

APPENDIX N : TABLES

Table N.1 Project Cost Summary in Master Plan

No.	Project	Comprehensive Assessment	Project Cost (mil VND)	Annual O/M Cost (mil VND/Y)	Remarks
IRRIGATION AND DRAINAGE IMPROVEMENT					
Reservoir Irrigation System					
R02	Ho Thanh	A	7,543	44	Irrigated Area (ha)
R06	Trung den	A	12,033	61	100
R09	Cua Ong	A	10,253	63	150
R11	Kao Bang	A	8,408	56	160
R01	Vung Huyen	B	976	11	20
R04	Vuc Mau	B	1,078	19	50
R05	Hao Hao	B	890	10	20
R17	Khe Dinh	B	1,643	25	60
R19	Khe Bo	B	2,259	22	35
R10	Thanh Thuy	C	5,888	59	100
RN2	Da Han	C	39,896	296	250
Pump Irrigation System					
P16	Nam Dong	A	22,661	679	800
PN1	Nam Cuong 2	A	9,966	107	120
P07	Nam Cuong 1	B	4,372	122	140
P10	Du DU	B	3,432	70	80
P19	Nam Tan	B	8,792	174	200
P20	Dai Dong 1	B	2,819	78	90
P23	Ru Dun	B	8,079	174	200
P28	Ghenh station	B	9,313	278	320
P31	Xuan Lam	B	10,432	287	330
P09	Nam Trung	C	16,275	435	500
P21	Dai Dong 2	C	2,824	52	60
P27	Sen doi	C	2,515	70	80
P29	Hong Long 1	C	5,629	117	135
P30	Hong Long 2	C	7,773	174	200
P33	Ru Doi	C	2,385	44	50
Inundation Mitigation, Drainage Improvement					
I1	Nam Nam Dike	A	3,952	367	1,920
D1	Nam Nam	C	11,522	288	1,400
AGRICULTURAL SUPPORTING SERVICE					
Agr. Extension Center					
Seed Supply Center					
Agr. Mechanization Service Center					
Nursery Center					
AGRO-INDUSTRY AND MARKETING IMPROVEMENT					
Agro-processing Complex					
Market-oriented Forwarding Center					
Improvement of Confectionery Factory					
Group Communal Facility for Silk Yarn					
Group Communal Facility for Soy-sauce Production					
Pine Tree Gum Processing Facility					
HEALTH AND SANITATION					
Rural Health and Sanitation Improvement					
EDUCATION FACILITIES					
School Electrification					
Rehabilitation of School Facilities					
Establishment of Technical Middle School					
Providing Teaching Aids for School					
Expansion of Regular Educational Center					
Expansion of Vocational Center					
Rural Road Improvement					
1	Route 15A (North)	A	17,554	355	14.8
2	Route 15A (South)	A	41,433	466	19.4
3	42 Dike Road	A	14,790	264	11.0
4	Phan Boi-Chua Road	A	16,083	173	7.2
5	Hung Tien-Nam Linh Road	A	13,416	211	8.8
6	42 Dike-Kim Lien Road	A	8,761	101	4.2
7	Kim Lien-Nam Cat Road	A	13,046	182	7.6
8	Nam Tan-Nam Loc Road	A	16,620	209	8.7
9	Nam Nam Dike Road	A	16,120	226	9.4
10	Nam Kim-Nam Phue-Nam Cuong Road	A	20,468	98	7.0
11	Cau-Sao Market Road	B	7,717	84	3.5
12	Nam Thanh-Nghi Loc Road	B	12,271	156	6.5
13	Nam Thai Road	B	8,096	113	4.7
14	Northern Ring Road	B	26,186	360	15.0
15	Nam Phue-Nam Trung Road	B	12,018	84	3.5
RURAL ELECTRIFICATION					
Complete Electrification					
Rehabilitation of Distribution Network					
Up-grading of Distribution Network					
Rural Water Supply					
Public Water Supply System (Dried-up Area)					
Public Water Supply System (Inundation Area)					
Material Supply of Filter Tank					
Public Water Supply System (Plane Area)					
Improvement of Existing Gravity Flow System					
House Connection System (Nam Dan Town)					
Environmental Conservation					
Erosion Control					
Total					
Subtotal of "A" Projects			559,656		
Sub-total of "B" Projects			347,988		
Sub-total of "C" Projects			127,747		
Total			1,035,391		

Table N.2 Labor Wage in Nghe An Province

No.	Labor	Specification	Unit	Unit Price (VND)	Reference
L-1	Operator Class A	Bulldozer	man-day	90,000	
L-2	Operator Class B	Shovel, Grador, Macadam, Buck	man-day	75,000	
L-3	Operator Class C	Tire Roller	man-day	70,000	
L-4	Operator Class D	Concrete Plant	man-day	65,000	
L-5	Driver Class A	Dump Truck	man-day	75,000	
L-6	Driver Class B	Truck	man-day	70,000	
L-7	Foreman		man-day	100,000	
L-8	Helper Class A	Heavy	man-day	55,000	
L-9	Helper Class B	Light	man-day	30,000	
L-10	Steel Bending Worker		man-day	50,000	
L-11	Building Worker		man-day	55,000	
L-12	Plant Operator		man-day	85,000	
L-13	Promptor		man-day	200,000	
L-14	Labor		man-day	50,000	

