

**Table G-FB-5 Farm Budget Summary**

(Per Farm)

	LOWLAND TYPE			UPLAND TYPE			MIXED TYPE			
	Income	Expense	Profit	Income	Expense	Profit	Income	Expense	Profit	
<b>KOHN KEAN</b>	Current	30,384	11,069	19,315	61,704	33,605	28,099	55,458	28,742	26,716
	Future	97,425	26,340	71,086	124,695	48,062	76,633	105,696	50,640	55,056
<b>MAHASARAKAM</b>	Current	18,342	7,688	10,654	19,386	8,434	10,952	18,342	7,688	10,654
	Future	64,570	28,116	36,454	70,380	31,515	38,865	64,570	28,131	36,439
<b>MUKUDAHAN</b>	Current	19,800	8,047	11,753	19,242	8,052	11,190			
	Future	60,499	18,996	41,503	59,763	20,615	39,148			
<b>SAKON NAKON</b>	Current	25,230	11,330	13,900	25,581	12,422	13,159			
	Future	57,549	17,307	40,241	56,253	17,511	38,742			
<b>6,000 m3 Pond</b>	Current	51,276	24,732	26,544						
	Future	145,089	52,535	92,555						

**Crop Budget for Farming Analysis**  
**Table G-FB-CR-1 Glutinous Ri (10rai)**

		Physical Inputs		Unit Prices		Comments	
		Unit	Quantity	Unit	Price		
Seed/Stem	Planting	kg/rai	100.0	Baht/kg	0	0	Use own seeds
Fertilizer	16-20-0	kg /rai	-	Baht/bag	350	-	
	15-15-15	kg /rai	-	Baht/bag	355	-	
	16-16-8	kg /rai	200	Baht/bag	330	1320	
	46-0-0	kg /rai	-	Baht/kg	350	-	
Chemical	Herbicides	liter/rai	-	Baht/liter	150	-	
	Insecticides	liter/rai	0.2	Baht/liter	450.0	90	
	Fungicides	liter/rai	0.15	Baht/liter	200.0	30	
Buffalou	days		7	Baht/rai	0	0	Use own livestock
Tractor	days		-	Baht/rai	-	-	
Transport	ton		2.8	Baht/ton	100	280	
Hired Labour	mandays		20	Baht/manday	100	2000	
Own Labour	mandays		56	Baht/manday	0	0	
Fuel			-	Baht/liter	12	-	
Others						-	
<b>Production Cost</b>						<b>3,720</b>	Baht/10 rai
<b>Income</b>						<b>12,600</b>	Baht/10 rai
Yield				Kg/rai	2,800		
Price				Bt/kg	4.5		
<b>Net Income</b>						<b>8,880</b>	Baht/10 rai
						<b>888</b>	Baht/rai

**Table G-FB-CR-2 Glutinous Ri (10rai)**

		Physical Inputs		Unit Prices		Comments	
		Unit	Quantity	Unit	Price		
Seed/Stem	Planting	kg/rai	0.5	Baht/kg	0	0	Use own seeds
Fertilizer	16-20-0	kg /rai	-	Baht/bag	350	-	
	15-15-15	kg /rai	-	Baht/bag	355	-	
	16-16-8	kg /rai	250	Baht/bag	330	1,650	
	46-0-0	kg /rai	-	Baht/bag	350	-	
Chemical	Herbicides	liter/rai	-	Baht/liter	150	-	
	Insecticides	liter/rai	0.2	Baht/liter	450	90	
	Fungicides	liter/rai	0.15	Baht/liter	200.0	30	
Buffalou	days		7	Baht/rai	0	0	Use own livestock
Tractor	days		-	Baht/rai	-	-	
Transport	ton		3.5	Baht/ton	100	350	
Hired Labour	mandays		20	Baht/manday	100	2,000	
Own Labour	mandays		56	Baht/manday	0	0	
Fuel			-	Baht/liter	12	-	
Others						-	
<b>Production Cost</b>						<b>4,120</b>	Baht/10 rai
<b>Income</b>						<b>15,750</b>	Baht/10 rai
Yield				Kg/rai	3,500		
Price				Bt/kg	4.5		
<b>Net Income</b>						<b>11,630</b>	Baht/10 rai
						<b>1,163</b>	Baht/rai

(10rai)

**Table G-FB-CR-3 Non-glutinous Rice W/O**

		Physical Inputs		Unit Prices		Comments	
		Unit	Quantity	Unit	Price		
Seed/Stem	Direct seeds	kg/rai	100.0	Baht/kg	0	0	Use own seeds
Fertilizer	16-20-0	kg /rai	-	Baht/bag	350	-	
	15-15-15	kg /rai	-	Baht/bag	355	-	
	16-16-8	kg /rai	200	Baht/bag	330	1320	
	46-0-0	kg /rai	-	Baht/kg	350	-	
Chemical	Herbicides	liter/rai	-	Baht/liter	150	-	
	Insecticides	liter/rai	0.2	Baht/liter	450.0	90	
	Fungicides	liter/rai	0.15	Baht/liter	200.0	30	
Baffalou		days	7	Baht/rai	0	0	Use own livestock
Tractor		days	-	Baht/rai	-	-	
Transport		ton	2.8	Baht/ton	100	280	
Hired Labour		mandays	20	Baht/manday	100	2000	
Own Labour		mandays	56	Baht/manday	0	0	
Fuel			-	Baht/liter	12	-	
Others							
<b>Production Cost</b>						<b>3,720</b>	Baht/10 rai
<b>Income</b>						<b>14,000</b>	Baht/10 rai
<b>Yield</b>				Kg/rai	2,800		
<b>Price</b>				Bt/kg	5		
<b>Net Income</b>						<b>10,280</b>	Baht/10 rai
						<b>1,028</b>	Baht/rai

(10rai)

**Table G-FB-CR-4 Non-glutinous Rice W/**

		Physical Inputs		Unit Prices		Comments	
		Unit	Quantity	Unit	Price		
Seed/Stem	Planting	kg/rai	50.0	Baht/kg	0	0	Use own seeds
Fertilizer	16-20-0	kg /rai	-	Baht/bag	350	-	
	15-15-15	kg /rai	-	Baht/bag	355	-	
	16-16-8	kg /rai	250	Baht/bag	330	1,650	
	46-0-0	kg /rai	-	Baht/bag	350	-	
Chemical	Herbicides	liter/rai	-	Baht/liter	150	-	
	insecticides	liter/rai	0.2	Baht/liter	450	90	
	Fungicides	liter/rai	0.15	Baht/liter	200	30	
Baffalou		liter/rai	7	Baht/liter	0	0	
Tractor		days	-	Baht/rai	-	-	Use own livestock
Transport		days	3.5	Baht/rai	100	350	
Hired Labour		ton	20	Baht/ton	100	2,000	
Own Labour		mandays	56	Baht/manday	0	0	
Fuel		mandays	-	Baht/manday	12	-	
Others			-	Baht/liter	-	-	
<b>Production Cost</b>						<b>4,120</b>	Baht/10 rai
<b>Income</b>						<b>17,500</b>	Baht/10 rai
<b>Yield</b>				Kg/rai	3,500		
<b>Price</b>				Bt/kg	5.0		
<b>Net Income</b>						<b>13,380</b>	Baht/10 rai
						<b>1,338</b>	Baht/rai

**Table G-FB-CR-5 Cassava W/O (rai)**

		Physical Inputs		Unit Prices		Comments	
		Unit	Quantity	Unit	Price		
Seed/Stem		Stem/rai	1,600.0	Baht/stem	0.1	(160)	Receives stems
Fertilizer	16-20-0	kg /rai	-	Baht/bag	350	-	from neighbors
	15-15-15	kg /rai	20	Baht/bag	355	142	
	16-16-8	kg /rai	-	Baht/bag	330	-	
	46-0-0	kg /rai	10	Baht/kg	350	70	
Chemical	Herbicides	liter/rai	-	Baht/liter	150	-	
	Insecticides	liter/rai	-	Baht/liter	450	-	
	Fungicides	liter/rai	-	Baht/liter	200	-	
Buffalou		days	1	Baht/rai	0	-	Use own livestock
Tractor		days	1	Baht/rai	180	180	
Transport		ton	1.7	Baht/ton	100	170	
Hired Labour		mandays	2.5	Baht/manday	70	175	
Own Labour		mandays	4	Baht/manday	0	0	
Fuel				Baht/liter	12	-	
Others						6	Transport cost of Fertilizer
<b>Production Cost</b>						<b>743</b>	
<b>Income</b>						<b>1,692</b>	
Yield				Kg/rai	1,800		
Price				Bt/kg	0.94		
<b>Net Income</b>						<b>949</b>	Baht/rai

**Table G-FB-CR-6 Cassava W/ (rai)**

		Physical Inputs		Unit Prices		Comments	
		Unit	Quantity	Unit	Price		
Seed/Stem		Stem/rai	1,600.0	Baht/stem	0.1	(160)	Receives stems
Fertilizer	16-20-0	kg /rai	0	Baht/bag	350	-	from neighbors
	15-15-15	kg /rai	40	Baht/bag	355	284	
	16-16-8	kg /rai	0	Baht/bag	330	-	
	46-0-0	kg /rai	20	Baht/kg	350	140	
Chemical	Herbicides	liter/rai	-	Baht/liter	150	-	
	Insecticides	liter/rai	-	Baht/liter	450	-	
	Fungicides	liter/rai	-	Baht/liter	200	-	
Buffalou		liter/rai	-	Baht/liter	-	-	
Tractor		days	1	Baht/rai	180	180	Use own livestock
Transport		days	2.5	Baht/rai	100	250	
Hired Labour		ton	2.5	Baht/ton	70	175	
Own Labour		mandays	5	Baht/manday	0	0	
Fuel		mandays		Baht/manday	12	-	
Others				Baht/liter	-	-	
<b>Production Cost</b>						<b>1,041</b>	
<b>Income</b>						<b>2,350</b>	
Yield				Kg/rai	2,500		
Price				Bt/kg	0.94		
<b>Net Income</b>						<b>1,309</b>	Baht/rai

**Table G-FB-CR-7 Sugarcane (rai)**

		Physical Inputs		Unit Prices		Comments	
		Unit	Quantity	Unit	Price		
Seed/Stem		kg/rai	5,000	Baht/kg	0	0	Receives stems
Fertilizer	16-20-0	kg /rai	0	Baht/bag	350	0	Sugar factory
	15-15-15	kg /rai	27	Baht/bag	355	191.7	
	16-16-8	kg /rai	0	Baht/bag	330	0	
	46-0-0	kg /rai	0	Baht/kg	350	-	
Chemical	Herbicides	liter/rai	-	Baht/liter	150	-	
	Insecticides	liter/rai	-	Baht/liter	450	-	
	Fungicides	liter/rai	-	Baht/liter	200	-	
Baffalou		days	-	Baht/rai	-	-	Use own livestock
Tractor		days	1	Baht/rai	200	200	Planting
Transport		ton	7.2	Baht/ton	100	720	80 Bt/day
Hired Labour		mandays	11	Baht/manday	80(100)	990	Harvesting
Own Labour		mandays	7	Baht/manday	0	0	100Bt/day
Fuel			12.5	Baht/liter	12	150	
Others							
<b>Production Cost</b>						<b>2,252</b>	
<b>Income</b>						<b>3,960</b>	
Yield				Kg/rai	7,200		
Price				Bt/kg	0.55		
<b>Net Income</b>						<b>1,708</b>	Baht/rai

**Table G-FB-CR-8 Soybean (rai)**

		Physical Inputs		Unit Prices		Comments	
		Unit	Quantity	Unit	Price		
Seed/Stem		kg/rai	15	Baht/kg	17	255	
Fertilizer	16-20-0	kg /rai	0		350	-	
	15-15-15	kg /rai	20		355	-	
	16-16-8	kg /rai	0		330	175	
	46-0-0	kg /rai	0	Baht/kg	350	-	
Chemical	Herbicides	liter/rai	0	Baht/liter	150	-	
	Insecticides	liter/rai	0.1875	Baht/liter	450	75	
	Fungicides	liter/rai	0	Baht/liter	200	-	
Baffalou		days	-	Baht/rai	-	-	
Tractor		days	1	Baht/rai	180	180	
Transport		ton	0.2	Baht/ton	100	20	
Hired Labour		mandays	1	Baht/manday	100	100	
Own Labour		mandays	9	Baht/manday	0	0	
Fuel			-	Baht/liter	12	-	
Others							
<b>Production Cost</b>						<b>805</b>	
<b>Income</b>						<b>2,592</b>	
Yield				Kg/rai	216		
Price				Bt/kg	12		
<b>Net Income</b>						<b>1,787</b>	Baht/rai

**Table G-FB-CR-9 Groundnuts (rai)**

		Physical Inputs		Unit Prices		Comments	
		Unit	Quantity	Unit	Price		
Seed/Stem		kg/rai	30	Baht/kg	14	420	
Fertilizer	16-20-0	kg /rai	0	Baht/bag	350	-	
	15-15-15	kg /rai	20	Baht/bag	355	142	
	16-16-8	kg /rai	0	Baht/bag	330	-	
	46-0-0	kg /rai	0	Baht/bag	350	-	
Chemical	Herbicides	liter/rai	0.267	Baht/liter	150	40	
	Insecticides	liter/rai	-	Baht/liter	450	-	
	Fungicides	liter/rai	-	Baht/liter	200	-	
Baffalou		days	1	Baht/rai	-	-	Use own livestock
Tractor		days	1	Baht/rai	180	180	
Transport		ton	0.2	Baht/ton	100	20	
Hired Labour		mandays	2	Baht/manday	100	200	
Own Labour		mandays	10	Baht/manday	0	0	
Fuel		-	-	Baht/liter	12	-	
Others							
<b>Production Cost</b>						<b>1,002</b>	
<b>Income</b>						<b>2,300</b>	
<b>Yield</b>				Kg/rai	230		
<b>Price</b>				Bt/kg	10		
<b>Net Income</b>						<b>1,298</b>	Baht/rai

**Table G-FB-CR-10 Stringbean (rai)**

		Physical Inputs		Unit Prices		Comments	
		Unit	Quantity	Unit	Price		
Seed/Stem		kg/rai	1.87	Baht/kg	400	748	
Fertilizer	16-20-0	kg /rai	0	Baht/bag	350	-	
	15-15-15	kg /rai	70	Baht/bag	355	497	
	16-16-8	kg /rai	0	Baht/bag	330	-	
	46-0-0	kg /rai	10	Baht/bag	350	70	
Chemical	Herbicides	liter/rai	-	Baht/liter	150	100	
	Insecticides	liter/rai	-	Baht/liter	450	-	
	Fungicides	liter/rai	-	Baht/liter	200	-	
Baffalou		days	-	Baht/rai	-	-	
Tractor		days	1	Baht/rai	200	200	Hire tractor
Transport		ton	0.6	Baht/ton	100	60	
Hired Labour		mandays	5	Baht/manday	100	500	Weeding
Own Labour		mandays	24	Baht/manday	0	0	100Bt/day
Fuel		-	-	Baht/liter	12	-	Spraying
Others						14	150Bt/day
<b>Production Cost</b>						<b>2,189</b>	
<b>Income</b>						<b>7,000</b>	
<b>Yield</b>				Kg/rai	700		
<b>Price</b>				Bt/kg	10		
<b>Net Income</b>						<b>4,811</b>	Baht/rai

**Table G-FB-CR-11 Chilli (rai)**

		Physical Inputs		Unit Prices		Comments	
		Unit	Quantity	Unit	Price		
Seed/Stem		kg/rai	1.25	Baht/kg	400	500	
Fertilizer	16-20-0	kg /rai	-	Baht/bag	350	-	
	15-15-15	kg /rai	85	Baht/bag	355	603.5	
	16-16-8	kg /rai	-	Baht/bag	330	-	
	46-0-0	kg /rai	-	Baht/bag	350	-	
Chemical	Herbicides	liter/rai	2.9	Baht/liter	150	435	
	Insecticides	liter/rai	1.11	Baht/liter	450	500	
	Fungicides	liter/rai	-	Baht/liter	200	-	
Baffalou		days	-	Baht/rai	-	-	
Tractor		days	1	Baht/rai	160	160	Hire tractor
Transport		times	1	Baht/times	50	50	50 baht for
Hired Labour		mandays	22	Baht/manday	100	2,200	transport
Own Labour		mandays	77	Baht/manday	0	0	
Fuel			-	Baht/liter	12	-	
Others							
<b>Production Cost</b>						<b>4,448</b>	
<b>Income</b>						<b>9,200</b>	
Yield				Kg/rai	230		
Price				Bt/kg	40		
<b>Net Income</b>						<b>4,752</b>	Baht/rai

**Table G-FB-CR-12 Eucalyptus (Rai)**

		Physical Inputs		Unit Prices		Comments	
		Unit	Quantity	Unit	Price		
Seed/Stem		No. of trees	400	Baht/kg	1.5	600	Feeding period is
Fertilizer	16-20-0	kg /rai	-	Baht/bag	350	-	two years.
	15-15-15	kg /rai	-	Baht/bag	355	-	
	16-16-8	kg /rai	-	Baht/bag	330	-	
	46-0-0	kg /rai	55	Baht/bag	350	385	
Chemical	Herbicides	liter/rai	-	Baht/liter	150	-	
	Insecticides	liter/rai	-	Baht/liter	450	-	
	Fungicides	liter/rai	-	Baht/liter	200	-	
Baffalou		days	-	Baht/rai	-	-	
Tractor		days	-	Baht/rai	-	-	
Transport		times	15	Baht/times	27	405	
Hired Labour		mandays	18.5	Baht/manday	100	1850	
Own Labour		mandays	10	Baht/manday	0	-	
Fuel		mandays	-	Baht/liter	12	-	
Others				Baht/liter		350	
<b>Production Cost</b>						<b>3,590.0</b>	
<b>Income</b>						<b>9,000</b>	(For 5 Years)
Yield				Kg/rai	15,000		
Price				Bt/kg	0.6		
<b>Net Income</b>						<b>5,410.0</b>	Baht/rai
<b>Annualized net income</b>						<b>1,082.0</b>	

**Table G-FB-CR-13 Papaya (rai)**

		Physical Inputs		Unit Prices		Comments	
		Unit	Quantity	Unit	Price		
Seed-Stem		Stem/rai	400	Baht/stem	0.45	180	
Fertilizer	16-20-0	kg /rai	-	Baht/bag	350	-	
	15-15-15	kg /rai	20	Baht/bag	355	142	
	16-16-8	kg /rai	-	Baht/bag	330	-	
	46-0-0	kg /rai	-	Baht/bag	350	-	
Chemical	Herbicides	liter/rai	-	Baht/liter	150	-	
	Insecticides	liter/rai	-	Baht/liter	450	-	
	Fungicides	liter/rai	-	Baht/liter	200	-	
Buffalou		liter/rai	-	Baht/liter	0	-	
Tractor		days	1	Baht/rai	160	160	
Transport		days	3	Baht/rai	100	300	
Hired Labour		ton	16	Baht/ton	100	1600	
Own Labour		mandays	12	Baht/manday	-	-	
Fuel		mandays	-	Baht/manday	12	-	
Others			-	Baht/liter	-	-	
<b>Production Cost</b>						<b>2,382</b>	
<b>Income</b>						<b>9,000</b>	
Yield			Kg/rai		3,000		
Price			Bt/kg		3.00		
<b>Net Income</b>						<b>6,618</b>	Baht/rai



**Table G-FB-CR-14 Mango**

		Unit: rai											
		1	2	3	4	5	6	7	8	9	10	11	12
Year		0	0	0	0	0	0	0	0	0	0	0	0
Yield (kg/rai)		0	0	0	200	250	500	700	900	1100	1100	1100	1100
Price (Baht/kg)		13	13	13	13	13	13	13	13	13	13	13	13
Income (Baht/rai)		0	0	0	2,600	3,250	6,500	9,100	11,700	14,300	14,300	14,300	14,300
Tree		1,000	0	0	0	0	0	0	0	0	0	0	0
Land preparation		500	0	0	0	0	0	0	0	0	0	0	0
Fertilizer		250	250	250	250	250	500	500	500	500	500	500	500
Chemical		240	240	240	240	240	240	240	240	240	240	240	240
Fuel		100	100	100	100	100	100	100	100	100	100	100	100
Cost (Baht/rai)		2,090	590	590	590	590	840	840	840	840	840	840	840
Profit (Baht/rai)		-2,090	-590	-590	2,010	2,660	5,660	8,260	10,860	13,460	13,460	13,460	13,460
<b>Average for 12 Years</b>		579 Average Yield (kg/rai) 13 Economic price 7,529 Average Income 83 Tree 42 Land preparation 396 Fertilizer 240 Chemical 100 Fuel 861 Average Cost 6,668 Profit											

**Table G-FB-CR-15 Eucalyptus**

		Unit: rai				
		1	2	3	4	5
Year		0	0	0	0	0
Yield (kg/rai)		0	600	600	600	600
Economic price		0	0	0	0	0
Income		0	600	600	600	600
Breeding		600	0	0	0	0
Fertilizer		200	100	100	0	0
Chemical		0	0	0	0	0
Medicine		350	0	0	0	0
Hired labor		750	200	200	200	100
Harvesting		0	0	0	0	400
Transport		0	0	0	0	400
Cost total		1,900	300	300	200	900
Profit						5,400
<b>Average profit</b>		1,080				
<b>Average yield</b>		3,000				
<b>Average income</b>		1,800				
<b>Average cost</b>		120				
<b>Average cost</b>		80				
<b>Average cost</b>		70				
<b>Average cost</b>		290				
<b>Average cost</b>		80				
<b>Average cost</b>		80				
<b>Average cost</b>		720				

**Table G-FB-CR-16 Tilapia**

Yield	kg/pond	178	Expense	
Unit price	Bt/kg	35.00	Preparing pond	123
Number of heads per m3	heads/m3	5.00	Fingerlings	797
<b>Income</b>	<b>Baht</b>	<b>6,230</b>	Feed	227
<b>Expense</b>	<b>Baht</b>	<b>2,494</b>	Medicine	240
<b>Net income</b>	<b>Baht</b>	<b>3,736</b>	Labour	205
Pond capacity for fish	rai	0.2	Electric for pumping	74
			Others	828
			<b>Total Expense</b>	<b>2,494</b>

Note: It is assumed that 30% capacity of 1200m3 pond is available through a wet season.

**Table G-FB-CR-17 Beef Cattle**

Expense	Buy small cows	3,000 Bt/head
	Feed	100 Bt/head
	Medicine	200 Bt/head
	Water and Electricity	120 Bt/head
	Labour	506 Bt/head
	Total	3,926 Bt/head
Income	Sell adult cows (400kg)	8,000 Bt/head
Net Income		4,074 Bt/head

Note: Cows eat grass planted on grassland at wet season and rice straw at dry season in priority areas. Deducted feed cost from above table. And estimated that the cost of feed is only from seeds of grass.

**Table G-FB-CR-18 Chicken**

1 chicken 1.5kg      In a year, chicken is feeded two times.

Income	Surviving rate	$60 \times 0.9 = 54$ head
		$1.5\text{kg/head} \times 26 \text{ Bt/kg} = 39 \text{ Bt /head}$
Expense	Purchasing young chicken	5 Bt /head
	Feed	17 Bt /head
	Vaccine	1 Bt /head
	Other (Electricity, water)	0.6 Bt /head
	Expense per head	23.6 Bt /head
Net income		15.4 Bt /head

**Table G-FB-CF-1 Cash Flow Analysis : Kohn Kean Lowland Type (The case : Short term loan 21,000 baht interest rate 5%, Long term loan 40,000 baht interest rate 5%)**

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>Farm Income</b>	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400
Paddy(12rai)*1	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500
Papaya (Intercropping)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fruits (Mango)	10,500	10,500	10,500	10,500	16,250	32,500	45,500	58,500	71,500	71,500	71,500	71,500	71,500	71,500	71,500
Vegetables (String bean)	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800
Vegetables (Chilli)	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850
Chicken	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230
Fish (Tilapia)	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Handicraft and hired in agriculture	60,280	60,280	60,280	68,780	72,030	88,280	101,280	114,280	127,280	127,280	127,280	127,280	127,280	127,280	127,280
<b>Sub total</b>	23,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
<b>Loan</b>															
Short term loan															
Long term loan															
<b>Total disbursement of loan</b>															
<b>Total Cash Income</b>	93,280	91,280	91,280	99,780	93,030	109,280	122,280	135,280	148,280	148,280	148,280	148,280	148,280	148,280	148,280
<b>Farm Cash Expense</b>	4,944	4,944	4,944	4,944	4,944	4,944	4,944	4,944	4,944	4,944	4,944	4,944	4,944	4,944	4,944
Paddy(12rai)*1	1,191	1,191	1,191	1,191	1,191	1,191	1,191	1,191	1,191	1,191	1,191	1,191	1,191	1,191	1,191
Papaya	10,450	2,950	2,950	2,950	2,950	2,950	2,950	2,950	2,950	2,950	2,950	2,950	2,950	2,950	2,950
Fruits (Mango)	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283
Vegetables (String bean)	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672
Vegetables (Chilli)	5,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450
Chicken*3	2,489	2,489	2,489	2,489	2,489	2,489	2,489	2,489	2,489	2,489	2,489	2,489	2,489	2,489	2,489
Fish (Tilapia)	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400
O & M for Farm Pond	34,878	25,379	25,379	24,188	24,188	25,438	25,438	25,438	25,438	25,438	25,438	25,438	25,438	25,438	25,438
<b>Sub total</b>	21,300	21,300	21,300	21,300	21,300	21,300	21,300	21,300	21,300	21,300	21,300	21,300	21,300	21,300	21,300
<b>Household Cash Expense*2</b>	56,179	46,679	46,679	45,488	45,488	46,738	46,738	46,738	46,738	46,738	46,738	46,738	46,738	46,738	46,738
<b>Loan payment</b>	1,150	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050
Interest payment for short term	23,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
Principal payment for short term	0	0	0	0	0	3,000	6,000	3,900	1,800	1,600	1,400	1,100	800	400	0
Interest payment for long term	0	0	0	0	0	0	0	2,000	2,000	4,000	4,000	5,000	6,000	8,000	8,000
Principal payment for long term	24,150	22,050	22,050	22,050	22,050	25,050	28,050	27,950	25,850	27,650	27,450	29,150	28,850	30,450	30,050
<b>Total Cash Expense</b>	80,329	68,729	68,729	67,538	67,538	71,788	74,788	74,688	72,588	74,388	74,188	75,888	75,588	77,188	76,788
<b>Net saving</b>	12,951	22,551	22,551	32,242	25,492	37,492	47,492	60,592	75,692	73,892	74,092	72,392	72,692	71,092	71,492
<b>Accumulated cash saving</b>	12,951	35,502	58,053	90,295	115,787	153,279	200,771	261,363	337,065	410,947	485,039	557,431	630,123	701,215	772,707

Note #1 The amount of rice sold excludes that of self-consumption.  
 #2 The expense of self-made rice is excluded from the household expense.  
 #3 First year of Chicken included the construction cost for a coop.  
 Short term loan interest rate 5%, Long term loan 5 year grace period, 5% interest rate. Farm pond is provided for free by AURO fund

**Table G-FB-CF-2 Cash Flow Analysis : Kohn Kean Upland Type** (The case : Short term loan 44,000 baht interest rate 5%, Long term loan 40,000 baht, interest rate 5%)

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>Farm Income</b>	47,520	47,520	47,520	47,520	47,520	47,520	47,520	47,520	47,520	47,520	47,520	47,520	47,520	47,520	47,520
Sugarcane	47,520	47,520	47,520	47,520	47,520	47,520	47,520	47,520	47,520	47,520	47,520	47,520	47,520	47,520	47,520
Papaya (intercropping)	3,150	3,150	3,150	0	0	0	0	0	0	0	0	0	0	0	0
Fruits (Mango)	0	0	13,000	16,250	32,500	32,500	45,500	58,500	71,500	71,500	71,500	71,500	71,500	71,500	71,500
Vegetables (String bean)	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500
Vegetables (Chili)	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800
Chicken	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850
Fish (Tilapia)	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230
Handicraft and hired in agriculture	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
<b>Sub total</b>	<b>92,050</b>	<b>92,050</b>	<b>101,900</b>	<b>105,150</b>	<b>121,400</b>	<b>134,400</b>	<b>147,400</b>	<b>160,400</b>	<b>160,400</b>	<b>160,400</b>	<b>160,400</b>	<b>160,400</b>	<b>160,400</b>	<b>160,400</b>	<b>160,400</b>
<b>Loan</b>															
Short term loan*2	46,000	44,000	44,000	44,000	44,000	44,000	44,000	44,000	44,000	44,000	44,000	44,000	44,000	44,000	44,000
Long term loan	46,000	44,000	44,000	44,000	44,000	44,000	44,000	44,000	44,000	44,000	44,000	44,000	44,000	44,000	44,000
<b>Total disbursement of loan</b>	<b>92,000</b>	<b>88,000</b>	<b>88,000</b>	<b>88,000</b>	<b>88,000</b>	<b>88,000</b>	<b>88,000</b>	<b>88,000</b>	<b>88,000</b>	<b>88,000</b>	<b>88,000</b>	<b>88,000</b>	<b>88,000</b>	<b>88,000</b>	<b>88,000</b>
<b>Total Cash Income</b>	<b>148,050</b>	<b>146,050</b>	<b>145,050</b>	<b>145,900</b>	<b>149,150</b>	<b>165,400</b>	<b>178,400</b>	<b>191,400</b>	<b>204,400</b>	<b>204,400</b>	<b>204,400</b>	<b>204,400</b>	<b>204,400</b>	<b>204,400</b>	<b>204,400</b>
<b>Farm Cash Expense</b>															
Sugarcane	27,024	27,024	27,024	27,024	27,024	27,024	27,024	27,024	27,024	27,024	27,024	27,024	27,024	27,024	27,024
Papaya (intercropping)	834	834	834	0	0	0	0	0	0	0	0	0	0	0	0
Fruits (Mango)	10,450	2,950	2,950	2,950	2,950	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200
Vegetables (String bean)	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283
Vegetables (Chili)	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672
Chicken *4	5,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450
Fish (Tilapia)	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494
O&M for Farm Pond	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400
<b>Sub total</b>	<b>56,607</b>	<b>47,107</b>	<b>47,107</b>	<b>46,273</b>	<b>46,273</b>	<b>47,523</b>	<b>47,523</b>	<b>47,523</b>	<b>47,523</b>	<b>47,523</b>	<b>47,523</b>	<b>47,523</b>	<b>47,523</b>	<b>47,523</b>	<b>47,523</b>
<b>Total</b>	<b>23,800</b>	<b>23,800</b>	<b>23,800</b>	<b>23,800</b>	<b>23,800</b>	<b>23,800</b>	<b>23,800</b>	<b>23,800</b>	<b>23,800</b>	<b>23,800</b>	<b>23,800</b>	<b>23,800</b>	<b>23,800</b>	<b>23,800</b>	<b>23,800</b>
<b>Household Cash Expense*3</b>	<b>88,407</b>	<b>70,907</b>	<b>70,907</b>	<b>70,073</b>	<b>70,073</b>	<b>71,323</b>	<b>71,323</b>	<b>71,323</b>	<b>71,323</b>	<b>71,323</b>	<b>71,323</b>	<b>71,323</b>	<b>71,323</b>	<b>71,323</b>	<b>71,323</b>
<b>Loan payment</b>															
Interest payment for short term	2,300	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200
Principal payment for short term	46,000	44,000	44,000	44,000	44,000	44,000	44,000	44,000	44,000	44,000	44,000	44,000	44,000	44,000	44,000
Interest payment for long term	0	0	0	0	0	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
Principal payment for long term	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total payment for loan</b>	<b>48,300</b>	<b>46,200</b>	<b>46,200</b>	<b>46,200</b>	<b>46,200</b>	<b>49,200</b>	<b>52,200</b>	<b>52,200</b>	<b>52,200</b>	<b>52,200</b>	<b>52,200</b>	<b>52,200</b>	<b>52,200</b>	<b>52,200</b>	<b>52,200</b>
<b>Total Cash Expense</b>	<b>128,707</b>	<b>117,107</b>	<b>117,107</b>	<b>116,273</b>	<b>116,273</b>	<b>120,523</b>	<b>123,523</b>	<b>123,523</b>	<b>123,523</b>	<b>123,523</b>	<b>122,923</b>	<b>124,623</b>	<b>124,623</b>	<b>125,923</b>	<b>125,923</b>
<b>Net saving</b>	<b>19,343</b>	<b>28,943</b>	<b>28,943</b>	<b>39,627</b>	<b>32,877</b>	<b>44,877</b>	<b>54,877</b>	<b>67,977</b>	<b>83,077</b>	<b>81,277</b>	<b>81,477</b>	<b>79,777</b>	<b>80,077</b>	<b>78,477</b>	<b>78,877</b>
<b>Accumulated cash saving</b>	<b>19,343</b>	<b>48,286</b>	<b>77,229</b>	<b>116,856</b>	<b>149,733</b>	<b>194,610</b>	<b>249,487</b>	<b>317,464</b>	<b>400,541</b>	<b>481,818</b>	<b>563,295</b>	<b>643,072</b>	<b>723,149</b>	<b>801,626</b>	<b>880,503</b>

Note #1 The amount of rice sold excludes that of self-consumption.  
 #2 Short term loan is provided based on the area size of paddy in considering the land productivity.  
 #3 The expense of self-made rice is excluded from the household expense.  
 #4 First year of Chicken included the construction cost for a coop.

