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Lampiran 1. Realisasi Panen Padi Tahun 2020

Kecamatan	Panen (Ha)												Jumlah	Provitas (KuHa ⁻¹)	Produksi (Ton)	
	Jan	Feb	Mar	April	Mei	Jun	Jul	Agust	Sept	Okt	Nov	Des				
Maros Baru			40	853	208		0	401	610				25	2.137	66,20	14.146,94
Turikale			200	600	88		188	462	150			205	145	2.038	65,25	13.297,95
Marusu				525	450									975	58,00	5.655,00
Bontoa				1.200	730		400	967	408					3.705	62,00	22.971,00
Lau				2.189			227	1.982				150		4.548	61,67	28.047,52
Bantimurung			250	3.714			1.583	2.060				480	520	8.607	61,40	52.846,98
Simbang			629	1.405			1.249	569				830	25	4.707	63,85	30.054,20
Mandai		100	507	818	15		316	978					17	2.751	63,00	17.331,30
Moncongloe			363	592	34		272	543	57	15	66			1.942	61,79	11.999,62
Tanralili			1.715	467			915	633	302		25	220		4.277	61,45	26.282,17
Tompobulu			705	1.545	293		515	610	285		15	235		4.203	64,70	27.193,41
Camba				350	805	782			575	775	35			3.322	70,00	23.254,00
Cenrana				1.235	766			743	100	27				2.871	69,00	19.809,90
Mallawa					1.360	481			478	180				2.499	67,00	16.743,30
Jumlah	-	100	4.409	15.493	4.749	1.263	5.665	9.948	2.965	997	1.806	1.187	48.582	63,95	22.116,66	

(Sumber: DPKP Maros)

Lampiran 2. Realisasi Panen Padi Tahun 2021

Kecamatan	Panen (Ha)												Jumlah	Provitas (KuHa ⁻¹)	Produksi (Ton)
	Jan	Feb	Mar	April	Mei	Jun	Jul	Agust	Sept	Okt	Nov	Des			
Maros Baru			350	543	162			776	279			2	2.112	59,00	12.461,00
Turikale			570	548	90			800			300	260	2.568	54,00	13.867,00
Marusu			100	1.015				0					1.115	56,00	6.244,00
Bontoa			700	346			400	592					2.038	62,00	12.636,00
Lau		2	1.575	20			305	1.295			185	115	3.497	63,00	21.898,00
Bantimurung			3.380	200		27	2.844	591		5	692	688	8.427	64,00	53.629,00
Simbang		559	1.482	479		267	1.933	170		15	585	220	5.710	66,13	37.760,00
Mandai			1.277	236			1.097	231			0	20	2.861	63,00	18.024,00
Moncongloe		55	620	298			225	375	200			80	1.853	62,50	11.581,00
Tanralili		180	1.720	200	281	0	194	500	1.632			225	4.932	65,83	32.474,00
Tompobulu	50g		20	2.779		74	26	1.360	84		4	150	4.547	60,80	27.646,00
Camba				320	1.090	653				570	355		2.988	65,00	19.422,00
Cenrana				417	2.156			764	77				3.414	68,33	23.328,00
Mallawa				465	853	247			273	309	53		2.200	77,92	17.142,00
Jumlah	50	796	11.794	7.866	4.632	1.268	7.024	7.454	3.115	684	1.819	1.760	48.262	63,39	305.701,00

(Sumber: DPKP Maros)

Lampiran 3. Realisasi Panen Padi Tahun 2022

Kecamatan	Panen (Ha)												Jumlah	Provitas (KuHa ⁻¹)	Produksi (Ton)
	Jan	Feb	Mar	April	Mei	Jun	Jul	Agust	Sept	Okt	Nov	Des			
Maros Baru			557	336	162			604	210			40	1.909	55,00	9.345,00
Turikale			700	508			100	600	120			300	2.328	56,00	10.140,00
Marusu			880	233									1.113	60,00	5.565,00
Bontoa		80	816	150				410					1.456	62,00	7.280,00
Lau		7	1.413	95		80	1.140	380			253		3.368	62,00	15.575,00
Bantimurung		805	2.089	688				1.370	4	130	1.280	320	6.686	54,00	24.779,95
Simbang		520	1.716	334						20	755		3.345	60,00	12.850,00
Mandai			1.458	75				1.091	231			11	2.866	56,00	13.395,00
Moncongloe		105	598	135				632	218				1.688	52,00	8.440,00
Tanralili		281	1.475	570				1.250	557		450		4.583	42,00	20.665,00
Tompobulu	31		184	1.998	691		195	1.092	261		254	26	4.732	52,00	22.260,00
Camba				925	665	473			320	320	260		2.963	58,00	11.915,00
Cenrana			17	1.595	961		15	647	363				3.598	53,44	17.990,00
Mallawa				52	1.503					12	363		1.930	58,00	7.775,00
Jumlah	31	1.798	11.903	7.694	3.982	553	1.450	8.076	2.284	482	3.615	697	42.565	51,60	187.974,95

(Sumber: DPKP Maros)

Lampiran 4. Rata-Rata panen dan Produktivitas panen di Kabupaten Maros 3 Tahun terakhir (2020-2022)

Kecamatan	Rata-rata Panen Kab. Maros 3 tahun terakhir (2020-2022) (Ha)												Rata- Rata Produktivitas Padi (Ku)
	Jan	Feb	Mar	April	Mei	Jun	Jul	Agust	Sept	Okt	Nov	Des	
Maros Baru	0	0	316	577	177	0	1	593	366	0	0	22	60,1
Turikale	0	0	490	552	59	0	96	621	90	0	253	235	58,4
Marusu	0	0	327	590	150	0	0	1	0	0	0	0	58
Bontoa	0	27	505	565	243	0	267	656	136	0	0	0	62
Lau	0	3	996	768	0	27	557	1219	0	0	196	38	62,2
Bantimurung	0	268	1906	1534	0	9	2214	1340	2	45	817	509	59,8
Simbang	0	360	1276	739	0	89	1061	246	0	12	723	82	63,3
Mandai	0	33	1081	376	5	0	471	767	18	0	17	10	60,7
Moncongloe	0	53	527	342	11	0	166	517	158	5	66	27	58,8
Tanralili	0	154	1637	412	113	19	370	794	830	0	238	148	56,4
Tompobulu	27	0	303	2107	328	25	245	1021	210	0	91	137	59,2
Camba	0	0	0	532	853	636	0	0	488	483	148	0	64,3
Cenrana	0	0	6	1082	1294	0	5	718	180	9	0	0	63,6
Mallawa	0	0	0	172	1239	243	0	0	250	167	208	0	67,6
Total	27	898	9370	10348	4472	1048	5453	8493	2728	721	2757	1208	59,6

(Sumber: Hasil Olah Data)

Lampiran 5. Data Ketersediaan Combine Rice Harvester di Kabupaten Maros Tahun 2023

Kecamatan	Kepemilikan Combine Rice Harvester (Unit)
Maros Baru	14
Turikale	11
Marusu	0
Bontoa	2
Lau	14
Bantimurung	50
Simbang	30
Mandai	6
Moncongloe	4
Tanralili	2
Tompobulu	10
Camba	5
Cenrana	1
Mallawa	0
Total	149

(Sumber Data: Data 14 BPP di Kab. Maros)

Lampiran 6. Hasil Pengamatan Operasi Kerja dan Perhitungan KLT, KLE dan Efisiensi Combine Rice Harvester pada Lahan Tak Jenuh Air

Luas lahan (m ²)	Waktu operasi (t) menit	Waktu operasi (t) jam	Jarak (s) m	waktu (t) s	Kecepatan (V) m s ⁻¹	Kecepatan (V) km jam ⁻¹	Lebar Kerja Alat (L) m	KLT (Ha jam ⁻¹)	KLE (Ha jam ⁻¹)	E (%)
381	6,35	0,106	24	14,05	1,708	6,149	1,8	1,107	0,360	32,523
381	6,35	0,106	13	7,22	1,801	6,482	1,8	1,167	0,360	30,855
381	6,35	0,106	18	9,83	1,831	6,592	1,8	1,187	0,360	30,340
381	6,35	0,106	23	12,55	1,833	6,598	1,8	1,188	0,360	30,314
228	4,54	0,076	15	8,15	1,840	6,626	1,8	1,193	0,301	25,265
228	4,54	0,076	19	10,37	1,832	6,596	1,8	1,187	0,301	25,379
228	4,54	0,076	20	10,85	1,843	6,636	1,8	1,194	0,301	25,226
1254	17,18	0,286	40	21,7	1,843	6,636	1,8	1,194	0,438	36,665
1254	17,18	0,286	32	17,34	1,845	6,644	1,8	1,196	0,438	36,623
1254	17,18	0,286	28	15,7	1,783	6,420	1,8	1,156	0,438	37,896
1254	17,18	0,286	38	20,34	1,868	6,726	1,8	1,211	0,438	36,176
2056	26,14	0,436	52	28,11	1,850	6,660	1,8	1,199	0,472	39,369
2056	26,14	0,436	50	27,3	1,832	6,593	1,8	1,187	0,472	39,764
2056	26,14	0,436	44	24,2	1,818	6,545	1,8	1,178	0,472	40,055
2056	26,14	0,436	38	20,5	1,854	6,673	1,8	1,201	0,472	39,288
2106	24,5	0,408	52	28,1	1,851	6,662	1,8	1,199	0,516	43,010
2106	24,5	0,408	32	17,5	1,829	6,583	1,8	1,185	0,516	43,527
2106	24,5	0,408	48	26,11	1,838	6,618	1,8	1,191	0,516	43,295
507	8,27	0,138	40	26,11	1,532	5,515	1,8	0,993	0,368	37,053
507	8,27	0,138	10	8,2	1,220	4,390	1,8	0,790	0,368	46,547
507	8,27	0,138	55	28,11	1,957	7,044	1,8	1,268	0,368	29,012
Rata-rata	14,79	0,247	32,90	18,21	1,791	6,447	1,8	1,160	0,411	35,628