Table N.3 Price of Basic Construction Materials in Nghe An Province

No.	Item	Specification	Unit	Unit Price (VND)	Reference
M-1	Kerosene		l	3,900	
M-2	Diesel		l	3,900	
M-3	Gasoline		l	4,600	
M-4	Oil		l	10,000	
M-5	Asphalt Concrete	Medium seed	ton	700,000	excluding labour
M-6	Asphalt Emulsion		kg	3,000	
M-7	Aggregate		m ³	98,800	Macadam 2x4
M-8	Cement	PC-300	kg	2,250	Bin Son Cement
M-9	Sand	Fresh	m ³	41,400	Yellow Sand
M-10	Crushed Gravel		m ³	88,100	Gravel
M-11	Crushed Stone		m ³	64,700	Rock
M-12	Macadam (Fine)	0.5x1, 1x2	m ³	103,800	Average
M-13	Macadam (Middle)	2x4, 4x6	m ³	86,100	Average
M-14	Forming Wood		m ³	2,000,000	
M-15	Steel Bar		(ons	6,257,850	Av. 10-22
M-16	Nail		kg	15,000	
M-17	Wire		kg	10,000	
M-18	Gabion Mat	t=30cm	pcs	12,000	
M-19	Conc. Admixture		m ³	667,000	

Table N.4 Unit Price of Typical Construction Works (1/2)

No.	Item	Unit	Price (VND)			Remarks
			L/C	F/C	Total	
UC-1	CONCRETE MIXING (180kg/m ²)	m ³	633,000	51,600	684,600	
UC-2	CONCRETE MIXING (240kg/m ²)	m ³	869,300	53,900	923,200	
UC-3	CONCRETE MIXING (350kg/cm ²)	m ³	1,160,900	50,400	1,211,400	
UC-4	CONCRETE COOLING	m ³	9,900	-	9,900	
UC-5	FILLING (MANPOWER)	m ³	38,000	3,700	41,700	
UC-6	SPOT BACK FILL (MANPOWER)	m ³	29,900	3,700	33,600	
UC-7	SPOT EXCAVATION (MANPOWER)	m ³	33,000	900	33,900	
UC-8	BUCK HOE LOADING (0.6m ³)	m ³	3,000	4,400	7,400	
UC-9	BUCK HOE LOADING (0.35m ³)	m ³	4,000	4,700	8,700	
UC-10	EXCAVATION (BULLDOZER 15T)	m ³	1,700	3,000	4,700	
UC-11	SUBBASE COURSE (t = 25cm)	m ²	33,600	8,700	42,300	
UC-12	BASE COURSE (t = 12cm)	m ²	22,000	5,400	27,400	
UC-13	ASPHALT PAVEMENT (SURFACE COURSE t = 5cm)	m ²	92,500	2,000	94,500	
UC-14	ASPHALT PAVEMENT (BINDER COURSE t = 5cm)	m ²	94,400	2,000	96,400	
UC-15	CONCRETE PLACING (180kg/cm ²)	m ³	713,500	54,300	767,800	
UC-16	CONCRETE PLACING (240kg/cm ²)	m ³	961,700	56,700	1,018,400	
UC-17	CONCRETE PLACING (350kg/cm ²)	m ³	1,268,000	53,000	1,321,000	
UC-18	SLOPE FORMING	m ²	7,200	5,400	12,600	
UC-19	ROADBED COMPACTION (t = 20cm)	m ²	6,800	4,700	11,500	
UC-20	SOIL TRANSPORTATION (D.TRUCK 8T L=0.5km)	m ³	6,690	8,515	15,300	
UC-21	SOIL TRANSPORTATION (D.TRUCK 8T L=1km)	m ³	7,473	9,511	17,000	
UC-22	SOIL TRANSPORTATION (D.TRUCK 8T L=2km)	m ³	9,038	11,503	20,600	
UC-23	SOIL TRANSPORTATION (D.TRUCK 8T L=5km)	m ³	13,735	17,481	31,300	
UC-24	SOIL TRANSPORTATION (D.TRUCK 8T L=10km)	m ³	21,562	27,443	49,100	
UC-25	SOIL TRANSPORTATION (D.TRUCK 8T L=20km)	m ³	37,217	47,367	84,600	
UC-26	EXCAVATION - TRANSPORTATION (L = 5.0km)	m ³	18,500	24,900	43,400	
UC-27	BASE-LAYER PLACING	m ²	1,200	1,200	2,400	
UC-28	STEEL-BAR BENDING and PLACING	kg	8,900	100	9,000	

