REPORT

ON

THE SETTLEMENT OPERATIONS

IN THE

THONGWA DISTRICT. SEASON 1889-90.

Accompanied by Maps.



RANGOON:

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RESOLUTION

THE REPORT ON SETTLEMENT OPERATIONS

THONGWA DISTRICT SEASON_1889-90.

Extract from the Proceedings of the Chief Commissioner, Burma, in the Revenue Department,-No. 118, dated the 22nd June 1891.

READ-

Report by Mr. H. M. S. Mathews, Settlement Officer, on the setflement work of the year 1889-90 in the Thongwa district.

Letter No. 198-18.T., dated the 28th January 1891, from the Commissioner of Irrawaddy to the Financial Commissioner, reviewing the same.

Letter No. 520-38R., dated the 20th May 1891, from the Financial Commissioner, enclosing Notes by him and by the Director of the Department of Land Records and Agriculture on

RESOLUTION .- The Settlement Officer's report deals with five circles in the Danubyu, five in the Yandoon, and five in the Pantanaw townships, comprising a gross area of 1,024 square miles and a cultivated area of 236 square miles. The Settlement Officer has divided the area under paddy cultivation into three soil tracts and has subdivided these into eight assessment tracts in accordance with the varying costs of carriage in each.

The Financial Commissioner considers that the Settlement Officer's classification might be simplified and that the rates proposed by Mr. Mathews might reasonably be pitched higher.

In regard to rates the Financial Commissioner is undoubtedly right. In arriving at the figures for half net profits every possible issue is given in favour of the cultivator, and after all that, when revenue rates come to be proposed. large deductions are made from the deduced and theoretically correct rates of This has been the practice in all land settlements in Lower Burma and the consequence is that the cultivators throughout the province hold on remarkably easy terms. This is seen when the revenue rates proposed are compared in any district with tenants' rates. In the tract now under settlement tenants pay from Rs. 7-4-0 to Rs. 2-11-0 per acre, or an average of Rs. 4-14-5 per acre, while the rates proposed by the Settlement Officer range only from Rs. 2-8-0 to Rs. 1-6-0. The Chief Commissioner agrees with the Financial Commissioner that more regard may be had to the deduced rates in view of the fact that the price of paddy has for years past remained high and shows no tendency to fall. But regard must also be had to the amount of enhancement. The actual existence of low rates always forces a Settlement Officer to forego the full assessments which he would otherwise feel at liberty to take. It is as

a general rule only when fresh land is being brought under assessment for the first time that the increased demand on a cultivator's holding can properly exceed 50 per cent. on his present payments,

- 2. The Chief Commissioner has personally conferred with the Financial Commissioner and the Settlement Officer, and has examined the results of the Settlement Officer's proposed rates and of the Financial Commissioner's revised rates, circle by circle, and compared them with the respective current revenue demands. The Financial Commissioner's amended classification of the circles for purposes of assessment appears to be justified except in the case of the Settlement Officer's Tract III, in which the high cost of carriage and therefore the lower net local value of produce would warrant rates of assessment somewhat below those suggested by the Financial Commissioner. The Chief Commissioner has therefore decided to grade the paddy area for purposes of assessment in the way suggested by the Financial Commissioner with this exception, that the Settlement Officer's Tract III shall be grouped with Tracts IV and V instead of with Tracts I and II.
- 3. The final classification and rating of the paddy cultivated area will therefore be as follows:

					Settler	nant	RATES PER ACRE SANCTIONED.					
		Group.			Officer's		Class of	soil.	Rat	e.		
	 								Rs.	۸.	ν.	
J	 			{	II		} 1st 2nd	:::	8 2	0 4	0	
11			•••	{	IV V		} lst 2nd	:::	$\frac{2}{2}$	8	0	
11			•••	{	VI VII VIII	••• •••	lst 2nd	:::	2 1	8	0	

Paddy-land.

4. The Financial Commissioner's revised rates for garden-land and lands cultivated with miscellaneous crops are approved. The gardens are very productive and the miscellaneous cultivation, which consists chiefly of chillies, maize, tobacco, melons, and cucumbers on the *churs*, is very profitable.

The Chief Commissioner is unable to see why garden-lands are throughout Burma so very inadequately assessed at present.

These lands will now in the area under settlement be assessed as follows:

					Tra-
Garden-lands { Tract I	•••	•••		٠	8)
Tract II		****	***	•••	2 } per acre.
Miscellaneous cultivation	***	***	***	* ***	2)

The proposed rate of Rs. 0-4-0 for solitary fruit trees is approved.

5. The application of the rates sanctioned in the preceding paragraph will cause a somewhat excessive enhancement of revenue on the paddy cultivated lands of certain villages in the Pyingatha and Tagè circles, and on the gardenlands of certain villages in the Kattiya and Kanhwèkabo circles. In order to

ease this off the Chief Commissioner has decided to assess these villages at a lower scale of rates for five years, i.e., up the 30th June 1896, after which they will have to pay the rates sanctioned in paragraph 2. These villages and the rates thus to be temporarily applied to them are as follow:

Cirole		Vil	lage.		Description o f land.	Rate per acre.
	. (Hlèzeik]	<u> </u>
		Akyaw ashe		•••	1	
Pyingatha	٠	Sinlangale Sinlangyi	•••		1	-
- 1	}	Negyaw			i	!]
ž.	1	Kyôntani			1	1
	Ĺ	Inyat			l	1
	_				j.	[]
	ſ	Sankin	•••		Paddy-land.	,
	į	Thôngwa		••• }	1 %	1st class soil Rs. 2-8-0.
	1	Yebauk	•••	•••	gg g	2nd class soil Rs. 2.
	- 1	Nyaungôn Yebyingyaung	•••	***	l &	and class son its. 2.
	!	Dain man Ass	•••		1 2.	1
Tagè	{	Pettan			1	
2.080]	Kaznn		***	1	ij
	ĺ	Thabyigyaung myau			ì	1
	- 1	Pankôn	•••			
	- 1	Myathlagyaung			1	1
	i	Letpangyaung			1	1
	Ĺ	Kyidawchaung)	J
				i		
	ſ	Momaka	• • •	•••	7	1
	- 1	Samalauk		•••	1	-
		Zibyugyun	•••	••••	1	
		Nyaungwaing	•••	••••	}	i I
e	- 1	Nyaungzauk Pawhla		•••	1	1 1
		Manali ante	•••	•••	1	11
		353 1: a 4 . 4		•••	1	1 :
Kattiya	≺	A		•••	1	((
	79.1	Amyanng			1	11
		Thambayachaung			Ţ	l j
	1	Nyaungywa			1	1
9.00	1	Kyunu		•••	1	11
	- }	Kattiya		***	ğ	1 1
	- 1	Hnetpyawgyun mye	inma	•••	1 7	Rs. 2.
	Ĺ	Hnetpyawgyun kayi	in		Garden-land.	16
					arc.	
	ſ	Kyaungdawyatôngy	an	•••	3	11
	1	Thambayachaung	•••	•••		
9	1	Kathawin auk	***			
		Kathawin ywama Kathawin atet		•••		11
	1	Daunggyi kayin		•••	1	11
Kanhwèkabo	5	Daunggyi myeinma	•••	`•••	1	
]	Paukchaung				
		Yelè		···	1	11
	1	Daunggyi			1	! !
	- 1	Yônngu	•••		1	!
	1	Hlèzwè		•••	1	11
p30	į	Letpanzin	•••	•••	j	IJ

6. The financial result of the rates of assessment now sanctioned on the entire area under settlement will be as follows:

Rs.

Actual current gross revenue (with 10 per cent. cess) ... 2,69,449

Gross revenue demand at the rates now sanctioned (with 10 per cent. cess) 8,74,856

This yields an increase of Rs. 1,05,407, or 39 per cent. on the current revenue which, in view of the fertility of the tract and of the present market value of its produce, cannot but be regarded as a very moderate increment.

- 7. The Chief Commissioner presumes that the Deputy Commissioner has taken steps for the demarcation and reservation of the grazing-grounds recommended by the Settlement Officer.
- 8. Extract paragraph 17 of the Settlement Officer's report on embankments will be forwarded to the Public Works Department for consideration.
- 9. Referring to paragraphs 16 and 21 of the report the Chief Commissioner desires that the Conservators of Forests will consider, in communication with local Civil Officers, whether it would be possible throughout Burma to lay down a rule under the Forest Act and Forest Regulation forbidding the cutting of timber for firewood or any other purpose within 2 chains of the banks of streams. It is important to preserve such timber for the greater security of the bank and to afford shade to fish, which do not spawn in shadeless streams.
- 10. As regards the closing of the smaller streams noticed in paragraph 23 of the report the Chief Commissioner thinks something might be done by Township Officers and thugyis to induce the villagers themselves to clear the beds. He would wish to have the plan tried at any rate. It is presumed that the wants of the tract in the matter of roads have been noted for the district road scheme now under preparation.
- 11. The attention of the Commissioner is invited to paragraph 55 and the excessive under-measurement of gardens by the thugyis. Some allowance has to be made for mistakes in thugyi measurements, but such differences as are here shown can only be due to fraud, and the Chief Commissioner thinks that it would be useful occasionally to make an example of a thugyi found returning such extremely false areas. A general warning that this will be done in future might have a good effect.
- 12. The report is very creditable to Mr. Mathews, the Settlement Officer, and the Chief Commissioner thanks him for his good work.

By order of the Chief Commissioner,

C. G. BAYNE, Secretary,

REVENUE DEPARTMENT.

NOTIFICATIONS.

Dated Rangoon, the 22nd June 1891.

No. 130.—Under the provisions of section 24 of the Burma Land and Revenue Act, 1876, the Chief Commissioner sanctions the following rates, which shall be, for the term of 15 years? the maximum rates of assessment upon the classes of land within the kwins and circles of the Thôngwa district hereinafter mentioned, and such rates shall take effect from the 1st July 1891.—

						PADDY	-LAND	
Tract.	Name of circle.	Senal No.	Kwin No.	Name of	kwin	1st class soil	2nd class soil.	Remarks
						Rate per	Rate per	
						Rs 4	Rs 1	
	Danubyu myoma	3 4 5 6 7 8	340 341 342 344 345 346 338 343	Hmawya Nandawgôn Lôksa Ônbin Thabaung Mayangyaung Kamadôk Yedwingôn	; :			
	H negyo	9 10 11 12 13 14 15 10 17 18 19 20	390 391 392 393 403 404 387 388 394 395 396 402	Tamya Kanyingauk Alamyo Kanngu Aleywa Kanngugyi Seikthangu Byinnya ashe Kyontôn Thaedaung Zibyugôn Kanngugale				
1	Pyingatha	21 22 23 24 25 26 27	349 351 364 365 366 367 369	Hlezeik Akyaw ashe Sinlangale Sinlangyi Negyaw Kyôntani Inyat		3 0	4	
	Thabyu	28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44	321 322 324 326 327 328 331 332 333 334 312 318 319 323 330 335 336	Ngathangyaung Kveingyaung Wayôngyaung Kyazu Welawè Kyundawmyo Nyaungvaung Talaingzu Pauktaw Myinzu Yôndawyemyôk Danôngyaung Inma Tawgalo Kôndan Letpan Kamadut				
	Thayaing	45 46 47 48 49 50 51 52	414 417 418 419 422 411 412 420	Zalôkgyi Sèya Kyaungôn				

1 7.							PADDY	-LAND.	
Tract.	Name of circle.	Serial No.	Kwin No.	Name of	kwin.	,	ıst class soil.	and class soft.	Remark
			***				Rate per acre.	Rate per acre.	
				¥		- 1	Rs. A.	Rs. A.	
	1	53 54	421 423	Zwekadein Sitkwin		•••]		
1		54 55 56 57 58	424	Chaungzauk	•••	•••			
- 1	Thayaing-con-	50	425 426	Poyauk Mayingôn	•••	•••			
į	cluded.	58	427	Ngapyingyaung	•••	•••			
- 1		59 60	428	Thèbyu Natsin		***			
1		61	436	Sankin	•••	***			
		63	437 438	Thôngwa Yebauk		•••			
		63 64	440	Nyaungôn Yebingyaung	•••	•••	3 0	2 1	
1.4		65 66	441	Pyinmagon		•••	3 0	2 4	
	Tagè	67 68	435	Pettan Kazun	•••	•••			
1	l'age)	69	439 442	Thabyegyaungm	yauk	•			
1	1 1	70 71	446	Paukôn Myathlagyaung		2			
1		.72	447 448	Letpangyaung					
1	}	73 74	449	Kyidawchaung Danaw					
- 1	Bawdi }	75	293	Vinyo		•••	1		
	7	76	294	Sutamu Zibin	•••	•••	}		
		77 78	295 387	Kawkabaw		•••	1		
,	Danubyu	79 80	339 347	Yegyi Alègaing	•••	•••	1	1	
i	۲	81	373	Thabyeyo	•••		l l		
J		8 ₂ 8 ₃	374 385	Sakangyi Byinnya anauk	•••	•••			
- 1		83	386	Talawaw Mcgaye	•••	•••			
	Hnegyo	85 86	389 397	Ngabataing	•••	•••			
j		87 88	398	Thabyubin Chaungwa	•••	•••			
-		89	399	Pyinmagôn	•••		1		
1	}	90 91	401 355	Thabawthabyiu Akyaw anauk	•••	•••			
1		92	356	Aingyi	a				
		93 94	357 358	Pyingatha Laman	•••	•••			
		95 96	359	Chaungale	***	•••			
11	Duimmetha	90 97	360 361	Kyontanaw anau Kyontanaw ashe	···	•••	2 8	2 0	
1	Pyingatha {	98	362	Pónzogyi Tigwe anauk	•••	•••			
1		100	348 350	Tigwe ashè	•••	•••	11		
1) ;	101	352	Kyônthamyin Kyônbaing ashè		•••	11		
1	4	103	353 363	Thanlwingu		•••			
j	}	104	370 313	Ingala taung Eikkalat		•••	1		
		106	314	Sindôn	•••		H		
1	Thabyu	107	315	Kyiganthaik Sekkawchaung		• • • • • • • • • • • • • • • • • • • •			
		109	329	Kyagayet		***			1 1 1
.]	,	110	408	Tawgyi Sagaywama	•••				
1	Thaysing	112	409	Tônbôn					
	I hayanng	113	413	Kakko Inta					
	1		443				el .		
	1		1						
					. :				
							*		