Table G-FB-CF-3 Cash Flow Analysis : Kohn Kean Mixed Type (The case : Short term loan 41,000 baht interest rate 5%, Medium term loan 20,000 baht interest rate 5%)															
Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>Farm income</b>	3,475	3,375	3,375	3,375	3,375	3,375	3,375	3,375	3,375	3,375	3,375	3,375	3,375	3,375	3,375
Rice glutinous*1	3,475	3,375	3,375	3,375	3,375	3,375	3,375	3,375	3,375	3,375	3,375	3,375	3,375	3,375	3,375
Sugarcane	39,600	39,600	39,600	39,600	39,600	39,600	39,600	39,600	39,600	39,600	39,600	39,600	39,600	39,600	39,600
Mango (intercropping)	0	0	0	325	406	813	1,138	1,463	1,788	1,788	0	0	0	0	0
Papaya (intercropping)	900	900	900	0	0	0	0	0	0	0	0	0	0	0	0
Vegetables (String bean)	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500
Vegetables (Chilli)	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800
Chicken	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850
Beef Cattle	0	16,000	24,000	16,000	16,000	16,000	24,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	24,000
Fish (Tilapia)	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230
Handicraft and hired in agricultur	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
<b>Non-farm income</b>	85,255	101,255	109,255	100,680	108,761	101,168	109,493	101,818	110,143	102,143	110,143	102,143	110,143	102,143	110,143
<b>Loan</b>	43,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000
Short term loan	43,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000
Medium term loan	12,000	12,000	8,000	8,000	8,000	12,000	8,000	12,000	8,000	12,000	8,000	12,000	8,000	12,000	8,000
Total disbursement of loan	55,000	53,000	49,000	53,000	49,000	53,000	49,000	53,000	49,000	53,000	49,000	53,000	49,000	53,000	49,000
<b>Total Cash Income</b>	140,255	154,255	159,255	153,680	157,761	154,168	158,493	154,818	159,143	155,143	159,143	155,143	159,143	155,143	159,143
<b>Farm Cash Expense</b>	2,060	2,060	2,060	2,060	2,060	2,060	2,060	2,060	2,060	2,060	2,060	2,060	2,060	2,060	2,060
Rice glutinous	22,520	22,520	22,520	22,520	22,520	22,520	22,520	22,520	22,520	22,520	22,520	22,520	22,520	22,520	22,520
Sugarcane	261	74	74	74	74	105	105	105	105	105	105	105	105	105	105
Mango (intercropping)	238	238	0	0	0	0	0	0	0	0	0	0	0	0	0
Papaya (intercropping)	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283
Vegetables (String bean)	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672
Vegetables (Chilli)	5,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450
Chicken *4	11,852	11,778	7,852	11,778	7,852	11,778	7,852	11,778	7,852	11,778	7,852	11,778	7,852	11,778	7,852
Beef Cattle*4	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494
Fish (Tilapia)	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400
O&M for Farm Pond	55,230	52,959	49,043	52,731	48,805	52,762	48,836	52,762	48,836	52,762	48,836	52,762	48,836	52,762	48,836
<b>Sub total</b>	21,300	21,300	21,300	21,300	21,300	21,300	21,300	21,300	21,300	21,300	21,300	21,300	21,300	21,300	21,300
<b>Household Cash Expense*2</b>	76,530	74,269	70,343	74,031	70,105	74,062	70,136	74,062	70,136	74,062	70,136	74,062	70,136	74,062	70,136
<b>Loan payment</b>	2,150	2,050	2,050	2,050	2,050	2,050	2,050	2,050	2,050	2,050	2,050	2,050	2,050	2,050	2,050
Interest payment for short term	43,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000
Principal payment for short term	600	1,200	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Interest payment for medium term	0	12,000	12,000	8,000	8,000	12,000	8,000	12,000	8,000	12,000	8,000	12,000	8,000	12,000	8,000
Principal payment for medium term	45,750	56,250	56,050	56,050	56,050	56,050	56,050	56,050	56,050	56,050	56,050	56,050	56,050	56,050	56,050
<b>Total Cash Expense</b>	122,280	130,519	126,393	126,081	126,155	126,112	126,186	126,112	126,186	126,112	126,186	126,112	126,186	126,112	126,186
<b>Net saving</b>	17,975	23,736	31,862	27,599	31,607	28,056	32,307	28,706	32,957	29,031	32,957	29,031	32,957	29,031	32,957
<b>Accumulated cash saving</b>	17,975	41,711	73,573	101,173	132,779	160,835	193,141	221,847	254,803	283,834	316,790	345,821	378,777	407,808	440,765

Note #1 The amount of net sold excludes that of self-consumption.  
#2 The expenses of self-made rice is excluded from the household expense.  
#3 Short term loan interest rate 5%, Medium term loan interest rate 5 % payment period 2 years. Farm pond is provided for free by ALRO fund.  
#4 First year of Chicken and Beef Cattle include the construction cost for coops.

**Table G-FB-CF-4 Cash Flow Analysis : Maharashtra Lowland Type (The case : Short term loan 18,500 baht interest rate 5%, Medium term loan 20,000 baht interest rate 5%)**

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>Farm Income</b>															
Rice glutinous*1	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250
Papaya (Around the pond)	1,440	1,440	1,440	1,440	1,440	1,440	1,440	1,440	1,440	1,440	1,440	1,440	1,440	1,440	1,440
Vegetables (String bean)	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500
Vegetables (Chilli)	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800
Chicken	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850
Beef Cattle	0	16,000	24,000	16,000	24,000	16,000	24,000	16,000	24,000	16,000	24,000	16,000	24,000	16,000	24,000
Fish (Tilapia)	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230
Handicraft and hired in agriculture	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
<b>Sub total</b>	<b>45,070</b>	<b>61,070</b>	<b>69,070</b>	<b>61,070</b>	<b>69,070</b>	<b>61,070</b>	<b>69,070</b>	<b>61,070</b>	<b>69,070</b>	<b>61,070</b>	<b>69,070</b>	<b>61,070</b>	<b>69,070</b>	<b>61,070</b>	<b>69,070</b>
<b>Loan</b>															
Short term loan	20,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500
Medium term loan	20,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500
<b>Sub total</b>	<b>41,000</b>	<b>37,000</b>	<b>37,000</b>	<b>37,000</b>	<b>37,000</b>	<b>37,000</b>	<b>37,000</b>	<b>37,000</b>	<b>37,000</b>	<b>37,000</b>	<b>37,000</b>	<b>37,000</b>	<b>37,000</b>	<b>37,000</b>	<b>37,000</b>
<b>Total disbursement of loan</b>	<b>41,000</b>	<b>37,000</b>	<b>37,000</b>	<b>37,000</b>	<b>37,000</b>	<b>37,000</b>	<b>37,000</b>	<b>37,000</b>	<b>37,000</b>	<b>37,000</b>	<b>37,000</b>	<b>37,000</b>	<b>37,000</b>	<b>37,000</b>	<b>37,000</b>
<b>Total Cash Income</b>	<b>77,570</b>	<b>91,570</b>	<b>95,570</b>	<b>91,570</b>	<b>95,570</b>	<b>91,570</b>	<b>95,570</b>	<b>91,570</b>	<b>95,570</b>	<b>91,570</b>	<b>95,570</b>	<b>91,570</b>	<b>95,570</b>	<b>91,570</b>	<b>95,570</b>
<b>Farm Cash Expense</b>															
Rice glutinous	2,035	2,035	2,035	2,035	2,035	2,035	2,035	2,035	2,035	2,035	2,035	2,035	2,035	2,035	2,035
Papaya (Around the pond)	381	381	381	381	381	381	381	381	381	381	381	381	381	381	381
Vegetables (String bean)	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283
Vegetables (Chilli)	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672
Chicken *4	5,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450
Beef Cattle*4	11,852	11,778	7,852	11,778	7,852	11,778	7,852	11,778	7,852	11,778	7,852	11,778	7,852	11,778	7,852
Fish (Tilapia)	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494
O & M for Farm Pond	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400
<b>Sub total</b>	<b>32,567</b>	<b>30,493</b>	<b>26,567</b>	<b>30,493</b>	<b>26,567</b>	<b>30,493</b>	<b>26,567</b>	<b>30,493</b>	<b>26,567</b>	<b>30,493</b>	<b>26,567</b>	<b>30,493</b>	<b>26,567</b>	<b>30,493</b>	<b>26,567</b>
<b>Total</b>	<b>53,867</b>	<b>51,793</b>	<b>47,867</b>	<b>51,793</b>	<b>47,867</b>	<b>51,793</b>	<b>47,867</b>	<b>51,793</b>	<b>47,867</b>	<b>51,793</b>	<b>47,867</b>	<b>51,793</b>	<b>47,867</b>	<b>51,793</b>	<b>47,867</b>
<b>Household Cash Expense*2</b>															
Loan payment	1,025	925	925	925	925	925	925	925	925	925	925	925	925	925	925
Interest payment for short term	20,560	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500
Interest payment for medium term	600	1,200	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Interest payment for long term	0	12,000	12,000	8,000	12,000	8,000	12,000	8,000	12,000	8,000	12,000	8,000	12,000	8,000	12,000
<b>Total payment for loan</b>	<b>22,125</b>	<b>32,625</b>	<b>32,425</b>	<b>28,425</b>	<b>32,425</b>	<b>28,425</b>	<b>32,425</b>	<b>28,425</b>	<b>32,425</b>	<b>28,425</b>	<b>32,425</b>	<b>28,425</b>	<b>32,425</b>	<b>28,425</b>	<b>32,425</b>
<b>Total Cash Expense</b>	<b>75,992</b>	<b>84,418</b>	<b>80,292</b>	<b>80,218</b>	<b>80,292</b>	<b>80,218</b>	<b>80,292</b>	<b>80,218</b>	<b>80,292</b>	<b>80,218</b>	<b>80,292</b>	<b>80,218</b>	<b>80,292</b>	<b>80,218</b>	<b>80,292</b>
<b>Net saving</b>	<b>1,578</b>	<b>7,152</b>	<b>15,278</b>	<b>11,352</b>	<b>15,278</b>	<b>11,352</b>	<b>15,278</b>	<b>11,352</b>	<b>15,278</b>	<b>11,352</b>	<b>15,278</b>	<b>11,352</b>	<b>15,278</b>	<b>11,352</b>	<b>15,278</b>
<b>Accumulated cash saving</b>	<b>1,578</b>	<b>8,730</b>	<b>24,008</b>	<b>35,360</b>	<b>50,638</b>	<b>61,990</b>	<b>77,268</b>	<b>88,620</b>	<b>103,898</b>	<b>116,260</b>	<b>130,528</b>	<b>141,880</b>	<b>157,158</b>	<b>168,510</b>	<b>183,788</b>

\*1 The amount of rice sold excludes that of self-consumption.  
 \*2 The expense of self-made rice is excluded from the household expense.  
 \*3 Short term loan interest rate 5%, Medium term loan interest rate 5% payment period 2 years. Farm pond is provided for free by ALRO fund.  
 \*4 First year of Chicken and Beef Cattle include the construction cost for coops.

**Table G-FB-CF-5 Cash Flow Analysis : Mahasarakam Upland Type (The case : Short term loan 24,000 baht interest rate 5%, Medium term loan 20,000 baht interest rate 5%)**

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>Farm Income</b>															
Cassava	11,750	11,750	11,750	11,750	11,750	11,750	11,750	11,750	11,750	11,750	11,750	11,750	11,750	11,750	11,750
Papaya (Around the pond)	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250
Vegetables (String bean)	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500
Vegetables (Chilli)	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800
Chicken	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850
Beef Cattle	0	16,000	24,000	16,000	24,000	16,000	24,000	16,000	24,000	16,000	24,000	16,000	24,000	16,000	24,000
Fish (Tilapia)	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230
Handicraft and hired in agriculture	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
<b>Sub total</b>	<b>55,380</b>	<b>71,380</b>	<b>79,380</b>	<b>71,380</b>	<b>79,380</b>	<b>71,380</b>	<b>79,380</b>	<b>71,380</b>	<b>79,380</b>	<b>71,380</b>	<b>79,380</b>	<b>71,380</b>	<b>79,380</b>	<b>71,380</b>	<b>79,380</b>
<b>Non-farm Income</b>															
<b>Loan</b>															
Short term loan	26,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000
Medium term loan	12,000	12,000	8,000	12,000	8,000	12,000	8,000	12,000	8,000	12,000	8,000	12,000	8,000	12,000	8,000
<b>Sub total</b>	<b>38,000</b>	<b>36,000</b>	<b>32,000</b>	<b>36,000</b>	<b>32,000</b>	<b>36,000</b>	<b>32,000</b>	<b>36,000</b>	<b>32,000</b>	<b>36,000</b>	<b>32,000</b>	<b>36,000</b>	<b>32,000</b>	<b>36,000</b>	<b>32,000</b>
<b>Total disbursement of loan</b>															
<b>Total Cash Income</b>	<b>93,380</b>	<b>107,380</b>	<b>111,380</b>	<b>107,380</b>	<b>111,380</b>	<b>107,380</b>	<b>111,380</b>	<b>107,380</b>	<b>111,380</b>	<b>107,380</b>	<b>111,380</b>	<b>107,380</b>	<b>111,380</b>	<b>107,380</b>	<b>111,380</b>
<b>Farm Cash Expense</b>															
Cassava	5,205	5,205	5,205	5,205	5,205	5,205	5,205	5,205	5,205	5,205	5,205	5,205	5,205	5,205	5,205
Papaya (Around the pond)	596	596	596	596	596	596	596	596	596	596	596	596	596	596	596
Vegetables (String bean)	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283
Vegetables (Chilli)	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672
Chicken #3	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450
Beef Cattle#3	11,852	11,778	7,852	11,778	7,852	11,778	7,852	11,778	7,852	11,778	7,852	11,778	7,852	11,778	7,852
Fish (Tilapia)	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494
O&M for Farm Pond	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400
<b>Sub total</b>	<b>35,952</b>	<b>33,878</b>	<b>29,952</b>	<b>33,878</b>	<b>29,952</b>	<b>33,878</b>	<b>29,952</b>	<b>33,878</b>	<b>29,952</b>	<b>33,878</b>	<b>29,952</b>	<b>33,878</b>	<b>29,952</b>	<b>33,878</b>	<b>29,952</b>
<b>Household Cash Expense*1</b>	<b>23,800</b>	<b>23,800</b>	<b>23,800</b>	<b>23,800</b>	<b>23,800</b>	<b>23,800</b>	<b>23,800</b>	<b>23,800</b>	<b>23,800</b>	<b>23,800</b>	<b>23,800</b>	<b>23,800</b>	<b>23,800</b>	<b>23,800</b>	<b>23,800</b>
<b>Total</b>	<b>59,752</b>	<b>57,678</b>	<b>53,752</b>	<b>57,678</b>	<b>53,752</b>	<b>57,678</b>	<b>53,752</b>	<b>57,678</b>	<b>53,752</b>	<b>57,678</b>	<b>53,752</b>	<b>57,678</b>	<b>53,752</b>	<b>57,678</b>	<b>53,752</b>
<b>Loan payment</b>															
First payment for short term	1,300	1,300	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,300
Second payment for short term	26,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	26,000
First payment for medium term	600	1,200	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Second payment for medium term	0	12,000	12,000	8,000	12,000	8,000	12,000	8,000	12,000	8,000	12,000	8,000	12,000	8,000	12,000
<b>Total payment for loan</b>	<b>27,900</b>	<b>40,500</b>	<b>38,200</b>	<b>34,200</b>	<b>38,200</b>	<b>34,200</b>	<b>38,200</b>	<b>34,200</b>	<b>38,200</b>	<b>34,200</b>	<b>38,200</b>	<b>34,200</b>	<b>38,200</b>	<b>34,200</b>	<b>40,300</b>
<b>Total Cash Expense</b>	<b>87,652</b>	<b>98,178</b>	<b>91,952</b>	<b>91,878</b>	<b>91,952</b>	<b>91,878</b>	<b>91,952</b>	<b>91,878</b>	<b>91,952</b>	<b>91,878</b>	<b>91,952</b>	<b>91,878</b>	<b>91,952</b>	<b>91,878</b>	<b>94,052</b>
<b>Net saving</b>	<b>5,728</b>	<b>9,202</b>	<b>19,428</b>	<b>15,502</b>	<b>19,428</b>	<b>15,502</b>	<b>19,428</b>	<b>15,502</b>	<b>19,428</b>	<b>15,502</b>	<b>19,428</b>	<b>15,502</b>	<b>19,428</b>	<b>15,502</b>	<b>17,328</b>
<b>Accumulated cash saving</b>	<b>5,728</b>	<b>14,930</b>	<b>34,358</b>	<b>49,860</b>	<b>69,288</b>	<b>84,790</b>	<b>104,218</b>	<b>119,720</b>	<b>139,148</b>	<b>154,650</b>	<b>174,078</b>	<b>189,580</b>	<b>209,008</b>	<b>224,510</b>	<b>241,838</b>

Note  
 #1 The expense of self-made vegetables, fish is excluded from the household expense, but includes the expense for rice.  
 #2 Short term loan interest rate 5%, Medium term loan interest rate 5% payment period 2 years. Farm pond is provided for free by ALRO fund.  
 #3 First year of Chicken and Beef Cattle includes the construction cost for coop.

**Table G-FB-CF-6 Cash Flow Analysis : Maharashtra Mixed Type (The case : Short term loan 23,000 baht interest rate 5%, Medium term loan 20,000 baht interest rate 5%)**

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>Farm income</b>	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250
Rice glutinous*1	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250
Cassava	9,400	9,400	9,400	9,400	9,400	9,400	9,400	9,400	9,400	9,400	9,400	9,400	9,400	9,400	9,400
Papaya (Around the pond)	1,440	1,440	1,440	1,440	1,440	1,440	1,440	1,440	1,440	1,440	1,440	1,440	1,440	1,440	1,440
Beef Cattle	0	16,000	24,000	16,000	24,000	16,000	24,000	16,000	24,000	16,000	24,000	16,000	24,000	16,000	24,000
Vegetables (String bean)	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500
Vegetables (Chilli)	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800
Chicken	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850
<b>Non-farm income</b>	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230
Fish (Tilapia)	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230
Handicraft and hired in agricultural	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
<b>Sub total</b>	<b>54,470</b>	<b>70,470</b>	<b>78,470</b>	<b>70,470</b>	<b>78,470</b>	<b>70,470</b>	<b>78,470</b>	<b>70,470</b>	<b>78,470</b>	<b>70,470</b>	<b>78,470</b>	<b>70,470</b>	<b>78,470</b>	<b>70,470</b>	<b>78,470</b>
<b>Loan</b>															
Short term loan	25,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000
Medium term loan	25,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000
<b>Sub total</b>	<b>50,000</b>	<b>46,000</b>	<b>46,000</b>	<b>46,000</b>	<b>46,000</b>	<b>46,000</b>	<b>46,000</b>	<b>46,000</b>	<b>46,000</b>	<b>46,000</b>	<b>46,000</b>	<b>46,000</b>	<b>46,000</b>	<b>46,000</b>	<b>46,000</b>
<b>Total disbursement of loan</b>	<b>12,000</b>	<b>12,000</b>	<b>8,000</b>	<b>12,000</b>	<b>8,000</b>	<b>12,000</b>	<b>8,000</b>	<b>12,000</b>	<b>8,000</b>	<b>12,000</b>	<b>8,000</b>	<b>12,000</b>	<b>8,000</b>	<b>12,000</b>	<b>8,000</b>
<b>Total Cash Income</b>	<b>37,000</b>	<b>35,000</b>	<b>31,000</b>	<b>35,000</b>	<b>31,000</b>	<b>35,000</b>	<b>31,000</b>	<b>35,000</b>	<b>31,000</b>	<b>35,000</b>	<b>31,000</b>	<b>35,000</b>	<b>31,000</b>	<b>35,000</b>	<b>31,000</b>
<b>Farm Cash Expense</b>	2,035	2,035	2,035	2,035	2,035	2,035	2,035	2,035	2,035	2,035	2,035	2,035	2,035	2,035	2,035
Rice glutinous	4,164	4,164	4,164	4,164	4,164	4,164	4,164	4,164	4,164	4,164	4,164	4,164	4,164	4,164	4,164
Cassava	381	381	381	381	381	381	381	381	381	381	381	381	381	381	381
Papaya (Around the pond)	11,852	11,778	7,852	11,778	7,852	11,778	7,852	11,778	7,852	11,778	7,852	11,778	7,852	11,778	7,852
Beef Cattle*2	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283
Vegetables (String bean)	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672
Vegetables (Chilli)	5,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450	3,450
Chicken *2	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494
Fish (Tilapia)	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400
O&M for Farm Pond	36,731	34,657	30,731	34,657	30,731	34,657	30,731	34,657	30,731	34,657	30,731	34,657	30,731	34,657	30,731
<b>Sub total</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>
<b>Household Cash Expense</b>	58,031	55,957	52,031	55,957	52,031	55,957	52,031	55,957	52,031	55,957	52,031	55,957	52,031	55,957	52,031
<b>Loan payment</b>	1,250	1,150	1,150	1,150	1,150	1,150	1,150	1,150	1,150	1,150	1,150	1,150	1,150	1,150	1,150
Interest payment for short term	25,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000
Capital payment for short term	600	1,200	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Interest payment for medium term	0	12,000	12,000	8,000	12,000	8,000	12,000	8,000	12,000	8,000	12,000	8,000	12,000	8,000	12,000
Capital payment for medium term	26,850	39,450	37,150	33,150	37,150	33,150	37,150	33,150	37,150	33,150	37,150	33,150	37,150	33,150	37,150
<b>Total payment for loan</b>	<b>84,881</b>	<b>95,407</b>	<b>89,181</b>	<b>89,107</b>	<b>89,181</b>	<b>89,107</b>	<b>89,181</b>	<b>89,107</b>	<b>89,181</b>	<b>89,107</b>	<b>89,181</b>	<b>89,107</b>	<b>89,181</b>	<b>89,107</b>	<b>89,181</b>
<b>Total Cash Expense</b>	<b>6,589</b>	<b>10,063</b>	<b>20,289</b>	<b>16,363</b>	<b>20,289</b>	<b>16,363</b>	<b>20,289</b>	<b>16,363</b>	<b>20,289</b>	<b>16,363</b>	<b>20,289</b>	<b>16,363</b>	<b>20,289</b>	<b>16,363</b>	<b>20,289</b>
<b>Net saving</b>	<b>6,589</b>	<b>15,652</b>	<b>36,941</b>	<b>53,304</b>	<b>73,593</b>	<b>89,956</b>	<b>110,245</b>	<b>126,608</b>	<b>146,897</b>	<b>163,260</b>	<b>183,549</b>	<b>199,912</b>	<b>220,201</b>	<b>236,564</b>	<b>254,753</b>
<b>Accumulated cash saving</b>															

Note #1 The amount of rice sold excludes that of self-consumption.  
 #2 First year of Chicken and Beef Cattle include the construction cost for coop.  
 #3 Short term loan interest rate 5%, Farm pond is provided for free by ALRO Fund.



