

**Lampiran 1. Total Permintaan Kopi Dari Bulan Mei-September 2017.**

<b>Bulan</b>	<b>Jenis Biji Kopi (kg)</b>			<b>Total</b>
	<b>Grade 1</b>	<b>Grade 2</b>	<b>Grade 3</b>	
Januari	0	0	0	0
Februari	0	0	0	0
Maret	0	0	0	0
April	0	0	0	0
Mei	800	110	10	920
Juni	400	130	10	540
Juli	370	160	20	550
Agustus	820	60	10	890
September	730	140	30	900
Oktober	0	0	0	0
November	0	0	0	0
Desember	0	0	0	0
<b>Total</b>	<b>3120</b>	<b>600</b>	<b>80</b>	<b>3600</b>

**Lampiran 2. Fungsi Kendala Bahan Baku Biji Kopi Pada Bulan Mei-  
September 2017**

Bulan	Jenis Biji Kopi (kg)			Total
	Grade 1	Grade 2	Grade 3	
Januari	0	0	0	0
Februari	0	0	0	0
Maret	0	0	0	0
April	0	0	0	0
Mei	830	150	20	1000
Juni	1245	225	30	1500
Juli	1245	225	30	1500
Agustus	0	0	0	0
September	0	0	0	0
Desember	0	0	0	0
Total	3320	600	80	4000

**Lampiran 3. Koofisien Jam Kerja Mesin Kelompok Tani Sumadi Tahun 2017**

<b>Jam Mesin</b>	<b>Waktu (jam) (a)</b>	<b>Kapasitas (kg) (b)</b>	<b>Kebutuhan jam/kg (c=a/b)</b>	<b>Perbandingan (d)</b>	<b>Jumlah mesin (e)</b>	<b>Koefisien (cxdxe)</b>
Pulper	2	50 kg	0.04	50%	2	0.04
Huller	2	50 kg	0.04	50%	2	0.04

**Lampiran 4. Ketersediaan Jam Kerja Mesin Pada Tahun 2017**

<b>Bulan</b>	<b>Jumlah Hari Kerja</b>	<b>Mesin Puper Jam kerja (2) Jumlah (2)</b>	<b>Mesin Huller Jam kerja (2) Jumlah (2)</b>
Mei	10	40	40
Juni	15	60	60
Juli	15	60	60

## Lampiran 5. Hasil Pengolahan Solusi Optimal

### a. DATA MEI

```

max 57304x1+32304x2+7304x3
st
x1+x2+x3<=1000
0.04x1+0.04x2+0.04x3<=40
0.04x1+0.04x2+0.04x3<=40
0.83x1+0.1125x2+0.015x3<=1500
x1<=880
x2<=190
x3<=90
end

```

LP OPTIMUM FOUND AT STEP 2

#### OBJECTIVE FUNCTION VALUE

1) 0.5430400E+08

VARIABLE	VALUE	REDUCED COST
X1	880.000000	0.000000
X2	120.000000	0.000000
X3	0.000000	25000.000000

  

ROW	SLACK OR SURPLUS	DUAL PRICES
2)	0.000000	32304.000000
3)	0.000000	0.000000
4)	0.000000	0.000000
5)	756.099976	0.000000
6)	0.000000	25000.000000
7)	70.000000	0.000000
8)	90.000000	0.000000

NO. ITERATIONS= 2

RANGES IN WHICH THE BASIS IS UNCHANGED:

VARIABLE	OBJ COEFFICIENT RANGES		
	CURRENT COEF	ALLOWABLE INCREASE	ALLOWABLE DECREASE
X1	57304.000000	INFINITY	25000.000000
X2	32304.000000	25000.000000	25000.000000
X3	7304.000000	25000.000000	INFINITY

RIGHTHAND SIDE RANGES

ROW	CURRENT RHS	ALLOWABLE INCREASE	ALLOWABLE DECREASE
2	1000.000000	0.000000	120.000000
3	40.000000	INFINITY	0.000000
4	40.000000	INFINITY	0.000000
5	1500.000000	INFINITY	756.099976

6	880.000000	120.000000	70.000000
7	190.000000	INFINITY	70.000000
8	90.000000	INFINITY	90.000000

**b. DATA JUNI**

```

max 57304x1+32304x2+7304x3
st
x1+x2+x3<=1500
0.04x1+0.04x2+0.04x3<=60
0.04x1+0.04x2+0.04x3<=60
0.83x1+0.1125x2+0.015x3<=1500
x1<=1360
x2<=1090
x3<=970
end

```

LP OPTIMUM FOUND AT STEP 2

OBJECTIVE FUNCTION VALUE

1) 0.8245600E+08

VARIABLE	VALUE	REDUCED COST
X1	1360.000000	0.000000
X2	140.000000	0.000000
X3	0.000000	25000.000000

ROW	SLACK OR SURPLUS	DUAL PRICES
2)	0.000000	32304.000000
3)	0.000000	0.000000
4)	0.000000	0.000000
5)	355.450012	0.000000
6)	0.000000	25000.000000
7)	950.000000	0.000000
8)	970.000000	0.000000

NO. ITERATIONS= 2

RANGES IN WHICH THE BASIS IS UNCHANGED:

VARIABLE	OBJ COEFFICIENT RANGES		
	CURRENT COEF	ALLOWABLE INCREASE	ALLOWABLE DECREASE
X1	57304.000000	INFINITY	25000.000000
X2	32304.000000	25000.000000	25000.000000
X3	7304.000000	25000.000000	INFINITY

