severity, and is said to have extended to the whole of the district as well as to Nushki and Quetta. Both crops failed and the price of wheat rose to about 5 seers to the rupee. Scarcity was again felt in 1870; and the third period of scarcity occurred in 1879-80 when the prices rose abnormally owing to the Afghan war. The scarcity was heightened by the total failure of the crops in Kachhi, and this period is still known to the natives as the sarkia, that is, the time when grain was sold at the rate of one sark or kása per rupee or about 5 seers.

In 1887-8 the wheat crops in Mastung and Kalát were destroyed by rust and the price of wheat rose to about 5 seers to the rupee. Since then there have been several unfavourable seasons in different parts of the district; the rust again destroyed the Mastung crops in 1896, and in 1898 great damage was caused by locusts. In 1900 there was another visitation of locusts which devastated the greater part of the cultivation. 1901 and 1902 were also years of scarcity on account of drought, and it is estimated that in the latter year about one-fourth of the crops at Mastung and Mungachar were a complete failure.

No special protective measures are undertaken by the Protective State, and the greatest safeguard against famine consists in the migratory habits of the people and the proximity of Kachhi and the protected areas in Sind and Nasírábád. Again, the majority of the people are both graziers and agriculturists, and though a year may be unfavourable to agriculture, it may still be one of fairly good pasturage. Thus it is only a combined failure of crops and grazing both in Kachhi and the highlands for consecutive seasons that can produce an acute crisis.

CHAPTER III.

ADMINISTRATIVE.

ADMINISTRA-TION AND STAFF. POR the purposes of administration the district is divided into two separate and well defined divisions, viz., (a) the areas subject to the direct jurisdiction of the Khan of Kalat and (b) the areas held by tribal groups.

The former consists of lands which are liable to pay revenue to the Khan and as a general rule all persons cultivating such lands are considered to be subjects of the Khan. The tribal areas are held by Brahuis, the principal tribes being the Raisanis with their clan, the Rustomzais; the Shahwanis; Bangulzais; Muhammad Shahis; Kurds; Lahris; Sarparras and Langavs. In some instances lands in class (a) above are held by Brahuis. They are subject to the Khan in revenue matters but are treated like other Brahuis in tribal matters.

In the time of Nasir Khan I and his immediate predecessors the Bráhui tribesmen were gradually organised into a confederacy with the Khan of Kalat at their head. living to the north of Kalát became the Sarawán division and those to the south, the Jhalawan division. Raisani chief at the head of the whole of the Sarawans and the Zarrakzai chief of Zahri at the head of the whole of the Ihalawans, who had seats in the Khan's darbar at the right and left of the Khan respectively, formed with the Khan a consultative body and were admitted to a substantial share in all deliberations affecting the affairs of the confederacy generally. The chiefs of tribes were bound to find men-at-arms for the purposes of the confederacy, when called upon to do so, but in consultation with their headmen of sections, had almost absolute power in the internal administration of their tribesmen, though there appears to have been a general power of appeal to the Khan. chiefs were, and still are, elected by their tribesmen, but the election was subject to the confirmation of the Khan.

Primogeniture in the chief's family was generally followed, ADMINISbut general unfitness was liable to exclude.

TRATION AND STAFF.

Attempts by the Khán at personal aggrandisement at the expense of the tribesmen ended in the rebellions which assumed so serious a shape during the reign of Mir Khudadad Khan, and in the interference of the British Government. Since then the relations of the Khan and the tribesmen have been governed by the terms of the Mastung Agreement, by the treaty of 1876, and by the custom which has grown up thereon.

Article 8 of the Agreement ran as follows:-

"His Highness the Khan hereby agrees to treat his Sirdars of Sarawan and Jalawan with kindness and consideration in accordance with their respective positions which have been handed down to them from their forefathers. the other hand, the Sirdars do promise to obey the Khan of Khelát's order according to old usage. His Highness the Khán and the Sarawan and Ialawan Sirdars do hereby agree that what has passed between them be forgotten. For the future should the Khán's Naibs or other officials cause any Brahooee injury or oppress him, the matter will be referred to the Khan for inquiry and decision, and the Sirdars on this account will not rebel against the Khelát Government: but should the Khan not do justice, will first refer the disputed point to the British Government for decision. In the same way the Khan will not wage civil war against the Sirdars for any offence until His Highness has first referred the point in dispute through the Political Agent to the British Government."

Article 5 of the Treaty of 1876 reads :-

"It is hereby agreed that should any dispute, calculated to disturb the peace of the country, arise hereafter between the Khan and the Sirdars of Khelat, the British Agent at the Court of His Highness shall in the first place use his good offices with both parties to effect by friendly advice an amicable arrangement between them, failing which the Khán will, with the consent of the British Government, submit such dispute to its arbitration, and accept and faithfully execute its award."

Shortly after the conclusion of the Mastung Agreement a set of rules were issued by the Khan, ordering the restoraAdminis-TRATION AND STAFF. tion of the civil administration of the country. The Government of India did not formally approve these rules on the ground that they involved too minute an interference on the part of the British officers, but they are interesting as showing what the original form of the civil administration was. They dealt with—

- (1) Collection of revenue, whether in cash or kind.
- (2) Settlement of claims for money.
 - (3) The disposal of criminal cases.
 - (4) The protection of the civil power by Military.

Brahuis purchasing land, which was subject to the Khan's revenue, were declared liable to payment of the revenue and a procedure for appeals in case of dispute was indicated. Claims for money were to be adjudicated on by the sardar or naid as the case might be, a final right of appeal being vested in the Khan. The procedure to be adopted in criminal cases was also fully laid down, a distinction in each case being made beetween Brahui tribesmen and persons subject directly to the Khan's jurisdiction. In the event of any tribe or portion of a tribe disobeying a lawful order of the Khan, the sardars were to be called on in accordance with ancient law and precedent to cause the offending tribe or portion of a tribe to submit.

Such is the basis on which the internal administration of the Kalat districts has grown up, but in the lapse of more than a quarter of a century the position has been modified, especially owing to the grant of allowances to the Sarawan chiefs by the British Government, with a result that the British control has become firmer and that the staff of officers paid by the British Government has been increased. The staff paid by the British Government includes (1905) a Political Agent, an Assistant Political Agent and a Native Assistant for the Sarawan country. All these officers have their headquarters at Mastung.

The Political Agent exercises general supervision and control in all matters, particularly over the Brahui tribes, though leaving the internal management of each tribe to be conducted, so far as pos. i.le, on tribal lines. In this he is assisted by the Assistant Political Agent, who also exercises jurisdiction on the Nushki Railway, which is combined with the Bolan Pass District for purposes of administration.

Adminis-TRATION AND STAFF

The Native Assistant. Sarawán, is in charge of the tribes in Sarawán and Kachhi and though directly responsible to the Political Agent, is also an Assistant to the Political Adviser to the Khán and acts in subordination to him in tribal matters. He receives petitions in tribal cases, refers petty cases to jirga, under the Political Agent's sanction, takes preliminary proceedings in important matters and is in charge of the tribal thánas in Sarawán and Kachhi.

The Political Adviser to the Khán assists His Highness in the administration of the State, gives advice in all political matters, deals under the guidance of the Political Agent with cases of dispute arising between the tribesmen on the one hand and the Khán's immediate subjects on the other in consultation with the Native Assistant, Sarawán, and is in superior charge of the administration of the Mastung niábat.

The areas under the direct jurisdiction of the Khan consist of the niába's of Kalát and Mastung and of the isolated village of Johan. The first and last are under the immediate control of the Khan, who himself conducts the administration of the Kalát niábat but is assisted by a náib at Kalát who decides petty cases, and in the Khan's absence is placed in entire charge both of the niábat and of the Kalát town. He is chiefly engaged in the collection of revenue.

At Johan the revenue is leased to a contractor, known as ijáradár, who is given a temporary lease of Johan together with Gazg in the Jhalawan country generally for two years. He collects the revenue, but the internal affairs of the Khán's cultivators are generally dealt with by their own headmen.

The local staff in the Mastung niábat which, as already mentioned, is under the supervision of the Political Adviser, consists mainly of a náib, a já-nashín and a sad-báshí. Their principal duty is in connection with the collection of revenue, but they also exercise civil and criminal powers in cases where the Khán's own subjects are concerned. The náib and the já nashín are both subordinate to the Political Adviser.

A subordinate revenue staff only exists in the Mastung niábat which has two patwáris stationed at Tíri and Pringábád respectively. Administration and Staff.

The *ijáradár* of Johán possesses a local representative in the person of *já nashín*, who helps the *ijáradár* at the time of revenue collections, and receives a small amount of grain as remuneration.

The village headmen, who assist in connection with the collection of the revenue and other administrative matters, are known as arbáb, malik and rais. The arbábs, of whom there are only two, are of the highest rank, and the appointment is always bestowed on an influential cultivator. Maliks are in charge of places of comparatively smaller importance, such as Tiri and Pringábád. Two raises of Tiri and the rais of Chhappar are in the pay of the State, and hold a position of influence much superior to that of the o dinary raises, who are village servants, and of whom there is one in every kárés and in every dry crop tract.

The following statement shows the places where these functionaries are stationed:—

Name of niábal,			Name of Circle.			Arbáb.	Malik.	Rais.
Mastung	***	•••	Mastung		•••	1	I	
			Tíri				2	2
			Kabnak		 .	•••	3	***
			Pringábád	***	•••	949	1	•••
Kalát	•••	•••	Kalát		•••	τ		•••
			Chhappar	•••	•••		••;	1

In Mastung a headman of the Sheikh clan of the Dehwars is recognised, who is known as sardár and assists in the collection of the revenue. Their remuneration is dealt with in the section on Land Revenue.

Internal tribal administration.

The principal figure in the tribal administration is the chief who occupies a position of great respect, almost of reverence. If to uprightness of character he adds that of open hospitality, his power is almost boundless. He uses his takkaris or heads of class for executive purposes, and, when necessary, for purposes of consultation, but he is in no way bound to consult them in any matter. His near relations also assist him in the manage-

ment of tribal affairs and are deputed to keep the peace or to settle disputes on the spot as occasion may require.

Adminis-Tration and Staff.

As a general rule minor disputes, such as those of petty assault, are referred by the tribesmen themselves to their takkaris for settlement. But it is open for them to go direct to the chief. If either party is dissatisfied with the decision of the takkaris, they go to the chief who hears the case, de novo. Important cases, such as those of adultery or cattle lifting, are always dealt with by the chief and also all civil cases in which Hindus are concerned. After all evidence has been taken, the chief passes orders which are verbal, except in the case of land disputes, in which a document is written, giving the nature of decision and sealed by the chief. Land disputes and cases of inheritance are frequently referred to qázis, in which case the parties are given a letter of introduction by the chief, and the successful party pays fees, generally at I per cent. on the total value of the claim as mohrána for a written decision.

The punishments inflicted by the chief generally take the shape of either compensation in arms or money, or, in case of cattle thefts, of double, treble or even eleven times the number of the cattle stolen. Fines are also inflicted, and an offender is sometimes detained for a short period in the chief's guest house. In cases of adultery, compensation generally takes the form of girls and cash, etc., to be given to the injured husband. In recent times it has become customary for chiefs to refer important cases of murder, adultery, etc., to the Political Agent for submission to the *pirgas*. They thus avoid the responsibility and odium of having to come to a decision themselves.

Tribal custom and Muhammadan law form the basis on which the judicial work of the country is carried on, though different systems prevail in the areas administered direct by the Khan, viz., Kalát and Johán where justice is administered on old and indigenous lines; in the Mastung niábat; and in tribal areas. In Kalát all civil and criminal cases are dealt with by the Khán. Crime is investigated by the náib who refers the cases to His Highness for orders. The náib also decides petty cases, both civil and criminal, but always in commu-

JUDICIAL.

JUDICIAL, nication with the Khan, so long as the latter is at Kalat. All persons engaged in cultivating the Khán's lands or paying revenue to him are considered to be subjects of the State, even though they may be Brahui tribesmen. In cases of a civil nature the Khán receives 25 per cent. ad valorem on the amount decreed. To this is added 5 per cent. on account of charges known as chobdári and mohsili which were formerly appropriated by the Khán's shahghási or the khalifa of chobdárs, but are now paid into the Khán's treasury, thus making an aggregate charge of 30 per cent. on the value of the decree.

> At Johan, the Khan reserves the right of jurisdiction to himself, but in practice the civil and criminal administration of that place is left in the hands of the people themselves. The ijáradár, to whom the revenue is leased, has little power beyond the control of the cattle pound.

> The administration of the Mastung niábat is carried on under an improved system through the Political Adviser. A dustur-ul-amal, defining the civil powers of the various officials, has been drawn up, and a set of rules has been framed for their guidance in civil cases. The já-nashin has powers to decide cases up to Rs. 500 in value, and the náib up to Rs. 10,000. Cases of higher value are heard by the Political Adviser, who also hears appeals from the orders of the já-nashín and the náib.

> Appeals from the Political Adviser's orders lie to His Highness the Khán. The rate of court fees is 10 per cent. on the value of the claim. In cases for possession of persons a charge of Rs. 7 is made.

In criminal cases no special powers have been conferred on the different officials, as the various cases are dealt with by jirga, sharlat, or arbitration, and each case is referred to the Political Adviser for orders.

The system of internal tribal control and the method of disposal of cases has been already referred to. To coordinate this system with the general administration of the country, tribal thánas, paid from the Khán's funds, have been established at Mastung, Wali Khán, Mungachar and Kardagáp. The jurisdiction of Mungachar thána includes a part of the Ihalawan country. The thana at Dasht, though under the Bolán, also controls one of the Sarawan tribes,

the Kúrds. The officials in these thánas work independently of the officials in the Khán's niábats; they assist in the detection of crime and the investigation of offences. govern the relations between the Khan's subjects, instructions were issued in August 1905 to the Political Adviser and the Native Assistant, Sarawan, a copy of which is given in Appendix VI.

TUDICIAL.

To supplement the thana system, local jirgas are held for Local jirgas. the settlement of petty disputes under the supervision of the thanadars. For this purpose lists of chiefs and respectable men living in the locality are kept up, from whom six are specially selected to form a permanent committee with the thánadár. The rest are temporary members, whose services are requisitioned as occasion arises. Should a permanent member be unavoidably absent, his place is taken by two of the temporary members. Six members form a quorum and the procedure is governed by rules framed by the Political Agent. When the Khan's subjects are one of the parties concerned, the náib brings with him not less than three and not more than seven Dehwar members to the local jirga to take part in the deliberations. All recommendations made by the local pirgas are submitted to the Political Agent for confirmation.

Disputes occurring between tribes are now settled by the sháhi jirgus which a-sembles at Quetta in summer and at Sibi in winter, and a tendency is observable for chiefs of tribes to refer all important cases, such as murder, adultery, theft, etc., even among their own tribesmen, to the jirgas. Chiefs who do not wish to refer intertribal cases to shahi jirgas not infrequently make settlements by mutual consent.

Sháhi · Jirgas.

The jirga awards are sent up to the Political Agent for confirmation and orders, and appeals from the *jirga* decisions lie to the Agent to the Governor-General.

No accurate statistics of the prevailing forms of crime are Prevalent available but, compared with pre-British days, crime is said to be on the decrease. In former days, highway robbery and cattle-lifting were very common. Raids and counter-raids were also frequently made. Among the indigenous tribes the Lahris generally, the Zahrozai Bangulzais, the Nákámzai Summalaris and the Hapursizai Jattaks were in former times the most notorious for their predatory habits. Now-a-days, land

crime.

JUDICIAL

disputes, petty theft, hurt and cattle-lifting are the commoner forms of crime. Serious cases generally take the form of adultery, adultery with murder and unnatural crime, the latter being specially prevalent in Mastung and Kalát.

Statistics indicate that cases of adultery in recent years have largely increased, the average annual number of such cases referred to *jirgas* from the whole of Kalat having risen from an aggregate of 2 in the five years ending with 1897-8 to 22 in the similar period ending in 1902-3.

Writing in 1906, Major H. L. Showers said in respect of these cases:

"The brutal practice recognised by Bráhui tribal custom of murdering the guilty parties in cases of adultery seems to be rather increasing than abating as the civil zation of the country advances. It may be that adultery is more common, but I should rather put it down to the greater need felt by the people for money, and to the knowledge that under the Agency jurisdiction a jirga or other award for compensation is pretty safe to be carried out. This of course is only surmise, but none the less some very doubtful looking cases have come up for settlement, while the number of cases in which only the guilty woman and not the man is killed is particularly noticeable. If the man is killed, there is nothing more to be said. But if he · escapes and only the woman suffers the penalty, then he has to make good compensation, usually Rs. 1,500, as the price of the woman's life. By Muhammadan law the evidence of three eye-witnesses to the adultery is necessary before the death penalty is considered lawful. But by Bráhui 'rawái' proof, as we understand it, is not apparently essential. statement, even a suspicion or rumour, of a woman's infidelity is all that seems necessary in some cases to justify her murder. It can be understood thus how easy it is for a man who for some reason wishes to get rid of his wife, or who stands in need of money, or who has a grudge against an enemy to discharge. to trump up a charge of adultery, put the wretched woman to instant death and be held blameless and justified by the law of his tribe.

"The mention of one or two actual cases to illustrate this brutally unjust and inhuman law may not be out of place. In 1902, when we had cholera in Kalát, a levy sowar was placed

JUDICIAL,

under my orders on the road above the Kolepur Station to stop traffic up the Bolan Pass. A woman desired to get through, but was prevented by the sowar. Angry at her failure she returned to her people and declared that the sowar had attempted to commit adultery with her. In the result the woman's husband was obliged by his 'izsat' to discard his wife, and the sowar was held liable to compensate him to the tune of Rs. 1,000.

"The sequel of this case is interesting as tending to bear out my view of these charges of adultery, and the inadequate nature of the evidence accepted by jirgas. The sowar was unable to pay the compensation. He was therefore imprisoned in default. But this does the complainant no good and the man has taken his wife back and is living with her in Quetta. No one could be at greater pains than he is now in proclaiming his wife's innocence in the case.

"I am strongly of opinion that an attempt should be made to modify the tribal rules under which these deeds of blood and cruelty are enacted. It might be done in two ways, either by arranging for no compensation to be given in cases in which the proof falls short of that required by Muhammadan law, or by imposing a Government fine on all persons who rightly or wrongly commit murder. That such a measure is practicable is proved by the fact that in Sind. whither thousands of Bráhuis migrate every year, none of these tribal brutalities are recognised, and all cases of bloodshed are treated as murder. Yet the Bráhuis don't refrain from going to Sind. I may also say that cases have been known where adultery having been committed in Sind territory, the subsequent murder has been deferred till the parties returned to Baluchistán. This shows that for all their vaunted 'rawaj' and 'izzat', the Brahuis are quite ready to forego the instant vindication of their outraged honour (which alone would seem to justify the shedding of blood), when the consequences involved under the law of British India have to be taken into consideration. seem that it is only when he is quite sa e from untoward consequences that his 'iseat' calls so imperatively for blood.

"As showing that the chances of reform in this matter are not hopeless, I am glad to be able to cite a recent case in the Magasi tribe, in connection with which a JUDICIAL.

modification of the existing 'rawáj' has been brought about. When a case of adultery occurred and the guilty man escaped, it was the practice to visit his crime on his relative. In the case referred to, a man's relative was actually killed in this way. The Shahi Jirga held the man justified, as it was shown that among the Magasis the practice is recognised. (It is not so recognised among other Baluch tribes.) At the instance of the I olitical Agent, Kalát, a subsequent Shahi Jirga has declared this custom to be unlawful and in this the Magasi Nawab and his tribe have concurred."

For the detection of crime, especially of theft, ordeal by water is stil resorted to, the usual places for the test being the Gésho pool at Gazg and the Soghandarri pool near Khajúri. The following is a description of the process. A man stands on the bank of the pool with a pole in his hand touching the bottom. The criminal, after making an appeal to Khwája Kh'dr (a saint who is famous throughout the Muhammadan world), dives into the water holding on to the pole. As soon as the criminal's head is under water, a third man, who is posted on the bank, runs to another, who is placed at a distance of about 35 paces, and if the crimin 1 can hold his breath till the runner has completed this distance and can bring up some mud from the bottom of the pool he is held to be innocent. The depth of the pool is about 9 feet.

Important cases of crime. The only important case of crime committed in recent times was that of Jáfar Khán, Sarparra. In June 1897, Jáfar Khán posted himself with some followers on the Mastung Quetta road near Alu and attacked three tongas, killing two of the tonga drivers and wounding the third. He fled to the hills and shortly afterwards appeared at the Ghazaband pass in the Quetta-Pishín District where he murdered two Hindu lascars employed by military.

The Bránui chiefs, who were called upon to arrest him, failed to do so; indeed some of them were proved to have assisted him by selling him arms and ammunition and in other ways. Jáfar afterwards made his escape to Kandahár through the Nushki District, notwithstanding an attempt made to capture him by a detachment of regular troops. The pursuit involved them in a dispute with the Tarásizai

Mengals who opposed the pursuing party and sheltered Jásar Judicial. Khán. The opposition was repulsed with some loss to the Tarásizais and the troops surprised and carried the village of Chandan Khán Band. After living in Kandahár for some time Jásar Khán incurred the Amír's displeasure, was heavily fettered, and subsequently died.

Qázis.

In former times much use was made of gázis, and members of the fraternity who are paid by the State still live at Kalát, Mastung and Tíri. Their allowances take the form of payments both in cash and kind. The cash allowance is paid annually, while the allowance in grain is paid at each harvest. Their offices are hered tary. In Mastung and Tiri the cases occurring among the Khan's subjects, especially cases of land dispute and inheritance, are referred to these gázis by the local officials. They also perform the functions of registrars. The duties of the qási at Kalát are almost entirely confined to the writing of bonds, with the previous permission of His Highness the Khan, for which he receives 5 per cent. ad valorem as mohrána. There is also a gázi at Nichára, to whom cases sometimes go from southern Sarawán. He is not paid by the Khan but only receives a mohrana of R. I for each written decision.

FINANCE.
Income.

The only parts of the country from which revenue is derived by the State are Mastung, Kalát and Johán, and the principal sources of revenue are land revenue, octroi receipts, the fees and fines levied in the decision of cases, and excise contracts. Certain other taxes also are levied on the local trade in the towns of Kalát and Mastung, such as duties on the sale of meat and other petty articles of daily consumption. Fees paid by gamblers, and cattle-pound receipts also form part of the revenues and will be described in the section on Miscellaneous Revenues. The system of land revenue collection is dealt with at length in the succeeding part of this chapter.

It is only since the year 1902, when the Mastung niábat came under the control of the Political Adviser, that reliable figures of the revenue from all sources are available. In the

FINANCE. year 1903-4 they amounted to Rs. 92,805, the principal items being :--

						Rs.
Land reve	nue	•••	•••	·	•••	79,885
Octroi	••••	••.	•••	***	•••	6,692
Muskarát	(excise)	•••	•••	•••		1,000
Court fees	and fine	S	***	•••	•••	1,766
Other pet	ty contra	icts ai	nd misc	ellane	ous	3,462
•			•	Fotal	•••	92,805

In 1903-4 the revenue of the Kalát niábat was estimated at Rs. 32,723 and of Johan with Gazg in the Jhalawan country at Rs. 1,200 which gives a total income derived by the State from the Sarawan country at Rs. 1,26,728 in that year.

Expenditure.

The principal items of expenditure borne by the State funds, so far as the Sarawan district is concerned, include the cost of the administration of Mastung, the maintenance of the local levies in charge of the thánas, the cost of the maintenance of the Mastung dispensary and other buildings. and the maintenance of roads.

In 1903-4 these amounted to Rs. 25,522-0-5 as follows: Administration of Mastung Niábat in-

cluding	Rs. 1	, 1 18-1	-11 O	n accou	int of	Rs.	a.	p.	
cost on	public	work	S	•	•••	7,268	2	7	
Levies .	••	•••	***	•••	•••	7,614	15	6	
Mastung o	lispen	sary	•••	•••	40-	2,687	10	1	
Miscellane	ous		•••	***	•••	8,551	4	3	

Expendiby the British Covernment,

Besides the expenditure incurred by the Kalat State, the ture incurred following items of expenditure are debited to the British Government exclusive of the cost of the Political Agent. Assistant Political Agent, and their establishments:

	Ac	tual	ls,	
	19	03-	4.	
	Rs.	a.	p.	•
Allowances to Chiefs	22,800	0	0	
Telegraph service between Kalát and Quetta	2,400	0	0	
Postal service do. do.	6,040	0	0	
Native Assistant, Sarawán and his establishment	4,512	0	0	
Kalát dispensary	0.10		_	
(Excluding a sum of Rs. 1,030 spent on build	ings as	ıd ı	repai	irs
during 1903).				

Besides the allowances to chiefs above shown, other payments are made to chiefs and individuals from the Bolán and Quetta-Pishin tribal levy services. Those in the Bolán include payments to the Kruds and Raisanis, and to the Langav chief; the Rustamzai chief's brother holds a service in Quetta-Pishin.

FINANCE.

LAND RE-

The only information about the systematic assessment of revenue in early times is to be found in the Ain-i-Akbari VENUE. which was written about 1590, when the district formed part of the empire of the Emperor Akbar. Mastung is mentioned as Mashtang, and Kalat with its neighbourhood is described as Kalát-i-Nichára. The district formed part of the sarkar of Kandahar and was included in the subah of Kábul. Kalát-i-Níchára formed the southernmost boundary of the Kandahár sarkár. The revenue was levied partly in cash and partly in kind, and the country was also required to furnish a specified number of horsemen and tootmen. Mastung paid 10 tumans and 8,000 dinárs in money and 470 kharwars of grain; and furnished 100 horsemen and 500 footmen. Kalát-i-Níchára supplied 30 Balochi horses, 30 camels, 500 horsemen and 500 footmen. The Ain-i-Akbari does not explain the extent of the country from which the revenue paid by Mastung was derived, but it seems not improbable that Mastung represented what is now known as the Sarawan country, and Kalat-i-Nichara the Jhalawan country. It may also be assumed that, whilst the cultivators of the irrigated lands in Mastung and Mungachar supplied the money and grain, the men-at-arms were found by the tribesmen of the hills. No evidence exists as to payments in money, kind, and animals being continued to Nádir Sháh and the Afghan rulers, under whose practical suzerainty the country passed in later times, but it is certain that the country continued to furnish a contingent of men-at-arms, and the exploits of Nasír Khán I with his Bráhui contingent in Khurásán are still a subject of common talk among the people. The system was known as sán, and under it each tribe supplied a given number of men in proportion to its total strength, the distribution being made among the various clans, sections and sub-sections. The supply of sán is alleged to have been discontinued in the time of Nasír Khán I (1750-51 to 1793-4), in whose time the Ahmadzai power reached its

LAND REVE zenith. Henceforward the Khans of Kalat gradually acquired a large measure of independence of Kandahar and its rulers. As the organised society, known as the Bráhui confederacy, assumed shape, two bodies of men were affected. each in a different way. The Khan's ulus, who held the fine irrigated lands of Mastung and Kalát, continued, as in Akbar's time, to find revenue in cash and kind, but did not ordinarily supply men-at-arms, whilst each of the Brahui tribes either undertook or was required to supply to the Khán a certain number of men-at-arms as its share of the burden of the confederacy. This was known as gham, gham kashi or lashkargiri and was entirely distinct from the san supplied to the suzerain power, though both systems were worked on much the same lines. The basis of the system of gham appears also to have resembled the gham-i-naukar system found in the neighbouring district of Pishin, which was under the direct rule of the Afghans. As soon as the word went forth that a certain number of men were required, the chief and his headmen (takkaris) were responsible for collecting and leading them. So strict was the system, that it is said that, when the call to arms was given, even the shepherds on the hill sides were bound to drop their crooks and join the ranks. For the time during which they were employed, they and their men received payment in cash and kind from the Khan's treasury. A statement showing, so far as can be ascertained, the number of men for which each tribe was responsible will be found in appendix VII. After becoming responsible for a given number of men-atarms, a tribe proceeded to divide the total number among its various clans (takkar). Each share was proportionate to the numerical strength and influence of the clan at the time of the original distribution. At the same time, to supplement this system, a portion of the tribal land was set aside for those clans, sections and sub-sections on whom the responsibility of finding the gham rested and this land was divided among clans, sections and sub-sections down to the irdividual. Every person who obtained a share in the gham land of the tribe was bound to share in the responsibilities a taching thereto and vice versa, and the admission of an outsider to the tribe was not complete until he had received a share in

LAND REVENUE.

the gham land. Until that time he was merely hamsáyah, i.e., under protection. The chief participated like others, but was given a special share, generally one-seventh. as a mark of his position. All the Brahui tribesmen-in Sarawan. except the Langavs, possess gham land, and the localities. in which they hold, are detailed below :-

Locality in which land is held.

Raisani including the ı.

> Mungachar. Rustamzai

Khad. Shahwani 2. Bangulzai Isplinji.

3. Muhammad Sháhi ... Mungachar and Kuák. 4.

Maray, Talkhkávi and Kiird 5. part of Bhalla Dasht.

6. Lahri Narmuk.

Gurgína and Kardgáp. 7. Sarparra

It may be mentioned that the Langavs were bound to apply men-at-arms, although they held no gham lands.

The system is still fully recognised among the tribesmen. and it is on the basis of the gham that all State demands, such as fines at the present day, or the provision of supplies (sursát) in former days, are and were provided for, Land held as gham is common tribal land and cannot be sold to aliens. The distribution as originally made holds good, and a unit, the numerical strength of which is less than the number of men allotted to it at the original distribution, still continues in possession of its share of gham lands. But, if a section dies out, its share of gham land and the responsibilities attaching thereto, are allotted by the chief and headmen in consultation to some other section or members of the tribe. When Kachhi was handed over to the Brahuis, in compensation for the death of Mír Abdulla in the fight with the Kalhoras at Jandrihar, part of lands in. Kachhi were made over to some of the Sarawan tribesmen either as compensation for blood or in return for the gham which each tribe had found, and these lands appear to have been distributed on the same system as those in Sarawán.