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Table N.4 Unit Price of Typical Construction Works (2/2)

No.	Item	Unit	Price (VND)			Remarks
			L/C	F/C	Total	
UC-29	FORMING	m2	200,700	-	200,700	
UC-30	GABION MAT (t = 30cm)	m2	56,700	7,500	64,200	
UC-31	FOUNDATION BED CRUSHED STONE	m3	179,700	33,000	212,700	
UC-32	EXCAVATION (BUCK HOE 0.6m3)	m3	3,100	4,600	7,700	
UC-33	EXCAVATION (BUCK HOE 0.35m3)	m3	4,400	5,300	9,700	
UC-34	CLEARING and GRUBBING	m2	1,500	2,200	3,700	
UC-36	SMALL CHANNEL EXCAVATION (A=2.0m2)	m3	13,900	5,700	19,600	
UC-37	SMALL CHANNEL EXCAVATION (A=1.0m2)	m3	21,900	8,900	30,800	
UC-38	SOIL SPREAD & COMPACTION (D=30cm, N=5)	m3	4,000	5,600	9,600	
UC-39	SOIL SPREAD & COMPACTION (D=20cm, N=7)	m3	6,200	8,800	15,000	
UC-40	EMBANKMENT (ROAD BODY)	m3	22,500	30,500	53,000	
UC-41	EMBANKMENT (ROAD BED)	m3	38,300	43,100	81,400	
UC-42	STORN MASONRY (t=30cm)	m2	182,900	5,200	188,100	
UC-43	STORN MASONRY	m3	618,900	25,900	644,800	
UC-44	MASONRY LINING (t=30cm)	m2	126,200	3,100	129,300	
UC-45	CONCRETE STRUCTURE	m3	2,118,400	54,300	2,172,700	
UC-46	REINFORCED CONCRETE STRUCTURE	m3	2,989,600	63,700	3,053,300	
UC-47	PC/RC BEAM BRIDGE CONSTRUCTION	m2	10,500,000	4,500,000	15,000,000	
UC-48	RC SLAB BRIDGE CONSTRUCTION	m2	10,400,000	500,000	10,900,000	
UC-49	BRIDGE MINOR REHABILITATION	m2	1,350,000	150,000	1,500,000	
UC-50	ROAD BED PRPREPARATION	m2	500	500	1,000	
A-1	Architecture (Building)	m2	1,200,000	300,000	1,500,000	
A-2	Architecture (Warehouse)	m2	800,000	200,000	1,000,000	
A-3	Architecture (Open)	m2	600,000	150,000	750,000	
A-4	Ground Facing	m2	4,000	1,000	5,000	
A-5	Concrete Facing	m2	68,000	17,000	85,000	
A-6	Gravel Facing	m2	30,000	8,000	38,000	

Table N.5 Work Schedule of Model Rural Development Project in Nam Dan District

Item	Project Cost* (mill VND)	Implementation Schedule						
		1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year	6 th Year	7 th to 10 th Year
IRRIGATION AND DRAINAGE IMPROVEMENT								
1 Ho Thanh Reservoir System	7,542							
2 Tang den Reservoir System	12,032							
3 Cua Ong Reservoir System	10,252							
4 Rao Bang Reservoir System	8,408							
5 Num Dung Pumping System	22,661							
6 Nam Cuong Pumping System	9,966							
7 Nam Nam Dike	3,952							
Total	74,813	453	22,486	13,959	16,077	21,838		
AGRICULTURAL SUPPORTING SERVICE								
1 Agricultural Extension Center	2,085							
2 Seed Supply Center	21,719							
3 Agricultural Mechanization Service Center	41,804							
TOTAL	65,609	1,312	64,297					
AGRO-INDUSTRY AND MARKETING IMPROVEMENT								
1 Agro-processing Complex	16,234							
2 Market-oriented Forwarding Center	4,027							
TOTAL	20,261					4,027	16,234	
EDUCATION FACILITIES								
1 School Electrification	1,364							
2 Rehabilitation of School Facilities	22,264							
TOTAL	23,628		2,474	2,474	2,929	2,929	2,929	2,474 x 4
RURAL ROAD IMPROVEMENT								
1 Route 15A (Northern Part)	17,554							
2 Route 15A (Southern Part)	41,433							
3 42 Dike Road	14,790							
4 Phan Boi - Chua Road	16,083							
5 Nam Nam Dike Road	16,120							
6 Nam Kim - Nam Phuc - Nam Cuong Road	20,468							
Total	126,448	1,180	58,538	36,475	30,255			
RURAL ELECTRIFICATION								
Region 1	35,568							
Region 2	19,206							
Region 3	21,190							
Total	75,965	384	19,246	21,477	34,857			
RURAL WATER SUPPLY								
Public Water Supply System (Dried-up Area)	53,617							
Public Water Supply System (Inundation Area)	16,052							
Material Supply of Filter Tank	5,808							
Total	75,477		8,671	8,671	8,305	8,305	8,305	8,305 x 4
ENVIRONMENTAL CONSERVATION								
Erosion Control	2,074							
GRAND TOTAL	464,275	4,339	176,092	83,220	91,253	36,797	29,460	10,779 x 4
		1%	38%	18%	20%	8%	6%	9%

* The project cost excludes price escalation.