**Table G-FB-CF-7 Cash Flow Analysis : Mukudahan Lowland Type (The case : Short term loan 19,000 baht interest rate 5%, Long term loan 40,000 baht interest rate 5%)**

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>Farm Income</b>															
Rice glutinous*1	6,300	6,300	6,300	6,300	6,300	6,300	6,300	6,300	6,300	6,300	6,300	6,300	6,300	6,300	6,300
Soybeans	1,296	1,296	1,296	1,296	1,296	1,296	1,296	1,296	1,296	1,296	1,296	1,296	1,296	1,296	1,296
Mango (intercropping)	0	0	0	6,500	8,125	16,250	22,750	29,250	35,750	35,750	35,750	35,750	35,750	35,750	35,750
Papaya (intercropping)	2,250	2,250	2,250	0	0	0	0	0	0	0	0	0	0	0	0
Vegetables (String bean)	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500
Vegetables (Chilli)	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600
Chicken	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800
Groundnuts	1,150	1,150	1,150	1,150	1,150	1,150	1,150	1,150	1,150	1,150	1,150	1,150	1,150	1,150	1,150
Fish (Tilapia)	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230
Handicraft and hired in agriculture	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
<b>Sub total</b>	<b>38,126</b>	<b>38,126</b>	<b>38,126</b>	<b>42,376</b>	<b>44,001</b>	<b>52,126</b>	<b>58,626</b>	<b>65,126</b>	<b>71,626</b>	<b>71,626</b>	<b>71,626</b>	<b>71,626</b>	<b>71,626</b>	<b>71,626</b>	<b>71,626</b>
<b>Non-farm income</b>															
<b>Loan</b>															
Short term loan	22,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000
Long term loan	22,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000
<b>Total disbursement of loan</b>	<b>44,000</b>	<b>38,000</b>	<b>38,000</b>	<b>38,000</b>	<b>38,000</b>	<b>38,000</b>	<b>38,000</b>	<b>38,000</b>	<b>38,000</b>	<b>38,000</b>	<b>38,000</b>	<b>38,000</b>	<b>38,000</b>	<b>38,000</b>	<b>38,000</b>
<b>Total Cash Income</b>	<b>70,126</b>	<b>67,126</b>	<b>67,126</b>	<b>71,376</b>	<b>63,001</b>	<b>71,126</b>	<b>77,626</b>	<b>84,126</b>	<b>90,626</b>	<b>90,626</b>	<b>90,626</b>	<b>90,626</b>	<b>90,626</b>	<b>90,626</b>	<b>90,626</b>
<b>Farm Cash Expense</b>															
Rice glutinous	3,256	3,256	3,256	3,256	3,256	3,256	3,256	3,256	3,256	3,256	3,256	3,256	3,256	3,256	3,256
Soybeans	403	403	403	403	403	403	403	403	403	403	403	403	403	403	403
Mango (intercropping)	5,225	1,475	1,475	1,475	1,475	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100
Papaya (intercropping)	596	596	596	596	596	596	596	596	596	596	596	596	596	596	596
Vegetables (String bean)	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095
Vegetables (Chilli)	2,224	2,224	2,224	2,224	2,224	2,224	2,224	2,224	2,224	2,224	2,224	2,224	2,224	2,224	2,224
Chicken *3	6,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600
Groundnuts	518	518	518	518	518	518	518	518	518	518	518	518	518	518	518
Fish (Tilapia)	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494
O&M for Farm Pond	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400
<b>Sub total</b>	<b>22,811</b>	<b>17,061</b>	<b>17,061</b>	<b>17,061</b>	<b>17,061</b>	<b>17,686</b>	<b>17,686</b>	<b>17,686</b>	<b>17,686</b>	<b>17,686</b>	<b>17,686</b>	<b>17,686</b>	<b>17,686</b>	<b>17,686</b>	<b>17,686</b>
<b>Household Cash Expense*2</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>
<b>Loan payment</b>	<b>1,100</b>	<b>1,100</b>	<b>950</b>	<b>950</b>	<b>950</b>	<b>950</b>	<b>950</b>	<b>950</b>	<b>950</b>	<b>950</b>	<b>950</b>	<b>950</b>	<b>950</b>	<b>950</b>	<b>1,100</b>
Principal payment for short term	22,000	22,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000
Interest payment for long term	0	0	0	0	0	3,000	6,000	3,900	1,800	1,600	1,400	1,100	800	400	0
Principal payment for long term	0	0	0	0	0	0	0	2,000	2,000	4,000	4,000	6,000	6,000	8,000	8,000
<b>Total payment for loan</b>	<b>23,100</b>	<b>23,100</b>	<b>19,950</b>	<b>19,950</b>	<b>19,950</b>	<b>22,950</b>	<b>25,950</b>	<b>25,850</b>	<b>23,750</b>	<b>25,550</b>	<b>27,050</b>	<b>28,350</b>	<b>28,350</b>	<b>31,100</b>	<b>31,100</b>
<b>Total Cash Expense</b>	<b>67,211</b>	<b>61,461</b>	<b>58,311</b>	<b>58,311</b>	<b>58,311</b>	<b>61,336</b>	<b>64,936</b>	<b>64,836</b>	<b>62,736</b>	<b>64,536</b>	<b>64,336</b>	<b>66,036</b>	<b>65,736</b>	<b>67,336</b>	<b>69,936</b>
<b>Net saving</b>	<b>2,915</b>	<b>5,665</b>	<b>8,815</b>	<b>13,065</b>	<b>4,690</b>	<b>9,190</b>	<b>12,690</b>	<b>19,290</b>	<b>27,890</b>	<b>26,090</b>	<b>26,290</b>	<b>24,590</b>	<b>24,890</b>	<b>23,290</b>	<b>28,630</b>
<b>Accumulated cash saving</b>	<b>2,915</b>	<b>8,580</b>	<b>17,395</b>	<b>30,460</b>	<b>35,150</b>	<b>44,340</b>	<b>57,030</b>	<b>76,320</b>	<b>104,210</b>	<b>130,300</b>	<b>156,590</b>	<b>191,180</b>	<b>206,070</b>	<b>229,360</b>	<b>249,990</b>

Note #1 The amount of rice sold excludes that of self-consumption.

#2 The expenses of self-made rice is excluded from the household expense.

#3 First year of Chicken and Beef Cattle include the construction cost for assets.

#4 Short term loan interest rate 5%, long term loan interest rate 5%. Farm pond is provided for free by ALRO fund.

**Table G-FB-CF-8 Cash Flow Analysis : Mukudahan Upland Type (The case : Short term loan 19,000 baht interest rate 5%, Long term loan 80,000 baht interest rate 5%)**

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>Farm income</b>															
Rice glutinous*1	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225
Cassava	7,050	7,050	7,050	7,050	7,050	7,050	7,050	7,050	7,050	7,050	7,050	7,050	7,050	7,050	7,050
Mango (Intercropping)	0	0	0	5,200	6,500	13,000	18,200	23,400	28,600	28,600	28,600	28,600	28,600	28,600	28,600
Papaya (Intercropping)	3,150	3,150	3,150	0	0	0	0	0	0	0	0	0	0	0	0
Vegetables (String bean)	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500
Vegetables (Chilli)	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600
Chicken	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800
Acacia (Eucalyptus)	0	0	0	0	18,000	0	0	0	0	0	0	0	0	0	0
Fish (Tilapia)	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230
Handicraft and hired in agriculture	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
<b>Sub total</b>	<b>37,555</b>	<b>37,555</b>	<b>37,555</b>	<b>39,605</b>	<b>58,905</b>	<b>47,405</b>	<b>52,605</b>	<b>57,805</b>	<b>81,005</b>	<b>63,005</b>	<b>63,005</b>	<b>63,005</b>	<b>81,005</b>	<b>63,005</b>	<b>63,005</b>
<b>Non-farm income</b>															
<b>Loan</b>															
Short term loan															
Long term loan															
<b>Total disbursement of loan</b>															
<b>Total Cash Income</b>	<b>79,555</b>	<b>76,555</b>	<b>76,555</b>	<b>68,605</b>	<b>87,905</b>	<b>66,405</b>	<b>71,605</b>	<b>76,805</b>	<b>100,005</b>	<b>82,005</b>	<b>82,005</b>	<b>82,005</b>	<b>100,005</b>	<b>82,005</b>	<b>82,005</b>
<b>Farm Cash Expense</b>															
Rice glutinous	1,425	1,425	1,425	1,425	1,425	1,425	1,425	1,425	1,425	1,425	1,425	1,425	1,425	1,425	1,425
Cassava	3,123	3,123	3,123	3,123	3,123	3,123	3,123	3,123	3,123	3,123	3,123	3,123	3,123	3,123	3,123
Mango (Intercropping)	4,180	1,180	1,180	1,180	1,180	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680
Papaya (Intercropping)	834	834	834	0	0	0	0	0	0	0	0	0	0	0	0
Vegetables (String bean)	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095
Vegetables (Chilli)	2,224	2,224	2,224	2,224	2,224	2,224	2,224	2,224	2,224	2,224	2,224	2,224	2,224	2,224	2,224
Chicken *3	6,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600
Acacia (Eucalyptus)	3,800	600	600	400	5,600	600	600	400	5,600	600	600	400	5,600	600	400
Fish (Tilapia)	2,494	2,494	2,489	2,489	2,489	2,489	2,489	2,489	2,489	2,489	2,489	2,489	2,489	2,489	2,489
O&M for Farm Pond	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400
<b>Sub total</b>	<b>26,175</b>	<b>17,975</b>	<b>17,970</b>	<b>16,936</b>	<b>22,136</b>	<b>17,636</b>	<b>17,636</b>	<b>17,436</b>	<b>22,636</b>	<b>17,636</b>	<b>17,636</b>	<b>17,436</b>	<b>22,636</b>	<b>17,636</b>	<b>17,436</b>
<b>Household Cash Expense*2</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>	<b>21,300</b>
<b>Total</b>	<b>47,475</b>	<b>39,275</b>	<b>39,270</b>	<b>38,236</b>	<b>43,436</b>	<b>38,936</b>	<b>38,936</b>	<b>38,736</b>	<b>43,936</b>	<b>38,936</b>	<b>38,936</b>	<b>38,736</b>	<b>43,936</b>	<b>38,936</b>	<b>38,736</b>
<b>Loan payment</b>															
Interest payment for short term	1,100	1,100	950	950	950	950	950	950	950	950	950	950	950	950	1,100
Principal payment for short term	22,000	22,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	22,000
Interest payment for long term	0	0	0	0	0	6,000	11,500	7,800	3,600	3,200	2,800	2,200	1,600	800	0
Principal payment for long term	0	0	0	0	0	0	0	4,000	4,000	8,000	8,000	12,000	12,000	16,000	16,000
<b>Total payment for loan</b>	<b>23,100</b>	<b>23,100</b>	<b>19,950</b>	<b>19,950</b>	<b>19,950</b>	<b>25,950</b>	<b>31,450</b>	<b>31,750</b>	<b>27,550</b>	<b>31,150</b>	<b>30,750</b>	<b>34,150</b>	<b>33,550</b>	<b>36,750</b>	<b>39,100</b>
<b>Total Cash Expense</b>	<b>70,575</b>	<b>62,375</b>	<b>59,220</b>	<b>58,196</b>	<b>63,386</b>	<b>64,886</b>	<b>70,386</b>	<b>70,486</b>	<b>71,486</b>	<b>70,086</b>	<b>69,686</b>	<b>72,886</b>	<b>77,486</b>	<b>75,686</b>	<b>77,836</b>
<b>Net saving</b>	<b>8,980</b>	<b>14,180</b>	<b>17,335</b>	<b>10,419</b>	<b>24,519</b>	<b>1,519</b>	<b>1,219</b>	<b>6,319</b>	<b>28,519</b>	<b>11,919</b>	<b>12,319</b>	<b>9,119</b>	<b>22,519</b>	<b>6,319</b>	<b>4,169</b>
<b>Accumulated cash saving</b>	<b>8,980</b>	<b>23,160</b>	<b>40,495</b>	<b>50,914</b>	<b>75,433</b>	<b>76,962</b>	<b>78,171</b>	<b>84,490</b>	<b>113,009</b>	<b>124,928</b>	<b>137,247</b>	<b>146,366</b>	<b>168,885</b>	<b>175,204</b>	<b>179,373</b>

Note #1 The amount of rice sold excludes that of self-consumption.  
 #2 The expense of self-made rice is excluded from the household expense.  
 #3 First year of Chicken includes the construction cost for a coop.  
 #4 Short term loan interest rate 5%, long term loan interest rate 5%. Farm pond is provided for free by ALRO fund.

**Table G-FB-CF-9 Cash Flow Analysis : Sakohn Nakon Lowland Type**(The case : Short term loan 22,500 baht interest rate 5%, Long term loan 80,000 baht interest r

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>Farm Income</b>															
Rice glutinous*1	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500
Soybeans	1,296	1,296	1,296	1,296	1,296	1,296	1,296	1,296	1,296	1,296	1,296	1,296	1,296	1,296	1,296
Mango (intercropping)	0	0	0	6,500	8,125	16,250	22,750	29,250	35,750	35,750	35,750	35,750	35,750	35,750	35,750
Papaya (intercropping)	2,250	2,250	2,250	0	0	0	0	0	0	0	0	0	0	0	0
Vegetables (String bean)	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500
Vegetables (Chilli)	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600
Chicken	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800
Fish (Tilapia)	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230
Handicraft and hired in agriculture	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
<b>Sub total</b>	<b>35,176</b>	<b>35,176</b>	<b>35,176</b>	<b>39,426</b>	<b>41,051</b>	<b>49,176</b>	<b>55,676</b>	<b>62,176</b>	<b>68,676</b>	<b>68,676</b>	<b>68,676</b>	<b>68,676</b>	<b>68,676</b>	<b>68,676</b>	<b>68,676</b>
<b>Non-farm Income</b>															
<b>Loan</b>															
Short term loan	25,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500
Long term loan	25,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500
Total disbursement of loan	15,000	15,000	15,000	10,000	5,000	0	0	0	0	0	0	0	0	0	0
Total Cash Income	40,500	37,500	37,500	32,500	27,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500
<b>Farm Cash Expense</b>															
Rice glutinous	2,085	2,085	2,085	2,085	2,085	2,085	2,085	2,085	2,085	2,085	2,085	2,085	2,085	2,085	2,085
Soybeans	403	403	403	403	403	403	403	403	403	403	403	403	403	403	403
Mango (intercropping)	5,225	1,475	1,475	1,475	1,475	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100
Papaya (intercropping)	596	596	596	0	0	0	0	0	0	0	0	0	0	0	0
Vegetables (String bean)	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095
Vegetables (Chilli)	2,224	2,224	2,224	2,224	2,224	2,224	2,224	2,224	2,224	2,224	2,224	2,224	2,224	2,224	2,224
Chicken *3	6,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600
Fish (Tilapia)	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494
O&M for Farm Pond	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400
<b>Sub total</b>	<b>21,122</b>	<b>15,372</b>	<b>15,372</b>	<b>14,776</b>	<b>14,776</b>	<b>15,401</b>	<b>15,401</b>	<b>15,401</b>	<b>15,401</b>	<b>15,401</b>	<b>15,401</b>	<b>15,401</b>	<b>15,401</b>	<b>15,401</b>	<b>15,401</b>
<b>Household Cash Expense*2</b>	<b>42,422</b>	<b>36,672</b>	<b>36,672</b>	<b>36,076</b>	<b>36,076</b>	<b>36,701</b>	<b>36,701</b>	<b>36,701</b>	<b>36,701</b>	<b>36,701</b>	<b>36,701</b>	<b>36,701</b>	<b>36,701</b>	<b>36,701</b>	<b>36,701</b>
<b>Loan payment</b>															
Interest payment for short term	1,275	1,275	1,125	1,125	1,125	1,125	1,125	1,125	1,125	1,125	1,125	1,125	1,125	1,125	1,275
Principal payment for short term	25,500	25,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	25,500
Interest payment for long term	0	0	0	0	0	4,500	8,750	5,850	2,700	2,400	2,100	1,650	1,200	600	0
Principal payment for long term	0	0	0	0	0	0	0	3,000	3,000	6,000	6,000	9,000	9,000	12,000	12,000
Total payment for loan	26,775	26,775	23,625	23,625	23,625	28,125	32,375	32,475	29,325	32,925	31,725	34,275	33,825	36,225	38,775
<b>Total Cash Expense</b>	<b>69,197</b>	<b>63,447</b>	<b>60,297</b>	<b>59,701</b>	<b>59,701</b>	<b>64,826</b>	<b>69,076</b>	<b>69,176</b>	<b>66,026</b>	<b>68,726</b>	<b>68,426</b>	<b>70,976</b>	<b>70,526</b>	<b>72,926</b>	<b>75,476</b>
<b>Net saving</b>	<b>6,479</b>	<b>9,229</b>	<b>12,379</b>	<b>12,225</b>	<b>8,850</b>	<b>6,850</b>	<b>9,100</b>	<b>15,500</b>	<b>25,150</b>	<b>22,450</b>	<b>22,750</b>	<b>20,200</b>	<b>20,650</b>	<b>18,250</b>	<b>15,700</b>
<b>Accumulated cash saving</b>	<b>6,479</b>	<b>15,708</b>	<b>28,087</b>	<b>40,312</b>	<b>49,162</b>	<b>56,012</b>	<b>65,112</b>	<b>80,612</b>	<b>105,762</b>	<b>128,212</b>	<b>150,962</b>	<b>171,162</b>	<b>191,812</b>	<b>210,062</b>	<b>226,762</b>

Note #1 The amount of rice sold excludes that of self-consumption.  
 #2 The amount of self-made rice is excluded from the household expense.  
 #3 First year of Chicken includes the construction cost for a coop.  
 #4 Short term loan interest rate 5%, long term loan interest rate 5%. Farm pond is provided for free by ALRO fund.

**Table G-FB-CF-10 Cash Flow Analysis : Sakhon Nakon Upland Type (The case : Short term loan 22,500 baht interest rate 5%, Long term loan 80,000 baht interest r. 15**

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>Farm income</b>															
Rice glutinous*1	900	900	900	900	900	900	900	900	900	900	900	900	900	900	900
Mango (intercropping)	0	0	0	6,500	8,125	16,250	22,750	29,250	35,750	35,750	35,750	35,750	35,750	35,750	35,750
Papaya (intercropping)	2,250	2,250	2,250	0	0	0	0	0	0	0	0	0	0	0	0
Vegetables (String bean)	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500
Vegetables (Chilli)	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600
Chicken	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800
Acacia (Eucalyptus)	0	0	0	0	18,000	0	0	0	0	0	0	0	0	0	0
Fish (Tilapia)	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230	6,230
Handicraft and hired in agriculture	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
<b>Sub total</b>	<b>30,280</b>	<b>30,280</b>	<b>34,530</b>	<b>54,155</b>	<b>44,280</b>	<b>50,780</b>	<b>57,280</b>	<b>63,780</b>	<b>63,780</b>	<b>63,780</b>	<b>63,780</b>	<b>63,780</b>	<b>63,780</b>	<b>63,780</b>	<b>63,780</b>
<b>Non-farm income</b>															
<b>Loan</b>															
Short term loan	25,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500
Long term loan	25,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500
<b>Total disbursement of loan</b>	<b>20,000</b>	<b>20,000</b>	<b>20,000</b>	<b>10,000</b>	<b>10,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Cash Income</b>	<b>45,500</b>	<b>42,500</b>	<b>42,500</b>	<b>32,500</b>	<b>32,500</b>	<b>22,500</b>	<b>22,500</b>	<b>22,500</b>	<b>22,500</b>	<b>22,500</b>	<b>22,500</b>	<b>22,500</b>	<b>22,500</b>	<b>22,500</b>	<b>22,500</b>
<b>Total Cash Expense</b>	<b>75,780</b>	<b>72,780</b>	<b>72,780</b>	<b>67,030</b>	<b>66,655</b>	<b>66,780</b>	<b>73,280</b>	<b>79,780</b>	<b>104,280</b>	<b>86,280</b>	<b>86,280</b>	<b>104,280</b>	<b>86,280</b>	<b>86,280</b>	<b>86,280</b>
<b>Farm Cash Expense</b>															
Rice glutinous	1,251	1,251	1,251	1,251	1,251	1,251	1,251	1,251	1,251	1,251	1,251	1,251	1,251	1,251	1,251
Mango (intercropping)	5,225	1,475	1,475	1,475	1,475	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100
Papaya (intercropping)	596	596	596	0	0	0	0	0	0	0	0	0	0	0	0
Vegetables (String bean)	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095
Vegetables (Chilli)	2,224	2,224	2,224	2,224	2,224	2,224	2,224	2,224	2,224	2,224	2,224	2,224	2,224	2,224	2,224
Chicken *3	6,800	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600
Acacia (Eucalyptus)	3,800	600	600	600	600	600	600	600	600	600	600	600	600	600	600
Fish (Tilapia)	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494	2,494
O & M for Farm Pond	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400
<b>Sub total</b>	<b>23,685</b>	<b>14,735</b>	<b>14,735</b>	<b>13,939</b>	<b>19,139</b>	<b>14,764</b>	<b>14,764</b>	<b>14,564</b>	<b>19,764</b>	<b>14,764</b>	<b>14,764</b>	<b>14,564</b>	<b>19,764</b>	<b>14,764</b>	<b>14,564</b>
<b>Total</b>	<b>44,985</b>	<b>36,035</b>	<b>36,035</b>	<b>35,239</b>	<b>40,439</b>	<b>36,064</b>	<b>36,064</b>	<b>35,864</b>	<b>41,064</b>	<b>36,064</b>	<b>36,064</b>	<b>35,864</b>	<b>41,064</b>	<b>36,064</b>	<b>35,864</b>
<b>Household Cash Expense*2</b>															
Loan payment	1,275	1,275	1,125	1,125	1,125	1,125	1,125	1,125	1,125	1,125	1,125	1,125	1,125	1,125	1,275
Interest payment for short term	25,500	25,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	25,500
Interest payment for long term	0	0	0	0	0	6,000	7,800	7,800	3,600	3,200	2,800	2,200	1,600	800	0
Principal payment for long term	0	0	0	0	0	0	0	4,000	4,000	8,000	8,000	12,000	12,000	16,000	16,000
<b>Total payment for loan</b>	<b>26,775</b>	<b>26,775</b>	<b>23,625</b>	<b>23,625</b>	<b>23,625</b>	<b>29,625</b>	<b>35,125</b>	<b>35,425</b>	<b>31,225</b>	<b>34,825</b>	<b>37,825</b>	<b>37,825</b>	<b>40,425</b>	<b>42,775</b>	<b>42,775</b>
<b>Total Cash Expense</b>	<b>71,760</b>	<b>62,810</b>	<b>59,660</b>	<b>58,864</b>	<b>64,064</b>	<b>65,689</b>	<b>71,189</b>	<b>71,289</b>	<b>72,289</b>	<b>70,889</b>	<b>73,689</b>	<b>73,689</b>	<b>78,289</b>	<b>76,489</b>	<b>78,639</b>
<b>Net saving</b>	<b>4,020</b>	<b>9,970</b>	<b>13,120</b>	<b>8,166</b>	<b>22,591</b>	<b>1,091</b>	<b>2,091</b>	<b>8,491</b>	<b>31,991</b>	<b>15,391</b>	<b>15,791</b>	<b>12,591</b>	<b>25,991</b>	<b>9,791</b>	<b>7,641</b>
<b>Accumulated cash saving</b>	<b>4,020</b>	<b>13,990</b>	<b>27,110</b>	<b>35,276</b>	<b>57,867</b>	<b>58,958</b>	<b>61,049</b>	<b>69,540</b>	<b>101,531</b>	<b>116,922</b>	<b>132,713</b>	<b>145,304</b>	<b>171,295</b>	<b>181,086</b>	<b>188,727</b>

Note #1 The amount of rice sold excludes that of self-consumption.

#2 The expense of self-made rice is excluded from the household expense.

#3 First year of Chicken includes the construction cost for a coop.

#4 Short term loan interest rate 5%, long term loan interest rate 5%. Farm pond is provided for free by ALRG fund.

**Table G-FB-CF-11 Cash Flow Analysis : 6000m3 pond Type (The case : Short term loan 55,000 baht interest rate 5%, Long term loan 80,000 baht interest rate 5%+Pond 122,743 baht.)**

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>Farm income</b>	7,100	7,100	7,100	7,100	7,100	7,100	7,100	7,100	7,100	7,100	7,100	7,100	7,100	7,100	7,100
Rice glutinous*1	23,760	23,760	23,760	23,760	23,760	23,760	23,760	23,760	23,760	23,760	23,760	23,760	23,760	23,760	23,760
Sugarcane	0	0	0	7,800	9,750	19,500	27,300	35,100	42,900	42,900	42,900	42,900	42,900	42,900	42,900
Mango (intercropping)	18,000	18,000	18,000	0	0	0	0	0	0	0	0	0	0	0	0
Papaya (intercropping)	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500
Vegetables (String bean)	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800
Vegetables (Chilli)	15,600	15,600	15,600	15,600	15,600	15,600	15,600	15,600	15,600	15,600	15,600	15,600	15,600	15,600	15,600
Chicken	2,592	2,592	2,592	2,592	2,592	2,592	2,592	2,592	2,592	2,592	2,592	2,592	2,592	2,592	2,592
Soybeans	2,300	2,300	2,300	2,300	2,300	2,300	2,300	2,300	2,300	2,300	2,300	2,300	2,300	2,300	2,300
Groundnuts	31,150	31,150	31,150	31,150	31,150	31,150	31,150	31,150	31,150	31,150	31,150	31,150	31,150	31,150	31,150
Fish (Tilapia)	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Handicraft and hired in agricultural	128,802	129,802	129,802	119,602	121,552	131,302	139,102	146,902	154,702	154,702	154,702	154,702	154,702	154,702	154,702
<b>Sub total</b>	128,802	129,802	129,802	119,602	121,552	131,302	139,102	146,902	154,702	154,702	154,702	154,702	154,702	154,702	154,702
<b>Non-farm income</b>	58,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000
<b>Loan</b>	58,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000
Short term loan	58,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000
Long term loan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total disbursement of loan</b>	142,743	20,000	20,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
<b>Total Cash Income*4</b>	200,743	75,000	75,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000
<b>Farm Cash Expense</b>	3,296	3,296	3,296	3,296	3,296	3,296	3,296	3,296	3,296	3,296	3,296	3,296	3,296	3,296	3,296
Rice glutinous	13,026	13,026	13,026	13,026	13,026	13,026	13,026	13,026	13,026	13,026	13,026	13,026	13,026	13,026	13,026
Sugarcane	6,270	1,770	1,770	1,770	1,770	1,770	1,770	1,770	1,770	1,770	1,770	1,770	1,770	1,770	1,770
Mango (intercropping)	596	596	596	0	0	0	0	0	0	0	0	0	0	0	0
Papaya (intercropping)	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283	3,283
Vegetables (String bean)	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672	6,672
Vegetables (Chilli)	11,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200
Chicken *3	805	805	805	805	805	805	805	805	805	805	805	805	805	805	805
Soybeans	1,035	1,035	1,035	1,035	1,035	1,035	1,035	1,035	1,035	1,035	1,035	1,035	1,035	1,035	1,035
Groundnuts	12,470	12,470	12,470	12,470	12,470	12,470	12,470	12,470	12,470	12,470	12,470	12,470	12,470	12,470	12,470
Fish (Tilapia)	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600
O&M for Farm Pond	60,253	53,753	53,753	53,157	53,157	53,907	53,907	53,907	53,907	53,907	53,907	53,907	53,907	53,907	53,907
<b>Sub total</b>	21,300	21,300	21,300	21,300	21,300	21,300	21,300	21,300	21,300	21,300	21,300	21,300	21,300	21,300	21,300
<b>Household Cash Expense*2</b>	81,553	75,053	75,053	74,457	74,457	75,207	75,207	75,207	75,207	75,207	75,207	75,207	75,207	75,207	75,207
<b>Loan payment</b>	2,900	2,900	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,900
Interest payment for short term	58,000	58,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	58,000
Principal payment for short term	0	0	0	0	0	24,411	29,911	19,767	9,123	8,110	7,096	5,575	4,055	2,027	-0
Interest payment for long term	0	0	0	0	0	0	0	10,137	10,137	20,274	20,274	30,411	30,411	40,549	40,549
Principal payment for long term	60,900	60,900	57,750	57,750	57,750	82,161	87,561	87,561	77,011	86,134	85,120	93,737	92,216	100,326	101,449
<b>Total payment for loan</b>	142,453	135,953	132,903	132,207	132,207	157,368	162,868	162,862	152,218	161,341	160,327	168,944	167,423	175,533	176,656
<b>Total Cash Expense</b>	65,349	68,849	71,999	52,395	54,345	28,934	31,234	39,040	57,484	48,361	49,375	40,758	42,279	34,169	33,045
<b>Net saving</b>	65,349	134,198	206,197	258,592	312,997	341,871	373,104	412,145	469,629	517,990	567,365	608,123	650,401	684,570	717,617
<b>Accumulated cash saving</b>															

Note #1: The amount of rice sold excludes that of self-consumption.  
 #2 The expense of self-made rice is excluded from the household expense.  
 #3 First year of Chicken includes the construction cost for a coop.  
 #4 The total cash income excludes the loan for pond excavation.

**Table G-PE-ALL-1 Farmland Use ALRO N.E. region**  
**Current Farmland Use**

	Kohn Kean	Mahasarakham	Mukudahan	Sakhon Nakon (rai)
Study Area	43,400	17,400	10,700	33,400
Service area %	85	90	80	85
Service area	36,700	15,660	8,560	28,390
Rice glutinous	6,208	5,352	2,560	10,280
Rice non-glutinous	1,552	1,338	640	2,570
Cassava	7,576	4,824	3,862	6,398
Sugarcane	13,478	1,500	767	2,990
Soybean	0	0	0	0
Groundnuts	0	0	0	0
Chilli	15	53	0	0
Stringbean	15	53	0	0
Mango	1,500	825	571	2,112
Eucalyptus	0	0	0	0
Papaya	486	275	200	750
Grassland	0	380	0	0
Fallow	5,870	0	0	0
Unplanted or farmyard etc.	0	0	0	0
<b>Total</b>	<b>36,700</b>	<b>14,600</b>	<b>8,600</b>	<b>25,100</b>

**Future without Farmland Use**

	Kohn Kean	Mahasarakham	Mukudahan	Sakhon Nakon (rai)
Study Area	43,400	17,400	10,700	33,400
Service area %	85	90	80	85
Service area	36,700	15,660	8,560	28,390
Rice glutinous	6,208	5,352	2,560	10,280
Rice non-glutinous	1,552	1,338	640	2,570
Cassava	7,576	4,824	3,862	6,398
Sugarcane	13,478	1,500	767	2,990
Soybean	0	0	0	0
Groundnuts	0	0	0	0
Chilli	15	53	0	0
Stringbean	15	53	0	0
Mango	1,500	825	571	2,112
Eucalyptus	0	0	0	0
Papaya	486	275	200	750
Grassland	0	380	0	0
Fallow	5,870	0	0	0
Unplanted or farmyard etc.	0	0	0	0
<b>Total</b>	<b>36,700</b>	<b>14,600</b>	<b>8,600</b>	<b>25,100</b>

**Future with Farmland Use**

	Kohn Kean	Mahasarakham	Mukudahan	Sakhon Nakon (rai)
Study Area	43,400	17,400	10,700	33,400
Service area %	85	90	80	85
Service area	36,700	15,660	8,560	28,390
Rice glutinous	5,897	4,337	2,432	9,880
Rice non-glutinous	1,474	1,084	608	2,470
Cassava	3,743	1,130	2,595	3,664
Sugarcane	15,553	1,520	760	2,110
Soybean	0	0	61	151
Groundnuts	0	0	61	150
Chilli	540	405	83	295
Stringbean	543	404	82	295
Mango	1,785	825	723	2,730
Eucalyptus	0	0	416	1,156
Papaya	595	275	241	910
Grassland	1,370	3,080	0	0
Fallow	3,060	0	0	0
Unplanted or farmyard etc.	2,140	1,540	660	1,610
<b>Total</b>	<b>36,700</b>	<b>14,600</b>	<b>8,722</b>	<b>25,421</b>

Note Total area includes the area of soybean and groundnuts which is being to be planted after harvesting rice.