(Sumber data: Hasil pengamatan dan olah data)

Lampiran 7. Hasil Pengamatan Operasi Kerja dan Perhitungan KLT, KLE dan Efisiensi Combine Rice Harvester pada Lahan Jenuh Air

Luas lahan (m ²)	Waktu operasi (t) menit	Waktu operasi (t) jam	Jarak (s) m	waktu (t) s	Kecepatan (V) m s ⁻¹	Kecepatan (V) km jam ⁻¹	Lebar Kerja Alat (L) m	KLT (Ha jam ⁻¹)	KLE (Ha jam ⁻¹)	E (%)
813	16,25	0,271	43	30,11	1,428	5,141	1,8	0,925	0,300	32,438
813	16,25	0,271	19	15,11	1,257	4,527	1,8	0,815	0,300	36,840
813	16,25	0,271	17	15,1	1,126	4,053	1,8	0,730	0,300	41,147
2044	40,21	0,670	81	58	1,397	5,028	1,8	0,905	0,305	33,703
2044	40,21	0,670	25	18,11	1,380	4,970	1,8	0,895	0,305	34,096
2044	40,21	0,670	17	17,25	0,986	3,548	1,8	0,639	0,305	47,760
656	12,9	0,215	31	23,14	1,340	4,823	1,8	0,868	0,305	35,147
656	12,9	0,215	20	17,2	1,163	4,186	1,8	0,753	0,305	40,494
656	12,9	0,215	32	24,11	1,327	4,778	1,8	0,860	0,305	35,476
Rata-rata	19,95	0,333	31,91	22,72	1,364	4,911	1,8	0,884	0,323	37,357

(Sumber data: Hasil pengamatan dan olah data)

Lampiran 8. Rata-rata KLT, KLE, Efisiensi Combine Rice Harvester pada Lahan Tak Jenuh Air dan Lahan Jenuh Air

Lahan Tak Jenuh Air				Lahan Jenuh Air			
Luas (m2)	KLT (ha/jam)	KLE (Ha/jam)	E (%)	Luas (m2)	KLT (ha/jam)	KLE (Ha/jam)	E (%)
381	1,162	0,360	31,008	813	0,823	0,300	36,809
228	1,191	0,301	25,281	2044	0,813	0,305	38,520
1254	1,189	0,438	36,840	656	0,827	0,305	37,039
2056	1,191	0,472	39,619				
2106	1,192	0,516	43,277				
507	1,107	0,368	37,537				
Rata-rata	1,172	0,409	35,594	Rata-rata	0,821	0,303	37,456

(Sumber: Hasil Olah Data)

Lampiran 9. Perhitungan Analisa Kebutuhan Combine Rice Harvester (70PK) berdasar Luas Panen per-bulan

Kecamatan	Akep Combine Rice Harvester (Unit)											
	Jan	Feb	Mar	Apr	Mei	Jun	Jul	Agust	Sept	Okt	Nov	Des
Maros Baru	0,00	0,00	4,21	7,69	2,36	0,00	0,01	7,91	4,88	0,00	0,00	0,29
Turikale	0,00	0,00	6,53	7,36	0,79	0,00	1,28	8,28	1,20	0,00	3,37	3,13
Marusu	0,00	0,00	4,36	7,87	2,00	0,00	0,00	0,01	0,00	0,00	0,00	0,00
Bontoa	0,00	0,36	6,73	7,53	3,24	0,00	3,56	8,75	1,81	0,00	0,00	0,00
Lau	0,00	0,04	13,28	10,24	0,00	0,36	7,43	16,25	0,00	0,00	2,61	0,51
Bantimurung	0,00	3,57	25,41	20,45	0,00	0,12	29,52	17,87	0,03	0,60	10,89	6,79
Simbang	0,00	4,80	17,01	9,85	0,00	1,19	14,15	3,28	0,00	0,16	9,64	1,09
Mandai	0,00	0,44	14,41	5,01	0,07	0,00	6,28	10,23	0,24	0,00	0,23	0,13
Moncongloe	0,00	0,71	7,03	4,56	0,15	0,00	2,21	6,89	2,11	0,07	0,88	0,36
Tanralili	0,00	2,05	21,83	5,49	1,51	0,25	4,93	10,59	11,07	0,00	3,17	1,97
Tompobulu	0,36	0,00	4,04	28,09	4,37	0,33	3,27	13,61	2,80	0,00	1,21	1,83
Camba	0,00	0,00	0,00	7,09	11,37	8,48	0,00	0,00	6,51	6,44	1,97	0,00
Cenrana	0,00	0,00	0,08	14,43	17,25	0,00	0,07	9,57	2,40	0,12	0,00	0,00
Mallawa	0,00	0,00	0,00	2,29	16,52	3,24	0,00	0,00	3,33	2,23	2,77	0,00

(Sumber: Hasil Olah Data)

Lampiran 10. Hasil Perhitungan Kebutuhan Combine Rice Harvester (70 PK) berdasar pada Luas Panen per-bulan

Kecamatan	Kebutuhan Combine Rice Harvester Per Kecamatan (Unit)											
	Jan	Feb	Mar	Apr	Mei	Jun	Jul	Agust	Sept	Okt	Nov	Des
Maros Baru	0	0	5	8	3	0	0	8	5	0	0	1
Turikale	0	0	7	8	1	0	2	9	2	0	4	4
Marusu	0	0	6	8	3	0	0	0	0	0	0	0
Bontoa	0	1	7	8	4	0	4	9	2	0	0	0
Lau	0	1	13	11	0	1	8	17	0	0	3	1
Bantimurung	0	4	26	21	0	1	30	18	1	1	11	7
Simbang	0	5	18	10	0	2	4	4	0	1	10	2
Mandai	0	1	15	6	1	0	7	11	1	0	1	1
Moncongloe	0	1	8	5	1	0	3	7	3	1	1	1
Tanralili	0	3	22	6	2	1	5	11	12	0	4	2
Tompobulu	1	0	5	29	5	1	4	14	3	0	2	2
Camba	0	0	0	8	12	9	0	0	7	7	2	0
Cenrana	0	0	1	15	18	0	1	10	3	1	0	0
Mallawa	0	0	0	3	17	4	0	0	4	3	3	0
Total	1	16	133	146	67	19	64	118	43	14	41	21

(Sumber: Hasil Olah Data)

Lampiran 11. Biaya yang disepakati untuk pengangkutan *Combine Rice Harvester* ke Lokasi Tujuan per unit dalam 1 kali perjalanan (Rp. 000)

	Maros baru	Turi kale	Marusu	Bontoa	Lau	Bantimurung	Simbang	Mandai	Moncongloe	Tanralili	Tompobulu	Camba	Cenrana	Mallawa
Maros baru	500													
Turikale	750	500												
Marusu	750	750	500											
Bontoa	750	1000	1000	500										
Lau	750	750	1000	750	500									
Bantimurung	1000	750	1000	750	750	500								
Simbang	1000	750	1000	1000	1000	750	500							
Mandai	1000	750	750	1000	1000	1000	750	500						
Moncongloe	1000	1000	1000	1000	1000	1000	1000	750	500					
Tanralili	1000	1000	1000	1000	1000	1000	750	750	750	500				
Tompobulu	1000	1000	1000	1000	1000	1000	750	1000	1000	750	500			
Camba	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	500		
Cenrana	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	1000	500	
Mallawa	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	1000	2000	500

(Sumber: Hasil Wawancara)