Preparation Period
Construction Period

Table N.8 Project Cost Summary of Model Rural Development Project in Nam Dan District
(unit : million VND)

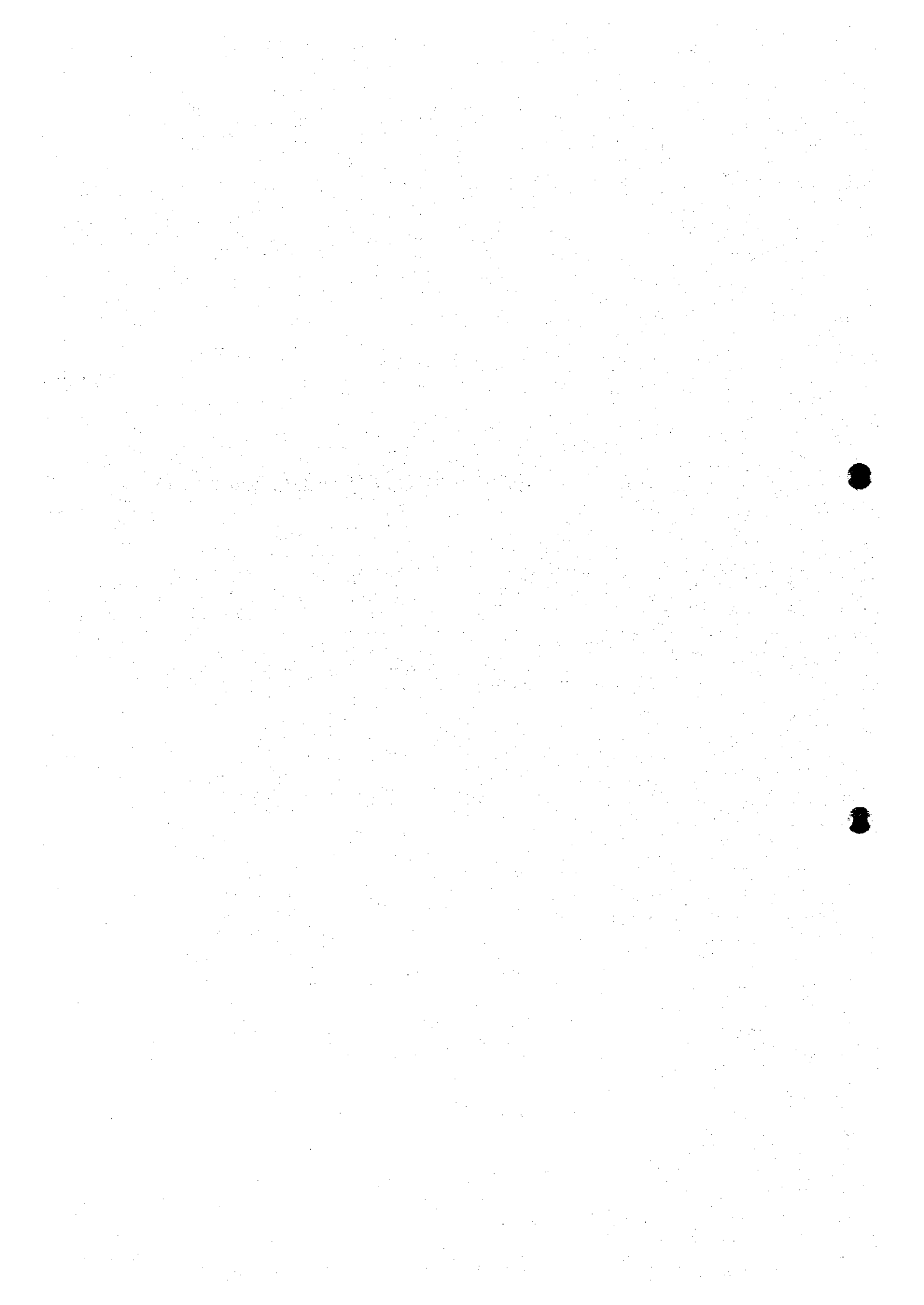
Items	Local Currency	Foreign Currency	Total Amount
1 Construction Cost	224,534	57,727	282,261
2 Land Compensation	4,329	0	0
3 Administration Cost	14,329	0	0
4 Engineering Cost	5,645	22,581	28,226
Sub-total	248,838	80,307	329,146
5 Material Supply and Equipment	36,771	56,152	92,923
6 Physical Contingency	28,561	15,646	44,207
Sub-total	314,170	150,105	464,275
7 Price Escalation	81,871	6,291	88,162
Total Project Cost	396,039	156,397	552,436