**Table G-PE-ALL-2**  
**Present and Projected future Yield**

		(kg/rai)		
		Present	Future Without	Future With
Rice glutinous	KK	300	300	350
	MH	260	260	300
	MK	250	250	300
	SN	350	350	400
Rice non-glutinous	KK	300	300	350
	MH	260	260	300
	MK	250	250	300
	SN	350	350	400
Cassava		1,800	1,800	2,500
Sugarcane		7,200	7,200	7,200
Soybean		216	216	216
Groundnuts		230	230	230
Chilli		230	230	230
Stringbean		700	700	700
Mango		1,100	1,100	1,100
Eucalyptus		15,000	15,000	15,000
Papaya		3,000	3,000	3,000
Tilapia per pond		180	180	180
Cow per head		400	400	400

**Table G-PE-ALL-3**

**Future without projects area cropped and Production**

Service area	Kohn Kean		Mahasarakham		Mukdahhan		Sakhon Nakon	
	Area cropped (rai)	Total Production(t)	Area cropped (rai)	Total Production(t)	Area cropped (rai)	Total Production(t)	Area cropped (rai)	Total Production(t)
Rice glutinous	6,208	1,862,400	5,352	1,391,520	2,560	640,000	10,280	3,598,000
Rice non-glutinous	1,552	465,600	1,338	347,880	640	160,000	2,570	899,500
Cassava	7,576	13,636,800	4,824	8,683,200	3,862	6,951,600	6,398	11,516,400
Sugarcane	13,478	97,041,600	1,500	10,800,000	767	5,522,400	2,990	21,528,000
Soybean	0	0	0	0	0	0	0	0
Groundnuts	0	0	0	0	0	0	0	0
Chilli	15	3,450	53	12,190	0	0	0	0
Stringbean	15	10,500	53	37,100	0	0	0	0
Mango	1,500	1,650,000	825	907,500	571	628,100	2,112	2,323,200
Papaya	486	1,458,000	275	825,000	200	600,000	750	2,250,000
Eucalyptus	0	0	0	0	0	0	0	0
<b>Total</b>		116,128,350		23,004,390		14,502,100		42,115,100

**Future with projects area cropped and Production**

Service area	Kohn Kean		Mahasarakham		Mukdahhan		Sakhon Nakon	
	Area cropped (rai)	Total Production(t)	Area cropped (rai)	Total Production(t)	Area cropped (rai)	Total Production(t)	Area cropped (rai)	Total Production(t)
Rice glutinous	5,897	2,063,950	4,337	1,301,100	2,432	729,600	9,880	3,952,000
Rice non-glutinous	1,474	515,900	1,084	325,200	608	182,400	2,470	988,000
Cassava	3,743	9,357,500	1,130	2,825,000	2,595	6,487,500	3,664	9,160,000
Sugarcane	15,553	111,981,600	1,520	10,944,000	760	5,472,000	2,110	15,192,000
Soybean	0	0	0	0	61	13,176	151	32,616
Groundnuts	0	0	0	0	61	14,030	150	34,500
Chilli	540	124,200	405	93,150	83	19,090	295	67,850
Stringbean	543	380,100	404	282,800	82	57,400	295	206,500
Mango	1,785	1,963,500	825	907,500	723	795,300	2,730	3,003,000
Papaya	595	1,785,000	275	825,000	241	723,000	910	2,730,000
Eucalyptus	0	0	0	0	416	6,240,000	1,156	17,340,000
<b>Total</b>		128,171,750		17,503,750		20,733,496		52,706,466



**Table G-PE-KK-4-1 KOHN KEAN AREA  
Crop Budget (Financial base)**

<b>Rice glutinous</b>				
Crop Budget		Present	Future w/o Project	Future w/ Project
Yield	(ton/rai)	0.30	0.30	0.35
Farmgate Price	(Baht/ton)	2,866	2,541	2,541
Gross Value of production	(Baht/rai)	859.9	762.3	889.3
Production costs	(Baht/rai)	318.3	318.3	316.2
Net value of production	(Baht/rai)	541.7	444.0	573.1
Labor requirement	(mandays/rai)	7.6	7.6	7.8

<b>Rice non glutinous</b>				
Crop Budget		Present	Future w/o Project	Future w/ Project
Yield	(ton/rai)	0.30	0.30	0.35
Farmgate Price	(Baht/ton)	3,185	2,823	2,823
Gross Value of production	(Baht/rai)	955.5	847.0	988.1
Production costs	(Baht/rai)	318.3	318.3	298.1
Net value of production	(Baht/rai)	637.2	528.7	690.0
Labor requirement	(mandays/rai)	7.6	7.6	7.8

<b>Cassava</b>				
Crop Budget		Present	Future w/o Project	Future w/ Project
Yield	(ton/rai)	1.80	1.80	2.50
Farmgate Price	(Baht/ton)	771.8	771.8	771.8
Gross Value of production	(Baht/rai)	1389.2	1389.2	1929.5
Production costs	(Baht/rai)	611.0	611.0	761.0
Net value of production	(Baht/rai)	778.3	778.3	1168.5
Labor requirement	(mandays/rai)	7.5	7.5	7.5

<b>Sugarcane</b>				
Crop Budget		Present	Future w/o Project	Future w/ Project
Yield	(ton/rai)	7.20	7.20	7.20
Farmgate Price	(Baht/ton)	426.2	426.2	412.3
Gross Value of production	(Baht/rai)	3,068.4	3,068.4	2,968.5
Production costs	(Baht/rai)	2,061.3	2,061.3	2,040.9
Net value of production	(Baht/rai)	1,007.1	1,007.1	927.7
Labor requirement	(mandays/rai)	18	18	18

<b>Soybean</b>				
Crop Budget		Present	Future w/o Project	Future w/ Project
Yield	(ton/rai)	0.22	0.22	0.22
Farmgate Price	(Baht/ton)	9,911.8	9,911.8	8,695.2
Gross Value of production	(Baht/rai)	2,140.9	2,140.9	1,878.2
Production costs	(Baht/rai)	745.9	745.9	709.8
Net value of production	(Baht/rai)	1,395.1	1,395.1	1,168.4
Labor requirement	(mandays/rai)	0	0	0

<b>Groundnuts</b>				
Crop Budget		Present	Future w/o Project	Future w/ Project
Yield	(ton/rai)	0.23	0.23	0.23
Farmgate Price	(Baht/ton)	6,447.0	6,447.0	5,587.2
Gross Value of production	(Baht/rai)	1,482.8	1,482.8	1,285.1
Production costs	(Baht/rai)	952.5	952.5	916.4
Net value of production	(Baht/rai)	530.3	530.3	368.7
Labor requirement	(mandays/rai)	28	28	28

**Table G-PE-KK-4-2 KOHN KEAN AREA  
Crop Budget (Financial base)**

<b>Chilli</b>				
Crop Budget		Present	Future w/o Project	Future w/ Project
Yield	(ton/rai)	0.2	0.2	0.2
Farmgate Price	(Baht/ton)	35,000.0	35,000.0	35,000.0
Gross Value of production	(Baht/rai)	8,050.0	8,050.0	8,050.0
Production costs	(Baht/rai)	3,942.2	3,942.2	3,877.8
Net value of production	(Baht/rai)	4,107.8	4,107.8	4,172.2
Labor requirement	(mandays/rai)	10	10	10

<b>Stringbean</b>				
Crop Budget		Present	Future w/o Project	Future w/ Project
Yield	(ton/rai)	0.7	0.7	0.7
Farmgate Price	(Baht/ton)	9000.0	9000.0	9000.0
Gross Value of production	(Baht/rai)	6300.0	6300.0	6300.0
Production costs	(Baht/rai)	1859.2	1859.2	1786.1
Net value of production	(Baht/rai)	4440.8	4440.8	4513.9
Labor requirement	(mandays/rai)	12	12	12

<b>Payaya</b>				
Crop Budget		Present	Future w/o Project	Future w/ Project
Yield	(ton/rai)	3.0	3.0	3.0
Farmgate Price	(Baht/ton)	4,286.1	4,286.1	4,286.1
Gross Value of production	(Baht/rai)	12,858.4	12,858.4	12,858.4
Production costs	(Baht/rai)	2,127.2	2,127.2	2,112.1
Net value of production	(Baht/rai)	10,731.2	10,731.2	10,746.3
Labor requirement	(mandays/rai)	29	29	29

**Table G-PE-KK-5-1 KOHN KEAN AREA**  
**Present and Future Farmgate Price of Farm Products and Inputs**

Crops/Inputs	Unit	Without		With	
		Financial	Economic	Financial	Economic
Rice glutinous	Baht/ton	2,866.4	3,394.2	2,540.9	3,019.9
Rice non-glutinous	Baht/ton	3,184.9	3,771.3	2,823.3	3,355.4
Cassava	Baht/ton	771.8	812.2	771.8	812.2
Sugarcane	Baht/ton	426.2	447.2	412.3	433.1
Soybean	Baht/ton	9,911.8	5,529.5	8,695.2	4,846.8
Groundnuts	Baht/ton	6,447.0	3,585.0	5,587.2	3,102.5
Chilli	Baht/ton	35,000	35,000	35,000	35,000
Stringbean	Baht/ton	9,000	9,000	9,000	9,000
Mango for domestic	Baht/ton	10,000.0	10,000.0	10,000.0	10,000.0
Mango for export	Baht/ton	17,697.5	18,777.6	17,697.5	18,777.6
Eucalyptus	Baht/ton	484.7	750.4	484.7	750.4
Papaya	Baht/ton	4,286.1	5,969.1	4,286.1	5,828.1
Cow	Baht/ton	1,500.1	4,851.5	1,583.3	5,086.0
Chicken	Baht/kg	35.1	42.9	35.1	42.9
Chicken (Native)	Baht/kg	40.0	40.0	40.0	40.0
Tilapia	Baht/kg	30.0	30.0	30.0	30.0
46-0-0	Baht/50kg	432	310	333	210
15-15-15	Baht/50kg	357	222	256	184
16-16-8	Baht/50kg	343	246	265	181
16-20-0	Baht/50kg	344	247	260	177

**TableG-PE-KK-5-2-1 PRICE STRUCTURE KOHN KEAN AREA**

Rice Non-Glutinous	1996		2005	
	Financial	Economic k)	Financial	Economic
Export price f.o.b. at Bangkok port (\$US/ton)				
Export price f.o.b. at Bangkok port (Baht/ton)	7,417.5	7,417.5	6,670.0	6,670.0
Export Tariff (10%)	741.8	0.0	667.0	0.0
Average Price of mixed grade rice (Baht/ton) a)	6,542.2	7,269.2	5,882.9	6,536.6
Port Handling and charges b)	327.1	300.9	294.1	270.6
Trader's Margin c)	98.1	90.3	88.2	81.2
Wholesale Price at Bangkok	6,117.0	6,877.9	5,500.5	6,184.8
Trader's Margin d)	91.8	84.4	82.5	75.9
Rice Price at rice milling factory	6,025.2	6,793.5	5,418.0	6,108.9
Paddy Price at rice milling factory e)	3,976.7	4,483.7	3,575.9	4,031.9
Milling cost f)	100	92.0	100	92.0
Transport cost to Milling Factory g)	220.0	191.4	220.0	191.4
Trader's Margin h)	198.8	182.9	178.8	164.5
Local market price	3,457.8	4,017.4	3,077.1	3,584.0
Local trader's margin i)	172.9	159.1	153.9	141.5
Transport cost to local market j)	100.0	87.0	100.0	87.0
Farmgate price	3,184.9	3,771.3	2,823.3	3,355.4

- a) Adjusted to the quality of rice price of 100%, 5%, 10%, 25%.  
b) 5% of Average Price of mixed grade rice.  
c) 1.5 % of export rice.  
d) 1.5 % of export rice.  
e) Milling recovery rate 66%.  
f) Milling cost 100 Baht/ton  
g) Kohn Kean to Bangkok milling factory, about 400 km  
h) 5% of paddy price at rice milling factory  
i) 5% of local market price  
j) Priority area to Muang of Kohn Kean, 60 km  
k) Standard conversion factor is 0.92.

Cassava (Tapioca pellets)	1996		2005	
	Financial	Economic	Financial	Economic
Import Price c.i.f. at Rotterdam port (\$US/ton)				
Ocean freight and insurance a)				
Export price f.o.b. at Bangkok port (\$US/ton)				
Export price f.o.b. at Bangkok port (Baht/ton)	2,345.0	2,345.0	2,345.0	2,345.0
Tariff (0%)	0.0	0.0	0.0	0.0
Value Add Tax	0.0	0.0	0.0	0.0
Port Handling and charges b)	117.3	107.9	117.3	107.9
Port gate price	2,227.8	2,237.1	2,227.8	2,237.1
Transport cost to Port near Bangkok c)	222.8	193.8	222.8	193.8
Trader's Margin d)	111.4	102.5	111.4	102.5
Processed cost e)	150	138.0	150	138.0
Local cassava pellets factory price	1,743.6	1,802.8	1,743.6	1,802.8
Cassava equivalent price (50%) e)	871.8	901.4	871.8	901.4
Local trader's margin	44.0	40.5	44.0	40.5
Local Transport cost	56.0	48.7	56.0	48.7
Farmgate price	771.8	812.2	771.8	812.2

- a) Freight rate 14\$/ton  
b) 5 % of f.o.b. price.  
c) 10 % of port gate price.  
d) 5 % of port gate price.  
e) 1 kg of cassava pellets is equivalent to 2 kg of cassava roots.

Sugarcane	1996		2005	
	Financial	Economic a)	Financial	Economic
Export price f.o.b. at Bangkok port (\$US/ton)				
Export price f.o.b. at Bangkok port (Baht/ton)	5,770.0	5,770.0	5,622.5	5,622.5
Tariff (0%)	0.0	0.0	0.0	0.0
Value Add Tax	0.0	0.0	0.0	0.0
Port Handling and charges b)	288.5	265.4	281.1	258.6
Port gate price	5,481.5	5,504.6	5,341.4	5,363.9
Transport cost to Port near Bangkok c)	274.1	238.4	267.1	232.3
Trader's Margin d)	274.1	252.1	267.1	245.7
Processed cost e)	150	138.0	150	138.0
Local sugar factory price	4,783.4	4,876.0	4,657.2	4,747.8
Sugarcane equivalent price (11%) e)	526.2	536.4	512.3	522.3
Local trader's margin	44.0	40.5	44.0	40.5
Local Transport cost	56.0	48.7	56.0	48.7
Farmgate price	426.2	447.2	412.3	433.1

- a) Standard conversion factor is 0.92.  
b) 5 % of f.o.b. price.  
c) 5 % of port gate price.  
d) 5 % of port gate price.  
e) 1 kg of cassava pellets is equivalent to 2 kg of cassava roots.

**Table G-PE-KK-5-2-2 PRICE STRUCTURE KOHN KEAN AREA**

Soybean	1996		2005	
	Financial	Economic	Financial	Economic
Export Price f.o.b. at Rotterdam port (\$US/ton)		266.9		238.6
Ocean freight and insurance a)		34.0		34.0
Import price c.i.f. at Bangkok port (\$US/ton)		232.9		204.6
Import price c.i.f. at Bangkok port (Baht/ton)	5,822.5	5,822.5	5,115.0	5,115.0
Import Tariff (60%)	3,493.5	0.0	3,069.0	0.0
Value Add Tax (10%)	931.6	0.0	818.4	0.0
Port Handling and charges b)	291.1	267.8	255.8	235.3
Port gate price	10,538.7	6,090.3	9,258.2	5,350.3
Transport cost to Port near Bangkok c)	263.5	229.2	231.5	201.4
Trader's Margin d)	263.5	242.4	231.5	212.9
Local market price	10,011.8	5,618.7	8,795.2	4,936.0
Local trader's margin	44.0	40.5	44.0	40.5
Local Transport cost	56.0	48.7	56.0	48.7
Farmgate price	9,911.8	5,529.5	8,695.2	4,846.8

a) Freight rate \$24/ton and insurance \$10.

b) 5 % of f.o.b. price.

c) 2.5 % of port gate price.

d) 2.5 % of port gate price.

Groundnuts	1996		2005	
	Financial	Economic	Financial	Economic
Export Price f.o.b. at Rotterdam port (\$US/ton)		186.3		166.3
Ocean freight and insurance a)		34.0		34.0
Import price c.i.f. at Bangkok port (\$US/ton)		152.3		132.3
Import price c.i.f. at Bangkok port (Baht/ton)	3,807.5	3,807.5	3,307.5	3,307.5
Import Tariff (60%)	2,284.5	0.0	1,984.5	0.0
Value Add Tax (10%)	609.2	0.0	529.2	0.0
Port Handling and charges b)	190.4	175.1	165.4	152.1
Port gate price	6,891.6	3,982.6	5,986.6	3,459.6
Transport cost to Port near Bangkok c)	172.3	149.9	149.7	130.2
Trader's Margin d)	172.3	158.5	149.7	137.7
Local market price	6,547.0	3,674.2	5,687.2	3,191.7
Local trader's margin	44.0	40.5	44.0	40.5
Local Transport cost	56.0	48.7	56.0	48.7
Farmgate price	6,447.0	3,585.0	5,587.2	3,102.5

a) Freight rate \$24/ton and insurance \$10.

b) 5 % of f.o.b. price.

c) 2.5 % of port gate price.

d) 2.5 % of port gate price.

Mango (Khleo Sawual)	1996		2005	
	Financial	Economic	Financial	Economic
Import Price c.i.f. at Tokyo port (\$US/ton)		1,500		1,500
Ocean freight and insurance a)		140.0		140.0
Export price f.o.b. at Bangkok port (\$US/ton)		1,360		1,360
Export price f.o.b. at Bangkok port (Baht/ton) b)	34,000.0	34,000.0	34,000.0	34,000.0
Export Tax (0%)	0.0	0.0	0.0	0.0
Value Add Tax (10%)	3,400.0	3,400.0	3,400.0	3,400.0
Port Handling and charges c)	1,700.0	1,564.0	1,700.0	1,564.0
Transport cost to Port	146.0	127.0	146.0	127.0
Office Expenditure	850.0	782.0	850.0	782.0
Certificate License	200	168.0	200	168.0
Packing	1400	1,288.0	1400	1,288.0
Labour for grading	1200	1,104.0	1200	1,104.0
Wholesale Price at Bangkok market	25,104.0	25,567.0	25,104.0	25,567.0
Transport cost to Bangkok	346.0	301.0	346.0	301.0
Trader's Margin d)	3,765.6	3,464.4	3,765.6	3,464.4
Value Add Tax (10%)	2,510.4	2,556.7	2,510.4	2,556.7
Local market price	20,992.4	21,801.6	20,992.4	21,801.6
Local trader's margin e)	3,148.9	2,897.0	3,148.9	2,897.0
Local Transport cost	146.0	127.0	146.0	127.0
Farmgate price (Baht/ton)	17,697.5	18,777.6	17,697.5	18,777.6

a) Freight rate 2400\$/20ton by Reefer.

b) Exchange rate 1 US dollar=25 baht.

c) 5 % of f.o.b. price.

d) 15 % of Wholesale Price.

e) 15 % of Wholesale Price.

**Table G-PE-KK-5-2-3 PRICE STRUCTURE KOHN KEAN AREA**

Acacia(Eucalyptus, Wood chip)	1996		2005	
	Financial	Economic	Financial	Economic
Import Price c.i.f. at Yokohama port (\$US/ton)				121
Ocean freight and insurance a)				40.0
Export price f.o.b. at Bangkok port (\$US/ton)				81.0
Export price f.o.b. at Bangkok port (Baht/ton)	2,025.0	2,025.0	2,025.0	2,025.0
Tariff (40%)	810.0	0.0	810.0	0.0
Value Add Tax (0%)	0.0	0.0	0.0	0.0
Port Handling and charges b)	101.3	93.2	101.3	93.2
Port gate price	1,113.8	1,931.9	1,113.8	1,931.9
Transport cost to Port near Bangkok	72.8	63.3	72.8	63.3
Trader's Margin c)	55.7	51.2	55.7	51.2
Processed cost	150	138.0	150	138.0
Local cassava pellets factory price	835.3	1,679.3	835.3	1,679.3
Woodchip equivalent price (70%) d)	584.7	839.6	584.7	839.6
Local trader's margin	44.0	40.5	44.0	40.5
Local Transport cost	56.0	48.7	56.0	48.7
Farmgate price	484.7	750.4	484.7	750.4

a) Freight rate 35\$/ton

b) 5 % of f.o.b. price.

c) 5 % of port gate price.

d) 1 ton of wood is equivalent to 0.7 ton of wood chip.

Papaya	1996		2005	
	Financial	Economic	Financial	Economic
Import Price c.i.f. at Tokyo port (\$US/ton)				600
Ocean freight and insurance a)				140.0
Export price f.o.b. at Bangkok port (\$US/ton)				460
Export price f.o.b. at Bangkok port (Baht/ton) b)	11,500.0	11,500.0	11,500.0	11,500.0
Export Tax (0%)	0.0	0.0	0.0	0.0
Value Add Tax (10%)	1,150.0	0.0	1,150.0	0.0
Port Handling and charges c)	575.0	529.0	575.0	529.0
Transport cost to Port	146.0	127.0	146.0	127.0
Office Expenditure	287.5	264.5	287.5	264.5
Certificate License	200	168.0	200	168.0
Packing	1400	1,288.0	1400	1,288.0
Labour for grading	1200	1,104.0	1200	1,104.0
Wholesale Price at Bangkok market	6,541.5	8,019.5	6,541.5	8,019.5
Transport cost to Bangkok	346.0	301.0	346.0	301.0
Trader's Margin d)	981.2	902.7	981.2	981.2
Value Add Tax (10%)	654.2	801.9	654.2	801.9
Local market price	5,214.3	6,815.7	5,214.3	6,737.2
Local trader's margin e)	782.1	719.6	782.1	782.1
Local Transport cost	146.0	127.0	146.0	127.0
Farmgate price (Baht/ton)	4,286.1	5,969.1	4,286.1	5,828.1

a) Freight rate 2400\$/20ton by Reefer.

b) Exchange rate 1 US dollar = 25 baht

c) 5 % of f.o.b. price.

d) 15 % of Wholesale Price.

e) 15 % of Wholesale Price.

**Table G-PE-KK-5-2-4 PRICE STRUCTURE KOHN KEAN AREA**

Cow	1996		2005		
	Financial	Economic	Financial	Economic	
Export Price f.o.b. at US port (\$US/ton)					156.3
Ocean freight and insurance a)					63.0
Import price c.i.f. at Bangkok port (\$US/ton)					219.3
Import price c.i.f. at Bangkok port (Baht/ton)	5,482.5	5,482.5	5,732.5	5,732.5	
Import Tariff (60%)	3,289.5	0.0	3,439.5	0.0	
Value Add Tax (10%)	0.0	0.0	0.0	0.0	
Port Handling and charges b)	274.1	252.2	286.6	263.7	
Port gate price	1,918.9	5,230.3	2,006.4	5,468.8	
Transport cost to Port near Bangkok	72.8	63.3	72.8	63.3	
Trader's Margin c)	95.9	88.3	100.3	92.3	
Processed cost	150	138.0	150	138.0	
Local meat factory price	1,600.1	4,940.7	1,683.3	5,175.2	
Local trader's margin	44.0	40.5	44.0	40.5	
Local Transport cost	56.0	48.7	56.0	48.7	
Farmgate price	1,500.1	4,851.5	1,583.3	5,086.0	

a) Freight rate \$53/ton and insurance \$10/ton.

b) 5 % of f.o.b. price.

c) 5 % of port gate price.

Chicken	1996		2005		
	Financial	Economic	Financial	Economic	
Export Price f.o.b. at Bangkok port (\$US/ton)					2484.0
Export price c.i.f. at Bangkok port (Baht/ton)	62,100.0	62,100.0	62,100.0	62,100.0	
Export Tax (0%)	0.0	0.0	0.0	0.0	
Value Add Tax (10%)	6,210.0	0.0	6,210.0	0.0	
Port Handling and charges a)	6,210.0	5,713.2	6,210.0	5,713.2	
Office Expenditure b)	1,552.5	1,428.3	1,552.5	1,428.3	
Certificate License	200	168.0	200	168.0	
Packing	1400	1,288.0	1400	1,288.0	
Port gate price	49,680.0	56,386.8	49,680.0	56,386.8	
Transport cost to Port near Bangkok	150.0	130.5	150.0	130.5	
Trader's Margin c)	2,484.0	2,285.3	2,484.0	2,285.3	
Processed cost d)	9,936.0	9,141.1	9,936.0	9,141.1	
Local meat factory price	37,110.0	44,829.9	37,110.0	44,829.9	
Local trader's margin e)	1,855.5	1,707.1	1,855.5	1,707.1	
Local Transport cost	200.0	174.0	200.0	174.0	
Farmgate price (Baht/ton)	35,054.5	42,948.8	35,054.5	42,948.8	
Farmgate price (Baht/kg)	35.1	42.9	35.1	42.9	

a) 10 % of f.o.b. price.

b) 2.5 % of f.o.b. price.

c) 5 % of port gate price.

d) 20 % of port gate price.

e) 5 % of factory gate price.

**Table G-PE-KK-5-2-5 PRICE STRUCTURE KOHN KEAN AREA**

Urca (46-0-0)	1996		2005	
	Financial	Economic	Financial	Economic
Export price f.o.b. at Yokohama ports (\$US/ton)				127.8
Ocean freight and insurance a)				40
Import price c.i.f. at Bangkok port (\$US/ton)				167.8
Import price c.i.f. at Bangkok port (Baht/ton)				
Import Tariff (30%)	5,497.5	5,497.5	4,195.0	4,195.0
Value Add Tax (10%)	1,649.3	0.0	1,258.5	0.0
Port Handling and charges b)	714.7	0.0	545.4	0.0
Port gate price	137.4	126.4	104.9	0.0
Trader's margin c)	7,998.9	5,623.9	6,103.7	4,195.0
Transport cost to Local market	399.9	367.9	305.2	0.0
Local market price	200.0	174.0	200.0	0.0
Local Transport cost to Farm	8,598.8	6,165.9	6,608.9	4,195.0
Trader's margin	44	38.3	44	0.0
Farmgate price (Baht/ton)	56	51.5	56	0.0
Farmgate price (Baht/kg)	8,642.8	6,204.2	6,652.9	4,195.0

a) Freight \$35/ton.

b) Port handling, storage charges is 2.5% of c.i.f. price.

c) 5% of port gate price.

Potassium Chloride (0-0-60)	1996		2005	
	Financial	Economic	Financial	Economic
Export price f.o.b. at Yokohama ports (\$US/ton)				87.5
Ocean freight and insurance a)				40
Import price c.i.f. at Bangkok port (\$US/ton)				127.5
Import price c.i.f. at Bangkok port (Baht/ton)				
Import Tariff (30%)	3,560.0	3,560.0	3,187.5	3,187.5
Value Add Tax (10%)	1,068.0	0.0	956.3	0.0
Port Handling and charges b)	462.8	0.0	414.4	0.0
Port gate price	89.0	81.9	79.7	73.3
Trader's margin c)	5,179.8	3,641.9	4,637.8	3,260.8
Transport cost to Local market	259.0	238.3	231.9	213.3
Local market price	200.0	174.0	200.0	174.0
Local Transport cost to Farm	5,638.8	4,054.2	5,069.7	3,648.2
Trader's margin	44	38.3	44	38.3
Farmgate price (Baht/ton)	56	51.5	56	51.5
Farmgate price (Baht/kg)	5,682.8	4,092.4	5,113.7	3,686.4

a) Freight \$35/ton.

b) Port handling, storage charges is 2.5% of c.i.f. price.

c) 5% of port gate price.

TSP (0-46-0)	1996		2005	
	Financial	Economic	Financial	Economic
Export price f.o.b. at Yokohama ports (\$US/ton)				127.8
Ocean freight and insurance a)				40
Import price c.i.f. at Bangkok port (\$US/ton)				167.8
Import price c.i.f. at Bangkok port (Baht/ton)				
Import Tariff (30%)	5,667.5	5,667.5	4,195.0	4,195.0
Value Add Tax (10%)	1,700.3	0.0	1,258.5	0.0
Port Handling and charges b)	735.8	0.0	545.4	0.0
Port gate price	141.7	130.4	104.9	96.5
Trader's margin c)	8,246.2	5,797.9	6,103.7	4,291.5
Transport cost to Local market	412.3	379.3	305.2	280.8
Local market price	200.0	174.0	200.0	174.0
Local Transport cost to Farm	8,858.5	6,351.2	6,608.9	4,746.3
Trader's margin	44	38.3	44	38.3
Farmgate price (Baht/ton)	56	51.5	56	51.5
Farmgate price (Baht/kg)	8,902.5	6,389.5	6,652.9	4,784.5

a) Freight \$35/ton.

b) Port handling, storage charges is 2.5% of c.i.f. price.

c) 5% of port gate price.