To further illustrate the gham system, the following and its distriparticular examples may be quoted. The Muhammad Sháhi tribe was required to supply 369 men-at-arms to the Khan. After putting aside a special share for the chief, the tribal

The gham bution among the Muhammad tribe.

LAND REVENUE.

land set apart for those partaking in the gham was divided into nine equal shares, according to the number of men required from each clan. The distribution was thus fixed as follows :—

1. The Sámézai cl	an	***	•••		too me	n-at-arms
2. The Khedráni	,,	-	***	***	80	,,
3. The Dodai	,,	•••	•••	***	40	"
4. The Gwahráni	,,	•••	***		40	"
5. The Súrozai	,,	•••	•••	•••	40	,,
6. The Bambkazai	>>	-29	•••		60	,,
					360	

It will be seen that the Samézai clan had to find two and a half shares, the Khedráni clan two, the Bambkazai one and a half, and the Dodai, the Gwahráni and the Súrozai one each, and the amount of land received was in the same proportion. Further division of each share was made by the headmen concerned by dividing the portion the clan had received by dahgánas, i.e., one-quarter of the land for every ten men.

Disputes in connection with the distribution appear to have been referred to the Khán for settlement as will be seen from the translation of the following sanad, the original of which, bearing the seal of Nasír Khán I, is in the possession of Sardár Samandar Khan Muhammad Sháhi (1905):—

TRANSLATION.