					PADDY	-LAND	
Tract.	Name of circle.	Serial No.	Kwin No.	Name of kwir.	ıst class soul	2nd class soul	Remark
				•	Rate	Rate	
					per acre	Rs 1	
		115	415	Yelč	1		
ſ	Thayaing—con-	116	430	Letswegyaung Ngani			
-	}	118	431 475	Lawlaung . Yandoon myoma			
- 1	1	120	487	Wèdaungatwin		(
ı		121	488 489	Kungyanzu Wèdaungapyin			
- 1		123	490	Gonmin			
		124	476 477	Letpangyaung . Natpe			
	Yandoon myoma	120	479 480	Thègôn			
-		128	481	Yôndaw	11		
1	(129	482 483	Mohôk Gayetya		;	
- 1		131	484	Kwingale	11	}	
Tagè		132	485 486	Tugyaung Hnettôn			
	(134	432	Pakun myauk		'	
	Tagè }	135	433 450	Pakun taung Wègyi			
Ì	(137	451 462	Wenge			
- 1		138	463	Suntani	11		
- 1	1 1	140	464 466	Samalauk . Padawdaung	11		
- 1	Ingabu	141	467	Palè auk			
- 1	i	143	408	Pale atet Kycttuywe			
11 ₹		145	471	Alègyaung	1 2 8	2 0	
1	}	146	473 492	Kungyangôn Momaka			
	l j	148	493	Samalauk	11	1	
i	1	149	494 495	Zibyukyun Nyaungwaing			
- 1		151	496 497	Nyaungzauk Pawbla	H		
-{		152	498	Mèzalı auk .		į	
1	Kattıya {	154	499 500	Mèzali alet			
ļ		156	501	Ashwe			
1		157	502 504	Letkya Thambayachaung			
1	1	159	505 506	Nyaungywa Kyun U		1	
1	1	161	507	Kattıya			
		162	508 509	Hnetpyawgyun myèinma Hnetpyawgyun kayin	11		
l	1	164	522	Kyôny it			
1		165	524 526	Chaungyi			
1	Inzaya	167	512	Udo	1		
١	inzaya	169	513	Lamaing		1	
- 1		170	515 521	Kyontama Kanyingauk	1		
I	1	172	527	Kattan			
1	1	173	202	Gônmin ashe	.	1	
1	Pantanaw myo-	175	209	Payabyo	1		
ļ	ma.	176	210 211	Okpo Pantanaw myoma			
(-	178	212	Shwekyaungdaik myauk			
	1	179	213	Shwekyaungdaik taung	J	'	

				*	PADDY	·LAND.	
Tact Name of circle.	Serial No.	Kwin No.	Name of kwin.		ıst class soil.	and class soil.	•Remarks.
					Rate per acre.	Rate per acre	
* 4 *						* 1 * w 1	y With
					Rs. A.	Rs. A.	**
Pantanaw myoma	180	214	Gônmin anauk Sitkaing)		
-concluded.	182	216	Tunpa ashè	•••		* F	
	183	217	Tunpa anauk Singyaung	•••		~	
Bawdi	185	304	Bawaingapyin ywa		1		
Dawdi }	186	305	Bawaing Sinlangyi	•••	l,		
1	188	292 276	Thingyaingon				
	189	218	Kywebyuthaung	•••	J		
	190	219	Yondawnèlathet Wèdaung		1		
4	192	225	Kattiya atet				
	194	226	Kattiya auk Pebin myauk				
į į	195	231	Pebin taung		1 1		
	196	220 221	Mayan Kyonthanaung				
II Pathwe	198	227	Payagon		2 8	2 0	
-11	199	266 267	Tawgalauk Payaikgyi	••••			
	201	268	Payagyi taung				
1	202	269 270	Satthè Talaingzu				
	204	271	Banitmyauk		1		
11 **	205	272 273	Kyôntôngale Inma ashè	•••			
	207	280	Banittaung				
- 41	208	281 188	Mwèbin		- 3		
1) ;	209	189	Meinmabye Myitwa				}
Kanhwalisha	211	197	Pyalin				
Kanhwèkabo	212	198	Yegyaw Hlezwè				1
[]	214	200	Chaungyi				ŀ
	215	201	Letpanzin		,		
	216	375	Kywetalin)		
	217	376 377	Kazun Mayangôn				
	219	378	Panga	* ***	1		}
	220	379 380	Yonsagadaw yemyok Kyoneik	•••			1
Hnegyo {	222	38 I	Hnègyo		1		1
	223	382 383	Tawkwè Sabegôn	***			
	225	384	Ryaungzu				
	226	405	Letpanzin Kywezagyun				
11	228	407	Pobawgyun	•••			ļ
III Pyingatha	229	354 371	Kyônbaing anauk Ingala myauk		2 0	1 8	
III { Pyingatha }	231	372	Tawkwè		. 31		
I) That	232	368	Kanusayè Sekkawgyun	***			
Thabyu {	234	325	Yelègyun		i		
Yandoon myoma {	235 236	478	Yemyôktaw taung Yemyôkdaw myauk				
1	237	443	Kadokama	. 924			
1 10-3	238	444	Gyobyu Wegyibôkchaung	44.		9.	
Tage	240	445	Thabyegyaung taung			4	
	241	452 453	Lahakunpadôk Wadaw				
Ingabu	243	456	Buthanut	in i			1
i ingabu j	244	459	Kôkkowa	* ***			

					Padd	Y-LAND.	
Tract.	Name of circle.	Serial No.	Kwin No.	Name of kwin.	ıst class soil.	2nd class soil.	Remarks.
1.					Rate per	Rate per	
					Rs. A.	Rs. A.	
r		245	460	Pandaing	. h		
		246	461	Ingabu Wèdaung	1)		
		247	472 474	Yanginsanya			
	Ingabu-concld.	249	455	Inma	1 1		
.		250	457 458	Tabèkula myauk	! !		
		251	465	Apaung	1 1		
	· [253	469	Pandawgale	11		
	Kattiya }	254 255	503 510	Yemyôklaha Yemyôktaw	1 1		
- 1	}	256	516	Teikwagyikyun	1 1		
- 1		257	517	Pyathakyun			
		258 259	518	Pesitkyun Kanyingaukkyun	11		
	Inzaya	260	520	Pyathakwin		1	
		261	523	Kyoyitkyun	1 1	ì I	
- 1		262	525 528	Chaungyikyun	1		
		264	511	Kaingdaw	1 1		
- 1	ſ	265	203	Pyintôngyi	. []	! !	
	Pantanaw	266	204	Pyintôngale Yebaw	1.1	1 1	
	myoma.	268	206	Nangat	11		
	ļ	269	207	Tawgyaung	1		
!		270	283 284	Kyungyi Kalaung	3 1		
11	l'	272	285	Minzè	1.1	1 1	
		273	286	Dawwa	1 1		
- 11		274	296	Mingayu Hlègaw			
111		275 276	297 298	Yelè	11	1 8	
		277	299	Sègyi myauk			
}		278	300	Sègyi taung Ywathit	1.1		
	Bawdi {	279 280	301	Thamaing			
		281	303	Kazinngu	4	1	
- 1		282 283	308	Akwi Shwelè	11		
- 11		284	309 287	Tawtamin ashe	1		
	1	285	288	Tawtamin anauk	11		
- 1		286	289 306	Gayethamyeinyemyők	1 1	i i	
	4	288	307	Natsè	1 1		
- 1		289	310	Sankabin	1 1		
	}	290	311	Kanyingôn Kabaing			
i i		292	264	Yinpa	11		
		293	265	Kadauksat	! !		
1		294	274 275	Inma anauk Kayinzeiktapat	1;		
		296	277	Gayetgyaw anauk	1 (
	Pathwa	297	278	Gayetgyaw ashe	.		
1	Pathwe	298	279 232	Intagaw Thayetngu	! !		
1		300	233	Kinwagyi	1 1		
1		301	282	Ngapègayet	11		
. 1		302	222	Kanuset Kawè	1.4		
		304	228	Kyôndaingalè	1.3		
- 1	,	305	229	Yemyok			
1		306	173	Kyaungdawyatônkyun Thambayachaung	1 1		
1	Kanhwèkabo	308	175	Konit-eindan	3 .		
	1	309	176	Kathawinauk	. 1.1	1	

2

2							
					PADDY	-LAND.	
Tract	Name of circle.	Serial No	Kum No.	Name of kwin	1st class soil	2nd class soil.	Bemarks.
					Rate per acie. Rs. A.	Rate per acre.	
1111	Kanhwèkabo— concluded Zayathla {	310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 327 327 328	177 178 179 180 181 182 183 184 185 186 187 190 191 192 193 194 195 262 147	Kathawinywama Kathawinatèt Daunggyi kayin Daunggyi myeinma Pyinmagon myauk Pyinmagon taung Magyigon Paukchaung Yelè Daungyi Yonngu Aunghlaing Theingyun Pyamalaw I ugyaung Pauktaw Tonkalaw Kanhwèkabo Olomyauk Mweyodaw	2 0	1 8	

No. 131.—Under the provisions of section 24 of the Burma Land and Revenue Act the Chief Commissioner sanctions the following rates which shall be for the term of 15 years, the maximum rates of assessment upon the classes of land within the kwins and circles of the Thôngwa district hereinafter mentioned, and such rates shall take effect from the 1st July 1891:—

Tract.	Name of circle.	No. of kwin.	Name of kwin.	Garden land.	Miscellaneo u s land.	Solitary fruit trees,	Remarks.
I	2	3	4	5	6	7	8
·	· *		,	Pata per aure	Rato per pero	Rate per tree.	
, · ·	5				1	Rs. A.	
	* v			Rs. A.	Rs. A.	Ks. A.	
	Yandoon {	475 476 477 487 488 489 490	Yandoon myoma Letpangyaung Natpe Wèdaung atwin Kungyanzu Wèdaung apyin Gônmin				
	Inzaya {	515 521 522 524 526 527	Kyôntama Kanyingauk Kyônyit Chaungyi Gangyaung Kattan				
1	Kanhwè- kabo.	173 174 176 177 178 179 180 184 185 186 187	Kyaungdawyatôngyun Thambayachaung Kathawin auk Kathawin ywama Kathawin atet Daunggyi kayin Daunggyi myeinma Paukchaung Yelè Daunggyi Uônngu Hlezwè Letpanzin	3 0	2 0	. 0 4	
	lngabu {	461 462 463 464 466 467 458 472 473 474	Ingabu Mezali Suntani Samalauk Padawdaung Palè auk Palè atet Wèdaung Kungyangèn Yanginsanya				
	Kattiya	492 493 494 495 496 497 498 499 500 501 505 506 507 508 509	Momaka Samalauk Zibyukyun Nyaungwaing Nyaungzauk Pawhla Mèzali auk Mèzali atet Amyaung Ashwe Thambayachaung Nyaungywa Kyun-u Kattiya Hnetpyawgyun myeinma Hnetpyawgyun kayin				

Tract.	Name of circle.	No. of kwin.	, S		Miscellaneo u s land.	Solitary fruit	Remarks.
I	2	3	4	5	6	7	8
		. •	*	Rate per acre	Rate per acre	Rate per tree.	
	,			Rs. A.	Rs. A.	Rs. A.	
	Danubyu {	340 341 342 343 344 345 346 338 339 347 337	Hmawya Nandawgôn Lôksa Yedwingôn Önbin Thabaung Mayangyaung Kamadôk Yegyi Alegaing Kawkabaw		* *		
<u> </u>	Hnegyo	390 391 392 373 374 375 376 377 381 383 384 385 387 388 395 397 401 402 403 404 405 407 379 380 382 389	Tamya Kanyingauk Alamyo Thabyeyo Sakkangyi Kywetalin Kazun Mayangôn Panga Hnègyo Sabegôn Kyaungzu Byinnya anauk Talawaw Seikthangu Byinnya ashe Kanngu Kyontôn Thaedaung Zibyugôn Ngabataing Thabyubin Chaungwa Pyinmagôn Thabawthabyu Kanngugale Alèywa Kanngugyi Letpanzin Kywezagyun Pobawgyun Yônsagadaw yemyôk Kyôneik Tawkwè Mègayè	2 0	2 0	0 4	
	Thabyu	314 315 317 321 322 323 313 316 318 324 325 327 328 330 331 332 333	Sindon Kyiganthaik Sekkawchaung Ngathangyaung Kyeingyaung Tawgalo Eikkalat Sekkawgyun Danôngyaung Inma Yayôngyaung Yelègyun Kyazu Welawe Kyundawmyo Köndan Nyaungyaung Talaingzu Pauktaw				

Tract.	Name of circle.	No: of kwin.	Name of kwin.	Garden land,	Miscellaneous land.	Solitary fruit trees.	ω Remarks.
	2		4	5		7	-
				Rate per acre	Rate per acre.	Rate per tree	
ſ	Thoham	334 335 336	Myinzu Letpan Kamadut	Rs. A.	Rs. A.	Rs. A.	
	Thabyu— concluded.	312 320 329 348	Yôndaw yemyók Tawgyi Kyagayet Tigwe anauk				
II	Pyingatha	349 359 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 367 368 370 371 372	Hlezeik Tigwe ashe Akyaw ashe Akyaw ashe Kyônbang ashe Kyônbang anauk Akyaw anauk Akyaw anauk Aingyi Pyingatha Laman Chaungale anauk Kyôntanaw Kyôntanaw Kyôntanaw Sinlangu Sinlangu Sinlangu Sinlangyi Negyaw Kyôntani Kanusaye Inyat Ingala taung Ingala myauk Tawkwè				
	Thayaing	408 409 410 411 412 413 414 415 416 417 418 420 421 422 423 424 425 426 427 428 429 430 431	Saga ywama 16iilón Kakko Sèya Kyaungôn Inta Santabaw Yelè Letswegyaung Letswegyaung Shwekanyinbin Kungyan Zwedaw Pettan Zwèkadein Zwèkadein Zalôkgyi Sitkwin Chaungzauk Poyauk Mayingôn Ngapyingyaung Ngapyingyaung Natsin Ngani Ngani	2 0	2 0	0 4	
	Tagè {	435 436 437 438 439 440 441 442 446	Pettan Sangin				