Table N.9 Annual O/M Cost of Model Rural Development Project in Nam Dan District

Item	Annual Average O/M Cost	Replacement in Terms of Annual Average	Remarks
IRRIGATION AND DRAINAGE IMPROVEMENT			
1 Ho Thanh Reservoir System	44 mil. VND		
2 Tang den Reservoir System	61 mil. VND		
3 Cua Ong Reservoir System	63 mil. VND		
4 Rao Bang Reservoir System	56 mil. VND		
5 Num Dung Pumping System	679 mil. VND	20 mil. VND	Pump and Small Gates
6 Nam Cuong Pumping System	107 mil. VND	8 mil. VND	Pump and Small Gates
7 Nam Nam Dike	367 mil. VND	8 mil. VND	Gate Equipment
Total	1,377 mil. VND		
AGRICULTURAL SUPPORTING SERVICE			
1 Agricultural Extension Center	718 mil. VND	187 mil. VND	Vehicle, Motorbike, Office Equipmen
2 Seed Supply Center	3,504 mil. VND	723 mil. VND	Seed Processing Eq. , Freezinf Facilit
3 Agricultural Machanization Service Center	4,909 mil. VND	3,477 mil. VND	Agricultural Machinery, Vehicle
TOTAL	9,131 mil. VND		
AGRO-INDUSTRY AND MRKETING IMPROVEMENT			
1 Agro-processing Complex	222 mil. VND		
2 Market-oriented Forwarding Center	129 mil. VND		
TOTAL	351 mil. VND		
RURAL ROAD IMPROVEMENT			
1 Route 15A (Nothern Part)	355 mil. VND		
2 Route 15A (Southern Part)	466 mil. VND		
3 42 Dike Road	264 mil. VND		
4 Phan Boi - Chua Road	173 mil. VND		
5 Nam Nam Dike Road	226 mil. VND		
6 Nam Kim- Nam Phuc - Nam Cuong Road	98 mil. VND		
Total	1,582 mil. VND		
RURAL ELECTRIFICTION			
Region 1	563 mil. VND		
Region 2	304 mil. VND		
Region 3	335 mil. VND		
Total	1,202 mil. VND		
RURAL WATER SUPPLY			
Public Water Supply System	1,728 mil. VND	775 mil. VND	Well Pump, Distribution Pump
TOTAL	15,371 mil. VND		

*: The project cost excludes price escalation.

APPENDIX O : PROJECT EVALUATION



**THE STUDY
ON
MODEL RURAL DEVELOPMENT
IN
NAM DAN DISTRICT, NGHE AN PROVINCE**

FINAL REPORT

APPENDIX - O PROJECT EVALUATION

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APPENDIX O : TABLES



Table O.1.1 Basic Economic Indicators

Annual Growth Rate of Gross Domestic Product

Year	(Unit : percent)					
	1991	1992	1993	1994	1995	1996
All Sectors	6.0	8.6	8.1	8.8	9.5	9.4
Agriculture Sector	2.2	7.1	3.8	3.9	4.5	-

Source : Annual Report 1996, State Bank of Vietnam, 1997
Vietnam Investment Review, General Statistics Department, 1997

Consumer Prices Index of Viet Nam

Year	(Unit : Percent)							
	1991	1992	1993	1994	1995	1996	Average 1992-96	Average 1994-96
Consumer Price Index	67.5	17.5	5.2	14.4	12.7	4.5	11.0	9.5

Source : State Bank of Vietnam, 1997

Consumer Prices Index of G7

Year	(Unit : Percent)							
	1991	1992	1993	1994	1995	1996	Average 1992-96	Average 1994-96
United States	2.0	2.9	2.9	2.6	2.8	2.9	2.9	2.8
Japan	2.7	1.2	1.0	0.7	-0.1	0.1	0.7	0.4
Germany	4.2	3.7	3.7	2.7	1.8	1.5	2.6	2.1
France	3.1	2.0	2.5	1.7	1.7	2.0	2.0	1.9
Italy	6.4	5.3	4.3	3.9	5.4	3.8	4.6	3.9
United Kingdom	4.4	2.7	1.9	2.5	3.4	2.4	2.6	2.5
Canada	3.8	2.1	1.7	0.2	2.2	1.6	1.9	0.9
Average	2.9	2.5	2.3	1.4	2.5	2.3	2.4	1.8

Source : Main Economic Indicators, OECD, 1997

Foreign Exchange Rates

Period	(Unit : VND/US\$)							
		1992	1993	1994	1995	1996	Jun-97	Jul-97
Bank for Foreign Trade	Buying	11,075	10,627	10,961	11,033	11,028	11,655	11,667
	Selling	11,146	10,649	10,972	11,044	11,036	11,666	11,678
	Average	11,111	10,638	10,967	11,039	11,032	11,661	11,673
Parallel Market	Buying	11,158	10,651	10,957	11,026	11,039	11,652	11,679
	Selling	11,236	10,671	10,978	11,042	11,055	11,667	11,696
	Average	11,197	10,661	10,968	11,034	11,047	11,660	11,688

