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MADRAS RECORD OFFICE

GOVERNMENT OF MADRAS

Revenue DEPARTMENT

G.O. No.	27	Press
B.P. No.		Mis.
Dated	5-2-1873	196

Not to be folded or roughly handled

Statement showing equivalents in imperial seers of local

Districts and Stations.	Name of Measure.	How used locally.	Assumed normal contents in rice.	Cubic capacity of the Specimen sent.	Diameter.	Rice, 1st sort.	Rice, 2nd sort.	
1	2	3	4	5	6	7	8	
<i>Ganjam.</i>								
1. Ganjam	Tum ...	Filled to overflowing; moderately heaped.	260	TOLAHS	INCHES.	INCHES.	I. S.	I. S.
2. Purushottapur	Do. ...			207.60	6.3	3.03	3.05	
3. Sompeta	Do. ...			209.33	5.9			
4. Surada	Do. ...		195.06	6.7				
5. Russelkonda	Do. ...		280	280	226.63	6.4	3.27	3.29
6. Berhampore	Do. ...				231.82	6.0		
7. Purlah Kimedy	Do. ...				185.11	6.4		
8. Tekkali	Do. ...		240	240	187.71	6.4	2.80	2.82
9. Narasunnappett... ..	Do. ...				...	6.5		
10. Aska... ..	Do. ...				191.71	6.2		
11. Itchapur	Do. ...		270	270	217.98	6.5	3.15	3.17
12. Chicacole	Do. ...				...	6.8		
		80			64.88	4.0		
<i>Vizagapatam.</i>								
1. Vizagapatam	Seer ...	Moderately heaped.	90	...	4.0	1.05	1.06	
2. Vizianagaram	Do. ...			...	...			
3. Anakapilli	Do. ...			...	...			
4. Sarwasiddi	Do. ...		80	80	65.74	3.5	0.93	0.94
5. Golconda	Do. ...				...	3.4		
6. Palconda	Do. ...				...	3.3		
7. Gajapatinagaram	Tavya ...		75	75	24.22	3.5	0.87	0.88
8. Veeravilli	Do. ...				25.95	4.2		
9. Cheepurpilli	Do. ...				...	4.2		
10. Satur	Do. ...		33	33	25.95	4.3	0.39	0.39
11. Parvatipur	Do. ...				27.68	4.8		
	Do. ...	26.81			5.0			
<i>Godavery.</i>								
1. Ramachendrapuram... ..	Seer ...	Moderately heaped.	80	65.74	3.5	0.93	0.94	
2. Narasapuram								
3. Amalapuram								
4. Tanuku								
5. Viravasaram								
6. Rajahmundry								
7. Peddapuram								
8. Ellore								
9. Yernagudem								
10. Cocanada								
11. Pittapuram								
12. Coringa								
13. Tuni								
14. Alamur								
15. Sivakodu								
16. Kottupeta								
17. Pentapadu								
18. Raghudevapuram								
19. Prattipadu... ..								
20. Chintalapudi								
21. Polaveram... ..								

measures of different food grains and of Salt.

Paddy, 1st sort, (<i>Oryza sativa</i> .)	Paddy, 2nd sort, (<i>Oryza sativa</i> .)	Horsegram, (<i>Dolichos uniflorus</i> .)	Cholum or Jowar, (<i>Holcus sorghum</i> .)	Cumboo or Bajra, (<i>Pennisetum glaucum</i> .)	Varagoo, (<i>Panicum miliaceum</i> .)	Ragi, (<i>Eleusine coracana</i> .)	Salt.	Wheat, (<i>Triticum aestivum</i> .)	Lundu, (<i>Phaseolus mungo</i> .)	Remarks.
9	10	11	12	13	14	15	16	17	18	19
1. S. 2.32	1. S. 2.32	1. S. 3.11	1. S. 2.88	1. S. 2.63	1. S. 2.69	1. S. 2.74	1. S. 3.14	1. S. 2.76	1. S. 3.13	
2. S. 2.34	2. S. 2.34	2. S. 3.14	2. S. 2.90	2. S. 2.64	2. S. 2.70	2. S. 2.75	2. S. 3.14	2. S. 2.76	2. S. 3.13	
3. S. 2.34	3. S. 2.34	3. S. 3.09	3. S. 2.84	3. S. 2.62	3. S. 2.67	3. S. 2.74	3. S. 3.15	3. S. 2.76	3. S. 3.13	
4. S. 2.51	4. S. 2.51	4. S. 3.34	4. S. 3.08	4. S. 2.82	4. S. 2.89	4. S. 2.95	4. S. 3.38	4. S. 2.96	4. S. 3.38	
5. S. 2.51	5. S. 2.51	5. S. 3.34	5. S. 3.12	5. S. 2.84	5. S. 2.90	5. S. 2.96	5. S. 3.37	5. S. 2.97	5. S. 3.38	
6. S. 2.16	6. S. 2.16	6. S. 2.86	6. S. 2.63	6. S. 2.41	6. S. 2.48	6. S. 2.53	6. S. 2.92	6. S. 2.54	6. S. 2.89	
7. S. 2.15	7. S. 2.15	7. S. 2.87	7. S. 2.64	7. S. 2.42	7. S. 2.48	7. S. 2.53	7. S. 2.91	7. S. 2.55	7. S. 2.89	
8. S. 2.43	8. S. 2.43	8. S. 3.22	8. S. 2.97	8. S. 2.72	8. S. 2.79	8. S. 2.85	8. S. 3.26	8. S. 2.88	8. S. 3.25	
9. S. 2.42	9. S. 2.42	9. S. 3.21	9. S. 2.95	9. S. 2.71	9. S. 2.78	9. S. 2.85	9. S. 3.26	9. S. 2.86	9. S. 3.24	
10. S. 0.72	10. S. 0.72	10. S. 0.98	10. S. 0.90	10. S. 0.82	10. S. 0.83	10. S. 0.84	10. S. 0.99	10. S. 0.84	10. S. 0.97	
11. S. 0.81	11. S. 0.81	11. S. 1.10	11. S. 1.01	11. S. 0.93	11. S. 0.93	11. S. 0.95	11. S. 1.11	11. S. 0.94	11. S. 1.09	
12. S. 0.72	12. S. 0.72	12. S. 0.98	12. S. 0.90	12. S. 0.83	12. S. 0.83	12. S. 0.85	12. S. 0.97	12. S. 0.84	12. S. 0.96	
13. S. 0.66	13. S. 0.66	13. S. 0.92	13. S. 0.84	13. S. 0.76	13. S. 0.78	13. S. 0.79	13. S. 0.90	13. S. 0.78	13. S. 0.90	
14. S. 0.30	14. S. 0.30	14. S. 0.41	14. S. 0.37	14. S. 0.34	14. S. 0.35	14. S. 0.35	14. S. 0.43	14. S. 0.35	14. S. 0.40	
15. S. 0.31	15. S. 0.31	15. S. 0.41	15. S. 0.38	15. S. 0.34	15. S. 0.35	15. S. 0.34	15. S. 0.46	15. S. 0.36	15. S. 0.41	
16. S. 0.33	16. S. 0.33	16. S. 0.42	16. S. 0.38	16. S. 0.34	16. S. 0.37	16. S. 0.34	16. S. 0.49	16. S. 0.37	16. S. 0.41	
17. S. 0.34	17. S. 0.34	17. S. 0.43	17. S. 0.38	17. S. 0.33	17. S. 0.37	17. S. 0.34	17. S. 0.50	17. S. 0.38	17. S. 0.41	
18. S. 0.72	18. S. 0.72	18. S. 0.98	18. S. 0.90	18. S. 0.83	18. S. 0.83	18. S. 0.85	18. S. 0.97	18. S. 0.84	18. S. 0.96	