Whereas the Muhammad Sháhi tribe have a dispute among themselves regarding the lands in Mungachar, it has been our pleasure to order that the division take place according to the number of men. Fateh Khán, Dehwár, the *Mohsil* of our Government, was deputed and he has divided the land into nine shares as under:—

```
Haider Khán, Sámézai = 2½ shares
Nodo Khedráni = 2,
Halím Khán, Dodai = 2*,
Shahbáz Khán, Bambkáni †= 1½,
Lashkar Khán, Súrozai = 1 share
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9 shares

This includes the one share now assigned to the Gwahránis.

[†] Now known as Bambkazai.

It is commanded that each person do take possession of the share assigned to him and supply the *ghamkashi* accordingly. No departure of any kind is to be made from the settlement hereby made. LAND Revenue.

Dated 21st Muharram, 1178 H.

21st July, 1764 A.D.

Evidently the headmen of the various clans mentioned arranged for carrying out the minor divisions among themselves.

The case of the Kurd tribe is one which is still more interesting. The tribe was required to supply 300 men-at-arms, for which purpose it was divided into 7 takkars. The share of the two largest of those takkars, the Shadizai and Masudani, was fixed at 80 men each, whilst that of the rest was forty each, thus giving a total of 360 men as shown below:—

nore The gham and its distribution The among the and Kurd tribe.

1. The Madézai clan (one takkar)
2. The Zardárzai clan (one takkar)
3. The Shudanzai clan (one takkar)
4. The Shádizai clan (two takkars)
5. The Phullánzai clan (one takkar)
6. The Masudáni clan (two takkars)
7. The Gorgézai clan (one takkar)
... 40 ,,
... 40 ,,
... 40 ,,
... 40 ,,

Total 360

For purposes of gham, the Muhammadzai clan was included with the Shádizai and the Daghárzai clan with the Masudáni, thus raising the strength of each to the equivalent of two takkars. The extra provision of 60 men above the actual quota due from the tribe, was intended to meet the contingency of units dying out or being unable to supply their quota from some cause or other.†

No material change has taken place in the revenue system which, indeed, is chiefly interesting for its antiquated character. No systematic record of rights has ever been made and information as to individual holdings or irrigated

Modern revenue history.

[†]Note.—The Sahtakzais are considered to be equal to one takkar and responsible for 40 men, but as their connection with the Kurds is somewhat indefinite and they are now independent for all practical purposes they have not been included in this statement.

LAND REVENUE. areas has always to be sought from the timekeeper (rais), whose information on all subjects connected with his area is complete.

In the Mastung niábat, as almost everywhere else in the Kalát State, the hand of Nasir Khán I is to be traced, for he introduced an improved system by causing the receipt books known as wehi, to be given to the cultivators, in which all items of receipt of fixed revenue, whether in cash or kind, were recorded. The distribution of these books appears to be the only attempt ever made by the Khans at the introduction of a systematic method of revenue collection. Even now, the only part in which a commencement has been made, since 1902, in putting matters on a sound footing, is Here account books are regularly kept, and revenue questions are dealt with on the lines followed in the administered districts but adapted to the local conditions. The accounts are kept and controlled by officers lent to His Highness the Khán by the British Government. No attempt has been made to depart from the principles of assessment originally followed, and existing circumstances have been taken as a basis for gradually introducing an improved system.

Elsewhere than in Mastung the system of keeping the accounts is primitive and impossible to check, and constant opportunities for corruption are offered to the Khan's revenue officials. When the harvest is ripe the officials sent out by the ndib either assess the State share of the revenue or divide the produce, after which the State Treasurer enters the amount received in his books and, if possible, records the names of the circles and the number of shabánas for which the revenue has been received from the cultivator. As no systematic check is kept on the náib's proceedings, but a general settlement of accounts is made at uncertain intervals, it has been hitherto no uncommon occurrence for large arrears to be found outstanding on these occasions resulting in the confiscation of the property of the official concerned.

The only Survey and Record of Rights which has been made in the district, was in the Kahnak and Dulái valleys, and was made in 1899 with a view to the satisfactory settlement of land disputes which had long existed between the chief section of the Raisánis and the Rustamzai clan, and to

Kahnak settlement survey of 1899.

Land Revenue

put a stop to the recurrence of disputes already decided. Lands belonging to the Khán of Kalát were excluded from the operations. The survey of irrigable lands was field to field, while in the case of dry crop lands, the survey was carried out kaumwár, i.e., according to tribal tenures. The total area surveyed amounted to 28,519 acres, of which 19,474 acres were under cultivation, including irrigated lands (ábi) 4,028 acres, gardens 61 acres, fallow 99 acres and dry crop 15,286 acres. The remaining 9,045 acres were waste and included culturable 2,640 and unculturable 6,405 acres.

To make the results permanent it was proposed that mutations should be regularly carried out in the records and that an establishment be engaged for their maintenance, mutations being checked from time to time by the tahsildar of Quetta. No action has, however, been taken in the direction indicated.

Before dealing with the system of assessment of the revenue in the areas held by the Khan, some explanation of the character of the tenures in different parts of the country is required. In the absence of any record of rights and indeed of any reliable records at all, the subject is one which necessarily presents many difficulties; so far as opportunity has arisen, however, careful enquiries have been made by the Gazetteer party working in the country, and though it has been found impossible to verify every statement, the facts here embodied are believed to be correct in the main.

On the whole, it may be asserted that the land tenures are interesting but complicated. For a full understanding of them, attention may once more be directed to the fact that three different areas exist in the district, side by side with one another. The first is the area in which the Khán collects revenue, and which is held by the cultivating classes attached to him and known as his ulus; this area also includes the crown lands. It includes all the best irrigated parts of the district. The second consists of tribal territory held by the Bráhui tribesmen and acquired generally by conquest, or in compensation for blood, out of which was set apart the portion held in gham, for the supply of men-at-arms and other State demands. The third is known as jūgir, i.e., land r water lying within the localities originally subject to the

Land tenures and jágirs. LAND REVENUE. Khán's revenue, but of which the revenue has, in after times, been assigned by the Khán either to tribesmen or to individuals.

Throughout all these areas, there has come into existence a body of peasant proprietors holding an alienable right in the land. In tribal territory, the land, as already mentioned, is not subject to pay revenue to the Khán, as the responsibility of the tribesmen towards the objects of the Bráhui confederacy ended with the supply of gham in the shape of men-at-arms. In the area subject to the Khan's direct control on the other hand, i.e., in parts of Mungachar, Mastung, Kalát and Johán, revenue was, and is, collected from the proprietary body, but no men-at-arms had to be supplied. it so happened that the Ahmadzai Kháns, in order to avoid the difficulty of collecting revenue in kind from a number of scattered areas of sources of irrigation, sometimes arranged with the proprietors to take a specified share of the land and water under particular sources of irrigation in permanent commutation of all demands for revenue on the source of irrigation in question. In such cases the Ahmadzai ruler himself became the proprietor and gave the land so acquired to tenants-at-will. Thus it came about that, in the very areas in which the Khan is the chief revenue taker, i.e., the person who receives the sarkari, as it is called, he is also a proprietor in certain cases and receives the proprietor's share or bohtári. It may be mentioned that it is these lands the rights in which have generally been assigned as jágír, a subject which will be dealt with presently. Sarkári thus represents the share of the produce paid in the Khan's areas on account of revenue, whilst bohtári is the share of the produce received by a proprietor from his tenant. But the term sarkári has come to be used in a wrong sense in those places where the Khán, as explained above, holds the proprietary right and where the payments made to him, though really bohtári, are known as Where a tribal proprietor does not himself cultivate, he levies bohtári from his tenants.

Revenue free grants or jágirs.

As already mentioned, most of the jágirs in the district have been given from those sources of irrigation in which the system of permanent commutation for the revenue, or the o-samin, had been followed. In course of time the jágirdárs managed to acquire the proprietary right in most of such

sources of irrigation, a process described in the following quotation from the Kahnak Settlement Report (1899).

LAND REVENUE.

"The samindars of Kahnak pay no revenue either to the British Government or to His Highness the Khan of Kalat. but it appears that the whole tract originally fell under the revenue jurisdiction of the latter. Under the revenue system generally obtaining in the Kalát State, the Kháns, in consideration of the revenue demand, took two shabanas (of land and water) of every káréz in this locality* which represented nearly one-sixth part of the whole káréz. These two shabánas were regarded as State property, and the State made its own arrangements for their cultivation. The remaining fivesixths of the kárés were enjoyed by the Zamindárs (as if revenue-free) in proprietary rights. Subsequently the State share was granted in jágírdári rights to some of the Sardárs. who also acquired other shares in the kárés by purchase as opportunity arose. Thus, bye and bye, all the kárézes be-The Raisáni and Rustamzai came wholly revenue-free. tribes seem to have got their hold on Kahnak in this manner. The Shergarh mahál of the Kahnak circle still affords an illustration of the system of revenue described above."

In other cases an assignment of the revenue due to the State on a specified portion of water has been made to individuals. The jagirs are scattered in the various parts of the district, and include both irrigated and unirrigated grants. The principal areas in which they are situated are Shirinab, Kahnak and the whole of the Dulai valley in the Mastung niábat, and in Malguzár and the Garrári valley in the Kalát niábat including parts of the Chhappar valley. Most of the holders in the Mastung niábat Bráhui tribesmen, principally Raisánis with Rustamzais, Shahwanis, Muhammad Shahis, Shahizai Méngals, Bangulzais, Rodénzais, Sarparras, and Saiads. In addition to this a host of minor individuals of different tribes also hold jágírs. In Kalát, the jágírs are held by the Muhammad Sháhis, Sháhizai Méngals, Saiads, and to a small extent by others. A peculiar case is that of the personal grants to the Raisani and Kambarani chiefs from the crown lands irrigated by the Dúdrán spring and the Ziárat Káréz. After

Note. - The system is known as do-o-samin or ao-samin. - Ed.

the whole of the seed supplied by the Khan for his own lands has been sown, each of these chiefs is entitled to the use of the water for a day and night and to cultivate so much land as may be irrigated thereby. They are regarded as possessing the occupancy right in the land.

The question of the jágirs held by the Bráhuis has always been a thorny one and came into special prominence in the time of Khudádád Khán, during whose reign many were The question was dealt with at the time of the confiscated. Mastung Settlement in 1876, and the Khan undertook to restore those grants to which the Brahuis could prove a just The Bráhuis appear to have put forward a claim at this time, as they still do, that land acquired by them in areas subject to the payment of revenue to the Khan became, ipso facto, revenue-free. At the time of the settlement the Khan consented to certain rules for the guidance of the chiefs and of his naibs in the collection of the revenue and, though the Government of India did not afterwards approve of these rules as involving too minute an interference by British officers in the affairs of the State, they are of interest as indicating the attitude of the parties and the modus vivendi arrived at, and one of them may be quoted here: "Regarding the first (i.e., the collection of revenue) I direct my naibs not to interfere in any way with revenue-free grants. These are to remain, as formerly, entirely in the hands of the But should a Bráhui purchase from a ryot land on which revenue, either in cash or in kind, has been fixed, the náib will collect from him the usual assessment. Should any Bráhui refuse to pay the assessment to the náib, the latter will at once refer to the Sirdar of the tribe to which the Brahui belongs, who will realise the amount Should the Sirdár consider the Bráhui had just grounds for refusing to pay the assessment, he will refer him to the náib, and should the latter concur, the claim will be dismissed. Should the náib not agree with the Sirdar the latter can refer the dispute to His Highness the Khan, whose decision in the matter will be final, and the Sirdar will be responsible for putting it in force. After putting the Khan's order in force, should the Sirdar consider the Khan's order unjust, he can refer the matter, through the Political Agent at Kalát, to the British Government. The procedure recorde

here applies to all disputes regarding the collection of revenue, whether in cash or in kind."*

LAND REVENUE.

On the question of the resumption of revenue-free grants by the Khan, all that need be said is that Sir Robert Sandeman committed himself to no guarantee that the Khan should always maintain in perpetuity the revenue-free holdings. The grants are consequently based on the usual principle of loyalty and good behaviour to the Khan, the condition on which the rights of the various chiefs were restored to them by the settlement of Mastung. There seems to be no doubt that when the Ahmadzai power was at its zenith revenue-free lands were confiscated even on the smallest pretexts and without provoking retaliation on the part of the holders. A story is told of Nasír Khán I confiscating a revenue-free grant held by the Muhammad Shahis in the Joak spring of the Shirinab valley, because a man with a long beard, who was drinking at it, was abused by the holder.

Turning now to the question of the origin of the proprietary right now held by the tribesmen in the land, it ter of proappears that in most cases it has originated either from prietary conquest, from occupation of unowned land, or from payment of compensation for blood. As an instance of the first, may be mentioned the expulsion of the Puzh and other Rinds from Narmuk by the Lahris, whilst the ownership by the Raisanis of a portion of the tract which they now possess in Mungachar and which is estimated at onefifth of the whole and belonged to the Shahwanis, is an example of the third. In former times admission to a tribe carried with it the right to a portion of the tribal lands.

It is only in recent times, however, that most of the tribesmen, who were previously almost entirely flockowners, have adopted a somewhat more settled life and have begun taking an interest in agriculture. The only tribe which has always made agriculture its profession is the Lángav, and its members have here and there acquired a proprietary right in tribal lands on the hadd-sharik system which will be presently described, as also by purchase. Thus the Lángavs have acquired much land by purchase from the Muhammad Shahis and Shahwanis in Mungachar, and the system is one which appears to be extending. Among the Sásolis of

The origin and charac-

^{*} Baluchistan Blue Book, No. 2, page 271.

LAND Revenue. Nimargh, land is occasionally transferred in payment of bride-price. With the Khan's ulus, the proprietary right appears to have had its origin either in purchase, or in the opening out of new sources of irrigation at a time when khuskavaland had little or no value. Land, whether irrigated or unirrigated, in which an anienable right has been once acquired, is called milk or miras.

Forms of proprietary rights.

But, whilst the origin, in most cases, of proprietary right may be attributed to one or other of the causes defined above, certain other forms have grown up on a more complicated basis, due to the peculiar conditions of the country, and will now be described. They are hadd-shartk, daghari, kalang, kalang-sharik, sardari, and raisi or maliki.

Hadd-sharik.

The hadd-sharik form of proprietorship is to be found in dry-crop tracts and is as development of the system known as lathoi, dashtoi or basti. The former is the more common name. A full description of the lathoi system will be found in the succeeding sections on tenants. It will suffice to say here that under it, waste land is given on a written agreement to a tenant for embanking, on the understanding that he will acquire an occupancy right in the land so embanked. It is also a condition of the agreement, however, that if, at any time, the proprietor wishes to eject the tenant without just cause, a portion of the embanked land, amounting to one-half, one-third or one-fourth of the whole, will be made over to him in proprietary right. The more difficult the task of reclamation, the larger the share assigned to the reclaimer. The more common practice, however, is the assignment of one-half, especially in Gurgina and Kardgap and in the Kurd area.

This hadd-sharik system is in vogue in Gurgina, Kardgáp, parts of Mungachar, Khad, Kúak, and the whole of the Kúrd area including Marav, Gwandén and Balla Dasht and the neighbouring valleys, and has produced a somewhat peculiar body of proprietors, for they are frequently not members of the tribe in whose tribal lands they possess a proprietary right. The system appears to have originated at a time when the value of land had not been realised, and few proprietors now resort to it. The Kúrds, however, do not admit that their tenants have alienable rights.

A tenant, who thus acquires a proprietary right in respect

of a part of the land reclaimed by him, is known as haddsharik or sharik-bazgar. Hadd-sharik means "a partner in the bones of the land," a very significant term. It is not usual for a hadd-sharik tenant to be able to claim a distribution of the land he has reclaimed, as such a division is not generally advantageous either to the landlord or tenant; indeed, the system appears to have been introduced largely as a deterrent to ejectment by the landlord without due cause. Division must necessarily be disadvantageous to the proprietor in the reduction in the size of his holding, and to the hadd-sharik in the reduction of the size of his tenancy. Tenants becoming hadd-sharik proprietors in respect of one-third of the land, a system which is known in the neighbourhood of Kishan, Shékhri and Iskalku always make a small cash payment to the original proprietor. When hadd-sharik rights are a condition of the holding, they are always entered in a written agreement.

A daghári proprietor is one who is given a share of water in a new kárés which has been excavated in his lands or the water of which has been brought on to his land. The allotment represents the compensation payable to him as owner. The daghári proprietor, as a rule, bears no share of the cost of excavation.

Daghári.

original proprietary body is unable to repair it, outsiders are sometimes invited to bear the expenditure required for its restoration, and on doing so become kalang sharik in the land and water of the kárés. They generally receive half the land and water, but instances are also known in which only one-third has been given to them. Káréses so restored are known as kalangi or lichakhi. When a dry kárés has been thus restored, no change is usually necessary in the actual distribution of the original shares of water, but one-half or one-third of the water and land is made over to the restorers. It sometimes happens, however, that repairs are found necessary for a kárés in which a group of kalang sharík holders already exists, and in such cases it is generally necessary for the holdings of the entire proprietary body in the kárés to be re-divided, and as a consequence the size of the various holdings is reduced. The system is known in

all parts of the district, but the areas specially noted for it

If a káréz becomes dry, or has been damaged, and the Kalang

are Gurgina, Kardgap, Mungachar and Shirinab. In Gurgina and Kardgap, the Sarparra tribesmen have lost some part of nearly every kares, notably to the Khurasanis. Outsiders have crept in even in cases where only small effort was required to restore the kareses and the cost was comparatively insignificant. The system is one which is not without its advantages in a district where no regular system of making takavi advances exists, and offers a sufficient inducement to the more industrious cultivators to come to the aid of their poorer or less energetic brethren.

Jávi.

Jávi holdings only exist in the Mastung niábat. The system is known as jau from the Arabic word meaning hunger. In character it resembles the kalang sharik system but, as it is generally found in káréses paying a fixed revenue and as the whole of the revenue continues to be paid by the original proprietary body, its results are highly injurious to the latter. The revenue in kárézes subject to fixed assessment, either in cash or kind, as will be explained presently, is distributed on the shares of water, i.e., per shabana. If, therefore, the source of supply happens to diminish and new capitalists are called in to assist in effecting the necessary repairs they receive a portion of the land and water as compensation for their expenditure. although the actual amount of water and the number of shabánas may be increased, the quantity of land held by the original proprietors has to be reduced to find sufficient to make over to the new comers, whilst, at the same time, the fixed revenue remains payable by the original proprietary body. That is to say, the new comers hold their land revenue-free. An example will further illustrate the system. The original supply of water in Káréz-i-Kark in Mastung was 14 shabanas and is known as kalangi-daur, i.e., the channel on which the revenue demand is fixed. The present supply (1904) has been divided into 20 shabánas, the six additional shabánas being held under the jávi form of proprietorship. An original proprietor, therefore, who used formerly to receive his turn of water after every 14 days, now receives his turn after every 20 days and the amount of land has also been reduced. But the fixed revenue demand is paid only by the original proprietors.

Instances of jávi proprietors occur in almost all káréses

paying fixed revenue in the Mastung niábat, and it will generally be found that the original proprietary body find the payment of the revenue a matter of considerable difficulty. especially in cases in which the original demand was fixed at a high figure. The Rod-i-Pashkaram, Káréz-Miána, Kungar, Kark and Káréz Nau are instances in point. cases in which the revenue is taken in produce, jávi proprietors are exactly on the same footing as kalang sharik and, so far as the revenue demand is concerned, the original proprietors suffer no disadvantages.

LAND REVENUE.

Sardári.

Sardári is an extension to irrigated areas of the system known as dastar, by which a certain part of the tribal lands is set apart for the chief's sole use and benefit. Similarly, where tribesmen have co-operated in excavating a kárés, it is not uncommon to find an assignment of a shabana or so with the land which it irrigates, made gratis to the chief as a mark of respect and in return for his patronage, although he may not have contributed to the capital required for carrying out the work.

In Mungachar the raises, who are also called maliks, have Raisi or in some cases received proprietary rights in portions of the water and land in certain káréses in return for the supervision they exercised over the original work, for keeping the accounts and for their general responsibility for the subsequent maintenance of the káréz.

The majority of the lands have been permanently divided Custom of down to the individual and permanent division has taken distribution. place in all irrigated lands. Unirrigated lands in tribal areas are in many cases still held by sections, especially in cases in which the lands are cultivated by persons other than the propietors, as in Khad-Mastung. The share of produce realised at each harvest is divided among individuals, under the supervision of the headmen, whose business is to collect it, but, as a matter of fact, the latter generally misappopriate much of it, especially in the case of such sections as are The headmen are entitled to no particular share in view of their office. But even where joint holdings still exist, division is constantly taking place, and the day of individual holdings in all cultivable land appears to be not far distant. Waste land is still held jointly, and hence it is sometimes found that payment for the right of extending a

kárés or constructing a new one is made to a clan or section. In the crown lands belonging to the Khán in which the cultivators are tenants-at-will, the land is divided annually into suitable plots at the time of sowing.

Tenants and

Tenants generally are known as bazgar. In crown lands tenantrights, all tenants are tenants-at-will and as such are liable to ejectment after harvesting the crop sown by them. The only exception to this rule is in the case of the Ziárat Káréz near Kalát where, although the proprietary-right admittedly rests with the Khán, the tenants appear to have acquired a sort of occupancy right, owing to their lengthy possession. A permanent division of water has taken place and possession has to this extent become hereditary. The question of the right of alienation does not appear ever to have been raised. Much the same conditions govern part of the water utilized for irrigating the Garok village from the Dúdrán spring.

All tenants in irrigated lands are tenants-at-will and, in addition to the cultivation of the soil, have to perform certain services for their landlords, such as the occasional supply of a load of firewood, the transport of the landlord's grain to and from the watermill, and the supply of earth and timber, if the proprietor wishes to build or repair his house. Tenants cultivating crown lands are required to render certain additional services which will be detailed under 'assessments.' The only service ordinarily expected from a tenant in a dry-crop area is the transport of the proprietor's share of produce to his house. The rent, which a tenant pays to the landlord, is known as samm bohtári, búhángav or túla. The latter word is only used among the wilder tribesmen.

Tenants in unirrigated tracts.

In dry-crop areas, whether in the Khan's or in tribal areas, tenants are of five kinds :- Lath bazgar, hadd-sharik bazgar, miádi bazgar, fasal batéra and shat bazgar. The first three are almost invariably held on written agreements (patta, rakam or kághaz).

Lath basgar.

The lath bazgar is a tenant who has reclaimed waste land and brought it under cultivation by clearing the bushes and plants and constructing embankments for irrigation. The system is known as lathoi, lathbandi, dashtoi or basti. So long as a lathband tenant continues to cultivate, he cannot be ejected without reasonable cause,

occupancy right which he acquires is alienable. As the people characteristically say, a piece of land once embanked becomes the "lawfully married wife" of the man embanking A lathband tenant also possesses the right of subletting, but there is a good deal of difference of opinion in different tribal areas as to whether he may do so without the landlord's permission.

LAND REVENUE.

In the Khan's areas the lath basgars have acquired a proprietary right. Their position as permanent occupants of the land in tribal areas is often called in question, but it is an undoubted fact that ejectment can only take place on reasonable cause being shown, such as neglect to cultivate the land and, even in such cases, compensation must be paid for the labour expended on the embankments. If a lathband tenant is ejected after he has cleared the land for the crop he is also entitled to compensation. In the Kurd area such compensation is paid at the rate of R. 1 per plot, 80 paces square. As a matter of fact, ejectments seldom take place.

Nearly all dry-crop lands are held under the lathband system. except in Narmuk, and it frequently happens that one tribe cultivates the lands of another, and one section that of another in the same tribe. The Lángavs of Mungachar and the Bangulzais supply most of the lath bazgars. In Narmuk, no occupancy right is obtained, and ejectment takes place at the will of the landlord on payment of compensation which is fixed by assessors.

Reference has already been made to the position of a hadd- Hadd-sharlk sharik bazgar. It is in practice the same as that of the lathbazgar, but, with the special provision that the hadd-sharik acquires a right of proprietorship in respect of part of the land on ejectment.

bazgar.

A miádi mudda bazgar is, as the name implies, a tenant Miádi who constructs embankments or reclaims land on the condition of retaining his tenancy for a limited period, generally not exceeding ten years. The system is not very common, but is to be met with in some parts of the Shahwani and Bangulzai countries round Kishán, Shékhri, Iskalku and During the term of his tenure such a tenant has the right of subletting the land. The term miadi is not in local use with the cultivators, but only appears in documents. The general term in use among the Brahuis is Mudda baegar.

gar or Mudda bazgar.

Modified forms of lathband tenan-Kúrd area.

In the Kurd area, lathband tenants are not known by this name but as charik-bazgar, séhak-bazgar or níma-shashikbazgar. The first two, as their names imply, pay rent at onefourth or one-third of the produce and have a hadd-sharik right to one-half of the land on ejectment. The name nimashashik, as has been described in the section on Rents, refers to the receipt of half one-sixth, i.e., one-twelfth, by the cies in the lathband tenant, when the proprietor finds a temporary tenant. The nima-shashik tenant merely has an occupancy right in the land, and on ejectment only receives compensation for the labour he has expended on his embankments. amount depends on their length and height, the ordinary rates being R. 1 for an embankment, 100 paces long, which has received one covering with the ken, Rs. 2 for the second covering, Rs. 3 for the third, and Rs. 4 for the fourth.

> Such payments are known as mish-ná-boha. Compensation is paid even to a nima-skashik tenant who is ejected for negligence.

Fasal batera.

Fasal batéra is said to mean either "crop bird" or "crop changer," and is applied to a tenant whose lien on the land ceases after he has raised the crop sown by him. He generally receives the land for cultivation when it has already been embanked. His position is that of a tenant-at-will as in permanently irrigated lands.

The Shatbazgar.

Finally, mention may be made of the shat-bazgar, i.e., the tenant who has nothing but a "stick." He is in reality only a labourer engaged to help in the cultivation paid from a share in the produce. He corresponds with the hatháin tenant of Kachhi, but, unlike the latter, receives no advance on being employed, nor does he get food. He is paid on different systems and either receives onesixth of the total produce or one-sixth of the grain heap left after deduction of the bohtári or sarkári. are found in all parts of the district, but are only employed by the well-to-do.

Finally, the báswál may be mentioned, who assist the cultivators of irrigated lands in Mastung by bringing their food and water and scaring birds. He is appointed jointly by several cultivators, and seed is sown for his use on the embankments and along water channels. Such cultivation is known as nihál.

The various headmen, both in the tribal as well as the LAND REV-Khán's areas, have been named in a previous section, and ENUE. their duties have been explained both with regard to the Headmen collection of men-at-arms and revenue. All chiefs possess muneration. a special share in the tribal land by virtue of their office. but this is not the case with headmen of clans and sections, except in a few cases in which a plot of land or a special. share in water has been set apart for them as a mark of respect. Most of the chiefs also enjoy allowances from Government.

The headmen in the area under the Khan belong to the leading families among the Khán's ulus. They are men of considerable influence and proprietors of large areas. All disputes arising among the cultivators and relating to land or water are settled with their co-operation. They also act as spokesmen of cultivators. The foremost among these are the arbábs. The arbáb of Kalát is the premier arbáb. All headmen whether arbab, malik, rais, mirab and mehtar have hereditary positions, but are liable to ejectment for general unfitness.

The system of remunerating the headmen varies with the Remuneracharacter of assessment prevailing in each area, and no tion. uniformity is observable. Thus in the Chashma at Kalat Kalat which supplies service in men, horses and labour, the arbáb is entitled to the service of two sowars known as chobdar and one bégári for his personal attendance or to a cash allowance instead. Formerly the arbab of Kalat and his assistants appear to have enjoyed a large cash allowance and had certain rights in the transit dues or goods passing through Kalát. The subordinate officials, viz., the rais and miráb, hold grants of one-half and one-eighth of a shabana respectively, which are exempt from the liability to revenue and also from charges incurred in connection with the repair or cleaning of the water channels.

In other kárézes a share in the produce is generally paid to the rais at harvest time, and he also holds a share of water free of all charges for repair. The grain measure generally given is 1 kasa on every heap of grain when threshed and winnowed. In the Crown lands in this niabal, the Khan has his own raises, who are paid fixed allowances in cash and kind. For example the rais in

gated areas.

ENUE.

LAND REV. charge of the Dúdrán spring receives pay at the rate of Rs. 5 per mensem and an allowance of Rs. 18 in a lump sum at the end of the year.

Mastung n iábat.

All leading maliks and raises in Mastung, Tiri and Kahnak are granted annual allowances in cash varying from Rs. 2-8 to Rs. 30 and certain other allowances in kind.

The malik of Pringábád has been granted a share in some of the kárézes in his charge revenue free: but receives no other remuneration. Practically all raises enjoy a small amount of land revenue-free in virtue of their services, for their responsibilities are large and multifarious, and a good deal of work falls on their shoulders, especially at the time when the káréses and springs are cleaned. Indeed, the services of a rais in each kárés are almost indispensable. and, in cases in which the State has not found its way to grant a revenue-free share, the cultivators have generally themselves combined to bear the burden of the revenue of his holding. Thus in the springs of Kahnak Khali. Shamezai and Babri, the revenue of which is fixed, the various proprietors have arranged to bear the revenue assessable on half a shabana held by the rais in the first two. and on one-and-a-half shabanas in the case of the last.

In areas not under the Khán's direct jurisdiction, every rais or malik is granted a concession of some sort, such as the proprietary right in part of the land and water or exemption for charges for repairing or cleaning. The share granted in proprietary right varies from two tas to two shabanas. When a rais has no share in water, he is paid his remuneration in grain, and he also gets a plot of lucerne. In Mungachar the amount of grain so paid varies from one to seven kásas on every shabána of water in the kárés. In 2 few cases such allowances are raid in addition to any share in water and land which may have been allotted.

Remuneration to raises, &c., in dry crop areas.

The system of remunerating the rais in dry-crop areas is uniform in the Khan's and in tribal areas, the payment consisting in one or two kásas on every kharwár of 80 kásas. i.e., one-eightieth or one-fortieth of the total produce. Where revenue is paid, the raisi allowance is calculated after the payment of the State share. In some cases, raises are also granted one or more embankments exempt from

revenue, or no revenue is taken from the produce raised by LAND one jora. Sometimes a selected heap of grain belonging to ENUE. the rais is not assessed to revenue. The raises of the Kurds in Kabo hold embankments free of revenue in addition to receiving grain allowances,

When any person goes to collect revenue in the area in charge of a rais, he must be feasted by the rais for the first day.