Lampiran 12. Tabel Optimasi Pemanfaatan *Combine Rice Harvester*

	Ke	Tujuan														Penawaran (CH)
Dari		MAROS BARU	TURIKALE	MARUSU	BONTOA	LAU	BANTIMURUNG	SIMBANG	MANDAI	MONCONGLOE	TANRALILI	TOMPOBULU	CAMBA	CENRANA	MALLAWA	
Sumber	MAROS BARU	C ₁₁	C ₁₂	C ₁₃	C ₁₄	C ₁₅	C ₁₆	C ₁₇	C ₁₈	C ₁₉	C ₁₁₀	C ₁₁₁	C ₁₁₂	C ₁₁₃	C ₁₁₄	a ₁
	TURIKALE	X ₁₁	X ₁₂	X ₁₃	X ₁₄	X ₁₅	X ₁₆	X ₁₇	X ₁₈	X ₁₉	X ₁₁₀	X ₁₁₁	X ₁₁₂	X ₁₁₃	X ₁₁₄	a ₂
	MARUSU	C ₂₁	C ₂₂	C ₂₃	C ₂₄	C ₂₅	C ₂₆	C ₂₇	C ₂₈	C ₂₁	C ₂₁₀	C ₂₁₁	C ₂₁₂	C ₂₁₃	C ₂₁₄	a ₃
	BONTOA	X ₂₁	X ₂₂	X ₂₃	X ₂₄	X ₂₅	X ₂₆	X ₂₇	X ₂₈	X ₂₉	X ₂₁₀	X ₂₁₁	X ₂₁₂	X ₂₁₃	X ₂₁₄	a ₄
	LAU	C ₃₁	C ₃₂	C ₃₃	C ₃₄	C ₃₅	C ₃₆	C ₃₇	C ₃₈	C ₃₉	C ₃₁₀	C ₃₁₁	C ₃₁₂	C ₃₁₃	C ₃₁₄	a ₅
	BANTIMURUNG	X ₃₁	X ₃₂	X ₃₃	X ₃₄	X ₃₅	X ₃₆	X ₃₇	X ₃₈	X ₃₉	X ₃₁₀	X ₃₁₁	X ₃₁₂	X ₃₁₃	X ₃₁₄	a ₆
	SIMBANG	C ₄₁	C ₄₂	C ₄₃	C ₄₄	C ₄₅	C ₄₆	C ₄₇	C ₄₈	C ₄₉	C ₄₁₀	C ₄₁₁	C ₄₁₂	C ₄₁₃	C ₄₁₄	a ₇
	MANDAI	X ₄₁	X ₄₂	X ₄₃	X ₄₄	X ₄₅	X ₄₆	X ₄₇	X ₄₈	X ₄₉	X ₄₁₀	X ₄₁₁	X ₄₁₂	X ₄₁₃	X ₄₁₄	a ₈
	MONCONGLOE	C ₅₁	C ₅₂	C ₅₃	C ₅₄	C ₅₅	C ₅₆	C ₅₇	C ₅₈	C ₅₉	C ₅₁₀	C ₅₁₁	C ₅₁₂	C ₅₁₃	C ₅₁₄	a ₉
	TANRALILI	X ₅₁	X ₅₂	X ₅₃	X ₅₄	X ₅₅	X ₅₆	X ₅₇	X ₅₈	X ₅₉	X ₅₁₀	X ₅₁₁	X ₅₁₂	X ₅₁₃	X ₅₁₄	a ₁₀
	TOMPOBULU	C ₆₁	C ₆₂	C ₆₃	C ₆₄	C ₆₅	C ₆₆	C ₆₇	C ₆₈	C ₆₉	C ₆₁₀	C ₆₁₁	C ₆₁₂	C ₆₁₃	C ₆₁₄	a ₁₁
	CAMBA	X ₆₁	X ₆₂	X ₆₃	X ₆₄	X ₆₅	X ₆₆	X ₆₇	X ₆₈	X ₆₉	X ₆₁₀	X ₆₁₁	X ₆₁₂	X ₆₁₃	X ₆₁₄	a ₁₂
	CENRANA	C ₇₁	C ₇₂	C ₇₃	C ₇₄	C ₇₅	C ₇₆	C ₇₇	C ₇₈	C ₇₉	C ₇₁₀	C ₇₁₁	C ₇₁₂	C ₇₁₃	C ₇₁₄	a ₁₃
	MALLAWA	X ₇₁	X ₇₂	X ₇₃	X ₇₄	X ₇₅	X ₇₆	X ₇₇	X ₇₈	X ₇₉	X ₇₁₀	X ₇₁₁	X ₇₁₂	X ₇₁₃	X ₇₁₄	a ₁₄
Permintaan (CH)	b ₁	b ₂	b ₃	b ₄	b ₅	b ₆	b ₇	b ₈	b ₉	b ₁₀	b ₁₁	b ₁₂	b ₁₃	b ₁₄		

Lampiran 13. Fungsi tujuan minimasi biaya pada bulan April

$$\begin{aligned}
 Z_{min} = \sum_{i=1, j=1}^{m, n} C_{ij} X_{ij} = & C_{11}X_{11} + C_{12}X_{12} + C_{13}X_{13} + C_{14}X_{14} + C_{15}X_{15} + C_{16}X_{16} + C_{17}X_{17} + C_{18}X_{18} + C_{19}X_{19} + C_{110}X_{110} + C_{111}X_{111} + C_{112}X_{112} + C_{113}X_{113} + C_{114}X_{114} + C_{21}X_{21} + C_{22}X_{22} + C_{23}X_{23} \\
 & + C_{24}X_{24} + C_{25}X_{25} + C_{26}X_{26} + C_{27}X_{27} + C_{28}X_{28} + C_{29}X_{29} + C_{210}X_{210} + C_{211}X_{211} + C_{212}X_{212} + C_{213}X_{213} + C_{214}X_{214} + C_{31}X_{31} + C_{32}X_{32} + C_{33}X_{33} + C_{34}X_{34} + C_{35}X_{35} + C_{36}X_{36} \\
 & + C_{37}X_{37} + C_{38}X_{38} + C_{39}X_{39} + C_{310}X_{310} + C_{311}X_{311} + C_{312}X_{312} + C_{313}X_{313} + C_{314}X_{314} + C_{41}X_{41} + C_{42}X_{42} + C_{43}X_{43} + C_{44}X_{44} + C_{45}X_{45} + C_{46}X_{46} + C_{47}X_{47} + C_{48}X_{48} + C_{49}X_{49} \\
 & + C_{410}X_{410} + C_{411}X_{411} + C_{412}X_{412} + C_{413}X_{413} + C_{414}X_{414} + C_{51}X_{51} + C_{52}X_{52} + C_{53}X_{53} + C_{54}X_{54} + C_{55}X_{55} + C_{56}X_{56} + C_{57}X_{57} + C_{58}X_{58} + C_{59}X_{59} + C_{510}X_{510} + C_{511}X_{511} + C_{512}X_{512} \\
 & + C_{513}X_{513} + C_{514}X_{514} + C_{61}X_{61} + C_{62}X_{62} + C_{63}X_{63} + C_{64}X_{64} + C_{65}X_{65} + C_{66}X_{66} + C_{67}X_{67} + C_{68}X_{68} + C_{69}X_{69} + C_{610}X_{610} + C_{611}X_{611} + C_{612}X_{612} + C_{613}X_{613} + C_{614}X_{614} + C_{71}X_{71} \\
 & + C_{72}X_{72} + C_{73}X_{73} + C_{74}X_{74} + C_{75}X_{75} + C_{76}X_{76} + C_{77}X_{77} + C_{78}X_{78} + C_{79}X_{79} + C_{710}X_{710} + C_{711}X_{711} + C_{712}X_{712} + C_{713}X_{713} + C_{714}X_{714} + C_{81}X_{81} + C_{82}X_{82} + C_{83}X_{83} + C_{84}X_{84} \\
 & + C_{85}X_{85} + C_{86}X_{86} + C_{87}X_{87} + C_{88}X_{88} + C_{89}X_{89} + C_{810}X_{810} + C_{811}X_{811} + C_{812}X_{812} + C_{813}X_{813} + C_{814}X_{814} + C_{91}X_{91} + C_{92}X_{92} + C_{93}X_{93} + C_{94}X_{94} + C_{95}X_{95} + C_{96}X_{96} + C_{97}X_{97} \\
 & + C_{98}X_{98} + C_{99}X_{99} + C_{910}X_{910} + C_{911}X_{911} + C_{912}X_{912} + C_{913}X_{913} + C_{914}X_{914} + C_{101}X_{101} + C_{102}X_{102} + C_{103}X_{103} + C_{104}X_{104} + C_{105}X_{105} + C_{106}X_{106} + C_{107}X_{107} + C_{108}X_{108} + C_{109}X_{109} \\
 & + C_{1010}X_{1010} + C_{1011}X_{1011} + C_{1012}X_{1012} + C_{1013}X_{1013} + C_{1014}X_{1014} + C_{111}X_{111} + C_{112}X_{112} + C_{113}X_{113} + C_{114}X_{114} + C_{115}X_{115} + C_{116}X_{116} + C_{117}X_{117} + C_{118}X_{118} + C_{119}X_{119} \\
 & + C_{1110}X_{1110} + C_{1111}X_{1111} + C_{1112}X_{1112} + C_{1113}X_{1113} + C_{1114}X_{1114} + C_{121}X_{121} + C_{122}X_{122} + C_{123}X_{123} + C_{124}X_{124} + C_{125}X_{125} + C_{126}X_{126} + C_{127}X_{127} + C_{128}X_{128} + C_{129}X_{129} \\
 & + C_{1210}X_{1210} + C_{1211}X_{1211} + C_{1212}X_{1212} + C_{1213}X_{1213} + C_{1214}X_{1214} + C_{131}X_{131} + C_{132}X_{132} + C_{133}X_{133} + C_{134}X_{134} + C_{135}X_{135} + C_{136}X_{136} + C_{137}X_{137} + C_{138}X_{138} + C_{139}X_{139} \\
 & + C_{1210}X_{1210} + C_{1211}X_{1211} + C_{1212}X_{1212} + C_{1213}X_{1213} + C_{1214}X_{1214} + C_{131}X_{131} + C_{132}X_{132} + C_{133}X_{133} + C_{134}X_{134} + C_{135}X_{135} + C_{136}X_{136} + C_{137}X_{137} + C_{138}X_{138} + C_{139}X_{139} \\
 & + C_{1310}X_{1310} + C_{1311}X_{1311} + C_{1312}X_{1312} + C_{1313}X_{1313} + C_{1314}X_{1314} + C_{141}X_{141} + C_{142}X_{142} + C_{143}X_{143} + C_{144}X_{144} + C_{145}X_{145} + C_{146}X_{146} + C_{147}X_{147} + C_{148}X_{148} + C_{149}X_{149} \\
 & + C_{1410}X_{1410} + C_{1411}X_{1411} + C_{1412}X_{1412} + C_{1413}X_{1413} + C_{1414}X_{1414}
 \end{aligned}$$

