

# Economic and Financial Analysis: Supplementary Tables

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July 2021

Bangladesh: Irrigation Management Improvement  
Project — Additional Financing



Table 1: Farm (0.2 hectare). Crop Budget for Paddy - HYV Boro (Rabi) - Existing Diesel Pump (1 hectare)

		Without Project					With Project				
		Qty	Financial		Economic		Qty	Financial		Economic	
			Price per Unit (Tk)	Income & Expenditure (Tk)	Price per Unit (Tk)	Income & Expenditure (Tk)		Price per Unit (Tk)	Income & Expenditure (Tk)	Price per Unit (Tk)	Income & Expenditure (Tk)
Unit											
Outputs											
Main product: Paddy - HYV Boro (Rabi) - Existing Diesel Pump	ton	3.00	16,640.00	49,920.00	22,293.87	66,881.61	4.40	16,640.00	73,216.00	22,293.87	98,093.03
Byproduct: Paddy straw - Paddy - HYV Boro (Rabi)	ton	1.01	4,800.00	4,848.00	4,658.64	4,705.23	1.50	4,800.00	7,200.00	4,658.64	6,987.97
Total income				54,768.00		71,586.84			80,416.00		105,080.99
Inputs											
Paddy - HYV Boro (Rabi) - Existing Diesel Pump seed	kg	98.00	29.00	2,842.00	28.15	2,758.31	50.00	29.00	1,450.00	28.15	1,407.30
Urea	kg	180.00	24.00	4,320.00	24.37	4,386.07	200.00	24.00	4,800.00	24.37	4,873.41
Triple superphosphate	kg	98.00	27.00	2,646.00	27.36	2,680.82	100.00	27.00	2,700.00	27.36	2,735.53
Muriate of Potash	kg	50.00	23.00	1,150.00	23.40	1,170.15	50.00	23.00	1,150.00	23.40	1,170.15
Land preparation	day	31.00	248.00	7,688.00	240.70	7,461.60	30.00	248.00	7,440.00	240.70	7,220.90
Plant protection	liter	1.50	1,400.00	2,100.00	1,358.77	2,038.16	2.40	1,400.00	3,360.00	1,358.77	3,261.05
Labor (hired) - Rabi	day	30.00	446.00	13,380.00	334.50	10,035.00	55.00	446.00	24,530.00	334.50	18,397.50
Labor (hired) - Kharif	day		400.00	-	300.00	-		400.00	-	300.00	-
		12,375.0					10,827.0				
Irrigation costs	sum	0	1.00	12,375.00	1.00	12,375.00	0	1.00	10,827.00	2.22	24,022.88
Family labor	day	45.00	-	-	-	-	45.00	-	-	-	-
Other	sum		1.00	-		-		1.00	-		-
Total expenditure				46,501.00		42,905.10			56,257.00		63,088.72
Gross Margin (Tk per ha)				8,267.00		28,681.74			24,159.00		41,992.27
Gross Margin (US\$ per ha)				97.42		337.99			284.69		494.84

Note: No cost is imputed for family labor.

Source: IMIP PPTA farmer group discussions and consultants' estimates.

Table 2: Farm (0.2 hectare). Crop Budget for Paddy - HYV Boro (Rabi) - Existing Electric Pump (1 hectare)

		Without Project					With Project				
		QTY	Financial		Economic		QTY	Financial		Economic	
			Price per Unit (Tk)	Income & Expenditure (Tk)	Price per Unit (Tk)	Income & Expenditure (Tk)		Price per Unit (Tk)	Income & Expenditure (Tk)	Price per Unit (Tk)	Income & Expenditure (Tk)
Unit											
<b>Outputs</b>											
Main product: Paddy - HYV Boro (Rabi) - Existing Electric Pump	ton	3.00	16,640.00	49,920.00	22,293.87	66,881.61	4.40	16,640.00	73,216.00	22,293.87	98,093.03
Byproduct: Paddy straw - Paddy - HYV Boro (Rabi)	ton	1.01	4,800.00	4,848.00	4,658.64	4,705.23	1.50	4,800.00	7,200.00	4,658.64	6,987.97
<b>Total income</b>				<b>54,768.00</b>		<b>71,586.84</b>			<b>80,416.00</b>		<b>105,080.99</b>
<b>Inputs</b>											
Paddy - HYV Boro (Rabi) - Existing Electric Pump seed	kg	98.00	29.00	2,842.00	28.15	2,758.31	50.00	29.00	1,450.00	28.15	1,407.30
Urea	kg	180.00	24.00	4,320.00	24.37	4,386.07	200.00	24.00	4,800.00	24.37	4,873.41
Triple superphosphate	kg	98.00	27.00	2,646.00	27.36	2,680.82	100.00	27.00	2,700.00	27.36	2,735.53
Muriate of Potash	kg	50.00	23.00	1,150.00	23.40	1,170.15	50.00	23.00	1,150.00	23.40	1,170.15
Land preparation	day	31.00	248.00	7,688.00	240.70	7,461.60	30.00	248.00	7,440.00	240.70	7,220.90
Plant protection	liter	1.50	1,400.00	2,100.00	1,358.77	2,038.16	2.40	1,400.00	3,360.00	1,358.77	3,261.05
Labor (hired) - Rabi	day	30.00	446.00	13,380.00	334.50	10,035.00	55.00	446.00	24,530.00	334.50	18,397.50
Labor (hired) - Kharif	day		400.00	-	300.00	-		400.00	-	300.00	-
		4,721.00					10,827.00				
Irrigation costs	sum	0	1.00	4,721.00	2.22	10,474.93	0	1.00	10,827.00	2.22	24,022.88
Family labor	day	45.00	-	-	-	-	45.00	-	-	-	-
Other	sum		1.00	-	-	-		1.00	-	-	-
<b>Total expenditure</b>				<b>38,847.00</b>		<b>41,005.03</b>			<b>56,257.00</b>		<b>63,088.72</b>
<b>Gross Margin (Tk per ha)</b>				<b>15,921.00</b>		<b>30,581.81</b>			<b>24,159.00</b>		<b>41,992.27</b>
<b>Gross Margin (US\$ per ha)</b>				<b>187.61</b>		<b>360.38</b>			<b>284.69</b>		<b>494.84</b>

Notes: No cost is imputed for family labor.  
Source: IMIP PPTA farmer group discussions and consultants' estimates.