Source : State Bank of Vietnam, 1997

Table O.2.1 Expected Tangible Benefit Appearance

Item	Disbursement (percent)									
	1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	7th Year	8th Year	9th Year	10th Year
IRRIGATION AND DRAINAGE IMPROVEMENT										
1 Ho Thanh Irrigation System					100%	100%	100%	100%	100%	100%
2 Tang den Irrigation System						100%	100%	100%	100%	100%
3 Cua Ong Irrigation System						100%	100%	100%	100%	100%
4 Rao Bang Irrigation System					100%	100%	100%	100%	100%	100%
5 Nam Dung Irrigation System			100%	100%	100%	100%	100%	100%	100%	100%
6 Nam Cuong Irrigation System				100%	100%	100%	100%	100%	100%	100%
7 Nam Nam Dike				100%	100%	100%	100%	100%	100%	100%
Total	0%	0%	53%	73%	86%	100%	100%	100%	100%	100%
AGRICULTURAL SUPPORTING SERVICES										
1 Agricultural Extension Center			100%	100%	100%	100%	100%	100%	100%	100%
2 Seed Supply Center			100%	100%	100%	100%	100%	100%	100%	100%
3 Agricultural Mechanization Center			100%	100%	100%	100%	100%	100%	100%	100%
TOTAL	0%	0%	100%	100%	100%	100%	100%	100%	100%	100%
AGRO-INDUSTRY AND MARKETING IMPROVEMENT										
1 Agro-processing Complex							100%	100%	100%	100%
2 Market-oriented Forwarding Center							100%	100%	100%	100%
TOTAL	0%	0%	0%	0%	0%	46%	100%	100%	100%	100%
EDUCATION FACILITIES										
1 School Electrification										
2 Rehabilitation of School Facilities										
TOTAL										
RURAL ROAD IMPROVEMENT										
1 Route 15A Northern Part			100%	100%	100%	100%	100%	100%	100%	100%
2 Route 15A Southern Part			100%	100%	100%	100%	100%	100%	100%	100%
3 42 Dike Road					100%	100%	100%	100%	100%	100%
4 Phan Bui - Chua Road					100%	100%	100%	100%	100%	100%
9 Nam Nam Dike Road				100%	100%	100%	100%	100%	100%	100%
10 Nam Kim - Nam Phuc - Nam Cuong Road				100%	100%	100%	100%	100%	100%	100%
Total	0%	0%	47%	76%	100%	100%	100%	100%	100%	100%
RURAL ELECTRIFICATION										
Region 1					100%	100%	100%	100%	100%	100%
Region 2			100%	100%	100%	100%	100%	100%	100%	100%
Region 3				100%	100%	100%	100%	100%	100%	100%
Total	0%	0%	25%	53%	100%	100%	100%	100%	100%	100%
RURAL WATER SUPPLY										
Public Water Supply System (Dried-up Area)										
Public Water Supply System (Inundation Area)										
Material Supply of Filter Tank										
Total										
ENVIRONMENTAL CONSERVATION										
Erosion Control							100%	100%	100%	100%
GRAND TOTAL	0%	0%	79%	87%	94%	99%	100%	100%	100%	100%

Table O.2.2 Cropping Area (1/5)

Crop	80 ha				Without Project				With Project				(Unit : ha)							
	Winter-Spring		ummer-Autum		Summer		Winter		Total		Winter-Spring		ummer-Autum		Summer		Winter		Total	
	45	35	45	15	90	80	80	80	80	160	160	80	80	0	0	0	0	160	200	
Paddy (Irrigated)	45	35	45	15	90	80	80	80	80	160	160	80	80	0 <td>0 <td>0 <td>0 <td>160</td> <td>200</td> </td></td></td>	0 <td>0 <td>0 <td>160</td> <td>200</td> </td></td>	0 <td>0 <td>160</td> <td>200</td> </td>	0 <td>160</td> <td>200</td>	160	200	
Paddy (Rainfed)					50															
Maize					0															
Sweet Potato					0															
Groundnut					0															
Green Bean					0															
Sesame					0															
Vegetables					0															
Chili					0															
Sugar Cane					0															
Mulberry					0															
Total	80	45	45	15	140	80	80	80	80	175	175	80	80	0	0	0	160	200		
Cropping Intensity (%)																				

Note : Winter-Spring is from late January to May.
 Summer-Autum is from early June to middle September.
 Summer is from early July to middle November.
 Winter is late September to middle January.
 Green bean is including green bean and soybean.
 Annual Crops as sugarcane and mulberry are placed in Winter-Spring column for calculation.