ROW	RIGHTHAND SIDE RANGES		
	CURRENT RHS	ALLOWABLE INCREASE	ALLOWABLE DECREASE
2	1500.000000	0.000000	140.000000

3	60.000000	INFINITY	0.000000
4	60.000000	INFINITY	0.000000
5	1500.000000	INFINITY	355.450012
6	1360.000000	140.000000	950.000000
7	1090.000000	INFINITY	950.000000
8	970.000000	INFINITY	970.000000

**c. DATA JULI**

max 57304x1+32304x2+7304x3

st

x1+x2+x3<=1500

0.04x1+0.04x2+0.04x3<=60

0.04x1+0.04x2+0.04x3<=60

0.83x1+0.1125x2+0.015x3<=1500

x1<=1320

x2<=1110

x3<=970

end

VARIABLE	VALUE	REDUCED COST
X1	1320.000000	0.000000
X2	180.000000	0.000000
X3	0.000000	25000.000000

ROW	SLACK OR SURPLUS	DUAL PRICES
2)	0.000000	32304.000000
3)	0.000000	0.000000
4)	0.000000	0.000000
5)	384.149994	0.000000
6)	0.000000	25000.000000
7)	930.000000	0.000000
8)	970.000000	0.000000

NO. ITERATIONS= 2

RANGES IN WHICH THE BASIS IS UNCHANGED:

VARIABLE	OBJ COEFFICIENT RANGES		
	CURRENT COEF	ALLOWABLE INCREASE	ALLOWABLE DECREASE
X1	57304.000000	INFINITY	25000.000000
X2	32304.000000	25000.000000	25000.000000
X3	7304.000000	25000.000000	INFINITY

ROW	RIGHTHAND SIDE RANGES		
	CURRENT RHS	ALLOWABLE INCREASE	ALLOWABLE DECREASE
2	1500.000000	0.000000	180.000000
3	60.000000	INFINITY	0.000000
4	60.000000	INFINITY	0.000000
5	1500.000000	INFINITY	384.149994
6	1320.000000	180.000000	930.000000
7	1110.000000	INFINITY	930.000000
8	970.000000	INFINITY	970.000000

**d. Data Agustus**

max 57304x1+32304x2+7304x3  
 st  
 x1+x2+x3>=0  
 0.83x1+0.1125x2+0.015x3<=1500  
 x1<=820  
 x2<=60  
 x3<=10  
 end

LP OPTIMUM FOUND AT STEP 3

OBJECTIVE FUNCTION VALUE

1) 0.4900056E+08

VARIABLE	VALUE	REDUCED COST
X1	820.000000	0.000000
X2	60.000000	0.000000
X3	10.000000	0.000000
ROW	SLACK OR SURPLUS	DUAL PRICES
2)	890.000000	0.000000
3)	812.500000	0.000000
4)	0.000000	57304.000000
5)	0.000000	32304.000000
6)	0.000000	7304.000000

NO. ITERATIONS= 3

RANGES IN WHICH THE BASIS IS UNCHANGED:

OBJ COEFFICIENT RANGES

VARIABLE	CURRENT COEF	ALLOWABLE INCREASE	ALLOWABLE DECREASE
X1	57304.000000	INFINITY	57304.000000
X2	32304.000000	INFINITY	32304.000000
X3	7304.000000	INFINITY	7304.000000

RIGHTHAND SIDE RANGES

ROW	CURRENT RHS	ALLOWABLE INCREASE	ALLOWABLE DECREASE
2	0.000000	890.000000	INFINITY
3	1500.000000	INFINITY	812.500000
4	820.000000	978.915710	820.000000
5	60.000000	7222.222656	60.000000
6	10.000000	54166.667969	10.000000

**e. September**

max 57304x1+32304x2+7304x3  
 st  
 x1+x2+x3>=0  
 0.83x1+0.1125x2+0.015x3<=1500  
 x1<=730  
 x2<=140  
 x3<=30  
 end

LP OPTIMUM FOUND AT STEP 3

OBJECTIVE FUNCTION VALUE

1) 0.4657360E+08

VARIABLE	VALUE	REDUCED COST
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X1	730.000000	0.000000
X2	140.000000	0.000000
X3	30.000000	0.000000
ROW	SLACK OR SURPLUS	DUAL PRICES
2)	900.000000	0.000000
3)	877.900024	0.000000
4)	0.000000	57304.000000
5)	0.000000	32304.000000
6)	0.000000	7304.000000

NO. ITERATIONS= 3

RANGES IN WHICH THE BASIS IS UNCHANGED:

OBJ COEFFICIENT RANGES			
VARIABLE	CURRENT COEF	ALLOWABLE INCREASE	ALLOWABLE DECREASE
X1	57304.000000	INFINITY	57304.000000
X2	32304.000000	INFINITY	32304.000000
X3	7304.000000	INFINITY	7304.000000

RIGHTHAND SIDE RANGES			
ROW	CURRENT RHS	ALLOWABLE INCREASE	ALLOWABLE DECREASE
2	0.000000	900.000000	INFINITY
3	1500.000000	INFINITY	877.900024
4	730.000000	1057.710938	730.000000
5	140.000000	7803.556152	140.000000
6	30.000000	58526.667969	30.000000