Lampiran 14a. Model Transportasi Optimasi *Combine Rice Harvester* Bulan Januari (biaya dalam Rp.000)

	MAROS BARU	TURIKALE	MARUSU	BONTOA	LAU	BANTIMURUNG	SIMBANG	MANDAI	MONCONG LOE	TANRALILI	TOMPO BULU	CAMBA	CENRANA	MALLAWA	SUPPLY (UNIT)
MAROS BARU	500	750	750	1000	750	1000	1000	1000	1000	1000	1000	2000	2000	2000	14
TURIKALE	750	500	750	1000	750	750	750	750	1000	1000	1000	2000	2000	2000	11
MARUSU	750	750	500	1000	1000	1000	1000	1000	1000	1000	1000	2000	2000	2000	0
BONTOA	750	1000	1000	500	750	750	1000	1000	1000	1000	1000	2000	2000	2000	2
LAU	750	750	1000	750	500	750	1000	1000	1000	1000	1000	2000	2000	2000	14
BANTIMURUNG	1000	750	1000	750	750	500	750	1000	1000	1000	1000	2000	1000	2000	50
SIMBANG	1000	750	1000	1000	1000	750	500	750	1000	1000	750	2000	2000	2000	30
MANDAI	1000	750	750	1000	1000	1000	750	500	750	750	1000	2000	2000	2000	6
MONCONGLOE	1000	1000	1000	1000	1000	1000	1000	750	500	750	1000	2000	2000	2000	4
TANRALILI	1000	1000	1000	1000	1000	1000	750	750	750	500	750	2000	2000	2000	2
TOMPOBULU	1000	1000	1000	1000	1000	1000	750	1000	1000	750	500	2000	1000	2000	10
CAMBA	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	500	1000	1000	5
CENRANA	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	1000	500	2000	1
MALLAWA	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	1000	2000	500	0
DEMAND (UNIT)	0	0	0	0	0	0	0	0	0	0	1	0	0	0	

(Sumber: Hasil Olah Data)

Lampiran 14b. *Tabel Optimal Cost Optimasi Combine Rice Harvester* bulan Januari (biaya dalam Rp.000)

Optimal cost = Rp 500	MAROS BARU	TURIKALE	MARUSU	BONTOA	LAU	BANTIMU RUNG	SIMBANG	MANDAI	MONCONG LOE	TANRA LILI	TOMPO BULU	CAMBA	CENRA NA	MALLA WA	Dummy (Unit)
MAROS BARU	0														14
TURIKALE		0													11
MARUSU			0												0
BONTOA				0											2
LAU					0										14
BANTIMURUNG						0									50
SIMBANG							0								30
MANDAI								0							6
MONCONGLOE									0						4
TANRALILI										0					2
TOMPOBULU											1				9
CAMBA												0			5
CENRANA													0		1
MALLAWA														0	0

(Sumber: Hasil Olah Data)

Lampiran 15a. Model Transportasi Optimasi *Combine Rice Harvester* Bulan Februari (biaya dalam Rp.000)

	MAROS BARU	TURIKALE	MARUSU	BONTOA	LAU	BANTIMU RUNG	SIMBANG	MANDAI	MONCONG LOE	TANRA LILI	TOMPO BULU	CAMBA	CENRA NA	MALLA WA	SUPPLY (UNIT)
MAROS BARU	500	750	750	1000	750	1000	1000	1000	1000	1000	1000	2000	2000	2000	14
TURIKALE	750	500	750	1000	750	750	750	750	1000	1000	1000	2000	2000	2000	11
MARUSU	750	750	500	1000	1000	1000	1000	1000	1000	1000	1000	2000	2000	2000	0
BONTOA	750	1000	1000	500	750	750	1000	1000	1000	1000	1000	2000	2000	2000	2
LAU	750	750	1000	750	500	750	1000	1000	1000	1000	1000	2000	2000	2000	14
BANTIMURUNG	1000	750	1000	750	750	500	750	1000	1000	1000	1000	2000	1000	2000	50
SIMBANG	1000	750	1000	1000	1000	750	500	750	1000	1000	750	2000	2000	2000	30
MANDAI	1000	750	750	1000	1000	1000	750	500	750	750	1000	2000	2000	2000	6
MONCONGLOE	1000	1000	1000	1000	1000	1000	1000	750	500	750	1000	2000	2000	2000	4
TANRALILI	1000	1000	1000	1000	1000	1000	750	750	750	500	750	2000	2000	2000	2
TOMPOBULU	1000	1000	1000	1000	1000	1000	750	1000	1000	750	500	2000	1000	2000	10
CAMBA	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	500	1000	1000	5
CENRANA	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	1000	500	2000	1
MALLAWA	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	1000	2000	500	0
DEMAND (UNIT)	0	0	0	1	1	4	5	1	1	3	0	0	0	0	

(Sumber: Hasil Olah Data)

Lampiran 15b. *Tabel Optimal Cost Optimasi Combine Rice Harvester* bulan Februari (biaya dalam Rp.000)

Optimal cost = Rp 8250	MAROS BARU	TURIKALE	MARUSU	BONTOA	LAU	BANTIMU RUNG	SIMBANG	MANDAI	MONCONG LOE	TANRA LILI	TOMPO BULU	CAMBA	CENRA NA	MALLA WA	Dummy (Unit)
MAROS BARU	0														14
TURIKALE		0													11
MARUSU			0												0
BONTOA				1											1
LAU					1										13
BANTIMURUNG						4									46
SIMBANG							5								25
MANDAI								1							5
MONCONGLOE									1						3
TANRALILI										2					
TOMPOBULU										1	0				9
CAMBA												0			5
CENRANA													0		1
MALLAWA														0	0

(Sumber: Hasil Olah Data)

Lampiran 16a. Model Transportasi Optimasi Combine Rice Harvester Bulan Maret (biaya dalam Rp.000)