**Table G-PE-KK-6-1-1 PRODUCTION COST KOHN KEAN AREA  
Rice Glutinous**

Present		Physical Inputs		Unit Prices		Total Value	
		Unit	Quantity	Unit	Price	Financial	Economic
Seed	Planted	kg/ha	10	Baht/kg	0	0	0
Fertilizer	46-0-0	kg / rai	0	Baht/50kg	432	310	0.0
	15-15-15	kg / rai	0	Baht/50kg	357	222	0.0
	16-16-8	kg / rai	20	Baht/50kg	343	246	137.2
	16-20-0	kg / rai	0	Baht/50kg	344	247	0.0
Chemical	Herbicides (Gramaxzone)	liter/rai	0	Baht/liter	150	143	0
		liter/rai	0	Baht/liter	0	0	0
	Insecticides (Karate)	liter/rai	0.02	Baht/liter	450	428	9
	Fungicides	liter/rai	0.015	Baht/liter	200	190	3
Tractor		days	0	Baht/rai	180	151.2	0
Transport (Truck)		ton	0.28	Baht/ton	100	87	28
Hired labor		mandays	2	Baht/manday	100	92	200
Fuel&Others		Liter	0	Baht/liter	12	10.8	0
Total Production Cost							377.2
							318.3

Future without		Physical Inputs		Unit Prices		Total Value	
		Unit	Quantity	Unit	Price	Financial	Economic
Seed	Planted	kg/ha	10	Baht/kg	0	0	0
Fertilizer	46-0-0	kg / rai	0	Baht/50kg	432	310	0.0
	15-15-15	kg / rai	0	Baht/50kg	357	222	0.0
	16-16-8	kg / rai	20	Baht/50kg	343	246	137.2
	16-20-0	kg / rai	0	Baht/50kg	344	247	0.0
Chemical	Herbicides (Gramaxzone)	liter/rai	0	Baht/liter	150	143	0
		liter/rai	0	Baht/liter	0	0	0
	Insecticides (Karate)	liter/rai	0.02	Baht/liter	450	428	9
	Fungicides	liter/rai	0.015	Baht/liter	200	190	3
Tractor		days	0	Baht/rai	180	151.2	0
Transport (Truck)		ton	0.28	Baht/ton	100	87	28
Hired labor		mandays	2	Baht/manday	100	92	200
Fuel&Others		Liter	0	Baht/liter	12	10.8	0
Total Production Cost							377.2
							318.3

Future with		Physical Inputs		Unit Prices		Total Value	
		Unit	Quantity	Unit	Price	Financial	Economic
Seed	Planted	kg/ha	5	Baht/kg	0	0	0
Fertilizer	46-0-0	kg / rai	0	Baht/50kg	333	210	0.00
	15-15-15	kg / rai	0	Baht/50kg	256	184	0.00
	16-16-8	kg / rai	25	Baht/50kg	265	181	132.75
	16-20-0	kg / rai	0	Baht/50kg	260	177	0.00
Chemical	Herbicides (Gramaxzone)	liter/rai	0	Baht/liter	150	143	0.00
		liter/rai	0	Baht/liter	0	0	0
	Insecticides (Karate)	liter/rai	0.02	Baht/liter	450	428	9
	Fungicides	liter/rai	0.015	Baht/liter	200	190	3
Tractor		days	0	Baht/rai	180	151.2	0
Transport (Truck)		ton	0.35	Baht/ton	100	87	35
Hired labor		mandays	2	Baht/manday	100	92	200
Fuel&Others		Liter	0	Baht/liter	12	10.8	0
Total Production Cost							379.75
							316.22

Note: Price of fertilizer is based on the price calculated from the international price.

**Rice Glutinous**

Economic price		
Present	Future without	Future with
318.28	318.28	316.22

**Table G-PE-KK-6-1-2 PRODUCTION COST KOHN KEAN AREA**  
**Rice non glutinous**

Present		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Seed	Planted	kg/ha	10	Baht/kg	0	0	0	0
Fertilizer	46-0-0	kg / rai	0	Baht/50kg	432	310	0.0	0.0
	15-15-15	kg / rai	0	Baht/50kg	357	222	0.0	0.0
	16-16-8	kg / rai	20	Baht/50kg	343	246	137.2	98.5
	16-20-0	kg / rai	0	Baht/50kg	344	247	0.0	0.0
Chemical	Herbicides (Gramaxzone)	liter/ rai	0	Baht/liter	150	143	0	0
		liter/ rai	0	Baht/liter	0	0	0	0
	Insecticides (Karate)	liter/ rai	0.02	Baht/liter	450	428	9	8.55
	Fungicides	liter/ rai	0.015	Baht/liter	200	190	3	2.85
Tractor		days	0	Baht/rai	180	151.2	0	0
Transport (Truck)		ton	0.28	Baht/ton	100	87	28	24.36
Hired labor		mandays	2	Baht/manday	100	92	200	184
Fuel&Others		Liter	0	Baht/liter	12	10.8	0	0
Total Production Cost							377.21	318.28

Future without		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Seed	Planted	kg/ha	10	Baht/kg	0	0	0	0
Fertilizer	46-0-0	kg / rai	0	Baht/50kg	432	310	0.0	0.0
	15-15-15	kg / rai	0	Baht/50kg	357	222	0.0	0.0
	16-16-8	kg / rai	20	Baht/50kg	343	246	137.2	98.5
	16-20-0	kg / rai	0	Baht/50kg	344	247	0.0	0.0
Chemical	Herbicides (Gramaxzone)	liter/ rai	0	Baht/liter	150	143	0	0
		liter/ rai	0	Baht/liter	0	0	0	0
	Insecticides (Karate)	liter/ rai	0.02	Baht/liter	450	428	9	8.55
	Fungicides	liter/ rai	0.015	Baht/liter	200	190	3	2.85
Tractor		days	0	Baht/rai	180	151.2	0	0
Transport (Truck)		ton	0.28	Baht/ton	100	87	28	24.36
Hired labor		mandays	2	Baht/manday	100	92	200	184
Fuel&Others		Liter	0	Baht/liter	12	10.8	0	0
Total Production Cost							377.21	318.28

Future with		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Seed	Planted	kg/ha	5	Baht/kg	0	0	0	0
Fertilizer	46-0-0	kg / rai	0	Baht/50kg	333	210	0.00	0.00
	15-15-15	kg / rai	0	Baht/50kg	256	184	0.00	0.00
	16-16-8	kg / rai	20	Baht/50kg	265	181	106.20	72.30
	16-20-0	kg / rai	0	Baht/50kg	260	177	0.00	0.00
Chemical	Herbicides (Gramaxzone)	liter/ rai	0	Baht/liter	150	143	0.00	0.00
		liter/ rai	0	Baht/liter	0	0	0	0
	Insecticides (Karate)	liter/ rai	0.02	Baht/liter	450	428	9	8.55
	Fungicides	liter/ rai	0.015	Baht/liter	200	190	3	2.85
Tractor		days	0	Baht/rai	180	151.2	0	0
Transport (Truck)		ton	0.35	Baht/ton	100	87	35	30.45
Hired labor		mandays	2	Baht/manday	100	92	200	184
Fuel&Others		Liter	0	Baht/liter	12	10.8	0	0
Total Production Cost							353.20	298.15

Note: Price of fertilizer is based on the price calculated from the international price.

**Rice non glutinous**

Economic price		
Present	Future without	Future with
318.28	318.28	298.15

**Table G-PE-KK-6-1-3 PRODUCTION COST KOHN KEAN AREA  
Cassava**

Present		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Stem	Planted	kg/ha	1,600	Baht/kg	0	0	0	0
Fertilizer	46-0-0	kg / rai	10	Baht/50kg	432	310	86.4	62.0
	15-15-15	kg / rai	20	Baht/50kg	357	222	142.8	88.8
	16-16-8	kg / rai	0	Baht/50kg	343	246	0.0	0.0
	16-20-0	kg / rai	0	Baht/50kg	344	247	0.0	0.0
Chemical	Herbicides (Gramaxzone)	liter/ rai	0	Baht/liter	150	143	0	0
		liter/ rai	0	Baht/liter	0	0	0	0
	Insecticides (Karate)	liter/ rai	0	Baht/liter	450	428	0	0
		Fungicides	liter/ rai	0	Baht/liter	200	190	0
Tractor	days	1	Baht/rai	180	151.2	180	151.2	
Transport (Truck)	ton	1.7	Baht/ton	100	87	170	147.9	
Hired labor	mandays	2.5	Baht/manday	70	64.4	175	161	
Fuel&Others	Liter	0	Baht/liter	0	0	0	0	
<b>Total Production Cost</b>						<b>754.27</b>	<b>610.96</b>	

Future without		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Seed	Planted	kg/ha	1,600	Baht/kg	0	0	0	0
Fertilizer	46-0-0	kg / rai	10	Baht/50kg	432	310	86.4	62.0
	15-15-15	kg / rai	20	Baht/50kg	357	222	142.8	88.8
	16-16-8	kg / rai	0	Baht/50kg	343	246	0.0	0.0
	16-20-0	kg / rai	0	Baht/50kg	344	247	0.0	0.0
Chemical	Herbicides (Gramaxzone)	liter/ rai	0	Baht/liter	150	143	0	0
		liter/ rai	0	Baht/liter	0	0	0	0
	Insecticides (Karate)	liter/ rai	0	Baht/liter	450	428	0	0
		Fungicides	liter/ rai	0	Baht/liter	200	190	0
Tractor	days	1	Baht/rai	180	151.2	180	151.2	
Transport (Truck)	ton	1.7	Baht/ton	100	87	170	147.9	
Hired labor	mandays	2.5	Baht/manday	70	64.4	175	161	
Fuel&Others	Liter	0	Baht/liter	0	0	0	0	
<b>Total Production Cost</b>						<b>754.27</b>	<b>610.96</b>	

Future with		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Seed	Planted	kg/ha	1,600	Baht/kg	0	0	0	0
Fertilizer	46-0-0	kg / rai	20	Baht/50kg	333	210	133.1	83.9
	15-15-15	kg / rai	40	Baht/50kg	256	184	204.6	147.4
	16-16-8	kg / rai	0	Baht/50kg	265	181	0.0	0.0
	16-20-0	kg / rai	0	Baht/50kg	260	177	0.0	0.0
Chemical	Herbicides (Gramaxzone)	liter/ rai	0	Baht/liter	150	143	0	0
		liter/ rai	0	Baht/liter	0	0	0	0
	Insecticides (Karate)	liter/ rai	0	Baht/liter	450	428	0	0
		Fungicides	liter/ rai	0	Baht/liter	200	190	0
Tractor	days	1	Baht/rai	180	151.2	180	151.2	
Transport (Truck)	ton	2.5	Baht/ton	100	87	250	217.5	
Hired labor	mandays	2.5	Baht/manday	70	64.4	175	161	
Fuel&Others	Liter	0	Baht/liter	0	0	0	0	
<b>Total Production Cost</b>						<b>942.7</b>	<b>761.0</b>	

Note: Price of fertilizer is based on the price calculated from the international price.

**Cassava**

Economic price

Present	Future without	Future with
610.96	610.96	760.96

**Table G-PE-KK-6-1-4 PRODUCTION COST KOHN KEAN AREA  
Sugarcane**

Present		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Stem	Planted	kg/ha	5,000	Baht/kg	0	0	0	0
Fertilizer	46-0-0	kg/rai	0	Baht/50kg	432	310	0.0	0.0
	15-15-15	kg/rai	27	Baht/50kg	357	222	192.8	119.9
	16-16-8	kg/rai	0	Baht/50kg	343	246	0.0	0.0
	16-20-0	kg/rai	0	Baht/50kg	344	247	0.0	0.0
Chemical	Herbicides (Gramaxzone)	liter/rai	0	Baht/liter	150	143	0	0
		liter/rai	0	Baht/liter	0	0	0	0
		liter/rai	0	Baht/liter	450	428	0	0
Tractor	Fungicides	liter/rai	0	Baht/liter	200	190	0	0
		days	1	Baht/rai	200	168	200	168
Transport (Truck)		ton	7.2	Baht/ton	100	87	720	626
Hired labor		mandays	11	Baht/manday	100	92	1,100	1,012
Fuel&Others		Liter	12.5	Baht/liter	12	10.8	150	135
Total Production Cost							2,362.8	2,061.3

Future without		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Seed	Planted	kg/ha	5,000	Baht/kg	0	0	0	0
Fertilizer	46-0-0	kg/rai	0	Baht/50kg	432	310	0.0	0.0
	15-15-15	kg/rai	27	Baht/50kg	357	222	192.8	119.9
	16-16-8	kg/rai	0	Baht/50kg	343	246	0.0	0.0
	16-20-0	kg/rai	0	Baht/50kg	344	247	0.0	0.0
Chemical	Herbicides (Gramaxzone)	liter/rai	0	Baht/liter	150	143	0	0
		liter/rai	0	Baht/liter	0	0	0	0
		liter/rai	0	Baht/liter	450	428	0	0
Tractor	Fungicides	liter/rai	0	Baht/liter	200	190	0	0
		days	1	Baht/rai	200	168	200	168
Transport (Truck)		ton	7.2	Baht/ton	100	87	720	626.4
Hired labor		mandays	11	Baht/manday	100	92	1,100	1,012
Fuel&Others		Liter	12.5	Baht/liter	12	10.8	150	135
Total Production Cost							2,362.8	2,061.3

Future with		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Seed	Planted	kg/ha	5,000	Baht/kg	0	0	0	0
Fertilizer	46-0-0	kg/rai	0	Baht/50kg	333	210	0.0	0.0
	15-15-15	kg/rai	27	Baht/50kg	256	184	138.1	99.5
	16-16-8	kg/rai	0	Baht/50kg	265	181	0.0	0.0
	16-20-0	kg/rai	0	Baht/50kg	260	177	0.0	0.0
Chemical	Herbicides (Gramaxzone)	liter/rai	0	Baht/liter	150	143	0	0
		liter/rai	0	Baht/liter	0	0	0	0
		liter/rai	0	Baht/liter	450	428	0	0
Tractor	Fungicides	liter/rai	0	Baht/liter	200	190	0	0
		days	1	Baht/rai	200	168	200	168
Transport (Truck)		ton	7.2	Baht/ton	100	87	720	626.4
Hired labor		mandays	11	Baht/manday	100	92	1,100	1,012
Fuel&Others		Liter	12.5	Baht/liter	12	10.8	150	135
Total Production Cost							2,308.1	2,040.9

Note: Price of fertilizer is based on the price calculated from the international price.

**Sugarcane**

Economic price

Present	Future without	Future with
2061.31	2061.31	2040.86

**Table G-PE-KK-6-1-5 PRODUCTION COST KOHN KEAN AREA Soybean**

Present		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Seed	Planted	kg/ha	15	Baht/kg	17	16	255	242.25
Fertilizer	46-0-0	kg/rai	0	Baht/50kg	432	310	0.0	0.0
	15-15-15	kg/rai	20	Baht/50kg	357	222	142.8	88.8
	16-16-8	kg/rai	0	Baht/50kg	343	246	0.0	0.0
	16-20-0	kg/rai	15	Baht/50kg	344	247	103.2	74.0
Chemical	Herbicides (Gramaxzone)	liter/rai	0	Baht/liter	150	143	0.0	0.0
		liter/rai	0	Baht/liter	0	0	0	0
	Insecticides (Karate)	liter/rai	0.1875	Baht/liter	450	428	84.4	80.2
	Fungicides	liter/rai	0	Baht/liter	200	190	0	0
Tractor		days	1	Baht/rai	180	151.2	180	151.2
Transport (Truck)		ton	0.2	Baht/ton	100	87	20	17.4
Hired labor		mandays	1	Baht/manday	100	92	100	92
Fuel&Others		Liter	0	Baht/liter	0	0	0	0
Total Production Cost							885.4	745.9

Future without		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Seed	Planted	kg/ha	15	Baht/kg	17	16	255	242.25
Fertilizer	46-0-0	kg/rai	0	Baht/50kg	432	310	0.0	0.0
	15-15-15	kg/rai	20	Baht/50kg	357	222	142.8	88.8
	16-16-8	kg/rai	0	Baht/50kg	343	246	0.0	0.0
	16-20-0	kg/rai	15	Baht/50kg	344	247	103.2	74.0
Chemical	Herbicides (Gramaxzone)	liter/rai	0	Baht/liter	150	143	0	0
		liter/rai	0	Baht/liter	0	0	0	0
	Insecticides (Karate)	liter/rai	0.1875	Baht/liter	450	428	84.4	80.2
	Fungicides	liter/rai	0	Baht/liter	200	190	0	0
Tractor		days	1	Baht/rai	180	151.2	180	151.2
Transport (Truck)		ton	0.2	Baht/ton	100	87	20	17.4
Hired labor		mandays	1	Baht/manday	100	92	100	92
Fuel&Others		Liter	0	Baht/liter	0	0	0	0
Total Production Cost							885.37	745.87

Future with		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Seed	Planted	kg/ha	15	Baht/kg	17	16	255	242.25
Fertilizer	46-0-0	kg/rai	0	Baht/50kg	333	210	0.00	0.00
	15-15-15	kg/rai	20	Baht/50kg	256	184	102.31	73.68
	16-16-8	kg/rai	0	Baht/50kg	265	181	0.00	0.00
	16-20-0	kg/rai	15	Baht/50kg	260	177	78.10	53.09
Chemical	Herbicides (Gramaxzone)	liter/rai	0	Baht/liter	150	143	0	0
		liter/rai	0	Baht/liter	0	0	0	0
	Insecticides (Karate)	liter/rai	0.1875	Baht/liter	450	428	84.4	80.2
	Fungicides	liter/rai	0	Baht/liter	200	190	0	0
Tractor		days	1	Baht/rai	180	151.2	180	151.2
Transport (Truck)		ton	0.2	Baht/ton	100	87	20	17.4
Hired labor		mandays	1	Baht/manday	100	92	100	92
Fuel&Others		Liter	0	Baht/liter	0	0	0	0
Total Production Cost							819.78	709.77

Note: Price of fertilizer is based on the price calculated from the international price.

**Soybean**

Economic price

Present	Future without	Future with
745.87	745.87	709.77

**Table G-PE-KK-6-1-6 PRODUCTION COST KOHN KEAN AREA  
Groundnuts**

Present		Physical Inputs		Unit Prices		Total Value			
		Unit	Quantity	Unit	Price	Financial	Economic		
Seed	Planted	kg/ha	30	Baht/kg	14	13	420	399	
Fertilizer	46-0-0	kg / rai	0	Baht/50kg	432	310	0.0	0.0	
		15-15-15	kg / rai	20	Baht/50kg	357	222	142.8	88.8
			kg / rai	0	Baht/50kg	343	246	0.0	0.0
		16-20-0	kg / rai	15	Baht/50kg	344	247	103.2	74.0
Chemical	Herbicides (Gramaxzone)	liter/ rai	0.267	Baht/liter	150	143	40.05	38.0475	
		liter/ rai	0	Baht/liter	0	0	0	0	
		Insecticides (Karate)	liter/ rai	0	Baht/liter	450	428	0	0
			Fungicides	liter/ rai	0	Baht/liter	200	190	0
Tractor		days	1	Baht/rai	180	151.2	180	151.2	
Transport (Truck)		ton	0.2	Baht/ton	100	87	20	17.4	
Hired labor		mandays	2	Baht/manday	100	92	200	184	
Fuel&Others		Liter	0	Baht/liter	0	0	0	0	
Total Production Cost							1106.0	952.5	

Future without		Physical Inputs		Unit Prices		Total Value			
		Unit	Quantity	Unit	Price	Financial	Economic		
Seed	Planted	kg/ha	30	Baht/kg	14	13	420	399	
Fertilizer	46-0-0	kg / rai	0	Baht/50kg	432	310	0.0	0.0	
		15-15-15	kg / rai	20	Baht/50kg	357	222	142.8	88.8
			kg / rai	0	Baht/50kg	343	246	0.0	0.0
		16-20-0	kg / rai	15	Baht/50kg	344	247	103.2	74.0
Chemical	Herbicides (Gramaxzone)	liter/ rai	0.267	Baht/liter	150	143	40.05	38.0475	
		liter/ rai	0	Baht/liter	0	0	0	0	
		Insecticides (Karate)	liter/ rai	0	Baht/liter	450	428	0	0
			Fungicides	liter/ rai	0	Baht/liter	200	190	0
Tractor		days	1	Baht/rai	180	151.2	180	151.2	
Transport (Truck)		ton	0.2	Baht/ton	100	87	20	17.4	
Hired labor		mandays	2	Baht/manday	100	92	200	184	
Fuel&Others		Liter	0	Baht/liter	0	0	0	0	
Total Production Cost							1,106.0	952.5	

Future with		Physical Inputs		Unit Prices		Total Value			
		Unit	Quantity	Unit	Price	Financial	Economic		
Seed	Planted	kg/ha	30	Baht/kg	14	13	420	399	
Fertilizer	46-0-0	kg / rai	0	Baht/50kg	333	210	0.00	0.00	
		15-15-15	kg / rai	20	Baht/50kg	256	184	102.31	73.68
			kg / rai	0	Baht/50kg	265	181	0.00	0.00
		16-20-0	kg / rai	15	Baht/50kg	260	177	78.10	53.09
Chemical	Herbicides (Gramaxzone)	liter/ rai	0.267	Baht/liter	150	143	40.05	38.0475	
		liter/ rai	0	Baht/liter	0	0	0	0	
		Insecticides (Karate)	liter/ rai	0	Baht/liter	450	428	0	0
			Fungicides	liter/ rai	0	Baht/liter	200	190	0
Tractor		days	1	Baht/rai	180	151.2	180	151.2	
Transport (Truck)		ton	0.2	Baht/ton	100	87	20	17.4	
Hired labor		mandays	2	Baht/manday	100	92	200	184	
Fuel&Others		Liter	0	Baht/liter	0	0	0	0	
Total Production Cost							1,040.5	916.4	

Note: Price of fertilizer is based on the price calculated from the international price.

**Groundnuts**

Economic price

Present	Future without	Future with
952.51	952.51	916.42

**Table G-PE-KK-6-1-7 PRODUCTION COST KOHN KEAN AREA  
Chill**

Present		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Seed	Planted	kg/ha	1.25	Baht/kg	400	380	500	475
Fertilizer	46-0-0	kg / rai	0	Baht/50kg	432	310	0.0	0.0
	15-15-15	kg / rai	85	Baht/50kg	357	222	607.1	377.5
	16-16-8	kg / rai	0	Baht/50kg	343	246	0.0	0.0
	16-20-0	kg / rai	0	Baht/50kg	344	247	0.0	0.0
Chemical	Herbicides (Gramaxzone)	liter/ rai	2.9	Baht/liter	150	143	435	413.25
		liter/ rai	0	Baht/liter	0	0	0	0
	Insecticides (Karate) Fungicides	liter/ rai	1.11	Baht/liter	450	428	499.5	474.525
		liter/ rai	0	Baht/liter	200	190	0	0
Tractor		days	1	Baht/rai	160	134.4	160	134.4
Transport (Truck)		ton	1	Baht/ton	50	43.5	50	43.5
Hired labor		mandays	22	Baht/manday	100	92	2200	2024
Fuel&Others		Liter	0	Baht/liter	12	10.8	0	0
<b>Total Production Cost</b>							<b>4,451.6</b>	<b>3,942.2</b>

Future without		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Seed	Planted	kg/ha	1.3	Baht/kg	400	380	500	475
Fertilizer	46-0-0	kg / rai	0	Baht/50kg	432	310	0.0	0.0
	15-15-15	kg / rai	85	Baht/50kg	357	222	607.1	377.5
	16-16-8	kg / rai	0	Baht/50kg	343	246	0.0	0.0
	16-20-0	kg / rai	0	Baht/50kg	344	247	0.0	0.0
Chemical	Herbicides (Gramaxzone)	liter/ rai	2.9	Baht/liter	150	143	435	413.25
		liter/ rai	0	Baht/liter	0	0	0	0
	Insecticides (Karate) Fungicides	liter/ rai	1.11	Baht/liter	450	428	499.5	474.525
		liter/ rai	0	Baht/liter	200	190	0	0
Tractor		days	1	Baht/rai	160	134.4	160	134.4
Transport (Truck)		ton	1	Baht/ton	50	43.5	50	43.5
Hired labor		mandays	22	Baht/manday	100	92	2200	2024
Fuel&Others		Liter	0	Baht/liter	12	10.8	0	0
<b>Total Production Cost</b>							<b>4,451.6</b>	<b>3,942.2</b>

Future with		Physical inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Seed	Planted	kg/ha	1.25	Baht/kg	400	380	500	475
Fertilizer	46-0-0	kg / rai	0	Baht/50kg	333	210	0.00	0.00
	15-15-15	kg / rai	85	Baht/50kg	256	184	434.81	313.13
	16-16-8	kg / rai	0	Baht/50kg	265	181	0.00	0.00
	16-20-0	kg / rai	0	Baht/50kg	260	177	0.00	0.00
Chemical	Herbicides (Gramaxzone)	liter/ rai	2.9	Baht/liter	150	143	435	413.25
		liter/ rai	0	Baht/liter	0	0	0	0
	Insecticides (Karate) Fungicides	liter/ rai	1.11	Baht/liter	450	428	499.5	474.525
		liter/ rai	0	Baht/liter	200	190	0	0
Tractor		days	1	Baht/rai	160	134.4	160	134.4
Transport (Truck)		ton	1	Baht/ton	50	43.5	50	43.5
Hired labor		mandays	22	Baht/manday	100	92	2200	2024
Fuel&Others		Liter	0	Baht/liter	12	10.8	0	0
<b>Total Production Cost</b>							<b>4,279.3</b>	<b>3,877.8</b>

Note: Price of fertilizer is based on the price calculated from the international price.

Chill

Economic price		
Present	Future without	Future with
3942.2	3942.2	3877.8

**Table G-PE-KK-6-1-8 PRODUCTION COST KOHN KEAN AREA  
Stringbean**

Present		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Seed	Planted	kg/ha	1.87	Baht/kg	400	380	748	710.6
Fertilizer	46-0-0	kg / rai	10	Baht/50kg	432	310	86.4	62.0
	15-15-15	kg / rai	70	Baht/50kg	357	222	499.9	310.9
	16-16-8	kg / rai	0	Baht/50kg	343	246	0.0	0.0
	16-20-0	kg / rai	0	Baht/50kg	344	247	0.0	0.0
Chemical	Herbicides (Gramaxzone)	liter/ rai	0.67	Baht/liter	150	143	100.5	95.475
		liter/ rai	0	Baht/liter	0	0	0	0
		liter/ rai	0	Baht/liter	450	428	0	0
	Insecticides (Karate)	liter/ rai	0	Baht/liter	200	190	0	0
	Fungicides	liter/ rai	0	Baht/liter	200	190	0	0
Tractor		days	1	Baht/rai	200	168	200	168
Transport (Truck)		ton	0.6	Baht/ton	100	87	60	52.2
Hired labor		mandays	5	Baht/manday	100	92	500	460
Fuel&Others		Liter	0	Baht/liter	12	10.8	0	0
Total Production Cost							2,194.9	1,859.2

Future without		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Seed	Planted	kg/ha	1.87	Baht/kg	400	380	748	710.6
Fertilizer	46-0-0	kg / rai	10	Baht/50kg	432	310	86.4	62.0
	15-15-15	kg / rai	70	Baht/50kg	357	222	499.9	310.9
	16-16-8	kg / rai	0	Baht/50kg	343	246	0.0	0.0
	16-20-0	kg / rai	0	Baht/50kg	344	247	0.0	0.0
Chemical	Herbicides (Gramaxzone)	liter/ rai	0.67	Baht/liter	150	143	100.5	95.475
		liter/ rai	0	Baht/liter	0	0	0	0
		liter/ rai	0	Baht/liter	450	428	0	0
	Insecticides (Karate)	liter/ rai	0	Baht/liter	200	190	0	0
	Fungicides	liter/ rai	0	Baht/liter	200	190	0	0
Tractor		days	1	Baht/rai	200	168	200	168
Transport (Truck)		ton	0.6	Baht/ton	100	87	60	52.2
Hired labor		mandays	5	Baht/manday	100	92	500	460
Fuel&Others		Liter	0	Baht/liter	12	10.8	0	0
Total Production Cost							2,194.9	1,859.2

Future with		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Seed	Planted	kg/ha	1.87	Baht/kg	400	380	748	710.6
Fertilizer	46-0-0	kg / rai	10	Baht/50kg	333	210	66.53	41.95
	15-15-15	kg / rai	70	Baht/50kg	256	184	358.08	257.87
	16-16-8	kg / rai	0	Baht/50kg	265	181	0.00	0.00
	16-20-0	kg / rai	0	Baht/50kg	260	177	0.00	0.00
Chemical	Herbicides (Gramaxzone)	liter/ rai	0.67	Baht/liter	150	143	100.5	95.475
		liter/ rai	0	Baht/liter	0	0	0	0
		liter/ rai	0	Baht/liter	450	428	0	0
	Insecticides (Karate)	liter/ rai	0	Baht/liter	200	190	0	0
	Fungicides	liter/ rai	0	Baht/liter	200	190	0	0
Tractor		days	1	Baht/rai	200	168	200	168
Transport (Truck)		ton	0.6	Baht/ton	100	87	60	52.2
Hired labor		mandays	5	Baht/manday	100	92	500	460
Fuel&Others		Liter	0	Baht/liter	12	10.8	0	0
Total Production Cost							2,033.1	1,786.1

Note: Price of fertilizer is based on the price calculated from the international price.