Statement showing equivalents in imperial seers of local

Districts and Stations.	Name of Measure.	How used locally.	Assumed normal contents in rice.	Cubic capacity of the Specimen sent.	Diameter.	Rice, 1st sort.	Rice, 2nd sort.
1	2	3	4	5	6	7	8
<i>Kistna.</i>							
1. Bezwada ...	Mercal ...	Liberally heaped.	TOLAHS	INCHES.	INCHES.	I. S.	I. S.
2. Gudivada ...	Adda ...	Do. ...	260	202.41	6.7	3.03	3.05
3. Tenali ...	Manike ...	Do. ...	210	152.24	6.5	2.45	2.47
4. Jaggayyapeta ...	Do. ...	Do. ...	180	153.28	4.5	2.10	2.11
5. Repalli ...	Do. ...	Do. ...	160	134.94	4.5	1.87	1.88
6. Nandigama ...	Do. ...	Do. ...	140	122.83	4.1	1.63	1.64
7. Dachipulli ...	Do. ...	Filled to overflowing.	140	115.05	4.1	1.63	1.64
8. Tammerikota ...	Do. ...	Do. ...	130	112.45	4.2	1.52	1.53
9. Narsarowpeta ...	Do. ...	Do. ...	130	116.78	4.3	1.52	1.53
10. Bandar ...	Padi ...	Liberally heaped.	120	112.45	4.1	1.40	1.41
11. Vinukonda ...	Padi Manika. ...	Filled to overflowing.	120	112.45	4.1	1.40	1.41
12. Avinigadda ...	Manika ...	Liberally heaped.	106	...	4.2	1.24	1.24
<i>Nellore.</i>							
1. Nellore ...	Seer.....	Heaped.	80	65.01	3.8	0.93	0.94
2. Gudur ...	...	...	...	...	...	...	...
3. Atmakur ...	...	...	...	...	...	...	...
4. Kavali ...	...	...	...	...	...	...	...
5. Allur ...	...	...	...	...	...	...	...
6. Polur ...	...	...	...	...	...	...	...
7. Venkatagiri ...	Half seer.	Do. ...	40	...	...	0.47	0.47
8. Podile ...	...	...	...	...	...	...	...
9. Daisi ...	...	...	...	...	...	...	...
10. Rapur ...	...	...	...	...	...	...	...
11. Udayagiri ...	...	...	...	...	...	...	...
12. Kanigiri ...	Manika.	Do. ...	140	...	4.1	1.63	1.64
13. Kandukur ...	...	...	...	...	...	...	...
14. Ongole ...	...	...	...	...	...	...	...
15. Addanki ...	...	...	...	...	...	...	...
<i>Chingleput.</i>							
1. Sydapet ...	Measure...	Filled to overflowing.	120	106.40	4.2	1.40	1.41
2. Ponneri ...	Do. ...	Do. ...	120	106.40	4.2	1.40	1.41
3. Trivellore ...	Do. ...	Do. ...	120	106.40	4.2	1.40	1.41
4. Madurantakam ...	Padi ...	Do. ...	140	118.07	4.2	1.63	1.64
5. Chingleput ...	Do. ...	Do. ...	140	118.07	4.2	1.63	1.64
6. Conjeeveram ...	Do. ...	Do. ...	150	128.02	4.5	1.73	1.76
<i>Madras.</i>							
1. Madras ...	Measure...	Struck.....	117	104.5	...	1.36	1.37
<i>North Arcot.</i>							
1. Wallajapett ...	Measure...	Liberally heaped.	160	...	4.5	1.87	1.88
2. Vellore ...	Do. ...	Do. ...	160	...	4.5	1.87	1.88
3. Poloor ...	Do. ...	Do. ...	160	...	4.5	1.87	1.88
4. Wandewash ...	Do. ...	Do. ...	160	...	4.5	1.87	1.88
5. Arcot ...	Do. ...	Do. ...	160	...	4.5	1.87	1.88
6. Kalastri ...	Do. ...	Do. ...	160	...	4.5	1.87	1.88

measures of different food grains and of Salt.—(Continued.)

Paddy, 1st sort, (<i>Oryza sativa</i> .)	Paddy, 2nd sort, (<i>Oryza sativa</i> .)	Horse-grain, (<i>Dolichos uniflorus</i> .)	Cholam or Jowar, (<i>Holcus sorghum</i> .)	Cumboo or Bajra, (<i>Pennisetum glaucum</i> .)	Varago, (<i>Panicum mitiacum</i> .)	Ragi, (<i>Eleusine coracana</i> .)	Salt.	Wheat, (<i>Triticum aestivum</i> .)	Uradu, (<i>Phaseolus mungo</i> .)	Remarks.
9	10	11	12	13	14	15	16	17	18	19
I. S.	I. S.	I. S.	I. S.	I. S.	I. S.	I. S.	I. S.	I. S.	I. S.	
2.34	2.34	3.09	2.84	2.60	2.68	2.74	3.15	2.76	3.13	
1.90	1.90	2.49	2.30	2.10	2.16	2.21	2.57	2.23	2.53	
1.61	1.61	2.21	2.03	1.85	1.87	1.92	2.17	1.90	2.18	
1.62	1.62	2.21	2.02	1.85	1.87	1.92	2.18	1.90	2.18	
1.44	1.44	1.97	1.81	1.64	1.66	1.70	1.94	1.69	1.94	
1.25	1.25	1.71	1.57	1.44	1.44	1.48	1.69	1.46	1.69	
1.15	1.15	1.59	1.45	1.34	1.34	1.38	1.54	1.35	1.57	
1.15	1.15	1.59	1.46	1.34	1.34	1.38	1.54	1.36	1.57	
1.18	1.18	1.60	1.46	1.34	1.36	1.38	1.61	1.38	1.57	
1.06	1.06	1.46	1.34	1.24	1.24	1.25	1.42	1.21	1.45	
0.95	0.95	1.30	1.20	1.09	1.10	1.12	1.31	1.12	1.29	
0.72	0.72	0.98	0.90	0.82	0.83	0.85	0.97	0.84	0.96	
0.36	0.36	0.49	0.45	0.41	0.41	0.42	0.49	0.42	0.48	
1.25	1.25	1.71	1.57	1.44	1.44	1.48	1.69	1.46	1.69	
1.06	1.06	1.46	1.35	1.24	1.23	1.28	1.41	1.26	1.45	
1.24	1.24	1.71	1.57	1.44	1.44	1.49	1.64	1.46	1.69	
1.33	1.33	1.83	1.69	1.54	1.55	1.60	1.76	1.57	1.82	
1.02	1.02	1.42	1.31	1.20	1.20	1.25	1.33	1.21	1.41	
1.44	1.44	1.97	1.81	1.64	1.66	1.70	2.15	1.69	1.94	