Tract.	Name of circle.	No. of kwin.	Name of kwin.	Garden land.	Miscellaneous land.	Solitary fru it trees.	Remarks.
1	2	3	4	5	6	7	8
					_	Rate per tree.	
	l ago—concld	447 448 449 450 451 432 433 434 444 445 452 453 454	Mvathlagyaung Letpangyaung Kyidawchaung Wègyi Wèngè Pakun myauk Pakun taung Kyinmagôn Kadôkama Gyobyu Thabyegyaung taung Lahakunpadôk Wadaw Wègyibôkchaung	Rs. A.	Rs. A.	Rs. A.	
	Ingabu {	471 455 456 457 458 459 460 405 469	Kyettuywe Alegyaung Inma Buthanut I abekula myank Tabekula taung Kôkkowa Pandang Apaung Pandawgale				
	Kattıya {	502 503 510	Letkya Yèmyöklaha Yèmyöktaw				
11 4	Yandoon {	479 480 481 482 483 484 485 480 478 491	Thègôn Wadaw Yôndaw Mohôk Gayetya Kwingale Tugyaung Hnettôn Yemyôkdaw taung Yemyôkdaw myauk	2 0	2 0	0 4	
	Inzaya	512 513 514	Udo Wagôn Lamaing Peikwagyi kyun Pyatha kyun Pesit kyun Kanying zuk kyun Pyatha kwin Kyônyit kyun Chaungyi kyun Gangyaung kyun Kaingdaw				
	Bawdı	283 284 285 286 287 288 290 291 292 293 294 295	Kyungyi Kalaung Minzè Dawwa Tawtamin ashe Tawtamin anauk Singyaung Singyaung Singyaung Singyaung Singyaung				

Tract.	Name of circle.	No. of kwin.	Name of kwin.	Garden land.	Miscellaneous land.	Solitary fruit trees.	Remarks.
1	2	3	4 '	5	6	7	8
		297	Hlègaw	Rate per acre.	Rate per acre Rs. A.	Rate per tice Rs. A	
	Bawdi—con-{ cluded. **	298 302 303 304 305 289 299 300 301 306 307 308 310 311	Yelè Thamaing Kazınngu Bawaıng apyin ywa Bawaıng Gayathamyein yemyôk Sègyi myauk Sègyi taung Ywathit Ayôn Natsè Akwi Shwehlè Sankabın Kanyıngôn				
11	Pathwè .	218 219 220 221 222 223 224 225 226 227 230 265 265 267 268 209 270 271 272 273 274 275 277 278 279 280 281 282 282	Kywebyuthaung Yondaw nèlathet Mayan Kyonthanaung Kanuset Wèdaung Kanuset Wèdaung Kattiya atet Kattiya atet Kattiya atet Kattiya auk Pebin myauk Pebin myauk Pebin taung Thayetngu Kinwagyi Kabaing Winpa Kadauksat Tawgalauk Payaikgyi Payagyi taung Satthe Talaingzu Banit myauk Kyôntôngale Inma anauk Kyonzeiktapat Thingyainggôn Gayetgyaw anauk Intagaw Banit taung Mwebin Ngapègayet Kyôndaingale Kyôndaingale Kyôndaingale Kyôndaingale Kyôndaingale Kyôndaingale	2 0	2 0	O 4	
	Kanhwèkabo (229 175 181	Yemyök Koniteindan Pyinmagön myauk Pyinmagön taung Magyigön Meinmabyè Myitwa Aunghlaing Theingyun Pyamalaw Tugyaung Pauktaw Tönkalaw Kanhwèkabo				

Tract.	Name of circle	No. of kwin.	Name of kwin.	G	arden	land.	Miscellaneous land.	Solitary fruit tges.	Remarks.
1	2	3	4	*	5		6	7	8
11 }	Kanhwèkabo { —concld. { Pantanaw }	197 198 200 202 203 204 205 206 207 208 210 211 212 213 214 215 216 217. 262	Pyalin Yegyaw Chaungyi Gônmin ashe Pyintôngyi Pyintôngale Yebaw Nangat Tawgyaung Kyundeik Payabyo Ôkpo Pantanaw myoma Shwekyaungdaik taung Gônmin anauk Sitkaing Tunpa ashe Tunpa anauk Obo myauk Mweyodaw	Ra	Rs.		Rate per acre. Rs. A.	Rate per tree. Rs. A.	

No. 132.—The Chief Commissioner directs that for a period of five years commencing from the 1st July 1891 and ending on the 30th June 1896 the maximum rates of assessment on paddy-lands fixed by Revenue Department Notification No. 130, dated the 22nd June 1891 shall not be applied to the kwins of the Thongwa district hereinafter mentioned; that during the said five years the following rates shall be the rates of assessment for paddy-land in the said kwins; and that from and after the 1st July 1896 the maximum rates fixed by Revenue Department Notification No. 130, dated the 22nd June 1891, shall be the rates of assessment in the said kwins:—

		win.	kwin.		PADDS	-LAND,	
Tract.	Serial number of kwin.			Name of kwin.	First class soil.	Second class soil.	Remarks.
		6-		Sankin	Rate per acre. Rs. A.	Rate per acre. Rs. A.	
	Tagè	61 62 63 64 65 66 67 68	436 437 438 440 441 434 435 439	Thôngwa Yebauk Nyaungôn Yebyingyaung Pyinmagôn Pettan			ł
1		69 70 71 72 73	442 446 447 448 449 349	Thabyègyaungmyauk Paukôn Myathlagyaung Letpangyaung Kyidawchaung	2 8	2 0	
	Pyingatha	22 23 24 25 26	351 364 365 366 367	Akyaw ashe Sinlangale Sinlangyi Negyaw Kyôntani		*	* * * * * * * * * * * * * * * * * * *
. (27	369	Inyat	4		

No. 133.—The Chief Commissioner directs that for a period of five years, commencing from the 1st July 1891 and ending on the 30th June 1896, the maximum rates of assessment on garden-lands fixed by the Revenue Department Ntification No. 131, dated the 22nd June 1891, shall not be applied to the kwins of the Thôngwa district hereinafter mentioned; that during the said five years the following rates shall be the rates of assessment for garden-lands in the said kwins; and that from and after the 1st July 1896 the maximum rates fixed by Revenue Department Notification No. 131, dated the 22nd June 1891, shall be the rates of assessment in these kwins:—

Tract.	Name of circle.	Serial No of kwin. Survey No. of kwin,	Name of kwin.	Garden-land.	Remarks.
1	Kattiya	49 49 49 49 49 49 50 50 50 50 50 17 17 17 17 17 17 18 18 18 18	Samalauk Zibyukyun Nyaungwaing Nyaungwaing Nyaungzauk Pawhla Mèzali auk Mèzali atet Amyaung Ashwe Thambayachaung Nyaungywa Kyunu Kattiya Hnetpyawgyun myeinma Hnetpyawgyun kayin Kyaungdawyatôngyun Thambayachaung Kathawin auk Kathawin ywama Kathawin atet Daunggyi kayin Daunggyi myeinma Paukchaung Yelè	Rate per acre. Rs. A.	
		18	Yônngu Hlezwe		

By order,

C. G. BAYNE, Secretary.

NOTE BY THE FINANCIAL COMMISSIONER, BURMA.

THE total area of the tract under settlement is 1,024 square miles. The cultivated area is 150,831 acres, or 236 square miles.

2. The population is estimated by the Settlement Officer to be about 170,000, showing a density of 166 per square mile of total area, 720 per square mile of cultivated area, which is a greater density than was found in the adjoin-

ing tracts* in 1888-89.

3. Judging by the figures contained in paragraph 6 of the report nearly half of the people are agriculturists. The other half are engaged in a great variety of occupations. This somewhat minute division of labour among the non-agricultural class, viewed in connection with the statistics of production and consumption by the agriculturists (Chapter II of report), appears to point to a considerable local demand by the landed classes for articles of convenience and even luxury, and to indicate a general condition of comfort. The three towns of Yandoon, Danubyu, and Pantanaw (with an aggregate population of 24,000) are the local centres of trade; and there are a considerable number of

substantial distributary villages along the main lines of traffic.

The calamity which most often overtakes the agriculturist and cripples him most seriously is cattle-disease. During the four years preceding 1889-90 the herds were annually decimated by disease, and this mortality among their ploughbeasts materially added to the farming expenses of the cultivators. But, in paragraph 12 of his report, the Settlement Officer shows that this calamity is avoidable by a little care. Some of the cultivators have the common sense to provide comfortable accommodation for their cattle and to stall-feed them during the rains. But the majority, apparently, leave their animals to shift for themselves, with the natural consequence that they catch any disease that is prevalent among the neighbouring herds. There is ample pasturage. All that is wanted is watchfulness and careful tending. But the ordinary Burman peasant will give neither and, when an epidemic occurs, the cattle die in hundreds, sometimes in thousands. I have more than once advocated legislative measuces for preventing spread of contagious cattle-desease. A separate Act would not be necessary; one or two sections in the Village Act (and Upper Burma Village Regulation) would suffice. The people would willingly submit to the restrictions imposed.

5: The most important parts of the report are those which relate to the production of the famil, the market value of the produce, the cost of raising this produce, the condition of the people, past and present. These matters are all

inter-pendent and have a vital bearing on the question of assessment.

Mr. Mathews has carefully divided the country into tracts on grounds of-

(a) common average outturn of paddy as tested by crop-cutting;

(b) common market value of paddy;

(c) common cost of carriage by land and water.

He has combined these economic characteristics in a final table of classification,

in which he grades the villages in eight assessment tracts.

The first three tracts lie solidly in the north. The fourth is confined almost entirely to the central south. The fifth is split up into small isolated areas lying in all directions. The sixth is in two blocks on the north and west. The seventh and eighth include the extensive country in the extreme south, east, and centre, which is liable to annual inundations from the two main rivers.

^{*} Myaungmya township (Bassein district).
*Shwelaung and (part of) Pantanaw townships (Thôngwa district).

In each of these tracts the natural soil is found to be of two qualities,—first or best and second or inferior. The best land in the first tract is found to yield 50 baskets of paddy, the worst land in the eighth tract is found to yield 25 baskets of paddy per acre. Crops were cut in a large number of kwins embracing all varieties of soil, and I believe that these rates of outturn are fair approxi-

mations to actual productiveness; if anything, perhaps a little low.

6. In getting at the gross value of the average cutturn of paddy Mr. Mathews has adopted as his primary standard of valuation the rate of Rs. 70 per 100 baskets (paragraph 74), which he calls the Rangoon export rate. From this assumed rate, which he admits to be a low one, Mr. Mathews deducts the cost of carriage and arrives at the series of local market rates (page 32) which he adopts for valuing the produce for assessment. I think Mr. Mathews has assumed much too low an export rate and, therefore, his deduced local rates are also much too low. This appears too from his own record of local selling prices ascertained to have been current during the last four years. In column 5 of the table given at the top of page 32 the Settlement Officer shows that these local prices have varied from Rs. 73 (highest) to Rs. 62 (lowest), whereas the three rates adopted (see column 6 of the same table) are Rs. 63 (highest), Rs. 58, and Rs. 53 (lowest), per 100 baskets. These are roundly about 14 per cent. below what they should be and certainly are unduly low for purposes of assessment. It would be much nearer the truth to take Rs. 70, Rs. 65, and Rs. 60 as representing the permanent average local values of paddy.

7. To come now to the cost of living and the cost of cultivation. Mr. Mathews has gone into considerable detail, and the figures of Statement VIII in the Appendix are interesting. I have no fault to find with them except that the item of "hire of labourers," which forms more than one-half of the entire cost of cultivation, appears to be excessive when it is considered that the average size of a holding is only 13½ acres and that paddy is the sole crop grown. However, I accept the figures as liberal estimates of the outlay necessary in order that the farmer may live comfortably and farm his holding with the least personal toil. Each landholder has to pay annually from the produce of his holding (i) Rs. 193, cost of the food and clothing, and miscellaneous expenses of his family; (ii) Rs. 83, cost of his somewhat extravagant farming; and after he has paid these he has a net profit of Rs. 104, or about Rs. 6-11-0 per acre. The tenants (who cultivate more than one-fourth of the whole area) do better. They raise on the average 50 per cent. more paddy on the acre than their landlords, and their net profit per acre is Rs. 8-5-0 against Rs. 6-11-0 earned by their landlords. This shows what can be made out of the land with

a little thrift and management by peasants of moderate industry.

8. The indebtedness of the farmers, both landlords and tenants, is purely nominal. Such as it is, it is for the most part cleared off at each barvest, and differs very little from that of the Deputy Commissioner of the district who runs up an account with a Rangoon, shopkeeper and pays his bill at the beginning of each month when he gets his pay. But there is some confusion in the Settlement Officer's figures of this so-called indebtedness. The larger portion of it is due to items in the cost of living, in the cost of cultivation (see statement on page 12), and to outlay in purchase of land, which of course yields a return. These items, which the Settlement Officer calls "ordinary expenses of cultivation" and "ordinary expenses of household," have already been discounted in computing the net profits (Statement VIII) of the cultivators. So that practically these expenses are twice counted. Either, therefore, the cost of living and cultivation must be reduced and the Rs. 40 per head amount of indebtedness (page 12 of report) retained or, if the cost of living and of cultivation be held to be correct, the amount of the so-called indebtedness must be reduced or wiped off altogether.

I point this out as indicating the rather one-sided view taken of the farmer's circumstances and the inclination on the part of the Settlement Officer to find reasons for a low estimate of resources and therefore for low rates of assess-

ment.

9. Now to come to the assessment rates proposed by the Settlement Officer. Mr. Mathews advises adoption of the following scale of rates per acre:—

			74.5					Rs.
Track	. 1	TRE CIRER BOIL		***	***	•••		2.50
1	0.00	2nd class soil	,	•••	***	***	:40.0	2.00
Tract	II	1st class soil		***	***	•••		2.38
3 7 3 3 3	v == == (2nd class soil			***	•••	***	1.88
Tract	III	1st class soil			***	• • •		2.25
7.		2nd class soil			pide.			1.75
Tract	TV	1st class soil		***	•••	**		2.38
41.40	* '	2nd class soil			•••	•••		2.00
Tract	. V	1st class soil			***	***	•••	2.25
11404	1	2nd class soil		****		• • •		1.68
Tract	VI	1st class soil		***	***	***	***	2.00
LIHOU		2nd class soil		***	***			1.68
Tract	VIT S	1st class soil		***	•••	***	***	2.18
TIME	7 44 7	2nd class soil		•••	•••		•••	1.20
Tract	VIII	1st class soil			•••			2.00
11400	4 TTT	2nd class soil						1.88

It is laid down in Article 139 of the Settlement Code (Directions to Settlement Officers) that "the proportion of the net profits to be taken by the State is one-half and the rates are to be framed accordingly." Now I find that, at one-half of the net profits, the average rates of assessment would be as follows on these eight tracts:

1.10			*	*			1	Rs.
Tract	I	•••		•••	•••		4	·80
Tract	II		***	•••			6	5.09
Tract	111	***	***	·	***	,,		1.07
Tract	IV		•••	***		•••	4	1.86
Tract	v	7	***	•••	***	•••	2	2.89
Tract	VI	•••		***			8	3.04
Tract	VII		***				1	.57
Tract	VIII	***				•••	2	34

These rates would in Tracts I, II, III, IV, V be fully double the average of the proposed rates. In Tracts VI and VIII they would be 65 per cent. and 30 per cent. respectively higher than the average of the proposed rates. In Tract VII the two rates are about equal.