	MAROS BARU	TURIKALE	MARUSU	BONTOA	LAU	BANTIMURUNG	SIMBANG	MANDAI	MONCONGLOE	TANRALILI	TOMPOBULU	CAMBA	CENRANA	MALLAWA	SUPPLY (UNIT)
MAROS BARU	500	750	750	1000	750	1000	1000	1000	1000	1000	1000	1500	1500	1500	14
TURIKALE	750	500	750	1000	750	750	750	750	1000	1000	1000	1500	1500	1500	11
MARUSU	750	750	500	1000	1000	1000	1000	1000	1000	1000	1000	1500	1500	1500	0
BONTOA	750	1000	1000	500	750	750	1000	1000	1000	1000	1000	1500	1500	1500	2
LAU	750	750	1000	750	500	750	1000	1000	1000	1000	1000	1500	1500	1500	14
BANTIMURUNG	1000	750	1000	750	750	500	750	1000	1000	1000	1000	1500	1000	1500	50
SIMBANG	1000	750	1000	1000	1000	750	500	750	1000	1000	750	1500	1500	1500	30
MANDAI	1000	750	750	1000	1000	1000	750	500	750	750	1000	1500	1500	1500	6
MONCONGLOE	1000	1000	1000	1000	1000	1000	1000	750	500	750	1000	1500	1500	1500	4
TANRALILI	1000	1000	1000	1000	1000	1000	750	750	750	500	750	1500	1500	1500	2
TOMPOBULU	1000	1000	1000	1000	1000	1000	750	1000	1000	750	500	1500	1500	1500	10
CAMBA	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	500	1500	1000	5
CENRANA	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1000	500	1500	1
MALLAWA	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1000	1500	500	0
DEMAND	5	7	6	7	13	26	18	15	8	22	5	0	1	0	

(Sumber: Hasil Olah Data)

Lampiran 16b. *Tabel Optimal Cost Optimasi Combine Rice Harvester bulan Maret (Rp.000)*

Optimal cost = Rp 82250	MAROS BARU	TURIKALE	MARUSU	BONTOA	LAU	BANTIMU RUNG	SIMBANG	MANDAI	MONCONG LOE	TANRALILI	TOMPO BULU	CAMBA	CENRA NA	MALLA WA	Dummy (Unit)
MAROS BARU	5		2												7
TURIKALE		7	4												
MARUSU			0												
BONTOA				2											
LAU				1	13										
BANTIMURUNG				4		26			4	12					4
SIMBANG							18	9		3					
MANDAI								6							
MONCONGLOE									4						
TANRALILI										2					
TOMPOBULU										5	5				
CAMBA												0		0	5
CENRANA													1		0
MALLAWA														0	

(Sumber: Hasil Olah Data)

Lampiran 17a. Model Transportasi Optimasi Combine Rice Harvester Bulan April (biaya dalam Rp.000)

	MAROS BARU	TURIKALE	MARUSU	BONTOA	LAU	BANTIMU RUNG	SIMBANG	MANDAI	MONCONG LOE	TANRALILI	TOMPO BULU	CAMBA	CENRA NA	MALLA WA	SUPPLY UNIT)
MAROS BARU	500	750	750	1000	750	1000	1000	1000	1000	1000	1000	2000	2000	2000	14
TURIKALE	750	500	750	1000	750	750	750	750	1000	1000	1000	2000	2000	2000	11
MARUSU	750	750	500	1000	1000	1000	1000	1000	1000	1000	1000	2000	2000	2000	0
BONTOA	750	1000	1000	500	750	750	1000	1000	1000	1000	1000	2000	2000	2000	2
LAU	750	750	1000	750	500	750	1000	1000	1000	1000	1000	2000	2000	2000	14
BANTIMURUNG	1000	750	1000	750	750	500	750	1000	1000	1000	1000	2000	1000	2000	50
SIMBANG	1000	750	1000	1000	1000	750	500	750	1000	1000	750	2000	2000	2000	30
MANDAI	1000	750	750	1000	1000	1000	750	500	750	750	1000	2000	2000	2000	6
MONCONGLOE	1000	1000	1000	1000	1000	1000	1000	750	500	750	1000	2000	2000	2000	4
TANRALILI	1000	1000	1000	1000	1000	1000	750	750	750	500	750	2000	2000	2000	2
TOMPOBULU	1000	1000	1000	1000	1000	1000	750	1000	1000	750	500	2000	1000	2000	10
CAMBA	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	500	1000	1000	5
CENRANA	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	1000	500	2000	1
MALLAWA	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	1000	2000	500	0
DEMAND (UNIT)	8	8	8	8	11	21	10	6	5	6	29	8	15	3	

(Sumber: Hasil Olah Data)

Lampiran17b. Tabel Optimal Cost Optimasi bulan April (biaya dalam Rp.000)

Optimal cost = Rp 99250	MAROS BARU	TURIKALE	MARUSU	BONTOA	LAU	BANTIMU RUNG	SIMBANG	MANDAI	MONCONG LOE	TANRALILI	TOMPO BULU	CAMBA	CENRA NA	MALLA WA	Dummy (Unit)
MAROS BARU	8		5												1
TURIKALE		8	3												
MARUSU			0												
BONTOA				2											
LAU				1	11										2
BANTIMURUNG				5		21			1	3		2	15	3	
SIMBANG							10				20				
MANDAI								6	0						
MONCONGLOE									4						
TANRALILI										2					
TOMPOBULU										1	9				
CAMBA												5			
CENRANA												1			
MALLAWA														0	

(Sumber: Hasil Olah Data)

Lampiran 18a. Model Transportasi Optimasi Combine Rice Harvester Bulan Mei (biaya dalam Rp.000)

	MAROS BARU	TURIKALE	MARUSU	BONTOA	LAU	BANTIMU RUNG	SIMBANG	MANDAI	MONCONG LOE	TANRALILI BULU	TOMPO BULU	CAMBA	CENRANA	MALLAWA	SUPPLY (UNIT)
MAROS BARU	500	750	750	1000	750	1000	1000	1000	1000	1000	1000	2000	2000	2000	14
TURIKALE	750	500	750	1000	750	750	750	750	1000	1000	1000	2000	2000	2000	11
MARUSU	750	750	500	1000	1000	1000	1000	1000	1000	1000	1000	2000	2000	2000	0
BONTOA	750	1000	1000	500	750	750	1000	1000	1000	1000	1000	2000	2000	2000	2
LAU	750	750	1000	750	500	750	1000	1000	1000	1000	1000	2000	2000	2000	14
BANTIMURUNG	1000	750	1000	750	750	500	750	1000	1000	1000	1000	2000	1000	2000	50
SIMBANG	1000	750	1000	1000	1000	750	500	750	1000	1000	750	2000	2000	2000	30
MANDAI	1000	750	750	1000	1000	1000	750	500	750	750	1000	2000	2000	2000	6
MONCONGLOE	1000	1000	1000	1000	1000	1000	1000	750	500	750	1000	2000	2000	2000	4
TANRALILI	1000	1000	1000	1000	1000	1000	750	750	750	500	750	2000	2000	2000	2
TOMPOBULU	1000	1000	1000	1000	1000	1000	750	1000	1000	750	500	2000	1000	2000	10
CAMBA	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	500	1000	1000	5
CENRANA	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	1000	500	2000	1
MALLAWA	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	1000	2000	500	0
DEMAND (UNIT)	3	1	3	4	0	0	0	1	1	2	5	12	18	17	

(Sumber: Hasil Olah Data)

Lampiran 18b. Tabel *Optimal Cost Optimasi Combine Rice Harvester* bulan Mei (biaya dalam Rp.000)

Optimal cost = Rp 78750	MAROS BARU	TURIKALE	MARUSU	BONTOA	LAU	BANTIMU RUNG	SIMBANG	MANDAI	MONCONG LOE	TANRALILI	TOMPO BULU	CAMBA	CENRANA	MALLAWA	Dummy (Unit)
MAROS BARU	3														11
TURIKALE		1													10
MARUSU			0												
BONTOA				2											
LAU					0										14
BANTIMURUNG				2		0							13		35
SIMBANG							0					6		12	12
MANDAI			3					1						2	
MONCONGLOE									1					3	
TANRALILI										2				0	
TOMPOBULU											5		5		
CAMBA												5			
CENRANA												1			
MALLAWA														0	

(Sumber: Hasil Olah Data)

Lampiran 19a. Model Transportasi Optimasi Combine Rice Harvester Bulan Juni (biaya dalam Rp.000)

	MAROS BARU	TURIKALE	MARUSU	BONTOA	LAU	BANTIMU RUNG	SIMBANG	MANDAI	MONCONG LOE	TANRALILI	TOMPO BULU	CAMBA	CENRANA	MALLAWA	SUPPLY (UNIT)
MAROS BARU	500	750	750	1000	750	1000	1000	1000	1000	1000	1000	2000	2000	2000	14
TURIKALE	750	500	750	1000	750	750	750	750	1000	1000	1000	2000	2000	2000	11
MARUSU	750	750	500	1000	1000	1000	1000	1000	1000	1000	1000	2000	2000	2000	0
BONTOA	750	1000	1000	500	750	750	1000	1000	1000	1000	1000	2000	2000	2000	2
LAU	750	750	1000	750	500	750	1000	1000	1000	1000	1000	2000	2000	2000	14
BANTIMURUNG	1000	750	1000	750	750	500	750	1000	1000	1000	1000	2000	1000	2000	50
SIMBANG	1000	750	1000	1000	1000	750	500	750	1000	1000	750	2000	2000	2000	30
MANDAI	1000	750	750	1000	1000	1000	750	500	750	750	1000	2000	2000	2000	6
MONCONGLOE	1000	1000	1000	1000	1000	1000	1000	750	500	750	1000	2000	2000	2000	4
TANRALILI	1000	1000	1000	1000	1000	1000	750	750	750	500	750	2000	2000	2000	2
TOMPOBULU	1000	1000	1000	1000	1000	1000	750	1000	1000	750	500	2000	1000	2000	10
CAMBA	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	500	1000	1000	5
CENRANA	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	1000	500	2000	1
MALLAWA	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	1000	2000	500	0
DEMAND (UNIT)	0	0	0	0	1	1	2	0	0	1	1	9	0	4	