Statement showing equivalents in Imperial Seers of local

Districts and Stations.	Name of Measure.	How used locally.	Assumed normal contents in rice.	Cubic capacity of the specimen sent.	Diameter.	Rice, 1st sort.	Rice, 2nd sort.
1	2	3	4	5	6	7	8
<i>North Arcot. (—Contd.)</i>			TOLAHS	INCHES.	INCHES	1. S.	1. S.
7. Tritany	Measure ..	Liberalily heaped.	80	...	3.8	0.93	0.94
8. Narayanavanam ...	Do. ...	Do. ...					
9. Chittoor	Do. ...	Do. ...	150	...	4.5	1.75	1.76
10. Goodiatum	Do. ...	Do. ...					
11. Madarpak	Do. ...	Do. ...	75	...	...	0.82	0.83
<i>South Arcot.</i>							
1. Trikalore	Padi	Filled to over-flowing.	140	115.95	4.15	1.63	1.64
2. Villapuram	Do. ...	Do. ...		117.64	4.2		
3. Cuddalore... ..	Do. ...	Do. ...		117.64	4.25		
4. Trivady	Do. ...	Do. ...		113.32	4.3		
5. Virdachalam	Do. ...	Do. ...		117.64	4.3		
6. Kallakurchi	Do. ...	Do. ...		115.91	4.3		
7. Trinomalay	Do. ...	Do. ...		115.95	4.3		
8. Tindivanam	Do. ...	Do. ...	70	114.18	4.4	0.82	0.82
9. Tripapalore	Do. ...	Do. ...		117.64	4.4		
10. Chellumbrum	Half Padi.	Do. ...		59.69	3.7		
11. Porto-Novo	Do. ...	Do. ...		60.55	3.7		
<i>Bellary.</i>							
1. Hospett	Seer.....	Liberalily heaped.	86	72.66	3.6	1.00	1.01
2. Kudlighi				72.66	3.6		
3. Huvinhudgally... ..				74.39	3.6		
4. Alur				71.80	3.6		
5. Adoni				72.66	3.6		
6. Raidrug				72.33	3.6		
7. Dhurmavaram				76.98	3.6		
8. Hindupur... ..				75.26	3.6		
9. Madaksira				72.66	3.6		
10. Tadputri				71.80	3.65		
11. Pennakonda				72.66	3.65		
12. Anantapur				72.66	3.65		
13. Bellary				71.80	3.65		
14. Hurpunhalli				77.85	3.7		
15. Gooty				68.33	3.7		
<i>Kurnool.</i>							
1. Peapalli	Seer.....	Heaped	86	71.79	3.65	1.00	1.01
2. Pattikonda				72.22	3.65		
3. Kurnool				95.15	4.1		
4. Ramalkota	Measure.	Do. ...	114	95.15	4.1	1.33	1.34
5. Nandikotkur				95.15	3.9		
6. Nundial				97.75	4.05		
7. Atmakur				98.61	3.9		
8. Kalva				95.15	4.05		
9. Sirwell				96.02	4.2		

measures of different food-grains and of Salt.—(Continued.)

Paddy, 1st sort, (<i>Oryza sativa</i> .)	Paddy, 2nd sort, (<i>Oryza sativa</i> .)	Horse-grain, (<i>Dolichos uniflorus</i> .)	Cholam or Jowar, (<i>Holcus sorghum</i> .)	Cumboo or Bajra, (<i>Pennisetia glauca</i> .)	Varagoo, (<i>Panicum miliaceum</i> .)	Ragi, (<i>Eleusine Coracana</i> .)	Salt.	Wheat, (<i>Triticum aestivum</i> .)	Uradu, (<i>Phaseolus mungo</i> .)	Remarks.
9	10	11	12	13	14	15	16	17	18	19
I. S.	I. S.	I. S.	I. S.	I. S.	I. S.	I. S.	I. S.	I. S.	I. S.	
0.72	0.72	0.98	0.90	0.82	0.83	0.85	1.08	0.84	0.96	
1.35	1.35	1.84	1.70	1.54	1.56	1.60	2.00	1.59	1.82	
0.67	0.67	0.92	0.85	0.77	0.78	0.80	1.00	0.80	0.91	
1.24	1.24	1.71	1.57	1.44	1.44	1.49	1.64	1.46	1.69	
1.25	1.25	1.71	1.58	1.44	1.44	1.49	1.64	1.47	1.70	
0.62	0.62	0.86	0.79	0.72	0.72	0.74	0.83	0.73	0.84	
0.77	0.77	1.06	0.97	0.89	0.89	0.91	1.22	0.88	1.03	
0.77	0.77	1.05	0.97	0.88	0.89	0.91	1.23	0.90	1.03	
0.77	0.77	1.05	0.97	0.88	0.89	0.91	1.23	0.90	1.03	
1.02	1.02	1.40	1.28	1.17	1.18	1.21	1.62	1.19	1.38	
1.02	1.02	1.40	1.28	1.17	1.18	1.21	1.63	1.20	1.38	

Statement showing equivalents in Imperial Seers of local

Districts and Stations.	Name of Measure.	How used locally.	Assumed normal contents in rice.	Cubic capacity of the specimen sent.	Diameter.	Rice, 1st sort.	Rice, 2nd sort.
1	2	3	4	5	6	7	8
<i>Kurnool.</i> —(Continued.)			TOLAHS	INCHES.	INCHES	I. S.	I. S.
10. Owk	} Measure.	Heaped	132	108.13	4.0	} 1.54	1.55
11. Koilkuntla				107.16	4.0		
12. Markapur				109.00	4.05		
13. Cumbum				112.45	4.1		
<i>Cuddapah.</i>							
1. Cuddapah	} Do. ...	Do. ...	132	...	...	1.54	1.55
2. Pullampett							
3. Jamalamadugu							
4. Pulivendala							
5. Proddatur							
6. Kadiri							
7. Rayachote							
8. Voilpad							
9. Madanapalli							
10. Badwel							
11. Sidhout							
12. Camalapeor							
13. Peelair							
14. Chitvel							
<i>Salem.</i>							
1. Ahtoor	Padi ...	Heaped moderately.	150	...	4.4	1.75	1.76
2. Salem	Do. ...	Do. ...	} 132	109.85	4.3	} 1.54	1.55
3. Senkerrydroog	Do. ...	Do. ...		...	4.2		
4. Denkenikota	Do. ...	Do. ...		...	4.2		
5. Oosoor	Do. ...	Do. ...		126	4.25		
6. Darampuri	Do. ...	Do. ...	118	...	4.3	1.38	1.39
7. Vaniembady	Manam ...	Do. ...	86	...	3.75	1.00	1.01
8. Pennagaram	Half do. (Y)	Do. ...	43	...	2.8	0.50	0.50
9. Namkul	Manam ...	Do. ...	75	...	3.4	0.88	0.88
10. Kistnagiri	Do. ...	Do. ...	72	...	3.2	0.84	0.85
11. Womalore	Do. ...	Do. ...	} 66	...	3.45	} 0.77	0.77
12. Razipur	Do. ...	Do. ...			3.6		
13. Paramati	Do. ...	Do. ...			3.65		
14. Haroor	Do. ...	Do. ...			3.65		
15. Trichengode	Do. ...	Do. ...	} 63	...	3.7	0.73	0.74
16. Uttengiri	Do. ...	Do. ...			3.75		
17. Tripatore	Do. ...	Do. ...			3.4		
<i>Coimbatore.</i>							
1. Collegal	Measure ...	Liberal heap-	} 130	107.26	4.0	} 1.52	1.53
2. Perindoray	Do. ...	Do. ...		107.48	4.1		
3. Palladam	Do. ...	Do. ...		...	...		
4. Coimbatore	Do. ...	Do. ...		107.26	4.2		
5. Bhowani	Do. ...	Do. ...		107.26	4.4		

measures of different food grains and of salt.—(Continued.)