10. I think we must insist on at least an approach to the standard of half net profits in assessment. This standard was laid down eleven years ago after very careful consideration, but it has been ignored in almost every settlement made since. Mr. Mathews has, on the one hand, been liberal in his estimate of the cultivator's outlay and, on the other hand, he has somewhat understated his resources. So that, even were the half net-profit rates strictly applied, the resulting assessment would be no more than the cultivators might fairly be called upon to pay.

11. Compare the rent-rate paid by the large body of tenants with the rates proposed for assessment and with the half net-profit rates. There are 2,831 tenants holding 31,714 acres, or 28 per cent. of the entire paddy-cultivated area. They pay rents (see page 17 of report) ranging from Rs. 7-4-0 to Rs. 2-11-0 per acre, and the average rent paid over the entire tenant-held area of 31,714 acres is Rs. 4-14-5 per acre. This is higher than the combined incidence of the half net-profit rates applied to the respective tracts would be, and it is more than double the incidence of the Settlement Officer's proposed rates on the entire cultivated area. The tenant class at present, taken as a whole, differs but little in its standard of comfort from the landholder class, simply because the tenants pay very moderately for their land, make a good profit, and can afford therefore to live and enjoy themselves quite as well as their landlords. Their rents are a fair criterion of what the land can pay without difficulty.

12. I think therefore that the proposed assessment rates on paddy-lands are too low. I would revise the Settlement Officer's proposals in the following particulars:—

(a) Combine Tracts I, II, and III in a single tract and assess the lands at—

Rs.

1st class soil 8:00
2nd class soil 2:25 per acre.

(b) Combine Tracts IV and V in a single tract and assess the lands at-

Rs. 1st class soil 2.50
2nd class soil 2.00

(c) Combine Tracts VI, VII, and VIII in a single tract and assess the lands at—

Physically and from an assessment point of view this abridged classification is just as satisfactory as the more elaborate classification of the Settlement Officer. The first three and the last three original tracts merit separate treatment. The two middle tracts (IV and V) could bear combination with the first three original tracts. But they differ in the lighter quality of the high lands and the more fluctuating productiveness of the low lands, and therefore may be dealt with as a separate single tract.

13. As to the garden and miscellaneous cultivation I think that, on the Settlement Officer's own showing, the assessment rates which he proposes are too low. The gardens and orchards are highly productive here as elsewhere.

Mr. Mathews proposes

	. %, .					Rs.
Garden-lands {	Tract I	•••	<i></i>	•••	•••	 2:00
Garden lands 5	Tract II	***	•••			4.75
Miscellaneous	***	***	***	. 4		1.20

He also proposes a graduated assessment on the gardens in the Kattiya and Kanhwèkabo circles rising from Rs. 1.50 by small annual increments to the full rates.

I would raise these rates as follows:

						Tres.
Camban lands (Tract I		 		*11	8.00
Garden-lands {	Tract II	*	 •••			2.00
Miscellaneous	****	***	 	***	***	2.00

and I would have no graduated assessments or make any exception whatever in the gardens of the two circles named. Improving assessments are not appreciated by the people, who would far rather pay down once for all the full rate, provided it was (as it certainly is) a fair one, than have a changing assessment every year and never know exactly whether they were paying more or less than they should.

14. The total demand proposed by the Settlement Officer, which includes an assessment of fallows at 2 annas per acre [see columns 10—15 of Statement XII(C)] is Rs. 2,84,887 against a current demand of Rs. 2,44,953, or an enhancement (without the 10 per cent. tess) of Rs. 39,934. The financial result of the revised rates which, as stated above, I think should be applied is a gross assessment (without the 10 per cent. cess) of Rs. 3,44,001. This is Rs. 59,114 higher than the Settlement Officer's proposed demand and Rs. 99,048 higher than the current demand, and its incidence on the entire cultivated area is Rs. 2-4-0 per acre, which appears to me to be moderate.

The 14th May 1891.

DONALD SMEATON,

Financial Commissioner,

Ra

AN analysis of the results of the crop-cutting experiments shown in appendix gives the following result :-

Average outturn in standard baskets per acre.

					Soil I.	Soil II.
	(I	•••		•••	78	*65
	II		7.4		78	53
	III		***	***	78	54
Tand	IV	•••	***	***	64	45
Y LB410	V	***	***	***	55	45
	VI	***	***	***	57	41
	VII	***		***	50	30 (very few experiments)
175m 1 12 m	VIII (on	y one exper	riment).			

From the above analysis it appears that the relative productive values of the

1st and 2nd class soils are practically as 4: 3.

The average outturns per acre adopted in the statement given in paragraph 77 of the report are much below these, and the proportions between the assumed outturns of 1st and 2nd class soil vary in the different tracts. No reason

has been assigned for these differences.

been assigned for these differences.

The report contains no statement of the principles on which the classification of soils into 1st and 2nd class has been made, i.e., as to whether the classification of rice-land has been made by position or according to the character of the soil, or from a consideration of both these factors in productiveness. There ere in the area to which the Settlement Officer's report relates a considerable number of tenants holding under the landowners, and from the statement given in section 79 it appears that the rents paid by them approach sufficiently near to competition rents to afford a fair basis for the determination of the relative values of 1st and 2nd class soil, and the Settlement Officer might, I think, advantageously support his assumed outturns for 1st and 2nd class soil in each tract by an analysis of rents paid by tenants for homogeneous holdings in the

The following statement shows the local value of paddy per 100 Government baskets in each of the tracts as ascertained by the Settlement Officer. As pointed out by the Commissioner the Settlement Officer appears to have assumed an unduly low rate for the Rangoon rate, on which his calculations are based, but the actual rates proposed are so far below the rates theoretically justifiable on the basis of a Government demand of half the net produce even with the low rates assumed that nothing is to be gained by raising these values:-

Total value of 100 Government baskets.

15.7	1	***	***	***	68
	II	* ***	* ***	***	58
	III	•••	***	***	53
Manat	IV	•••	•••		68
Trace	V	***	***	•••	58
	VI	•••	•••		58
	VII		• • • •	•••	68
	VIII	* ***	***		58

Tract I.—The rate theoretically justifiable is 5.80, the present rate is 1.79. The Settlement Officer proposes rates of 2.50 and 2.00 on the ground that for Tracts I and II of last year rates of Rs. 2-10-0 and Rs. 2-4-0 were sanctioned, and that this tract is of very similar quality to them, slightly lower rates being proposed on the ground that the full rates sanctioned last year would press too hardly on the people considering the present low incidence. The rates proposed by the Settlement Officer, though giving a considerable increase, appear to be decidedly moderate and might be accepted.

Tracte II and IV.—The rates proposed by the Settlement Officer are 2.38 and 1.88 and 2.38 and 2.00 respectively. Assuming rates of Rs. 2-8-0 and Rs. 2 for Tract I, the rates theoretically justifiable for these tracts are 2.25 and 1.75 for each tract. As these theoretical rates give a considerable enhancement I would propose to amalgamate these two tracts and to adopt rates of 2.25

and 175 for both.

If these rates were adopted, the Settlement Officer's proposed demand would be reduced by Rs. 8,891.40 in Tract II and by Rs. 3.841.45 in Tract IV

In the latter tract there is an unusually large fallow area and this being valued at 2 annas an acre makes the increase in revenue obtained appear small

at present, but this will probably be remedied in a short time.

Tract III.—The rates theoretically justifiable on the basis of a maximum rate of Rs. 2-8-0 and Rs. 2 for Tract I are Rs. 2-2-0 and Rs. 1-10-0. These rates give an enhancement of 16 per cent. on the present assessment and, considering the comparatively low rate, Rs. 3-71, at which tenants in this tract pay, they will, I think, be high enough. If adopted, the Settlement Officer's demand will be reduced by Rs. 1,042-33.

Tract V.—In this tract the Settlement Officer practically proposes to retain present rates and his rates may, I think, be accepted as theoretical rates on the basis of a maximum of Rs. 2-8-0 for Tract I are only Rs. 1-12-0 and Rs. 1-6-0. There is, however, no need for reducing the assessment as it is paid with ease

(paragraph 50).

Tracts VI and VII.—The rates proposed by the Settlement Officer give

very moderate enhancements in revenue and might be accepted.

Tract VIII.—This is a small tract and the area has been largely understated by the thugyis. The enhancement proposed, however, is rather large, and I would propose rates of Rs. 1-12-0 and Rs. 1-6-0. If adopted, the Settlement Officer's proposed demand would be reduced by Rs. 158-22.

If the rates now proposed were adopted, the Settlement Officer's proposed demand for the whole of the paddy-land would be reduced by Rs. 8,933.40.

The data given in the report relating to garden-land and miscellaneous cultivation are insufficient for a person like myself, with no local knowledge, to be able to criticise the proposals.

T. C. WILSON.

Offg. Director of the Department of Lund Records
The 9th February 1891.

and Agriculture, Burma.

From Colonel H. B. Spearman, Commissioner of the Irrawaddy Division, to the Director of the Department of Land Records and Agriculture, Burma,—No 183-18.T. dated Thayetmyo, the 28th January 1891.

I HAVE the honour to invite attention to the correspondence regarding the report of the Settlement Officer, Bassein and Thôngwa, ending with your letter No. 687-73R., dated the 29th October last.

- 2. On my arrival here I found a "proof" printed copy of his report with statements. These I now forward as I received them.
- 3. The area reserved and to be reserved for grazing-grounds is larger comparatively than that set apart in the tract under settlement last year, but it is not excessive, namely, 23,000 acres for 38,000 head of cattle. The selection of sites near villages is a wise measure, as is that of care in securing approaches.
- 4. The question indirectly raised in the 17th paragraph was considered when the embankment gave way last rains at Kyiganthaik. I do not think that any sufficient advantage would be gained by any extension of the embankment or any exclusion of such water as may find its way up the Bawdi
- 5. I am very doubtful as to the advantage of any such protective scheme as that shadowed in the first and second clauses of paragraph 19, and I am certainly not prepared to support it unless and until the officers of the Public Works Department report favourably on its probable result, and under no circumstances would I allow cultivators to endeavour to retain large areas by interfering in any way with the flow of water. If the work is worth doing and is to cause good instead of harm, it should be carried out by scientific officers and not by the peasants, and not by private subscriptions either wholly or partly.
- 6. I think that it would be highly advisable for the Government to reserve forests along the banks of streams in order to prevent the gradual lessening of the fish-supply. I recommended it some ten years ago, but nothing was done.
- 7. The undermeasurements brought to notice in the 55th paragraph are serious and indicate considerable laxity on the part of the thugy is and supervising local Revenue authorities, but it is, I think, what has been found everywhere on a Settlement Officer visiting the tract.
- 8. I am extremely doubtful as to the falling off in immigration since the annexation of Upper Burma, alluded to in the 56th paragraph. From such facts as have come to my notice I think that the immigration from Upper Burma to the southern tracts has increased since emigration has not been interfered with as it was by the Government of the King of Burma.
- 9. I do not understand why the Settlement Officer has (in paragraph 74) taken the Rangoon rate for unhushed rice at Rs 70. It has not been as low as this for many years and Rs. 80 would be a much fairer rate, and yet not, I think, high enough. I would take Rs. 85, and the local values "adopted" as shown in column 6 are far too low, and accepting and proposing for sanction the rates recommended in paragraph 77 as 1 do, I am satisfied that if I err, it is in favour of the cultivators.
- with the Settlement Officer. I sympathize fully with his desire to avoid any hardship to the cultivators, but I think that he goes the wrong way. My experience of the Burman character, extending over 28 years, has taught me that fixity is what a Burman most prefers and that he would sooner pay Rs. 2 a year per acre, having hitherto paid 8 annas, than have the rates continually altered. I am not solitary in this view. It was expressed by officers who knew the Burman far better than I ever have or shall, Colonels Browne, Brown, and Duff. I regret that I am not now in a position to refer to the papers, but I would invite attention to the reports on settlement made many years ago (in 1868, I think, or in 1869) by Colonel Duff, then Deputy Commissioner of the Amherst district. I am prepared to admit that if a Burman had the same education and the same temperament as an Englishman, he would like the

rates being gradually raised; but he is a Burman. I would at once impose the tull rates and on the proper measurements, and I am satisfied that, if this is done, there will be much soreness which will wear off shortly, instead of the immediate establishment of a raw and the blistering of the wound yearly.

- 11. I am not able to accept the reasons of the Settlement Officer for an all round rate of 4 annas for "solitary" fruit trees. The demand is not liked by the people. It is preferred, no doubt, to a demand of 8 annas, but it is not liked. No one likes to pay revenue or taxes. It is not any more "prima facue proof" of ownership than a payment of Rs. 20 a tree would be. It is, however, a tair rate and for this reason I would continue it.
- 12. I recommend, therefore, that for paddy-land and for "solitary" fruit trees the Settlement Officer's proposal be accepted; that for garden-land his proposals be accepted, except that in the Kanhwekabo and Kattiya circles the rates be at once raised to the full amount.

REPORT

ON

THE SETTLEMENT OPERATIONS

IN THE

THÖNGWA DISTRICT. SEASON 1889-90.

CHAPTER I.

GENERAL DESCRIPTION OF THE COUNTRY.

During the year under report settlement operations were carried out in the Pantanaw, Danubyu, and Yandoon townships.

These townships comprise the whole of the northern portion of the Thôngwa district and adjoin the neighbouring districts of Bassein, Hanthawaddy, and Henzada. The names of the circles brought under settlement, with their gross and cultivated areas, are given in the statement below.