(Sumber: Hasil Olah Data)

Lampiran 19b. Tabel *Optimal Cost Optimasi Combine Rice Harvester* bulan Juni (biaya dalam Rp.000)

Optimal cost = Rp 20500	MAROS BARU	TURIKALE	MARUSU	BONTOA	LAU	BANTIMU RUNG	SIMBANG	MANDAI	MONCONG LOE	TANRALILI	TOMPO BULU	CAMBA	CENRANA	MALLAWA	Dummy (Unit)
MAROS BARU	0														14
TURIKALE		0													11
MARUSU			0												0
BONTOA				0											2
LAU					1										13
BANTIMURUNG						1									49
SIMBANG							2								28
MANDAI								0							6
MONCONGLOE									0						4
TANRALILI										1					1
TOMPOBULU											1	3	0	4	2
CAMBA												5			
CENRANA												1			
MALLAWA														0	

(Sumber: Hasil Olah Data)

Lampiran 20a. Model Transportasi Optimasi Combine Rice Harvester Bulan Juli (biaya dalam Rp.000)

	MAROS BARU	TURIKALE	MARUSU	BONTOA	LAU	BANTIMU RUNG	SIMBANG	MANDAI	MONCONG LOE	TANRALILI	TOMPO BULU	CAMBA	CENRANA	MALLAWA	SUPPLY (UNIT)
MAROS BARU	500	750	750	1000	750	1000	1000	1000	1000	1000	1000	2000	2000	2000	14
TURIKALE	750	500	750	1000	750	750	750	750	1000	1000	1000	2000	2000	2000	11
MARUSU	750	750	500	1000	1000	1000	1000	1000	1000	1000	1000	2000	2000	2000	0
BONTOA	750	1000	1000	500	750	750	1000	1000	1000	1000	1000	2000	2000	2000	2
LAU	750	750	1000	750	500	750	1000	1000	1000	1000	1000	2000	2000	2000	14
BANTIMURUNG	1000	750	1000	750	750	500	750	1000	1000	1000	1000	2000	1000	2000	50
SIMBANG	1000	750	1000	1000	1000	750	500	750	1000	1000	750	2000	2000	2000	30
MANDAI	1000	750	750	1000	1000	1000	750	500	750	750	1000	2000	2000	2000	6
MONCONGLOE	1000	1000	1000	1000	1000	1000	1000	750	500	750	1000	2000	2000	2000	4
TANRALILI	1000	1000	1000	1000	1000	1000	750	750	750	500	750	2000	2000	2000	2
TOMPOBULU	1000	1000	1000	1000	1000	1000	750	1000	1000	750	500	2000	1000	2000	10
CAMBA	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	500	1000	1000	5
CENRANA	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	1000	500	2000	1
MALLAWA	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	1000	2000	500	0
DEMAND (UNIT)	0	2	0	4	8	30	4	7	3	5	4	0	1	0	

(Sumber: Hasil Olah Data)

Lampiran 20b. Tabel *Optimal Cost* Optimasi *Combine Rice Harvester* bulan Juli (biaya dalam Rp.000)

Optimal cost = Rp 35500	MAROS BARU	TURIKALE	MARUSU	BONTOA	LAU	BANTIMU RUNG	SIMBANG	MANDAI	MONCONG LOE	TANRALILI	TOMPO BULU	CAMBA	CENRANA	MALLAWA	Dummy (Unit)
MAROS BARU	0														14
TURIKALE		2													9
MARUSU			0												0
BONTOA				2											
LAU				2	8										4
BANTIMURUNG						30									20
SIMBANG							4								26
MANDAI								6							
MONCONGLOE								1	3	0					
TANRALILI										2					
TOMPOBULU										3	4				3
CAMBA												0			5
CENRANA													1		0
MALLAWA														0	0

(Sumber: Hasil Olah Data)

Lampiran 21a. Model Transportasi Optimasi Combine Rice Harvester Bulan Agustus (biaya dalam Rp.000)

	MAROS BARU	TURIKALE	MARUSU	BONTOA	LAU	BANTIMU RUNG	SIMBANG	MANDAI	MONCONG LOE	TANRA LILI	TOMPO BULU	CAMBA	CENRANA	MALLAWA	SUPPLY (UNIT)
MAROS BARU	500	750	750	1000	750	1000	1000	1000	1000	1000	1000	2000	2000	2000	14
TURIKALE	750	500	750	1000	750	750	750	750	1000	1000	1000	2000	2000	2000	11
MARUSU	750	750	500	1000	1000	1000	1000	1000	1000	1000	1000	2000	2000	2000	0
BONTOA	750	1000	1000	500	750	750	1000	1000	1000	1000	1000	2000	2000	2000	2
LAU	750	750	1000	750	500	750	1000	1000	1000	1000	1000	2000	2000	2000	14
BANTIMURUNG	1000	750	1000	750	750	500	750	1000	1000	1000	1000	2000	1000	2000	50
SIMBANG	1000	750	1000	1000	1000	750	500	750	1000	1000	750	2000	2000	2000	30
MANDAI	1000	750	750	1000	1000	1000	750	500	750	750	1000	2000	2000	2000	6
MONCONGLOE	1000	1000	1000	1000	1000	1000	1000	750	500	750	1000	2000	2000	2000	4
TANRALILI	1000	1000	1000	1000	1000	1000	750	750	750	500	750	2000	2000	2000	2
TOMPOBULU	1000	1000	1000	1000	1000	1000	750	1000	1000	750	500	2000	1000	2000	10
CAMBA	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	500	1000	1000	5
CENRANA	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	1000	500	2000	1
MALLAWA	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	1000	2000	500	0
DEMAND (UNIT)	0	8	9	0	9	17	18	4	11	7	11	14	0	10	

(Sumber: Hasil Olah Data)

Lampiran 21b. Tabel *Optimal Cost Optimasi Combine Rice Harvester* bulan Agustus (biaya dalam Rp.000)

Optimal cost = Rp 94500	MAROS BARU	TURIKALE	MARUSU	BONTOA	LAU	BANTIMU RUNG	SIMBANG	MANDAI	MONCONG LOE	TANRA LILI	TOMPO BULU	CAMBA	CENRANA	MALLAWA	Dummy (Unit)
MAROS BARU	0		9												5
TURIKALE		8													3
MARUSU			0												
BONTOA				0											2
LAU					9										5
BANTIMURUNG						17			4	5		8	0		16
SIMBANG							18		1		1			10	
MANDAI								4	2						
MONCONGLOE									4						
TANRALILI										2					
TOMPOBULU											10				
CAMBA												5			
CENRANA												1			
MALLAWA														0	

(Sumber: Hasil Olah Data)

Lampiran 22a. Model Transportasi Optimasi Combine Rice Harvester Bulan September (biaya dalam Rp.000)

	MAROS BARU	TURIKALE	MARUSU	BONTOA	LAU	BANTIMU RUNG	SIMBANG	MANDAI	MONCONG LOE	TANRA LILI	TOMPO BULU	CAMBA	CENRANA	MALLAWA	SUPPLY (UNIT)
MAROS BARU	500	750	750	1000	750	1000	1000	1000	1000	1000	1000	2000	2000	2000	14
TURIKALE	750	500	750	1000	750	750	750	750	1000	1000	1000	2000	2000	2000	11
MARUSU	750	750	500	1000	1000	1000	1000	1000	1000	1000	1000	2000	2000	2000	0
BONTOA	750	1000	1000	500	750	750	1000	1000	1000	1000	1000	2000	2000	2000	2
LAU	750	750	1000	750	500	750	1000	1000	1000	1000	1000	2000	2000	2000	14
BANTIMURUNG	1000	750	1000	750	750	500	750	1000	1000	1000	1000	2000	1000	2000	50
SIMBANG	1000	750	1000	1000	1000	750	500	750	1000	1000	750	2000	2000	2000	30
MANDAI	1000	750	750	1000	1000	1000	750	500	750	750	1000	2000	2000	2000	6
MONCONGLOE	1000	1000	1000	1000	1000	1000	1000	750	500	750	1000	2000	2000	2000	4
TANRALILI	1000	1000	1000	1000	1000	1000	750	750	750	500	750	2000	2000	2000	2
TOMPOBULU	1000	1000	1000	1000	1000	1000	750	1000	1000	750	500	2000	1000	2000	10
CAMBA	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	500	1000	1000	5
CENRANA	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	1000	500	2000	1
MALLAWA	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	1000	2000	500	0
DEMAND (UNIT)	0	5	2	0	2	0	1	0	1	3	12	3	7	3	