Crop	100 ha				Without Project				With Project				(Unit : ha)							
	Winter-Spring		ummer-Autum		Summer		Winter		Total		Winter-Spring		ummer-Autum		Summer		Winter		Total	
	45	55	45	20	90	100	100	100	200	100	100	100	100	75	75	75	75	200	275	
Paddy (Irrigated)	45	55	45	20	90	100	100	100	200	100	100	100	100	75	75	75	75	200	275	
Paddy (Rainfed)					110															
Maize					20															
Sweet Potato					0															
Groundnut					0															
Green Bean					0															
Sesame					0															
Vegetables					0															
Chili					0															
Sugar Cane					0															
Mulberry					0															
Total	100	45	45	20	220	100	100	100	275	220	220	100	100	75	75	75	275	275		
Cropping Intensity (%)																				

Table O.2.2 Cropping Area (2/5)

Crop	Without Project				With Project				Total	(Unit : ha)	
	Summer		Winter		Summer		Winter			With	Without
	Winter-Spring	ummer-Autum	Summer	Winter	Winter-Spring	ummer-Autum	Summer	Winter		Total	Total
Cua Ong Reservoir System											
150 ha											
Paddy (Irrigated)	100	100			200	150			300	100	0
Paddy (Rainfed)	50		50		100				0	-100	0
Maize				20	20			70	70	50	0
Sweet Potato					0				0	0	0
Groundnut					0				0	0	0
Green Bean					0				0	0	0
Sesame					0				0	0	0
Vegetables					0				0	0	0
Chili					0				0	0	0
Sugar Cane					0				0	0	0
Mulberry					0				0	0	0
Total	150	100	50	20	320	150	0	70	370	50	247
Cropping Intensity (%)											
					213						

Crop	Without Project				With Project				Total	(Unit : ha)	
	Summer		Winter		Summer		Winter			With	Without
	Winter-Spring	ummer-Autum	Summer	Winter	Winter-Spring	ummer-Autum	Summer	Winter		Total	Total
Rao Bang Reservoir System											
160 ha											
Paddy (Irrigated)	100	100			200	160			320	120	0
Paddy (Rainfed)	60		60		120				0	-120	0
Maize				50	50			110	110	60	0
Sweet Potato					0				0	0	0
Groundnut					0				0	0	0
Green Bean					0				0	0	0
Sesame					0				0	0	0
Vegetables					0				0	0	0
Chili					0				0	0	0
Sugar Cane					0				0	0	0
Mulberry					0				0	0	0
Total	160	100	60	50	370	160	0	110	430	60	269
Cropping Intensity (%)											
					231						

Table O.2.2 Cropping Area (3/5)

Crop	Nam Dong Pumping System 800 ha				Without Project				With Project				(Unit : ha)		
	With Project		Without Project		With Project		Without Project		With Project		Without Project				
	Winter-Spring	ummer-Autum	Summer	Winter	Total	Winter-Spring	ummer-Autum	Summer	Winter	Total	Winter-Spring	ummer-Autum		Summer	Winter
Paddy (Irrigated)	253				506	800				800	800				1,600
Paddy (Rainfed)	547		30		577							150			0
Maize				50	50							70			150
Sweet Potato				70	70							70			70
Groundnut					0							0			0
Green Bean					0							0			0
Sesame					0							0			0
Vegetables					0							0			0
Chili					0							0			0
Sugar Cane					0							0			0
Mulberry					0							0			0
Total	800	253	30	120	1,203	800	800	0	220	1,820	800	800	0	220	1,820
Cropping Intensity (%)					150					228					

Crop	Nam Cuong Pumping System 120 ha				Without Project				With Project				(Unit : ha)		
	With Project		Without Project		With Project		Without Project		With Project		Without Project				
	Winter-Spring	ummer-Autum	Summer	Winter	Total	Winter-Spring	ummer-Autum	Summer	Winter	Total	Winter-Spring	ummer-Autum		Summer	Winter
Paddy (Irrigated)					0	100				100	100				200
Paddy (Rainfed)	50		15		65							50			0
Maize	30				30							0			50
Sweet Potato					0							0			0
Groundnut	30				30							0			0
Green Bean		30			30	20						0			-30
Sesame					0							0			-10
Vegetables					0							0			0
Chili	10				10		20					20			20
Sugar Cane					0							0			0
Mulberry					0							0			0
Total	120	30	15	0	165	120	120	0	70	310	120	120	0	70	310
Cropping Intensity (%)					138					258					

Table O.2.2 Cropping Area (4/5)