-									-
Distriot.	Township.	Name of circl	е.	Serial No.	Cultivated ares.	Gross area.	Square miles.	Percentage of celtivated to pross area (columns 5 and 6).	Remarks.
1	2	8		4	5	6	7	8	9
	Dannbyu.	Danubyu Huègyo Pyingatha Thabyu Thayaing		1 2 8 4 5	Acres. 4,250°85 22,641°87 11,078°00 15,514°86 20,402°98	Acres. 14,917·49 51,004·80 46,071·78 48,867·54 88,760·29	28·81 79·69 72·00 76·85 52·75	28·50 44·39 24·08 81·75 60·48	
Thôngwa.	Yandoon.	Total Yandoon Tagè Ingabu Kattiya Luzaya		 6 7 8 9	78,888·56 10,972·58 12,107·48 6,011·28 7,529·90 7,876·99	22,180·21 51,664·98 54,471·81 40,564·27 48,850·10	84·66 80·78 85·11 68·88 68·51	87·96 49·47 28·48 11·04 18·66 16·82	. ,
Th.	Pantanaw.	Total Pantanaw Bawdi Pathwè Kanhwekabo Zayathla	1 1 1 1 1 1 1 1	11 12 18 14 14	8,984·16 6,084·26 18,728·05 9,070·18 107·84	212,781·82 18,278·76 84.184·08 78,184·70 65,208·15 6,965·29	28:55 181:46 114:85 101:89 10:88	20·68 21·69 7·28 18·75 18·91 1·55	Only two
Į		Total GRAND TOTAL			82,949·44 150,881·28	247,765·98 655,118·65	887·13 1,028·62	18-29	AWIII6.

2. The area thus described lies within the valley of the main Irrawaddy, being situated in what may be called the middle delta, which extends from the bifurcation of the Ngawun river above Henzada to that of the Ma-ubin river below Pantanaw. The surface of the country is generally low, the greater portion of the area being subject to inundation when the river is in flood, except where protected by the bunds. The main Irrawaddy, averaging in the dry season shout three-fourths of a mile in width, runs through the centre of this tract from

north to south, while from it, on the east and west banks respectively, diverge the Panhlaing or Yandoon creek and the Pantanaw river. The Bawle river, a branch of the Hlaing, forms the eastern boundary of the tract and joins the Panhlaing creek in the south-east corner. On the western boundary the Baydi river drains a large area lying between the Irrawaddy and the Taga, and finally discharges itself into the Pantanaw river. Except in the Panhlaing, where the salt water in the dry season finds its way from the Rangoon river, the water met with is invariably sweet and drinkable. During the rains the level of the Irrawaddy is about 25 feet higher than in the dry season and, except where confined by the bunds, spreads itself over the adjoining country and forms vast lakes, above which the higher lands rise like islands. As is the case with all silt-depositing rivers, the surface of the country close to the banks is higher than inland, so that, instead of there being a watershed between the Irrawaddy and Bawlè rivers, there is a considerable depression. These low-lying plains are covered with long grass interspersed with trees and, though very fertile, are generally too deeply flooded to be cultivable. Lying within the main banks of the river are numerous and extensive sandbanks and islands, which are usually entirely flooded during the rains, but in the dry season furnish excellent localities for vegetable gardens. They also provide valuable grazing areas for the numerous cattle employed on the adjacent paddy cultivation. Statement No. XI of the Appendices gives some idea of the average rise and fall of the river, and the rainfall in different parts of the settlement area.

3. On the high land immediately adjoining the main banks of the river is situated the greater portion of the permanent cultivation, and here are found large and flourishing villages almost invariably shaded by groves of well-grown fruit trees. Further inland, where the flooded depressions are reached, the cultivated plains are replaced by extensive stretches of level country, covered in places with kaing grass and trees, and in others with low swamp grasses. Trees are fairly numerous, but are not as a rule valuable for their timber-producing qualities; those which do flourish are such as are able to bear standing in 6 to 10 feet of water for half of the year, while during the other half they are scorched with the jungle fires, which are so prevalent in the hot weather.

4. Burmans and Karens form the great majority of the population, the Races of the people. number of persons of other races being very small.

-		11100-040	-						
ċ	ć.		popu-		B	ACES.			
Seriel No.	Township.	Name of orcle.	Total po latiou.	Burmese.	Karens.	Shans	Talarogs	Natives of India.	Remarks
1	2	8	4	5	6	7	8	9	10
1 2 3 4 5	Danubyu	Dauuhyu Hnègyo Pyingatha Thabyu Thayaing	8,098 8,626 6,605 11,578 8,804	6,873 4,947 4,937 6,273 5,820	1,018 8,560 2,487 5,056 8,894	56 22 24 78 6	93 91 46 44 12	118 6 11 182 72	
		Total	48,711	27,450	15,515	181	226	859	
6 7 8 9 10	Yandoon.	Yandoon Tagè Ingabu Katuya Inzaya	18,771 9,360 7,828 9,189 8,426	14,274 5,508 5,777 6,487 5,308	8,487 8,684 1,887 2,185 2,955	150 80 22 27 71	108 112 127 418 92	757 81 10 22	
		Total	58,519	87,849	14,198	800	852	820	
11 12 18 14 15	Pantanaw.	Pantanaw Bawdi Pathwè Kanhwekabo Zayathla	9,970 7,888 9,966 7,615	6,591 5,628 4,086 2,979	2,156 1,790 5,848 8,818	54 27 5 4	18 881 51 189	156 17 26 680	No resident population in
		Total	34,889	19,229	18,607	90	584	879	two kwins
		GRAND TOTAL .	181,619	84,028	48,820	571	1,662	2,088	ment.

This statement is taken from the Census Report of 1881, since which time the population has very considerably increased. It will be seen that, in proportion to the Burmans, the Karens are relatively not nearly as numerous as in the tract settled last year. This is due to the existence of the large towns of Pantanaw, Danubyu, and Yandoon, of which the majority of the inhabitants are non-agriculturists, while the Karen almost invariably obtains his living from the soil. A reference to Statement No. VIII of the Appendices shows that the Karens form about 69 per cent. of the population engaged in paddy-cultivation, while they hold even a larger proportion of the orchard gardens. Vegetable cultivation on the chur lands is, on the other hand, almost exclusively carried on by Burmans.

5. As remarked last year, the Talaings are rapidly disappearing as asdistinct race, the majority calling themselves Burmans. It is only in isolated fishing villages, where families have been living together for generations, that talaing communities, preserving any of the distinctions of the race, are met with.

6. The three towns of Yandoon, Danubyu, and Pantanaw have a population of the people lation of some 24,000 persons, who are mostly traders and shopkeepers. Of the rural population the greater number are either agriculturists or fishery workers.

The annexed statement gives the occupations of all persons assessed to

capitation-tax as classified by the thugyis.

	-	-		-	
Serial No	Occupation.			Total number asserved	hemark
1 2 8 4 4 5 6 7 8 9 10 11 12 18 14 15 16 17 18 19 20 21 22 2 2 4 25 26 27 28 30 81 82 83 84 85 86 87 88 89 40		•••		10 473 2,776 2 587 2,119 1 308 7 909 2,824 366 206 193 25 8 91 240 35 20 53 34 211 77 21 28 38 13 21 21 75 15 4 83 60 24 70 6 7 11 20	
		Total	-	82,159	

7. The return does not show such townspeople as are assessed to income tax, nor persons who are exempted from capitation-tax for other causes; these, however, form a small proportion of the total population. The damin-workers, like those met with in last year's tract, form a migratory population, which works during the dry season in the estuaries of the Irrawaddy.

8. Although there are extensive areas under orchard and vegetable garden cultivation, paddy forms the staple crop and covers 75.06 per cent. of the total cultivated area. Unlike last season's area, the plough or tè (\infty \infty \infty) is generally used for breaking up the ground, being followed in the usual way with the harrow or tundôn (\infty \infty \infty \infty). Most of the paddy is grown in nurseries and afterwards planted out. In the flooded tracts the surface in many places is not high enough for nurseries, and the plants have to be purchased from more fortunately situated places at considerable expense.

9. The gardens usually lie in long narrow strips on the banks of the rivers and streams, the most valuable being those which are annually fertilized by silt introduced through small artificial channels similar to those described last

year.

The vegetable gardens are generally found on the sandbanks and islands lying in the bed of the main river. For these the kaing grass is cleared away during the rains and the soil prepared for the crops after the flood goes down, either by light harrowing or hand tilling. Paddy-land is very rarely manured, while in gardens the betel-vine is the only crop for which fertilizers are regularly used, and it is only for this crop that there is any attempt at dry-weather irrigation.

10. As noted in paragraph 2 the country, except where protected by the bunds, is liable to floods. Towards the east the combined flood-waters of the Bawlè and Irrawaddy render large areas unfit for cultivation, while most of the cultivated area is more or less injuriously affected. These floods, when higher than usual, drown out areas which ordinarily escape, while the lower cultivated lands are annually inundated until so late in the rains that only short-lived classes of paddy, which ripen rapidly, but bear light crops, can be planted.

Floods, caused by the bursting of the reclamation bunds, are fortunately of such very rare occurrence that they need not be considered as disasters to which

cultivation is liable.

11. Cattle-disease breaks out periodically at intervals of a few years.

The statistics of the last four years (Appendices Statement No. I) show that, although there has been no widely distributed epidemic, the mortality of buffaloes during the past four years has been very heavy. The district statistics regarding cattle mortality are practically only available for two years, and the percentage of deaths to the number of cattle living, as shown in these returns, has been calculated for that period. Prior to 1888-89 the cattle statistics of several circles could not be traced either in the district office or from the thugyis' returns.

The percentage of average annual mortality for the whole tract is as fol-

lows:

				ettlement statistics.
Buffaloes Bullocks	 			17·8 7·8
		Total	•••	11-1

12. An enemy against which the cattle have to contend, and which is probably more troublesome in Thôngwa than in any other district of Burma, is the mosquito. In the Danubyu township this insect is perhaps bearable, but in Pantanaw and Yandson it becomes an intolerable nuisance, many places being infested by it even in the dry season. The name Pantanaw is derived from two Talaing words meaning mosquito-town, and there is no doubt that it fully deserves its name. In these two

townships buffaloes, in the rains, are at night placed in open sheds and protected by the smoke of fires. Bullocks and cows are kept in closed sheds, walled in with mats and plastered with mud, within which fires are lighted to keep out the insects. The more careful cattle-owners place their bullocks and cows under large bamboo frames covered with muslin, in which the animals are fairly free from annoyance. Another trouble from which the cattle suffer is caused by the floods in the unprotected low-lying kwins. Here, when the river is at its highest, the cattle have to take refuge on ant heaps and hummocks in order to get above the floods, while in places where these are not available they have sometimes to stand in water for days together.

With the extension of the reclamation bunds and the consequent spread of cultivation the mosquitos will doubtless become less troublesome, while the cattle will have better wet-weather pasturages. Burmans who have valuable cart animals as well as plough-cattle sometimes house them in well-built stables. In the Tagè circle substantial buildings with raised plank floors were noticed, and in most places straw is stacked for consumption during the rains.

13. Ample areas are as a rule available for pasturage. Some of have these already been reserved, and very extensive areas, which are in regular use as grazing-grounds, have now been marked on the map and recommended for reservation. The following statement gives in tabular form some idea of the distribution of these pasturages. The areas in this return have been roughly worked out as marked on the map in order to arrive at fairly correct totals, but in the settlement registers, from which the statement given under paragraph 41 is taken, these areas, not having been separately surveyed, have not even this approximation to correctness.

Statement of Grazing-grounds.

Serial No	Township	Cucle	Ares proposed for re	4rea already reserv.	Total area used for grazing	Total number of	σ Total area cultivated	Percentage of grazing to total area	Vumber of grazing grounds	Remarks
			Acres	Acres	Acros		Астев	Acres		
1	5 1	Danubyu .	1,295 50		1 295 50	1,148	4 250 85	30 47	4	
2	اخ	Huègyo	4 797 85	122 50	4,800 35	5,602	22,041 87	21 46	42	
3	Danubyu.	Pyingatha	2,185 00		2,185 00	3 603	11,073 00	1971	19	
	Da.	Thabyu	726 50	72 50	799 00	3 660	15 514 86	5 15	1	
5) (Thaysing	1 303 00		1,303 00	4,031	20,402 98	6.38	G	
6	h (Yandoon	1,478 50	250 00	1,728 50	2,110	10,972 -8	15 75	8	1
7	ligi	Tagò	1,978 00	172 50	2,150 50	3 807	12 107 48	17 76	12	
8	Yandoon	Ingabu	241 50		241 50	1,142	6,011 28	4 01	2	İ
9	N A	hattiya	41 50		41 50	769	7,529 90	55	2	
10	IJι	Inzaya	1,029 00		1 029 00	1,053	7,376-99	13 94	4	
11	11	Pantanaw	484 50		484 50	842	9 964 16	12 22	3	
12	1	Bawdı .	2,076 25		2,076 25	2,317	6,084 26	34 13	13	
18	1	Pathwe .	2,238-50	1,200 50	3,439 00	5,609	13,723 05	25 00	10	
14	Pantanaw	Kanhweimbo	1,418 50		1,418 50	1 546	9,070 .3	15 63	8	
15	μ-t	Zayathia					10" 84			Only two
		Total	21,284 10	1,818 00	23,059 10	37,762	1,50,831 23	15 28	132	

- 14. Endeavours have been made to secure small isolated grazing-grounds for each agricultural village of any size. Small areas are often available near the village, and their proximity insures the cattle being better looked after than in more distant places. The segregation of the herds in these areas may also check the spread of cattle-disease, but as this often breaks out at the end of the dry season, before the cattle are confined to the regular grazing-grounds, this result, though important, is not always obtained. The area for grazing buffaloes, in the low-lying country under report, is more easily obtained than that for grazing bullocks. Lands suitable for the latter are only found on the banks of streams, where the surface is fairly high. Cattle-paths leading to the grazing-grounds have been carefully noted where existent or obtainable, while others have, where necessary, been recommended for demarcation and reservation.
- Village forests.

 Village forests.

 Village forests.

 Village forests.