Table 3: Farm (0.2 hectare). Crop Budget for Paddy - HYV Aman (Kharif II) (1 hectare)

		Without Project					With Project				
		QTY	Financial		Economic		QTY	Financial		Economic	
			Price per unit (Tk)	Income & Expenditure (Tk)	Price per unit (Tk)	Income & Expenditure (Tk)		Price per unit (Tk)	Income & Expenditure (Tk)	Price per unit (Tk)	Income & Expenditure (Tk)
Unit											
Outputs											
Main product: Paddy - HYV Aman (Kharif II)	ton	2.10	16,640.00	34,944.00	22,293.87	46,817.13	3.50	16,640.00	58,240.00	22,293.87	78,028.54
Byproduct: Paddy straw - Paddy - HYV Aman (Kharif II)	ton	0.90	8,630.00	7,767.00	8,375.86	7,538.27	1.60	8,630.00	13,808.00	8,375.86	13,401.37
Total income				42,711.00		54,355.40			72,048.00		91,429.91
Inputs											
Paddy - HYV Aman (Kharif II) seed	kg	90.00	28.00	2,520.00	27.18	2,445.79	60.00	28.00	1,680.00	27.18	1,630.53
Urea	kg	154.00	24.00	3,696.00	24.37	3,752.52	150.00	24.00	3,600.00	24.37	3,655.05
Triple superphosphate	kg	11.00	27.00	297.00	27.36	300.91	75.00	27.00	2,025.00	27.36	2,051.65
Muriate of Potash	kg	10.00	23.00	230.00	23.40	234.03	25.00	23.00	575.00	23.40	585.08
Land preparation	day	27.00	248.00	6,696.00	240.70	6,498.81	26.00	248.00	6,448.00	240.70	6,258.11
Plant protection	liter	0.57	1,400.00	798.00	1,358.77	774.50	0.50	1,400.00	700.00	1,358.77	679.39
Labor (hired) - Rabi	day		446.00	-	334.50	-		446.00	-	334.50	-
Labor (hired) - Kharif	day	30.00	400.00	12,000.00	300.00	9,000.00	50.00	400.00	20,000.00	300.00	15,000.00
Irrigation costs	sum		1.00	-	2.22	-	2,470.00	1.00	2,470.00	2.22	5,480.42
Family labor	day	45.00	-	-	-	-	45.00	-	-	-	-
Other	sum		1.00	-		-		1.00	-		-
Total expenditure				26,237.00		23,006.56			37,498.00		35,340.23
Gross Margin (Tk per ha)				16,474.00		31,348.84			34,550.00		56,089.69
Gross Margin (US\$ per ha)				194.13		369.42			407.14		660.97

Notes: No cost is imputed for family labor.  
Source: IMIP PPTA farmer group discussions and consultants' estimates.

Table 4: Farm (0.2 hectare). Crop Budget for Potato (Rabi) (1 hectare)

		Without Project					With Project				
		QTY	Financial		Economic		QTY	Financial		Economic	
			Price per Unit (Tk)	Income & Expenditure (Tk)	Price per Unit (Tk)	Income & Expenditure (Tk)		Price per Unit (Tk)	Income & Expenditure (Tk)	Price per Unit (Tk)	Income & Expenditure (Tk)
Unit											
Outputs											
Main product: Potato (Rabi)	ton		14,960.00	-	14,519.44	-	10.00	14,960.00	149,600.00	14,519.44	145,194.43
Byproduct:	ton		0.00	-	0.00	-		0.00	-	0.00	-
Total income				-		-		149,600.00		145,194.43	
Inputs											
Potato (Rabi) seed	kg		100.00	-	97.06	-	900.00	100.00	90,000.00	97.06	87,349.59
Urea	kg		24.00	-	24.37	-	200.00	24.00	4,800.00	24.37	4,873.41
Triple superphosphate	kg		27.00	-	27.36	-	100.00	27.00	2,700.00	27.36	2,735.53
Muriate of Potash	kg		23.00	-	23.40	-	75.00	23.00	1,725.00	23.40	1,755.23
Land preparation	day		248.00	-	240.70	-	35.00	248.00	8,680.00	240.70	8,424.38
Plant protection	liter		1,400.00	-	1,358.77	-	3.00	1,400.00	4,200.00	1,358.77	4,076.31
Labor (hired) - Rabi	day		446.00	-	334.50	-	70.00	446.00	31,220.00	334.50	23,415.00
Labor (hired) - Kharif	day		400.00	-	300.00	-		400.00	-	300.00	-
Irrigation costs	sum		1.00	-	2.22	-	2,470.00	1.00	2,470.00	2.22	5,480.42
Family labor	day		-	-	-	-	75.00	-	-	-	-
Other	sum		1.00	-		-		1.00	-		-
Total expenditure				-		-		145,795.00		138,109.88	
Gross Margin (Tk per ha)				-		-		3,805.00		7,084.55	
Gross Margin (US\$ per ha)				-		-		44.84		83.49	

Notes: No cost is imputed for family labor.  
Source: IMIP PPTA farmer group discussions and consultants' estimates.

Table 5: Farm (0.2 hectare). Crop Budget for Vegetables (Kharif I) (1 hectare)