Assessment to revenue is everywhere known as gham, and Character lands which pay revenue are known as ghamkash. The charac- of assesster of the assessment in different parts of the district is too elaborate and complicated to be described in general terms. The system differs in every area, it may almost be said in every kárés: that in vogue in irrigated areas, again. differs from that in dry-crop tracts. Each area, therefore, will be treated separately and a beginning will be made with irrigated areas.

The sowári wa begár system is only applicable to the large Irrigated area irrigated by the magnificent spring at Kalat called the areas. Chashma. Out of the 4½ streams of water into which the ment in spring is divided, 11 streams are the property of the Khan; Kalat. C. Sowari wa the Dehwars holding the remaining three are not subject begar. to the payment of any revenue in cash or kind, but render certain personal services as mace-bearers (chobdar), footmen (piáda), labourers (bégár), and messengers (kásid) According to local tradition, the system dates from the time when the Dehwars invited Mir Hasan, Mirwari, to deliver them from Mughal tyranny and occupy the masnad. The numbers are 50 mace-bearers, 6 footmen, 31 labourers and 27 messengers. The duties of the chobdars, under their Khalifa, include attendance on the Khan, both at headquarters and on tour, and the execution of summonses and decrees in cases coming before the Khán. Whilst the Khán is at Kalát, their services are not fully utilized, but the Khalifa with some chobdars attends the darbar and receives subsistence allowance (rosa). During tours all are given subsistence allowance.

The footmen attended the ladies of the harem in former times on the Khan's annual migration to Kachhi, and, whilst on this duty were given cooked food and a small subsistence allowance. No service in footmen is levied at present, but the Khan's right to it is recognised.

BNUE.

LAND REV- . The labourers have to perform menial service in the Khan's palace at Kalát, such as fetching water, repairing the walls and removing snow. They receive no wages, except that whilst employed on the last named duty they are each given a seer of dates daily.

The kásids were employed in carrying the Khán's post from Kalat to Kachhi and were supplied with a pair of sandals and a piece of country cloth for each return journey. In cases of failure to find these attendants, the cultivators have to pay cash at the rate of Rs. 50 per annum for each chobdár, Rs. 15 per annum for each footman and R. 1 for each labourer for every 5 days.

The barazad system.

The bárásád system at Kalát, (locally also known as báránsát,) is similar to the ábo-samín prevailing in Mastung which will be presently described. The term appears to mean "free from burden" and, under the conditions of the system, the Khan took over the proprietary right in a portion of the land and water under a kárés and lifted the burden from the remainder by declaring it revenue free. The cultivators are expected to keep a bárásád kárés in order, and no expenses in connection with the repairs or cleaning are borne by the Khan. The system is said to have been introduced by Nasir Khán I, up to whose time revenue had been paid by division of the produce at the rate of one-tenth. The share taken by the Khan appears to have varied from about one-fifth to one-ninth. All the kárézes in Kalát, except the Ziárat, Ahmád Khán, Malghuzár, Mohím Khán, and Bázár are subject to this system.

The assessment in Mastung. Abosamin or Aosamín.

This system prevails in the Mastung and Tiri circles of the Mastung nidbat, the latter including Kahnak. It is similar in nature and principle to the bárázád system in Kalát, and reference has already been made to the description given of it in the Kahnak settlement survey of 1899. The proportion to the total amount of the holding of the share set apart for the Khan is approximately one-fourth in Mastung and one-sixth in Tiri and Kahnak, the systems being distinguished in each locality as charik abo-zamín and shashik ábo-zamín.

Fixed assessments. Zari wa Kalang.

The two kinds of assessment known as sari and kalang are probably of very ancient origin. Kalang is fixed revenue in kind taken from the two principal spring crops, vis. wheat and barley. Zari, or cash assessment, evidently had its origin in the difficulty of dividing the miscellaneous crops. such as lucerne, carrots, maize and millets, which are abundantly cultivated for the autumn harvest.

LAND. REVENUE.

Karezes under fixed assessment, whether in cash or in kind. are known as kalangi and the holdings subject to revenue are known as jafai as distinguished from those which are revenue free. It may be observed that both kalang and. sari are levied in all kárézes and springs under fixed assessment with a few exceptions in the Kahnak valley, viz., in Chashma Kahnak Khali, Chashma Shamézai and Chashma Babri, where no grain revenue is paid; here, however, certain other payments in lucerne and fire-wood have been substituted. In some places such as the kalangi kárézes in Pringábád and the Mobi in Tíri, bhúsa is taken in addition to the grain and cash, either in a lump amount fixed on a group of káréses or on each measure of water in an important stream. The amounts of grain and cash in kalangi káréses are absolutely fixed and must be paid even if the source of water supply runs dry. The grain payable must be of good quality and grown on irrigated land.

Mahsúl is the application of the principle of appraisement Mahsúl and to onions and potatoes, in kalangi and abo-zamin kareses. takhta-bandi. In the latter case, revenue is taken on the crops mentioned in lands which are otherwise revenue-free under the ábosamin system. It does not apply to káréses subject to batái. It has replaced the system. known as pawak, under which one-eighth of the produce of fields cultivated with madder was taken. Potatoes and onions are now grown instead of madder, and mahsúl is taken on them, generally at the rate of 8 annas per bag containing about 21 standard maunds.

Local variations occur in the levy of mahsul and no definite principle appears to be followed. Thus, in the three springs in Kahnak subject to fixed assessment, which have already been mentioned, revenue is taken by division of the produce at the rate of one-tenth plus one seer in every maund. Potatoes and onions in these springs are exempt, an exemption which is extended to all three crops in the other abo-samin káréses in Kahnak. Again, most of the lands subject to fixed assessment in Mastung, Pringábád and Tíri pay mahsúl at the full rates, but certain káréses, on the other hand, such LAND Revenue. as Chakul Wáli, Chakul Ganjábád, Chakul Hárún, Chakul Thul-i-Darya Khán and Khwásám pay half rates, a concession known as adh-kári. Again, a káréz known as káréz régi, which is an ábo-zamin káréz, pays no mahsúl at all and this is also the case with other kárézes in Tíri.

The takhtabandi system of mahsúl.

Takhta-bandi also comes under the general heading of mahsúl, and consists in an assessment at cash rates, on every takhta or set of plots of lands cultivated with tobacco. The rate is generally Rs. 3 per takhta. The takhta is undefined, but is roughly about 40 paces long and, in the case of tobacco cultivation, about eight to ten paces wide.

Ijāra.

The system of iiára or contract is resorted to either in those cases in which the area of the land is insignificant or when the area is situated at such a distance from headquarters as to render arrangements for the collection of revenue difficult by the ordinary revenue staff. Revenue is also taken in this way in Crown lands comprised in small holdings acquired by confiscation. Payment by ijára takes the form of a fixed amount of wheat or barley. The period of . the contract does not ordinarily exceed 10 years, but some of those in Mastung have been continuously renewed for very long periods. The most important ijara is that of Johan, which is said to have been leased for the last thirty years, the term of each lease ordinarily not exceeding two years. The ijáradár usually levies the revenue by division of the produce, except in the case of those men who themselves cultivate the holding given to them on contract.

Appraisement. Dána-bandi consists in the assessment of the standing crop by one of the niábat officials assisted by assessors from among the respectable and influential cultivators. In Mastung the amount of bhúsa in the case of wheat is fixed at about the same rate as the grain.

Batái.

Batái is the general form of revenue in Crown lands, but is in vogue elsewhere also. Where revenue is to be taken by actual division, the grain heap is sealed by a guard known as tappodár, and the arrival of the niábat official deputed for the purpose is awaited. The latter is accompanied by his following of sowars or footmen, the State weighman (dharwái), the treasurer (tahwildár) and also sometimes by a munshi.

The weighman now proceeds to divide the main heap into smaller heaps of equal size (khori) according to the rate of revenue. Thus, if one-sixth is to be taken six heaps are made. An extra heap of a smaller size, known as mian kharch or niám kharch, is at the same time set apart for the payment of cesses and the various village servants described elsewhere. Anything remaining on the threshing floor from this heap is known as johán buni, talla, or kún-i-kharman and is the right of the cultivator.

LAND REVENUE

viewed.

It will be seen that the various systems of revenue taking show entire absence of uniformity and it is difficult to describe systems reone as more prevalent than the other. In Kalát the most common form of taking revenue is the bárázád system, to which 14 out of the 19 kárézes are subject. In the Mastung niábat, on the other hand, the most important area is under fixed assessment, no less than 43 of the most important sources of irrigation being subject to it. Batái is prevalent around Pringábád, and the ábo-zamín system in Kahnak and parts of Mastung. Of late the batái system has given way before that of appraisement, especially in Mastung, the reason assigned being the removal of the necessity of appointing crop watchers. The services of such men are required from June to August and as they cost Rs. 8 per footman and Rs. 15 per horseman each month, they are expensive. Under the Khan's régime, the duty was and is assigned to sepoys, but this system usually ended in corruption of some kind, as might well be expected.

The rates of revenue levied in Crown lands will be dealt Rates of rewith later. In irrigated localities subject to ordinary assess- venue. ment, the rate of the revenue, like the character of the assessment, differs in almost every area. Thus, it is onetenth at Johan, one-sixth at Karchhap in the Mungachar valley, and in the Mastung niábat it varies from one-fourth to one-fifth, two-ninths and one-sixth. The first and the last are the most common rates in the Mastung and Pringábád circles, and one-fifth in Shírínáb in the Mastung circle.

The rates mentioned are those generally recognised in the case of the more important crops, but they are not absolute, and some of the crops raised in an area subject to a certain rate will not infrequently be found to be assessed at a different rate. This is especially the case with autumn crops,

tobacco, for instance, being assessed by the takhta at cas rates, as already mentioned whatever the rate of batái may be, whilst potatoes and onions pay by the bag. Melons and all other cucurbitaceous crops are appraised at cash rates. In Kalát a special rate, one-fourth, is levied on bhang, and the crop is subject to revenue even if grown in land which is revenue-free.

Rates in Crown lands.

Seed, except in the case of melons, and manure are usually supplied by the Khán in Crown land and the rate of revenue, which includes also the proprietary share, differs in various localities. The usual rate is two-thirds in the case of the principal khushbar crops, but a varying rate is levied in almost all sabsbar crops. Appendix VIII indicates the condition of affairs. In the Mastung niábat, the most prevalent rate in the circle of the same name is three-fourths, but melons and lucerne pay two-fifths and four-fifths respec-In Pringábád the sabebar crop pays the prevailing rate of two-thirds, with the exception of lucerne, vegetables and bhang, which pay three-fourths. Similarly, in Tiri and Kahnak the prevailing rate is three-fourths, but melons pay two-fifths, and maize and juári two-thirds. In Ziárat and the Dudrán lands in the Chhappar valley, including the Muchai kárés, the prevailing rate is two-thirds as in the case of Pringábad but here lucerne pays four-fifths.

Rates levied on straw, etc. in Crown lands.

The rates at which the straw is assessed generally differ from those paid on the grain. In the Mastung circle, for instance, the prevailing rate for the straw of all crops is three-fourths, but revenue is levied on maize and juári stalks at four-fifths. Again, wheat pays two-tnirds, but wheat bhúsa pays three-fourths, and the whole of the barley bhúsa is appropriated by the Khán. The rate of two-thirds applies to straw of all kinds in Pringárád, but extends only to wheat and barley in Kahnak and Tíri where maize, juári, gál and mung straw pay three-fourths. This rate of three-fourths is uniform for all crops in Ziárat and Chhappar.

 Assessment of gardens. In the Mastung niábat the fruit in orchards, which have been planted in land subject to assessment, is appraised and recovered in cash. In kalangi and ábo-samín káréses, girdens are not subject to assessment. In Crown lands, trees in orchards planted by a tenant are alienable, and are generally assessed at two-thirds of the produce. The proceeds of the

sale of leaves is taken by the State; the division of the proceeds of any wood sold follows that of the fruit. fourths of the fruit is payable to the Khan in the case of orchards which have not been planted by the tenant in Crown lands. Orchards in Crown lands at Kalát are let on contract.

The character of the assessment in dry-crop areas is simple, all lands, whether in jágirs or in the Khán's area, ment in dry paying revenue either by division of produce or by appraise- crop ment, the latter being the most common. In Mastung, where the appraisement has been fixed, it is known as ijdra.

Khushkava areas pay a uniform rate of one-seventh in that part of the Kalát niábat, which lies in the Sarawán country including parts of Mungachar and Chhappar. In the Mastung niábat, the rate is one-tenth with the exception of the three areas known as Khushkába-i-Choto, Khushkába-i-Mall and Khushkába-i-Khárak, in which one-eighth is levied.

The rate levied on straw in the Mastung niábat is oneeighth on all lands, even those paying one-tenth in grain, in the Mastung circle, whilst the rates in Pringábád, Kahnak. and Tiri coincide with those paid in grain. niábat the rate for straw is coincident with the grain, but as the Khán is in the habit of taking a good deal of bhúsa at the nominal price of Ans. 4 per camel load, the share is considerably increased and may be estimated at not less than one-fourth of the total produce. The system is known as bai-ná-phori, a reference to which is made later under the subject of special payments made by the Lángav tribe.

Cesses are known as lowásima or kharcha, and they are Cesses. everywhere paid from the common heap set aside as niámkharch, already referred to. Their character is the same both in irrigated and unirrigated areas. To deal first with the Mastung niábat: both in irrigated and unirrigated areas paying revenue by batái, the prevailing rates of cesses are 61 kásas on every kharwár of the total produce in the Mastung circle, and six kúsus in the Tíri and Kahnak. The only exception in Tíri is Khushkába-i-Shora, which pays four kásas on every khharwar. The Pringabad circle enjoys the privilege of exemption from the payment of cesses and is said to have done so ever since the time that it was a jágir of Bibi Allah Dinni, sister of the ex-Khán, Mír Khudádád, who jevied no cesses of any kind.

LAND REVENUE.

and rates.

In addition to this fixed rate, certain other payments are made from the common produce; they include (i) kharman paimāti, the remuneration of the grain measurer; (ii) jholi giri or the remuneration of the men, who carry the bag containing the share set aside as revenue; (iii) tappodāri for the crop watcher; (iv) toho for the guard placed over the threshed heap; (v) dagg for the sepoy deputed to look after the division of the produce; (vi) tori or drukhān for the village carpenter; and (vii) rasūlwāi or the share of the village priest; anything over is the cultivator's (kūn-i-kharman). The first three alone are paid at fixed rates, viz., half a kāsa each in every kharwār. The others are given by guess work. On the whole, it may be assumed that about ten per cent. of the total produce is paid on account of cesses in Mastung.

In Crown lands the cesses levied are similar to those taken in areas assessed to revenue, except that cesses are levied in the case of grain bearing autumn crop, such as maize, mung and juari at the usual rates, but no miscellaneous payments are made.

Cesses in the Kalát niábat.

The rain crop areas belonging to the Khán mostly lie in the Mungachar and Chhappar valleys and numerous cesses are levied in them. Their names show that they were originally intended as payments to particular officials or individuals in the Khán's household, who were thus permitted to batten on the people. As the original recipients died, they were appropriated by the State, and now only the last item *chank* is paid direct to the persons concerned. The sixth item, *saiad*, is paid direct from the Khán's treasury at Kalát. A list of them is given below:—

- (1) Dároghai-for the dárogha or Khán's Deputy.
- (2) Tappodári-for the guard over the grain heap.
- (3) Raisi-for the local rais.
 - (4) Kárdári-for the Hindu accountant.
 - (5) Sarishtédári-for the munshi.
 - (6) Saiad-for the Saiads of Kalát.
 - (7) Kásu—for one of the Khán's carpenters named Kásu.
 - (8) Uppi and Ramadán—for blacksmiths once in the service of the Khán.
 - (9) Lwang—for a court musician now dead.

(10) Mir-akhor-for the head groom.

LAND. REVENUE.

- (11) Káh-kash-charge for the transport of the revenue share in straw to headquarters.
- (12) Kadim—for a sowar deputed to watch the crops.
- (13) Muru-for the State trumpeter.
- (14) Darbáni-for the door-keeper of the Khán's palace.
- (15) Dharwái-for the grain measurer.
- (16) Chank-handfuls given to the sepoys present at the time of batái.

Of these items those which are recovered at fixed rates are dároghai i kása, raisi i kása, muru } kása and dharwái } kása, making an aggregate of 6 per cent. of the total pro-For the remaining items, except chank, a fixed quantity of 13 kásas is taken from each grain heap *johán.

The cesses levied in the irrigated Crown lands in the Chhappar valley are much the same as those levied on land in Kalát. subject to the ordinary assessment, and include 5 per cent, of the total produce paid at fixed rates, and 15 kásas, instead of 13 kásas which are taken from each grain heap. In the Kalát valley, the cesses levied at fixed rates amount to the comparatively higher rate of 10.3 per cent. of the total produce, but other miscellaneous payments are smaller, viz., 3 kásas on every heap. Cesses are not paid on the sabsbar crop grown in Crown lands except in the case of those which bear grain. The Khán, however, takes the whole of any katti or pea stalks which may be grown in lieu of the same amount of wheat bhusa which may be due to him. Juári, if cut green, and onions pay one-twentieth of the whole produce on account of dároghai. The Khán also possesses the privilege of taking a certain number of melons or water-melons for his personal use, a right kown as tuhfa or jira. The number is generally about two hundred.

In land subject to fixed assessment, the amount of cesses was originally included in calculating the fixed amount of areas under fixed assessproduce assessment (kalang), but not in the case of the fixed ment. cash assessment. The kalang includes 16 kásas per kharwár on account of what is known as sarf, or State contingencies, and 1 kása on account of dharwái or measuring

Cesses on

Cesses in

[•] The size of a johán is indefinite. An average johán is not less than 1½ khurwárs or 120 kásas.

Land Revenue. charges; that is to say, 21¹/₄ per cent. on the total amount of revenue fixed in grain is paid on account of cesses.

Cesses on gardens.

Ordinarily no cesses are levied on orchards, but should the fruit be apportioned by actual division, as is sometimes the case with mulberries and dried apricots (chamri), a cess is recovered at the grain rates prevailing in the locality. In the case of dry fruit such as almonds, etc., which can be weighed, the cess is recovered, generally at three seers per local maund.

Revenue system in jágírs. As already explained, almost all jugitrdars have, in course of time, acquired the proprietary right in the irrigated land in their jagirs. Where they do not cultivate themselves, therefore, the share which they take from the tenant represents not only the revenue but the proprietor's share. It generally consists of two-thirds of the produce, but the seed is supplied by the proprietor. In unirrigated areas, jagir lands are mostly occupied by tenants who have acquired occupancy rights and most of whom pay one-fourth of the produce, though in some cases the rate is one-sixth. No cesses are levied by the jagirdars except for the darogha or deputy who collects the revenue. The share of the latter varies from 2 to 4 per cent. of the total produce. Straw is generally taken at the same rate as the grain, but in remote parts the jagirdar seldom troubles to lift it.

Special kinds of assignment,

In Tiri and Kahnak, however, instances occur in which the Khan has assigned either the right to the collection of some portion of the revenue or the right to have certain animals fed by the cultivators. Thus, in a small part of the Rod-i Mobi in Mastung, certain Raisanis of Kahnak collect the fixed revenue in cash and kind direct, whilst in the three Kahnak springs subject to fixed assessment the cultivators have to maintain a horse during the summer belonging to the Jamálzai Raisanis of Bábkári with two other horses belonging to the Khán. The Jamálzais send their horses by turns every ten days.

The system

The absence of uniformity of system throughout the area renders it difficult to determine the general effects of the assessment on the cultivators. On the whole, however, it may safely be said that the assessment, even after cesses have been included, is not heavy. Hardship occasionally occurs

where a source of irrigation subject to fixed assessment. decreases or dries up, but, on the other hand, this is compensated for by the fixity obtaining in the case of those sources of irrigation in which the supply has increased. most popular system with the cultivators is that of appraisement as the estimate of the revenue share generally results slightly in their favour. No one, it may be noted, is allowed to excavate a kárés in areas subject to the payment of revenue in Mastung, unless he first obtains permission. which is accorded on the payment of mohrána or rasúm.

Generally speaking, the responsibility for the transport of the revenue share in grain or straw rests with the cultivators in Mastung, but where the extent of a niábat is large and the lands are situated at a distance from the headquarters, as in the Kalát niábat, the State makes its own arrangements for the transport of its share both in grain and straw. cess known as káhkash, i.e., a charge for the transport of the State share of straw, is levied in the Kalát niábat. the Crown lands in Chhappar, which lie close to Kalát. the State only transports the straw; the transport of the grain has to be done by the cultivators.

In tribal areas the transport of the proprietor's grain and straw is always done by the cultivators.

Irrigated land, when cultivated from rain or flood water. is assessed at the rates fixed for khushkava. At Kalat a revenue chaslightly enhanced rate, proportioned to the amount of special irrigation received, is sometimes charged on khushkava lands cumstances. receiving irrigation from a permanent source belonging to the Khan. The system, which is still in vogue, seems to have originated in Mir Khudádád Khán's time, who was in the habit of turning spare water from permanent sources of cultivation on to khushkáva lands, even though they did not require it, and against the will of the cultivators, with the object of obtaining an enhanced share of the produce.

In Mastung, where the water of one source is frequently used on land other than that actually belonging to it, the usual conditions of assessment in vogue appear to be as follows. When the water of one kalangi kárés is turned on to that of another, the revenue is not affected, nor is an enhanced rate taken if such water or water from a revenuefree kárés is turned on to a dry crop area. If, however, kalangi

LAND REVENUE.

Transport of produce

190

· LAND REVENUE. water is used on the land of a dry káréz, half the usual assessment on the latter is taken. Crops raised from revenue-free water used on kalangi land do not pay revenue except in the case of those subject to mahsúl, which pay at half rates.

Special payments and services.

A sketch of the revenue conditions prevailing in the country would not be complete without some reference to certain special prerogatives which the Khan has to particular exactions or services.

Hait.

The first of these is called hait, which is a right possessed by the Khán in the Rod-i-Mobi, Mastung niábat, to a particular plot of land, the cultivation of which is done by the cultivators without payment, on the Khán finding the seed, and the whole produce going to the Khán. The system is similar to that known as gávéra in Kachhi. In return for the privilege, a deduction of Rs. 11-10 is made from the cash assessment fixed on the Mobi, but none is made from the fixed assessment in grain.

Sursát.

Sursat consists in the provision of supplies of fuel and fodder gratis for the Khan on his paying a visit to any area. Small parties of persons representing the State have also to be entertained. When supplies have to be found, the cultivators of a tract divide the burden among themselves in proportion to the amount of cultivation in the various For instance, the Mastung niábat, for the purposes of the provision of supplies, is divided into three parts, the Mastung circle providing two, and Tiri, including Kahnak. the remainder. The Pringábád circle did not supoly sursát in former times, as it paid revenue to the Khan's relatives, but since its re-transfer to the State, sursat has been recovered from it. The maliks or raises make the internal distribution on the cultivators in their respective charges, and all káréses subject to revenue, in whatever form, are liable to payment or their quota. It is usual for the Khán's party to halt at Káréz Amánulla, on his way to Kalát, and if he did so, the cultivators between Káréz Amánulla on the south and Chakul Do-Túti on the north found the supplies, and were exempted on this account from finding further supplies with the rest of the Mastung circle.

The rule in the Mastung niabat is that supplies and fodder have to be turnished for the first three days a ter the Khan's arrival.

In the time of the ex-Khán, Mír Khudádád Khán, the provision of sursat of fodder formed a bone of bitter contention between the tribesmen and the Khán, as all tribal and inám areas were indiscriminately required to supply fodder for the troops which had been raised by him. dispute was one of those which were discussed by Sir Robert Sandeman at Mastung in 1876, and the tribal areas no longer find any fodder for the Khan now, but a trace of the custom still exists in the case of the Langav tribe which supplies a quantity of bhúsa annually to the Khán on a nominal payment*.

LAND REVENUE.

Mehmáni is found by the cultivators of Crown lands in the Mehmáni. Mastung niábat with the exception of those in the Pringábád circle, each mehtar having to supply a sheep to the Khán every year, but the number is not definitely fixed. In the parts of Mungachar and Chhappar, which are in the Kalat niábat, the holders of proprietary right have occasionally to find a sheep for the Khan.

Another form of mehmáni is the entertainment given to the State officials by the cultivators when they come for batái.

Kái-choi.

Kái-choi is a corruption of the two Persian words káh. meaning grass, and chob, firewood, which are supplied to the local officials on different systems in the various localities. Thus in Pringábád, káréses, subject to fixed revenue, have to supply the Khán's officials stationed there with as much bhúsa, lucerne or other fodder and firewood as may reasonably be required for his daily personal use. In the Mastung circle, almost all kárézes, etc., subject to the Khán's revenue. are bound to find once a year one trangart of khasil and one bullock load of firewood. The fodder thus supplied is known as tarangar náibí, while the firewood is known as angatí. The same kárézes also have to supply 4 jowál t of any fodder that may be available daily throughout the year. This is done

Baluchistán Blue Book, No. 2, p. 265, case No. 30 of the list of complaints made by the Sarawan Division against the Kalat Government.

[†] A larangar contains about 4 or 5 maunds of khasil.

i.e., about two bullock-loads.

by turns. These payments were originally meant for the náib, but are now amalgamated with the Khán's dues.

The cultivators in Ziarat and Chhappar have to find fuel for the Khan's party of sepoys throughout the year and every *jora* of bullocks has also to supply a bullock-load of fuel once a year for the Khan's use at Kalat.

Bégár.

Bégár consists in the Khán's right to forced labour for keeping his stables, mangers, buildings and granaries in repair. In Chhappar and Ziárat the cultivators also have to take the Khan's horses to Kalat at the end of the summer. In Mastung, Chhappar and Ziárat the service is found by tenants-at-will in the Crown lands; the number of men supplied varies on each occasion, but it is generally one man on every jora. In Pringábád, Tíri and Kahnak the system is slightly different. In the first-named place, the bégár consists of a fixed number of 8 men, who are supplied by such káréses as are subject to fixed assessment. distribution is made among the cultivators on each káréz, but 8 men have to be in attendance daily and take their orders from the Khán's official stationed at Pringábád. Tíri and Kahnak all káréses, under fixed assessment as well as the ábo-zamín kárézes, find bégár, when required; but the number of men is not fixed.

Special services imposed on the Lángay tribe.

Owing to the fact that they cultivated large areas of the Khán's lands, and were largely under his influence, special exactions have been imposed on the Langavs of Mungachar, one of which is still enforced, whilst others have ceased. That now exacted is known as kishk. On his annual visits to Kachhi or elsewhere, the tribe has to find 40 men for personal attendance on the Khan, under the command of three officers known as sarkishk. The kishkis, as the men are called, received a subsistence allowance in grain in addition to a cash payment for each expedition which was generally of about six months' duration. The tribe paid each man Rs. 7, a sum which was subsequently raised to Rs. 40 each for men of the Ali clan and Rs. 30 each for those of the Shadizai clan. The last occasion on which kishk was levied was when the present Khán went to the Delhi Durbár in 1903.

The Lángav chief and his section, the Alam Khánzai, have always been exempt from the services. Other services. which were discontinued after Sir R. Sandeman's intervention in Kalát affairs, were known as dúdrán: khirái or phori: bai-ná-phori; and bag-ná-khismat.

LAND REVENUE.

Dúdrán.

Dúdrán was the compulsory service imposed on the tribe for the cultivation of the land under the Dúdrán spring. this purpose 48 men were supplied by the tribe, whose business it was not only to cultivate, but to look after the Khan's horses and to reap his lucerne crop, etc. They received as remuneration one-third of the total produce. They were known as béldár and a new batch was supplied each year. On their return to their homes their fellow-tribesmen paid each man Rs. 50 for the year of his compulsory deputation. a total sum of Rs. 2,400.

Khiráj was a kind of camel tax levied on all camels belonging to the Lángavs at the rate of Rs. 3-8 per camel per year. The collection was made by the Lángav chief, who received 8 annas from the amount. The bai-ná-phori consisted of a large quantity of bhúsa which was supplied to the Khán on the nominal payment of 8 annas per camel-load, out of which 4 annas was appropriated by the chief. The system is still partly in force. The bag-ná-khizmat consisted in the feeding of about sixty camels belonging to the Khan on lucerne, each kárés supplying its quota.

The distribution of the fixed assessment in Zari kalang Distribution kárézes follows that of the shabánas, nim-shabánas or kilás, pás of fixed asand nim pás into which the source of supply is divided, and in Mastung the Mobi the recognised incidence is per kilá or half shabána. The share of water in possession of each holder together with the amount of revenue due is noted in the wehis already referred to. Owing to careless account-keeping, mistakes have in course of time crept into the wehis, in some cases causing slight variations in the actual recoveries, but these differences are not material. Thus one holder may be shown as paying R. 1 per shabana, whilst another man in the same kárés pays R. 1-0-3. In Pringábád, the working of the system is a little more complicated, the measures recognised for the

sessment in niábat.

purposes of distributing the fixed assessment being known as dáng and nákhun. When the original assessment was fixed, a shabána in the more of the important kárézes such as Káréz-i-Kandaki and Káréz-i-Kalán was considered to be equal to six dáng, each dáng being in its turn equal to 12 nákhun. In kárézes on the other hand which possessed only a small supply of water, the whole flow was counted as being equal to so many dángs. Thus Káréz Padora, which has 17 shabánas, is counted as 1 dáng; Káréz Buddazai with 20 shabánas as 10 dáng; Káréz Rodrís and Káréz-i-Asha with 16 and 14 shabánas, respectively, as 16 and 42 dáng.

Government or Crown lands.

Lands belonging in proprietary right to the Khán are known as sarkári. The history of the acquisition of some of these lands cannot be traced, but the methods by which others have been acquired are known as (i) sabt, (ii) padr or baitulmál, (iii) sultáni or hafdaham, (iv) ábo-zamín and (v) bárázád. The last named two systems have been described in the section on the Character of Assessment above. They represent the lands and water set apart for the Khán in lieu of revenue. Zabt or Zaft lands are those acquired by confiscation either from defaulting cultivators or from defaulting náils and other servants of the State. Padr or baitulmál lands consist of escheats to the State in default of heirs. Sultáni or hafdaham lands are to be found in the ábo-samín káréses and consist of the additional share of one-seventeenth in Mastung and one-twentieth in Kalát, set apart for the Khan's wazir of the Mullazai family who was given the title of Sultan by the Afghan rulers, whence the name sultani. Some of these holdings have since been resumed by the Khan. The rates of rent of revenue and the methods employed for getting them cultivated have been detailed elsewhere.

The káréses or localities in which Crown lands are situated include the Chashma and the Bárázád káréses in Kalát; Ziárat, Dúdrán and Muchai in the Chhappar valley; Zard, Mastung, Pringábád, Tíri, Kahnak, and Shírináb in Mastung.

Watermills are to be found only in the *niábat* of Kalát and Mastung. They number 52 and are detailed in the following statement (1905):—

LAND REVENUE. Watermills.

Name of Niábat.	Name of spring, káréz or stream on which working.	Revenue free.	Revenue paying.	Total.
Kálat niábat	Chashma	7	1	8
	Ziárat	i		1
	Dúdrán	2	6	8
Mastung niábat	Rod-i-Mobi	6		
J	" Pashkaram…	8	******	8
	Bahrám Sháhi	10	1	11
	Káréz Kandaki	4		.4
1	Káréz Kalán	I		I
	Rod-i-Sariáb		5	
	Total	39	13	52

The one mill at Kalát (Chashma) subject to revenue belongs solely to the Khán who makes his own arrangements for working it through his servants. The six mills paying revenue in Dúdrán are owned by individuals who pay the Khán for the water power. In 1903 they had been leased for Rs. 2,000 for a term of three years, which is an average of Rs. 111-1-9 per mill per year. In granting the right to the use of the water power, it is generally a condition that the Khán's corn should be ground by the lessee free of cost.

Twenty-nine out of 35 mills in the Mastung niábat are worked on water supplies which are subject to fixed assesment and therefore pay no revenue. Of the remaining six which pay revenue, five are on Rod-i-Sariáb and one on Káréz-Bahrám Sháhi. In the former, one-fifth of the gross proceeds is set apart for the miller and the remaining four-fifths divided into three equal shares of which the State receives one share, that is to say, four-fifteenth of the total receipts, on account of revenue. The mill on Káréz-Bahrám Sháhi is assessed to revenue at one-third of the total receipts. In 1904, the total revenue from watermills in the Mastung niábat amounted to Rs. 180.

Cattle tax is not levied in the district. Reference has al- Cattle tax. ready been made to the *khiráj* or *phori* which was formerly paid by the Lángavs to the Khán, but which has now been discontinued.

LAND ... REVENUE.

The tax known as *khaft* which is levied by some of the tribal chiefs will be described later.

Revenue free grants including assignments of revenue and grain allowances, &c.