Paddy, 1st sort, (<i>Oryza sativa</i> .)	Paddy, 2nd sort, (<i>Oryza sativa</i> .)	Horse-grass, (<i>Dolichos uniflorus</i> .)	Cholam or Jowar, (<i>Holchus sorghum</i> .)	Cumboo or Bajra, (<i>Pennisetia spicata</i> .)	Varagoo, (<i>Panicum miliaceum</i> .)	Ragi, (<i>Eleusine Coracana</i> .)	Salt.	Wheat, (<i>Triticum aestivum</i> .)	Ulundu, (<i>Phaseolus mungo</i> .)	Remarks.
9	10	11	12	13	14	15	16	17	18	19
1. S.	1. S.	1. S.	1. S.	1. S.	1. S.	1. S.	1. S.	1. S.	1. S.	1. S.
1.18	1.18	1.61	1.48	1.36	1.36	1.40	1.87	1.38	1.59	
1.18	1.18	1.61	1.48	1.36	1.36	1.40	1.87	1.38	1.59	
1.35	1.35	1.84	1.70	1.54	1.56	1.60	2.10	1.59	1.82	
1.18	1.18	1.61	1.49	1.36	1.36	1.40	1.86	1.39	1.60	
1.12	1.12	1.54	1.42	1.30	1.30	1.33	1.77	1.33	1.53	
1.07	1.07	1.44	1.33	1.21	1.22	1.25	1.66	1.25	1.43	
0.77	0.77	1.05	0.97	0.88	0.89	0.91	1.21	0.90	1.03	
0.38	0.38	0.52	0.48	0.43	0.45	0.45	0.58	0.44	0.52	
0.67	0.67	0.92	0.84	0.77	0.77	0.79	1.05	0.79	0.90	
0.64	0.64	0.88	0.81	0.73	0.74	0.76	0.97	0.75	0.87	
0.59	0.59	0.81	0.74	0.68	0.68	0.70	0.93	0.69	0.79	
0.60	0.60	0.81	0.74	0.68	0.69	0.70	0.94	0.69	0.79	
0.57	0.57	0.78	0.71	0.65	0.65	0.67	0.89	0.66	0.76	
1.16	1.16	1.59	1.46	1.34	1.34	1.38	1.81	1.36	1.57	
1.16	1.16	1.59	1.47	1.34	1.34	1.38	1.82	1.37	1.58	Half measure sent.
1.18	1.18	1.60	1.47	1.34	1.36	1.39	1.84	1.38	1.58	

Statement showing equivalents in Imperial Seers of local

Districts and Stations.	Name of Measure.	How used locally.	Assumed normal contents in rice.	Cubic capacity of the Specimen sent.	Diameter.	Rice, 1st sort.	Rice, 2nd sort.
1	2	3	4	5	6	7	8
Coimbatore.—(Contd.)							
6. Sattiamangalam ...	Measure.	Liberally heaped.	TOLAHS	INCHES.	INCHES	L. S.	L. S.
7. Pollachy ...	Do.	Do.	140	112.97	4.3	1.63	1.64
8. Caroor ...	Do.	Do.	145	112.45	4.3	1.69	1.70
9. Dharapuram ...	Do.	Do.	160	130.02	4.4	1.87	1.88
10. Oodamalpettah...	Do.	Do.	160	...	...	1.87	1.88
Nilgiris.							
1. Ootacamund ...	Half measure.	Heaped to overflowing.	64	50.17	4.1	0.75	0.75
2. Coonoor ...	Do.	Do.	64	52.77	3.9	0.75	0.75
Tanjore.							
1. Tirumore ...	Patnam Padi.	Heaped	126	104.66	4.75	1.47	1.48
2. Tirumady ...							
3. Tirumam ...							
4. Tirumaconum ...							
5. Madhyarjunam...	Padi	Do.	135	...	5.3	1.57	1.58
6. Kodavasal...							
7. Muttupettah ...							
8. Mannargudi ...							
9. Nidamangalam ...	Half Patnam Padi.	Do.	63	53.63	3.6	0.73	0.74
10. Pattukottai ...							
11. Kornad ...							
12. Shealli ...							
13. Poraiyar ...	Half Patnam Padi.	Do.	63	53.63	3.6	0.73	0.74
14. Tirumalavasal ...							
15. Negapatam ...							
16. Tiruvalur ...							
17. Tritrapundi ...	Half Padi.	Do.	60	...	...	0.70	0.70
18. Tiptorai ...							
19. Ardhangi ...							
Trichinopoly.							
1. Trichinopoly ...	Padi	Well filled to overflowing.	120	...	4.75	1.40	1.41
2. Kulitalai ...	Do.	Do.	120	...	4.75	1.40	1.41
3. Perambalur ...	Do.	Do.	120	...	4.75	1.40	1.41
4. Museri ...	Do.	Do.	120	...	4.75	1.40	1.41
5. Udayarpalem ...	Half Padi.	Do.	60	...	...	0.70	0.70
Madura.							
1. Madura ...	Measure.	Heaped	135	103.8	5.3	1.57	1.58
2. Tirumangalam ...							
3. Melur ...							
4. Dindigul ...							
5. Periakulam ...							
6. Palani ...							
7. Ramnad ...							

measures of different foot-grains and of Salt.—(Continued.)

Paddy, 1st sort, (<i>Oryza sativa</i> .)	Paddy, 2nd sort, (<i>Oryza sativa</i> .)	Horse-grain, (<i>Dolichos uniflorus</i> .)	Cholam or Jowar, (<i>Holcus sorghum</i> .)	Cumboo or Bajra, (<i>Pennisetia glauca</i> .)	Varagoo, (<i>Panicum mitaceum</i> .)	Ragi, (<i>Eleusine Coracana</i> .)	Salt.	Wheat, (<i>Triticum aestivum</i> .)	Ulundu, (<i>Phaseolus mungo</i> .)	Remarks.
9	10	11	12	13	14	15	16	17	18	19
I. S.	I. S.	I. S.	I. S.	I. S.	I. S.	I. S.	I. S.	I. S.	I. S.	
1.25	1.25	1.71	1.57	1.44	1.44	1.48	1.96	1.47	1.70	
1.29	1.29	1.77	1.63	1.49	1.49	1.54	2.02	1.53	1.76	Measure not sent. Half measure sent.
1.44	1.44	1.97	1.81	1.64	1.66	1.70	2.23	1.69	1.94	
0.57	0.57	0.78	0.72	0.66	0.66	0.68	0.89	0.67	0.77	
1.15	1.15	1.55	1.42	1.29	1.32	1.34	1.59	1.34	1.53	
1.27	1.27	1.67	1.52	1.38	1.41	1.45	1.72	1.46	1.64	
0.57	0.57	0.78	0.71	0.65	0.65	0.66	0.79	0.66	0.76	
1.10	1.10	1.50	1.35	1.24	1.24	1.27	1.77	1.24	1.45	
0.55	0.55	0.75	0.67	0.62	0.62	0.63	0.89	0.62	0.73	
1.27	1.27	1.67	1.52	1.38	1.41	1.45	1.72	1.46	1.64	