		Without Project					With Project				
		QTY	Financial		Economic		QTY	Financial		Economic	
			Price per unit (Tk)	Income & Expenditure (Tk)	Price per unit (Tk)	Income & Expenditure (Tk)		Price per unit (Tk)	Income & Expenditure (Tk)	Price per unit (Tk)	Income & Expenditure (Tk)
Unit											
Outputs											
Main product: Vegetables (Kharif I)	ton		10,000.00	-	9,705.51	-	12.00	10,000.00	120,000.00	9,705.51	116,466.12
Byproduct:	ton		0.00	-	0.00	-		0.00	-	0.00	-
Total income				-		-			120,000.00		116,466.12
Inputs											
Vegetables (Kharif I) seed	kg		3,500.00	-	3,396.93	-	1.50	3,500.00	5,250.00	3,396.93	5,095.39
Urea	kg		24.00	-	24.37	-	120.00	24.00	2,880.00	24.37	2,924.04
Triple superphosphate	kg		27.00	-	27.36	-	100.00	27.00	2,700.00	27.36	2,735.53
Muriate of Potash	kg		23.00	-	23.40	-	25.00	23.00	575.00	23.40	585.08
Land preparation	day		248.00	-	240.70	-	60.00	248.00	14,880.00	240.70	14,441.80
Plant protection	liter		1,400.00	-	1,358.77	-	1.00	1,400.00	1,400.00	1,358.77	1,358.77
Labor (hired) - Rabi	day		446.00	-	334.50	-		446.00	-	334.50	-
Labor (hired) - Kharif	day		400.00	-	300.00	-	20.00	400.00	8,000.00	300.00	6,000.00
Irrigation costs	sum		1.00	-	2.22	-	2,700.00	1.00	2,700.00	2.22	5,990.74
Family labor	day		-	-	-	-	75.00	-	-	-	-
Other	sum		1.00	-		-		1.00	-		-
Total expenditure				-		-			38,385.00		39,131.36
Gross Margin (Tk per ha)				-		-			81,615.00		77,334.76
Gross Margin (US\$ per ha)				-		-			961.76		911.32

Notes: No cost is imputed for family labor.  
Source: IMIP PPTA farmer group discussions and consultants' estimates.

Table 6: Farm (1.0 hectare) Crop Budget for Paddy - HYV Boro (Rabi) - Existing Diesel Pump (1 hectare)

		Without Project					With Project				
		QTY	Financial		Economic		QTY	Financial		Economic	
			Price per unit (Tk)	Income & Expenditure (Tk)	Price per unit (Tk)	Income & Expenditure (Tk)		Price per unit (Tk)	Income & Expenditure (Tk)	Price per unit (Tk)	Income & Expenditure (Tk)
Unit											
Outputs											
Main product: Paddy - HYV Boro (Rabi) - Existing Diesel Pump	ton	3.00	16,640.00	49,920.00	22,293.87	66,881.61	4.40	16,640.00	73,216.00	22,293.87	98,093.03
Byproduct: Paddy straw - Paddy - HYV Boro (Rabi)	ton	1.10	4,800.00	5,280.00	4,658.64	5,124.51	1.30	4,800.00	6,240.00	4,658.64	6,056.24
Total income				55,200.00		72,006.12			79,456.00		104,149.27
Inputs											
Paddy - HYV Boro (Rabi) - Existing Diesel Pump seed	kg	62.00	29.00	1,798.00	28.15	1,745.05	60.00	29.00	1,740.00	28.15	1,688.76
Urea	kg	200.00	24.00	4,800.00	24.37	4,873.41	200.00	24.00	4,800.00	24.37	4,873.41
Triple superphosphate	kg	90.00	27.00	2,430.00	27.36	2,461.98	100.00	27.00	2,700.00	27.36	2,735.53
Muriate of Potash	kg	34.00	23.00	782.00	23.40	795.70	50.00	23.00	1,150.00	23.40	1,170.15
Land preparation	day	37.00	248.00	9,176.00	240.70	8,905.78	28.00	248.00	6,944.00	240.70	6,739.51
Plant protection	liter	0.88	1,400.00	1,232.00	1,358.77	1,195.72	2.50	1,400.00	3,500.00	1,358.77	3,396.93
Labor (hired) - Rabi	day	45.00	446.00	20,070.00	334.50	15,052.50	60.00	446.00	26,760.00	334.50	20,070.00
Labor (hired) - Kharif	day		400.00	-	300.00	-		400.00	-	300.00	-
Irrigation costs	sum	12,375.00	1.00	12,375.00	1.00	12,375.00	10,827.00	1.00	10,827.00	2.22	24,022.88
Family labor	day	47.00	-	-	-	-	47.00	-	-	-	-
Other	sum		1.00	-		-		1.00	-		-
Total expenditure				52,663.00		47,405.14			58,421.00		64,697.17
Gross Margin (Tk per ha)				2,537.00		24,600.98			21,035.00		39,452.10
Gross Margin (US\$ per ha)				29.90		289.90			247.88		464.91

Notes: No cost is imputed for family labor.  
Other costs (marketing, and other crop-specific costs) assumed at 0% of main product income.  
Source: IMIP PPTA farmer group discussions and consultants' estimates.



Table 7: Farm (1.0 hectare) Crop Budget for Paddy - HYV Boro (Rabi) - Existing Electric Pump (1 hectare)

	Unit	Without Project					With Project				
		QTY	Financial		Economic		QTY	Financial		Economic	
			Price per Unit (Tk)	Income & Expenditure (Tk)	Price per Unit (Tk)	Income & Expenditure (Tk)		Price per Unit (Tk)	Income & Expenditure (Tk)	Price per Unit (Tk)	Income & Expenditure (Tk)
Outputs											
Main product: Paddy - HYV Boro (Rabi) - Existing Electric Pump	ton	3.00	16,640.00	49,920.00	22,293.87	66,881.61	4.40	16,640.00	73,216.00	22,293.87	98,093.03
Byproduct: Paddy straw - Paddy - HYV Boro (Rabi)	ton	1.10	4,800.00	5,280.00	4,658.64	5,124.51	1.30	4,800.00	6,240.00	4,658.64	6,056.24
Total income				55,200.00		72,006.12			79,456.00		104,149.27
Inputs											
Paddy - HYV Boro (Rabi) - Existing Electric Pump seed	kg	62.00	29.00	1,798.00	28.15	1,745.05	60.00	29.00	1,740.00	28.15	1,688.76
Urea	kg	200.00	24.00	4,800.00	24.37	4,873.41	200.00	24.00	4,800.00	24.37	4,873.41
Triple superphosphate	kg	90.00	27.00	2,430.00	27.36	2,461.98	100.00	27.00	2,700.00	27.36	2,735.53
Muriate of Potash	kg	34.00	23.00	782.00	23.40	795.70	50.00	23.00	1,150.00	23.40	1,170.15
Land preparation	day	37.00	248.00	9,176.00	240.70	8,905.78	28.00	248.00	6,944.00	240.70	6,739.51
Plant protection	liter	0.88	1,400.00	1,232.00	1,358.77	1,195.72	2.50	1,400.00	3,500.00	1,358.77	3,396.93
Labor (hired) - Rabi	day	45.00	446.00	20,070.00	334.50	15,052.50	60.00	446.00	26,760.00	334.50	20,070.00
Labor (hired) - Kharif	day		400.00	-	300.00	-		400.00	-	300.00	-
Irrigation costs	sum	4,721.00	1.00	4,721.00	2.22	10,474.93	10,827.00	1.00	10,827.00	2.22	24,022.88
Family labor	day	47.00	-	-	-	-	47.00	-	-	-	-
Other	sum		1.00	-		-		1.00	-		-
Total expenditure				45,009.00		45,505.06			58,421.00		64,697.17
Gross Margin (Tk per ha)				10,191.00		26,501.06			21,035.00		39,452.10
Gross Margin (US\$ per ha)				120.09		312.29			247.88		464.91