**Stringbean**

Economic price

Present	Future without	Future with
1,859.2	1,859.2	1,786.1



**Table G-PE-KK-6-1-9 PRODUCTION COST KOHN KEAN AREA  
Mango**

Present		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Calculated average value base	
					Financial	Economic	Financial	Economic
Seed	Planted	kg/ha	25	Baht/kg	40	38	83.3	79.2
Fertilizer	46-0-0	kg/rai	0	Baht/50kg	432	310	0.0	0.0
	15-15-15	kg/rai	23	Baht/50kg	357	222	164.3	102.1
	16-16-8	kg/rai	35	Baht/50kg	343	246	240.1	172.4
	16-20-0	kg/rai	0	Baht/50kg	344	247	0.0	0.0
Chemical	Herbicides (Gramaxzone)	liter/rai	0	Baht/liter	150	143	0	0
		liter/rai	0	Baht/liter	0	0	0	0
	Insecticides (Karate)	liter/rai	0.56	Baht/liter	450	428	252	239.4
	Fungicides	liter/rai	0	Baht/liter	200	190	0	0
Tractor		days	5	Baht/rai	100	84	41.7	35.0
Transport (Truck)		ton	0	Baht/ton	100	87	0	0
Hired labor		mandays	0	Baht/manday	100	92	0	0
Fuel&Others		Liter	8.4	Baht/liter	12	10.8	100.8	90.72
<b>Total Production Cost</b>							<b>882.2</b>	<b>718.8</b>

Future without		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Calculated average value base	
					Financial	Economic	Financial	Economic
Seed	Planted	kg/ha	25	Baht/kg	40	38	83.3	79.2
Fertilizer	46-0-0	kg/rai	0	Baht/50kg	432	310	0.0	0.0
	15-15-15	kg/rai	23	Baht/50kg	357	222	164.3	102.1
	16-16-8	kg/rai	35	Baht/50kg	343	246	240.1	172.4
	16-20-0	kg/rai	0	Baht/50kg	344	247	0.0	0.0
Chemical	Herbicides (Gramaxzone)	liter/rai	0	Baht/liter	150	143	0	0
		liter/rai	0	Baht/liter	0	0	0	0
	Insecticides (Karate)	liter/rai	0.56	Baht/liter	450	428	252	239.4
	Fungicides	liter/rai	0	Baht/liter	200	190	0	0
Tractor		days	5	Baht/rai	100	84	41.7	35.0
Transport (Truck)		ton	0	Baht/ton	100	87	0	0
Hired labor		mandays	0	Baht/manday	100	92	0	0
Fuel&Others		Liter	8.4	Baht/liter	12	10.8	100.8	90.72
<b>Total Production Cost</b>							<b>882.2</b>	<b>718.8</b>

Future with		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Calculated average value base	
					Financial	Economic	Financial	Economic
Seed	Planted	kg/ha	25	Baht/kg	40	38	83.3	79.2
Fertilizer	46-0-0	kg/rai	0	Baht/50kg	333	210	0.0	0.0
	15-15-15	kg/rai	23	Baht/50kg	256	184	117.7	84.7
	16-16-8	kg/rai	35	Baht/50kg	265	181	185.8	126.5
	16-20-0	kg/rai	0	Baht/50kg	260	177	0.0	0.0
Chemical	Herbicides (Gramaxzone)	liter/rai	0	Baht/liter	150	143	0	0
		liter/rai	0	Baht/liter	0	0	0	0
	Insecticides (Karate)	liter/rai	0.56	Baht/liter	450	428	252	239.4
	Fungicides	liter/rai	0	Baht/liter	200	190	0	0
Tractor		days	5	Baht/rai	100	84	41.7	35.0
Transport (Truck)		ton	0	Baht/ton	100	87	0	0
Hired labor		mandays	0	Baht/manday	100	92	0	0
Fuel&Others		Liter	8.4	Baht/liter	12	10.8	100.8	90.72
<b>Total Production Cost</b>							<b>781.3</b>	<b>655.5</b>

Note: Price of fertilizer is based on the price calculated from the international price.

**Mango**

Economic price

Present	Future without	Future with
718.8	718.8	655.5

**Table G-PE-KK-6-1-10 PRODUCTION COST KOHN KEAN AREA  
Eucalyptus**

Present		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Trees	Planted	kg/ha	400	Baht/kg	1.5	1.4	120	114
Fertilizer	46-0-0	kg / rai	11	Baht/50kg	432	310	95.1	68.2
	15-15-15	kg / rai	0	Baht/50kg	357	222	0.0	0.0
	16-16-8	kg / rai	0	Baht/50kg	343	246	0.0	0.0
	16-20-0	kg / rai	0	Baht/50kg	344	247	0.0	0.0
Chemical	Herbicides (Gramaxzone)	liter/ rai	0	Baht/liter	150	143	0	0
		liter/ rai	0	Baht/liter	0	0	0	0
	Insecticides (Karate)	liter/ rai	0	Baht/liter	450	428	0	0
	Fungicides	liter/ rai	0	Baht/liter	200	190	0	0
Tractor		days	0	Baht/rai	100	84	0	0
Transport (Truck)		ton	0.8	Baht/ton	100	87	80	69.6
Hired labor		mandays	3.7	Baht/manday	100	92	370	340.4
Fuel&Others		liter	6	Baht/liter	12	10.8	72	64.8
<b>Total Production Cost</b>							<b>737.1</b>	<b>657.0</b>

Future without		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Seed	Planted	kg/ha	400	Baht/kg	1.5	1.4	120.0	114.0
Fertilizer	46-0-0	kg / rai	11	Baht/50kg	432	310	95.1	68.2
	15-15-15	kg / rai	0	Baht/50kg	357	222	0.0	0.0
	16-16-8	kg / rai	0	Baht/50kg	343	246	0.0	0.0
	16-20-0	kg / rai	0	Baht/50kg	344	247	0.0	0.0
Chemical	Herbicides (Gramaxzone)	liter/ rai	0	Baht/liter	150	143	0	0
		liter/ rai	0	Baht/liter	0	0	0	0
	Insecticides (Karate)	liter/ rai	0	Baht/liter	450	428	0	0
	Fungicides	liter/ rai	0	Baht/liter	200	190	0	0
Tractor		days	0	Baht/rai	100	84	0	0
Transport (Truck)		ton	0.8	Baht/ton	100	87	80	69.6
Hired labor		mandays	3.7	Baht/manday	100	92	370	340.4
Fuel&Others		liter	6	Baht/liter	12	10.8	72	64.8
<b>Total Production Cost</b>							<b>737.1</b>	<b>657.0</b>

Future with		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Seed	Planted	kg/ha	400	Baht/kg	1.5	1.5	120.0	120.0
Fertilizer	46-0-0	kg / rai	11	Baht/50kg	333	210	73.2	46.1
	15-15-15	kg / rai	0	Baht/50kg	256	184	0.00	0.00
	16-16-8	kg / rai	0	Baht/50kg	265	181	0.00	0.00
	16-20-0	kg / rai	0	Baht/50kg	260	177	0.00	0.00
Chemical	Herbicides (Gramaxzone)	liter/ rai	0	Baht/liter	150	143	0.0	0.0
		liter/ rai	0	Baht/liter	0	0	0	0
	Insecticides (Karate)	liter/ rai	0	Baht/liter	450	428	0	0
	Fungicides	liter/ rai	0	Baht/liter	200	190	0	0
Tractor		days	0	Baht/rai	100	84	0	0
Transport (Truck)		ton	0.8	Baht/ton	100	87	80	69.6
Hired labor		mandays	3.7	Baht/manday	100	92	370	340.4
Fuel&Others		liter	6	Baht/liter	12	10.8	72	64.8
<b>Total Production Cost</b>							<b>715.2</b>	<b>640.9</b>

Note: Price of fertilizer is based on the price calculated from the international price.

**Eucalyptus**

Economic price

Present	Future without	Future with
657.0	657.0	640.9

**Table G-PE-KK-6-1-11 PRODUCTION COST KOHN KEAN AREA  
Payaya**

Present		Physical Inputs		Unit Prices		Total Value			
		Unit	Quantity	Unit	Price		Financial	Economic	
Stem	Planted	kg/ha	400	Baht/kg	0.45	0.43	180	171	
Fertilizer	46-0-0	kg / rai	0	Baht/50kg	432	310	0.0	0.0	
		15-15-15	kg / rai	20	Baht/50kg	357	222	142.8	88.8
		16-16-8	kg / rai	0	Baht/50kg	343	246	0.0	0.0
		16-20-0	kg / rai	0	Baht/50kg	344	247	0.0	0.0
Chemical	Herbicides (Gramaxzone)	liter/rai	0	Baht/liter	150	143	0	0	
		liter/rai	0	Baht/liter	0	0	0	0	
		Insecticides (Karate)	liter/rai	0	Baht/liter	450	428	0	0
	Fungicides	liter/rai	0	Baht/liter	200	190	0	0	
Tractor		days	1	Baht/rai	160	134.4	160	134	
Transport (Truck)		ton	3	Baht/ton	100	87	300	261	
Hired labor		mandays	16	Baht/manday	100	92	1,600	1,472	
Fuel&Others		Liter	0	Baht/liter	12	10.8	0	0	
Total Production Cost							2,382.8	2,127.2	

Future without		Physical Inputs		Unit Prices		Total Value			
		Unit	Quantity	Unit	Price		Financial	Economic	
Seed	Planted	kg/ha	400	Baht/kg	0.45	0.43	180	171	
Fertilizer	46-0-0	kg / rai	0	Baht/50kg	432	310	0.0	0.0	
		15-15-15	kg / rai	20	Baht/50kg	357	222	142.8	88.8
		16-16-8	kg / rai	0	Baht/50kg	343	246	0.0	0.0
		16-20-0	kg / rai	0	Baht/50kg	344	247	0.0	0.0
Chemical	Herbicides (Gramaxzone)	liter/rai	0	Baht/liter	150	143	0	0	
		liter/rai	0	Baht/liter	0	0	0	0	
		Insecticides (Karate)	liter/rai	0	Baht/liter	450	428	0	0
	Fungicides	liter/rai	0	Baht/liter	200	190	0	0	
Tractor		days	1	Baht/rai	160	134.4	160	134.4	
Transport (Truck)		ton	3	Baht/ton	100	87	300	261	
Hired labor		mandays	16	Baht/manday	100	92	1600	1472	
Fuel&Others		Liter	0	Baht/liter	12	10.8	0	0	
Total Production Cost							2,382.8	2,127.2	

Future with		Physical Inputs		Unit Prices		Total Value			
		Unit	Quantity	Unit	Price		Financial	Economic	
Seed	Planted	kg/ha	400	Baht/kg	0.45	0.43	180	171	
Fertilizer	46-0-0	kg / rai	0	Baht/50kg	333	210	0.00	0.00	
		15-15-15	kg / rai	20	Baht/50kg	256	184	102.31	73.68
		16-16-8	kg / rai	0	Baht/50kg	265	181	0.00	0.00
		16-20-0	kg / rai	0	Baht/50kg	260	177	0.00	0.00
Chemical	Herbicides (Gramaxzone)	liter/rai	0	Baht/liter	150	143	0.0	0.0	
		liter/rai	0	Baht/liter	0	0	0	0	
		Insecticides (Karate)	liter/rai	0	Baht/liter	450	428	0	0
	Fungicides	liter/rai	0	Baht/liter	200	190	0	0	
Tractor		days	1	Baht/rai	160	134.4	160	134	
Transport (Truck)		ton	3	Baht/ton	100	87	300	261	
Hired labor		mandays	16	Baht/manday	100	92	1,600	1,472	
Fuel&Others		Liter	0	Baht/liter	12	10.8	0	0	
Total Production Cost							2,342.3	2,112.1	

Note: Price of fertilizer is based on the price calculated from the international price.

**Payaya**

Present	Future without	Future with
2127.2	2127.2	2112.1

**TABLE G-PE-KK-7-1 KOHN KEAN AREA  
LABOR REQUIREMENT**

Total	(000 mandays/rai)													
	30,830	106	66	53	80	86	2	13	2	0	2	52	209	672
Present	30,830	106	66	53	80	86	2	13	2	0	2	52	209	672
Future without	30,830	106	66	53	80	86	2	13	2	0	2	52	209	672
Future with	30,130	132	75	71	86	119	2	16	2	1	1	59	222	787

Total	(million mandays)													
Present	0.11	0.07	0.05	0.08	0.09	0.00	0.00	0.01	0.00	0.00	0.00	0.05	0.21	0.67
Future without	0.11	0.07	0.05	0.08	0.09	0.00	0.00	0.01	0.00	0.00	0.00	0.05	0.21	0.67
Future with	0.13	0.08	0.07	0.09	0.12	0.00	0.00	0.02	0.00	0.00	0.00	0.06	0.22	0.79

Market wage rate	(Baht/day)													
Future without	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Future with	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Economic cost of Daily Farm Labor	(US\$/day)													
Future without	92	92	92	92	92	92	92	92	92	92	92	92	92	92
Future with	92	92	92	92	92	92	92	92	92	92	92	92	92	92

Economic cost of Farm Labor	(million Baht)												
Future without	9.74	6.04	4.90	7.38	7.95	0.21	1.24	0.21	0.00	0.14	4.79	19.20	61.8
Future with	12.11	6.91	6.52	7.91	10.99	0.20	1.50	0.20	0.07	0.14	5.41	20.45	72.4

Incremental cost of Farm Labor	(million Baht)												
W/-W/O	2.37	0.87	1.62	0.53	3.03	-0.01	0.26	-0.01	0.07	-0.01	0.63	1.25	10.59

Conversion factor for labor 0.92  
 NOTE: Conversion factor for labor was assumed to be 0.92.  
 Wage is: 100 baht/ day.

# KOHN KEAN AREA

TABLE G-PE-KK-8-1-1 Net Value of Production at full development

## Future without

		Area	Yield	Farmgate Price	Gross value of Production	Production Cost	Net Value of Production	Net Value of Production in project area
		(rai)	(kg/rai)	(Baht/ton)	(Baht/rai)	(Baht/rai)	(Baht/rai)	(000 Baht)
<b>Crops</b>	Rice glutinous	6,208	300	3,394	1,018.3	318.3	700.0	4,345
	Rice non-glutinous	1,552	300	3,771	1,131.4	318.3	813.1	1,262
	Cassava	7,576	1,800	812	1,462.0	611.0	851.0	6,447
	Sugarcane	13,478	7,200	447	3,219.5	2061.3	1,158.2	15,611
	Soybean	0	216	5,530	1,194.4	745.9	448.5	0
	Groundnuts	0	230	3,585	824.6	952.5	-127.9	0
	Chilli d-1)	15	230	35,000	8,050.0	3942.2	4,107.8	185
	Stringbean d-2)	15	700	9,000	6,300.0	1859.2	4,440.8	200
	Mango a)	1,500	579	10,000	5,791.7	718.8	5,072.8	7,609
	Eucalyptus b)	0	3,000	750	2,251.3	657.0	1,594.3	0
	Papaya	486	3,000	5,969	17,907.4	2127.2	15,780.2	7,669
	Grassland c)	0	-	-	-	-	-	-
Fallow	5,870	-	-	-	-	-	-	-
Unplanted or farmyard et)	0	-	-	-	-	-	-	-
<b>Total</b>		<b>36,700</b>						<b>43,329</b>
<b>Livestock</b>	Cow	(No. of head)	(ton/head)	(Baht/ton)	(Baht/head)	(Baht/head)	(Baht/head)	
		920.0	0.4	4,851.5	1,940.6	1,608.5	332.1	306
	Chicken e)	(No. of head)	(kg/head)	(Baht/kg)	(Baht/head)	(Baht/head)	(Baht/head)	
		36,800	1.5	43	64	22	42	3,094
<b>Fishery</b>	Tilapia	(rai)	(kg/rai)	(Baht/kg)	(Baht/rai)	(Baht/rai)	(Baht/rai)	
		33	178	30	5,340	2,307	3,033	100
<b>Total</b>								<b>46,828</b>

## Future with

		Area	Yield	Farmgate Price	Gross value of Production	Production Cost	Net Value of Production	Net Value of Production in project area
		(rai)	(kg/rai)	(Baht/ton)	(Baht/rai)	(Baht/rai)	(Baht/rai)	(000 Baht)
<b>Crops</b>	Rice glutinous	5,897	350	3,020	1,057.0	316.2	740.7	4,368
	Rice non-glutinous	1,474	350	3,355	1,174.4	298.1	876.3	1,292
	Cassava	3,743	2,500	812	2,030.5	761.0	1,269.6	4,752
	Sugarcane	15,553	7,200	433	3,118.0	2040.9	1,077.2	16,753
	Soybean	0	216	4,847	1,046.9	709.8	337.1	0
	Groundnuts	0	230	3,103	713.6	916.4	-202.8	0
	Chilli d-1)	540	230	35,000	8,050.0	3877.8	4,172.2	6,759
	Stringbean d-2)	543	700	9,000	6,300.0	1786.1	4,513.9	7,353
	Mango a)	1,785	579	10,000	5,791.7	655.5	5,136.1	9,168
	Eucalyptus b)	0	3,000	750	2,251.3	640.9	1,610.4	0
	Papaya	595	3,000	5,828	17,484.2	2112.1	15,372.1	9,146
	Grassland c)	1,370	-	-	-	-	-	-
Fallow	3,060	-	-	-	-	-	-	-
Unplanted or farmyard et)	2140	-	-	-	-	-	-	-
<b>Total</b>		<b>36,700</b>						<b>59,591</b>
<b>Livestock</b>	Cow	(No. of head)	(ton/head)	(Baht/ton)	(Baht/head)	(Baht/head)	(Baht/head)	
		4,002	0.4	5,086.0	2,034.4	1,608.5	425.9	1,704.2
	Chicken	(No. of head)	(kg/head)	(Baht/kg)	(Baht/head)	(Baht/head)	(Baht/head)	
		95,650	1.5	43	64	22	42	8,041
<b>Fishery</b>	Tilapia	(rai)	(kg/rai)	(Baht/kg)	(Baht/rai)	(Baht/rai)	(Baht/rai)	
		214	178	30	5,340	2,307	3,033	649
<b>Total</b>								<b>69,986</b>

Note

a) Average yield and production cost for 12 years after planting.

b) Average yield and production cost for 5 years.

c) The increase of grassland area in KK and MH is reflected on the cost reduction of feed of cows.

d-1),d-2) Vegetables are planted three times on same fields for one year.

e) Chicken is rotated two times for one year.

**Total net value of production**

**Without**  
46,828

**With**  
69,986

**Net incremental value of production at full development**

**23,158**

# KOHN KEAN AREA

**TABLE G-PE-KK-8-1-2 Net Value of Production at full development**  
The case Excluded chicken and cow

## Future without

		Area	Yield	Farmgate Price	Gross value of Production	Production Cost	Net Value of Production	Net Value of Production in project area
		(rai)	(kg/rai)	(Baht/ton)	(Baht/rai)	(Baht/rai)	(Baht/rai)	(000 Baht)
<b>Crops</b>	Rice glutinous	6,208	300	3,394	1,018.3	318.3	700.0	4,345
	Rice non-glutinous	1,552	300	3,771	1,131.4	318.3	813.1	1,262
	Cassava	7,576	1,800	812	1,462.0	611.0	851.0	6,447
	Sugarcane	13,478	7,200	447	3,219.5	2061.3	1,158.2	15,611
	Soybean	0	216	5,530	1,194.4	745.9	448.5	0
	Groundnuts	0	230	3,585	824.6	952.5	-127.9	0
	Chilli d-1)	15	230	35,000	8,050.0	3942.2	4,107.8	185
	Stringbean d-2)	15	700	9,000	6,300.0	1859.2	4,440.8	200
	Mango a)	1,500	579	10,000	5,791.7	718.8	5,072.8	7,609
	Eucalyptus b)	0	3,000	750	2,251.3	657.0	1,594.3	0
	Papaya	486	3,000	5,969	17,907.4	2127.2	15,780.2	7,669
	Grassland c)	0	-	-	-	-	-	-
	Fallow	5,870	-	-	-	-	-	-
	Unplanted or farmyard et	0	-	-	-	-	-	-
<b>Total</b>		<b>36,700</b>						<b>43,329</b>
<b>Fishery</b>	Tilapia	(rai)	(kg/rai)	(Baht/kg)	(Baht/rai)	(Baht/rai)	(Baht/rai)	
		33	178	30	5,340	2,307	3,033	100
<b>Total</b>								<b>43,429</b>

## Future with

		Area	Yield	Farmgate Price	Gross value of Production	Production Cost	Net Value of Production	Net Value of Production in project area
		(rai)	(kg/rai)	(Baht/ton)	(Baht/rai)	(Baht/rai)	(Baht/rai)	(000 Baht)
<b>Crops</b>	Rice glutinous	5,897	350	3,020	1,057.0	316.2	740.7	4,368
	Rice non-glutinous	1,474	350	3,355	1,174.4	298.1	876.3	1,292
	Cassava	3,743	2,500	812	2,030.5	761.0	1,269.6	4,752
	Sugarcane	15,553	7,200	433	3,118.0	2040.9	1,077.2	16,753
	Soybean	0	216	4,847	1,046.9	709.8	337.1	0
	Groundnuts	0	230	3,103	713.6	916.4	-202.8	0
	Chilli d-1)	540	230	35,000	8,050.0	3877.8	4,172.2	6,759
	Stringbean d-2)	543	700	9,000	6,300.0	1786.1	4,513.9	7,353
	Mango a)	1,785	579	10,000	5,791.7	655.5	5,136.1	9,168
	Eucalyptus b)	0	3,000	750	2,251.3	640.9	1,610.4	0
	Papaya	595	3,000	5,828	17,484.2	2112.1	15,372.1	9,146
	Grassland c)	1,370	-	-	-	-	-	-
	Fallow	3,060	-	-	-	-	-	-
	Unplanted or farmyard et	2140	-	-	-	-	-	-
<b>Total</b>		<b>36,700</b>						<b>59,591</b>
<b>Fishery</b>	Tilapia	(rai)	(kg/rai)	(Baht/kg)	(Baht/rai)	(Baht/rai)	(Baht/rai)	
		214	178	30	5,340	2,307	3,033	649
<b>Total</b>								<b>60,241</b>

Note

a) Average yield and production cost for 12 years after planting

b) Average yield and production cost for 5 years.

c) The increase of grassland area in KK and MH is reflected on the cost reduction of feed of cows.

d-1),d-2) Vegetables are planted three times on same fields for one year.

e) Chicken is rotetaed two times for one year.

**Total net value of production**

**Without**  
**43,429**

**With**  
**60,241**

**Net Incremental value of production at full development**

**16,812**

**Table G-PE-KK-9-1 Benefit Cost Ratio and IRR**

Year	Project Cost		Benefit	Incremental Benefit (Cash Flow)	Discounted Value		(000' Baht)
	Investment	O&M			Benefit	Cost	12% discounted
1	3,856.2			-3,856.2	0.0	3,443.1	0.893
2	3,856.2			-3,856.2	0.0	3,074.2	0.797
3	30,812.9			-30,812.9	0.0	21,932.0	0.712
4	30,812.9			-30,812.9	0.0	19,582.1	0.636
5		2,672.7	23,157.8	20,485.2	13,140.4	1,516.5	0.567
6		2,672.7	23,157.8	20,485.2	11,732.5	1,354.1	0.507
7		2,672.7	23,157.8	20,485.2	10,475.4	1,209.0	0.452
8		2,672.7	23,157.8	20,485.2	9,353.1	1,079.4	0.404
9		2,672.7	23,157.8	20,485.2	8,350.9	963.8	0.361
10		2,672.7	23,157.8	20,485.2	7,456.2	860.5	0.322
11		2,672.7	23,157.8	20,485.2	6,657.3	768.3	0.287
12		2,672.7	23,157.8	20,485.2	5,944.0	686.0	0.257
13		2,672.7	23,157.8	20,485.2	5,307.2	612.5	0.229
14		2,672.7	23,157.8	20,485.2	4,738.5	546.9	0.205
15		2,672.7	23,157.8	20,485.2	4,230.8	488.3	0.183
16		2,672.7	23,157.8	20,485.2	3,777.5	436.0	0.163
17		2,672.7	23,157.8	20,485.2	3,372.8	389.3	0.146
18		2,672.7	23,157.8	20,485.2	3,011.4	347.6	0.130
19		2,672.7	23,157.8	20,485.2	2,688.8	310.3	0.116
20		2,672.7	23,157.8	20,485.2	2,400.7	277.1	0.104
21		2,672.7	23,157.8	20,485.2	2,143.5	247.4	0.093
22		2,672.7	23,157.8	20,485.2	1,913.8	220.9	0.083
23		2,672.7	23,157.8	20,485.2	1,708.8	197.2	0.074
24		2,672.7	23,157.8	20,485.2	1,525.7	176.1	0.066
25		2,672.7	23,157.8	20,485.2	1,362.2	157.2	0.059
26		2,672.7	23,157.8	20,485.2	1,216.3	140.4	0.053
27		2,672.7	23,157.8	20,485.2	1,086.0	125.3	0.047
28		2,672.7	23,157.8	20,485.2	969.6	111.9	0.042
29		2,672.7	23,157.8	20,485.2	865.7	99.9	0.037
30		2,672.7	23,157.8	20,485.2	773.0	89.2	0.033
					116,202	61,442	
<b>Internal Rate of Return</b>							<b>24.69%</b>
<b>B/C RATIO</b>							<b>1.891</b>

**Table G-PE-KK-9-2 Benefit Cost Ratio and IRR**

The case Excluded chicken and cow

Year	Project Cost		Benefit	Incremental Benefit (Cash Flow)	Discounted Value		(000'Baht) 12% discounted
	Investment	O&M			Benefit	Cost	
1	3,856.2			-3,856.2	0.0	3,443.1	0.893
2	3,856.2			-3,856.2	0.0	3,074.2	0.797
3	30,812.9			-30,812.9	0.0	21,932.0	0.712
4	30,812.9			-30,812.9	0.0	19,582.1	0.636
5		2,672.7	16,811.9	14,139.2	9,539.5	1,516.5	0.567
6		2,672.7	16,811.9	14,139.2	8,517.4	1,354.1	0.507
7		2,672.7	16,811.9	14,139.2	7,604.8	1,209.0	0.452
8		2,672.7	16,811.9	14,139.2	6,790.0	1,079.4	0.404
9		2,672.7	16,811.9	14,139.2	6,062.5	963.8	0.361
10		2,672.7	16,811.9	14,139.2	5,413.0	860.5	0.322
11		2,672.7	16,811.9	14,139.2	4,833.0	768.3	0.287
12		2,672.7	16,811.9	14,139.2	4,315.2	686.0	0.257
13		2,672.7	16,811.9	14,139.2	3,852.8	612.5	0.229
14		2,672.7	16,811.9	14,139.2	3,440.0	546.9	0.205
15		2,672.7	16,811.9	14,139.2	3,071.5	488.3	0.183
16		2,672.7	16,811.9	14,139.2	2,742.4	436.0	0.163
17		2,672.7	16,811.9	14,139.2	2,448.6	389.3	0.146
18		2,672.7	16,811.9	14,139.2	2,186.2	347.6	0.130
19		2,672.7	16,811.9	14,139.2	1,952.0	310.3	0.116
20		2,672.7	16,811.9	14,139.2	1,742.8	277.1	0.104
21		2,672.7	16,811.9	14,139.2	1,556.1	247.4	0.093
22		2,672.7	16,811.9	14,139.2	1,389.4	220.9	0.083
23		2,672.7	16,811.9	14,139.2	1,240.5	197.2	0.074
24		2,672.7	16,811.9	14,139.2	1,107.6	176.1	0.066
25		2,672.7	16,811.9	14,139.2	988.9	157.2	0.059
26		2,672.7	16,811.9	14,139.2	883.0	140.4	0.053
27		2,672.7	16,811.9	14,139.2	788.4	125.3	0.047
28		2,672.7	16,811.9	14,139.2	703.9	111.9	0.042
29		2,672.7	16,811.9	14,139.2	628.5	99.9	0.037
30		2,672.7	16,811.9	14,139.2	561.1	89.2	0.033
					84,359	61,442	
					<b>Internal Rate of Return</b>		<b>17.70%</b>
					<b>B/C RATIO</b>		<b>1.373</b>



**KOHN KEAN AREA**

**TABLE G-PE-KK-10-1 Annual Maintenance Cost**

	Tax excluded			Economic cost			(000 Bakt)
	F/O	L/O	Total	F/O	L/O	Total	
Farm Pond	281	120	401	164	70	235	241
Farm Road	2,416	888	3,334	1,725	626	2,351	2,432
						<b>Total</b>	<b>2,673</b>

**TABLE G-PE-KK-10-2 Construction Cost**

	F/O	L/O	Total
Civil Works Farm Pond	19,425	8,325	27,750
Farm Road	34,928	12,693	47,621
Sub total	54,353	21,018	75,371
Design	0	10,944	10,944
Administration	5,435	2,102	7,537
Physical Contingencies	5,979	3,406	9,385
Sub total	65,767	37,470	103,237