No exhaustive enquiries have ever been made into the revenue-free grants of the district, a subject which naturally presents much difficulty. The grants are either tribal or made to individuals or to religious institutions. Those which are tribal are in possession of influential persons or families belonging to the different Brahui tribes and were given for services rendered to the Khan of Kalat in former times. All the Sarawan Brahuis, except the Langavs, hold revenue-free grants. The most important of all are those held by the Raisánis, the Shahwanis, Bangulzais, Muhammad Sháhis and Sháhizai-Méngals. The Summaláris and the Gurgnáris also enjoy small grants in one or two places. Hitherto there appears to have been no restriction in the alienation of the grants, and in a good many cases the present holders are not of the same family as those to whom the grants were originally made. They include Dehwars, Hindus, and Khánazáds. In Káréz Gulzár and Káréz Ladha in Mastung, a Hindu, named Ahu, is a co-sharer, whilst Khánazáds hold a share in Káréz-i-Julgau in Tíri. Mention may also be made, among this class, of the grants now held by the Khárán Chief as part of the estate of the late Mustaufi, Fakir Muhammad.

Religious grants include those made to Saiads, Sáhibzádas and qázis, as endowments of the shrines of pírs and of mosques. The Saiads of Mastung, Kalát, Tíri, Kahnak and Kiráni near Quetta hold rèvenue-free grants in various kárézes and streams and endowments are attached to the shrines of Sheikh Taghe(Taqi), Sháh-i-Mardán. Pír Dastgír, and Sheikh Lango. In Káréz Míaná in Mastung a Sáhibzáda known as Sáhibzáda Sarhindi, from Sarhind in the Punjab, enjoys a free grant of a small amount of water.

Grain allowances. Grain allowances in addition to cash payments of Rs. 20 and Rs. 10 respectively are made in Mastung to qázis Abdul Halim and Muhammad Ján for their services in connection with the disposal of cases. The former gets 3 kharwárs 9 kásas of wheat and the latter 75 kásas each of the wheat and barley. Allowances are also made to the irregular levies (amla) maintained by the Khán and will be described hereafter. The State makes recoveries from the cultivators, both

in irrigated and unirrigated areas, in the form of a cess for payment to certain Saiads of Kalát and Mastung. That in the Kalát niábat is known as saiad and amounts to 3 kásas on every heap of grain (johán,) whilst in the Mastung circle of the Mastung niábat the total amount of cesses, viz, 61 kásas on every kharwár, includes ½ kása for payment to certain Saiads of Mastung and Kalát. After the collection of the cess the disbursements are made at the Khan's discretion from his granaries. Allowances of 40 kásas of wheat and 40 kásas of barley each are paid to a Lori and carpenter at Mastung for miscellaneous services rendered by them.

LAND

REVENUE

Where tribesmen do not collect their share themselves. Tribal headmen of clans or sections are deputed to carry out the system of collecting work and distribute the amount collected to families and revenue. individuals. The rates, which include the proprietor's share of the crop, vary from one-fourth to one-fifth, one-sixth and one-eighth, the first named being the commonest, both in dry crop and irrigated lands. A share in straw is seldom taken in dry crop areas, but the right to the straw is everywhere recognised. In irrigated lands one-sixth of the bhúsa is commonly taken and one-fifth of the straw of all sabsbar crops.

The Raisanis, excluding the Rustamzais who make their own arrangements, alone make special arrangements for the collection of their revenue through the agency of a náib in the Mungachar and Chhappar valleys. The local raises work under this officer, who takes revenue fixed by ijara in irrigated land, either in cash or kind, and by appraisement in dry crop areas. He receives six kharwars of wheat annually on account of náib from certain káréses in the Mandeháji and Brinchinnau circles of Mungachar as his own remuneration. Four kásas per kharwár are given to him in unirrigated tracts. Where káréses have been excavated in the jurisdiction of two tribes, as is the case with the Raisanis and the Muhammad Shahis in the Mungachar valley, both the tribes collect the revenue jointly and subsequently divide the produce. The system is sometimes modified by one of the tribes having sold its right to the revenue to the proprietary body. Thus, in the Sardárwál Káréz in the Brinchinnau circle of Mungachar, the Ahmad Khánzai Muhammad Sháhis have sold their moiety of

Revenue levied by chiefs and headmen. the 1th levied to the various owners and revenue is now paid, at one-eighth, only to the Sarájzai Raisánis.

In concluding the account of the revenue of the district, mention may be made of payments made by the tribesment to their chiefs or headmen. The Sarawán country differs from the Jhalawán in the fact that the levy of mália, as it is called, is not universal. It is confined to the instances quoted below, the most important being that of the Langav chief.

The Lángav chief's mália.

The origin of the máli or mália collected by the Lángav chief from certain specified sections appears to have orginated in the custom of presenting him with a milch sheep (déru) on the occasion of his visiting an encampment, the sheep being replaced every year. Gradually, as the chief's power increased, he claimed the sheep every year as a matter of right from such of the sections as had been in the habit of supplying with a deru, and in course of time other payments were also forced upon them. The price of each sheep has now been converted into a cash payment of Rs. 4. An estimate of the various kinds of annual payments received by the chief gives the following results: cash Rs. 140-6; 136 sheep at Rs. 4 each = Rs. 544; 1,022 kásas of wheat; 280 kásas of barley; 8 small plots (kurda) of lucerne; 7 smaller plots (churu) of carrots; and 49 tarangar of bhiisa. accounts are kept and the collections depend on the memory of an old dárogha of the chief by name Fateh Muhammad, and as in recent times several disputes have occurred about these payments, the figures given should be received with caution.

Kullois of Mungachar.

In addition to the payments made by his own tribesmen, the Langav chief receives a sum of Rs. 100 annually from the Kulloi Rinds living in Mungachar. These Kullois have long been in dispute with the Langav chief and have always claimed their tribal connection with the Rind tribe in Kachhi. There are sanads dated the 20th of Rajab 1248 H. (1832 A.D.) and the 4th of Rabi-ul-Awal 1293 H. (1876 A.D.) in the possession of the Kulloi headman Allah Bakhsh, declaring the Kullois independent of the Langavs, but in view of the fact that all services for the Khan, etc., are performed by the members of the Langav tribe proper, the Kullois, who are in possession of extensive tracts in

Mungachar, have been made responsible for the annual payment of Rs. 100 to the Langav chief.

LAND REVENUE

The total receipts from the Lángav mália are divided into five shares, two of which are taken by the chief and the remaining three are distributed among his family. A sanad dated the 25th of Ramzán 1266 H. (1849 A.D.) granted by Nasir Khán II, is in the possession of the Lángav chief, which refers to 51 shares, but a division into only 5 shares is now made.

The headman of the Shadizai clan of the Langav tribe Mália levies a small contribution from a few families of the Shah- headman of alizai section in addition to what the clan already pays to the Shadizai the chief, the families concerned being exempted in return Langavtribe. from all tribal services rendered to the Khan which are described elsewhere. These contributions consist of 50 kásas of barley paid by the Báránzai sub-section; poll-tax of Rs. 2 per adult male paid by Patéhanzais of Zard, and similar tax paid by Dur Muhammad and his two cousins belonging to Rahmánzai Koharizai sub-section.

clan of the

Reference has already been made to the allotment of a Revenue of special share in the tribal land to the chief in virtue of his the Muhammad Shahi office. A special case is that of the Muhammad Shahi chief chief. who, though given a share in land in areas held his tribe in other parts of the district, receives none in the Shirinab valley and in parts of the Mungachar valley, but instead he receives one-twenty-eighth of the total produce from lands embanked in these places. one-twenty-eighth is calculated at one-seventh of onefourth, at which rate the Muhammad Sháhis levy revenue in Shírináb and Mungachar. In the Barfiwál and Mithawál káréses in Shírínáb, the payment is represented by a fixed amount of 35 kásas paid to the chief, of which 5 kásas represent the transport charges of the Sardár's share to his house.

The headman of the Umarani clan living at Iskalku collects a sheep from each family of the sections of his clan levied by the living in Jhalawan, whilst in Sarawan he receives one-eighth headman in of the total produce as dastar from those living in the Khad Khad. valley.

LAND REVENUE. by the Bangulzai chief Shahwáni headman.

The Alizai headman, of the Shahwanis living at Iskalku, and the Bangulzai chief levy what is known as khaf from Khaf levied certain sections attached to them. That taken by the former is at the rate of one sheep on every married man annually whilst the khaf received by the latter consists of one sheep on every flock each year. The Alizai headman takes toll from the Shahwani sections known as Dahijav and Siahijav who are flock-owners in the vicinity of Baghwana in the Jhalawan country. The Bangulzai chief receives khaf from the Mazaráni Marris and the Pahlwanzai Méngals who have long been living in the Bangulzai hills. In the case of the Mazaráni Marris the payment is compulsory, whilst the Pahlwanzai Méngals always send a sheep though not bound to do so.

MISCEL-LANEOUS REVENUES.

No imports, other than those alreay detailed, exist in tribal areas. The Khán of Kalát supplements his land revenue by a variety of taxes, which include receipts from octroi, excise contracts, stamps, salt and a number of miscellaneous taxes levied on the local trade at Kalát and Mastung, which may be called Town dues.

Octroi.

Octroi, known as mahsúl chungi or sung, is levied on all articles imported for sale into the towns of Mastung and Kalát and also on merchandise in transit through those places to areas not under the authority of the Khan, and on exports from the district. In the past the right of collection has generally been let on a contract, the average income at Kalát being about Rs. 5,000 per annum, whilst in Mastung it was Rs. 6,000 in 1900. In the latter place the collections were being made direct by the niábat officials in 1904.

Intoxicating drugs.

The intoxicants for the sale of which licenses are granted, are country spirits, opium, poppy-heads, charas, gánja and bhang. The contract is known as gutta or ijára-i-muskrát. Separate contracts are given for Kalát and Mastung, the contract for the latter place including the right to sell in Pringábád and Tíri. The articles included in the excise contract are exempt from octroi duty. The license merely provides for the monoply of the sale and does not contain conditions specifying the quality of the drug to be sold and other matters. The quantities to be kept by private persons are also not the subject of any regulation. The average income from the Kalát contract is Rs. 500 per annum. At Mastung there was formerly a combined contract-for the sale of liquor and drugs, the income from which, in 1900, was Rs. 1,200. In 1903, a separate contract was given for the sale of liquor at Rs. 1,025 and for that of drugs at Rs. 445; total Rs. 1,470.

MISCEL-LANEOUS REVENUES.

The following were the rates of sale of intoxicants in 1904 at Mastung and in 1002 at Kalat :-

t Mastung at			9-3		Mastung. Rs. a. p.				alá	it. 1. p	
Countr	y liquot			Per bottle		12	•		3. c	_	•
Opium	•			Per tola	_	8			5		
Bhang				Per seer					4		
Chars,	Yárkan	rkandi		Per tola	· o 3		3 0				
Chars,	Local :-	- .				,					
ıst	Quality	(rup)		Per seer	I 2	0	0	0	4	0	per tcla.
2nd	Do.	(tahge	alím)	do.	8	0	0	0	3	0	do.
3rd	Do.	(gánje	2)	do.	4	9	4	0	2	0	do.
4th	Do.	(kháko	7)*	*****			••.	0	Ľ	ំ	do.
											T) (

Liquor is imported from Kachhi, especially from Bhág, Dádhar and Gandáva. Opium is imported from Amritsar in the Punjab, whilst a small quantity is also grown in Mastung, Kalát and Mungachar for domestic use. Bhang and chars, the latter including gánja,* are local products, the former being cultivated and the latter manufactured in fairly large quantities in Kalát, Iskalku and Mastung. Iskalku chars has a great local reputation.

Chars from Afghanistán also finds its way into the district, and that known as Yarkandi, from Yarkandin Central Asia, is imported via Kandahár.

Chars and bhang are exported by individuals in small quantities to the neighbouring districts of Quetta-Pishin, Jhalawan and Kachhi.

The consumption of liquor is entirely confined to the Consumers Hindu population. The Brahuis, unlike their Baloch brethren and conof Kachhi, are not addicted to it. Opium is used only by the well-to-do, especially those of advanced years, but the consumption is not large. The principal consumers are a few Afghan merchants living at Kalat and some of the Hindus. Among the Bráhuis it is only used medicinally, especially in the preparation of an article known as. barsh, which is used as a cure for cold and cough,

[•] In India the word gánja is used for the flowering tops of cultivated female hemp plant, but, as will be seen, in Kalat the word refers to an inferior preparation of hemp.-ED.

MISCELLA-NEOUS REVE-NUES. Chars, gánja and bhang are used mostly by the lower classes, the first named drug being in common use. In Mastung and Kalát, secluded places, called dáira, are the meeting places of the chars-smoking fraternity, and here Loris, fakirs, and some of the Dehwars assemble.

Cultivation of poppy.

The cultivation of the poppy is chiefly in the hands of the Sheikh section of Dehwars, who manufacture opium for sale to the licensed contractor. The exudation from the heads is collected in the usual way by scratching the surface with a cut. The green heads are sometimes boiled two or three times, but the decoction, when congealed, is inferior.

Hemp drugs.

The drugs prepared from hemp are known as chars and gánja. The female bhang plants are reaped when they are about waist high and charged with the seed. The seeds and leaves are separated and half dried. They are then spread on a carpet made of goat hair, another carpet is spread over them, and the leaves, etc., which lie between, are gently rubbed. The dust containing the narcotic principle is shaken off and the leaves, &c., which have been deprived of it, are removed to another carpet. The first dust is the best chars and is of the first quality, known as rup. The dust obtained from the the second process is known as tahgalim and is of the second quality. A third shaking gives an inferior quality known as gánja. The dust is next put into a copper vessel and melted, after which it is made into small balls called kabsa and put into a bag of sufficiently thick cloth to keep the balls moist. The first quality of chars can be distinguished from the varieties by the ease with which it melts.

At Iskalku, where the *bhang* plants make very strong growth, a fourth shaking also returns some dust, but it is very inferior and known as *kháka*. The leaves and seed which have been deprived of the dust, are used for drinking and are known as *bhang*.

A preparation known as *májún* is made of hemp leaves, before they have been deprived of their narcotic properties, which are mixed and boiled with *ght*, pistachio, almonds, cocoanut, cardamoms, and other spices. Only very wealthy persons use the preparation, and though the sale is included in the excise contract at Mastung, there is no restriction on the manufacture.

Stamps have been in use since 1902 and court fees are levied in cases decided by local and shahi jirgas and by the officials of the Mastung niábat. Petition-writers and, in their absence, thána munshis sell the stamps, but receive no commission on the sale. Up to 1894, no court fees were levied in cases decided by jirga, but owing to the number of frivolous claims preferred, a jirga recommended, in 1895, that fees should be levied in cases of money and land at half the rates levied in British territory. This rate was at Rs. 3-12 per cent, to be paid by the party who lost the suit, and the realization was to be considered as fine and part of the fine to be paid in cash, and the proposal was accepted. The levy of full rates was sanctioned in 1902, and payments in stamps were substituted for cash payments. The receipts in jirga cases are credited to a Jirga Fine Fund.

Realizations in cases disposed of by the *niábat* officials are credited to the State.

The total receipts from stamps in jirga cases in 1904-5 were Rs. 3,741 and the value of those levied by niábat officials was Rs. 4,365 in the same year. A set of rules for the levy of court fees has been drawn up for their guidance. They are levied at 10 per cent. ad valorem on the value of the claim, and no application bearing court-fee stamps under Rs. 5, R. 1 and annas 8 respectively are heard. The minimum fee in the case of applications to the Khan is Rs. 5, to the Political Adviser R. 1, and to the niábat officials annas 8.

The salt most in use is imported from Kachhi; Nushki salt is also used in western parts of the district. A small quantity of Punjab rock salt is procurable in the bazars at Kalát and Massung, but its use is limited only to the Indian officials living in these places. Its price is too high for the local people. In Gurgína and Shírínáb, salt is obtained by gently shaking the branches of the tamarisk bushes in August and September and is used for domestic purposes. Kachhi and Nushki salt is imported by Bráhuis and is bartered for wheat in the proportion of 2 measures of salt to 1 of wheat and for barley in equal quantities. The only duties levied on salt are octroi at the rate of R. 1 per camel-load when imported into Kalát town and at the rate of R. 1 per maund on importation into Mastung.

Miscellaneous Revenues.

Stamps.

Salt.

MISCELLA-NEOUS REVENUES.

Town dues.

The imposts which have been denominated "Town dues" are for the most part levied by contract and consist of monopolies for the sale of articles of common consumption. In Kalát they are collected under the supervision of the *Mir Shab* or officer responsible for the watch and ward of the town and at Mastung by the *niábat* officials. They are:—

Description of	Locality where	Amount realized.				
the tax.	levied.	Year.	Amount.			
			Rs. a. p.			
1. Monopoly for the sale of meat	Kalát, at o-3-o per animal slaughtered.	1895-06	750 0 0			
and purchase of hides (ljára kasábi wá post faroshi or mazbúhi.)	Mastung, at 0-7-0 per animal slaughtered.	Year ending 31-10-05.	875. o o			
2. Gambling li- cense (kamárbázi or	Kalát, o-1-o per rupee won.	1894	250 O O			
tikri).	Mastung, o-o-6 per rupee won.	1903-4	350 O O			
3. Sale of match boxes.	Mastung including Pringábád and Tíri.	1905	173 0 0			
4. Monopoly for dyeing and sale of iron beels and nails for shoes.	Mastung	1905	155 0 0			
5. Zargari, or tax on gold, silver and ornaments.	Mastung, one pie per rupee on gold. One pice per tola on sil- ver.	1900	185 13 6			
- .	Kalat, one pie per rupee.	1893	250 ò o			
6. Sale of boiled mung pulse.	Mastung •••	1904	30 ө о			
7. Tax on hack- ney carriages.	Mastung o-1-o per mensem and one anna per night for halts.	1900	31 O O			
8. Jemadári shut- rán, or tax on camels plying for hire.	Lak Pass, between Quetta and Mastung, 0-4-0 per loaded camel.	1 900	321 0 0			
9. Shop tax	Mastung bazár o-8-o to Rs. 2 per month.	1900	430 12 0			
10. Sale of cook- ed food.		1904	240 0 0			

Receipts on account of all fines imposed in petty cases, including cattle-pound receipts, are known as bádihawái. Cattle-pounds exist in Mastung, Chhappar, and Johan. At the last named place they are included in the lease of neous revenue. At Chhappar and Mastung the cattle-pounds are under the control of niábat officials. Fines imposed for cattle trespass are Ans. 8 for a camel, Ans. 4 for a bullock, Ans. 4 to Ans. 8 for a horse, Ans. 2 for a donkey and An. 1 for a goat or sheep. The animals are made over to the owners on payment of the fine and the feeding expenses incurred during the period for which they were in the lock-up.

MISCELLA-NEOUS

receipts.

The only fund partaking of the character of a Local Fund LOCAL is the Jirga Fine Fund, which has been in existence since 1888. Much of its income is derived from the Sarawán country and most of the expenditure is also incurred there. but its operations are not entirely confined to the district. It is a State Fund and was managed by the Political Adviser up to 1902, when its administration was transferred to the Political Agent. Since 1900, the budgets have been passed by the Agent to the Governor-General.

The principal items of receipts are (1) fines in political cases, (2) court fees, (3) forfeitures and unclaimed property, (4) rent of the Kalát house at Quetta, (5) interest and (6) cattle-pound receipts. The expenditure is chiefly devoted to (1) the maintenance of the political prisoners kept in Bráhui thánas, (ii) allowances paid to headmen or other influential persons assisting, the Political Agent in political work and to qázis for deciding cases, (iii) subsistence allowance paid to witnesses and (iv) miscellaneous expenditure connected with the pirgas. The cost of Brahui thánas, which formerly formed a large item of the expenditure, is now paid for by the State. Advances are also occasionally made from the fund.

LOCAL FUNDS. In 1893, the balance of the fund, amounting to about Rs. 8,000, was devoted to the erection of the Kalát House at Quetta. The year 1899-1900 opened with a balance of Rs. 4,568-9-11; the average annual receipts and expenditure for the five years ending 1993-4 have been Rs. 7,994 and Rs. 7,624, respectively, and the closing balance on March 31, 1904, was Rs. 6,417.

Public Works.

The public works in the district are divided into two classes, those belonging to and maintained by the British Government and those belonging to and maintained by the Kalát State.

The following are the principal buildings maintained by the British Government:—

Name of place.	Name of building.	From what funds erect- ed and from what source maintained.	Remarks.
Mastung	Political Agent's	Provincial Reve-	
•	Political Agent's office and quarters for clerks.	Built by British Government.	Part cost borne by State.
	Political rest- house,	Built from Jirga Fine Fund but maintained by Local Govern- ment.	*******
į	Post and tele- graph office.	Provincial Reve- nues.	400.00
	Assistant Political Agent's house.	Do	*******
	Native Assistant Sarawán's house	Do	· •••••

Public Works.

Name of place.	Name of building.	From what funds erect- ed and from what source maintained.	Remarks.
Kalát	Residency	Provincial Reve- nues.	The Residency and its surroundings are built on land purchased by Government at a cost of Rs. 2,916-8.
	Political Agent's office.	Do	*******
	Post and tele- graph office.	Do	- - -
	Hospital	Do	*******
	Rest-house	Do	*******
	Military lines	Do	*******
	Quarters for clerks.	Do	********
Kahnak	Tiléra levy post and rest-house.	Do	***************************************
Kili Murád Khán (Kardgáp).	Rest-house	14000	Built from funds specially granted by the Government of India for theimprovement of the Nushki-Seistán route; maintained by the Kalát State since 1903.

They are in charge of the Military Works Service and form a part of the charge of the Assistant Commanding Royal. Engineer, Quetta. The Garrison Engineer, Civil Works and Mastung, who has his headquarters at Quetta, has direct

Public Works. control with a sub-overseer under him whose headquarters are at Mastung.

No organised department exists in the State for carrying out large public works, but those which have been executed in the past, such as the Quetta-Kalát Road and the Míri or Khán's palace at Mastung, have been supervised by officers or subordinates lent by the Military Works Department. Among the more important uildings maintained by the State are:—

Name of place.	Name of building.	From what funds erected and from what source maintained.			
Quetta	Míri or the Khán's palace Thána (Mastung) with Jail attached Thána (Walikhán) Niábat office and quarters for	Kalát State Funds. Khán's Fund. Kalát State Funds. Khán's Fund.			
Guru Mungachar. Kalát Sibi Mach	Levy lines for Political Agent's levies Rest-house Political Adviser's house Harboi bungalow (Gishk) Political Agent's house House for Political Adviser Political Agent's bungalow.	Khán's Fund and Jirga Fine Fund. Khán's Fund. Do. Do. Do. Khán's and Kalát State Funds. State Funds.			

For the maintenance of these buildings and for the construction of roads and tracks in the various parts of the district a sub-overseer and a *mistri* are maintained, whose work is supervised by the Native Assistant, Sarawan, under the instructions of the Political Agent. Funds for the purpose are provided by the State and from the Jirga Fine Fund.

ARMV.

The State possessed no standing army prior to the year 1854, when Nasir Khan II, for the first time, enrolled a regiment of infantry known as the Fateh Jang regiment, another of cavalry called the Fass Risala, and a battery of

guns. These were garrisoned at Kalát with detachments in Kachhi and the Jhalawán country. Nasír Khán's successor. Mir Khudádád Khán, the ex-Khán, increased the numbers of the infantry and cavalry and in his time the army was chiefly utilized in attempting to coerce the recalcitrant Bráhui chiefs. The present Khán added a regiment of cavalry which is stationed at Kalát and is known as the Sháhi Risála. The men are chiefly recruited from the Khán's household dependants and the number of the regiment at the present time (1906) The army was never properly organised or disciplined, and in 1905, in consequence of internal disturbances and mutinous conduct, the majority of the men were disbanded, and their place taken by a reorganised force of 600 rank and file, who are to be permanently quartered at Kalát.

The levies employed in the district are of two kinds, viz. services maintained by the British Government and those maintained by the Khán of Kalát. The latter include two distinct bodies, namely, the tribal levies in charge of different thánas, and the amla or the Khán's irregular levies.

The service maintained by the British Government consists of the Postal and Telegraph Levies on the line between Quetta and Kalát. It was originally included in the Quetta-Pishin Levy service, and at the time of the revision and redistribution, which took place after the meeting of the Levy Committee in 1883, its monthly cost was fixed at Rs. 553 5-4 which has not been altered. The line remained under the Political Agent, Quetta-Pishin till up to 1890. when it was transferred to the Political Agent, Kalát. The service (1906) consists of 24 men, of whom 2 are officers and 22 sowars. The expenditure is debited to the Provincial Revenues.

Besides maintaining these Levy services, the British Allowances Government has also granted personal allowances to certain paid to Saraof the Sarawan chiefs in recognition of the services rendered by the British by them during the second Afghan war in guarding communications and in providing supplies, and to ensure their co-operation in the future. Those originally sanctioned in June 1879, when the second Afghan war was still in progress, included Rs. 400 per mensem to Sardar Sir Assad Khán Raisáni and Rs. 300 per mensem each to the Bangulzai, Kúrd, Muhammad Sháhi, Lahri and Rustamzai chiefs.

ARMY.

LEVIES.

Government.

LEVIES.

and were intended to be only as temporary payments. At the end of the war, Sir Robert Sandeman advocated the continuance of these allowances, and they were sanctioned for the lifetime of the holders, and since then have been continued from father to son to enable the chiefs to maintain their influence over their tribesmen.

In 1881, the allowance paid to the Rustamzai chief was incorporated in the Quetta-Pishin service, and in 1887 on the death of Wadéra Ahmad Khán, the allowance of the Bangulzai chief ceased. In 1889 this allowance was restored and one of Rs. 300 per mensem was given to the Shahwáni Sardár, whose case appeared to have been overlooked owing to the chief being a minor at the time the allowances were originally sanctioned. Since this time the total amount paid has been Rs. 1,900 per mensem. They are treated as "Territorial and Political Pensions," and are held on conditions of loyalty, good service and good behaviour to the British Government.

Other allowances to headmen. In addition to the payments to the heads of tribes, allowances for some of the headmen of the Sarawán country are provided from the Kalát District and Bolán Pass Levy services. They include the payment of Rs. 300 per mensem from the former service to the Rustamzai chief, and the following allowances paid from the Bolán, the names of the recipients being as they stood in 1906:—

Rs. a. p.

• •					•
Sardár Sir Ghaus Bakhsh, K.C.	I.E.	•••	100	0	О
Mír Abdur Kahmán, Raisáni	•••	•••	80	0	0
K.B. Mír Yusuf Khán, Kúrd		•••	20	0	o
S. Yár Muhammad Khán "	•••	•••	50	0	0
Mír Amír Khán, Kúrd	•••	•••	49	o	0
K.S. Mír Rahím Khán	•••	•••	70	0	0
Mir Afzal and Dost Muham	mad	at			
Rs. 20 each	•••	•••	40	0	o
Mír Baháwal Khán Sahtakzai	• • • •	•••	40	0	0
Mír Kamál Khán, Jemadár	•••	•••	50	0	0
S. Rasúl Baksh Khán, Lángav	•••	•••	130	0	0
Mír Shakar Khán Kuchk	•••	•••	40	o	0
Mír Isa Khán, Kuchk	•••	***	30	0	o
Méngal headmen	•••	•••	114	0	o
			•		

Carried over ... 813 0 0

Brought forward	•••	813	0	0	LEVIES.
BADRAKA.					

Kúrds (Mír Khudádád Khán Rs. 412-8-0,			
S. Yár Muhammad Rs. 87-8)	500	o	0
Mír Baháwal Khán Sahtakzai	250	0	0
sung.			
Sardar Sir Ghaus Bakhsh, K C.I.E	183	5	4 ′
Bolán office establishment, etc.	53	0	0
K.B. Mir Rasul Bakhsh (Mir Karam			
Khàn)	100	0	0
Two sowars with do	40	0	0
· ·			
Total	,939	5	4.

The allowance of Rs. 100 per mensem paid to Sardár Sir Ghaus Bakhsh, Raisáni, is an additional sardári allowance which was granted with effect from the 1st of April 1901, out of the pay of his grandfather, the late Háji Mulla Muhammad. The allowance to the Lángav chief dates from July 1806, and includes a personal allowance of Rs. 100 and Rs. 50 for the maintenance of 2 sowars. The allowance was reduced to Rs. 130 per mensem from the 1st of July 1901.

Other allowances are also personal and have been granted for the general good behaviour and influential position which the grantees occupy. They accompany the Political Agent, Kalát, and on tours are required to help him on all occasions. Some of them are almost continuously on duty with the Political Agent or his assistants. rest render no active service except when specially called out.

Of the two bodies of levies maintained at the cost of the Levies main State, the tribal levies are stationed in the different thánas Khán, and the grant of service to them is governed by the same principles as apply to the levies maintained by the British Government in administered areas. Their duties are primarily in connection with the tribesmen and to prevent friction between them and the Khán's subjects with whom no interference is permitted. They perform the duties of police, arrest offenders and investigate crime, whilst petty cases are adjudicated by jirgas held locally under the supervision

tained by the

LEVIES.

of the thánadár. With this object a man of influence and position is usually selected for the post. The system was introduced in 1889 when a thána was established at Mastung. This was followed by the establishment of the thána at Alu in 1897 after the outrages committed by Jáfar Khán, Sarparra; that in Mungachar was established in 1902, while a Sub-thána was established at Kardgáp in 1898. In addition to the thánas, there are Levy posts for the protection of travellers along the Quetta-Kalát road at Doctor Chah, Guru, Bidrang Kotal and Soru. Each Levy post has a definite jurisdiction. In case of the Mungachar thána the jurisdiction includes part of the Jhalawan country. The levies are under the supervision of the Native Assistant, Sarawan, and the Political Agent, Kalat, exercises general control. The expenditure, which amounts Rs. 19,152 per year, is borne by the State.

The total strength of the tribal levies at present (1907) is as follows:—

Post.	Officers.	Writers.	Sowars	Footmen.	Cost per month.	Remarks.
Mastung `	4	2	7	13	Rs. 591	One sweeper is attached to the thána and jail whose pay is included in the monthly cost.
Wali-khán		1 1 1	8 5 3	4 4 3	335 275 105	
and Tiléra (2 footmen at each place) Kalát and its surround	***		583	10	106	The monthly cost includes wages for watersupply to Bidrang post.
ings		l 1	2		62	!
Dasht thána	***	•••		4	62	The monthly cost includes Rs. 7 and Rs. 10 on account of allowance to duffadár and muharrir.
Total	9	6	25	38	1,596	

LEVIES.
The amla.

The amla appear to be a relic of the time prior to Nasír Khan II, when no standing army was maintained, but a body of men was kept which was recruited from the Bráhui tribes and was officered by men of position and influence. In time of war the supreme command was vested in the Shánghási, a trusted khánasád official of the Khán. men were principally employed on guard duty with the Khan. both in camp and at headquarters and were supplied with mounts by the State which were known as bázgír. time of Nasír Khán II, the amla consisted of 200 men under a Pahlwánzai Méngal of Mungachar. The ex-Khán, Mír Khudádád Khán, on succeeding to the masnod enlisted four amlas, each consisting of 100 men, under a Jemadár. One of the most important of these was recruited from the Langay tribe. These meh took part in all the battles fought by Khudádad Khan and were prominent in that of Khad-Mastung.

With the recruitment of a regular army, they ceased to perform military duties, and have since been employed principally to assist in the collection of the revenue, for watching the crops in Crown lands, for carrying the post, and for helping in the collection of the octroi. They also perform the duties of police when required among the Khán's subjects and accompany the Khán on tour. As a rule, they provide themselves with weapons of their, own, but a man who has not got any is provided with a sword or a carbine by the State. They have no uniform and are entirely without discipline.

The men are divided into two distinct classes: the amla proper, or those who are supplied with horses by the Khán and the amla-i-khud-sowár or khud-aspa who provide mounts of their own. Their strength has been gradually reduced by desertion and from other causes, and in 1904 those stationed in Kalát consisted of 3 Jemadárs and 83 men, of whom 1 Jemadár and 38 sepoys belonged to the amla proper and 2 Jemadárs and 45 sowárs to the amla-khud-aspa or khud-sowár. Of these, 14 men were employed outside Kalát, 7 being stationed at Chhappar, 3 at Ziárat, and 2 men each at Garok and Togau. The seni r sepoy in charge of each party except at Togau, is known as já-nashín or duffadár, his only privilege being the right to get his horse fed from fodder grown on the Khán's lands.

LEVIES.

Other detachments of amla are posted at Lahri and Gandava in Kachhi and at Khuzdar in Jhalawan.

Pay and allowances of the irregular levies.

The allowances paid to the men consist, in the case of the khud-sowár, of four items, viz.: ros or rations for men, kadim or grain ration for a horse, mowájib or wages paid annually, and káhasp or fodder allowance paid in cash. The amla who receive mounts gratis are given only ros and mowájib. Their Jemadár receives an additional monthly allowance of Rs. 2-8 called jira.

Although the allowances for ros and kadim are fixed in grain, the total amount due is converted into cash according to current rates at the end of each month and the men are paid the amount.

The movájib is paid at the end of every year, the length of a month being calculated as equal to 29 or 30 days alternately for purposes of economy. The system is known as shamsi-kamri. A deduction of one pice in the rupee which was originally meant for the Khán's mustaufi, but is now appropriated by the State, is made on all allowances, whether in cash or kind.

Amla under the Political Adviser.

A new body of men called amla which recently came into existence was engaged in 1905 in consequence of the abolition of the old army of the Khán. The men who have been recruited from the local Bráhui tribes as well as from Dehwárs and Saiads, are trained in drill. The amla is maintained by the State and is under the control of the Political Adviser. It is employed for miscellaneous duties connected with the management of the Mastung niábat, including investigation of local cases. The total strength as detailed below consists of 64 men, all of whom are stationed in Mastung:—

	Details.	Details. Monthly Detail		Monthly Expenditure.
	* •	Rs.		Rs.
	Sad Báshi Jemadár	. , 45	48 Khásadár	s 384
I	Panjah, Báshi (Jem: of Khásadárs)	adar 20	1 Sergeant	I5
1	Dah Báshi Duffadái	r of ••• 27	ı Clerk	I5 ·
I	Dah Báshi (Havildár	r, ıst	• •	
	class of Khásadárs)		1 Sweeper	••• 7
3	Do. (do. class of Khásadárs)		Miscellane	eous I
6	Sowárs	112	Total 6	671

TAILS. istration.

The punishment of imprisonment was scarcely ever resorted to in former times. It was only in default of the Jail Adminpayment of fines that imprisonment was inflicted by the Khan, and in such cases the term was indefinite, release being procured on payment of the fine or on a surety furnishing personal security for the payment. Occasionally, persons of influence, who had made themselves obnoxious to the Khan, were thrown into a prison, which was generally represented by the quarterguard of one of the regiments at Kalát. Prisoners of all classes were either given a subsistence allowance in kind, in which case they had to cook their own food, or were supplied with cooked meals. In some cases, however, food was brought for the convicts by their relations. No work was required of them except to cut lucerne for the Khán's horses. This system still exists at Kalat and such other places as are directly administered by the Khán.

