

ECONOMIC ANALYSIS–SUPPLEMENTARY TABLES

1. **Economic Internal Rate of Return and Sensitivity Analysis.** The summary results and detailed computations are shown in Tables 1 to 5.
2. **Distribution of Net Economic Benefits and Poverty Impact Ratio.** The summary results and detailed computations are shown in Tables 6 to 9.

Table 1: Houayxay Integrated Urban Development

Table 2: Houayxay Solid Waste

Table 3: Houayxay Urban Drainage

Table 4: Luang Namtha Solid Waste

Table 5: Luang Namtha Integrated Urban Development

Table 6: Distribution of Net Economic Benefits – Houayxay (KIP billion)
Integrated Urban Development

Particulars	Financial PV	Economic PV	Econ PV less Fin PV	Government / Economy	Labor	Public	Total
Revenue / Benefits	-	99.0	99.0			99.0	99.0
Costs							
Equipment and Materials	26.7	18.9	(7.9)	7.9			7.9
Labor	10.2	7.2	(3.0)		3.0		3.0
Other Cost	14.0	9.9	(4.1)	4.1			4.1
Net Benefits	(50.9)	63.1	114.0	(50.9)			(50.9)
Gains and Losses				(38.9)	3.0	99.0	63.1

Urban Roads and Drainage Upgrading

Particulars	Financial PV	Economic PV	Econ PV less Fin PV	Government / Economy	Labor	Public	Total
Revenue / Benefits	-	71.9	71.9			71.9	71.9
Costs							
Equipment and Materials	46.2	32.6	(13.6)	13.6			13.6
Labor	17.6	12.4	(5.2)		5.2		5.2
Other Cost	24.2	17.1	(7.1)	7.1			7.1
Net Benefits	(87.9)	9.8	97.8	(87.9)			(87.9)
Gains and Losses				(67.2)	5.2	71.9	9.8

Solid Waste Management

Particulars	Financial PV	Economic PV	Econ PV less Fin PV	Government / Economy	Labor	Consumers	Total
Revenue / Benefits	13.2	15.5	2.3			2.3	2.3
Costs							
Equipment and Materials	9.7	6.8	(2.9)	2.9			2.9
Labor	4.2	2.9	(1.2)		1.2		1.2
Other Cost	6.9	4.9	(2.0)	2.0			2.0
Net Benefits	(7.6)	0.8	8.4	(7.6)			(7.6)
Gains and Losses				(2.7)	1.2	2.3	0.8

PV = present value

Source: PPTA Consultant.

Table 7: Distribution of Net Economic Benefits – Houayxay (KIP billion)

Integrated Urban Development

Particulars	Financial PV	Economic PV	Econ PV less Fin PV	Government / Economy	Labor	Public	Total
Revenue / Benefits	-	117.1	117.1			117.1	117.1
Costs							
Equipment and Materials	75.1	53.0	(22.1)	22.1			22.1
Labor	28.6	20.2	(8.4)		8.4		8.4
Other Cost	39.3	27.7	(11.6)	11.6			11.6
Net Benefits	(143.0)	16.3	159.3	(143.0)			(143.0)
Gains and Losses				(109.3)	8.4	117.1	16.3

Solid Waste Management

Particulars	Financial PV	Economic PV	Econ PV less Fin PV	Government / Economy	Labor	Customer	Total
Revenue / Benefits	12.6	16.6	4.1			4.1	4.1
Costs							
Equipment and Materials	9.4	6.6	(2.8)	2.8			2.8
Labor	4.0	2.8	(1.2)		1.2		1.2
Other Cost	6.7	4.7	(2.0)	2.0			2.0
Net Benefits	(7.5)	2.5	10.0	(7.5)			(7.5)
Gains and Losses				(2.8)	1.2	4.1	2.5

PV = present value

Source: PPTA Consultant.

Table 8: Poverty Impact Ratio – Houayxay (KIP billion)

Integrated Urban Development

Items	Government / Economy	Labor	Public	Total
Gains and losses		3.00	99.02	102.02
Financial return	(38.91)			(38.91)
Benefits (Losses)	(38.91)	3.00	99.02	63.11
Proportion of poor	0.20	0.25	0.20	
Benefits to poor	(7.78)	0.75	19.80	12.77
Poverty Impact Ratio				0.20

Urban Roads and Drainage Upgrading

Items	Government / Economy	Labor	Public	Total
Gains and losses		5.18	71.86	77.04
Financial return	(67.21)			(67.21)
Benefits (Losses)	(67.21)	5.18	71.86	9.84
Proportion of poor	0.20	0.25	0.20	
Benefits to poor	(13.44)	1.30	14.37	2.23
Poverty Impact Ratio				0.23

Solid Waste Management

Items	Government / Economy	Labor	Consumers	Total
Gains and losses		1.22	2.33	3.55
Financial return	(2.71)			(2.71)
Benefits (Losses)	(2.71)	1.22	2.33	0.84
Proportion of poor	0.20	0.25	0.20	
Benefits to poor	(0.54)	0.31	0.47	0.23
Poverty Impact Ratio				0.27

Source: PPTA Consultant.

Table 9: Poverty Impact Ratio – Luang Namtha (KIP billion)

Integrated Urban Development					0
Items	Government / Economy	Labor	Public	Total	
Gains and losses		8.4	117.1	125.6	
Financial return	(109.3)			(109.3)	
Benefits (Losses)	(109.3)	8.4	117.1	16.3	
Proportion of poor	0.20	0.25	0.20		
Benefits to poor	(21.9)	2.1	23.4	3.7	
Poverty Impact Ratio				0.23	

Solid Waste Management					
Items	Government / Economy	Labor	Customer	Total	
Gains and losses		1.18	4.09	5.27	
Financial return	(2.78)			(2.78)	
Benefits (Losses)	(2.78)	1.18	4.09	2.49	
Proportion of poor	0.20	0.25	0.20		
Benefits to poor	(0.56)	0.30	0.82	0.56	
Poverty Impact Ratio				0.22	

Source: PPTA Consultant.