Notes: No cost is imputed for family labor.  
Other costs (marketing, and other crop-specific costs) assumed at 0% of main product income.  
Source: IMIP PPTA farmer group discussions and consultants' estimates.

Table 8: Farm (1.0 hectare). Crop Budget for Paddy - HYV Aman (Kharif II) (1 hectare)

		Without Project					With Project				
		QTY	Financial		Economic		QTY	Financial		Economic	
			Price per Unit (Tk)	Income & Expenditure (Tk)	Price per Unit (Tk)	Income & Expenditure (Tk)		Price per Unit (Tk)	Income & Expenditure (Tk)	Price per Unit (Tk)	Income & Expenditure (Tk)
Unit											
Outputs											
Main product: Paddy - HYV Aman (Kharif II)	ton	2.45	16,640.00	40,768.00	22,293.87	54,619.98	3.40	16,640.00	56,576.00	22,293.87	75,799.16
Byproduct: Paddy straw - Paddy - HYV Aman (Kharif II)	ton	1.20	8,630.00	10,356.00	8,375.86	10,051.03	1.50	8,630.00	12,945.00	8,375.86	12,563.78
Total income				51,124.00		64,671.01			69,521.00		88,362.94
Inputs											
Paddy - HYV Aman (Kharif II) seed	kg	62.00	28.00	1,736.00	27.18	1,684.88	60.00	28.00	1,680.00	27.18	1,630.53
Urea	kg	140.00	24.00	3,360.00	24.37	3,411.38	150.00	24.00	3,600.00	24.37	3,655.05
Triple superphosphate	kg	44.00	27.00	1,188.00	27.36	1,203.63	75.00	27.00	2,025.00	27.36	2,051.65
Muriate of Potash	kg	31.00	23.00	713.00	23.40	725.49	25.00	23.00	575.00	23.40	585.08
Land preparation	day	33.00	248.00	8,184.00	240.70	7,942.99	27.00	248.00	6,696.00	240.70	6,498.81
Plant protection	liter	0.44	1,400.00	616.00	1,358.77	597.86	1.50	1,400.00	2,100.00	1,358.77	2,038.16
Labor (hired) - Rabi	day		446.00	-	334.50	-		446.00	-	334.50	-
Labor (hired) - Kharif	day	50.00	400.00	20,000.00	300.00	15,000.00	60.00	400.00	24,000.00	300.00	18,000.00
Irrigation costs	sum		1.00	-	2.22	-	2,470.00	1.00	2,470.00	2.22	5,480.42
Family labor	day	40.00	-	-	-	-	40.00	-	-	-	-
Other	sum		1.00	-		-		1.00	-		-
Total expenditure				35,797.00		30,566.24			43,146.00		39,939.69
Gross Margin (Tk per ha)				15,327.00		34,104.77			26,375.00		48,423.25
Gross Margin (US\$ per ha)				180.62		401.89			310.81		570.63

Notes: No cost is imputed for family labor.  
Other costs (marketing, and other crop-specific costs) assumed at 0% of main product income.  
Source: IMIP PPTA farmer group discussions and consultants' estimates.

Table 9: Farm (1.0 hectare). Crop Budget for Potato (Rabi) (1 hectare)

		Without Project				With Project					
		QTY	Financial		Economic		QTY	Financial		Economic	
			Price per Unit (Tk)	Income & Expenditure (Tk)	Price per Unit (Tk)	Income & Expenditure (Tk)		Price per Unit (Tk)	Income & Expenditure (Tk)	Price per Unit (Tk)	Income & Expenditure (Tk)
Unit											
Outputs											
Main product: Potato (Rabi)	ton		14,960.00	-	14,519.44	-	12.00	14,960.00	179,520.00	14,519.44	174,233.32
Byproduct:	ton		0.00	-	0.00	-		0.00	-	0.00	-
Total income				-		-		179,520.00		174,233.32	
Inputs											
Potato (Rabi) seed	kg		100.00	-	97.06	-	900.00	100.00	90,000.00	97.06	87,349.59
Urea	kg		24.00	-	24.37	-	250.00	24.00	6,000.00	24.37	6,091.76
Triple superphosphate	kg		27.00	-	27.36	-	200.00	27.00	5,400.00	27.36	5,471.07
Muriate of Potash	kg		23.00	-	23.40	-	100.00	23.00	2,300.00	23.40	2,340.31
Land preparation	day		248.00	-	240.70	-	45.00	248.00	11,160.00	240.70	10,831.35
Plant protection	liter		1,400.00	-	1,358.77	-	4.50	1,400.00	6,300.00	1,358.77	6,114.47
Labor (hired) - Rabi	day		446.00	-	334.50	-	100.00	446.00	44,600.00	334.50	33,450.00
Labor (hired) - Kharif	day		400.00	-	300.00	-		400.00	-	300.00	-
Irrigation costs	sum		1.00	-	2.22	-	2,470.00	1.00	2,470.00	2.22	5,480.42
Family labor	day		-	-	-	-	115.00	-	-	-	-
Other	sum			-		-		1.00	-		-
Total expenditure				-		-		168,230.00		157,128.96	
Gross Margin (Tk per ha)				-		-		11,290.00		17,104.35	
Gross Margin (US\$ per ha)				-		-		133.04		201.56	

Notes: No cost is imputed for family labor.  
Other costs (marketing, and other crop-specific costs) assumed at 0% of main product income.  
Source: IMIP PPTA farmer group discussions and consultants' estimates.