Since the improved system of administration has been introduced into the Mastung niábat, a jail has been erected at Mastung to accommodate about 80 prisoners. have also been provided at Alu and Mungachar which can accommodate about 10 and 5 persons respectively. addition to the jail at Mastung which is attached to the thána, there is also a lock-up in charge of the náib with accommodation for about five persons. The jail and the lock-ups are maintained by the State. The prisoners are employed on road-making, tree-planting, and other out-door labour. Certain industries, as blanket-making, are also being introduced.

For serious offences when imprisonment in the State Jail is considered unsuitable, prisoners are sometimes sent to the Government jails at Quetta and Shikarpur, the cost being borne either by State Funds or the Jirga Fund.

Reference has been made to some of the cattle pounds in the Cattle section on Miscellaneous Revenues. There are six cattle pounds. pounds, two at Mastung and one each at Walikhán, Mungachar, Chhappar and Johan. One of those at Mastung and the pounds at Alu and Mungachar are attached to the thánas and are in charge of the thánadárs. The second ound at Mastung is managed by the niábat officials.

JAILS.

Chhappar, the pound is managed by the náib of Kalát, while the *ijáradár* of Johán is in charge of the cattle pound at that place. The receipts from the cattle pounds in charge of thánas are credited to the Jirga Fine Fund, and amounted to Rs. 28-9 during 1903-4.

EDUCATION.

Education is practically non-existent, and no organised system of public or private instruction exists. The people, with the exception of a few religious sects, such as Saiads and mullas, are wholly illiterate and, unlike their Afghan neighbours, have hitherto exhibited no inclination to go to Kandahar for instruction in Muhammadan law theology. The Saiads and mullás possess only a smattering of Persian; members of the latter class who live with Brahui chiefs conduct their correspondence. Female education is unknown. The priests in charge of the mosques at Kalát and Mastung teach a few boys from the Korán and occasionally receive small payments from the parents. The daily attendance at each of these maktabs, as they are called, does not exceed 20, and it is very irregular A small primary school which has accommodation for about 100 boys was established, in 1005, at Mastung with one teacher; in July 1905, there were three classes with a total attendance of 36 boys. It is maintained by the State.

MEDICAL.

There are only two medical institutions in the district, a first class civil dispensary at Kalát and a third class dispensary maintained by the Kalát State at Mastung.

The Kalát dispensary. The Kalat dispensary is maintained wholly by the British Government. Its establishment was sanctioned in 1877, and the Residency Surgeon with an Assistant Surgeon under him was first placed in charge of it. In 1880, the headquarters of the Residency Surgeon were transferred to Quetta, and the charge of the Kalat dispensary has, since that date, been held by the Assistant Surgeon who is under the control of the Agency Surgeon. The dispensary buildings consisted, in 1903, of one ward of seven rooms for indoor patients; a dispensary and hospital containing 5 rooms including an office store; quarters for the Assistant Surgeon and office, etc. Out of 7 beds for indoor patients, 6 are for males and

one for a female. The dispensary is used by the people of Kalát and the surrounding country, both in Jhalawán and Sarawan, and the political effect of its establishment has been excellent.

MEDICAL.

The total number of patients treated at the dispensary in 1903 was as under:-

Particulars.		Year 1903.	Remarks.
Outdoor	•••	3,982	* These are only important opera-
Indoor		45	tions. Figures for minor operations are not available, as no record has been kept of
* Operations	•••	48	them since 1891.

The average daily attendance of indoor patients has varied from 2 to about 6; and that of outdoor patients during the years 1901 and 1902 was 45.98 and 29.71 respectively.

The dispensary at Mastung is a State institution, in The Mascharge of a Hospital Assistant, and is supervised by the Agency Surgeon, Quetta. It was established in 1806.

tung dispen-

The dispensary is highly appreciated by the local population, and a new building, opened in 1905, provides accommodation for two indoor male patients. It has a large room for a dispensary, an operating room, and quarters for the Hospital Assistant, servants and stores.

The total number of patients treated at the dispensary during 1903 was 4,892 including 2 indoor patients. The total expenditure, including the cost of European medicines, amounted to Rs. 1,578-4-9.

The general health of the district may be said to be good, Prevalent and no part can be pointed out in which disease is specially prevalent. The figures for the Kalat dispensary which are given below, may be taken as generally indicative of the most prevalent diseases. Malarial fever heads the list, and is followed by diseases of the digestive organs, the latter being no doubt due to the coarse food and dirty habits of the people. The water from wells in some of the dry-crop areas is extremely bad, and is also a contributory cause in cases of the latter kind. The natives constantly quote instances of sudden death, which they attribute to the

MEDICAL.

drinking of such water for prolonged periods. The principal diseases treated at Kalát in 1901 were as follows:-

Name of	Name of disease.					
Malarial diseases	•••	•••	***	•••		2,111
Other digestive diseas	es	•••	•••	•••		1,031
Ulcers	***	•••	***	•••		640
Eye diseases	•••		***			6i:
Skin diseases	•••		***	•••	•••	374
Respiratory diseases	***	•••	****	***		37
Dyspepsia	•••	***	•••	•••	•••	26
Local injuries	***	•••	***	***		24
Debility (Anemia)	•••	•••	***	***	•••	21:
Other diseases	•••		***	***	•••	I,44
				Total		7,310

There has been a general rise in the number of patients for treatment, an increase which is apparently attributable not so much to the extension of the prevalence of certain classes of disease, but to the fact that every year the benefits of the dispensaries are more widely appreciated.

Out of the total number of 4,738 patients treated at Mastung in 1901, 3,262 were men, 760 women, and 716 children of both sexes. The most common diseases were:-

Malarial fever	•	•••	•••	•••	812
Ulcers	•••	•••	***		564
Eye diseases	•••		•••	•••	262
Dysentery (•••	•••	•••	213

As only the well-to-do in Kalát and Mastung eat vegetables, scurvy is not uncommon.

Epidemics.

Epidemics are usually small-pox (putav), measles (surkhko), cholera (wabá or dáki) and a remittent fever (bhalla helh), which is possibly typhus (mubárki). Small-pox appears every two or three years, being generally imported by the Brahuis from Sind or Kachhi. In recent times, the most important outbreak of the disease was that of 1901 which affected nearly the whole of the district and caused considerable mortality, especially in Mastung and Kalát. In Kalát the disease was most virulent among the nomad population. It disappeared when the Bráhuis proceeded on their annual migration to Kachhi in the autumn.

A serious outbreak of typhus also occurred in Kalát and Mastung in 1901 simultaneously with the small-pox. The

MEDICAL.

mortality was large. Cholera is rare in the more remote localities, and it has only occurred in Mastung and Mungachar within living memory. It appeared in Mungachar in 1883, but did not spread beyond Karchhap in consequence of the voluntary segregation of the sufferers. Mastung has had three known outbreaks, the first about 1853, the second about 1878, and the last in 1903. latter was a severe epidemic, which extended to Mungachar and Kardgap also. The disease was imported from Quetta and spread as far as Suráb in the Jhalawán country. Kalát escaped owing to the segregation measures adopted not only by the Khan but by the people themselves. number of cases both in Mastung and Mungachar valleys, as reported, were 1092, out of which 648 died. In the Mastung valley the villages which suffered most were those . round Tiri and Pringábád and Sheikh Wásil. Tribesmen, however wild they may be, are not unwilling to do as they are told to prevent an epidemic from spreading, and the natural barriers of the country also help towards this end.

In some localities the presence of shrines, such as those of Shah Abdulla and Pir Jongal in Narmuk, of Chillinga or the 40 saints of Johan, and of Mahmud Gohran in Mungachar, are believed by the people to make those places proof against cholera.

The people care very little for vaccination, its place being taken by inoculation which is known as tukka. Previous to and inocula-1900, vaccination had not been introduced in any part of the district, but a few people were vaccinated in 1901 on the outbreak of small-pox. In 1903, 86 vaccination operations were performed in Mastung, out of which 66 were successful. A sum of Rs. 99-2-8 was spent.

Inoculation is the only means of protection for the bulk of the population. The inoculators are Saiads or people reputed for their religious sanctity, who are sent for when an outbreak of small-pox occurs, and who are paid a small fee which varies according to the donor's means. The rates generally are Ans. 8 for a man and Ans. 4 for a woman. Each tribe has its own inoculator. Thus the Lahri country round Narmuk is visited by the Saiads of Mastung as well as by some of the Saiads of Kiráni near Quetta. The same classes also inoculate the inhabitants of the eastern and central parts

Vaccination

MEDICAL.

of the district, including the Bangulzai and the Kurd countries, and the country round Mastung and Mungachar. The Shahwanis of Iskalku, Kishan, Shékhri and neighbourhood are attended by the Saiads of Nichara. At Kalat the practice is monopolized by one family of Saiads, at present (1904) represented by a lady known as the Bibi Sahib. Her deputy (khalifa) performs the actual operation, after which the lady touches the wound three times with her head dress, the process being known as pallav.

The method of inoculation is as follows: A small incision is made with a razor on the right wrist, and powdered small-pox pustules, mixed with Sal Ammoniac, are inserted, after which the wound is bandaged. If the small-pox does not appear during the first year, the patient is again inoculated in the following year on the left wrist and the pustules appear without fail. An eruption and fever generally occur within three days of the operation. Before the appearance of the pustules, the patient's diet usually consists of dates, as they are believed to hasten the eruption. Another diet is a decoction of juniper fruit, with dry bread, and sheep's lard. Salt is forbidden. After the appearance of the eruption, the patient is given mutton soup with dry bread and a little salt, and is kept closely segregated.

Indigenous Hindus, living in Kalat and Mastung and other places, like the Hindus of India, consider small-pox the visitation of a goddess and do not resort to inoculation.

Indigenous remedies.

The Bráhui quite understands the value of segregation, and the better informed supply a patient suffering from an infectious disease with separate utensils.

The nomads and those living in remote places treat the sick by their own methods, which are not infrequently efficacious. A Bráhui's pharmacy is well supplied with local drugs, and the local amateur physician is called *tabib*. His methods are primitive, and his cures include not only medicines, but branding the patient's body, wrapping him in sheep or goat's skins, and the employment of charms. For these services the operator receives no fee, except the food which is given to all guests.

Charms.

A sick man has a far geater belief in charms than in medicines, which, considering the quality of the latter, is not, perhaps, surprising. When all other measures fail, the

Saiad is called in, and a charm is played. In cases of spleen, a sword is struck lightly on the patient's stomach on a Sunday: in jaundice, diseases of the liver, a red onion with a blue thread in it will be hung on his neck; another remedy is for the Saiad to spit on the part affected. Branding is resorted to in cases of diseases of the liver, lungs, spleen and digestive system; in cases of pneumonia and prolonged fever the patient is wrapped in the skin of a freshly killed sheep or goat, and bleeding is not uncommon in cases of pneumonia, spleen and irregular menstruation.

Indigenous medicines.

MEDICAL.

Experience and necessity, caused by the absence of European drugs, has taught the people the full value of the aromatic and other herbs which grow so profusely in the highlands, and there is hardly a single herb or bush which is not put to some kind of medicinal use. Thus, for malarial fever, decoctions or extracts of the local plants known as (1) bui-mádrán (Achillea millefolium), (2) kalpora (Teucrium Stocksianum), (3) karkáwa (Fagonia Arabica, Linn.), (4) Gwári darnau (Perowskia atriplicifolia, Berth.), (5) Panérband (Withania coagulans) and (6) gul gidar, imported from Makrán, where it is known as gurdir, are all commonly used. The mármutk (Boucerosia aucheriana) plant is also sometimes powdered and taken with cold water.

For sore eyes (baibar), tobacco water is put in the eye. after which an ointment made from gum of the mashmunk (Prunus eburnea) or of the khat (Olea cuspidata) is applied. Another ointment used for this disease is made of a small quantity of opium mixed with human milk and old black molasses.

In coughs, cold (khulla), and pneumonia, a decoction of simsok (Salvia Cabulica) is drunk or the patient is made to inhale the smoke of wet bhusa.

For dysentery (pech) and diarrhoea (dast) dry curds are dissolved in water and administered, or isabghol (Plantago ovata), is swallowed with bhang (Cannabis sativa).

The pice packet system of selling quinine through the agency of the Post office was introduced in 1895, and in of the 3 years ending with March 31, 1904, 2,574 packets were packet system of sale sold at the Kalát, and 644 packets at the Mastung, Post of quinine. office.

MEDICAL.

Village sanitation and watersupply.

Sanitary arrangements are primitive, and in most places non-existent. In Kalat town, heaps of refuse and dirt are piled in the different quarters, whilst litter and filth remain in the houses and screets until they are removed to manure the fields. In Mastung, a few sweepers are employed to clean the bazar and in the vicinity. Some of the more wellto-do men employ sweepers in their houses. In the houses of chiefs and men of position, whose womenfolk observe parda, well privies are used, a very insanitary system said to have been imported from Persia and Afghánistán. sanitation of the villages outside the towns is fairly good, owing to the periodical migration of the Brahui population for the winter, and to their living for the most part of the year in tents (gidán.) As soon as excessive filth has accumulated at one place, the tents are moved elsewhere. The mud houses, too, are abandoned after a time, which accounts for the deserted villages that one finds so frequently. The supply of drinking water is drawn from springs, streams or kárézes, and from wells in the khushkava tracts of Mungachar and Chhappar: Narmuk: Talkhkávi near Isplinji; and in the two northern valleys of Bhalla Dasht and Gwanden. The watersupply from sources other than wells is on the whole good. The Ziarát Káréz in Kalát and Káréz-i-Paddah in Mastung are noted for the excellence of their water.

There is great scarcity of good drinking water in the Zarakhu valley, which is a part of Bhalla Dasht, in the country round Narmuk and the outlying tracts situated in the hills, especially of the Sárán, Nágáu, and Harboi. In these parts, water has to be brought from a great distance, either from wells or springs. It is occasionally taken from pools in which rain water has collected, but is dirty. Cattle and human beings drink and clothes are generally washed at the same place.

SURVEYS.

The Survey Department of the Government of India has prepared and published maps of the whole district on the scales of 1"=2 miles, 1"=4 miles, 1"=8 miles and 1"=16 miles. A map on the scale of 6 inches to a mile has also been prepared by the Survey Department of the coal bearing area in the Sor Range which includes the Digári coal mines.

In 1899, when the settlement operations, to which reference has already been made in the section on Land Revenue, were commenced, Kahnak and a part of the valley including the Dulái valley were surveyed on the scale of 16" to the mile, and a further survey of some more villages to the south and south-west of Kahnak, including a part of Tíri, was made in 1905 on the same scale.

During the operations of 1899, the survey of irrigable lands was made field to field, whilst in case of dry crop areas it was done according to tribal tenures. The survey made in 1905 was of a more summary nature and excluded waste land. Irrigated lands, gardens and cultivated and culturable dry-crop areas were surveyed in blocks. An enumeration and valuation of all houses and trees was included.

SURVEYS.

CHAPTER IV.

MINIATURE GAZETTEERS.

BRINCHINNAU is one of the largest villages in Mungachar, and gives its name to one of the central divisions of that valley. It lies at an elevation of about 5,990 feet above the sea. The village consists of four hamlets called Rahmalizai Shahr, Karamalizai Shahr, Shahalizai Shahr and Lundi Shahr, and is the headquarters of the Shadizai section of the Langav tribe. The place derives its importance from the fact that it lies on the caravan route, formerly much frequented, between Kalat and Kandahar.

The population consists of about 43 families of Shádizai and 6 families of the Allahyárzai sections of the Lángav tribe. All are agriculturists and hold lands subject to the payment of revenue to the Raisanis and Muhammad Sháhis. A náib, appointed by the Raisanis, resides in the village to collect revenue in Mungachar and Chhappar. The village possesses three shops of Hindus; there are four families of Loris. About 1½ miles to the west of the village is Karbukha, known also as Kot or Sardárná-Shahr, where the Lángav chief resides.

About four miles east of Brinchinnau is Mandéháji, the name given to a collection of hamlets, each of which has a separate local name. The most important are the 3 hamlets inhabited by the Malangzai (50 houses), Durrakzai (30 houses), and Bahrámzai (30 houses) sections of the Lángav tribe. Others are Khurásánis (18 families), Muhammad Sháhis (30 families), and Pahlwánzai Méngals (10 families). Mandéháji is the best irrigated part of Mungachar and possesses 14 kárézes. The trade is local and largely in grain. There are six shops of Hindus. The most notable person in the neighbourhood is Saiad Salím Sháh, who is held in great reverence by the people. The Mungachar thána and

rest-house are situated at a distance of about 8 miles from Brinchinnau on the Kalát road.

MINIATURE
GAZET
TEERS.

Iskalku is a villagelying about 7 miles to the east of Kalat in the southern end of the valley of the same name, at the foot of the Harboi hills. It is the largest Shahwani village in Sarawan and forms the headquarters of the Alizai section of that tribe. Iskalku is said to have been granted to Shaho, the ancestor of the Shahwani tribe, at the time when the Ahmadzais came to Kalát. The main features of the village are its shady, thick orchards containing chiefly mulberry and apricot trees, and its terraced fields. An abundant watersupply, used for irrigation, is derived from 7 springs and 1 kárés, of which the most important is the Bhalla Chashma which contains 20 shobánas, divided into 160 pás, and held by a number of holders. The soil is extremely fertile and yields good crops, including tobacco and hemp (bhang). The chars, as prepared from hemp grown at Isk Iku, is considered especially good. There is a good deal of dry crop cultivation in the neighbourhood. To the west of the village in a hill named Chota-ná-lath is a cave called khasánao from the treasure supposed to be hidden in This cave is avoided by the people for superstitious reasons.

The village has (1904) about 158 houses, comprising 120 of Shahwanis, 12 of Nicharis, 7 each of Umaranis and Lahris, and a few more of Bangulzais, Baranzai Mengals and others; there is also one shop kept by a Hindu. The present headman (1906) is K. B. Mir Azim Khan* Shahwani. Other notable persons residing in the village are Mir Kamal Khan, son of the late K. B. Mir Samundar Khan, Lahri, who purchased land at Iskalku and settled there, and Mir Dadi-Khuda, headman of the Sarawan Umaranis.

The village lies on the road from Kalát to the Bolán and tracks lead from it to Nichára and Gazg through the Harboi. The Harboi bungalow at Gíshk is 10 miles east of the village.

Isplinji, the headquarters of the Bangulzai tribe, is a fine valley situated south of the Marav valley. The two are divided by the small hill of Khurban which also separates the Kurds from the Bangulzais. Isplinji, like Marav, is

Died in February 1507.

MINIATURE GAZET-TEERS.

important from its position with regard to the Bolán pass, the whole course of which from near Mach to Kirta is overlooked from the summits of the hills east of the valley, paths enabling the Kurds and Bangulzais to descend quickly into the pass. The distance of Isplinji from Mastung via the Surkh Bájo pass is about 28 miles, and from Kalát via Johán about 50 miles. The total number of houses, including all the scattered huts and hamlets in the whole valley, may be estimated at about The largest groups are those inhabited by, and called after the name of, the Saiadzais (about 30 houses) and Dinárzais (about 40 houses). Both hamlets contain small orchards of mulberry and apricot trees, together with some almonds and The chief and some of his relations reside in a small hamlet called Wadéra-ná-Shahr consisting of about 15 houses and situated east of the Saiadzai village, and close to it is a large mound said to be the ruins of an old Rind fort. The present Bangulzai chief is Wadéra Núr Muhammad. Besides the chief, his relations, and other Saiadzais, a number of Dínárzais, Gwand Badduzais and a few servile dependants also live in the valley. A Hindu bania from Kachhi keeps a shop in the Wadéra's village during the summer. The Koh Badduzais come in the summer with their flocks, of sheep and camels and pitch their tents at the skirts of the hills to the west of Isplinji, their encampments extending to Kábo, Talkhkávi and Zardén Thal in the Kúrd country. On the approach of winter, the whole population of the valley migrates and the villages are deserted by all except a few families of Lángay basgars who stay to look after the cultivation. valley is, on the whole, well cultivated and is divided among the tribesmen in what are known as tir or shares of each For the most part the land is dry crop. clan or takkar. The two principal hill torrents which provide flood irrigation are Kangari from the south and the Tang from the northwest. The valley possesses two káréses called Mutkuna Jo and Nok Io. The principal owners are Saiadzais and Dinárzais in Mutkuna Jo and Saiadzais, Dinárzais, Garránis, Shahozais and Gohramzais in Nok Jo. There is also one well about 30 feet deep which is worked by a Persian wheel and belongs to a Dinárzai named Faiz Muhammad. Before the construction of these kárézes the Chashma, a large spring

MINIATURE Gazetteers.

situated under the spurs of the Koh Siáh, irrigated the lands in Isplinji, but it has been dry for many years. The tomb of Bíbi Lálén, wife of Sakhi Patéhán, the ancestor of the Saiadzais and the patron saint of the Bangulzais, is situated at Isplinji and is held in great reverence by the tribesmen; the Ṣakhi's own shrine lies at Khaisár near Johán.

There is no trade except that carried on by the Hindu traders, and the only industry is the manufacture by the Badduzai nomads of woollen carpets. The passage into the Bolán through the difficult hills on the east lies over the Dilband hill by an extremely difficult footpath which leads to Bárari and thence into the Bolán. A bridle path constructed in 1905 between Kalát and Kolepur via Johán runs through Isplinji. Communication on the west with Mastung has become easy on account of the improvement of the difficult passes which lead over the Játu pass west of Marav and the Ab-i-Gul and the Surkh Bájo passes over the Zahrighat Range.

Johan is a large village situated in the valley of that name on the northern bank of the Sarawán river at an elevation of 5,150 feet above the sea. It is well known for the excellence of its tobacco and has always been important from the fact that the three routes, Kalát-Bíbináni via Narmuk, Kalát-Kolepur, and Nushki-Bolán via Mungachar run through it. It is about 37 miles from Kalát, 43 miles from the railway station of Kolepur, 58 miles from Bíbínáni via Robdár, and 51 miles from Mastung via Isplinji, Umar Dhor and the Surkh Bájo pass.

The valley in which it lies is a highly picturesque one with its terraced fields, abundant irrigation, groves of myrtle, and orchards of mulberry, pomegranate, grape and apricot. The total number of houses is about 70. The majority of the inhabitants are called Johánis and form a portion of the ulus of His Highness the Khán. They are divided into four sections, viz., Alízai, Gwassarzai, Puzh and Sheikh, and number about 40 houses. The headman, Mir Ghulám Murtza (1906), is an Alízai and claims descent from one named Ali, a Durráni Afghán, who is said to have married the sister of Járo, a Puzh Rind of Mir Chákar's time. The remaining three sections are of Rind stock. Other inhabitants are Bangulzais (13 houses), Shahwánis (3 houzes), Lahris (10

MINIATURE GAZET-TEERS. houses), and a few Raisanis. Kambraris and others. population does not migrate during the winter. During the summer, the place is visited by 6 or 7 Hindus from Kachhi who carry on a brisk trade mainly in tobacco and wheat. The soil is extremely fertile and well suited for the cultivation of tobacco, but the amount of land, in proportion to the watersupply, is limited. The sources of irrigation are the Sarawan river and several springs. The Khan levies revenue at one-tenth of the total produce in addition to the cesses called sábiti and náibi on tobacco, and náibi on grain The cesses on tobacco amount to about one seer from every cultivator: while the náibi cess on grain is levied at 1 kása on every kharwar. The revenue is, however, usually leased in conjunction with that of Gazg in Inalawan for a term of years to a contractor called ijáradár, whose authority is confined to the collection of the revenue and the control of the Khán's cattle-pound. He is, as a rule, represented locally by one of the cultivators. The contractor pays annually to the Khan 60 gunis* of rice and 60 gunis of barley for the revenue contract of Johan and Gazg combined. The headman of the Johanis is exempt from revenue in respect of his holding. Land at Johan has been acquired purchase in recent years by the Lahri and Bangulzai chiefs. These chiefs have hitherto held these lands free of revenue, but the question of their assessment was raised by the Khan's contractor in 1905. The Bangulzai chief irrigates his land from the water of the Khaisar spring about 2 miles west of Johán.

The village possesses several shrines, the principal of which are those of Bibi Názo, Sháh Dáho, Bughdi Shahíd and Bíbi Nékzan, all of which have been mentioned in Chapter I. Of places of archæological interest may be mentioned the Takht-i-Sulaimán, which consists of the ruins of an old fort on a hill about 3 miles east of the village, and several long graves which are found scattered in the valley, the most important group being that of six situated in the stony plain east of Johán.

Kahnak. The locality bearing the name of Kahnak has a local importance from its connection with the Raisanis and Rustamzais. It is a prolongation of the

^{· •} A gúni is equal to 50 kásas.

Mastung valley in its north-western end and lies below the south-western skirts of the Chiltan hill. The villages comprised in it are 16 in number, each known by a separate name. Kahnak proper is locally called Kahnak Khali, and stands on the north side of a conspicuous mound, on which is an unfinished fort commenced by the Khan of Kalat in 1874 to overawe the Raisanis, but which is now in ruins. Kahnak Khali has about 130 houses and two Hindus' shops. The indigenous inhabitants are known as Kahnakis and affiliate themselves nominally with the Sarparra tribe, but for all practical purposes are included in the ulus of His Highness the Khán, and their headman is designated as malik. residents in Kahnak Khali include Rodénzai Sarparras; Rustumzais; Lallazai Sheikh Husainis; and Dodai Muhammad Shahis. The spring has a copious supply of water divided into 13 shabánas and irrigates (1905) 926 acres of land, including 2 acres under gardens. The total area irrigated in the Kahnak valley from 25 káréses and 4 springs was found (1905) to be 9,560 acres, including 69 acres under gardens. The largest sources of irrigation include Chashma Kahnak (926 acres); Káréz Guldahan (635 acres); and Káréz Darwázi Kalán (570 acres). The most important of the remaining villages are situated to the east of Kahnak Khali, the two largest being Bábkári, which contains about 150 houses, and Shahr Sardar Ghaus Bakhsh (about 100 houses). Perhaps in no other part of the district is the population so divers as in Kahnak. In Bábkári live the Bábkáris who claim to be Méngals; also Garr Sásolis; Summaláris; Badduzsis; Raisánis (Jamálzais); Zagar Méngals, and a few Shahizai Méngals and others. Shahr Sardar Ghaus Bakhsh is the principal Raisani village and its inhabitants are Rustamzais, Sarájzais, Pandránis, Bullozais, Shoránzais, Somálzais, Ráhusainzais, and Zangizais besides some Sheikh Husainis, Lahris and others. All are engaged in agriculture. The hamlet of Sardár Bakhtiár Khán, the Rustamzai chief, is situated about 2 miles northeast of Kahnak proper and possesses about 15 houses. As related in the section on Population, much friction has existed in the past between the Raisani chief and the Rustamzais. Owing to their constant disputes, the Raisani chief, who resides at Mithri in Kachhi, was in 1896 forbidden

MINIATURE GAZETTEERS.

MINIATURE GAZET-TEERS. by the Agent to the Governor-General with the concurrence of the Khán to interfere in Kahnak and the Rustamzais to visit Mithri. This order is still (1907) in force. In 1899, a Survey and Record of Rights was made of their respective lands in Kahnak. In 1904 between the months of April and August the telegraph line between Dhingar and Soru was maliciously cut five times, but notwithstanding the endeavours made, the perpetrators of the offence were not traced.

The Kahnak Rest-house at Tiléra on the Quetta-Nushki road is about 2 miles west of Sardár Bakhtiár Khán's village at the foot of the Mashélakh hills. It is 32 miles from Quetta and about 16 miles from Mastung town. The Kahnak railway station about 4 miles from Kahnak Khali.

Kalat, the capital town of the Kalát State, is situated in 29° 2'N and 66° 35' E, at a distance of 881 miles south of Quetta and is 6,783 feet above the sea. It is known. to the natives as Kalát-i-Baloch and Kalát-i-Séwa; the former to distinguish it from Kalát-i-Ghilzai in Afghánistán, and the latter from its legendary founder. Its population was about 2,000 persons in 1901. The inhabitants are chiefly the Khán of Kalát's troops and his retainers; the remainder include Hindu traders, of whom there are 50 or 60 families, some 12 families of shoemakers, of blacksmiths. The town occupies a spur of the Shah-i-Mardán hill on the west of the Kalát valley and is in a state of dilapidation. A wall surrounds it, with ten bastions at intervals, each having a separate name after the section of the Dehwars which is required to keep it in repair. Its three approaches on the north, south and east are known respectively as the Mastungi, Gilkand and Dildar gates. Outside the wall are the three suburbs known as Pasi-i-Shahr, Rú-i-Shahr and Khél or Bábi Khél. Commanding the town is the miri, or citadel, an imposing structure in which the Khán of Kalát resides. It has five storeys and has a fine view of the valley and the juniper ranges of the Harboi hills beyond.

Below the citadel lies a Hindu temple of Kali, probably of pre-Muhammadan date. The marble image of the goddess, holding the emblem of plenty, stands in front of two lights which are perpetually burning and for which oil is

supplied by the State. A large stone forming the plinth of the guard room of the Dildar gate bears an image of Shiva.

MINIATURE.
GAZETTEERS.

Beyond the fact that he was a Hindu and that he has left traces in the Bilav-i-Séwa or Séwa's peak in the Chágai District and that a section of the Dehwars of Kalat is still known as Séwazais, nothing is known of the founder of the town. Kalát fell into the hands of the Mírwáris about the 15th century, since which time it has remained the capital of the Ahmadzai Khans. The tomb of Manday, the Mughal governor from whom the throne was wrested by the Mirwaris with the help of the Dehwars of Kalat, is situated near the Mastungi gate. Some describe Manday as a Baloch. In the Ain-i-Akbari. Kalát and Nichára are mentioned as one district under the title of Kalát-i-Níchára. 1758, Kalát withstood three assaults by Ahmad Sháh, and in 1839 during the first Afghan war was taken by the British under General Willshire when Mehrab Khan. the ruler, was slain. The Mastungi gate still bears the marks of the British cannon. A year later, Mehráb Khán's successor Shah Nawaz Khan was ousted and Kalat surrendered to the Sarawan insurgents.

There are no important industries, but silk embroidery of a superior kind is done for home use. The trade of the town is chiefly retail business. In pre-British days Kalát was an important centre of trade and caravans passed through it from Afghánistán to India. A large population of Bábi, Bábur and Núrzai Afgháns lived at Kalát, but have deserted the place in recent years owing to the decline of trade. Some Jews also lived there as jewellers and traders in silk cloth up to the time of Nasír Khán II. Taxes on trade are levied by the State by a system of contracts which is described in Chapter III. No sanitary arrangements exist, and the town is in a dirty condition. The watersupply of the inhabitants is from wells.

About two miles north of the town is the Residency and other buildings known to the natives as *chhávni*. The principal buildings include the Residency, the Political Agent's Office, Post and Telegraph Office, Rest-house, military lines, and the Political Adviser's house. Except the ast named, which is a State building, the rest have been

MINIATURE GAZET-TERRS. constructed by the British Government. A dispensary maintained by Government is located outside the town.

Maray or Marao is a fine valley situated north of the Isplinji valley and south-east of the Bhalla Dasht. about 8 miles long and 6 miles broad and lies at an elevation of 5.506 feet above the sea. The valley is inhabited by the Madézai, Phullánzai, Hájizai, Karmuzai, Zardárzai, Masúdáni, and Gorgézai sections of the Kúrd tribe. As already said in the description of Isplinji, the valley is important owing to its rosition with regard to the Bolan pass. valley is entirely surrounded by hills and is a basin with no drainage exit. On the north of the valley is a depression where water collects after heavy rains forming a small lake which abounds with waterfowls of various description. Bordering on this lake is a long narrow strip of land called Chaman. about 4 miles long and 100 yards wide, lying in the form of a crescent. A grass locally called bhunnu grows on it in great profusion and its roots are dug by the people in the autumn for use as fodder.

There are four villages in Maray, viz., Shahr Sardar Yar Muhammad, containing about 40 houses in three hamlets: Mír Yusuf Khán, containing about 30 houses in two hamlets; Shahr Khair Bakhsh possessing about 28 houses: and Shahr Vatar Khan with about houses in two hamlets. The first three are situated close to each other within a radius of about a mile, while the fourth is about a mile to the north. The name Marav is, strictly speaking, the designation of the whole valley, but is more appropriately applied to Shahr Yusuf Khán. A bungalow of modern style has been built by Sardar Yar Muhammad in his village, but the chief generally resides in Gwanden. In Yusuf Khán's village there are 4 shops belonging to Hindus engaged in the local trade and I of a Hindu goldsmith. About 16 families of Purtoszai, Mazárzai, Jongalzai and Patéhanzai Lángavs reside in Khair Bakhsh village and are engaged in the cultivation of lands as tenants. Pírkáni and Sahtakzai nomads pitch their tents in the valley during the summer. The inhabitants of the Marav valley live by agriculture and flock-owning and by selling firewood in Mastung. Cultivation in the valley has increased a good deal of late years. The land is for the most part

MINIATURE GAZET-