Statement showing equivalents in Imperial Seers of local

Statement showing equivalents in Imperial Seers of local

Districts and Stations.	Name of Measure.	How used locally.	Assumed normal contents in rice.	Cubic capacity of the Specimen sent.	Diameter.	Rice, 1st sort.	Rice, 2nd sort.
1	2	3	4	5	6	7	8
<i>Tinnevelly.</i>							
1. Tenkarai ...	Madras measure.	Struck	120	107.26	4.2	1.40	1.41
2. Tinnevelly ...							
3. Ambasamudrum ...							
4. Srivilliputtur ...							
5. Nanguneri ...							
6. Sankaranainar Kovil.							
7. Tenkasi ...							
8. Sattur ...							
9. Ottapidaram ...							
10. Kulasegarapatnam ...							
11. Vilattikolam ...							
12. Palamcottah ...							
13. Tuticorin ...							
14. Watrap ...							
15. Virdupatti ...							
16. Radapuram ...							
17. Kaitar ...							
<i>Malabar.</i>							
1. Palghaut ...	McLeod Seer.	Liberally heaped.	130	104.67	4.3	1.52	1.53
2. Walluvanad ...				103.8	5.0		
3. Koteyom ...				97.75	5.35		
4. Cherakal ...				100.34	5.35		
5. Kurumbranad ...				97.75	5.7		
6. Ernaad ...				79.58	5.7		
7. Wynaad ...				74.39	3.7		
8. Calicut ...	Half McLeod Seer.	Do.	65	49.21	3.8	0.76	0.76
9. Ponani ...	Do.	Do.		47.48	4.25		
10. Cochin ...	Nali	Do.		43	34.6		
<i>South Canara.</i>							
1. Mangalore ...	Seer	Struck	78	71.78	4.1	0.91	0.92
2. Udipi ...				72.21	3.9		
3. Upinangadi ...				73.18	3.9		
4. Kundapur ...				71.13	4.5		
5. Kassergode ...				72.66	5.0		

measures of different food-grains and of Salt.—(Concluded.)

Paddy, 1st sort, (<i>Oryza sativa</i> .)	Paddy, 2nd sort, (<i>Oryza sativa</i> .)	Horse-grain, (<i>Dolichos uniflorus</i> .)	Cholam or Jowar, (<i>Holcus sorghum</i> .)	Cumboo or Bajra, (<i>Pennisetum glaucum</i> .)	Varagoo, (<i>Panicum miliaceum</i> .)	Ragi, (<i>Eleusine Coracana</i> .)	Salt.	Wheat, (<i>Triticum aestivum</i> .)	Ulundu, (<i>Phaseolus mungo</i> .)	Remarks.
9	10	11	12	13	14	15	16	17	18	19
I. S.	I. S.	I. S.	I. S.	I. S.	I. S.	I. S.	I. S.	I. S.	I. S.	
1.05	1.05	1.46	1.34	1.23	1.23	1.28	1.42	1.25	1.45	
1.16	1.16	1.59	1.47	1.34	1.24	1.38	1.58	1.36	1.57	
1.19	1.19	1.60	1.46	1.33	1.36	1.38	1.68	1.39	1.57	
1.20	1.20	1.61	1.46	1.32	1.36	1.39	1.69	1.40	1.59	
1.20	1.20	1.58	1.46	1.30	1.36	1.37	1.69	1.41	1.57	
0.81	0.81	1.12	1.03	0.95	0.94	0.98	1.11	0.96	1.11	
0.84	0.84	1.11	0.99	0.92	0.95	0.95	1.14	0.94	1.08	
0.59	0.59	0.79	0.73	0.67	0.66	0.69	0.84	0.68	0.78	
0.59	0.59	0.80	0.74	0.68	0.68	0.68	0.86	0.70	0.79	
0.38	0.38	0.52	0.48	0.43	0.45	0.45	0.53	0.44	0.52	
0.68	0.68	0.95	0.87	0.80	0.80	0.83	0.94	0.81	0.94	

If the measure is to be used fully heaped, the weight of the heap due to the diameter according to the following table must be deducted from the supposed or standard contents in rice before the tests can be applied. If the measure is used only "half heaped," or merely "topped," half the amounts shown in the table should be deducted. The remainder in each case is the struck content of the measure to which alone the tests apply.

2. The diameter should be carefully measured to tenths of an inch. If a measure is not quite round a mean between the longest and shortest diameter should be taken. Some wooden measures are made with a flat rim, and the grain will be found to heap almost to the outer edge. In such cases the external diameter should be taken. It may exceed the internal diameter by $\frac{1}{4}$ ths of an inch which in wide measures will cause a considerable difference in the weight of the heap.

Table showing the weight of Rice in heaps of different diameters (Bayley, p. 58).

Diameter inches.	Tolabs of rice.	Diameter inches.	Tolabs of rice.	Diameter inches.	Tolabs of rice.	Diameter inches.	Tolabs of rice.
2	2	4	7	6	24	8	56
2 $\frac{1}{2}$	2 $\frac{1}{2}$	4 $\frac{1}{2}$	8	6 $\frac{1}{2}$	28	8 $\frac{1}{2}$	60
2 $\frac{3}{4}$	3	4 $\frac{3}{4}$	9	6 $\frac{3}{4}$	32	8 $\frac{3}{4}$	65
2 $\frac{7}{8}$	3 $\frac{1}{2}$	4 $\frac{7}{8}$	11	6 $\frac{7}{8}$	36	8 $\frac{7}{8}$	70
3	4	5	13	7	40	9	75
3 $\frac{1}{4}$	4 $\frac{1}{2}$	5 $\frac{1}{4}$	15	7 $\frac{1}{4}$	44	9 $\frac{1}{4}$	87
3 $\frac{1}{2}$	5	5 $\frac{1}{2}$	18	7 $\frac{1}{2}$	48	10	100
3 $\frac{3}{4}$	5 $\frac{1}{2}$	5 $\frac{3}{4}$	21	7 $\frac{3}{4}$	52	...	...

3. For the struck contents thus obtained tests are to be applied according to the following rules.

4. The test by volume (*i. e.*, ounces) of water is the best. The best drinking water obtainable should be used as it is the clearest. The measure to be tested should be well washed out, and if it is of wood water should be allowed to stand in it for a quarter of an hour before testing, so as to guard against absorption during that process, whereby the result would be falsified. The capacity of the measure to hold water must be carefully ascertained, and leaks caulked on the outside only with pitch or sealing wax. But even though it be found impossible to staunch the measure, good results may be obtained by catching the water which escapes by leakage, measuring it, and deducting the amount from that poured into the measure from the test glass. Much care is required in filling the measure. The rim should be moistened before testing and the water should not be allowed to overtop it. If the rim be dry, water will stand without spilling quite a sixteenth of an inch above it; and in a measure of five inches diameter this will represent 1.39 tolabs of rice. The surface of the water must be exactly level with the rim.

5. The test by weight of water is next best. The measure must first be weighed empty and then full. The difference is of course the weight of the water. The same precautions as to filling and preparing the measure must be observed as for the volume test; and care must be taken against spilling.

6. The paddy test is better than the rice test. Ordinary specimens should be used; there should be no attempt to procure old or well dried grain for the purpose, or to procure uniformity by using the same grain again and again. The tests by grain must always be by struck measure. The measure should be placed in a basket of grain so that the orifice is level. It should then be filled with both hands till no more will remain on the heap. This is *full or liberal heaping*. It seems to be considered in some places to be equivalent to "filling to overflowing."

The heap is then to be swept off gently till level with the rim with a straight flat stick, *not with the hand*, and the remaining contents weighed.

TABLE II.—(Tamil Districts and West Coast.)

Rice. Tolabs.	Paddy. Tolabs.	Water. Tolabs.	Water. Ounces.	Cubic Inches.
1	0.7401	1.2401	0.5084	0.8790
3	2.2203	3.7203	1.5252	2.6371
5	3.7004	6.2004	2.5421	4.3952
7	5.1806	8.6806	3.5589	6.1533
9	6.6608	11.1608	4.5757	7.9113
10	7.4009	12.2409	5.0841	8.7904
30	22.2026	37.2026	15.2524	26.3711
50	37.0044	62.0044	25.4207	43.9519
70	51.8062	86.8062	35.5890	61.5327
90	66.6079	111.6079	45.7573	79.1134
100	74.0088	124.0088	50.8415	87.9038

TABLE III.—(Telugu Districts.)