 Village s, most of the large waste areas including extensive patches of tree and bush jungle. In the Ingabu and Tagè circles these forests are being considerably denuded by woodcutters from Rangoon and other places, who come there in search of fuel. The timber met with is of little value for building purposes, that used in the more substantial buildings being generally imported. The denudation of the forests of the abovementioned circles is, in the neighbourhood of the fisheries, partly caused by the local fishery workers consuming large quantities of firewood in the preparation of dried fish.
- There are two main systems of embankment in the tract under report; one a continuation of the main Henzada em-Embankments bankment on the west bank of the Irrawaddy, extending from the borders of the Henzada district to Pantanaw, and the other on the east bank in the Thayaing circle. The western system protects a large extent of country extending right up to the Bassein district boundary. Towards the southern extremity of this bund, however, the land is very low, and the floodwater, entering from the Irrawaddy through the Bawdi river, meets and backs up the drainage water flowing down from the higher lands of the Henzada district and the Danubyu township. The result of this is that a very large area, for the whole of the rains, is deeply flooded and therefore uncultivable (see Map No. IX). At first sight it is a somewhat curious fact that the surface of this low land is gradually but steadily rising. The rise is said to have been going on since Burmese times, the cultivators having a saying which runs as follows: "Ta hnit atwin mye chet ma ta wut to det de" (တနှစ်အတွင်း မြေကျက်မတဝတ်ထိုး ထက် యిస్తే), meaning to say that in the course of a year the surface rises the height of a sitting hen. This elevation of the surface does not appear to be due to inward upheaval or to a fall in the water-level, but to the deposit on the surface of silt washed down from the higher lands. The area protected and damaged by, the two systems of bunds is shown separately in the adjoined statement,

Effect of Government Es	mbankments.
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			,		
Name of circle.	Area of cultivated land cultivable before construction of bund	Area of cultivated land rendered cultivable by construction of bund	Land thrown out of cultivation in consequence of constitution of bund.	Total area	Remarks.
1	2	3	4	5	6
Henzada to Pantanaw Embankment.	Acres	Астев	Acres	Actes	
Danubyu . Hnè yo Pyingatha	2 919 81 7,529 22 2, 50 01	660 17 12 995 85 7,943 34		3,579 48 20 528 07 10 293 85	I
Thabyu Bawdi	9,262 14 802 03	1,869 84 4,075 89	J1 34	11,131 98 4 409 26	
Total	22 862 71	27 548 09	31 34	49 942 14	
Thayanng Embankment					
Thavaing Tage	13 489 79 9,207 66	5,234 81 2,155 83		18,674 60 11 36, 49	
Total	22,647 15	7,390 64		80,088 19	
Ma-ubin Embankment					
Kanhwekabo	544 26		1,449 54	1,993 80	
GRAND TOTAL	45,554 42	3 1, 938 73	1 480 88	81 974 03	

18. The eastern bund system protects a large area from mundations caused by the spill water of the Irrawaddy, but leaves the country still exposed to the floods from the Bawlè river. The relief to the area thus partly protected is, however, very great, as the floods of the Bawlè river, when unassociated with those of the Irrawaddy, subside rapidly and do much less damage than formerly. The closing of the Kakko stream, in the northern part of the Thayaing circle, was effected in 1888-89 and proved a work most beneficial to the neighbouring country. Prior to its closure, when the Irrawaddy was in flood, the water used to sweep through this opening into the Bawlè river and flood cultivation even as far down as the Ingabu and Kattiya circles.

19 To complete the protection of the Tage and Thayang circles the cultivators are of opinion that the present bund should be extended northwards for a couple of miles in the Apyauk circle (Henzada) and southwards to Yankinsanya opposite Yandoon. There is little doubt that the cultivators are right, and it is more than probable that the extensions would result in the reclamation of large areas in the adjoining district of Hanthawaddy.

The large kwins of Apaung (No. 465), Inma (No. 455), and others in the vicinity are at present covered with three or four cubits of water in the rains, and as the closing of the Kakkochaung has already lowered the flood-level in some of the kwins by two or three cubits, there is little doubt that the extensions now recommended would render these large areas cultivable.

Although the above extensions are of importance for the completion of the existing scheme of embankments, there is little doubt that a more important and valuable project is that for reclamation of the large tract of waste which forms the greater portion of the area, stretching from a short distance below Yandoon to Maletto below Ma-ubin.

This could probably be effected by embanking the Irrawaddy from the mouth of the Maletto river to Yandoon and extending the bund along the south bank of the Yandoon creek. It is confidently predicted that such a bund would be more beneficial than that of the Ma-ubin island, although that is an undoubted success. As, however, settlement operations on the greater portion of this area will not be effected till next season, further remarks and recom-

mendations will more conveniently be offered in the report of the following

year.

In the Pantanaw circle the Karen garden cultivators are anxious to reclaim the flooded area, measuring some 5,600 acres in the centre of the circle, by throwing round it a small bund at their own expense. Contributions, amounting to Rs 7,500, have been promised, the contributors, 240 in number; stipulating that grants for paddy cultivation should be made to them with five years' exemption within the protected area. In the rains the area to be protected is at present covered with about three cubits of water, and although there is no doubt that a small circular bund would keep the flood-water out, the rain water collecting inside would still have to be dealt with. In spite of these difficulties it might be well to carry out the scheme, but it should be done by Government agency with the funds subscribed, arrangements being entered into with the interested garden-owners for acquisition of the necessary land without payment. Recommendations to this effect have been forwarded to the Deputy Commissioner.

20. The fisheries dealt with are of great value and importance. Statement No. XIV of the Appendices gives the rental and other particulars of each fishery. The most valuable fisheries belong to the Bawdi and Maletto systems. Those of the Bawdi river and its tributaries are rented for over a lakh of rupees. The Maletto river fisheries are also very important, but as the Maletto river falls partly within the circles which will be settled in 1890-91 the statistics connected with its fisheries have not yet been completed.

21. The fisheries of the Bawdi river do not appear to be deteriorating, while the rental is steadily rising consequent on increased competition at the periodical auctions, the higher prices for which the fish are sold, and the larger outturn obtained by the more systematic way in which the fisheries are now worked. The fisheries of Tagè and Ingabu circles appear, on the other hand, to be deteriorating.

This deterioration is caused by the decreased volume of water finding its way into the fisheries in consequence of the bunding of the Kakkochaung, and also from the increased flow of tidal water which effects an entrance from the south and east. The extensions of the bund recommended in paragraph 19 will probably have a prejudicial effect on these fisheries, but the benefit to cultivation will more than balance this. The extensions of cultivation in the neighbourhood of the fisheries, and the denudation of the forest lands caused by this and the wood-cutting operations described in paragraph 16, also, without doubt, damage the fisheries and cause the fish to forsake them. It would not, however, appear possible or advisable to restrict these operations.

22. The rivers described in paragraph 2, in connection with which there are other smaller streams, form the principal communications of the tract. Besides the roads in the towns there is only one metalled road in the tract, namely, that from Danubyu to Pyingatha, about 7 miles in length, which was made some seven years ago. At the 5th mile the road stops short at the Akyaw stream, over which there is a sort of floating bridge by which foot-passengers can only cross singly and with care. Recommendations for the permanent bridging of this stream, which forms a serious barrier to the transport of paddy to Danubyu, have been sent to the Deputy Commissioner.

In the Hnègyo circle a raised bridle path with a cart-track has been partly made between the main bund and the village of Hnègyo. Recommendations for its extension to Hnègyo and on to meet the Shakègyi road have already been made.

23. In the matter of communications the tract, since the construction of the bund, is probably worse situated than it was before. The bund having closed the outlets into the river, the streams are silting up, and vast quantities of duck-weed or "hmaw" (695), which used to be washed out into the main river, are now collecting, at certain seasons, even in the large streams, completely blocking the waterway and rendering navigation impossible.

24. The Panhlaing or Yandoon creek is, in the dry weather, very shallow in several places and, except at spring-tides, large boats have to lighten themselves of a portion of their cargoes in order to get along. Boats are consequently much delayed and some of them are therefore taken to Rangoon by the longer route vid Ma-ubin and the Thakutpin or Bassein creek.

A good deal of the paddy of the Thayaing circle could more conveniently find its way into the market by the Bawlé river, thus avoiding the shallows of the Yandoon creek, and reducing the journey to Rangoon from five tides to three. Recommendations for opening up one or two cart-tracks connecting the cultivated areas with the river bank have been forwarded to the Deputy Commissioner and are shown on Map No. IX.

25. The settlement area includes the important towns of Danubyu, Yandoon, and Pantanaw, which contain respectively some 5,000, 14,000, and 6,000 inhabitants.

Besides these there are 19 villages each containing over 100 houses. Danubyu, Yandoon, and Pantanaw are the headquarters of the townships of the same names.

Of these Yandoon is now by far the most important, having risen, since the British occupation of the country, from an insignificant little village to an important trading centre.

In Burmese times its position as a centre of trade was occupied by the large villages of Nyaungwaing and Nyaungebedauk, which were situated some 10 miles higher up the river, and formed the market where the boots, from up country, exchanged their merchandize for that of the scaboard districts. These large villages were at times the residence of the Hlaing and Ingabu Myothugvis, who then governed this part of the country, but after the British occupation the inhabitants moved down to Yandoon, which was more conveniently situated for the purposes of trade. The principal trade of Yandoon is in ngapi, which is stored in large quantities and exported to Upper Burma either by steamer or boat. Since the opening of the Mandalay railway a certain proportion of this trade has been diverted to Rangoon and, although business has not yet depreciated to any great extent, the local traders seem to be of opinion that Yandoon is declining.

26. Pantanaw, which is supported by the ngapi trade, contains some 900 houses. It is a decaying town, large numbers of the inhabitants having emigrated to Wakamé and Yandoon since the Pantanaw river became so shallow as to be barely navigable for steam-launches of the lightest draught in the dry season.

Pantanaw used, in Burmese times, to be the headquarters of a Myothugyi, who was nominally subject to Bassein. Just opposite, at Kalaung resided a Penin, who had jurisdiction as far as Shwelaung.

27. Danubyu contains some 900 houses. It was the headquarters of a Myothugyi and contains a celebrated pagoda which, like that at Pantanaw, is said to have been founded by the Talaing Princess Onmadandi. The pagoda is a large one, known as the Kyaikalunbun or pagoda encircled by a hundred bilus. This year a tiny pagoda, some 10 feet in circumterence, was discovered buried under the pagoda platform, and by some is supposed to be Onmadandi's pagoda. Some ingenuity is, however, required to connect this diminutive erection with the pretentious name given to the pagoda of that Princess.

28. Danubyu, as is pointed out in the Gazetteer, is of interest as the place where the famous Burmese General Bandula fell, and where in the second Burmese war there was some trouble with Maung Myat Tun, formerly Penin or petty Governor of Thabyu.

It is now celebrated for its mat-weaving industry, which is carried on very extensively. Looms are rarely seen, cloth-weaving being almost universally displaced by the more lucrative business of mat-making. These mats are known as thinbyus ($\infty \mathcal{E}_{\mathbb{Q}^2}$) and are used all over the country for sleeping purposes. The thin ($\infty \mathcal{E}$) from which they are woven grows in great abundance in the circles of the lower delta, whence it is brought to Danubyu by boat. The mat-weavers are mostly women, smart workers being able without difficulty to turn out in

one day a mat measuring some 6 feet by 2 feet 6 inches. The thin $(\infty \delta)$ after being steeped in water is split, the rind being pecled off in two layers, which are woven up separately. The outer rind is smooth and is woven into a mat which forms the upper layer of the finished thinbyu $(\infty \delta \mathfrak{P}_{\delta})$ The inner rind is rougher and is woven into a second mat, which is finally tacked to the under side of the smoother one, the two mats together forming a bed considerably softer than hard boards.

The unprepared thin used for one mat costs about 4 annas, while the finished thinbyu fetches about 10 annas, so that the profits of one person are from 4

to 6 annas per day.

Besides this the pith of the thin, which remains over after the mat-weaving, is utilized for rope-making and has some value. Mats in considerable quantities are also woven at Sagagyi in the Thayaing circle and at Pantanaw. More expensive mats than those described above are also occasionally woven in the same way, but with more carefully prepared material. These fetch fancy prices, but are not in the same demand as those of the common description.

29. Amongst the more important villages stands Sagagyi, already mentioned, which contains some 400 houses, and where there is a considerable trade. The greater portion of the village-site has been washed away and recommendations for the acquisition inside the bund of a fresh site have been sent to the Deputy Commissioner.

At Sekkaw, a large village close to Yandoon, there is a considerable industry in the weaving of fishing-nets, while at Nyaungyaung some pottery is turned

out.

30. Under section 98 of the Directions for Settlement Officers short accounts

Bocord and history of customs of the prevailing customs and general history of each kwin have been recorded and entered in the settlement registers.

Statement No. XIII of the Appendices is a translation of the notes recorded for the Nandawgôn kwin. Many of the kwins are named after villages, streams, or trees which are found within their boundaries, but others again re-

cord in their names matters which have now become history.

Thus the Nandawgón (\$\$:coo\chi2) kwin, close to Danubyu, is said to have received its name from the erection of a temporary palace or Nandaw (\$\$:coo\sigma), put up for the Kônbaung Min while he was on his way up the river. The kwins of Lôksa (\chi2000) and Kyundawnyo (\chi\$\chi2000\chi2000) were so called because the original cultivators held their lands on condition of special services which they rendered to the Burmese Government.

31. The paddy grown in the settlement area is almost all exported to Rangoon; small quantities from the north-west corner of
the Hnégyo circle are carted down to the Taga, and
re sent to Bassein, but this is an inappreciable quantity.

are sent to Bassein, but this is an inappreciable quantity.

Ngapi is collected and stored at Yandoon, and thence goes to Upper Burma

or to other parts of the country.

Danubyu, Pantanaw, Sagagyi, and other places contain numerous traders

who buy produce for sale and export.

32. The principal products of the tract are paddy and fish; but chillies, mangoes, plantains, and other classes of fruit and vegetables are also grown in very large quantities.

CHAPTER II.

GENERAL CONDITION OF THE PEOPLE.

 mcrease of 31.4 per cent. to the census population of 1881. This gives an average of rather more than one person per acre of cultivation.

Adopting the original census figures, the density of the population per square mile. Square mile is found to be 128.6, that of Danubyu being 143.7, Yandoon 161.0, and Pantanaw 88.8. It is not possible to distinguish accurately between non-agriculturists and agriculturists; but, from the statement given under paragraph 6 and quoted above, the proportion of agriculturists to the total population is, in the three townships of Danubyu, Yandoon, and Pantanaw, 50, 40, and 60 per cent. respectively.

Average number of cultivating family.

35. The average number of the cultivating family has been found to be 5.8, Karen families averaging

slightly more than Burmans.

36. Statement No. VIII of the Appendices shows the cost of living of the ordinary paddy-cultivating family to be about Rs.