The only source of permanent irrigation is khushkáva. one kárés excavated at great cost by Sardár Allah Dinna. grandfather of the present chief. Out of a total of 21 shabánas into which the water is divided, 17 are held by the Kurd Sardarkhels. There is also one well worked by a Persian wheel, which was started in 1904, and three springs, viz., Chakkul, Phoghi and Bhalla Jo. The watersupply of these is, however, uncertain and they are often dry. The crops include wheat, juári, lucerne and some potatoes. Supplies in small quantities are procurable without much Drinking water is obtained from the kárés. There is also one well in Yar Muhammad village and 6 in the ands called Mall, about 2 miles to the south. The former is about 22 feet deep and the latter about 60 feet. Two ancient mounds are situated to the south of Yar Muhammad village and on one of them the Kurds have now a graveyard. Seven long graves, said to be those of companions of the Prophet who were killed in fights with the infidels, are situated in the Lop lands in the north-eastern prolongation of the valley. Communication with Mastung and Kolepur has been facilitated by the construction of bridle paths and by the improvement of all difficult passes, including the Marav Khand on the way to Kolepur, and the Játu (7,265 feet), Surkh Bájo, and Ab-i-Gul leading to Mastung. Kolepur, the nearest railway station, is about 16 miles to the north. difficult footpaths cross the hills on the east to Khajuri through the Machhi pass. There is very little local trade. except that passing in transit from Johan to Kolepur, and there are no local industries.

Mastung, the second town in the district and the headquarter station of the Kalát Political Agency, of the Political Adviser to His Highness the Khán and of the local niábat, lies in 27° 48′ N. Lat. and 66° 47′ E. Long. The town is situated about 14 miles from the northern end of the fertile valley of the same name at an elevation of ,590 feet above the sea-level. Mastung possesses a most salubrious climate and is noted for the excellence of its fruits and of the wheat grown in the valley. It is connected with Quetta and Kalát by a metalled road, and is distant from those places 33 and 55½ miles respectively. Six miles to the north of Mastung is the Mastung Road (locally known as

MINIATURE GAZET-TEERS. Wali Khan) station on the Quetta-Nushki branch of the N.-W. Railway.

The town proper possesses about 300 houses and is enclosed by a wall. It is entirely surrounded by gardens. and orchards protected by mud walls about 6 feet high. has a moderately well-supplied bazar of about 30 shops kept by Hindus. There are also the officials of the nidbat establishment, 5 or 6 families of Dehwar goldsmiths, and 2 shops of a baker and a butcher. The indigenous inhabitants of Mastung are Khwaja Khél and Zar Khél Dehwars, Saiads and Mullazais. The Arbab or the principal headman of the Dehwars resides in the town. The chief State buildings are the recently constructed miri or palace of the Khan; the niabat office; the thang with a jail attached to it; the dispensary; the levy lines and a primary school (established in 1905). The principal mosque lies in the west of the town. The idgáh is outside to the north of the town and is a low-walled enclosure. Except the resthouse which lies to the east of the town, all the Government buildings are located in the west and include the Political Agent's house, completed in 1903-4, the Political Agent's office and quarters for his clerks, Post and Telegraph Office, the Assistant Politcal Agent's house and the house for the Native Assistant. Sarawán.

The present town, according to Masson, who visited the place in 1831 and again in 1840, is affirmed to represent the ancient city of Arangábád, whose site was pointed out to him a little to the east or north-east of the present town, but no trace of this is visible now (1906). Another name of Mastung which is traceable in some of the sanads issued by the Ahmadzai Kháns is Khudábád. said to have been given by the early Ahmadzai Khans, but is never used now. The most ancient of the present inhabitants of Mastung are the Chamkazais and the site of their village is south-west of the present town. Two ancient mounds are the Sampur, about 4 miles west of Mastung, and Sufed Bulandi, about 5 miles north-west. To the south-west of the present miri is the site of the old citadel which was destroyed by Ahmad Shah. Masson in 1840 describes the town as containing about 400 houses surrounded. with a crenated wall and governed by Muhammad Khan

Shahwani on behalf of Shah-Shuja-ul-mulk, who had given him the title of naib with a salary of Rs. 200 per annum. It was to Mastung that Lieutenant Loveday and Mr. Masson were taken after the revolt of the Sarawan chiefs which placed Nasir Khan II on the masnad. In 1876, Sir Robert Sandeman negotiated here the settlement between Mir

hán and the Bráhui chiefs.

Khudádád

MINIATURE GAZET-TEERS.

Beyond the silk industry, which has already been referred to under Arts and Manufactures in Chapter II, and silk embroidery which is executed for home use, there are no other industries. The trade is in the hands of the Hinlu shopkeepers under the supervision of a panchayat. The imports consist mostly of piece-goods for use in the town and neighbourhood. The principal exports are wheat, melons and almonds. Taxes are levied on the trade by the State. Five sweepers, under the supervision of a Hospital Assistant, are employed on sanitation, and the watersupply is obtained from . árézes. The two largest káréses are Bahrám Sháhi and Tindlán, which flow past the town from east to west. A number of villages and hamlets are situated round the town on the various sources of irrigation. To the east of the town are Pir Kanu (15 houses); Tindlán (25 houses); Bahrám Sháhi (20 houses); and Saulai (20 houses). On the north are Sheikha (100 houses in five hamlets.): Sheikh Taghé (20 houses); Káréz Miáná (30 houses); and Dand houses). The majority of the inhabitants are Dehwars of the Abizai, Trákhar, Dádrizai, Saulai and Sheikh sections. .The remainder are Lahris, Kurds, Garranis, Shahwanis and servile dependants. The Shahwani chief lives at Mári, a small village of some 20 houses Hájizai and Ramandánzai Shawanis fying about 2 miles north of Mastung. The Muhammad Sháhi chief resides in a small village east of the town called Muhammad Shahi. It contains about 30 houses of Ahmad Khanzai and Bambkazai Muhammad Sháhis. About 6 miles north of Mastung are situated the two large villages of Tiri and Pringábád. Each is the headquarters of a patwári's circle of the Mastung nidbat. Tiri contains about 150 houses and Pringábád about 200. The inhabitants are Dehwars of several sections and are known as Tirchis

Miniature Gazetteers. and Pringábádis respectively. Special mention may be made of the Saiads of Tiri, the most influential of whom is Saiad Muhammad Zamán, son of Saiad Muhammad Sharif, mentioned in Chapter I. In general appearance the two villages have little to distinguish them from Mastung. are walled and surrounded by gardens and each possesses a small bazar consisting of a few shops of Hindus. was formerly much grown at Tiri, but the cultivation has lately been replaced by that of potatoes and onions. The Mobi supplies the largest amount of irrigation to Tíri, and Pringábád has several kárézes, the largest ones being the Káréz Kandki and Káréz-i-Kalán. It was at Pringábád that-Nasír Khán I totally routed the Afghán army sent by Ahmad Shah to chastise him for declaring independence in 1758. An encounter also took place near here in 1840 between a body of Brahui insurgents and a British force, resulting in the defeat of the former and the submission of Mastung. Two hamlets reckoned with Tiri are Rék (15 houses) and Sarband (35 In the latter lives the principal Tirchi headman, Malik Badal (1906). Kandáva is another large village, about a mile west of Tiri. It contains about 150 houses, mostly of Tirchi Dehwars and the shrine of Sheikh Lango, a local saint of considerable repute. The Quetta-Nushki Railway runs close past these villages.

Narmuk is a large valley in eastern Sarawán, inhabited by the Lahri tribe. The main valley lies immediately east of the Sarun hill and west of the Nagau range which separates it from the plains of Kachhi. A branch valley, the Drang, which farther north is called the Lop, runs northward parallel to the Nágau Range. In its general aspect the whole tract is most uninviting, marked by an entire absence of trees and with few villages. Of the latter the most important are Hasanjoi, Takht and Rékgwásh. Hasanjoi is about 13 miles from Johan and is situated in the Narmuk valley. The village was established by the late Sardar Dost Muhammad Khán, father of the present Sardár Mír Bahrám Khan (1906). It consists of some 10 huts and the Sardar's residence or kot, which is surrounded by a high mud wall. Takht, also called Takht-i-Muhammad Khán, a very old vlilage, was founded many generations ago by Sardar Muhammad Khán, the ancestor of the Lahri Sardárkhéls. It contains about

MINIATURE GAZET-TEERS.

30 houses and is situated at the foot of the Sárún, about 3 miles south of Hasanjoi, and was formerly the headquarters of the chief. Rékgwash is situated in the Drang valley at a distance of about 7 miles from Takht, at the foot of the Nágau Range, and consists of some 40 houses. inhabitants of Hasanioi and Rékgwásh are Zobéráni Lahris and those of Takht are Bráhímzais. During the summer, three shops are opened at Hasanjoi by the Hindu traders of Sanni. The Lop valley is inhabited by the latoi and Koh-Kullois The majority of the remaining inhabitants of the tract are Lahri nomads. The whole tract is very deficient in water. At Hasanjoi drinking water is obtained from a few springs about 2 miles to the west; at Takht from three wells from 18 to 24 feet deep, and at Rékgwash from Robdar about 4 miles off. To the west of Rékgwash there is a large pool called Nasli, where water collects after heavy rains and is used by the population. The road from Kalat to Bibinani passes through Narmuk halting stage is about a miles and Gétáni. the north-east of Hasanioi. There are a few small springs at Gétáni. Two attempts have been made to dig kárézes from the skirts of the Sárún hill, but without success. The káréz last excavated, about 1899, at a cost of about 12,000 rupees by the late Sardár Dost Muhammad Khán to irrigate lands at Hasanjoi, worked for three years and then dried; most of the wells have since fallen in.

The tribal graveyard of the Lahris is about 1½ miles east of Hasanjoi; it convains the graves of the Lahri chiefs and among others of Mir Fazal Khán, who was killed at Kalát with Mir Mehráb Khán II in 1839 and is regarded as a saint. His grave is visited by people suffering from intermittent fever (sehlákhi). Other important shrines are those of Sháh Abdulla in the Diang valley and of Pír Jongal on the road to Gazg. The Níchári-Lahri grave ard north of Hasanjoi marks the site where these two tribes fought with each other in old times with great bloodshed. Other places of archæological interest are the ruins of a fort at Pudgili and several gabrbands scattered throughout the valley. Of the latter the most important is called Dehwár Kushta and lies on the road midway between Johán and Hasanjoi. The Sárún plateau on the west is ascended by

MINIATURE GAZET-TEERS. footpaths from Hasanjoi, Takht, Doséh, Hanári and Gurgina. On the east, the Nágau Range is crossed into Kachhi by five difficult tracks, one leading from Lop to Dádhar over the Bhaur and the remaining four to Sanni over the Nágau hills.

Shirinab is the name applied to the northern portion of the valley which extends from Kanéti northwardsi to. the point where it opens into the Mastung plain. southern portion of the valley is called Zard. forms part of Mastung, and Zard of Mungachar. The total length of the valley, including Zard, is about 24 miles with a breadth of from 11 to 21 miles measuring from base to base of the mountain ridges which enclose it on the east and west. The possession of Shirinab is divided between the Muhammad Sháhis on the south and the Khán of Kalát on the north. Owing to the stony skirts of the hills cultivation is confined to the banks of the river. The valley is well irrigated. The sources of irrigation include 8 kárézes and I spring held by the Bráhui tribesmen and 4 kárézes, 2 springs and I stream subject to the payment of revenue to In the tribal portion, the principal proprietors are the Muhammad Sháhis, but Méngal, Raisáni, Kambrári, Shahwani, Kulloi, and Bangulzai tribesmen have also acquired small shares by purchase or by investment of capital in kárézes. The tract contains 8 villages, the largest being Kanéti (50 houses) situated about 1 mile east of the Shirinab river. It is inhabited chiefly by Muhammad Shahis (20 families) and Mengals (24 families) with a few Shahwanis, Raisanis and others. All depend on agriculture combined with flock-owning. The present headman (1004) is Shádi Khán Súrozai Muhammad Sháhi. is one of the few Brahui villages which will be found inhabited during the winter. A Hindu trader has a shop there and collects ghi, wool, and carbonate of soda (khár) for export. There is a good deal of cultivation. Irrigation is from 3 káréses and the principal crop is tobacco which flourishes well in the whole valley. Khushkáva cultivation in small tracts along the skirts of the hills is practicable after good rains. Three footpaths lead to Kardgap over the Rodangi, Garrae and loak hills respectively on the west; the range on the east is crossed into Khad by a track through the Chhuttok pass.

ZARD.

239

Of the remaining villages Shírínáb, a small village at the northern entrance of the valley, derives its irrigation water from the Shírínáb river and is owned entirely by the Khán. It contains about 10 houses of Súrozai Muhammad Sháhis and Sheikh Dehwárs who cultivate the Khán's lands.

MINIATURE GAZET-TEERS.

Zard is the name commonly applied to the southern or that part of the Shirinab valley which is populated by the Lángavs. It is reckoned with Mungachar and extends from the two Kulloi villages of Músazais and Karímzai in the south, to the khushkava tracts of Chhori and Rodangi in the The Mastung-Panjgur road runs through the tract. The locality derives its name from a kárés of the same name and has an extensive irrigated area, watered by 25 káréses. The total number of villages is 21, the principal ones being Shahr Ghulám Ján (55 houses), Músazai and Karimzai (30 and 25 houses respectively), Burjalizai (30 houses), and Lori-tá-Shahr (20 houses of Loris), all situated at the foot of the hills on the east of the valley. On the west side of the valley are Sálárzai (30 houses) and Khúni (26 houses). The inhabitants are mostly Lángavs of various sections. The largest and chief village is Shahr Ghulam Ján, which has four shops kept by Hindus. Two dyers also carry on business here. Excellent crops are raised in Zard, especially tobacco, lucerne and melons. Tobacco is exported to Makrán in exchange for dates. The trade is mostly in grain and is in the hands of the Hindu traders. Caravans passing through the valley usually halt either near Burjalízai, Patéhánzai or Shahr Ghulám Ján. The Shahwánis possess revenue rights in respect of a part of the land irrigated by the Zard and the Nok Jo kárézes and the Méngals in those of Sohro and Phidri. The Khan holds proprietary shares in the kárézes of Dháiwál, Phidri, Máiwál, Sohro, Sabzáh, and Zahrowál, and the Khárán Chief, Sir Nauroz Khán, has inherited shares from the late Mustaufi, Fakír Muhammad, in those of Zard, Phidri, Khuni, Sabzab and Sodawál.

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SARAWAN GAZETTEER. APPENDICES.

List of Appendices.

- I. Alphabetical List of Agricultural, Flockowners' and Revenue Terms in Kachhi, Sarawán and Jhalawán.
- II. Statement showing káréses, springs, &c., in Sarawán (1903).
- III. Report on sericulture in Mastung, by Major H. L. Showers, I.A., C.I.E. (1966).
- IV. Lists of Principal Routes.
- V. Travellers' Bungalows, &c., in Sarawan (1905).
- VI. Instructions dealing with the Duties of the Native Assistant in Sarawan and regulating his relations with the Political Adviser in Kalat.
- VII. Statement showing the men-at-arms supplied by the Brahui tribes in Sarawan.
- VIII. Statement showing Rates of revenue paid in various Crown Lands in Sarawan.

APPENDIX I.

Alphabetical list of Agricultural, Flockowners' and Revenue Terms in Kachhi, Sarawán and Jhalawán.

Terms used in Kachbi (Jatki).	Terms used in Sarawán and Jhalawán (Bráhui).	Explanation.
Abád sál	Abád sál	A year in which there has been a favourable rainfall and the crops are good.
Abádkár or Ráhak	Bazgar or Bazghar.	A tenant who brings land under cultivation.
Abu	Abos	Ears of wheat, juor and maize when half ripe, also purched grain and half ripe melons.
Achha Karna, dhalli, or Karai Karan.	Táho-tinning	Winnowing.
Adh, réj or rés	Namb	(i) Irrigation at sowing time. (ii) A field is adh when the water has been fully absorbed and the land is fit for ploughing.
Adhambári or nisf ambár.		Land, half the revenue of which has been granted to a jugirdur by the State.
Ahat :	Ahat	The system under which village servants, such as carpenters, etc., are employed and paid in kind at each harvest.
Aitha or thála	******	(i) Irrigated land which has remained fallow for a certain number of years, generally two. (ii) In some places the term is used for irrigated lands generally.
Ajjar, dhanr or mégar or rama (B dochi),	Kur or Khur	A flock of goats or sheep.

Terms used in Kachhi (Jatki).	Terms used in Sarawán and Jhalawán (Bráhui).	Explanation.
Ambár	Ambár	A heap of grain, a granary.
Angari	*** 100	A disease affecting wheat.
Arbáb	Arbáb	A village or circle official who is charged with superintending the cultivation, the construction of dams and the division of water.
Arbábi	*******	Payment made by cultivaters to the arbab.
Arhari or chétri		Crops sown in spring and reaped by June.
Asiáb or jandrah	Asiáb	A watermill.
Athog, samm, milki- yat, haqulard, sam- mulard, haq-i-topa. Zamindari and topa.	Bohtári, Bohar or tula (Jhalawán).	The share of produce paid by a tenant to the proprietor of the soil. The amount varies, but is generally ath, whence the name.
	Avidún	The well of a Kárés.
Bádsháhi trappar or gham.	<u></u>	Lit: The King's rug or carpet. Distribution of yokes and labour, &c., which are required for the construction of dams in river beds, &c.
Bagg	*****	A <i>juar</i> disease caused by a southerly wind in October.
Bágh	Bágh	A garden.
• •••••	Bághcha	A small garden.
Báhiti	•••••	A cotton plant which has lost its petals.
******	Báhu, puli	A sheaf of wheat or barley.
Bair, Séri		In flood crop areas, a very large tract of embanked and cultivated land having no subsidiary dams. Larger than the gáhn and banna (q. v.)

Terms used in Kachhi (Jatki).	Terms used in Sarawán and Jhalawán (Bráhui)	Explanation.
•••••	Balkh	A disease from which melons suffer.
Band or banna, ban-	Band or lath	An embanked field. Larger than gáhn (q. v.)
Bár, ráh or khori	(i) Khori	(i) Small heaps of winnowed and cleaned grain made at the time of batái.
	(ii) Johán or zágh	(ii) The whole heap of winnowed grain.
Bára	Kurda	An irrigable plot.
Basta (Dádhar)		Fodder revenue permanently fixed on shares of water in irrigated lands, generally by the bullock load.
Batái, Sarkári	Batái	Division of produce, also revenue demand.
Bazgar	Bazgar or bazghar	A tenant.
*****	Bélum	A small pen in which kids are kept.
, *****	Bént or Kachh	A flat or tract of land in the bed of a stream.
Bét	*****	Silt in river bed.
Bhákhul or bhákur, sathli or sathri and káhin.	Púli or píli	A small sheaf of juár or wheat when cut and lying in the field.
Bhándur or gassar	, · , ppo 148	Soil which has sand and clay mixed.
Bhánga	*******	Small heaps of winnowed and cleansed grain made at the time of batái.
Bháni	*****	Cotton picking.
Bhannar, Kána or Karab.	Karab	Stalks of judr.
Bhánr	******	Cattle manure.

Terms used in Kachhi (Jatki).	Terms used in Sarawán and Jhalawán (Bráhui).	Explanation.
Bhánrán		A cattle pen.
Bharti or dag-karan.	•••	Measuring the grain heap for bathi.
Bhathi or Khand	*****	(i) Alarge breach in an embank meet. (ii) Sheet used in indigo manu- facture at Dádhar.
Bhoh, boh or bhun	Pug or Phug	Wheat chaff.
Bhunjo or puan and paun pati vatra.	Khákáwa	Second watering.
Віјј	Tughm or tumgh	Seed.
Bit	•••••	Ears of judy in which a few grains still remain after threshing.
Bohtár	Bohtár	Landlord.
Bosi or thadda and datha (Bhág Nári).	- n	Sproutings of juár stubble which have not received irrigation as distinguished from arhari which has received irrigation. A system cy which inferior soil
		is artificially improved by deposits of silt.
Búhari or <i>adhi</i> and sannahri.	Búhari	A water divide for irrigation purposes.
Bukhra	100000	A disease of young juar plants caused by heat in August,
Buzgal (Baluchi)	Buzgal	A flock of goats.
Chashma	Chashma	A spring.
*****	Chakul	A small spring.
Chat (Shorán)	*****	The watering of the wheat crop shortly before harvest to keep the stalks erect.
Chél or dhák	•••••	The juár crop when a little over waist high.

Terms used in Kachhi (Jatki).	Terms used in Sarawán and Jhalawán (Bráhui).	Explanation.
Chhat or chhat khér	Chhat	Broad-cast sowing.
Chhér		Assembly of cultivators for the protection of a dam on the approach of floods.
Chong or chonk gal- phár, nisri, nisarna or nisára.		The just crop when the ears first begin to sprout.
•••	Chúchik	Flowers of the tobacco plant.
Dáchi	Dáchi	A female camel.
Dag (Gandáva)	•••••	Road cess.
****	Dági	A kind of inferior soil.
Dáhni (Khári)	*****	The water and irrigated lands paying revenue to the Khán.
Dáho yáhri		Lit. one-eleventh. A concession made by the State or jagirdar from the revenue share of the grain heap to a proprietor for the reclamation of waste land.
Dámán or pat or potho.	•••••	Hard clay waste land beyond the reach of floods.
Dánabandi or Kantra	Dánabandi	Appraisement of crops for purposes of revenue.
Dánd or Kárigar (Baluchi).	Kharás	Bullock.
Dás or míd (Baluchi).	Drassam	Goat hair.
Dasht-i-amwat, pat patchir or potho.	••••••	Documentary term used for hard clay soil lying beyond the reach of flood water.
Dédha or dídh	Did	The stage which juir and wheat reach when the ears first begin to form, but have not burst.
Déra, rah, bár or neh.	Johán or kharman	The threshing flcor, also heaps of cut crop.

Terms used in Kachhi (Jatki).	Terms used in Sarawán and Jhalawán (Bráhui).	Explanation.
Dhaggi or gaun	Daggi	Cow.
Dhanrwál	Shoan or Shwan	A shepherd or goatherd.
Dhara, dharo or puri	Johán	(i) An unwinnowed heap of
		corn. (ii) The heap of bhúsa plastered with mud.
Dhéra	******	A bundle of wool spun into thread.
Dhéri	Khori	Heap of grain made for purposes of batái.
Dhor	,	Cattle.
	Dhor	A flood water channel in plain.
Dhung	•••••	A pair of juár ears. The wages of crop cutters are generally calculated by dhung, generally 12 per diem.
*******	Dhuttur	A variety of juári in Bághwána.
Dohánri-piwánri	Déru	Milch sheep or goat given on loan.
******	Dor or dhor	A stream.
Dohar		Second ploughing.
Dukál	Dukkál	Drought; a year of scarcity.
Dumbi or ridd	Mélh	Sheep.
	Dún	A well.
Gába or gab		Juár or wheat before the ears open.
Gáh or ghá karna gáhn and gopat.	Go-at, Gobat, or Gowat.	Threshing.
Gáhn or panni		A small embanked field for irrigation by flood water.
Galla		A herd of male camels.

Terms used in Kachhi (Jatki)./	Terms used in Sarawán and Jhalawán (Bráhui).	Explanation.
****	Gálicha 🚥 🚥	A kind of millet.
Gánar or trikhar bhága.	******	Juár stalks when three-leaved, and about 4 to 6 inches high.
Gandha	Gandho	A large dam across a river. A smaller dam is called wakra.
Ganwál	******	A cow-herd who tends cattle be- longing to several owners (as distinguished from dhanrwal.
	Garar	System of sowing seed by drill in dry crop land during late winter rains.
Garpi	•••••	Sowing cotton seed in lines by pinches.
•••••	Garmséli kholum	A variety of wheat originally obtained from Garmsél in Afghánistán.
Gash-gad-phitti-ka- ran, or Jhang- máran.		Clearing land.
******	Garr	A camel disease, itch.
Gham	Gham	The system under which lands are held by tribesmen in return for supplying men-at-arms to the Khan of Kalát
Gidra	Galau	Sweet melons.
Godi or Kámba	******	Weeding.
Gogra	• an	Cotton boll.
•••	Gomána	The trial well of a kárés.
Gúna	*****	Oil-seed chaff and stalks.
Gundi	Kúhli	Earthen receptacle for grain. Smaller ones are known as gundara.

Terms used in Kachhi (Jatki).	Terms used in Sarawái and Jhalawán (Bráhui).	n	Explanation.
•••••	Gwaz	•••	A branch channel for the distri- bution of flood water.
Habúb, habúbát, le wázima or rasúm.	Lowázima		Subsidiary recoveries or cesses levied in addition to the fixed share of revenue.
******	Habaira or soi	•••	Land which lies fallow for one year.
Haldari	*****	•,	Mustard crop when fully ripe and still green.
Hal wahána or ha waháwan and ha wáhna.			Ploughing.
*** ***	Hankén		A pen for flocks.
Hindwána	. Kútikh		Water melons.
******	Hét		A goat.
******	Hízak		A leather skin for keeping milk (mashak).
Ijára	. Ijára		 (i) Lump assessment. (ii) Lease or contract. (iii) Payment made by contract for any agricultural undertaking. (iv) Appraisement of crop; system of land mortgages.
Inám or jágír			Grant of revenue-free lands.
Jálár or arhat	 .[]alár		Well worked by Persian wheel.
Jandráhi	. Asiáwán		Miller.
******	Jaulúshtak		A variety of barley.
Jo	Jo		A water channel from a stream.
Jora	•		 (i) A pair of bullocks. (ii) The land cultivated by a pair of bullocks for one harvest.
•	Jopák		Spring harvest.

Terms used in Kacl (Jatki).	nhi	Terms use in Sarawán and Jhalawán (Bráhui).	Explanation.
**		Káhchar	Pasture ground.
Kakra	•••	*****	Cotton seed.
Kála páni or Sia or siáháf.	íháb	Siáháf	. Permanent source of irrigation.
Kallar	•••	Kallar, Kallarbas or Shorábast.	t Saline soil.
Kánbél	•••	•••••	Depressions below the embank- ments in which til is generally sown.
Kángar	•••	······	(i) Wheat stubble. (ii) Green barley stalks from which grain has been extracted and used as fodder.
Karáwa (Bála Ná	iri).	Toho	A crop watcher.
Káréz	•••	Káréz	Under-ground water channel.
Káréz Kash	•••	Káréz Kash	Professional kárés diggers.
•••••		Kas (Bal. pashm)	Wool.
	•	Katal	Ears in which grain is left after threshing.
Katar	•••		Shearing.
Katti		Katti	Mung, moth or sireh straw.
Katra	•••	****	A shearer.
Khálisa	•••	•••••	Documentary term for lands subject to full revenue demand.
Khambháni		••••••	A sling for scaring birds.
Khauri	•••	•	Soil with a light clay surface which cracks but possesses a sandy sub-soil.
Khér		••••	A flock of cattle, goats or sheep belonging to several owners.

Terms used in (Jatki)			Terms used in Saraw and Jhalawán (Bráhui).	án	Explanation.
Khéri	•••	•••	******		(i) Ploughing.
			·		(ii) Land which has been ploughed and finished for the day.
			Shom	•••	(iii) The first ploughing of a field.
Khéti	•••	••-	Kishár	•••	Cultivation.
Khíra	***	•••	· ·		Judr or wheat ears containing milky juice.
Khuid	•••		Khít		Young wheat or barley for grazing.
*****			Khurrum	•••	A pit for storing grain.
			Khushkáva	•	Dry-crop area.
Kín Karan bandi.	or lat	h-	Kénr		To embank land with the plank harrow.
Kubíjh	•••	•••	******		Indigo seeds which do not ger- minate.
Kukk	•••	•••	*****		Earless juár stalks used as sugarcane.
Kúli (Nasírá matt.	ibád)	or	*****		Alluvial soil containing yellow- ish silt.
Lái	•••	•••	Lái	•••	Crop-cutting by hired labour.
*****			Lai or Lai-kashi	***	Process of cleaning the wells and tunnels.
Láb or lábáro	o .		Dráu or Láb		Time of reaping.
Láigar .	•••		Láigar		Crop cutters.
Lápa (Jhal)	***		•••••		Wages paid to the cultivator who cuts crop in irrigated land.
Lassi	•••	•••	*****		Slight showers of rain occurring at the beginning of winter.
Lath	***	٠.,.	Lath, band		A field embankment.

Terms us ed in Kachhi (Jatki).	Terms used in Sarawán and Jhalawán (Bráhui).	Explanation.
Lathband bazgar	Lathband bazgar	A tenant who has embanked land for cultivation.
Léro		A male camel.
	Lok	A full grown camel.
Lunrna	*****	Reaping indigo or til.
Lur	******	 (i) A flood as distinguished from rau. (ii) A technical term for lands irrigated by floods.
Machhi-chír	*****	Kárézes with open channels.
Mang	Hashar	Labour borrowed for agricul- tural purposes.
Mardán sari (Sibri near Dádhar- Baluchi).	•••••• ·	Periodical division of lands among males.
•••••	Mat	A he-goat.
Matt	Matt	A rich soil containing red loam deposited by floods.
Milis	Milis	Camel hair.
Milk, mulk or mírás.	Milk, mulk or mírás.	Ancestral land or property in land.
Mithi (samın)	••••	A dark loam specially suitable for indigo.
Mokhi (Bhág Nári), or moki.	•••••• ·	Appraisement of revenue in cash or kind on standing crops of mung, moth or judri.
Мога	Mora	Wisps of lucerne and moth.
Mundhi	•••••	(i) Second year's cotton or indigo crop. (ii) Indigo stalks left in the ground.
Náhwar	******	Permanently irrigated land which has remained fallow for more than two years.

Terms used in Ka (Jatki).	ıcbhi	Terms used in Sarawán and Jhalawán (Bráhui),		Explanation.
Náli waháwa Náli.	n or	Sund		Drilling.
Nambh Zamín	•••	******		A field, the surface of which has dried alter irrigation but the sub-soil is still wet.
		Nambúr		Tunnels of a kárés.
Nár or Sundha	•••			(i) Root stalks of juár allowed to remain in the ground. (ii) Root stalks of sireh and til are also called nár.
		Palál		(iii) Wheat stubble.
Néri or rop	•	-==++		First year's cotton crop.
****		Niori		Dry crop land irrigated by spare water from permanent sources of irrigation.
Nokh	•••	••••		Rain or flood crop land after it has remained fallow for one year.
Olar		*****		Refuse of fodder left by cattle.
		Páléz, Pálézát .		Cucurbitaceous crops.
Panára	•••			Payments to camel grazers for grazing camels belonging to others.
Panéri Janag (Balu-	Panéri halling .		Transplantation of seedlings.
chi)		Panéri tulifin (Panéri), Shánda (Mastung).		
Partál	•	•••••		 (i) Revenue levied on produce payments made by the cultivators to village servants. (ii) Mahésar in Bolán lands. The levy of revenue from the remnant of the common heap.
Péha	•=•		-	A platform for scaring birds.

Term used in Kachhi (Jatki).	Terms used in Sarawán and Jhalawán (Bráhui)	Explanation.
Phor	******	Half ripe barley grain eaten after parching.
••••••	Prísh (Bl : Arzun)	A kind of millet.
Phundani	Puto	The term is used in Mírwári country for the juári crops only.
Pir khori or Vich-ki- Khori.	•••••	An extra heap made at batái from which cesses, &c., are paid.
Pokhi	Dasing	Sowing.
•••••	Put	Picking the tobacco crop.
Ráhaki	*****	Share of produce allowed to a tenant-at-will.
Raís or míráb	Raís or míráb	A village officer who supervises the division of water or the cultivation of land.
Rájána (Bolan Lands).	100,00	Payment in kind made from the common produce to the cultivator in cert in villages for tran-p rt of the jagirdar's share to his house.
Rasúlwai or korán kása.	Rasulwai	Share of grain generally the first measure set apart in the name of the Prophet and given to the village mullá.
Ratti	Ratti, surkhi	Rust.
•••••	Roina	Open channel of a kárés.
Ráyati		Irrigated lands paying revenue to the Khán or jigirdár in which preprietary rights are vested in the tenant.
Romba	Panéri or tughmi	Seedlings.
Sailába or lur	Nokáf	. Flood irrigation.
Sang or sitta '	Khosha	The ear generally of wheat or judr.

Terms used in Kachhi (Jatki).	Terms used in Sarawán and Jhalawán (Bráhui).	Explanation.
Sánwanr	Bashshám	Summer rains occurring in July and August.
Sarbél (Kunára near Gandáva) (Baluchi)		Proportion of water and land to which a male child becomes entitled in irrigated lands subject to periodical distribution.
, ***	Sabzbar or Saozbar or hámén.	Autumn harvest,
Shágirdána	Shágirdána	The perquisites of a miller.
i estaturi	Shoráwaki or daik	A variety of wheat sown late originally imported from Shorawak.
2004 - 10 10 10 10 10 10 10 10 10 10 10 10 10	Shira	Ears of a crop when the grain begins to form, also juice of dates.
****	Sohél	Autumn.
pom.do	Shom parosh, Shom Shikast.	First watering.
Sukáhri (Baluchi) sukiári.	v04***	Land ploughed whilst dry.
*** **	Siáhzamín	Dark loam soil.
*****	Sundia Kholum	A variety of wheat.
Sungari	******	Empty cotton bolls.
Sursát	Sursát	Supplies furnished by cultivators to the Khán, jágirdár or officials.
	Taghár	A water-divide.
	Trimáhi Kholum	A variety of wheat.
	Taláf or hauz	A small tank for storing water from a káréz.
Téjár	*****	A crop which has been reaped twice or thrice, generally juár.

Terms used (Jat		chbi	Terms used in Sarawá and Jhalawán (Bráhui).	ia	Explanation.
Tháran	•••		******		Reclamation of waste land.
Toha or toh	10	•	Toho	•••	A crop or water watcher.
Trehán	•••		. *****		A three-year old camel calf.
Trúi (D ádh	ar)	•••	·•••••		Revenue levied on the wheat crop from the earnings of labourers engaged in harvest- ing.
Un	•••		Kás :.		Wool.
Uth	•••		Huch		Camel.
Val	•••	••			(i) The collection of wheat or juár in the threshing floor.
					(ii) A heap of ears on the threshing floor.
Wah	•••	•••	*****		A canal.
Wáhndi	+01		Wáhndi	•••	Taking flocks to graze at a distance for a lengthened period.
Wáhi	•••	•••	******		A water channel.
Wajib	•••	•••	*****		Payments made to village offi- cials who help in collection of revenue and superintend cultivation of lands.
•••	•••		Wali		The plants of cucurbitaceous crops.
Wáráthi	•••	•••	•••••		Dry stalks of cotton plants.
Wári	•••	•••	Rék or Réki	•••	Sandy soil.
Wári	•••	•••			A thorn enclosure for keeping goats or sheep.
Wáro	•••	•••	*****		Picking cotton.
***	•••		Yali	•••	Stony soil.
Wiham	•••	•••	Zank	••	Lambing season.

Terms used in Kachhi (Jatki).	Terms uesd in Saraw and Jhalawán (Bráhui).	án	Explanation.	
Zahghal	Zaghal	•••	A small flock of kids and lambs when grazing.	
	Zardoi	,.,	A melon disease.	
******	Zarkharíd		Land acquired by purchase.	
****	Zhalli	. ••·	Soil containing gravel.	
Zobhai (Baluchi)	Khúrda or Zoba	***	Wages paid to a shepherd by a share in the flock which he tends.	
•	Zik	. 	Skin for keeping ghi.	

APPENDIX II.

Statement showing kárézes, springs, etc., in Sarawán in 1903.

Locality.	Káréze	es.	Springs.	Streams.	Remarks.	
2000004		Running.	Dry.			
Narmuk			2		. •••	
Iskalku		3	1	7	•••	
Kakku (Harbo	i hills)			I	•••	Ì
Shékhri		1		I	•••	1
Kishán		•••		2	•••	
Muhammad (Harboi hills	S h á h).			•••• ·	I	
Garráp 🐽 .		1			•••	
Gédi				1		İ
Izbotki	•••			İ	***	
Isplinji		2.			•••	
Khaisár and Jo	hán	*		1	I	
Bárari	•••			1	. ***	This is the same stream which irri-
Jam					***	gates Johán.
Hampádagh Nágau hills.	in the			I	•••	
Robdár	••• •••				I	
Marav	•••	1			•••	İ
Mastung niába	t		[
(i) Mastung	.	68	30	4	3	
(ii) Pringáb	ád	29	14		•••	
(iii) Tíri		20	12	ı	1	
(iv) Kahnak	···	21	12	4	•••	·.
(v) Dulái	•••	3	6	2	•••	Four of these were running in 1905.
Carried	over	149	77	27	7	

_			Káreze	es.			
Locality	·•		Running.	Dry.	Springs.	Streams.	Remarks.
Brought for	ward		149	77	27	7	
Khad (tribal a	rea)	•••	•••	2	•••	•••	
Shírínáb (triba	d area)		8	•••	I	***	
Gurgina and K	ardgá	p	18	19	11		
Nímargh	•••	•••	1	3	35		
Mungachar	•••	•••	···.				
Zard	•••	•••	25	4		•••	
Brinchinnau	•••	•••	10	18			
Mandéháji	•••		14	7			
Kárchháp	•••		ı				
Chhappar vall	ey·		2		2		
Kalát	•••	•	19	•••	3		
Garrári	•••	•••	2	1		•••	
Lés		•••			\	1	
Chauki	•••	•••			2)	
Astangi	•••				100	} 1	
Sariáth and no hood.	eighbo	ur-		***	5	3	
Khajúri	•••	•••	 .		1*	•••	* Besides the large
·							spring there are several smaller ones, the number of which is un- known.
,	Total	•••	250	131	87	12	

APPENDIX III.

Extracts from a letter No. 1763, dated the 11th July 1906, from Major H. L. Showers, I.A., C.I.E., Political Agent, Kalát, to the First Assistant to the Hon'ble the Agent to the Governor-General in Baluchistán.

With reference to correspondence ending with your First Assistant's endorsement No. 860—Z, dated the 1st August 1905, on the subject of the Mastung sericulture experiment, I have the honour to submit the following report of the operations carried out in the present year.

- 2. The success of the experiment last year was so encouraging that it was determined to considerably extend the scope of this season's operations. Accordingly an order for 240 oz. of Bombyx Mori silkworm eggs was placed with M. L. de I. Arbousset of Alais in July last. These reached Mastung in good order on the 9th of October. During the winter they were kept in the Agency house, being protected from the cold by placing a quilted cover over the "Almirah" they were in, while occasionally on very cold days a fire was necessary.
- 3. In addition to the French eggs a sample of 6 oz. of Italian eggs was received from Messrs. Ditta Tommasa Ferri & Co. of Ascoli Picono in Italy, while Mr. Frank Durant (Durant, Bevan & Co. of London) was good enough to send me a further supply of 5 oz. of Caucasus eggs.
- 4. During the autumn and winter, a silk factory was constructed on a site near the Khan's Miri. Four large buildings with an aggregate floor area of 6,900 square feet were constructed at a cost of about Rs. 3,900. In these wooden trestles were erected so as to provide seven tiers of trays or matting for the accommodation of the silkworms.

The tray area thus provided amounted to 19,700 square feet. Even this space was not nearly sufficient for the worms as they increased in size and had to be spread out;

and various other buildings in the Míri, the niábat, the Levy thána, etc., were brought into requisition. The tray area in these amounted to some 24,900 square feet, giving a total area of 44,600 square feet occupied by the worms when the expansion was at its highest.

- 5. In addition to the Mastung factory, smaller factories were established in the large villages of Tiri, and Pringábád and at Mach in the Bolán Pass. The full tray area in these places amounted to 10,000 square feet. It was intended to experiment at Kalát also, but owing to the altitude (nearly 7,000 feet) mulberry leaf is not ready for cropping until late in May while the eggs do not seem to remain in good order later than the end of April.
- 6. The first hatching began on the 1st of May and the operations continued till the 8th of May. The first cocoon was spun on the 25th of May and the last on the 30th of June.
- 8. The total quantity of leaf supplied at Mastung from the 1st of May to the 25th of June was 5,443 maunds, the largest quantity in any one day being 250 maunds. At Tiri, Pringábád and Mach the quantity was about 960 maunds more or a grand total of 6,403 maunds.
- 9. To collect and supply the leaf at the factories, a large number of men were employed, the highest number in any one day being 116.
- able. It comprised the picking of leaf from twigs and branches, the chopping it up when the worms are young, the feeding of the worms, the changing of the leaf and the cleaning of trays, the maintenance night and day of a fire in each compartment, etc. When the operations were at their height the number of men and boys employed was 103 in all the factories. These were given wages at Rs. 8 per mensem for a man and Rs. 4 per mensem for a boy. In addition there was a jemadar or supervisor over each block or group of buildings white Pundit Tara Chand and his assistant, two sericulture experts whose services have been obtained from the Kashmir Durbar, also assisted in the work of supervision.