Table 10: Farm (1.0 hectare). Crop Budget for Vegetables (Kharif I) (1 hectare)

		Without Project					With Project				
		QTY	Financial		Economic		QTY	Financial		Economic	
			Price per Unit (Tk)	Income & Expenditure (Tk)	Price per Unit (Tk)	Income & Expenditure (Tk)		Price per Unit (Tk)	Income & Expenditure (Tk)	Price per Unit (Tk)	Income & Expenditure (Tk)
Unit											
Outputs											
Main product: Vegetables (Kharif I)	ton	12.40	10,000.00	124,000.00	9,705.51	120,348.32	16.00	10,000.00	160,000.00	9,705.51	155,288.16
Byproduct:	ton	-	0.00	-	0.00	-		0.00	-	0.00	-
Total income				124,000.00		120,348.32			160,000.00		155,288.16
Inputs											
Vegetables (Kharif I) seed	kg	3.00	3,500.00	10,500.00	3,396.93	10,190.79	1.50	3,500.00	5,250.00	3,396.93	5,095.39
Urea	kg	140.00	24.00	3,360.00	24.37	3,411.38	150.00	24.00	3,600.00	24.37	3,655.05
Triple superphosphate	kg	66.00	27.00	1,782.00	27.36	1,805.45	100.00	27.00	2,700.00	27.36	2,735.53
Muriate of Potash	kg	58.00	23.00	1,334.00	23.40	1,357.38	50.00	23.00	1,150.00	23.40	1,170.15
Land preparation	day	38.00	248.00	9,424.00	240.70	9,146.47	44.00	248.00	10,912.00	240.70	10,590.65
Plant protection	liter	0.30	1,400.00	420.00	1,358.77	407.63	1.50	1,400.00	2,100.00	1,358.77	2,038.16
Labor (hired) - Rabi	day		446.00	-	334.50	-		446.00	-	334.50	-
Labor (hired) - Kharif	day	60.00	400.00	24,000.00	300.00	18,000.00	60.00	400.00	24,000.00	300.00	18,000.00
Irrigation costs	sum		1.00	-	2.22	-	2,470.00	1.00	2,470.00	2.22	5,480.42
Family labor	day	180.00	-	-	-	-	180.00	-	-	-	-
Other	sum		1.00	-		-		1.00	-		-
Total expenditure				50,820.00		44,319.10			52,182.00		48,765.36
Gross Margin (Tk per ha)				73,180.00		76,029.22			107,818.00		106,522.80
Gross Margin (US\$ per ha)				862.36		895.94			1,270.54		1,255.28

Notes: No cost is imputed for family labor.  
Other costs (marketing, and other crop-specific costs) assumed at 0% of main product income.  
Source: IMIP PPTA farmer group discussions and consultants' estimates.

Table 11: Farm (1.0 hectare). Crop Budget for Pulses (Rabi) (1 hectare)

	Unit	Without Project					With Project				
		QTY	Financial		Economic		QTY	Financial		Economic	
			Price per Unit (Tk)	Income & Expenditure (Tk)	Price per Unit (Tk)	Income & Expenditure (Tk)		Price per Unit (Tk)	Income & Expenditure (Tk)	Price per Unit (Tk)	Income & Expenditure (Tk)
<b>Outputs</b>											
Main product: Pulses (Rabi)	ton	0.40	58,000.00	23,200.00	56,291.96	22,516.78	0.90	58,000.00	52,200.00	56,291.96	50,662.76
Byproduct:	ton		0.00	-	0.00	-		0.00	-	0.00	-
<b>Total income</b>				<b>23,200.00</b>		<b>22,516.78</b>			<b>52,200.00</b>		<b>50,662.76</b>
<b>Inputs</b>											
Pulses (Rabi) seed	kg	20.00	150.00	3,000.00	145.58	2,911.65	50.00	150.00	7,500.00	145.58	7,279.13
Urea	kg	22.00	24.00	528.00	24.37	536.07	25.00	24.00	600.00	24.37	609.18
Triple superphosphate	kg	14.00	27.00	378.00	27.36	382.97	12.00	27.00	324.00	27.36	328.26
Muriate of Potash	kg		23.00	-	23.40	-	5.00	23.00	115.00	23.40	117.02
Land preparation	day	20.00	248.00	4,960.00	240.70	4,813.93	20.00	248.00	4,960.00	240.70	4,813.93
Plant protection	liter		1,400.00	-	1,358.77	-		1,400.00	-	1,358.77	-
Labor (hired) - Rabi	day	5.00	446.00	2,230.00	334.50	1,672.50	10.00	446.00	4,460.00	334.50	3,345.00
Labor (hired) - Kharif	day		400.00	-	300.00	-		400.00	-	300.00	-
Irrigation costs	sum		1.00	-	2.22	-	2,740.00	1.00	2,740.00	2.22	6,079.50
Family labor	day	45.00	-	-	-	-	45.00	-	-	-	-
Other	sum		1.00	-	-	-		1.00	-	-	-
<b>Total expenditure</b>				<b>11,096.00</b>		<b>10,317.14</b>			<b>20,699.00</b>		<b>22,572.02</b>
<b>Gross Margin (Tk per ha)</b>				<b>12,104.00</b>		<b>12,199.65</b>			<b>31,501.00</b>		<b>28,090.75</b>
<b>Gross Margin (US\$ per ha)</b>				<b>142.63</b>		<b>143.76</b>			<b>371.21</b>		<b>331.02</b>

Notes: No cost is imputed for family labor.

Other costs (marketing, and other crop-specific costs) assumed at 0% of main product income.

Source: IMIP PPTA farmer group discussions and consultants' estimates.