**Economic Construction Cost**

Tax excluded		F/O	L/O	Total	CF	CF	F/O	L/O	Total
Civil Works Farm Pond		11,369	4,873	16,242	1.09	0.88	12,393	4,288	16,681
Farm Road		24,635	8,952	33,587	1.09	0.88	26,852	7,878	34,730
Sub total		36,004	13,825	49,829			39,245	12,166	51,411
Design		0	7,114	7,114	1.09	0.92	0	6,545	6,545
Administration		3,533	1,366	4,899	1.09	0.92	3,851	1,257	5,108
Physical Contingencies		3,886	2,214	6,100	1.09	0.92	4,236	2,037	6,273
Sub total				67,942			47,331	22,004	69,336

**TABLE G-PE-KK-10-3 Construction cost disbursement schedule**

	1999		2000		2001		2002		Total
	F/O	L/O	F/O	L/O	F/O	L/O	F/O	L/O	
Civil Works Farm Pond	0	0	0	0	9,713	4,163	9,713	4,163	27,750
Farm Road	0	0	0	0	17,464	6,347	17,464	6,347	47,621
Sub total	0	0	0	0	27,177	10,509	27,177	10,509	75,371
Design	0	5,472	0	5,472	0	0	0	0	10,944
Administration	0	420	0	420	2,718	631	2,718	631	7,538
Physical Contingencies	317	181	317	181	2,673	1,523	2,673	1,523	9,388
Sub total	317	6,073	317	6,073	32,568	12,663	32,568	12,663	103,241

Tax excluded		F/O	L/O	F/O	L/O	F/O	L/O	F/O	L/O	Total
Civil Works Farm Pond		0	0	0	0	5,685	2,436	5,685	2,436	16,242
Farm Road		0	0	0	0	12,317	4,476	12,317	4,476	33,587
Sub total		0	0	0	0	18,002	6,912	18,002	6,912	49,829
Design		0	3,557	0	3,557	0	0	0	0	7,114
Administration		0	273	0	273	1,767	410	1,767	410	4,900
Physical Contingencies		206	118	206	118	1,737	990	1,737	990	6,102
Sub total		206	3,947	206	3,947	39,508	15,225	39,508	15,225	67,945

**Economic Construction cost**

	1999		2000		2001		2002		Total
	F/O	L/O	F/O	L/O	F/O	L/O	F/O	L/O	
Civil Works Farm Pond	0	0	0	0	6,196	2,144	6,196	2,144	16,681
Farm Road	0	0	0	0	13,426	3,939	13,426	3,939	34,730
Sub total	0	0	0	0	19,622	6,083	19,622	6,083	51,411
Design	0	3,272	0	3,272	0	0	0	0	6,545
Administration	0	251	0	251	1,926	377	1,926	377	5,108
Physical Contingencies	225	108	225	108	1,894	911	1,894	911	6,275
<b>Total</b>	<b>225</b>	<b>3,632</b>	<b>225</b>	<b>3,632</b>	<b>23,442</b>	<b>7,371</b>	<b>23,442</b>	<b>7,371</b>	<b>69,338</b>
<b>Annual total cost</b>		<b>3,856</b>		<b>3,856</b>		<b>30,813</b>		<b>30,813</b>	

**Table G-PE-MH-4-1 MAHASARAKAM AREA  
Crop Budget (Financial base)**

<b>Rice glutinous</b>				
Crop Budget		Present	Future w/o Project	Future w/ Project
Yield	(ton/rai)	0.26	0.26	0.30
Farmgate Price	(Baht/ton)	2,849	2,524	2,524
Gross Value of production	(Baht/rai)	740.8	656.2	757.1
Production costs	(Baht/rai)	318.4	318.4	316.3
Net value of production	(Baht/rai)	422.4	337.8	440.8
Labor requirement	(mandays/rai)	7.6	7.6	7.8

<b>Rice non glutinous</b>				
Crop Budget		Present	Future w/o Project	Future w/ Project
Yield	(ton/rai)	0.26	0.26	0.30
Farmgate Price	(Baht/ton)	3,166	2,804	2,804
Gross Value of production	(Baht/rai)	823.1	729.1	841.3
Production costs	(Baht/rai)	318.4	318.4	298.2
Net value of production	(Baht/rai)	504.7	410.7	543.0
Labor requirement	(mandays/rai)	7.6	7.6	7.8

<b>Cassava</b>				
Crop Budget		Present	Future w/o Project	Future w/ Project
Yield	(ton/rai)	1.80	1.80	2.50
Farmgate Price	(Baht/ton)	760.7	760.7	760.7
Gross Value of production	(Baht/rai)	1369.2	1369.2	1901.6
Production costs	(Baht/rai)	611.2	611.2	761.3
Net value of production	(Baht/rai)	758.0	758.0	1140.4
Labor requirement	(mandays/rai)	7.5	7.5	7.5

<b>Sugarcane</b>				
Crop Budget		Present	Future w/o Project	Future w/ Project
Yield	(ton/rai)	7.20	7.20	7.20
Farmgate Price	(Baht/ton)	420.1	420.1	406.4
Gross Value of production	(Baht/rai)	3,025.0	3,025.0	2,926.2
Production costs	(Baht/rai)	2,374.7	2,374.7	2,354.3
Net value of production	(Baht/rai)	650.3	650.3	572.0
Labor requirement	(mandays/rai)	18	18	18

<b>Soybean</b>				
Crop Budget		Present	Future w/o Project	Future w/ Project
Yield	(ton/rai)	0.22	0.22	0.22
Farmgate Price	(Baht/ton)	9,890.7	9,890.7	8,676.7
Gross Value of production	(Baht/rai)	2,136.4	2,136.4	1,874.2
Production costs	(Baht/rai)	746.1	746.1	710.0
Net value of production	(Baht/rai)	1,390.3	1,390.3	1,164.2
Labor requirement	(mandays/rai)	0	0	0

<b>Groundnuts</b>				
Crop Budget		Present	Future w/o Project	Future w/ Project
Yield	(ton/rai)	0.23	0.23	0.23
Farmgate Price	(Baht/ton)	6,433.2	6,433.2	5,575.3
Gross Value of production	(Baht/rai)	1,479.6	1,479.6	1,282.3
Production costs	(Baht/rai)	952.8	952.8	916.6
Net value of production	(Baht/rai)	526.9	526.9	365.7
Labor requirement	(mandays/rai)	28	28	28

**Table G-PE-MH-4-2 MAHASARAKAM AREA  
Crop Budget (Financial base)**

<b>Chilli</b>				
Crop Budget		Present	Future w/o Project	Future w/ Project
Yield	(ton/rai)	0.2	0.2	0.2
Farmgate Price	(Baht/ton)	35,000.0	35,000.0	35,000.0
Gross Value of production	(Baht/rai)	8,050.0	8,050.0	8,050.0
Production costs	(Baht/rai)	3,942.8	3,942.8	3,878.5
Net value of production	(Baht/rai)	4,107.2	4,107.2	4,171.5
Labor requirement	(mandays/rai)	10	10	10

<b>Stringbean</b>				
Crop Budget		Present	Future w/o Project	Future w/ Project
Yield	(ton/rai)	0.7	0.7	0.7
Farmgate Price	(Baht/ton)	9000.0	9000.0	9000.0
Gross Value of production	(Baht/rai)	6300.0	6300.0	6300.0
Production costs	(Baht/rai)	1859.8	1859.8	1786.6
Net value of production	(Baht/rai)	4440.2	4440.2	4513.4
Labor requirement	(mandays/rai)	12	12	12

<b>Payaya</b>				
Crop Budget		Present	Future w/o Project	Future w/ Project
Yield	(ton/rai)	3.0	3.0	3.0
Farmgate Price	(Baht/ton)	4,269.1	4,269.1	4,269.1
Gross Value of production	(Baht/rai)	12,807.4	12,807.4	12,807.4
Production costs	(Baht/rai)	2,127.4	2,127.4	2,112.2
Net value of production	(Baht/rai)	10,680.0	10,680.0	10,695.2
Labor requirement	(mandays/rai)	29	29	29

**Table G-PE-MH-5-1 MAHASARAKAM AREA**  
**Present and Future Farmgate Price of Farm Products and Inputs**

Crops/Inputs	Unit	Without		With	
		Financial	Economic	Financial	Economic
Rice glutinous	Baht/ton	2,849.3	3,379.4	2,523.8	3,005.1
Rice non-glutinous	Baht/ton	3,165.9	3,754.9	2,804.3	3,339.0
Cassava	Baht/ton	760.7	802.5	760.7	802.5
Sugarcane	Baht/ton	420.1	441.9	406.4	427.9
Soybean	Baht/ton	9,890.7	5,510.7	8,676.7	4,830.2
Groundnuts	Baht/ton	6,433.2	3,572.7	5,575.3	3,091.8
Chilli	Baht/ton	35,000	35,000	35,000	35,000
Stringbean	Baht/ton	9,000	9,000	9,000	9,000
Mango for domestic	Baht/ton	10,000.0	10,000.0	10,000.0	10,000.0
Mango for export	Baht/ton	17,680.5	18,763.0	17,680.5	18,763.0
Eucalyptus	Baht/ton	477.7	746.1	477.7	746.1
Papaya	Baht/ton	4,269.1	5,954.5	4,269.1	6,259.1
Cow	Baht/ton	1,490.1	4,842.8	1,573.3	5,077.3
Chicken	Baht/kg	34.6	42.5	34.6	42.5
Chicken (Native)	Baht/kg	40.0	40.0	40.0	40.0
Tilapia	Baht/kg	30.0	30.0	30.0	30.0
46-0-0	Baht/50kg	433	311	333	210
15-15-15	Baht/50kg	358	222	256	185
16-16-8	Baht/50kg	343	247	266	181
16-20-0	Baht/50kg	344	247	261	177

**Table G-PE-MH-5-2-1 PRICE STRUCTURE MAHASARAKAM AREA**

Rice Non-Glutinous	1996		2005	
	Financial	Economic k)	Financial	Economic
Export price f.o.b. at Bangkok port (\$US/ton)				
Export price f.o.b. at Bangkok port (Baht/ton)	7,417.5	7,417.5	6,670.0	6,670.0
Export Tariff (10%)	741.8	0.0	667.0	0.0
Average Price of mixed grade rice (Baht/ton) a)	6,542.2	7,269.2	5,882.9	6,536.6
Port Handling and charges b)	327.1	300.9	294.1	270.6
Trader's Margin c)	98.1	90.3	88.2	81.2
Wholesale Price at Bangkok	6,117.0	6,877.9	5,500.5	6,184.8
Trader's Margin d)	91.8	84.4	82.5	75.9
Rice Price at rice milling factory	6,025.2	6,793.5	5,418.0	6,108.9
Paddy Price at rice milling factory e)	3,976.7	4,483.7	3,575.9	4,031.9
Milling cost f)	100	92.0	100	92.0
Transport cost to Milling Factory g)	240.0	208.8	240.0	208.8
Trader's Margin h)	198.8	182.9	178.8	164.5
Local market price	3,437.8	4,000.0	3,057.1	3,566.6
Local trader's margin i)	171.9	158.1	152.9	140.6
Transport cost to local market j)	100.0	87.0	100.0	87.0
Farmgate price	3,165.9	3,754.9	2,804.3	3,339.0

- a) Adjusted to the quality of rice price of 100%, 5%, 10%, 25%.  
b) 5% of Average Price of mixed grade rice.  
c) 1.5% of export rice.  
d) 1.5% of export rice.  
e) Milling recovery rate 66%.  
f) Milling cost 100 Baht/ton  
g) Kohn Kean to Bangkok milling factory, about 400 km  
h) 5% of paddy price at rice milling factory  
i) 5% of local market price  
j) Priority area to Muang of Kohn Kean, 60 km  
k) Standard conversion factor is 0.92.

Cassava (Tapioca pellets)	1996		2005	
	Financial	Economic	Financial	Economic
Import Price c.i.f. at Rotterdam port (\$US/ton)				
Ocean freight and insurance a)				
Export price f.o.b. at Bangkok port (\$US/ton)				
Export price f.o.b. at Bangkok port (Baht/ton)	2,345.0	2,345.0	2,345.0	2,345.0
Tariff (0%)	0.0	0.0	0.0	0.0
Value Add Tax	0.0	0.0	0.0	0.0
Port Handling and charges b)	117.3	107.9	117.3	107.9
Port gate price	2,227.8	2,237.1	2,227.8	2,237.1
Transport cost to Port near Bangkok c)	245.1	213.2	245.1	213.2
Trader's Margin d)	111.4	102.5	111.4	102.5
Processed cost e)	150	138.0	150	138.0
Local cassava pellets factory price	1,721.3	1,783.5	1,721.3	1,783.5
Cassava equivalent price (50%) e)	860.7	891.7	860.7	891.7
Local trader's margin	44.0	40.5	44.0	40.5
Local Transport cost	56.0	48.7	56.0	48.7
Farmgate price	760.7	802.5	760.7	802.5

- a) Freight rate 14\$/ton  
b) 5% of f.o.b. price.  
c) 10% of port gate price.  
d) 5% of port gate price.  
e) 1 kg of cassava pellets is equivalent to 2 kg of cassava roots.

Sugarcane	1996		2005	
	Financial	Economic a)	Financial	Economic
Export price f.o.b. at Bangkok port (\$US/ton)				
Export price f.o.b. at Bangkok port (Baht/ton)	5,770.0	5,770.0	5,622.5	5,622.5
Tariff (0%)	0.0	0.0	0.0	0.0
Value Add Tax	0.0	0.0	0.0	0.0
Port Handling and charges b)	288.5	265.4	281.1	258.6
Port gate price	5,481.5	5,504.6	5,341.4	5,363.9
Transport cost to Port near Bangkok c)	328.9	286.1	320.5	278.8
Trader's Margin d)	274.1	252.1	267.1	245.7
Processed cost e)	150	138.0	150	138.0
Local sugar factory price	4,728.5	4,828.3	4,603.8	4,701.3
Sugarcane equivalent price (11%) e)	520.1	531.1	506.4	517.1
Local trader's margin	44.0	40.5	44.0	40.5
Local Transport cost	56.0	48.7	56.0	48.7
Farmgate price	420.1	441.9	406.4	427.9

- a) Standard conversion factor is 0.92.  
b) 5% of f.o.b. price.  
c) 5% of port gate price.  
d) 5% of port gate price.  
e) 1 kg of cassava pellets is equivalent to 2 kg of cassava roots.

**Table G-PE-MH-5-2-2 PRICE STRUCTURE MAHASARAKAM AREA**

Soybean	1996		2005	
	Financial	Economic	Financial	Economic
Export Price f.o.b. at Rotterdam port (\$US/ton)				238.6
Ocean freight and insurance a)				34.0
Import price c.i.f. at Bangkok port (\$US/ton)				204.6
Import price c.i.f. at Bangkok port (Baht/ton)	5,822.5	5,822.5	5,115.0	5,115.0
Import Tariff (60%)	3,493.5	0.0	3,069.0	0.0
Value Add Tax (10%)	931.6	0.0	818.4	0.0
Port Handling and charges b)	291.1	267.8	255.8	235.3
Port gate price	10,538.7	6,090.3	9,258.2	5,350.3
Transport cost to Port near Bangkok c)	274.0	238.4	240.7	209.4
Trader's Margin d)	274.0	252.1	240.7	221.5
Local market price	9,990.7	5,599.9	8,776.7	4,919.4
Local trader's margin	44.0	40.5	44.0	40.5
Local Transport cost	56.0	48.7	56.0	48.7
Farmgate price	9,890.7	5,510.7	8,676.7	4,830.2

a) Freight rate \$24/ton and insurance \$10.

b) 5 % of f.o.b. price.

c) 2.5 % of port gate price.

d) 2.5 % of port gate price.

Groundnuts	1996		2005	
	Financial	Economic	Financial	Economic
Export Price f.o.b. at Rotterdam port (\$US/ton)				166.3
Ocean freight and insurance a)				34.0
Import price c.i.f. at Bangkok port (\$US/ton)				132.3
Import price c.i.f. at Bangkok port (Baht/ton)	3,807.5	3,807.5	3,307.5	3,307.5
Import Tariff (60%)	2,284.5	0.0	1,984.5	0.0
Value Add Tax (10%)	609.2	0.0	529.2	0.0
Port Handling and charges b)	190.4	175.1	165.4	152.1
Port gate price	6,891.6	3,982.6	5,986.6	3,459.6
Transport cost to Port near Bangkok c)	179.2	155.9	155.7	135.4
Trader's Margin d)	179.2	164.8	155.7	143.2
Local market price	6,533.2	3,661.9	5,675.3	3,181.0
Local trader's margin	44.0	40.5	44.0	40.5
Local Transport cost	56.0	48.7	56.0	48.7
Farmgate price	6,433.2	3,572.7	5,575.3	3,091.8

a) Freight rate \$24/ton and insurance \$10.

b) 5 % of f.o.b. price.

c) 2.5 % of port gate price.

d) 2.5 % of port gate price.

Mango (Khleo Sawuai)	1996		2005	
	Financial	Economic	Financial	Economic
Import Price c.i.f. at Tokyo port (\$US/ton)				1,500
Ocean freight and insurance a)				140.0
Export price f.o.b. at Bangkok port (\$US/ton)				1,360
Export price f.o.b. at Bangkok port (Baht/ton) b)	34,000.0	34,000.0	34,000.0	34,000.0
Export Tax (0%)	0.0	0.0	0.0	0.0
Value Add Tax (10%)	3,400.0	3,400.0	3,400.0	3,400.0
Port Handling and charges c)	1,700.0	1,564.0	1,700.0	1,564.0
Transport cost to Port	146.0	127.0	146.0	127.0
Office Expenditure	850.0	782.0	850.0	782.0
Certificate License	200	168.0	200	168.0
Packing	1400	1,288.0	1400	1,288.0
Labour for grading	1200	1,104.0	1200	1,104.0
Wholesale Price at Bangkok market	25,104.0	25,567.0	25,104.0	25,567.0
Transport cost to Bangkok	366.0	318.4	366.0	318.4
Trader's Margin d)	3,765.6	3,464.4	3,765.6	3,464.4
Value Add Tax (10%)	2,510.4	2,556.7	2,510.4	2,556.7
Local market price	20,972.4	21,784.2	20,972.4	21,784.2
Local trader's margin e)	3,145.9	2,894.2	3,145.9	2,894.2
Local Transport cost	146.0	127.0	146.0	127.0
Farmgate price (Baht/ton)	17,680.5	18,763.0	17,680.5	18,763.0

a) Freight rate 2400\$/20ton by Reefer.

b) Exchange rate 1 US dollar=25 baht

c) 5 % of f.o.b. price.

d) 15 % of Wholesale Price.

e) 15 % of Wholesale Price.

**Table G-PE-MH-5-2-3 PRICE STRUCTURE MAHASARAKAM AREA**

Acacia(Eucalyptus, Wood chip)	1996		2005	
	Financial	Economic	Financial	Economic
Import Price c.i.f. at Yokohama port (\$US/ton)				121
Ocean freight and insurance a)				400
Export price f.o.b. at Bangkok port (\$US/ton)				81.0
Export price f.o.b. at Bangkok port (Baht/ton)	2,025.0	2,025.0	2,025.0	2,025.0
Tariff (40%)	810.0	0.0	810.0	0.0
Value Add Tax (0%)	0.0	0.0	0.0	0.0
Port Handling and charges b)	101.3	93.2	101.3	93.2
Port gate price	1,113.8	1,931.9	1,113.8	1,931.9
Transport cost to Port near Bangkok	82.8	72.0	82.8	72.0
Trader's Margin c)	55.7	51.2	55.7	51.2
Processed cost	150	138.0	150	138.0
Local cassava pellets factory price	825.3	1,670.6	825.3	1,670.6
Woodchip equivalent price (70%) d)	577.7	835.3	577.7	835.3
Local trader's margin	44.0	40.5	44.0	40.5
Local Transport cost	56.0	48.7	56.0	48.7
Farmgate price	477.7	746.1	477.7	746.1

a) Freight rate 35\$/ton

b) 5 % of f.o.b. price.

c) 5 % of port gate price.

d) 1 ton of wood is equivalent to 0.7 tong of wood chip.

Papaya	1996		2005	
	Financial	Economic	Financial	Economic
Import Price c.i.f. at Tokyo port (\$US/ton)				600
Ocean freight and insurance a)				140.0
Export price f.o.b. at Bangkok port (\$US/ton)				460
Export price f.o.b. at Bangkok port (Baht/ton) b)	11,500.0	11,500.0	11,500.0	11,500.0
Export Tax (0%)	0.0	0.0	0.0	0.0
Value Add Tax (10%)	1,150.0	0.0	1,150.0	0.0
Port Handling and charges c)	575.0	529.0	575.0	529.0
Transport cost to Port	146.0	127.0	146.0	127.0
Office Expenditure	287.5	264.5	287.5	264.5
Certificate License	200	168.0	200	168.0
Packing	1400	1,288.0	1400	1,288.0
Labour for grading	1200	1,104.0	1200	1,104.0
Wholesale Price at Bangkok market	6,541.5	8,019.5	6,541.5	8,019.5
Transport cost to Bangkok	366.0	318.4	366.0	0.0
Trader's Margin d)	981.2	902.7	981.2	981.2
Value Add Tax (10%)	654.2	801.9	654.2	801.9
Local market price	5,194.3	6,798.3	5,194.3	7,038.3
Local trader's margin e)	779.1	716.8	779.1	779.1
Local Transport cost	146.0	127.0	146.0	0.0
Farmgate price (Baht/ton)	4,269.1	5,954.5	4,269.1	6,259.1

a) Freight rate 2400\$/20ton by Reefer.

b) Exchange rate 1 US dollar=25 baht.

c) 5 % of f.o.b. price.

d) 15 % of Wholesale Price.

**Table G-PE-MH-5-2-4 PRICE STRUCTURE MAHASARAKAM AREA**

Cow	1996		2005	
	Financial	Economic	Financial	Economic
Export Price f.o.b. at US port (\$US/ton)				166.3
Ocean freight and insurance a)				63.0
Import price c.i.f. at Bangkok port (\$US/ton)				229.3
Import price c.i.f. at Bangkok port (Baht/ton)				
Import gate price	5,482.5	5,482.5	5,732.5	5,732.5
Import Tariff (60%)	3,289.5	0.0	3,439.5	0.0
Value Add Tax (10%)	0.0	0.0	0.0	0.0
Port Handling and charges b)	274.1	252.2	286.6	263.7
Port gate price	1,918.9	5,230.3	2,006.4	5,468.8
Transport cost to Port near Bangkok	82.8	72.0	82.8	72.0
Trader's Margin c)	95.9	88.3	100.3	92.3
Processed cost	150	138.0	150	138.0
Local meat factory price	1,590.1	4,932.0	1,673.3	5,166.5
Local trader's margin	44.0	40.5	44.0	40.5
Local Transport cost	56.0	48.7	56.0	48.7
Farmgate price	1,490.1	4,842.8	1,573.3	5,077.3

a) Freight rate \$53/ton and insurance \$10/ton.

b) 5 % of f.o.b. price.

c) 5 % of port gate price.

Chicken	1996		2005	
	Financial	Economic	Financial	Economic
Export Price f.o.b. at Bangkok port (\$US/ton)				2484.0
Export price c.i.f. at Bangkok port (Baht/ton)	62,100.0	62,100.0	62,100.0	62,100.0
Export Tax (0%)	0.0	0.0	0.0	0.0
Value Add Tax (10%)	6,210.0	0.0	6,210.0	0.0
Port Handling and charges a)	6,210.0	5,713.2	6,210.0	5,713.2
Office Expenditure b)	1,552.5	1,428.3	1,552.5	1,428.3
Certificate License	200	168.0	200	168.0
Packing	1400	1,288.0	1400	1,288.0
Port gate price	49,680.0	56,386.8	49,680.0	56,386.8
Transport cost to Port near Bangkok	165.0	143.6	165.0	143.6
Trader's Margin c)	2,980.8	2,742.3	2,980.8	2,742.3
Processed cost d)	9,936.0	9,141.1	9,936.0	9,141.1
Local meat factory price	36,598.2	44,359.8	36,598.2	44,359.8
Local trader's margin e)	1,829.9	1,683.5	1,829.9	1,683.5
Local Transport cost	200.0	174.0	200.0	174.0
Farmgate price (Baht/ton)	34,568.3	42,502.3	34,568.3	42,502.3
Farmgate price (Baht/kg)	34.6	42.5	34.6	42.5

a) 10 % of f.o.b. price.

b) 2.5 % of f.o.b. price.

c) 5 % of port gate price.

d) 20 % of port gate price.

e) 5 % of factory gate price.



**Table G-PE-MH-5-2-5 PRICE STRUCTURE MAHASARAKAM AREA**

Urea (46-0-0)	1996		2005	
	Financial	Economic	Financial	Economic
Export price f.o.b. at Yokohama ports (\$US/ton)		179.9		127.8
Ocean freight and insurance a)		40		40
Import price c.i.f. at Bangkok port (\$US/ton)		219.9		167.8
Import price c.i.f. at Bangkok port (Baht/ton)	5,497.5	5,497.5	4,195.0	4,195.0
Import Tariff (30%)	1,649.3	0.0	1,258.5	0.0
Value Add Tax (10%)	714.7	0.0	545.4	0.0
Port Handling and charges b)	137.4	126.4	104.9	0.0
Port gate price	7,998.9	5,623.9	6,103.7	4,195.0
Trader's margin c)	399.9	367.9	305.2	0.0
Transport cost to Local market	210.0	182.7	210.0	0.0
Local market price	8,608.8	6,174.6	6,618.9	4,195.0
Local Transport cost to Farm	44	38.3	44	0.0
Trader's margin	56	51.5	56	0.0
Farmgate price (Baht/ton)	8,652.8	6,212.9	6,662.9	4,195.0
Farmgate price (Baht/kg)	433	311	333	210

a) Freight \$35/ton.

b) Port handling, storage charges is 2.5% of c.i.f. price.

c) 5 % of port gate price.

Potassium Chloride (0-0-60)	1996		2005	
	Financial	Economic	Financial	Economic
Export price f.o.b. at Yokohama ports (\$US/ton)		102.4		87.5
Ocean freight and insurance a)		40		40
Import price c.i.f. at Bangkok port (\$US/ton)		142.4		127.5
Import price c.i.f. at Bangkok port (Baht/ton)	3,560.0	3,560.0	3,187.5	3,187.5
Import Tariff (30%)	1,068.0	0.0	956.3	0.0
Value Add Tax (10%)	462.8	0.0	414.4	0.0
Port Handling and charges b)	89.0	81.9	79.7	73.3
Port gate price	5,179.8	3,641.9	4,637.8	3,260.8
Trader's margin c)	259.0	238.3	231.9	213.3
Transport cost to Local market	210.0	182.7	210.0	182.7
Local market price	5,648.8	4,062.9	5,079.7	3,656.9
Local Transport cost to Farm	44	38.3	44	38.3
Trader's margin	56	51.5	56	51.5
Farmgate price (Baht/ton)	5,692.8	4,101.1	5,123.7	3,695.1
Farmgate price (Baht/kg)	285	205	256	185

a) Freight \$35/ton.

b) Port handling, storage charges is 2.5% of c.i.f. price.

c) 5 % of port gate price.

TSP (0-46-0)	1996		2005	
	Financial	Economic	Financial	Economic
Export price f.o.b. at Yokohama ports (\$US/ton)		186.7		127.8
Ocean freight and insurance a)		40		40
Import price c.i.f. at Bangkok port (\$US/ton)		226.7		167.8
Import price c.i.f. at Bangkok port (Baht/ton)	5,667.5	5,667.5	4,195.0	4,195.0
Import Tariff (30%)	1,700.3	0.0	1,258.5	0.0
Value Add Tax (10%)	736.8	0.0	545.4	0.0
Port Handling and charges b)	141.7	130.4	104.9	96.5
Port gate price	8,246.2	5,797.9	6,103.7	4,291.5
Trader's margin c)	412.3	379.3	305.2	280.8
Transport cost to Local market	210.0	182.7	210.0	182.7
Local market price	8,868.5	6,359.9	6,618.9	4,755.0
Local Transport cost to Farm	44	38.3	44	38.3
Trader's margin	56	51.5	56	51.5
Farmgate price (Baht/ton)	8,912.5	6,398.2	6,662.9	4,793.2
Farmgate price (Baht/kg)	446	320	333	240

a) Freight \$35/ton.

b) Port handling, storage charges is 2.5% of c.i.f. price.

c) 5 % of port gate price.