Standard of living. Condition of 193 per annum, the figure for the richest circle of last year's settlement area being Rs. 154. The same statement shows the average net income per family to be Rs. 104, out of which the land revenue, amounting to about Rs. 30, has to be met, as well as the average amount of indebtedness, Rs. 40, mentioned in the next paragraph. The balance available for contingencies, amusements, &c., after meeting these charges, is therefore Rs. 34 per family. The net income in the Kattiya, Pantanaw, and Kanhwekabo circles is returned as very small because the value of the outturn of the gardens, which are worked together with the paddy-holdings, has not been included in the gross receipts obtained from cultivation.

37. The statistics regarding the condition of the garden-cultivators are not come per family is shown to be for orchard gardeners Rs. 62. It is probably, however, really much greater than this, for the majority of the orchard gardeners of Kattiya, Kanhwekabo, and some other circles live entirely on the fruit of

their gardens, and are at least as well to do as the paddy-cultivators.

38. The miscellaneous vegetable cultivators are not in such good circumstances, the majority have other means of subsistence, either plying with carts for hire, or working as boat coolies. The statements of outturn obtained from these cultivators are very difficult to check and the outturn is almost invariably much understated. The figures for net income also cannot be accepted as only a portion of the cost of living should be debited to the soil, the gardeners having other occupations.

39. The following statement shows the result of enquiries made into the indebtedness of the cultivators. Like last year it was found that, though a large number of agriculturists are in the habit of borrowing money on various pretexts, they generally manage to meet their liabilities as soon as the harvest is got in.

The average amount of indebtedness per family is found to be Rs. 40·1, being Rs. 46·5 for the circles examined in January and February, while it was only Rs. 15·7 for those examined in March and April after the season's crop

was in the market.

As the greater portion of the debts are incurred and paid off annually, the rate of annual indebtedness, Rs. 40, as accepted above, though somewhat in excess of the actual amount, is approximately correct. The heaviness of the indebtedness in Kattiya and Inzaya is the result of floods in 1888-89, which damaged a considerable area. An attempt has been made, but without much success, to classify the causes of indebtedness. In the Bawdi circle, however, where large areas of new land have been taken up in the last few years, the indebtedness, which is shown as somewhat heavy, is correctly returned as having been incurred for cultivation expenses. In none of these circles is there any reason to apprehend that the burden of indebtedness is permanent.

			TOTAL :	Total number		PERCENTAGE		Percentage			Amount of debts.			Incidence of indebtedness.		ENTAGE INCUR			
		No. of the last of		OF CULTIVATORS,		OF CULTI- VATORS.		OF INDEBTEDNESS CLASSIFIED.			Percentage of debts classified.		per person	er person 1ed.	of culti-	of house.		10 000	
Township.	Circle.	Month in which examined.	Examined.	Indebted.	Not indebted.	Indobted.	Able to pay in one year.	Not able to pay in one year, but able to pay eventually.	Hopelessly involved.	At 36 per cent, and under.	Over 86 per cent.	Total amount of debts. ,,	Average amount of debt per examined.	Average net moome per exammed.	For ordinary expenses	For ordinary expenses	Purchase of land	Purchase of cattle.	Remarks
	D1		231	100	42.4	E77 C	44.4	52.6	30	63.3	Rs. 86·7	Rs. 17,832	77.2	84.3	÷ 8-7	70 0	10.5	15.8	
Ванцвиц.	Danubyu myoma Hnègyo Pyingatha Thabyu Thayaing	do. do. February	1,083 528 644 468	133 383 248 109 190	42 4 64·4 53 0 83·1 59·4	57 6 85·6 47·0 16·9 40 6	44 4 55·1 89 5 53·2 43 2	43 6 58 8 45 9 52 6	1·3 1·7 ·9 4·2	49·9 25·2 41 9 67·9	50·1 74·8 58·1 82·1	45,964 33.657 13.261 84,647	42·4 74·0 19·9 74·0	77·4 114·8 97·4 150·5	14 5 7 4 8 3 21 6	63 9 77 9 77 1 48 9	8.6 30 4.6 5.2	18 0 11 7 10 0 24·3	
Такроок.	Yandoon myoma Tagè Ingabu Kattiya Inzaya .	March . February March do do.	137 284 115 168 80	22 31 3 18 17	83·9 89·1 97·4 92·1 78·7	16·1 10·9 2.6 7·9 21·8	86·4 12·9 7·7	63·6 71 0 100·0 69·2 82 4	16·1 23·1 17·6	68·2 65·0 52·1 5·6 50 9	81·8 85 0 47·9 94·4 49·1	2,960 5,835 884 2,140 8,215	21·6 18·7 3·3 13·1 40·1	87·3 82·6 43·2 21·7 54·5	9 0 12 9 7.7 23 5	31 9 48 4 100 0 53 8 76 5	13 6 8 2 28 1 	45·5 85 5 15 4	
PANTANA	Pantanaw Bawdi Pathwè Kauhwekabo Zayathla	April do do. do. do. do.	9 111 19 227	 21 20	81 0 91:2	 19·0 8 8	42·9 20·0	57·1 80·0	· :	54·4 34 0	5 ·6 66 0	2,958 1,940	26·6 8·5	121·6 54·9 	619	88 1 85 0	 5.0	 100	
	Total	1	4,099	1,190	70 9	29.1	44-9	52:3	2.8	49 6	50.4	1,64,288	40.1	104-2	12.8	68-5	4.8	16.9	

40. Of non-agriculturists the most wealthy Vocation and condition of nonclasses are the fishery lesses, boat-owners, brokers, and pleaders.

The first-mentioned make very large profits, but they are somewhat reckless and improvident

The boat-owners and brokers of Yandoon, who are principally engaged in the ngapi trade, are notoriously wealthy. while a limited number of pleaders here, as in other places, are very well-to do. Of other trades, persons engaged in cartbuilding, an industry largely carried on in Danubyu, make a comfortable living

The following statement gives the classification, circle by circle, of the cultivated and waste area. As shown in the state-Area of cultivation and waste area amounts to 150,831·23 acres, or about 23 per cent. of the gross area The area thrown out of cultivation in Xandoon and Pantanaw has been abandoned in consequence of floods, and, though not uncultivable, it does not appear to produce remunerative crops. Under miscellaneous and garden cultivation the majority of the abandoned land falls under the tormer head abandonment being necessitated by changes in the river-bed, which cause the destruction of the islands and sandbanks on which most of this cultivation is carried out

The area shown under road and canal consists almost entirely of land occupied by the embankments. The greater portion of this land was acquired under the Act, but in the Thabyu, Bawdi, and Thayaing circles it was found that the Act had not been put into force, the land actually occupied by the bund and its borrow-pits having been bought through the thugyi without notification.

Recommendations for the formal acquisition of a strip broad enough to meet

all requirements were sent to the Executive Engineer, Henzade.

Under the heads of grass and tree jungle very large areas are shown as uncultivable, being heavily flooded during the rainy season. The total area available for cultivation amounts to 80,501 58 acres, which at the present rate of extensions would be taken up in the next 18 years. In addition to this area, however, the gradual elevation of the surface of the land in the basin of the Bawdi river will render cultivable an extensive area, while the greater portion of the uncultivable land in the Yandoon township would be brought under cultivation if protected as suggested in paragraph 19.

The area under tree and bush jungle amounts to over 200,000 acres and, although much of this is not heavily wooded, the supply of fuel should be ample for years to come.

1

		đ y -culti-		or vege-	ď	GRAZING	-GROUND.		LAND T OUT OF CULTIV	PADDY-	OUT OF GA	HEOWN RDEN AND ANEOUS ATION.	pagoda		TREE OR BU	SB JUNGLE,	GRASS	JUNGLE.		
	Circle.	Under pade	Fallow.	Miscellaneous or table garden- vation.	Orchard garden.	Culturable.	Unculturable.	Villego-aite.	Culturable.	Unenlturable.	Culturablo.	Unculturable.	Monastic and land.	Rosd or canal.	Culturable.	Unculturable.	Culturable.	Unoulturable.	Under water.	Total area.
		Acre	Acres	. Acres.	Acres.	Acres.	Acres.	Acres.	Acrse.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acre
1	Danubyu .	. 3,411	02 168	16 39-91	631.46	626-63	869-67	219.78	18.41		17:90		28:55	80.00	1,060-79	4,404-18	165.79	220-97	2,947:17	14,91
	Huègyo .	19,716	49 811	697-43	1,416.37	2,454.46	1,423 18	313-84	200-28		122:90		43.52	106-43	5,404.10	9,351.42	1,923-35	3,071.62	2.942-43	51,00
1	Pyingatha .	. 9,734	47 558	8 2:55	777-15	367-00	690-60	182-20	38.70	.83	85.57		17:71	73.88	15,356.53	14,824 95	1,537 01	11.30	1,780-36	.46,0
	Thabyu .	. 10,745	55 386	13 2,556:30	1,826 58		557-45	260-33	192.97		443.99		39-22	140.43	621-63	10,439-03	2,418.47	10,132-81	8,106-35	48,86
4	Thayaing .	17,59	00 1,080	00 714-50	1,013-88	281-12	1,404.92	280.07	116.42		92.66		51.31	100-15	2,157-80	2,698-19	2,961:34	761-00	2.450-03	33,70
	Total .	. 61,206	18 8,005	4,010-64	5,665:44	3,729-21	4.950-19	1,255-22	566.78	.83	762-92		183-31	507:79	24,600.85	41,717-77	9,005.96	14,230-79	19,996-34	194,6
-	Yandoon .	. 8,06	57 334	15 98:13	2,476.73	112-82	2,225.58	175-81	93-29		134-03	117:39	81.99	63.77	143.39	1,066:70	851-80	4,897-76	1,221:30	22,1
	Tagò	10,96	49 503	00 24-53	719.46	359.42	1.998-32	255-59	173:11		.96		33:72	55.17	2,755-64	27,474 74	1,531.95	1,738-51	3,180-32	51,6
{	Ingebu	3,40	49 183	45 355-63	2,066:71		171.42	122:34	13.68		331-03		24-20	64.18	1,882-76	12,079-06	7,155-43	18,200.45	7,982-92	54,4
	Kattiya	2,43	81 206	97 498-85	4,396-27	36.49	22:79	95:55	383-42		69.52		30-58	102:36	1,262-59	766-02	1,648-58	26,254.92	2,361:35	10,5
	Inmya	3,06	66 132	79 2.142-92	2,037-62	35.01	1,213-33	110-52	744.87		567:13		19.66	51.54	35-16	11,048-97	2,483-95	14,128.35	5,734-62	43,8
-				_																
-	Total	27,82	02 1,359	36 3,120-06	11,696 79	543.91	5,631-44	759-91	1,408 37		1,465.73	117:39	190 15	357-02	6,079 54	52,737.49	13,671.71	65,389 99	20,480 51	212,7
-								1		i			i				77			
	Pantanaw	1,61	07 334	24 274-14	1,736.71	30.06	557-31	163-16	288:27		663 34		64.21	56.74	128-22	4,121.47	355-16	5,558-76	1,822-90	18,2
	Bawdi .	- 1	1	339-00	1,336.00	213-85	1,716.46	206:78	158-60		504.02		41.56	104.07	369-62	-83,333-85	3,283.39	31,632-14	6,454-58	84,1
	Pathwe				1,942-44	271.07	8.290-21	277.69	891.61.	'17	303.99		48'58	21'85	5,656.71	22,423-59	3,419.46		5,178-76	73,1
1		. 1,460			4,179-46	309-83	1,269-84	121.32	638 79		2,601 48		20.16	13.85	1,804 47		1,31504	120	12,265 33	55,2
1	Zavethla		39 28		1.00				-05							3,887-20		2,109:04	561-07	6,9
	Total .	17,719	37 2,121	3,920-17	9,195-61	824-81	6,933-82	768-05	2,007 30	117	4,072:83		174-51	195.51	7,959-02	74,592-11	8,903-65	82,101-17	26,282-64	247,7
	GRAND TOTAL	106,78	52 6,486	0 11,050-87	26,557-54	5,097-96	17,515.38	2,783-98	3,98247	1.00	6,301:38	117-39	547-97	1.060-32	38,039.41	169,047-40	31,581-32	161,621-96	65,999 49	635,1

42. The following statement gives, circle by circle, the average area of the different classes of holdings. The average paddy holding is largest in Pyingatha, Hnègyo, and Thayaing, where the cultivators are very well-to-do, and where new land has been taken up freely.

The smallest paddy holdings are in Ingabu and Kanhwekaho, where the area planted with paddy is usually attached to a large garden, which forms the principal means of subsistence of the cultivator, paddy being only grown for home consumption. The apparent discrepancies between columns 2 and 3 of the statement are caused by the fact that the figures in column 3 were collected from the statements of cultivators in 144 kwins only, statistics of small holdings under 3 acres being omitted.

It will be noticed that in the Danubyu township, where the area under paddy cultivation is large, the average area of the garden is much less than in the

other two townships.

This is primarily caused by interference of the embankments with the free access of the flood-water which used to make the gardens so productive, the result being that paddy has been extensively substituted for garden cultivation in the protected areas.

			PA	DDY	•	
	Cuele		Average area from registers	iverage mea from state ments of culti- vators	Gurden	Miscellaneous
	1		2	8	4	5
			,			
Danubyu myom ı		• •	11 10	130	1.91	4 48
Hnegvo			19 02	17 0	2.75	6 17
Pyingatha			17 83	16 1	8.37	88
Thabyu			12 11	18 9	2 99	5 33
Thuyamg			17 37	18 5	2 77	4.67
Yandoon myoma			11 32	13 5	3 74	2 65
Tage		•••	13 18	14 6	2 48	74
Ingabu			9 29	128	4 60	8 90
Kattıya			10 49	12 3	6 62	5.70
Inzaya		,	10 18	150	4 18	8.85
Pantanaw myoma	•••		12 35	6.5	4 15	1 19
Bawdı	•••		13 14	148	8 57	2 38
Pathwè			11 65	14 1	8 70	2 80
Kanhwekabo			6 29	107	5.10	4 42
Zayathla		•	12 81		50	
G	deneral average	į	13.57	15 4	3 94	4·19

^{43.} No statistics regarding the past condition of the tenant classes are available, but from Statement No. VIII of the Appendices it will be seen that the annual cost of living per family is Rs. 169, while for cultivation it is Rs. 86. The average amount of

indebtedness is Rs. 47, while that of the ordinary cultivator, taken from statistics in which 81 per cent. of the persons examined were landowners, amounted to Rs. 40 per person.