Rice. Tolabs.	Paddy. Tolabs.	Water. Tolabs.	Water. Ounces.	Cubic Inches.
1	0.7455	1.2778	0.5246	0.9091
3	2.2364	3.8333	1.5737	2.7273
5	3.7273	6.3889	2.6229	4.5455
7	5.2182	8.9334	3.6721	6.3636
9	6.7091	11.4999	4.7212	8.1818
10	7.4545	12.7777	5.2458	9.0909
30	22.3636	38.3331	15.7374	27.2727
50	37.2727	63.8885	26.2290	45.4545
70	52.1818	89.3339	36.7206	63.6364
90	67.0909	114.9993	47.2122	81.8182
100	74.5455	127.7770	52.4581	90.9091

7. The following is an illustration of the use of these tables:—A measure which is supposed to represent, well heaped, 132 tolabs of rice is brought to be tested. Its heaping diameter is 5½ inches. From Table I. the heap weighs 15 tolabs. The struck contents ought to be 117 tolabs of rice, or (from Table II.)

Rice. Tolabs.	Paddy. Tolabs.	Water. Tolabs.	Water. Ounces.
100	74.0088	124.0088	50.8415
10	7.4009	12.4009	5.0841
7	5.1806	8.6806	3.5589
117	86.5903	143.0903	59.4845
Or ...	86½	143½	59½

8. When the precautions above described have been observed, measures may be stamped which are found to vary from standard within the following limits:—

Test by ounces of water... ½ per cent.
Do. by weight of water ... 1 do.
Do. do. of grains ... 2 do.

The first test should be always used if possible.

9. When proved, measures should be stamped at the top and bottom, as near the edge as possible. If there is a joining at the side, an impression should be made across it. These precautions are necessary to prevent alteration of the measure by changing either its length or diameter after it has been stamped; a practice which the Board believe to be not rare.

(Signed) H. E. STOKES,
Acting Sub-Secretary.

No. 51.

PROCEEDINGS OF THE BOARD OF REVENUE, dated 15th January 1873.

Read again—

Government Order, 26th January 1872, No. 168A.

" " 26th March " " 525.

Board's Proceedings, 6th April " " 537.

" " 8th " " " 544.

" " 11th " " " 577.

Government Order, 10th May " " 751.

" " 21st " " " 808.

Board's Proceedings, 2nd July " " 1,169.

Read also the following papers:—

Collectors' replies, furnishing information relative to the Local Weights and Measures.

From Commissioner of the Nilgiris,	dated 22nd May	1872, No.	65.
" " " "	29th July	" "	87.
" Collector of Madura,	22nd June	" "	226.
" " of Godavery District,	1st July	" "	200.
" " of Cuddapah,	26th "	" "	122.
" Officiating Collector, Madras,	31st "	" "	155.
" Acting Collector of South Arcot,	12th August	" "	281.
" Collector of Kurnool,	12th "	" "	230.
" " of Tinnevely,	14th June	" "	248.
" " "	16th August	" "	359.
" " of Chingleput,	20th "	" "	353.
" Acting Collector of Vizagapatam,	19th June	" "	357.
" " " "	28th August	" "	510.
" Collector of Salem,	13th September	" "	236.
" " of Bellary,	13th "	" "	318.
" " of Malabar,	15th July	" "	167.
" " "	26th September	" "	221.
" Acting Collector of North Arcot,	30th "	" "	492.
" " of Tanjore,	4th October	" "	335.
" " of Trichinopoly	10th "	" "	219.
" Collector of Coimbatore,	19th "	" "	164.
" " of Nellore,	11th November	" "	2,610.
" " of Kistna District,	18th "	" "	2,758.
" Acting Collector of Ganjam,	23rd "	" "	2,020.
" Collector of South Canara,	14th "	" "	1,385.

Proceedings of the Madras Government, dated 9th September 1872, No. 1,296,
Revenue Department.

ABSTRACT.—*Price Lists of Food Grains.*—Board of Revenue to arrange for the direct submission of the periodical Price Lists required by the Government of India.

Proceedings of the Madras Government, dated 20th November 1872, Miscellaneous
No. 122, Revenue Department.

ABSTRACT.—*Food Grains.*—Board of Revenue requested to expedite the transmission to the Government of India of the Returns called for by them.

Proceedings of the Madras Government, dated 9th December 1872, Miscellaneous
No. 59, Revenue Department.

ABSTRACT.—*Prices current of Food Grains.*—Board of Revenue to report whether they are forwarded to the Government of India.

THE Government of India having called for price lists of the various grains used as food and of salt in terms of the imperial seer weight as defined by Act XXXI. of 1871,* the Board of Revenue were directed to frame tables for converting the local measures in use throughout the Presidency into imperial seers.

2. Had it been thought sufficient merely to convert the prices per Madras garce (imaginary though it is) into prices per imperial seer the task would have been comparatively easy; but such results would not have been of value. The unsatisfactory character of the price lists rendered in terms of the Madras

garce had for some time been known to the Board, and a complete inquiry as to the values of the local measures was evidently an essential preliminary to the introduction of the proposed system. The Board regret the delay which has taken place, but think it will be admitted that the verification and testing of the local measures involved considerable labour and required time to ensure satisfactory results. The last Collector's report, that from Ganjam, was received only on the 2nd December, and the information from several districts, *e.g.*, the Kistna, is still incomplete.

3. The first step was to ascertain what the local measures are. To this end the Collectors were directed to procure the most accurate specimens obtainable of the measures in use at each station (to be that of a Tahsildar or Deputy Tahsildar or Sub-Magistrate) where prices are recorded, and having personally tested them with well dried old rice and with water, to forward them to the Board. The measures were also tested with average rice, when filled according to local usage. From these experiments the Board have arrived at conclusions as to the normal weights of rice, that is those which the measures are meant to represent; and those

Enclosure A.

adopted are entered in the column so headed in the statement appended. The local standards are evidently not well ascertained in many instances; those now

reported differ in some cases from recent statements; and it is evident from the rude character of some of the measures, made of wood and bamboo, and of irregular shapes, that standards so represented must fluctuate even if originally definite. To adopt absolutely the weighments now reported, would be to assume that the specimen measures now sent up are exact to standard, which is improbable and indeed in some of the reports expressly denied. The Board have therefore been guided not by the present reports alone, but also by reference to established local standards in Mr. Bayley's valuable memorandum drawn up in 1852, and

* The cubic capacity has been ascertained (where important) by measuring with water, the fluid oz. being equal to 1.73295 cubic inches. Accurate results can seldom be attained by measurement, as few measures are so well made as to be perfectly regular in shape. by regard to the cubic capacity* of the measures sent and their consequent value in average rice (111 to 115 tolahs to 100 cubic inches—Bayley). They believe that the equivalents assumed are the best that can be got on existing data, and for the present purpose quite sufficiently near to real standards, where there are any. It is to be remembered that as the new price returns are to be carried to only one place of decimals, there is a margin of 8.57344 tolahs in each case.