(Sumber: Hasil Olah Data)

Lampiran 22b. Tabel *Optimal Cost Optimasi Combine Rice Harvester* bulan September (biaya dalam Rp.000)

Optimal cost = Rp 26250	MAROS BARU	TURIKALE	MARUSU	BONTOA	LAU	BANTIMU RUNG	SIMBANG	MANDAI	MONCONG LOE	TANRA LILI	TOMPO BULU	CAMBA	CENRANA	MALLAWA	Dummy (Unit)
MAROS BARU	0														14
TURIKALE		5													6
MARUSU			0												
BONTOA				0											2
LAU					2										12
BANTIMURUNG						0							6		44
SIMBANG							1				2				27
MANDAI			2					0							4
MONCONGLOE									1	1				1	1
TANRALILI										2					
TOMPOBULU											10				
CAMBA												3			2
CENRANA													1		
MALLAWA															0

(Sumber: Hasil Olah Data)

Lampiran 23a. Model Transportasi Optimasi Combine Rice Harvester Bulan Oktober (biaya dalam Rp.000)

	MAROS BARU	TURIKALE	MARUSU	BONTOA	LAU	BANTIMU RUNG	SIMBANG	MANDAI	MONCONG LOE	TANRALILI	TOMPO BULU	CAMBA	CENRANA	MALLAWA	SUPPLY (UNIT)
MAROS BARU	500	750	750	1000	750	1000	1000	1000	1000	1000	1000	2000	2000	2000	14
TURIKALE	750	500	750	1000	750	750	750	750	1000	1000	1000	2000	2000	2000	11
MARUSU	750	750	500	1000	1000	1000	1000	1000	1000	1000	1000	2000	2000	2000	0
BONTOA	750	1000	1000	500	750	750	1000	1000	1000	1000	1000	2000	2000	2000	2
LAU	750	750	1000	750	500	750	1000	1000	1000	1000	1000	2000	2000	2000	14
BANTIMURUNG	1000	750	1000	750	750	500	750	1000	1000	1000	1000	2000	1000	2000	50
SIMBANG	1000	750	1000	1000	1000	750	500	750	1000	1000	750	2000	2000	2000	30
MANDAI	1000	750	750	1000	1000	1000	750	500	750	750	1000	2000	2000	2000	6
MONCONGLOE	1000	1000	1000	1000	1000	1000	1000	750	500	750	1000	2000	2000	2000	4
TANRALILI	1000	1000	1000	1000	1000	1000	750	750	750	500	750	2000	2000	2000	2
TOMPOBULU	1000	1000	1000	1000	1000	1000	750	1000	1000	750	500	2000	1000	2000	10
CAMBA	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	500	1000	1000	5
CENRANA	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	1000	500	2000	1
MALLAWA	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	1000	2000	500	0
DEMAND (UNIT)	0	0	0	0	0	1	1	0	1	0	0	7	1	3	

(Sumber: Hasil Olah Data)

Lampiran 23b. Tabel *Optimal Cost Optimasi Combine Rice Harvester* bulan Oktober (biaya dalam Rp.000)

Optimal cost = Rp 14000	MAROS BARU	TURIKALE	MARUSU	BONTOA	LAU	BANTIMU RUNG	SIMBANG	MANDAI	MONCONG LOE	TANRALILI	TOMPO BULU	CAMBA	CENRANA	MALLAWA	Dummy (Unit)
MAROS BARU	0														14
TURIKALE		0													11
MARUSU			0												0
BONTOA				0											2
LAU					0										14
BANTIMURUNG						1									49
SIMBANG							1								29
MANDAI								0							6
MONCONGLOE									1						3
TANRALILI										0					2
TOMPOBULU											0	1	1	3	5
CAMBA												5			
CENRANA												1			
MALLAWA														0	

(Sumber: Hasil Olah Data)

Lampiran 24a. Model Transportasi Optimasi Combine Rice Harvester Bulan November (biaya dalam Rp.000)

	MAROS BARU	TURIKALE	MARUSU	BONTOA	LAU	BANTIMU RUNG	SIMBANG	MANDAI	MONCONG LOE	TANRALILI	TOMPO BULU	CAMBA	CENRANA	MALLAWA	SUPPLY (UNIT)
MAROS BARU	500	750	750	1000	750	1000	1000	1000	1000	1000	1000	2000	2000	2000	14
TURIKALE	750	500	750	1000	750	750	750	750	1000	1000	1000	2000	2000	2000	11
MARUSU	750	750	500	1000	1000	1000	1000	1000	1000	1000	1000	2000	2000	2000	0
BONTOA	750	1000	1000	500	750	750	1000	1000	1000	1000	1000	2000	2000	2000	2
LAU	750	750	1000	750	500	750	1000	1000	1000	1000	1000	2000	2000	2000	14
BANTIMURUNG	1000	750	1000	750	750	500	750	1000	1000	1000	1000	2000	1000	2000	50
SIMBANG	1000	750	1000	1000	1000	750	500	750	1000	1000	750	2000	2000	2000	30
MANDAI	1000	750	750	1000	1000	1000	750	500	750	750	1000	2000	2000	2000	6
MONCONGLOE	1000	1000	1000	1000	1000	1000	1000	750	500	750	1000	2000	2000	2000	4
TANRALILI	1000	1000	1000	1000	1000	1000	750	750	750	500	750	2000	2000	2000	2
TOMPOBULU	1000	1000	1000	1000	1000	1000	750	1000	1000	750	500	2000	1000	2000	10
CAMBA	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	500	1000	1000	5
CENRANA	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	1000	500	2000	1
MALLAWA	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	1000	2000	500	0
DEMAND (UNIT)	0	4	0	0	3	11	10	1	1	4	2	2	0	3	

(Sumber: Hasil Olah Data)

Lampiran 24b. Tabel *Optimal Cost Optimasi Combine Rice Harvester* bulan November (biaya dalam Rp.000)

Optimal cost = Rp 22500	MAROS BARU	TURIKALE	MARUSU	BONTOA	LAU	BANTIMU RUNG	SIMBANG	MANDAI	MONCONG LOE	TANRALILI BULU	CAMBA	CENRANA	MALLAWA	Dummy (Unit)
MAROS BARU	0													14
TURIKALE		4												7
MARUSU			0											0
BONTOA				0										2
LAU					3									11
BANTIMURUNG						11								39
SIMBANG							10							20
MANDAI								1		2				3
MONCONGLOE									1					3
TANRALILI										2				
TOMPOBULU											2			8
CAMBA											2		3	0
CENRANA												0		1
MALLAWA													0	

(Sumber: Hasil Olah Data)

Lampiran 25a. Model Transportasi Optimasi Combine Rice Harvester Bulan Desember (biaya dalam Rp.000)

	MAROS BARU	TURIKALE	MARUSU	BONTOA	LAU	BANTIMU RUNG	SIMBANG	MANDAI	MONCONG LOE	TANRALILI	TOMPO BULU	CAMBA	CENRANA	MALLAWA	SUPPLY (UNIT)
MAROS BARU	500	750	750	1000	750	1000	1000	1000	1000	1000	1000	2000	2000	2000	14
TURIKALE	750	500	750	1000	750	750	750	750	1000	1000	1000	2000	2000	2000	11
MARUSU	750	750	500	1000	1000	1000	1000	1000	1000	1000	1000	2000	2000	2000	0
BONTOA	750	1000	1000	500	750	750	1000	1000	1000	1000	1000	2000	2000	2000	2
LAU	750	750	1000	750	500	750	1000	1000	1000	1000	1000	2000	2000	2000	14
BANTIMURUNG	1000	750	1000	750	750	500	750	1000	1000	1000	1000	2000	1000	2000	50
SIMBANG	1000	750	1000	1000	1000	750	500	750	1000	1000	750	2000	2000	2000	30
MANDAI	1000	750	750	1000	1000	1000	750	500	750	750	1000	2000	2000	2000	6
MONCONGLOE	1000	1000	1000	1000	1000	1000	1000	750	500	750	1000	2000	2000	2000	4
TANRALILI	1000	1000	1000	1000	1000	1000	750	750	750	500	750	2000	2000	2000	2
TOMPOBULU	1000	1000	1000	1000	1000	1000	750	1000	1000	750	500	2000	1000	2000	10
CAMBA	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	500	1000	1000	5
CENRANA	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	1000	500	2000	1
MALLAWA	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	1000	2000	500	0
DEMAND (UNIT)	1	4	0	0	1	7	2	1	1	2	2	0	0	0	