- 11. The total quantity of cocoons picked amounted to 6,253 lb. These after being dried in the sun weighed 2,080 lb.

This should produce some 1,040 lb. of raw silk, which at 13 shillings and 4 pence a pound should yield a return of Rs. 10,400. Against this the cost of the eggs and the working expenses amount to Rs. 4,000. The cost of building of trestles and other materials and of reeling machinery has not been taken into account, but these remain as a permanent asset and, with profits such as now obtained, the initial expenditure will soon be recouped.

- 12. Thus this season's operations have also been successful, and it may be said, I think, that this important industry is now permanently established in the Mastung valley.
- 13. The immediate success achieved, however, is only a part of the tale. More important and significant is the widespread interest taken in the operations by the people of the country. The factories have often been thronged with visitors, while many applications were received from samindars to be supplied with young silkworms to rear in their own homes. These were supplied to 6 different men and in all cases the worms were successfully reared. there was the army of some 250 persons employed in the operations. They are all Dehwar or Brahui samindars and the knowledge they have gained of the industry will be diffused throughout the whole Mastung valley. The success of the operations indeed was largely due to the zeal displayed by these workmen. A very wholesome and sometimes even troublesome rivalry prevailed between the people employed in the various blocks of buildings. They particularly felt the parting with worms they had reared when, as the latter required more space, they had to be moved to other buildings. On one or two occasions the rivalry between blocks led to open quarrels and some fighting. this emulation among people who do not ordinarily take much interest in anything beyond their own immediate concerns is an excellent sign, and I think it may be asserted that interest in the industry has been aroused among all classes of the local people from the highest to the lowest. This interest extended even to Kharan, and at Sir Nauroz Khán's particular request I sent him \frac{1}{2} an oz. of eggs to experiment with. The result is not yet known.

- 14. For the disposal of the season's cocoons it is proposed to reel off as many as possible in Mastung. The rest can either be sent to Kashmir to be reeled or despatched for sale to Marseilles where a market for them will be readily obtainable. The reeled silk will be sent for disposal to Messrs. Durant, Bevan & Co., the London Brokers who dispose of the Kashmir produce.
- 15. A reeling machine of the latest type has just been imported from Messrs. J. Berthaud Fils of Lyon Charpennes in France. The silk reeled on this by Pundit Tara Chand should be of excellent quality. As the industry expands, additional machines will be required.
- 16. It has now to be considered what arrangements should be made for the future carrying on and development of the industry.

The main object should be to get the people of the country to take up the industry, but to ensure this it is necessary that the State should continue for some years to come to show To this end an important beginning has been made by the putting down last winter of a large number of mulberry cuttings and mulberry seed. A well equipped factory has been provided which only requires the addition of a few extra buildings to make it complete and it has been conclusively demonstrated that silkworm-rearing on a large scale can be carried through to a successful issue. proposed, too, to introduce silk weaving, which will greatly add to the interest and usefulness of the industry. already stated, the people take keen interest in the industry and the private planting of mulberry expressly for sericultural purposes has already begun. Thus I confidently expect that in a very few years we shall see both the cultivation of mulberry and the rearing of the silkworm in active progress in every village in the Mastung valley, thus carrying with it the three-fold benefit of extended arboriculture, increases to the State revenue, and the providing of remunerative employment for large numbers of these thriftless and poverty-stricken tribesmen.

17. His Highness the Khan, I may say, has evinced considerable interest in the operations and he remarked to me lately in conversation that such an industry ought to be

successful in Mastung, for as Panjgur is the home of the date so is Mastung the home of the mulberry.

- 18. * * *
- obtained from the experiment with Caucasus eggs. The worms were strong and healthy and cocoons of good size were produced. The silk, moreover, is far whiter than that obtained from French cocoons and this is a quality much appreciated by the brokers. I think, therefore, that while we should not abandon the French seed, which does so well both here and in Kashmir, a proportion at all events of next year's supply should be obtained from Persia. It is to be presumed, too, the climate of Mastung approximates more nearly to that of northern Persian than to the French climate and prima facie, therefore, the Persian seed should do better here than French seed.
- 20. For a year or two until the trees lately put down by the State bear leaf, I would recommend the factory operations being conducted on a somewhat smaller scale than in the present year. At the same time, however, endeavours should be made to get the samindárs to conduct operations of their own, and the order for seed now to be sent Home should be based on the number of men who are willing to come forward in the matter. In this connection, I think, the monopoly of the Kalát State with regard to the industry within the State limits should be recognised. That is to say, all producers must dispose of their produce to the State. I gave some seed this year to the Church Mission Society at Wali Khán and this condition was imposed on them.
- 21. I would also recommend that we should continue to deal with M. de I. Arbousset for the purchase of French seed and with Messrs. Durant, Bevan & Co., for the disposal of the produce. Both have taken a sympathetic interest in our newly started enterprise.

Sir Thomas Wardle of Leek too will, I am sure, be always glad to hear how we are progressing and to give us the benefit of his valuable experience in all that pertains to sericulture.

APPENDIX IV.

ROUTE LISTS.

The route lists are intended primarily for District officials. The lists have no pretension to be exhaus ive. Distances, except when drawn from published route lists, are approximate only.

Nomenclature.-

Metalled— Road, fit for carts.

Bridle-path—A made path fit for camel and other transport.

Track-Unmade, but usually fit for camel transport.

Foot path or path—Suitable for foot passengers, though in some cases fit for horses and laden camels.

I-QUETTA-KALÁT ROAD.

Stages.	Intermediate distance in miles.	Total distance in miles.	Accommodation for travellers.	Remarks.
Quetta to Sariáb (Levy Post).	8	. 8	Rest-house	The Kalát road which is metalled and partial y bridged branches off from the Quetta Bolán road at 8 miles.
Mián Ghundi (Levy Post).	2 3	103	Quarters for officers in the Levy Post.	A much frequented path follows the skirts of the Chiltan hill to Kiráni and Samungli.
Mastung	22}	33	Political Rest- house.	There is a gradual ascent from the Mián Ghundi post to the top of the Lak pass (6½ miles); and at the foot of the pass on the Mastung side, an unmetalled road constructed by the Railway Department takes off to Shaikh Wásil via Tíri. Alu Levy post lies on the main road between miles 25 and 26. From Mastung a bridle-path goes to Kolepur via the Surkh Bájo pass and Dasht and another to Marav via the Abi-Gul and Játu passes.

Stages.	Intermediate distance in miles.	Total distance in miles.	Accommodati for travellers		Remarks.
Guru	17	50½	Political R house,	lest-	The road lies through the Khad valley.
Mungachar (Levy Post).	15≩	661	Political F house.	₹est-	A 10-foot bridle-path goes to Johán via Sheikh Háji, from which a track branches off to Kishán and Shékhri via the Sinjdi and Morgand valleys, and thence a footpath runs to Gazg in the Jhalawán country via the Pusalak vallev and the Chháb river. This is the shortest route between Mungachar and Gazg, but the portion between Chháb and Gazg is difficult and unfit for camels and more especially in the gorges of the Chháb river. Another track leads from Mungachar to Zard via Mandéháji.
Kalát	221	883	Political R house.	Rest-	The road passes through the Marján pass. The old road ran through the Lágháni pass, but was abandoned when the present road was constructed.

General.—The road lies in the Quetta-Pishin District up to the Lak pass, beyond which it is in Kalát territory. It was constructed in 1897 at the cost of the Kalát State and at the present time (1905) is in good repair and fit for wheeled traffic, the only difficult portion being between the villages of Wali Khán and Mastung where it runs through a tract of drifting sand.

Water is obtained from wells at Sariáb, Mián Ghundi, Doctor Cháh (below the Lak pass) and Guru. The water-supply at Mastung and Mungachar is from kárézes.

Supplies can be obtained at Mastung and Kalát, but as regards other stages previous notice should be given for Sariáb and Mián Ghundi to the Political Agent, Quetta-Pishin, and for the remaining places to the Political Agent, Kalát. A small supply of fodder is usually obtainable from the Chaukidár at Mungachar.

II-mastung-panjgúr route.

Stages.	Intermediate distance in miles	Total distance in miles.	' Accommodation for travellers.	• Remarks.
Mastung to Shirinab.	10	10	••••	A track runs to Sheikh Wásil through the Túrai valley, and thence to Panjpái in the Shorarúd valley through the Sheikh Wásil gorge. The Shírínáb river is liable to floods in rainy weather. Three tracks run to the Kardgáp valley through (1) the Khurd Bárak pass, (2) the Hílhi pass and (3) the Alídír pass via the Túrai river and the Ali Dasht valley; the last named being the easiest and more generally used for laden camels.
Kanéti (Shirináb valley),	12	22		Two footpaths, known as Joak and Garai, lead to Kadrgáp via the Ali Dasht valley. A third one, passable by camels, is known as Rodangi and goes to Kardgáp along the bed of the Rodangi hill torrent and thence to Ali Dasht, where it joins the Joak and the Garai paths. A track leads to the Khad valley and thence to Mastung through the Chhuttok pass.
Shabr Ghulám Ján (Zard valley).	14	36	14-000	Track to Gurgina via Khúni, the Pírání sham and thence through the Sarband river. Water obtainable from a well.
Purdu	20	56	••••••	The road runs through the Mungachar valley via Brinchinnau village, from which tracks lead to Johán via Mandeháji, Pinzái and Sheikh Háji, and to Kalát via the Lágháni pass. A footpath takes off from near Kárchháp to Nímargh through the Umraráhi pass and is passable, but difficult and only fit for lightly laden camels.

Stages.	Intermediate distance in miles.	Total distance in miles.	Accommodation for travellers.	Remarks.
Chháti	14	70	•••••	The road lies through the Chhappar valley via Togau. A 10-foot bridle-path between Kalát and Nímargh over the Píhi pass crosses the road near the Togau village. Two footpaths lead to Kalát from Togau through the Kándori and the Jánekáni passes in the Siáh Koh, the latter being the more difficult.
Ziárati or Hayát Khán (Dasht- i-Gorán).	12	82	*****	(1) A footpath from Chháti to Kalát. (2) Good camel track to Ziárati and thence to Kalát. (3) Ziárati to Khárán.
Siáh Damb (Bita- go).	14	96	******	Good camel road to Súráb via Bitagu.
Máráp-Káréz	11	107	*****	
Chil Baghu	5	112	*****	A path to Súráb, one march.
Toba (Gidar)	22	134	******	From Gidar to Panjgur. See Jhalawan route III.

General.—The route lies in the Sarawan country as far as Chhati and is generally used by caravans proceeding to Panjgur in preference to the metalled road between Quetta and Kalat, along which grazing for camels is scarce.

The track from Mastung as far as Chháti is good for all beasts of burden and could be used for light wheeled vehicles.

At Chháti, good water is obtainable from a kárés, but caravans generally stay at Patki to the west of Chháti, which is a more convenient halting place.

If supplies are required, notice should be given to the Political Agent, Kalát. For further details of the alternate routes via Rakhshán and Rághai, see Makrán Gazetteer Routes Nos. 2 and 3. Water is available at all these stages.

III.-KALÁT-DÁDHAR via NARMUK AND BÍBINANI.

Stages.	Intermediate distance in miles.	Total distance in miles.	Accommodation for travellers.	Remarks,
Kalát to Iskal- ku.	7	7	*	The road, after leaving the Kalát valley, runs through hills and enters the Iskalku nullah, which is about two miles in length. A track from Iskalku goes to Níchára via Ali Dasht and Laur and is fit for laden camels. A shorter bridle-path to Níchára runs through Gíshk in the Harboi hills.
Kishán	15		***************************************	The road continues through low hills for about 8 miles, after which it enters the Bolkhé-Morgand valley. From Kishán a track leads to Mungachar via the Sinjdi valley and the Sheik Háji shrine, and another through the Maki Sham pass. The latter is difficult for camels, A footpath from Kishán runs to Gazg in the Jhalawán country through the Pusalak valley and the Chháb river. It is unfit for camels, especially in the gorges of the Chháb river.
Johán	15	37	••••	The road proceeds in a northerly direction along the plain for 4½ miles, then turning north-east, enters the hills by the Ali Isufi Khand through the bed of the Sarawán river. After this the track leads up a steep ascent, and passes through a mass of low hills under the Koh-i-Siáh Range to the shrine of Sháh-í-Mardán Pír (6 miles). At 6½ miles it re-enters Sarawán river and follows its bed, which is broad an 1 tolerably easy, though enclosed by hills. From Johán there is a track to Isplinji (about 22 miles).
Gétáni(Narmuk).	9	46		Hasanjoi, the headquarters of the Lahri chief, is about 4 miles from Gétáni. The track, after leaving Johán, lies through the Sarawán river, after which it passes through low hills via the Ríbi Kapot shrine and Dehwar Kushta.

Stages.	Intermediate distance in miles.	Total distance in miles.	Accommodation for travellers.	Remarks.
Robdár (Sari Deh village).	18	64		The road lies through the Narmuk valley in a south-eastern direction opposite the villages of Hasanjoi and Takht it then curves round the Taláng mountain and takes a northerly direction via Malagán and enters the valley of Robdár through the pass known as Robdár-ná-Khand. From Narmuk a track leads to Gazg in the Jhalawán country via Púdgili, the Pír Jongal shrine and the Gurgína pass, which is difficult for laden camels. Three footpaths go to Sanni in Kacnhi through the Nágau hills, and are known as (1) the Hurro or Rodh-ná-Kasar via the stages of Gokháni, Thal, Bár Bojh, Míro Pír, Rodh stream, Hurro stream, Bing Bént and Sanni; (2) The Naláni-ná-Kasár via Sanni, Pánch Bént, Daranjan and Rodh where it joins the Hurro track, the distance from Sanni to Hasanjoi in each case is about 68 miles; and (3) Zághná-Kasar, distance from Sanni to Hasanjoi about 56 miles. Al! are unsuitable for laden camels. The first is the easiest, but owing to the scarcity of water is not frequently used. A fourth track, which is much frequented, goes to Dádhar via the Bhaur hills passing through the Lop valley. It is known as Bhaur-ná-Kasar and the distance between Dádhar and Hasanjoi in Narmuk is about 70 miles; the stages are Dádhar, Sibri, Hampádagh, Tang-ká-pusht, Tarangar, Thathaghár, Kurragha Sing, Dérav (Lop) and Hasanjoi. The track is suitable for lightly laden camels.

Stages.	Intermediate distance in miles.	Total distance in miles.	Accommodation for travellers.	Remarks.
Jam	23	87	******	The road from Sari Deh to Jam lies in the bed of the Robdár stream and before emerging from the hills passes through the difficult pass known as Jalla-Khand. It then enters the Sarawán river again and follows its bed. From Jam a difficult footpath leads to Isplinji over the Dilband mountain.
Bíbináni (Levy Post)	8	95	***************************************	The road lies in the bed of the Sarawán river which is liable to floods. At Bíbináni the track joins the Bolán metalled road and Old Mach is 14½ miles. A track leads from Bíbináni to Khajúri (about 6 miles), and thence to the Gháib Pír springs (about 2 miles).
Kirta (Levy Post).	121	1073	Rest-house	Dranjan Levy Post is about half way between Bibinani and Kirta.
Kundláni (Levy Post).	8	115½	Rest-house	Drájbént Levy Post is about half way between Kirta and Kundláni. A track from Kirta (which is locally known as Gogird or Chbota Kirta) leads to the Kirta village (about 4 miles), and thence to the Píshi station on the Mushkáf-Bolán Railway (9 miles).
Rindli Levy Post (Railway sta- tion closed).	Io	125 ½	Rest-house	
Dádhar	. 2	1273		The track between Rindli and Dádhar is fit for laden animals.

General.—This route known to the people of southern and central Sarawán as the Bolán-ná-Kasar is the line generally taken by the tribesmen during their periodical

migrations to Kachhi. A ro-foot bridle path has been constructed as far as Bibi Náni where it joins the Bolán road. The most difficult portions are those round Robdár.

Water is abundant throughout except at Gétáni in Narmuk where it is obtained from small springs. Fuel is obtainable without notice at all stages of the route which lie in the Sarawán country. Supplies in small quantities are procurable without notice at Iskalku, Johán, Robdár and Dádhar. For supplies at other stages and for supplies in larger quantities notice should be given to the Political Agent, Kalát. Between Iskalku and Johán the country belongs to the Shahwáni tribe. Johán is the Khán's territory. The Lahri chief exercises authority at Narmuk and the Bangulzai chief at Robdár and Jam.

IV.-KALÁT-KOLEPUR.

Stages.	Intermediate distance in miles.	Total distance in miles	Accommodation for travellers.	Remarks.
Calát to Johán	37	37	ven 448	See route III.
splinji	-22	59		Isplinji is the head-quarter of the Bangulzai chief. The track crosses the Khaisar stream near Khaisar village about a miles from Johan and 'passing through the Khaisar valley lies in the bed of the Shishar stream. It then crosses the Pashak stream and passing over the Shishar watershed runs through the Shishar valley for about 5 miles. A toot path leads to Mungachar via the Tang stream and thence via Kábo and Kuak. A 10-foot bridle path branches off to Mastung via Kábo and Abi-Gul pass. A foot-path practicable only for foot passengers

Stages.	Intermediate distance in miles	Total distance in miles.	Accommodation for travellers.	Remarks,
				goes to Jam and Bárari over the Dilband mountain. An- other still more difficult track is through the Pandar Ghat pass and the Parri river, which is liable to floods.
Marav	7	66	•••••	The road lies through the Khúrbán hill. A to-foot bridle path leads from Marav to Mastung through the Játu pass, Omar Dhor and the Surkh Bájo pass. From Marav three paths used by local men enter the Bolán through the Machhi pass. They are known as Wáro, Kunj-ná-Kasar, and Rúshi-ná-Kasar. The Wáro which is the easiest lies through the Machhi pass and the stream of the same name, and passing over the Wáro mountain, follows the bed of the Tunnitok hill torrent. It then joins the Bolán road. Both the other paths lead to Khajúri, but are very difficult.
Kolepur (Railway Station).	14	80	******	The route lies through the Marav-ná-Khand and thence through the Gwandén valley.

General.—A 10-foot bridle path has been constructed along the whole route. This route opens up the central Safawan country and brings it in touch with the railway. Supplies can be obtained by giving previous notice to the Political Agent, Kalat. The route lies in the Shahwani tribal area as far as Johan; Johan belongs to His Highness the Khan. Isplinji is in Bangulzai country, and Marav in the Kurd area. The track joins the Bolan road at Kolepur.

V.—KALÁT-NUSHKI via GURGÍNA.

Stages.	Intermediate distance in miles.	Total distance in miles.	Accommodation for travellers.	Remarks.
Kalát to Ziárat.	. 8	8		A foot-path leads from Ziárat to Chháti (about 10 miles). A 10-foot bridle path also leads to Nímargh over the Píhi Khand through the Chhappar valley (about 18 miles from Ziárat) and crosses the Mastung-Panjgúr route. From Nímargh a track goes to Nushki via Zéni and Munjro and is fit for camels.
Purdu ••• •••	10	18	••••	A foot-path leads to Mandéháji in Mungachar through the Manguri hill. Another enters Gurgína via the Umra-ráhi-Khand whence it goes to Kishingi via the Rodangi stream. This foot path is known as Rodangi-ná-Kasar and is used by the local people. A third foot path from Mungachar, which is comparatively easier than the Rodangi-ná-Kasar, is known as Bundi-ná-Kasar, and takes off from Gadáp (Kárchháp) passing through the Patki-ná-Khand (where it is known as Laghámgír). This portion is difficult and as the name signifies the rider must lead his horse. It then enters the Gurgína valley near the village of Murád Khán Murrai and thence goes to Kishingi via the Bundi stream, joining the Rodangi track at a point called Huch-ná-likh.
Khurásáni, also called Lángai (Mungachar valley).	14	32		The Mastung-Panjgur road is crossed near Purdu, after which the track lies through the Mungachar valley to the west of the Mungachar (Shirinab) river. A track leads to Brinchinnau in Mungachar and thence to Johán, and there is a foot path to Nimargh through the Umrâ-râhi-Khand.

Stages.	Intermediate distance in miles,	Total distance in miles.	Accommodation for travellers.	Remarks.					
Músa Khán also ca led Kaftári (Gurgína).	20	52	•	The course lies along the bed of the Sarband river along a 10 foot bridle path. A track goes southwards to Nimargh over the Kamund watershed, where it is joined by a path leading to Kardgáp and Panjpai. From Kaftári a track leads to the Kardgáp railway station (about 14 miles).					
Galangur (Rail- way station).	10	62	**************************************	Between Músa Khán and Galan- gúr the track is known as the Múdénack, pas ing over a plain of that name. At Galan- gúr the track joins the Quetta- Nushki route.					
Kishingi (Levy Post) Railway Station.		71	Quarters for officers in Levy Post. A Serai.	The road lies along the bed of the Galangur nullah and is easy and in good order.					
Nushki	12	83	Two Serais. Political officers' rest- house.	ná-Kasar leaves the main road					

General.—This was the main route followed in former times by caravans trading between Kalat and Nushki; but it lost its importance when trade was diverted from Kalat to Quetta.

From Kalat to Musa Khan, the route lies in the Kalat territory and Galangur, Kishingi and Nushki belong to the Nushki tahsil of the Chagai District.

Water and fuel can be obtained at all the stages.

APPENDIX V.

Travellers' bungalows, &c., in the Sarawán country, 1905.

Locality.	Nature of Accom- modation.	Establishment Maintained.	Remarks including details of Water supply.
Mastung Poli- tical rest- house.			Kárés water obtainable. Supplies can be had for 50 men without notice, but for a larger number one day's notice is required.
Guru Political rest-house.	2 rooms with 1 bathroom.	2 Chaukidárs	Water from well. Supplies obtainable at three days' notice for any number of men.
Mungachar Political rest-house.		ı Sweeper-chau- kidár.	Ditto.
Kalát Political rest-house.	5 rooms with 2 bathrooms.	ı Chaukídár	Kárés water obtainable close by. Supplies can be had for 10 men without notice, but for larger number of men one day's notice is required.
	2 rooms with 1 bat hroom.	2 Chaukidárs and a sweeper.	Spring water obtainable. Sup- plies for 15 men can be had without notice through the chauhidars, but for larger number of men three days' notice is required.
Murád · Khán Officers' Quarters (Kardagáp).	2 rooms with 2 bathrooms.		Kárés water ob'ainable. Sup- plies obtainable for any number of men at three days' notice.
Gishk Political Bungalow.	,,	Nil.	Water is obtainable at the distance of about 1 mile. No supplies available on spot.

Note.—The bungalows at Mastung, Kálat and Kahnak are in charge of the Garrison Engineer, Civil and Mastung, and those at other places under the Political Agent, Kálat. The charge per diem is 8 annas except at Murád Khán where no fees are levied.

APPENDIX VI.

DETAILED INSTRUCTIONS SANCTIONED BY THE AGENT TO THE GOVERNOR-GENERAL IN BALUCHISTAN DEALING WITH THE DUTIES OF THE NATIVE ASSISTANT IN SARAWÁN AND REGULATING HIS RELATIONS WITH THE POLITICAL ADVISER IN KALÁT.

Instructions issued, in 1905, by the Political Agent, Kalát, to Khán Bahadur Kazi Jalaluddin, C.I.E., Political Adviser to His Highness the Khan of Kalát.

I have the honour to forward, herewith, for your information and favour of necessary action, a copy of the instructions being issued, with the approval of the Governor-General's Agent in Baluchistan, to the Native Assistant, Sarawan, for the future administration of the Sarawan and Kachi tribes.

- 2. You will observe that, though you are to be relieved of all ordinary routine work in connection with these tribes, your general authority over them will remain unimpaired. You will still be considered with regard to them an Assistant to the Political Agent, Kalát, as described in the Hon'ble Mr. Barnes' letter No. 6192, of 4th July 1900, to the address of the Government of India, a copy of which was sent you with Captain Knox's endorsement No. 2920 of 5th October 1900, and the terms of which, in this respect, have, as you are aware, been acted upon since the date of your appointment to Kalát.
- 3. You will observe too that the Native Assistant, Sarawan, though directly responsible to the Political Agent, is also to be considered an Assistant to the Political Adviser, and he will act in due subordination to you in all tribal matters in which your intervention is necessary.
- 4. Further you will continue, as at present, to deal directly with cases of dispute arising between Baluch and Brahui tribesmen or the tribal Thana establishments on the one part and the Khan's Niabats or the Khan's immediate

subjects on the other, acting, of course, in consultation with the Native Assistant, Sarawan, and under the guidance of the Political Agent. Such cases are to be reported to the Political Agent.

5. The primary object of thus relieving you of the routine portion of your duties with the tribes is to enable you to give your time more fully to attendance on His Highness the Khan and to the control of his Niabats. This is demanded equally in view of recent events in Kalat and of the growing success of your administration of the large Niabats. These objects constitute indeed the raison d'etre of your appointment as Political Adviser. It will be necessary therefore that you should spend in future the greater part of the year either in Kalat or in attendance on His Highness, should he leave Kalat on tour, etc. This will allow of your spending a month with the Political Agent during the Quetta and Sibi Shahi Jirgas respectively, and four months in touring among, or in residing at, the Niabats in your charge.

Instructions issued by the Political Agent in Kalát to the Native Assistant, Sarawán.

In his letter No. 4388 of the 19th October 1904, the Hon'ble the Agent to the Governor-General sanctioned your being placed in charge of the Baluch and Brahui tribes of Sarawan and Kachi. This arrangement is now to be given effect to and the following detailed instructions with regard to your new duties are accordingly issued to you.

Having made over charge of your present duties to the Assistant Political Agent, Kalát, you will take over from the Political Adviser to the Khán that portion of his duties which is connected with the control of the Baluch and Brahui tribes of Sarawán and Kachi and which he has exercised under the guidance of the Political Agent.

These duties comprise, inter alia,

- (1) The receiving of petitions in all classes of political, civil and criminal cases.
- (2) The reference of petty cases to Jirga, to arbitration or to Shariat, etc.
- Note.—The settlements arrived at in all such cases must be submitted to the Political Agent for confirmation

or other orders before being given effect to. In important cases you will take such preliminary proceedings as may be necessary, e.g., the arrest of offenders, the taking of security, etc., and then submit the file to the Political Agent for orders, together with any proposals you may have to make as to the mode of settlement to be followed.

(3) The charge of the various Sarawan and Kachi Thanas and posts, viz., the Mastung, Aloo. Mungachar, Dandhor, and Gandava thanas and the Doctor Chah, Bidrang, Guru, Soro, and You will control Kardgap posts. responsible for the ordinary working of these thanas and posts, and the pay of the levy establishments employed in them will be disbursed through your office. All questions connected with the appointment, dismissal, and promotion of these levies will be referred by you to the Political Agent. As a rule too all questions of leave and punishment will be similarly referred. The extent to which you may exercise authority in the inflicting of petty punishments and the granting of short periods of leave will be communicated to you hereafter.

As is done by the Political Adviser, you will levy a Courtfee of eight annas on all criminal petitions, while civil suits will be taxed at Rs. 7-8-0 per cent. on the value of the suits.

Your weekly diaries and your reports will be submitted direct to the Political Agent as the Political Adviser's have been, but as directed by the Hon'ble the Agent to the Governor-General you are also an Assistant to His Highness the Khan's Political Adviser, and, as such, you will be careful to act in subordination to that officer in all matters with which it may be necessary for him to deal, either of his own initiative or at the instance of the Political Agent.

The Political Adviser will continue to deal directly with cases of dispute arising between Baluch and Brahui tribesmen or the tribal thana establishments on the one part and the Khan's Niabats or the Khan's immediate subjects on the other, acting in consultation with yourself. Such cases are to be reported to the Political Agent.

ou are enjoined in conclusion to use every possible endeavour to carry the tribal Chiefs with you in your conduct of tribal affairs. The levy establishments placed at your disposal are by no means intended for the supersession of the Chiefs' authority but rather for the support and amplification of it. You should be very careful also to maintain amicable relations between the establishments in your charge and the Niabat officials of His Highness the Khán. The success of your work will be largely judged in this regard.

Translation of an order, dated Mastung, the 16th November 1905, issued by the Political Agent, Kalát.

The Native Assistant Sarawán has raised a question as to which officer or court should a case or complaint be referred when the plaintiff or complainant is a Bráhui and the defendant or accused the subject (riáya) of the Khán or vice versa. It has also been stated that under an order of Captain Knox all such cases were to be referred to the thánas but the said order is not forthcoming.

After proper enquiry and discussion the following instructions are issued with a view to facilitate the carrying on of Government work. The relations between the Government and niábat officials should be such as to secure a smooth despatch of Government work:—

- (a) Many Brahuis hold lands within the jurisdiction of the Mastung niábat in the same way as the Dehwars i.e., the subjects (riáya) of the Khan, and pay revenue to the Khan. Accordingly, disputes relating to land and water which pay revenue to the Khan, irrespective of the fact whether the plaintiffs or defendants be Dehwar samindars or Brahuis, shall be referred to the niábat for enquiry, investigation, and settlement under the supervision of the Political Adviser.
- (b) Criminal cases in which the complainant is a Bráhui, and the defendant or accused, a subject of the Khán or vice versa should be filed in the Court of the Political Adviser, Kalát, who, after full consideration of the circumstances of the case, shall

refer it to the niábat officials or to the thánadars. In the latter case it shall be understood that he shall send such cases to the Native Assistant, Sarawán, for enquiry by the thána. In cases in which he thinks necessary or proper the Political Adviser shall consult with the Native Assistant, Sarawán.

- (c) On a case being filed should the Political Adviser be unable to decide whether such a case should be enquired into by the niábat or the thána, he shall obtain orders from the Political Agent Kalát.
- (d) Para. (4) of the instructions issued in English by this office and approved by the Hon'ble the Agent to the Governor-General conveys that the Political Adviser shall continue to act, as heretofore, in cases between the Brahuis and the subjects (riàya) of the Khan. Accordingly, the responsibility in such cases is imposed on the Political Adviser whose duty it shall be to secure, in this manner, the proper working of these cases.
- (e) When the Political Adviser is absent from Mastung he shall, in consultation with the Native Assistant, Sarawan, issue instructions to the niabat officials and the thanas to take action in cases which may occur during his absence so that there should be no delay, and he shall send a copy of the said instructions for information to this office.
- (f) All orders and instructions previously issued from time to time by this office shall be borne in mind, for instance, when parties are in a case both Brahuis and Dehwars, the motabars and sardars of both the parties should be associated in the jirga.

APPENDIX VII.

Statement showing the men-at-arms supplied by the Brahui tribes in the Sarawan district.

Serial No.	Name of tribe.	Name of clan.	No. of men-at- arms.	Total.	Remarks.
1	Raisáni	*****	•••••	300	
2	Shahwani	Ramadánzai Alizai, including Kallozai	(a) 100 50 50 50 50 40 50 50 (b) 60	500	
3	Bangulzai	Saidzai = 1 share Gohrámzai = 1 ,, Bijjárzai = 1 ,, Dínárzai = 1 ,, Shoránzai = 1 ,, Sháhozai = ½ ,, Baddúzai = 1 ,, Garrani = 1 ,,	}7½ shares.	700	
4	Muhanımad Sháhi	Sámézai Khedráni	(c) 100 80 40 40 40 60	360	·
5	Kúrd	Madézai = I takkar Zardárzai = I ,, Shudanzai = I ,, Shádizai = 2 takkars Phullánzai = 1 takkar Masúdáni = 2 takkars Gorgézai = 1 takkar	40 40 40 80 40 80 40	} } (#)360	

⁽a) Mirozai 33, Chanrozi 33, Khwajazai 33 and 1 man by any of these three sections = 100

⁽b) The Umaranis disputed (1905) the right of the Shahwani chief to levy men-at-arms and claimed their connection with the Mengal tribe of the Jhalawán country.

⁽c) Including Ahmad Khánzai, Hájizai and Ráhatzai sections.
(d) The Kurd tribe was responsible to the Khán only for 300 men. The extra provision of 60 men was intended to meet the contingency of units dying out or being unable to supply their quota from some cause or other.

Serial No.	Name o	f tribe.		Name of	clan.		No. of men-at- arms.	Total.	Remarks.
6	Sahtakzai	•••	***	· •••••				(e) 40	
. 7	Lahri		***	Bráhimzai Haidarzai Zobèráni Khalécháni Shadiáni Shangráni	***		I ,, I ,, I ,,	700	
8	Lángav	***	***	Ali Shádizai	***	•••	350	} 700	
9	Sarparra dénis an M é n g Nushki,	d Zag	'nr				500	500	

⁽e) The Sahtakrais are considered to be equal to one takkar of the Kurd tribe and are resp nsible for 40 men, but as their connection with the Kurds is somewhat indefinite they have not been included under the Kurds.

N.B.—The Rinds of Kachhi also supplied 1,000 men-at-arms with the Sarawáns.

APPENDIX VIII.

Statement showing Rates of Revenue paid in various Crown lands.

					-		Mastung N	liábat.		Kal	át Niábat.		
	me of (Crop.			Mastung.	Pringábád.	Pringábád. Tíri.		Chhappar including Muchai Káréz.	Ziárat.	Garok.	Remarks.	
Wheat	***	***	•••)	ָן י				,			
Barley -	•••	•••	•••		hbar crops.					2 3	,	2	
Shirr	•••	•••	•••	•••	Kushbar (Rabi) crop	k g	8	28	3	3	3 8	3	
Matar	•••		***	•••.) E	}						l	ı
Tobacco	•••	•••	**,	·••		<u>\$</u>	Not cu	ltivated.	4	Not cultivated.			"Chúchik" or flowers exempt from revenue.
Melons (Pái	lésát)	•••	***		Gu	<u>s</u>	2 T	<u>3</u>	*	formerly it was §.	formerly it was §.		Appraisement in cash.
Potatoes	•••	•••	•••	•••	ar (Kharif) crops.	å	3 8	<u>8</u>	2	Not cultivated, if done battle at 2/3.		if 3-	
Lucerne	•••	•••	••	***	Sabsbar	4 6	8	4	2	- 1	4 5		
Maize	••• ,	•••	. •••	•••		ā.	9 8	3	3	 ••••••		***	
Gál or Prisi	i.	•••	••• 、	•••	'	a 4	2 8	3	ŧ	3	9 3		,
Onions	•••	•••	** :	ز	į į	ą l	3	a .	8	2 3	9 3	***	

APPENDIX VIII-(contd.)

Statement showing Rates of Revenue paid in various Crown lands—(contd.)

							Mastung N	liábat.	-	Kala	it Niábat.			
	Name of Crop.					Mastung.	Pringábád.	Tíri,	Kahnak.	Chhappar including Muchai Káréz.	£Ziárat.	Garok.	Remarks.	
Mung	***	•••		٠)		4	. 3	8	3	Not	cultivated	l.	-	
Carrots	•••	····	***	·	rr(f)	2	2/8	ŧ	2	. 2	2 3	•••	Appraisement in cash.	
Judri			•••	•••	(Kharif)	<u>8</u>	3	<u>2</u> 평.	2 3	· 2	2 3			
Coriander ((dhanı	a)	•••	•••	Sabsbar (crops.	2	2 8	2	ž	. 2 8	2 8	•••	7	
Vegetables Bhang	···		···	}	Sal	9 4	34	. <u>8</u>	å	*** 10	*****		·	
	Fo	DDER	s.	•						•				
Bhúsa of	whea	t	•••	•••	•••	} 2	2 3	2 3	2/3	4		3		
Katti of sh	hirr a	nd <i>ma</i>	tar	•••	•••	11	8	8	3	a a	*	•		
Bhúsa of 1	barley	•••			•••	Whole	3	2 T	2 3	· 2	4	1		

Pásgmáti	•••	•••	•••			•••		******		3		ž		Fine chaff of wheat thrown along the borders of the threshing floor by winnewing.
Kalal		•••		•••	•••	•••		•••••		1/2		⅓ .		Bhása having grain left after winnowing.
Maize (judi	ri or 2	Zurraf		•••		ţ	2 %	. 4	34	4		‡	1	
Prísh		•••	•••	•••	• • • •	3	2 3	3	8	₽.		3	2	
Mung	•••	•••	•••	· •••	•••	2	2 11	å	3	Not cultivated.			i .	