4. The relative weights of the commodities of which the prices are to be recorded, had also to be ascertained. These vary with almost every weighment, and every set of specimens, if not, as seems likely, with the same grains at different times owing to difference in humidity, and probably in all parts of the country. Experiments under as diverse conditions as possible were therefore required, and all Collectors were accordingly requested to report the weights (by struck measure to avoid difference of heaping) of average specimens of the different articles obtained in the local bazaars. The experiments seem to have been made with considerable care. The averages which follow are deduced from 197 weighments made with twenty-six different sets of specimens, and the Board think they may be used with confidence. There are two methods by which they can be utilized; either the weights of a given volume may be compared, or one grain being taken as a standard and assumed as invariable the others may be compared with it. The former is the more satisfactory, if dependence can be placed on the ascertainment of the cubic capacities of the numerous measures on which the average for the given volume is struck. In the following table the results of both methods are given. The second has been applied for water as well as rice; but the general averages obtained did not appreciably differ. The figures obtained from cubic capacity have been, in the following statement, reduced to rice 1st sort as 100, to admit of comparison between the results of the two methods. The general average weight of the different articles to 100 cubic inches are given in a note.*

	Tolahs.		Tolahs.
Rice, 1st sort...	111.79	Varagu ...	98.07
" 2nd	112.53	Ragi ...	102.19
Paddy, 1st sort...	83.96	Salt ...	114.91
" 2nd	83.94	Wheat ...	99.44
Gram ...	116.58	Ulundu ...	115.53
Cholum ...	107.36	Water ...	140.60
Cumboo ...	98.63		

more than any other (no less than 37 tola in 100 cubic inches) and whatever its weight at the pans where it is made, it must be considerably increased in transit

* Ceded Districts.		Chiefly supplied from	
Bellary ...	105.98	Nellore ...	111.05
Cuddapah(a) ...		Chingleput..	119.80
Kurnool ...	110.45		
	216.43		230.85
Average...	108.22		115.43
North Arcot.	123.65	Chingleput..	119.80
		South Arcot.	96.58
			216.38
		Average...	108.19
West Centre.			
Salem ...	125.11	Chingleput..	119.80
Coimbatore ...	129.23	South Arcot..	96.58
Nilgiris ...	133.47	Tanjore ...	121.10
	387.81		337.48
Average...	129.27		112.49
Trichinopoly(a)		Tanjore ...	121.10
(a) No measures sent.			

extreme dryness of the climate, or whether it can be due to admixture with earth salt. The correct ascertainment of the price of salt is however a matter of extreme importance, and steps must be taken to obtain more satisfactory data as to its weight than those now recorded. Each Collector should select a measure (not too small) which should be sent round to all Tahsildars and Sub-Magistrates in succession, with instructions to report the weight of salt of ordinary quality sold at their stations (1) by struck measure, (2) by liberally heaped measure, and (3) by measure filled as usual at the station. The results should be tabulated and forwarded to the Board together with the measure used.

6. There is another point, however, which has to be considered in framing the conversion table for the different grains, when, as is most frequently the case, the local measure is used heaped. This is the difference in the law of heaping to which each grain is subject. Thus the weight of a heap of paddy, though the grain in the husk is only three-fourths as heavy as rice, is, on the same diameter, very nearly as great as that of a heap of rice. Generally the smooth and round grains heap low, and the long and rough ones heap high. Of all the commodities examined, cumboo heaps lowest and salt highest. The following table is based on the differences, classified according to diameters of the measures used, which have been recorded in seven districts, and on experiments made in the Board's office. The table is not put forth as absolutely correct, but it is sufficient for the present purpose. Many causes induce variation, for example, different degrees of humidity alter the adhesion, the size, and probably also the shape of the grains, as well as their absolute weight.

Very high results for rice which have been reported from Malabar are perhaps thus explained.

Statement showing heaping of different articles.

Diameter. Inches.	Rice. (Bayley) Tolahs.	Paddy. Tolahs.	Gram. Tolahs.	Cholum. Tolahs.	Cumboo. Tolahs.	Varagu. Tolahs.	Ragi. Tolahs.	Salt. Tolahs.	Wheat. Tolahs.	Ulundu. Tolahs.
2	2	1½	1½	1	1	1	1	2	1½	1½
3	4	3	4	4	2½	4	3	5	4	4
3½	4½	4	5	4½	3	4½	3½	7	4½	4½
3½	5	5	6	5	4½	5	4	9	5	5
3½	6	6	7	6	5	6	5	11	6	6
4	7	7	8	7	6	7	5½	13	7	7½
4½	8	8	9	8½	7	8	6½	15	9	9
4½	9	10	11	10	8	10	8	17	11	10½
4½	11	12	13	11	9½	12	9½	20	12½	12
5	13	14	15½	13	11	14	11	23	15	14½
5½	15	16½	18	15	12	16	14	26	18	17
5½	18	19	20	18	13½	18	16	29	21	19
5½	21	21	21½	20	15	21	18	32½	24	22
6	24	23	23	22	18	24	20	36	27	25
6½	28	25	25	24	20½	27	23	40	30	29
6½	32	29	27	26	23	30	26½	44	33	33
6½	36	32½	31	28	25½	33	30	48	37	37
7	40	35	36	30	28	36	33	53	41	41
7½	44	38	41	36	31	39½	35½	58	45	45
7½	48	41	46	43	34	43	38	65	50	50

7. From the data above described the conversion table, Enclosure A, has been prepared. Where measures are used struck, the ratios of the other grains to rice have been applied to the weights in rice to obtain the weights of the other grains; but where heaped measure is adopted, the struck contents in rice having been first obtained by deducting the weight of the heap due to the diameter the weights of the struck contents of the other grains have been deduced by means of the ratios of relative weight, and the whole weights got by adding the weight of the heap of each grain due to the diameter. Where measures are used "topped" or "filled to overflowing" half the amounts shown in the table in the last paragraph have been taken. The converted weights are carried to two places of decimals of an imperial seer, in order to ensure correctness in the single place to be shown in the new returns.

8. The conversion of the district returns is to be done in the Board's office, and all that they are to contain is the number of local measures of each commodity sold for a rupee. It is of the greatest importance that the measure taken should be invariably that mentioned in Enclosure A. for each station, and if inappropriateness of any kind in the standards taken should, owing to local change or other cause, come to light, it should at once be brought to the notice of the Board. Record in the following form must be kept at every station at which prices are

recorded. Column 5 must contain the name of the measure entered opposite the station in the Board's conversion table (Enclosure A.)

1. District.
2. Station.
3. Month and year.
4. Day of the month.
5. Name of local measure.
6. Rice, 1st sort.
7. " 2nd "
8. Paddy, 1st "
9. " 2nd "
10. Horse-grain.
11. Cholum.
12. Cumboo.
13. Varagu.
14. Ragi.
15. Salt.
16. Wheat.
17. Ulundu.

Columns 6—17 must be sub-divided into three columns so as to show prices ruling in (1) the fortnight ending—, (2) in the previous fortnight ending—, (3) fortnight of the previous year ending (same date as that under report.)

It must be remembered that retail prices are what is wanted. Further orders will probably be issued hereafter as to recording wholesale prices.

9. In the Resolution communicated with G. O., dated 9th September 1872, the Government of India state that the returns are to be furnished twice in the month showing the prices ruling on the 15th and the last day of it; and that it will be sufficient to have one price list for each district showing the prices current at the head-quarter station. The local Government order these price lists to be sent direct to the Government of India.

10. All Collectors should therefore despatch to the Board's office punctually on the 1st and 16th of each month, beginning from the 1st February, the returns of prices for the previous day. The Treasury Deputy-Collector should be held personally responsible for this being done.

11. The returns must, however, be kept up daily at all stations, Huzur and taluq, and a return under the above headings showing for each station the average of the month, must be sent to the Board as hitherto.