Table 12: Farm (0.2 hectare). Farm Budget (0.2 hectare) - Financial Prices

	Without Project			With Project		
	Area (ha)	Margin (Tk per ha)	Net Income (Tk)	Area (ha)	Margin (Tk per ha)	Net Income (Tk)
<b>Income from Crops (Gross)</b>						
Paddy - HYV Boro (Rabi) - Existing Diesel Pump	0.15	8,267.00	1,240.05	0.17	24,159.00	4,107.03
Paddy - HYV Boro (Rabi) - Existing Electric Pump		15,921.00	-		24,159.00	-
Paddy - HYV Aman (Kharif II)	0.12	16,474.00	1,976.88	0.16	34,550.00	5,528.00
Potato (Rabi)		-	-	0.02	3,805.00	76.10
Vegetables (Kharif I)		-	-	0.02	81,615.00	1,958.76
Paddy - HYV Boro (Rabi)		9,189.60	-		23,390.00	-
<b>Total</b>	<b>0.27</b>		<b>3,216.93</b>	<b>0.37</b>		<b>11,669.89</b>
<b>Cropping Intensity (%)</b>	<b>135</b>			<b>187</b>		
<b>Other Crop Income (not incl in crop budgets)</b>						
<b>Other Crop Costs (not incl in crop budgets)</b>						
Land rent						
Loan interest						
Irrigation charges						
Other						
Total Other Crop Costs			-			-
<b>Non-crop Farm Income (Net)</b>			<b>61,500.00</b>			<b>65,900.00</b>
<b>Net Farm Income (Tk)</b>			<b>64,716.93</b>			<b>77,569.89</b>
<b>Net Farm Income (Tk per ha)</b>			<b>323,584.65</b>			<b>387,849.45</b>
<b>Net Farm Income (US\$)</b>			<b>762.63</b>			<b>914.09</b>
<b>Net Farm Income (US\$ per ha)</b>			<b>3,813.16</b>			<b>4,570.46</b>
<b>Family labor (days)</b>			<b>12</b>			<b>18</b>
Hired labor	5			11		
<b>Net Farm Income (Tk per Family Labor Day)</b>			<b>5,393.08</b>			<b>4,309.44</b>
<b>Net Farm Income (US\$ per Family Labor Day)</b>			<b>63.55</b>			<b>50.78</b>

Notes: No cost is imputed for family labor.  
Other costs (marketing, and other crop-specific costs) assumed at 0% of main product income.  
Source: IMIP PPTA farmer group discussions and consultants' estimates.

Table 13: Farm (1.0 ha). Farm Budget (1 ha) - Financial Prices

	Without Project			With Project		
	Area (ha)	Margin (Tk per ha)	Net Income (Tk)	Area (ha)	Margin (Tk per ha)	Net Income (Tk)
<b>Income from Crops (Gross)</b>						
Paddy - HYV Boro (Rabi) - Existing Diesel Pump	0.60	2,537.00	1,522.20	0.80	21,035.00	16,828.00
Paddy - HYV Boro (Rabi) - Existing Electric Pump		10,191.00	-		21,035.00	-
Paddy - HYV Aman (Kharif II)	0.40	15,327.00	6,130.80	0.60	26,375.00	15,825.00
Potato (Rabi)		-	-	0.10	11,290.00	1,129.00
Vegetables (Kharif I)	0.02	73,180.00	1,463.60	0.10	107,818.00	10,781.80
Pulses (Rabi)	0.01	12,104.00	121.04	0.05	31,501.00	1,575.05
Paddy - HYV Boro (Rabi)		6,122.00	-		18,602.00	-
<b>Total</b>	<b>1.03</b>		<b>9,237.64</b>	<b>1.65</b>		<b>46,138.85</b>
<b>Cropping Intensity (%)</b>	<b>103</b>			<b>165</b>		
<b>Other Crop Income (not incl in crop budgets)</b>						
<b>Other Crop Costs (not incl in crop budgets)</b>						
Land rent						
Loan interest						
Irrigation charges						
Other						
Total Other Crop Costs			-			-
<b>Non-crop Farm Income (Net)</b>			<b>78,700.00</b>			<b>83,400.00</b>
<b>Net Farm Income (Tk)</b>			<b>87,937.64</b>			<b>129,538.85</b>
<b>Net Farm Income (Tk per ha)</b>			<b>87,937.64</b>			<b>129,538.85</b>
<b>Net Farm Income (US\$)</b>			<b>1,036.27</b>			<b>1,526.50</b>
<b>Net Farm Income (US\$ per ha)</b>			<b>1,036.27</b>			<b>1,526.50</b>
<b>Family labor (days)</b>			<b>48</b>			<b>93</b>
Hired labor	27			59		
<b>Net Farm Income (Tk per Family Labor Day)</b>			<b>1,832.03</b>			<b>1,392.89</b>
<b>Net Farm Income (US\$ per Family Labor Day)</b>			<b>21.59</b>			<b>16.41</b>

Notes: No cost is imputed for family labor.  
Other costs (marketing, and other crop-specific costs) assumed at 0% of main product income.  
Source: IMIP PPTA farmer group discussions and consultants' estimates.

**Table 14: Prices Used in Financial and Economic Analyses**  
(Constant 2021 Tk)

Item	Unit	Financial	Economic	CF
<b>Agricultural Outputs</b>				
Paddy - HYV Boro (Rabi) - Existing Diesel Pump	ton	16,640.00	22,293.87	1.34
Paddy - HYV Boro (Rabi) - Existing Electric Pump	ton	16,640.00	22,293.87	1.34
Paddy - HYV Aman (Kharif II)	ton	16,640.00	22,293.87	1.34
Potato (Rabi)	ton	14,960.00	14,519.44	0.97
Vegetables (Kharif I)	ton	10,000.00	9,705.51	0.97
Pulses (Rabi)	ton	58,000.00	56,291.96	0.97
Paddy straw - Paddy - HYV Boro (Rabi)	ton	4,800.00	4,658.64	0.97
Paddy straw - Paddy - HYV Aman (Kharif II)	ton	8,630.00	8,375.86	0.97
<b>Agricultural Inputs</b>				
Seeds/planting material				
Paddy - HYV Boro (Rabi) - Existing Diesel Pump seed	kg	29.00	28.15	0.97
Paddy - HYV Boro (Rabi) - Existing Electric Pump seed	kg	29.00	28.15	0.97
Paddy - HYV Aman (Kharif II) seed	kg	28.00	27.18	0.97
Potato (Rabi) seed	kg	100.00	97.06	0.97
Vegetables (Kharif I) seed	kg	3,500.00	3,396.93	0.97
Pulses (Rabi) seed	kg	150.00	145.58	0.97
Urea	kg	24.00	24.37	1.02
Triple superphosphate	kg	27.00	27.36	1.01
Muriate of Potash	kg	23.00	23.40	1.02
Land preparation	sum	248.00	240.70	0.97
Plant protection	liter	1,400.00	1,358.77	0.97
Labor (hired) - Rabi	day	446.00	334.50	0.75
Labor (hired) - Kharif	day	400.00	300.00	0.75
Irrigation costs	ha	1.00	2.22	2.22

CF = conversion factor, kg = kilogram

Source: IMIP PPTA farmer group discussions and consultants' estimates.