On comparing these figures with those given in paragraph 36 it will be seen that while the tenant cultivator lives at rather a lower rate than the ordinary cultivator, he works nearly as large a holding and has a larger net income, a portion of which is, however, absorbed in the payment of rent and debts. There is, however, no clearly defined line between the tenant and land-owning classes, many of the former having land of their own, but renting holdings in addition for various reasons.

Of the tenants met with it was found that 88 per cent. had been renting their holdings for less than four years, and that Kareas were rather more numerous than Burmans. The following statement shows in tabular form the reasons given for renting and letting land. It will be seen that the principal reason for letting land is the occurrence of some calamity in the cultivator's family. The large landowners, who let a considerable proportion of the rented land, are most of them cultivators, who have cleared new land, and are unable to work both it and their original holdings as well.

Of persons renting land a large proportion are young people just starting in life, while persons whose large families render their own land insufficient for their requirements are also largely represented amongst the tenants.

-					=
	RIASONS FOR 1 TIL	per		REASONS FOR RENTING	f per
Serial No	Reasons.	Total number of sons	Serial No.	Reasons.	Total number of
1 2 8 4 5 6 7 8 9 10 11 12 13 14	Sickness or old age of cultivator. Death of member of family Not being a cultivator. Holding too small to work profitably Land mortgaged with possession and leased by mortgagee Owner wishing to trado. Death of cattle Cattle sold on account of poverty Inherited land Large landowner Wants to clear new land Heirs inheriting land too young to work. Land distant from home Other reasons not falling under the above.	574 219 152 111 16 213 63 7 5 413 49 57 815 177	1 2 8 4 4 5 6 7 8 9 10 11 12 18	Own land flooded Own land barren Wishing to cultivate independently, being previously field labourer Wishing to cultivate independently, being previously petty trader or of other occupation Own land sold because of debts Own land mortgaged with possession. Separating from parents and setting up house Own land let because far from house or because its position is considered unlucky Just immigrated. To plant nurseries Annually rents, land not being able to purchase it. Own land not sufficient Other reasons	28 23 310 184 64 31 721 41 468 115 618 288
	Total	2,881		Total	2,831

44. The following statement shows that 31,714.06 acres, or 28 per cent.

of the total area under paddy cultivation, is held
by tenants. This is large, 18 being the percentage
in the circles of the Thôngwa district settled last year.

With increased prosperity there appears to be some tendency for the formation of a land-letting class, the majority of landlords being, however, well-to-do agriculturists. From the statement given under the preceding paragraph it appears evident that the tenant state is incidental to the starting in life of most young agriculturists, and new arrivals who after a few years emerge from this and either buy or clear new land of their own. Land devoted to orchard and vegetable garden cultivation is very rarely rented, and the statistics now given refer only to paddy-land.

-	the same of the sa															
Township.	Circle.		Circle.		Number of landholders.	Number of tenants,	Ares rented.	Amount of rent not in-	Amount of revenue paid by tenant.	Total amount of rent and revenue paid by tenant.	Total outturn of land rent- ed.	Average price of paddy per 100 G S baskets.	Value of outturn.	Outturn per acre.	Total rent per acre paid by tenant, columns 5 and 3.	Incidence of precent de- mand including cess per acre in the same arcie.
1	2	1	3	4	5	6	7	8	9	10	11	12	13	14		
DANUBYU	Danubyu Hnègvo Pyngatha Thabyu Thayang	:::	137 429 220 821 364	127 544 279 396 436	Acres 1,515 22 7,490 49 8,979 60 8,699 57 5,460 54	Rs. 5,939 24 24,184 29 8,292 83 13,455 75 18 385 95	Rs 3,240 83 11,491 68 6,371 94 7,782 88 9,270 05	Rs. 9,180 07 85,675 97 14,664 77 21,238 63 27,055 90	G S Basket. 96,314 45 484,616 84 248,176 90 161,399 45 333,931 68	Rs. 72 82 68 36 62 05 72 89 68 77	Rs 70,136 18 2 97,104 07 1,50,891 26 1,17,644 06 2,12,948 23	G. S Basket. 63.56 58.02 61.10- 43.62 61.15	Rs. 6 05 4.76 8 68 5 74 5.06	Rs 2 25 1 87 1 65 2 11 1 95		
	Total		1,471	1,832	22,145 42	70,257 96	38,157 38	1,08,415 34	1,269,439 32		8,48,723 80	57 03	4.89	1.92		
YARDOON	Yandoon Tagè Ingabo Kattiya Inzaya		198 214 46 26 58	236 241 50 28 68	2,310 10 2,398 11 388 07 277 71 560 78	14,399·40 9,157 67 1,923 21 912 28 £,268 09	2,855 77 8,122 28 466 03 517 25 821 65	16,745 17 12,279 90 1,489 24 1,429 58 3,089 74	98.719·68 106.594 44 21,241 71 15,266 25 28,518·96	67 29 68 73 70 99 68 45 70 64	59,699 47 78,262 86 15,079 49 10,449 75 20,145 79	88 40 44 54 55 45 54 97 50 86	7 24 5 13 3 88 5 14 5 52	2 19 1 60 1 90 1 93 2 25		
	Total	j	587	623	5,924 72	27,750 65	7,282.93	35,033.58	260,341 04		178,636 86	48 94	5-91	1 92		
Pantanaw -	Pantanaw Bawdi Pathwè Kanhwekabo Zayathla	::	42 74 191 15	50 83 222 19 2	827 95 1,065 72 2,154 47 74 02 21 76	549 64 8,173 70 1,814 65 141 37 66 79	465·79 1,662·62 3,965 26 128 75 20 40	1,015·43 4,836·62 5 779 91 270·12 87 19	9 866 27 42,851 80 82,013 11 1,145 08 877 80	74·20 65·42 72·46 83 13 71 24	7,820 77 28,033 64 59,426 69 951 90 625 34	30-08 40-20 58-06 15-46 40-34	3·09 4·53 2·68 3·64 4·00	1 75 2·00 1 88 1·27 2 17		
×	Total		828	376	3,643-92	5,746 15	6,242.82	11,988.97	136,754 06		96,858 34	37 52	3 29	1.79		
-	GRAND TOTAL	•••	2,331	2,831	31,714 06	1,08,754 76	51,683 13	1,55,437.89	1,666,534 42	401	11,28 710-00	52:54	4-90	1.90		

45. The rents paid by the tenants vary from Rs. 2.68 in Pathwe to Rs. 7.24 in Yandson. As might be expected the highest rents are paid in the neighbourhood of the large towns of Danubyu and Yandson, where there is considerable competition for the land. Even there, however, the rents are not

high.

Statement No. X of the Appendices is similar to that submitted for inclusion in the Revenue Administration Report. It shows that about half of the tenants pay rent in addition to the Government revenue, the charges paid amounting to Rs. 3 48 and Rs. 2 04 per acre respectively. About one-fourth pay the Government revenue without any additional charge, while the remainder either pay a lump-sum as rent in satisfaction of all demands or are occupying partially cleared land, which they work without charge, on the strength of the advantage resulting to the landowner from the clearing and cultivating operations.

Rent is usually paid in kind, being measured out on the threshing-floor.

When, however, the tenant pays revenue, he of course does so in money.

46. No grants made under the old rules were met with in the settlement

Grants made under the Act are taken up freely and, in consequence of the carelessness of the thugyis, who very rarely survey them, are a frequent source of dispute.

CHAPTER III.

Statement No. IV of the Appendices shows the land revenue, including cess, obtained during the last 20 years from the Amount of previous assessments. area now under settlement. The increase in 1876-77 was partly due to additions to the assessed area, resulting from the expiration of a period of settlement in eight circles, and the consequent measurement of extensions effected during settlement. The decrease in 1878-79 was due to heavy floods in the previous year, which caused large areas to be thrown out of culti-In 1879-80 the large increase was due to a summary enhancement of rates in all circles except Yandoon, Tage, and Ingabu, the enhancement varying from 5.9 per cent. in Inzaya to 25 per cent. in the Pantanaw circle. In the following year the rate of cess, previously 5 per cent., was increased in all circles to 10 per cent., accounting for the greater portion of the increase in revenue. In 1886-87, in consequence of the disturbances and the feeling of insecurity which prevailed after the annexation of Upper Burma, there was a considerable check to cultivation, producing a slight decrease of revenue, a result which was also aggravated by floods in the Yandoon township. Recovery, however, was rapid, the increased rate of progress during the next two years covering the temporary depression.

48. The method of assessment under the Burmese régime varied in different parts of the country, but the recognized demand was based on the number of yoke of ploughcattle used by the cultivator. For one yoke the demand was sometimes Rs. 25, the outturn varying, but being perhaps 500 baskets. At Rs. 10 per 100 baskets the value of the outturn would be Rs. 50, so that the demand was about

half the gross outturn.

After the annexation this system was replaced by fixed rates of assessment per acre. These were at first adopted after a rough local enquiry being

afterwards revised by regular settlements.

In 1869-70 portions of eight circles were settled. The rates of assessment then imposed varied from Rs. 1-4-0 to Rs. 2-4-0 per acre, and were fixed after consideration of the nearness or otherwise of the Rangoon market and the fertility of the soil. The settlements were entered into with parties of cultivators, the period being five years in some and ten years in other cases.

The rates imposed under this settlement were in 1879-80 subjected to a summary enhancement noticed in paragraph 47. Unfortunately the records of former settlements do not appear to have been printed and cannot be traced.

The interesting and useful deductions obtainable by comparison of the condition formerly and at present of the cultivators and kwins are therefore not possible.

49. The expiring assessment including cess amounts to Rs. 2,69,448.74.

Amount of expiring assessment. The rates excluding cess are shown on Map No. I and vary from Rs. 1-8-0 to Rs. 2-8-0. The incidence of this assessment, including fallow and fruit-tree rates, is 1.83 per acre.

Facility or deficulty of collections collected during the last four years under coercive processes. Even in 1886-87, when, as noticed in paragraph 47, there was considerable agricultural depression, the percentage of revenue, which had to be collected under coercive processes, did not amount to 1.0 per cent. Statement No. VI shows the amount of remission which for various causes has been sanctioned during the last four years, the remission for 1886-87, for the reasons given in paragraph 47, being, it will be noticed, considerable. The reasons leading to remission in this case were, however, abnormal, and under ordinary circumstances it has very seldom been found necessary to make remissions of land revenue to any extent

Former and present market value of land are available, but from the statements of the cultivators, noted during the recording of tenures, the price of good land appears to have increased from 100 to 200 told in the last 30 years.

The figures in the following statement are taken from statistics of all land sales for the past four years. It will be seen that land is not changing hands very rapidly and that the selling price of paddy-land is about half that of orchard gardens and twice that of the vegetable gardens which are found on the sandbanks and islands of the main river. The highest prices for paddy-land are obtained near Yandoon, and for garden-land in the circles of Kattiya and Ingabu on the banks of the Panhlaing creek:—

report on the settlement operations in the thôngwa district, se

Annual Sales of Land (average of four years).

							1	====	~								T	-
			PADD1-LAND						G/	RDEN-LAND.				MISCHI	LANEOUS LA	AD.		
Circle.			Number of sales.	Area sold.	Price paid,	Rato per acre.	Percentage of total area.	Number of sales.	Area sold	Price paid.	Rate per acre.	Percentage of total area.	Number of sales	Area sold.	Price paid.	Rate per acre.	Percentage of total area.	Remarks.
Danubyu Hnègyo Ryingatha Thabyu Thayaing	 	::	14 52 25 18 41	Acres. 155.82 803.05 411 12 185.72 661.92	Rs. 2,967·75 8,459·25 3,744·62 3,958·50 11,298·48	19·04 10·53 9 10 21·31 17 05	4 35 3·91 8 99 1·66 3 54	1 4 8 4 1	80 16:53 9:62 8:94 1:06	Rs. 19 75 326:50 53:00 97 50 26:25	23 43 19·75 5·50 10 90 24 76	12 1 16 1 ·23 48 ·10	9 7 2	38·54 36·19 15·88	250 62 201.00 39 50	6·50 5·55 2·48	5·52 1·41 2·22	
	Total		150	2,217.63	30,428.60	13 72	3 45	13	36.95	522.00	14.12	·55	18	90.61	491 12	5.42	2.00	
Yandoon Tagè Ingabu Kattiya Inzaya	 	 	16 26 9 7 6	150·32 309·75 85·00 63·42 46·25	8,788·75 5,415 38 761·50 685·00 877·50	25·16 17·48 8·95 10·80 18·97	1·79 2·72 2·36 2·40 1 44	3 1 3 13 6	14 36 2 64 18:17 70 80 28 23	416·75 43 75 618 75 8,339·50 600·50	29·16 16·57 35 70 47·16 21·27	57 ·36 ·87 1·83 1·38	3	1 13 9.90	38 75 84·75	27·09 8 56	1·45 	
	Total		64	654.74	11,523-13	17 59	2 24	26	134 20	5,051.25	37 64	1.14	4	11.33	123 50	10.90	.86	
Pantanaw Bawdi Pathwè Kanhwekabo Zayathia	 Total		23	54·76 204·18 246·47 14·46 	346·25 2,284·62 2,569·50 173·00 	6·82 10·94 10·42 11·96 	2 80 4·63 2·16 ·72 	1 8 4 10 	3·91 16·97 15·75 48·57 	50 00 842·00 417·25 902·13 	12·78 20·15 26·49 18·57	-22 1·27 ·81 1·16 ···	 1 8 2	 11·35 10·59	13·75 174·25 185·00 	17·18 15·85 17·46	·28 2·76 ·86 ·	
GRAI	m Total	`	900	.,	47,275-10	13.98	2.99	62	256-35	7,284.68	28.41	.96	28	124-68	987-62	*7-92	1.13	

Land mortgage statistics.

Ger than that annually alienated by sales and, as will be seen from the following statement, the average amount advanced per acre on a mortgage is greater than the selling price in the case of paddy and vegetable garden land, but less in the case of orchard gardens. Buffaloes and other property, moveable or immoveable, being often included in the security given for advances, makes the mortgage money larger than it would otherwise be, while the mortgage is also encumbered in many cases with heavy accumulations of interest. The high average rate of mortgages is also partly due to the fact that the owners, where they would sell poor and newly cleared land, almost invariably prefer to mortgage old established estates of greater value. Mortgages as a rule are usufructuary, in which cases they bear no interest, the mortgagee either working the land himself or renting it back to the mortgagor.