(Sumber: Hasil Olah Data)

Lampiran 25b. Tabel *Optimal Cost Optimasi Combine Rice Harvester* bulan Desember (biaya dalam Rp.000)

Optimal cost = Rp 10500	MAROS BARU	TURIKALE	MARUSU	BONTOA	LAU	BANTIMU RUNG	SIMBANG	MANDAI	MONCONG LOE	TANRALILI	TOMPO BULU	CAMBA	CENRANA	MALLAWA	Dummy (Unit)
MAROS BARU	1														13
TURIKALE		4													7
MARUSU			0												0
BONTOA				0											2
LAU					1										13
BANTIMURUNG						7									43
SIMBANG							2								28
MANDAI								1							5
MONCONGLOE									1						3
TANRALILI										2					0
TOMPOBULU											2				8
CAMBA												0			5
CENRANA													0		1
MALLAWA														0	0

(Sumber: Hasil Olah Data)

Lampiran 26a. Analisa sensitivitas terhadap produksi turun 10%

Biaya Tetap				Rp 77.136.059
Biaya tidak tetap				
Jenis biaya	Harga satuan	Keterangan/ Biaya		Jumlah
Biaya Bahan Bakar	Rp 6.800	3900 Liter		Rp 26.520.000
Biaya pelumas				
Oli mesin	Rp 45.000	20 Liter		Rp 900.000
Oli Gardan	Rp 43.750	260 Liter		Rp 11.375.000
Oli hidrolik	Rp 30.000	20 Liter		Rp 600.000
Biaya perbaikan dan pemeliharaan				
perbaikan	Rp 40.000.000	1		Rp 40.000.000
Pembersihan	Rp 2.000.000	1		Rp 2.000.000
Biaya operator				
Operator (1/OH)	Rp 2.000	1 /karung		Rp 27.000.000
Buruh (3/OH)	Rp 1.000	3 /karung		Rp 40.500.000
Biaya khusus (ban)	Rp 9.500.000	2 ban		Rp 19.000.000
Biaya transport combine ke	Rp 500.000	2 pp		Rp 2.000.000
				Rp 169.895.000
TC				Rp 247.031.059
TR				Rp 442.530.000
R/C Ratio				1,791394174

Lampiran 26b. Analisa sensitivitas terhadap produksi naik 10%

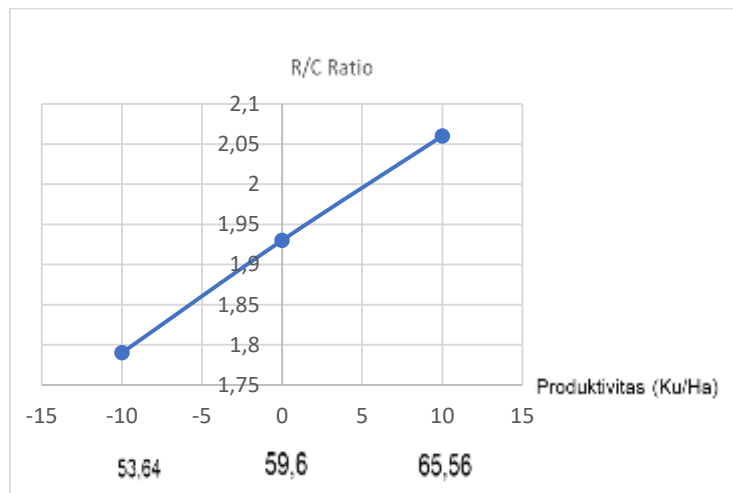
Biaya Tetap				Rp 77.136.059
Biaya tidak tetap				
Jenis biaya	Harga satuan	Keterangan/ Biaya		Jumlah
Biaya Bahan Bakar	Rp 6.800	3900 Liter		Rp 26.520.000
Biaya pelumas				
Oli mesin	Rp 45.000	20 Liter		Rp 900.000
Oli Gardan	Rp 43.750	260 Liter		Rp 11.375.000
Oli hidrolik	Rp 30.000	20 Liter		Rp 600.000
Biaya perbaikan dan pemeliharaan				
perbaikan	Rp 40.000.000	1		Rp 40.000.000
Pembersihan	Rp 2.000.000	1		Rp 2.000.000
Biaya operator				
Operator (1/OH)	Rp 2.000	1 /karung		Rp 33.000.000
Buruh (3/OH)	Rp 1.000	3 /karung		Rp 49.500.000
Biaya khusus (ban)	Rp 9.500.000	2 ban		Rp 19.000.000
Biaya transport combine ke	Rp 500.000	2 pp		Rp 2.000.000
				Rp 184.895.000
TC				Rp 262.031.059
TR				Rp 540.870.000
R/C Ratio				2,064144617

Lampiran 27a. Analisa sensitifitas luas panen turun 10%

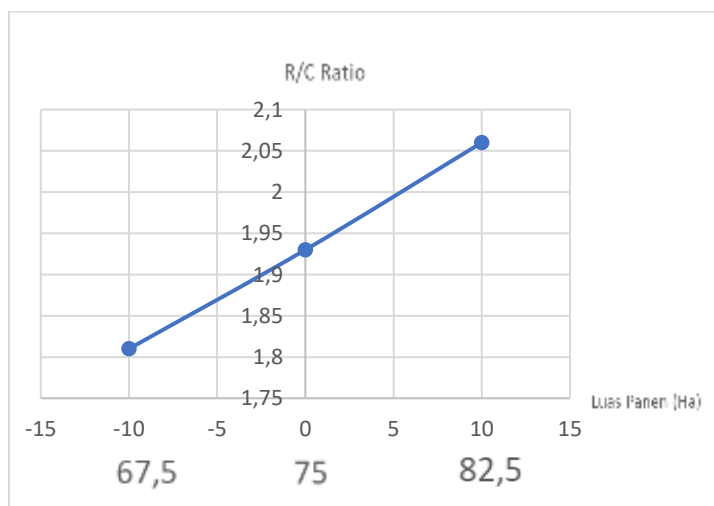
Biaya Tetap				Rp 77.136.059
Biaya tidak tetap				
Jenis biaya	Harga satuan	Keterangan/ Biaya		Jumlah
Biaya Bahan Bakar	Rp 6.800	3510 Liter		Rp 23.868.000
Biaya pelumas				
Oli mesin	Rp 45.000	20 Liter		Rp 900.000
Oli Gardan	Rp 43.750	260 Liter		Rp 11.375.000
Oli hidrolik	Rp 30.000	20 Liter		Rp 600.000
Biaya perbaikan dan pemeliharaan				
perbaikan	Rp 40.000.000	1		Rp 40.000.000
Pembersihan	Rp 2.000.000	1		Rp 2.000.000
Biaya operator				
Operator (1/OH)	Rp 2.000	1 /karung		Rp 27.000.000
Buruh (3/OH)	Rp 1.000	3 /karung		Rp 40.500.000
Biaya khusus (ban)	Rp 9.500.000	2 ban		Rp 19.000.000
Biaya transport combine ke	Rp 500.000	2 pp		Rp 2.000.000
				Rp 167.243.000
TC				Rp 244.379.059
TR				Rp 442.530.000
R/C Ratio				1,810834373

Lampiran 27b. Analisa sensitifitas luas panen naik 10%

Biaya Tetap				Rp 77.136.059
Biaya tidak tetap				
Jenis biaya	Harga satuan	Keterangan/ Biaya		Jumlah
Biaya Bahan Bakar	Rp 6.800	4290 Liter		Rp 29.172.000
Biaya pelumas				
Oli mesin	Rp 45.000	20 Liter		Rp 900.000
Oli Gardan	Rp 43.750	260 Liter		Rp 11.375.000
Oli hidrolik	Rp 30.000	20 Liter		Rp 600.000
Biaya perbaikan dan pemeliharaan				
perbaikan	Rp 40.000.000	1		Rp 40.000.000
Pembersihan	Rp 2.000.000	1		Rp 2.000.000
Biaya operator				
Operator (1/OH)	Rp 2.000	1 /karung		Rp 33.000.000
Buruh (3/OH)	Rp 1.000	3 /karung		Rp 49.500.000
Biaya khusus (ban)	Rp 9.500.000	2 ban		Rp 19.000.000
Biaya transport combine ke	Rp 500.000	2 pp		Rp 2.000.000
				Rp 187.547.000
TC				Rp 264.683.059
TR				Rp 540.870.000
R/C Ratio				2,043462857



Gambar 5. Grafik sensitivitas *R/C Ratio* terhadap penurunan produktivitas 10% dan kenaikan produktivitas 10%



Gambar 6. Grafik Sensitivitas terhadap penurunan luas panen 10% dan kenaikan luas panen 10%