**Table 15: Export Parity Price – Rice**

Item	%	Unit	Price
FOB (free onboard), port of origin <sup>a</sup>		\$/ton	505.00
Less: Freight & insurance to Bangladesh border		\$/ton	(20.00)
FOB, Bangladesh border		\$/ton	485.00
Adjusted border price (adjusted by SERF)	1.03	\$/ton	499.72
Border price, Bangladesh border		Tk/ton	42,405.91
Less: Quality adjustment for local product (10%)	10.0	Tk/ton	(4,240.59)
Border price, Bangladesh border, local equivalent		Tk/ton	38,165.32
Less: Handling charges and storage costs at border (Bangladesh) (2.5%)	2.5	Tk/ton	(954.13)
Less: Transport, loading, unloading and insurance costs to mill (5%)	5.0	Tk/ton	(1,908.27)
Equivalent price at mill		Tk/ton	35,302.92
Milling conversion rate - rice to paddy (65%)	65.0	Tk/ton	22,946.90
Less: Farm to market transport and handling <sup>b</sup>		Tk/ton	(300.00)
Less: Farm storage, losses and related costs (1%)	1.0	Tk/ton	(353.03)
Plus: Value of straw byproduct (5%)	5.0	Tk/ton	1,114.69
Export parity farm gate price		Tk/ton	22,293.87

<sup>a</sup> Rice (Thailand), 5% broken, white rice, FOB Bangkok. Source: World Bank. October 2020. *Commodity Price Data (Pink Sheet)*.

<sup>b</sup> Average distance of 100 km at Tk3.00/ton/km.

Source: IMIP PPTA consultants' estimates

**Table 16: Import Parity Price - Urea (N 46%)**

Item		Unit	Price
FOB, port of origin <sup>a</sup>		\$/ton	232.00
Add: Freight & insurance to Bangladesh border		\$/ton	20.00
CIF, Bangladesh border		\$/ton	252.00
Adjusted border price (adjusted by SERF)		\$/ton	259.65
Border price, Bangladesh border		Tk/ton	22,033.59
Plus: Handling charges and storage costs at border, Bangladesh border (2.5%)	2.5	Tk/ton	550.84
Plus: Transport, loading, unloading and insurance costs to market/dealers (2.5%)	2.5	Tk/ton	550.84
Equivalent price delivered to market/dealers		Tk/ton	23,135.27
Plus: Dealer costs, handling and margin (5%)	5.0	Tk/ton	1,156.76
Dealer price		Tk/ton	24,292.03
Farm to market transport and handling <sup>b</sup>		Tk/ton	75.00
Import parity farm gate price		Tk/ton	24,367.03

<sup>a</sup> Rice (Thailand), 5% broken, white rice, FOB Bangkok. Source: World Bank. October 2020. *Commodity Price Data (Pink Sheet)*.

<sup>b</sup> Average distance of 100 km at Tk3.00/ton/km.

Source: IMIP PPTA consultants' estimates

**Table 17: Import Parity Price - Triplesuperphosphate (TSP)**

Item		Unit	Price
FOB, port of origin <sup>a</sup>		\$/ton	263.00
Add: Freight & insurance to Bangladesh border		\$/ton	20.00
CIF, Bangladesh border		\$/ton	283.00
Adjusted border price (adjusted by SERF)		\$/ton	291.59
Border price, Bangladesh border		Tk/ton	24,744.07
Plus: Handling charges and storage costs at border, Bangladesh border (2.5%)	2.5	Tk/ton	618.60
Plus: Transport, loading, unloading and insurance costs to market/dealers (2.5%)	2.5	Tk/ton	618.60
Equivalent price delivered to market/dealers		Tk/ton	25,981.27
Plus: Dealer costs, handling and margin (5%)	5.0	Tk/ton	1,299.06
Dealer price		Tk/ton	27,280.33
Farm to market transport and handling <sup>b</sup>		Tk/ton	75.00
Import parity farm gate price		Tk/ton	27,355.33

<sup>a</sup> TSP Tunisian, granular, f.o.b. Source: World Bank. October 2020. *Commodity Price Data (Pink Sheet)*.

<sup>b</sup> Average distance of 25 km at Tk3.00/ton/km.

Source: IMIP PPTA consultants' estimates

**Table 18: Import Parity Price - Muriate of Potash (MP)**

Item		Unit	Price
FOB, port of origin <sup>a</sup>		\$/ton	222.00
Add: Freight & insurance to Bangladesh border		\$/ton	20.00
CIF, Bangladesh border		\$/ton	242.00
Adjusted border price (adjusted by SERF)		\$/ton	249.34
Border price, Bangladesh border		Tk/ton	21,159.24
Plus: Handling charges and storage costs at border, Bangladesh border (2.5%)	2.5	Tk/ton	528.98
Plus: Transport, loading, unloading and insurance costs to market/dealers (2.5%)	2.5	Tk/ton	528.98
Equivalent price delivered to market/dealers		Tk/ton	22,217.20
Plus: Dealer costs, handling and margin (5%)	5.0	Tk/ton	1,110.86
Dealer price		Tk/ton	23,328.06
Farm to market transport and handling <sup>b</sup>		Tk/ton	75.00
Import parity farm gate price		Tk/ton	23,403.06

<sup>a</sup> Potassium chloride, standard grade, spot, f.o.b. Vancouver. Source: World Bank. October 2020. *Commodity Price Data (Pink Sheet)*.

<sup>b</sup> Average distance of 25 km at Tk3.00/ton/km.