12. From the present reports it would seem that the operations of the establishments for stamping measures have not produced as much benefit as might have been expected. Only a small proportion of the measures now sent up are stamped; and it is several times remarked that even the stamped measures show considerable variation from the standard. This is due partly to the want of clear instructions, but chiefly to the use of a grain standard which is itself variable. Enclosure B. contains rules and tables which should be translated by all Collectors and furnished for their guidance to all stamping establishments and to Tahsildars. The grain standard hitherto adopted has usually been rice. The figures given in paragraph 5 show that except paddy, rice is about as good a grain as could be chosen, but it is still an unsatisfactory test. In Board's Proceedings, 6th April 1872, No. 537, they directed that in future measures should be tested only in the

manner laid down in Board's Proceedings, 29th June 1871, No. 2,613, i.e., by the weight of water. This is undoubtedly a better test than any grain test, but the present experiments show a variation of 6.84 tolahs in 100 cubic inches of water. The weight of water itself varies according to the quantity of matter in solution and suspension, and the operation of weighing a measure full of water is a practically difficult one. A test by volume of water is more trustworthy and much more easily applied. The fluid oz. being of a volume accurately defined with reference to all conditions (viz., 1.73295 cubic inches), this test is independent of variations in temperature, barometric pressure, and matter in solution. It must be adopted in preference to the tests by weight of water or grain; but these tests are useful as a check and should be continued. All that is necessary is to supply stamping Gumastas with test glasses, and tables of equivalents. Collectors will report how many glasses will be required. Each stamping officer should have a twenty oz. glass equivalent to a pint and a five oz. glass graduated to quarter of an oz. which is sufficient for practical purposes. Enclosure B. contains tables of equivalent tests and directions for applying them. The weight of distilled water at 80° with barometer 30 inches is 140.02 tolahs to 100 cubic inches. The Board's tables are based on the following assumptions:—

Water (not distilled) 100 cubic inches = 140.75 tolahs = Rice { In Telugu districts 111 tolahs = Paddy 82 tolahs
In Tamil do. 113.5 = Paddy 84. "

Divisional officers should take frequent opportunities of examining the operations of stamping establishments.

13. The Board proceed to notice such points in the Collectors' letters as call for remark.

It appears that prices are not recorded at all stations of Tahsildars and Sub-Magistrates. This should be done as a rule; and the Collectors of the

districts noted in the margin will report whether there is any reason against its enforcement at the stations where apparently no record is now kept. If not, they will forward specimens of the local measures, tested for rice and water as has been done in the present returns.

Vizagapatam.—The difficulty of obtaining correct information as to ruling prices is a real one, but must be overcome by patience and conciliatory measures.

Godavery.—The pukka seer should be used everywhere in recording prices, though it is said that the sales are actually made in submultiples of it. In the conversion table the dimensions of the seer used in Vizagapatam have been adopted.

Kistna.—The Collector may, if he thinks fit, discontinue the record of prices at Kykalur and Ganpavaram. The specimen measures from the other stations should be sent as soon as possible.

North Arcot.—The Maderpak measure is not forthcoming amongst those sent. The Collector is requested to send it or another specimen for identification. The measures forwarded will be returned as requested.

Stations not represented.		Stations not represented.	
Ganjam ..	3	South Arcot ..	8
Vizagapatam ..	9	Trichinopoly ..	4
Kistna ..	8	Madura ..	11
Nellore ..	1	Salem ..	1
Bellary ..	8	Malabar ..	8
Chingleput ..	5	Canara ..	3
North Arcot ..	8		

South Arcot.—The retention of the standard of 140½ tolals is approved for the present. The measures of South Arcot are found to be more uniform and accurate than those sent from most other districts.

Cuddapah.—A specimen of the local measure should have been forwarded. With reference to Mr. Bayley's remarks in his memorandum, the Board are inclined to question the Collector's statement that the local measures are uniform throughout the district. He is requested to make further enquiry and report. For conversion, the dimensions of the measure in use in the neighbouring taluqs of Kurnool, which seems to be the same as that reported on, have been taken.

Tanjore.—The Tanjore measures are tested with ulundu, though, as they are intended for Madras measures, rice ought to be the standard. The weights of rice given in Enclosure A. should be adopted in future. The fact that the same grain has been used for twelve or thirteen years past in some of the taluqs is sufficient to account for the increase above standard spoken of. The Board trust that the standard will be better preserved in future. Measurement by struck measure was ordered, not for the purpose of ascertaining the capacity of the local measure, but for getting rid of a cause of error in arriving at the relative weights. The Pattukotta standard should be retained. It will probably be found that it was altered to agree with the measure introduced in the neighbouring district of Madura.

Malabar.—The Board have retained Munjeri with the standard now reported. The Collector will include Tirurangadi when reporting regarding the other stations omitted.

14. With regard to paragraph 10 of the Board's Proceedings, 29th June 1871, No. 2,613, in which it was suggested that attempts should be made to equalize the measures in use in each district, suggestions have been made by some of the Collectors. The Collector of Coimbatore states that a measure of 150 tolals heaped is desired in the district; the Collector of Tinnevely says that any standard which is considered desirable can be introduced; and the Collector of Malabar wishes for standards of a Madras measure which would be only a slight modification of the McLeod Seer extensively used in the district. The Board think attempts to equalize the district measures amongst themselves will merely tend, if not to produce further diversity, at least to perpetuate diversity where it now exists; and that the best solution of the difficulty would be to introduce everywhere the imperial seer measure as defined in Act XXXI. of 1871 or a multiple of it. That measure is of a capacity of about 61 cubic inches, and would contain struck about 69 tolals of rice. A measure to contain an imperial seer weight of rice would be more convenient but could not be introduced under legal authority. The seer measure doubled or 122 cubic inches, would contain of average rice 137.86 tolals, which is nearly equal to the common manika of 140 tolals or 1½ pukka seers, and to the species of Madras measure which contains heaped 135 tolals. There are also several measures now in use, from 66 to 75 tolals which might be approximated to the standard seer. If any attempt is made to introduce such a measure it will be advisable to prescribe standard dimensions, especially if, which the Board would not recommend, a measure to be used heaped be conceded to local habits.

Neglect of this point has vitiated most of the attempts which have been made to introduce the Madras measure in the provinces. In some places measures to be used heaped, are made of the same struck capacity as the Madras measure struck or topped (117 or 120 tolals); but owing to different diameters being adopted the heaped contents vary from 125 to 135 tolals. Some are made so as to equal, heaped, the Madras measure struck or topped. The following dimensions would answer for the new measures, single and double.

	For single	For heaped measure.
61 cubic inches=68.93 tolals or average rice (113 tolals to 100 cubic inches.)	Cylinder— Diameter, 4.854 inches. Depth, 4.854 inches.	Cylinder— Diameter, 4 inches. Depth, 4.361 inches.
122 cubic inches=137.86 tolals.	Cylinder— Diameter, 5 inches. Depth, 6.213 inches.	Cylinder— Diameter, 5 inches. Depth, 5.628 inches.

(A true Extract.)

Acting Sub-Secretary.

To the Secretary to Government, Revenue Department,
with two enclosures.

.. all Collectors. do.
.. the Director of Revenue Settlement. do.
.. the Superintendent of Government Farms, do.

26/10/73
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2-8-05
4-12-05

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24-4-94
30-7-96

1-8-91
15-8-92
24-4-94
30-7-96

Revenue 1873, District

Board of Revenue

MADRAS.

RECEIVED, 15TH JANUARY 1873, No

2229

Received 23-1-73

JANUARY.
No. 51.

Conversion of local Measures into Imperial
Seers.—Report submitted to Government
regarding —

RECORDED.

5-7-1873

MADRAS RECORD OFFICE.

Government Records.

Revenue Department.

~~RECEIVED~~

Dated *5-2-* 1873

No. *27 Miss*

Back Nos. _____

Diary Date _____