**Table G-PE-MH-6-1-1 PRODUCTION COST MAHASARAKAM AREA  
Rice Glutinous**

Present		Physical Inputs		Unit Prices		Total Value				
		Unit	Quantity	Unit	Price		Financial	Economic	Financial	Economic
Seed	Planted	kg/ha	10	Baht/kg	Financial	Economic	Financial	Economic	Financial	Economic
Fertilizer	46-0-0	kg / rai	0	Baht/50kg	0	0	0	0	0	0
	15-15-15	kg / rai	0	Baht/50kg	433	311	0.0	0.0	0.0	0.0
	16-16-8	kg / rai	20	Baht/50kg	358	222	0.0	0.0	0.0	0.0
	16-20-0	kg / rai	0	Baht/50kg	343	247	137.4	98.7	137.4	98.7
Chemical	Herbicides (Gramaxzone)	liter/ rai	0	Baht/liter	344	247	0.0	0.0	0.0	0.0
	Insecticides (Karate)	liter/ rai	0	Baht/liter	150	143	0	0	0	0
	Fungicides	liter/ rai	0.02	Baht/liter	0	0	0	0	0	0
Tractor		liter/ rai	0.015	Baht/liter	450	428	9	8.55	9	8.55
Transport (Truck)		days	0	Baht/day	200	190	3	2.85	3	2.85
Hired labor		ton	0.28	Baht/ton	180	151.2	0	0	0	0
Fuel&Others		mandays	2	Baht/manday	100	87	28	24.36	28	24.36
		Liter	0	Baht/liter	100	92	200	184	200	184
			0	Baht/liter	12	10.8	0	0	0	0
Total Production Cost							377.4	318.4	377.4	318.4

Future without		Physical Inputs		Unit Prices		Total Value				
		Unit	Quantity	Unit	Price		Financial	Economic	Financial	Economic
Seed	Planted	kg/ha	10	Baht/kg	Financial	Economic	Financial	Economic	Financial	Economic
Fertilizer	46-0-0	kg / rai	0	Baht/50kg	0	0	0	0	0	0
	15-15-15	kg / rai	0	Baht/50kg	433	311	0.0	0.0	0.0	0.0
	16-16-8	kg / rai	20	Baht/50kg	358	222	0.0	0.0	0.0	0.0
	16-20-0	kg / rai	0	Baht/50kg	343	247	137.4	98.7	137.4	98.7
Chemical	Herbicides (Gramaxzone)	liter/ rai	0	Baht/liter	344	247	0.0	0.0	0.0	0.0
	Insecticides (Karate)	liter/ rai	0	Baht/liter	150	143	0	0	0	0
	Fungicides	liter/ rai	0.02	Baht/liter	0	0	0	0	0	0
Tractor		liter/ rai	0.015	Baht/liter	450	428	9	8.55	9	8.55
Transport (Truck)		days	0	Baht/day	200	190	3	2.85	3	2.85
Hired labor		ton	0.28	Baht/ton	180	151.2	0	0	0	0
Fuel&Others		mandays	2	Baht/manday	100	87	28	24.36	28	24.36
		Liter	0	Baht/liter	100	92	200	184	200	184
			0	Baht/liter	12	10.8	0	0	0	0
Total Production Cost							377.4	318.4	377.4	318.4

Future with		Physical Inputs		Unit Prices		Total Value				
		Unit	Quantity	Unit	Price		Financial	Economic	Financial	Economic
Seed	Planted	kg/ha	5	Baht/kg	Financial	Economic	Financial	Economic	Financial	Economic
Fertilizer	46-0-0	kg / rai	0	Baht/50kg	0	0	0	0	0	0
	15-15-15	kg / rai	0	Baht/50kg	333	210	0.00	0.00	0.00	0.00
	16-16-8	kg / rai	25	Baht/50kg	256	185	0.00	0.00	0.00	0.00
	16-20-0	kg / rai	0	Baht/50kg	266	181	132.96	90.48	132.96	90.48
Chemical	Herbicides (Gramaxzone)	liter/ rai	0	Baht/liter	261	177	0.00	0.00	0.00	0.00
	Insecticides (Karate)	liter/ rai	0	Baht/liter	150	143	0.00	0.00	0.00	0.00
	Fungicides	liter/ rai	0.02	Baht/liter	0	0	0	0	0	0
Tractor		liter/ rai	0.015	Baht/liter	450	428	9	8.55	9	8.55
Transport (Truck)		days	0	Baht/day	200	190	3	2.85	3	2.85
Hired labor		ton	0.35	Baht/ton	180	151.2	0	0	0	0
Fuel&Others		mandays	2	Baht/manday	100	87	35	30.45	35	30.45
		Liter	0	Baht/liter	100	92	200	184	200	184
			0	Baht/liter	12	10.8	0	0	0	0
Total Production Cost							379.96	316.33	379.96	316.33

Note: Price of fertilizer is based on the price calculated from the international price.

**Rice Glutinous**

Economic price

Present	Future without	Future with
318.43	318.43	316.33

**Table G-PE-MH-6-1-2 PRODUCTION COST MAHASARAKAM AREA**  
Rice non glutinous

Present		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Seed	Planted	kg/ha	10	Baht/kg	0	0	0	0
Fertilizer	46-0-0	kg / rai	0	Baht/50kg	433	311	0.0	0.0
	15-15-15	kg / rai	0	Baht/50kg	358	222	0.0	0.0
	16-16-8	kg / rai	20	Baht/50kg	343	247	137.4	98.7
	16-20-0	kg / rai	0	Baht/50kg	344	247	0.0	0.0
Chemical	Herbicides (Gramaxzone)	liter/ rai	0	Baht/liter	150	143	0	0
		liter/ rai	0	Baht/liter	0	0	0	0
	Insecticides (Karate)	liter/ rai	0.02	Baht/liter	450	428	9	8.55
	Fungicides	liter/ rai	0.015	Baht/liter	200	190	3	2.85
Tractor		days	0	Baht/rai	180	151.2	0	0
Transport (Truck)		ton	0.28	Baht/ton	100	87	28	24.36
Hired labor		mandays	2	Baht/manday	100	92	200	184
Fuel&Others		Liter	0	Baht/liter	12	10.8	0	0
Total Production Cost							377.37	318.43

Future without		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Seed	Planted	kg/ha	10	Baht/kg	0	0	0	0
Fertilizer	46-0-0	kg / rai	0	Baht/50kg	433	311	0.0	0.0
	15-15-15	kg / rai	0	Baht/50kg	358	222	0.0	0.0
	16-16-8	kg / rai	20	Baht/50kg	343	247	137.4	98.7
	16-20-0	kg / rai	0	Baht/50kg	344	247	0.0	0.0
Chemical	Herbicides (Gramaxzone)	liter/ rai	0	Baht/liter	150	143	0	0
		liter/ rai	0	Baht/liter	0	0	0	0
	Insecticides (Karate)	liter/ rai	0.02	Baht/liter	450	428	9	8.55
	Fungicides	liter/ rai	0.015	Baht/liter	200	190	3	2.85
Tractor		days	0	Baht/rai	180	151.2	0	0
Transport (Truck)		ton	0.28	Baht/ton	100	87	28	24.36
Hired labor		mandays	2	Baht/manday	100	92	200	184
Fuel&Others		Liter	0	Baht/liter	12	10.8	0	0
Total Production Cost							377.37	318.43

Future with		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Seed	Planted	kg/ha	5	Baht/kg	0	0	0	0
Fertilizer	46-0-0	kg / rai	0	Baht/50kg	333	210	0.00	0.00
	15-15-15	kg / rai	0	Baht/50kg	256	185	0.00	0.00
	16-16-8	kg / rai	20	Baht/50kg	266	181	106.36	72.38
	16-20-0	kg / rai	0	Baht/50kg	261	177	0.00	0.00
Chemical	Herbicides (Gramaxzone)	liter/ rai	0	Baht/liter	150	143	0.00	0.00
		liter/ rai	0	Baht/liter	0	0	0	0
	Insecticides (Karate)	liter/ rai	0.02	Baht/liter	450	428	9	8.55
	Fungicides	liter/ rai	0.015	Baht/liter	200	190	3	2.85
Tractor		days	0	Baht/rai	180	151.2	0	0
Transport (Truck)		ton	0.35	Baht/ton	100	87	35	30.45
Hired labor		mandays	2	Baht/manday	100	92	200	184
Fuel&Others		Liter	0	Baht/liter	12	10.8	0	0
Total Production Cost							353.36	298.23

Note: Price of fertilizer is based on the price calculated from the international price.

**Rice non glutinous**

Economic price

Present	Future without	Future with
318.43	318.43	298.23

**Table G-PE-MH-6-1-3 PRODUCTION COST MAHASARAKAM AREA  
Cassava**

Present		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Stem	Planted	kg/ha	1,600	Baht/kg	0	0	0	0
Fertilizer	46-0-0	kg/rai	10	Baht/50kg	433	311	86.5	62.1
	15-15-15	kg/rai	20	Baht/50kg	358	222	143.0	89.0
	16-16-8	kg/rai	0	Baht/50kg	343	247	0.0	0.0
	16-20-0	kg/rai	0	Baht/50kg	344	247	0.0	0.0
Chemical	Herbicides (Gramaxzone)	liter/rai	0	Baht/liter	150	143	0	0
		liter/rai	0	Baht/liter	0	0	0	0
		liter/rai	0	Baht/liter	450	428	0	0
Tractor	Fungicides	liter/rai	0	Baht/liter	200	190	0	0
		days	1	Baht/rai	180	151.2	180	151.2
Transport (Truck)		ton	1.7	Baht/ton	100	87	170	147.9
Hired labor		mandays	2.5	Baht/manday	70	64.4	175	161
Fuel&Others		Liter	0	Baht/liter	0	0	0	0
Total Production Cost							754.55	611.21

Future without		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Seed	Planted	kg/ha	1,600	Baht/kg	0	0	0	0
Fertilizer	46-0-0	kg/rai	10	Baht/50kg	433	311	86.5	62.1
	15-15-15	kg/rai	20	Baht/50kg	358	222	143.0	89.0
	16-16-8	kg/rai	0	Baht/50kg	343	247	0.0	0.0
	16-20-0	kg/rai	0	Baht/50kg	344	247	0.0	0.0
Chemical	Herbicides (Gramaxzone)	liter/rai	0	Baht/liter	150	143	0	0
		liter/rai	0	Baht/liter	0	0	0	0
		liter/rai	0	Baht/liter	450	428	0	0
Tractor	Fungicides	liter/rai	0	Baht/liter	200	190	0	0
		days	1	Baht/rai	180	151.2	180	151.2
Transport (Truck)		ton	1.7	Baht/ton	100	87	170	147.9
Hired labor		mandays	2.5	Baht/manday	70	64.4	175	161
Fuel&Others		Liter	0	Baht/liter	0	0	0	0
Total Production Cost							754.55	611.21

Future with		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Seed	Planted	kg/ha	1,600	Baht/kg	0	0	0	0
Fertilizer	46-0-0	kg/rai	20	Baht/50kg	333	210	133.3	83.9
	15-15-15	kg/rai	10	Baht/50kg	256	185	205.0	147.7
	16-16-8	kg/rai	0	Baht/50kg	266	181	0.0	0.0
	16-20-0	kg/rai	0	Baht/50kg	261	177	0.0	0.0
Chemical	Herbicides (Gramaxzone)	liter/rai	0	Baht/liter	150	143	0	0
		liter/rai	0	Baht/liter	0	0	0	0
		liter/rai	0	Baht/liter	450	428	0	0
Tractor	Fungicides	liter/rai	0	Baht/liter	200	190	0	0
		days	1	Baht/rai	180	151.2	180	151.2
Transport (Truck)		ton	2.5	Baht/ton	100	87	250	217.5
Hired labor		mandays	2.5	Baht/manday	70	64.4	175	161
Fuel&Others		Liter	0	Baht/liter	0	0	0	0
Total Production Cost							943.2	761.3

Note: Price of fertilizer is based on the price calculated from the international price.

**Cassava**

Economic price

Present	Future without	Future with
611.21	611.21	761.27

**Table G-PE-MH-6-1-4 PRODUCTION COST MAHASARAKAM AREA Sugarcane**

Present		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Stern	Planted	kg/ha	5,000	Baht/kg	0	0	0	0
Fertilizer	46-0-0	kg / rai	0	Baht/50kg	433	311	0.0	0.0
	15-15-15	kg / rai	27	Baht/50kg	358	222	193.1	120.1
	16-16-8	kg / rai	0	Baht/50kg	343	247	0.0	0.0
	16-20-0	kg / rai	0	Baht/50kg	344	247	0.0	0.0
Chemical	Herbicides (Gramaxzone)	liter/rai	0	Baht/liter	150	143	0	0
		liter/rai	0	Baht/liter	0	0	0	0
	Insecticides (Karate)	liter/rai	0	Baht/liter	450	428	0	0
		liter/rai	0	Baht/liter	200	190	0	0
Tractor		days	1	Baht/rai	200	168	200	168
Transport (Truck)		ton	7.2	Baht/ton	150	130.5	1,080	940
Hired labor		mandays	11	Baht/manday	100	92	1,100	1,012
Fuel&Others		Liter	12.5	Baht/liter	12	10.8	150	135
Total Production Cost							2,723.1	2,374.7

Future without		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Seed	Planted	kg/ha	5,000	Baht/kg	0	0	0	0
Fertilizer	46-0-0	kg / rai	0	Baht/50kg	433	311	0.0	0.0
	15-15-15	kg / rai	27	Baht/50kg	358	222	193.1	120.1
	16-16-8	kg / rai	0	Baht/50kg	343	247	0.0	0.0
	16-20-0	kg / rai	0	Baht/50kg	344	247	0.0	0.0
Chemical	Herbicides (Gramaxzone)	liter/rai	0	Baht/liter	150	143	0	0
		liter/rai	0	Baht/liter	0	0	0	0
	Insecticides (Karate)	liter/rai	0	Baht/liter	450	428	0	0
		liter/rai	0	Baht/liter	200	190	0	0
Tractor		days	1	Baht/rai	200	168	200	168
Transport (Truck)		ton	7.2	Baht/ton	150	130.5	1,080	939.6
Hired labor		mandays	11	Baht/manday	100	92	1,100	1,012
Fuel&Others		Liter	12.5	Baht/liter	12	10.8	150	135
Total Production Cost							2,723.1	2,374.7

Future with		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Seed	Planted	kg/ha	5,000	Baht/kg	0	0	0	0
Fertilizer	46-0-0	kg / rai	0	Baht/50kg	333	210	0.0	0.0
	15-15-15	kg / rai	27	Baht/50kg	256	185	138.4	99.7
	16-16-8	kg / rai	0	Baht/50kg	266	181	0.0	0.0
	16-20-0	kg / rai	0	Baht/50kg	261	177	0.0	0.0
Chemical	Herbicides (Gramaxzone)	liter/rai	0	Baht/liter	150	143	0	0
		liter/rai	0	Baht/liter	0	0	0	0
	Insecticides (Karate)	liter/rai	0	Baht/liter	450	428	0	0
		liter/rai	0	Baht/liter	200	190	0	0
Tractor		days	1	Baht/rai	200	168	200	168
Transport (Truck)		ton	7.2	Baht/ton	150	130.5	1,080	939.6
Hired labor		mandays	11	Baht/manday	100	92	1,100	1,012
Fuel&Others		Liter	12.5	Baht/liter	12	10.8	150	135
Total Production Cost							2,668.4	2,354.3

Note: Price of fertilizer is based on the price calculated from the international price.

**Sugarcane**

Economic price

Present	Future without	Future with
2374.72	2374.72	2354.28

**Table G-PE-MH-6-1-5 PRODUCTION COST MAHASARAKAM AREA Soybean**

Present		Physical Inputs		Unit Prices		Total Value				
		Unit	Quantity	Unit	Price		Financial	Economic	Financial	Economic
Seed	Planted	kg/ha	15	Baht/kg	17	16	255	242.25		
Fertilizer	46-0-0	kg/rai	0	Baht/50kg	433	311	0.0	0.0		
	15-15-15	kg/rai	20	Baht/50kg	358	222	143.0	89.0		
	16-16-8	kg/rai	0	Baht/50kg	343	247	0.0	0.0		
	16-20-0	kg/rai	15	Baht/50kg	344	247	103.3	74.1		
	Chemical	Herbicides (Gramaxzone)	liter/rai	0	Baht/liter	150	143	0.0	0.0	
	Insecticides (Karate)	liter/rai	0.1875	Baht/liter	450	428	84.4	80.2		
	Fungicides	liter/rai	0	Baht/liter	200	190	0	0		
Tractor		days	1	Baht/rai	180	151.2	180	151.2		
Transport (Truck)		ton	0.2	Baht/ton	100	87	20	17.4		
Hired labor		mandays	1	Baht/manday	100	92	100	92		
Fuel&Others		liter	0	Baht/liter	0	0	0	0		
Total Production Cost							885.7	746.1		

Future without		Physical Inputs		Unit Prices		Total Value				
		Unit	Quantity	Unit	Price		Financial	Economic	Financial	Economic
Seed	Planted	kg/ha	15	Baht/kg	17	16	255	242.25		
Fertilizer	46-0-0	kg/rai	0	Baht/50kg	433	311	0.0	0.0		
	15-15-15	kg/rai	20	Baht/50kg	358	222	143.0	89.0		
	16-16-8	kg/rai	0	Baht/50kg	343	247	0.0	0.0		
	16-20-0	kg/rai	15	Baht/50kg	344	247	103.3	74.1		
	Chemical	Herbicides (Gramaxzone)	liter/rai	0	Baht/liter	150	143	0	0	
	Insecticides (Karate)	liter/rai	0.1875	Baht/liter	450	428	84.4	80.2		
	Fungicides	liter/rai	0	Baht/liter	200	190	0	0		
Tractor		days	1	Baht/rai	180	151.2	180	151.2		
Transport (Truck)		ton	0.2	Baht/ton	100	87	20	17.4		
Hired labor		mandays	1	Baht/manday	100	92	100	92		
Fuel&Others		Liter	0	Baht/liter	0	0	0	0		
Total Production Cost							885.67	746.13		

Future with		Physical Inputs		Unit Prices		Total Value				
		Unit	Quantity	Unit	Price		Financial	Economic	Financial	Economic
Seed	Planted	kg/ha	15	Baht/kg	17	16	255	242.25		
Fertilizer	46-0-0	kg/rai	0	Baht/50kg	333	210	0.00	0.00		
	15-15-15	kg/rai	20	Baht/50kg	256	185	102.49	73.83		
	16-16-8	kg/rai	0	Baht/50kg	266	181	0.00	0.00		
	16-20-0	kg/rai	15	Baht/50kg	261	177	78.22	53.15		
	Chemical	Herbicides (Gramaxzone)	liter/rai	0	Baht/liter	150	143	0	0	
	Insecticides (Karate)	liter/rai	0.1875	Baht/liter	450	428	84.4	80.2		
	Fungicides	liter/rai	0	Baht/liter	200	190	0	0		
Tractor		days	1	Baht/rai	180	151.2	180	151.2		
Transport (Truck)		ton	0.2	Baht/ton	100	87	20	17.4		
Hired labor		mandays	1	Baht/manday	100	92	100	92		
Fuel&Others		Liter	0	Baht/liter	0	0	0	0		
Total Production Cost							820.08	709.99		

Note: Price of fertilizer is based on the price calculated from the international price.

**Soybean**

Economic price

Present	Future without	Future with
746.13	746.13	709.99

**Table G-PE-MH-6-1-6 PRODUCTION COST MAHASARAKAM AREA  
Groundnuts**

Present		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Seed	Planted	kg/ha	30	Baht/kg	Financial	Economic	Financial	Economic
Fertilizer	46-0-0	kg / rai	0	Baht/50kg	14	13	420	399
	15-15-15	kg / rai	20	Baht/50kg	433	311	0.0	0.0
	16-16-8	kg / rai	0	Baht/50kg	358	222	143.0	89.0
	16-20-0	kg / rai	15	Baht/50kg	343	247	0.0	0.0
Chemical	Herbicides (Gramaxzone)	liter/ rai	0.267	Baht/liter	344	247	103.3	74.1
		liter/ rai	0	Baht/liter	150	143	40.05	38.0475
	Insecticides (Karate)	liter/ rai	0	Baht/liter	0	0	0	0
	Fungicides	liter/ rai	0	Baht/liter	450	428	0	0
Tractor		days	1	Baht/rai	200	190	0	0
Transport (Truck)		ton	0.2	Baht/ton	180	151.2	180	151.2
Hired labor		mandays	2	Baht/manday	100	87	20	17.4
Fuel&Others		Liter	0	Baht/liter	100	92	200	184
Total Production Cost					0	0	1106.3	952.8

Future without		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Seed	Planted	kg/ha	30	Baht/kg	Financial	Economic	Financial	Economic
Fertilizer	46-0-0	kg / rai	0	Baht/50kg	14	13	420	399
	15-15-15	kg / rai	20	Baht/50kg	433	311	0.0	0.0
	16-16-8	kg / rai	0	Baht/50kg	358	222	143.0	89.0
	16-20-0	kg / rai	15	Baht/50kg	343	247	0.0	0.0
Chemical	Herbicides (Gramaxzone)	liter/ rai	0.267	Baht/liter	344	247	103.3	74.1
		liter/ rai	0	Baht/liter	150	143	40.05	38.0475
	Insecticides (Karate)	liter/ rai	0	Baht/liter	0	0	0	0
	Fungicides	liter/ rai	0	Baht/liter	450	428	0	0
Tractor		days	1	Baht/rai	200	190	0	0
Transport (Truck)		ton	0.2	Baht/ton	180	151.2	180	151.2
Hired labor		mandays	2	Baht/manday	100	87	20	17.4
Fuel&Others		Liter	0	Baht/liter	100	92	200	184
Total Production Cost					0	0	1,106.3	952.8

Future with		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Seed	Planted	kg/ha	30	Baht/kg	Financial	Economic	Financial	Economic
Fertilizer	46-0-0	kg / rai	0	Baht/50kg	14	13	420	399
	15-15-15	kg / rai	20	Baht/50kg	333	210	0.00	0.00
	16-16-8	kg / rai	0	Baht/50kg	256	185	102.49	73.83
	16-20-0	kg / rai	15	Baht/50kg	266	181	0.00	0.00
Chemical	Herbicides (Gramaxzone)	liter/ rai	0.267	Baht/liter	261	177	78.22	53.15
		liter/ rai	0	Baht/liter	150	143	40.05	38.0475
	Insecticides (Karate)	liter/ rai	0	Baht/liter	0	0	0	0
	Fungicides	liter/ rai	0	Baht/liter	450	428	0	0
Tractor		days	1	Baht/rai	200	190	0	0
Transport (Truck)		ton	0.2	Baht/ton	180	151.2	180	151.2
Hired labor		mandays	2	Baht/manday	100	87	20	17.4
Fuel&Others		Liter	0	Baht/liter	100	92	200	184
Total Production Cost					0	0	1,040.8	916.6

Note: Price of fertilizer is based on the price calculated from the international price.

**Groundnuts**

Economic price

Present	Future without	Future with
952.77	952.77	916.63

**Table G-PE-MH-6-1-7 PRODUCTION COST MAHASARAKAM AREA**  
**Chilil**

Present		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Seed	Planted	kg/ha	1.25	Baht/kg	400	380	500	475
Fertilizer	46-0-0	kg/rai	0	Baht/50kg	433	311	0.0	0.0
	15-15-15	kg/rai	85	Baht/50kg	358	222	607.8	378.2
	16-16-8	kg/rai	0	Baht/50kg	343	247	0.0	0.0
	16-20-0	kg/rai	0	Baht/50kg	344	247	0.0	0.0
Chemical	Herbicides (Gramaxzone)	liter/rai	2.9	Baht/liter	150	143	435	413.25
		liter/rai	0	Baht/liter	0	0	0	0
	Insecticides (Karate)	liter/rai	1.11	Baht/liter	450	428	499.5	474.525
	Fungicides	liter/rai	0	Baht/liter	200	190	0	0
Tractor		days	1	Baht/rai	160	134.4	160	134.4
Transport (Truck)		ton	1	Baht/tonne	50	43.5	50	43.5
Hired labor		mandays	22	Baht/manday	100	92	2200	2024
Fuel&Others		Liter	0	Baht/liter	12	10.8	0	0
Total Production Cost							4,452.3	3,942.8

Future without		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Seed	Planted	kg/ha	1.3	Baht/kg	400	380	500	475
Fertilizer	46-0-0	kg/rai	0	Baht/50kg	433	311	0.0	0.0
	15-15-15	kg/rai	85	Baht/50kg	358	222	607.8	378.2
	16-16-8	kg/rai	0	Baht/50kg	343	247	0.0	0.0
	16-20-0	kg/rai	0	Baht/50kg	344	247	0.0	0.0
Chemical	Herbicides (Gramaxzone)	liter/rai	2.9	Baht/liter	150	143	435	413.25
		liter/rai	0	Baht/liter	0	0	0	0
	Insecticides (Karate)	liter/rai	1.11	Baht/liter	450	428	499.5	474.525
	Fungicides	liter/rai	0	Baht/liter	200	190	0	0
Tractor		days	1	Baht/rai	160	134.4	160	134.4
Transport (Truck)		ton	1	Baht/tonne	50	43.5	50	43.5
Hired labor		mandays	22	Baht/manday	100	92	2200	2024
Fuel&Others		Liter	0	Baht/liter	12	10.8	0	0
Total Production Cost							4,452.3	3,942.8

Future with		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Seed	Planted	kg/ha	1.25	Baht/kg	400	380	500	475
Fertilizer	46-0-0	kg/rai	0	Baht/50kg	333	210	0.00	0.00
	15-15-15	kg/rai	85	Baht/50kg	256	185	435.57	313.80
	16-16-8	kg/rai	0	Baht/50kg	266	181	0.00	0.00
	16-20-0	kg/rai	0	Baht/50kg	261	177	0.00	0.00
Chemical	Herbicides (Gramaxzone)	liter/rai	2.9	Baht/liter	150	143	435	413.25
		liter/rai	0	Baht/liter	0	0	0	0
	Insecticides (Karate)	liter/rai	1.11	Baht/liter	450	428	499.5	474.525
	Fungicides	liter/rai	0	Baht/liter	200	190	0	0
Tractor		days	1	Baht/rai	160	134.4	160	134.4
Transport (Truck)		ton	1	Baht/tonne	50	43.5	50	43.5
Hired labor		mandays	22	Baht/manday	100	92	2200	2024
Fuel&Others		Liter	0	Baht/liter	12	10.8	0	0
Total Production Cost							4,280.1	3,878.5

Note: Price of fertilizer is based on the price calculated from the international price.

Chilil

Present	Economic price	
	Future without	Future with
3942.8	3942.8	3878.5



**Table G-PE-MH-6-1-8 PRODUCTION COST MAHASARAKAM AREA**  
Stringbean

Present		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Seed	Planted	kg/ha	1.87	Baht/kg	400	380	748	710.6
Fertilizer	46-0-0	kg / rai	10	Baht/50kg	433	311	86.5	62.1
	15-15-15	kg / rai	70	Baht/50kg	358	222	500.6	311.4
	16-16-8	kg / rai	0	Baht/50kg	343	247	0.0	0.0
	16-20-0	kg / rai	0	Baht/50kg	344	247	0.0	0.0
Chemical	Herbicides (Gramaxzone)	liter/ rai	0.67	Baht/liter	150	143	100.5	95.475
		liter/ rai	0	Baht/liter	0	0	0	0
	Insecticides (Karate)	liter/ rai	0	Baht/liter	450	428	0	0
		Fungicides	liter/ rai	0	Baht/liter	200	190	0
Tractor		days	1	Baht/rai	200	168	200	168
Transport (Truck)		ton	0.6	Baht/ton	100	87	60	52.2
Hired labor		mandays	5	Baht/manday	100	92	500	460
Fuel&Others		Liter	0	Baht/liter	12	10.8	0	0
Total Production Cost							2,195.6	1,859.8

Future without		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Seed	Planted	kg/ha	1.87	Baht/kg	400	380	748	710.6
Fertilizer	46-0-0	kg / rai	10	Baht/50kg	433	311	86.5	62.1
	15-15-15	kg / rai	70	Baht/50kg	358	222	500.6	311.4
	16-16-8	kg / rai	0	Baht/50kg	343	247	0.0	0.0
	16-20-0	kg / rai	0	Baht/50kg	344	247	0.0	0.0
Chemical	Herbicides (Gramaxzone)	liter/ rai	0.67	Baht/liter	150	143	100.5	95.475
		liter/ rai	0	Baht/liter	0	0	0	0
	Insecticides (Karate)	liter/ rai	0	Baht/liter	450	428	0	0
		Fungicides	liter/ rai	0	Baht/liter	200	190	0
Tractor		days	1	Baht/rai	200	168	200	168
Transport (Truck)		ton	0.6	Baht/ton	100	87	60	52.2
Hired labor		mandays	5	Baht/manday	100	92	500	460
Fuel&Others		Liter	0	Baht/liter	12	10.8	0	0
Total Production Cost							2,195.6	1,859.8

Future with		Physical Inputs		Unit Prices		Total Value		
		Unit	Quantity	Unit	Price		Financial	Economic
Seed	Planted	kg/ha	1.87	Baht/kg	400	380	748	710.6
Fertilizer	46-0-0	kg / rai	10	Baht/50kg	333	210	66.63	41.95
	15-15-15	kg / rai	70	Baht/50kg	256	185	358.71	258.42
	16-16-8	kg / rai	0	Baht/50kg	266	181	0.00	0.00
	16-20-0	kg / rai	0	Baht/50kg	261	177	0.00	0.00
Chemical	Herbicides (Gramaxzone)	liter/ rai	0.67	Baht/liter	150	143	100.5	95.475
		liter/ rai	0	Baht/liter	0	0	0	0
	Insecticides (Karate)	liter/ rai	0	Baht/liter	450	428	0	0
		Fungicides	liter/ rai	0	Baht/liter	200	190	0
Tractor		days	1	Baht/rai	200	168	200	168
Transport (Truck)		ton	0.6	Baht/ton	100	87	60	52.2
Hired labor		mandays	5	Baht/manday	100	92	500	460
Fuel&Others		Liter	0	Baht/liter	12	10.8	0	0
Total Production Cost							2,033.8	1,786.6

Note: Price of fertilizer is based on the price calculated from the international price.

**Stringbean**

Economic price

Present	Future without	Future with
1,859.8	1,859.8	1,786.6