Source: IMIP PPTA consultants' estimates



**Table 19: Calculation of Standard Conversion Factor (SCF)**

<b>Item</b>		<b>(Tk m)</b>
		<b>2021</b>
Imports		2,714,416.82
Import duties		145,300.00
Import subsidies		
Duties: imports	%	5.4
Exports		2,061,054.22
Export taxes		400.00
Export subsidies		
Taxes: exports	%	0.0
Standard Conversion Factor		0.97
Shadow exchange rate factor (1/SCF)		1.03

Source: Bangladesh Bank (exchange rate at 7 April 2021).



Item	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047
<b>Incremental Crop Gross Margin</b>																	
<b>Crop</b>																	
Paddy - HYV Boro (Rabi)	4.628	4.628	4.628	4.628	4.628	4.628	4.628	4.628	4.628	4.628	4.628	4.628	4.628	4.628	4.628	4.628	4.628
Paddy - HYV Aman (Kharif II)	4.084	4.084	4.084	4.084	4.084	4.084	4.084	4.084	4.084	4.084	4.084	4.084	4.084	4.084	4.084	4.084	4.084
Potato (Rabi)	0.327	0.327	0.327	0.327	0.327	0.327	0.327	0.327	0.327	0.327	0.327	0.327	0.327	0.327	0.327	0.327	0.327
Vegetables (Kharif I)	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518
Pulses (Rabi)	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023
Total	<b>11.580</b>	<b>11.580</b>	<b>11.580</b>	<b>11.58</b>	<b>11.58</b>	<b>11.58</b>	<b>11.58</b>	<b>11.58</b>	<b>11.58</b>	<b>11.58</b>	<b>11.58</b>	<b>11.58</b>	<b>11.580</b>	<b>11.580</b>	<b>11.580</b>	<b>11.580</b>	<b>11.580</b>
<b>Costs</b>																	
<b>Investment</b>																	
Coastal Flood Protection																	
Rehabilitation of coastal embankment	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Coastal flood protection structures	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Subtotal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Main River System and Reservoir																	
Repairs to water and flood control structures	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
New water and flood control structures	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Subtotal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Excavation of Khals	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Repair of BWDB Offices	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Farmer Canal System																	
New low-lift pumps with electric motors	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Buried uPVC pipe system	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Prepaid meter system	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Pilot solar panels and pumps	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Subtotal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Upgrading of Electricity Distribution System	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Subtotal	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
<b>Annual operation and maintenance</b>																	
Level 1	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060
Level 2	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.388
Level 3	0.114	0.114	0.338	0.338	0.338	0.338	0.338	0.338	0.338	0.338	0.338	0.338	0.657	0.898	0.898	0.898	0.898
Independent Management Operator Establishment	1.660	1.660	1.507	1.507	1.507	1.507	1.507	1.507	1.507	1.507	1.507	1.507	1.310	1.319	1.319	1.319	1.319
	<b>2.222</b>	<b>2.222</b>	<b>2.293</b>	<b>2.293</b>	<b>2.293</b>	<b>2.293</b>	<b>2.293</b>	<b>2.293</b>	<b>2.293</b>	<b>2.293</b>	<b>2.293</b>	<b>2.293</b>	<b>2.415</b>	<b>2.665</b>	<b>2.665</b>	<b>2.665</b>	<b>2.665</b>
<b>Program Overhead Costs (%)</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>Total</b>	<b>2.222</b>	<b>2.222</b>	<b>2.293</b>	<b>2.293</b>	<b>2.293</b>	<b>2.293</b>	<b>2.293</b>	<b>2.293</b>	<b>2.293</b>	<b>2.293</b>	<b>2.293</b>	<b>2.293</b>	<b>2.415</b>	<b>2.665</b>	<b>2.665</b>	<b>2.665</b>	<b>2.665</b>
<b>Net Cash Flow</b>	<b>9.358</b>	<b>9.358</b>	<b>9.287</b>	<b>9.29</b>	<b>9.29</b>	<b>9.29</b>	<b>9.29</b>	<b>9.29</b>	<b>9.29</b>	<b>9.29</b>	<b>9.29</b>	<b>9.29</b>	<b>9.17</b>	<b>8.92</b>	<b>8.92</b>	<b>8.92</b>	<b>8.92</b>



**Table 21: Incremental Agricultural Labor Generated**

	Days per ha			With Project		Without Project		Total Increase
	With	Without	Increase	(ha)	(days)	(ha)	(days)	(days)
<b>Farm (0.2 ha)</b>								
Paddy - HYV Boro (Rabi)	55	30	25	15,210	836,550	8,306	249,165	587,385
Paddy - HYV Aman (Kharif II)	50	30	20	14,040	702,000	10,440	313,200	388,800
Potato (Rabi)	70		70	1,800	126,000	0	0	126,000
Vegetables (Kharif I)	20		20	2,124	42,480	36	0	42,480
Pulses (Rabi)			0	90	0	11	0	0
								1,144,665
<b>Farm (1.0 ha)</b>								
Paddy - HYV Boro (Rabi)	60	45	15	15,210	912,600	8,306	373,748	538,853
Paddy - HYV Aman (Kharif II)	60	50	10	14,040	842,400	10,440	522,000	320,400
Potato (Rabi)	100		100	1,800	180,000	0	0	180,000
Vegetables (Kharif I)	60	60	0	2,124	127,440	36	2,160	125,280
Pulses (Rabi)	0	0	0	90	0	11	0	0
								1,164,533

**Total Days per Year - Weighted<sup>a</sup>**      **1,146,652**

**Value**

Agricultural wage rate (Tk per day)	300.00
<b>Total Value (Tk million)</b>	<b>344.00</b>

<sup>a</sup> Weighted according to the distribution of farms in the project area.

Source: IMIP PPTA consultants' estimates

**Table 22: Irrigation Costs**  
(Tk per hectare)

	With Project		Without Project	
	Financial	Economic	Financial	Economic
<b>Crop Budget</b>				
Boro rice	10,827.00	24,022.88	12,375.00	12,375.00
<b>Estimated Pumping Costs</b>				
Diesel - current			9,290.91	
Electricity - current			1,463.90	3,248.10
Electricity - future	1,421.73	3,154.53		

Source: IMIP PPTA consultants' estimates