Crop	Without Project				With Project				Total	(Unit : ha)	
	Summer		Winter		Summer		Winter			With - Without	Total
	Winter-Spring	ummer-Autum	Summer	Winter	Winter-Spring	ummer-Autum	Summer	Winter			
Total Irrigation Improvement Sub-project Area	1,410	575	225	210	1,086	1,390	0	0	2,780	1,694	-1,022
Paddy (Irrigated)	543	0	0	0	1,022	0	0	0	0	0	285
Paddy (Rainfed)	797	0	225	140	170	0	0	455	70	0	0
Maize	30	0	0	70	30	0	0	0	0	0	-30
Sweet Potato	0	0	0	0	0	0	0	0	0	0	-10
Groundnut	30	0	0	0	30	0	0	0	0	0	0
Green Bean	0	30	0	0	0	20	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	20	0	0	0
Chili	10	0	0	0	10	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0	0
Total	1,410	575	225	210	2,418	1,410	0	545	3,365	947	239
Cropping Intensity (%)	171										

Crop	Without Project				With Project				Total	(Unit : ha)	
	Summer		Winter		Summer		Winter			With - Without	Total
	Winter-Spring	ummer-Autum	Summer	Winter	Winter-Spring	ummer-Autum	Summer	Winter			
Total Agricultural Area	11,502	7,136	839	2,826	22,303	7,973	614	3,161	23,250	947	202
Paddy (Irrigated)	3,299	5,924	0	0	9,223	4,146	0	0	10,917	1,694	-1,022
Paddy (Rainfed)	3,495	0	839	0	4,334	2,698	614	0	3,312	0	285
Maize	980	0	0	1,187	2,167	950	0	1,502	2,452	0	0
Sweet Potato	1,018	0	0	1,179	2,197	1,018	0	1,179	2,197	0	-30
Groundnut	2,040	0	0	0	2,040	2,010	0	0	2,010	0	-10
Green Bean	0	630	0	0	630	0	620	0	620	0	0
Sesame	0	50	0	0	50	0	50	0	50	0	0
Vegetables	200	532	0	460	1,192	200	0	480	1,212	20	0
Chili	60	0	0	0	60	70	0	0	70	10	0
Sugar Cane	210	0	0	0	210	0	0	0	210	0	0
Mulberry	200	0	0	0	200	200	0	0	200	0	0
Total	11,502	7,136	839	2,826	22,303	7,973	614	3,161	23,250	947	202
Cropping Intensity (%)	194										

Table O.2.2 Cropping Area (5/5)

Crop	10,092 ha				197				(Unit : ha)
	Without Project		With Project		Without Project		With Project		
	Winter-Spring	Summer-Autum	Winter	Total	Winter-Spring	Summer	Winter	Total	
Paddy (Irrigated)	2,756	5,381	0	8,137	2,756	0	0	8,137	0
Paddy (Rainfed)	2,698	0	614	3,312	2,698	0	614	3,312	0
Maize	950	0	0	1,997	950	0	0	1,997	0
Sweet Potato	1,018	0	0	2,127	1,018	0	0	2,127	0
Groundnut	2,010	0	0	2,010	2,010	0	0	2,010	0
Green Bean	0	600	0	600	0	600	0	600	0
Sesame	0	50	0	50	0	50	0	50	0
Vegetables	200	532	0	1,192	200	0	460	1,192	0
Chili	50	0	0	50	50	0	0	50	0
Sugar Cane	210	0	0	210	210	0	0	210	0
Mulberry	200	0	0	200	200	0	0	200	0
Total	10,092	6,563	614	19,885	10,092	6,563	614	19,885	197
Cropping Intensity (%)									

Crop	1,200 ha				197				(Unit : ha)
	Without Project		With Project		Without Project		With Project		
	Winter-Spring	Summer-Autum	Winter	Total	Winter-Spring	Summer	Winter	Total	
Paddy (Irrigated)	1,080	0	0	1,080	1,080	0	0	1,200	120
Paddy (Rainfed)	0	120	0	120	0	120	0	120	-120
Maize	0	0	0	0	0	0	0	0	0
Sweet Potato	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0
Total	1,080	120	0	1,200	1,080	120	0	1,200	0
Cropping Intensity (%)									

Table O.2.3 Yield of Crops (1/2)

Crop	(Unit : ton / ha)					
	Without Project			With Project		
	Winter-Spring	ummer-Autum	Summer	Winter	ummer-Autum	Summer
Paddy (Irrigated)	4.5	3.5	1.3		6.5	6.1
Paddy (Rainfed)	2.4			1.4		
Maize	1.8			4.5		
Sweet Potato	1.4				1.0	
Groundnut		0.7				
Green Bean						
Sesame						
Vegetables						
Chili	0.8				1.2	
Sugar Cane						
Mulberry						7.5

Note : Winter-Spring is from late January to May.
 Summer-Autum is from early June to middle September.
 Summer is from early July to middle November.
 Winter is late September to middle January.
 Green bean is including green bean and soybean.
 Annual Crops as sugarcane and mulberry are placed in Winter-Spring column for calculation.

Crop	(Unit : ton / ha)					
	Without Project			With Project		
	Winter-Spring	ummer-Autum	Summer	Winter	ummer-Autum	Summer
Paddy (Irrigated)	4.3	3.3	1.3		6.2	5.8
Paddy (Rainfed)	2.1			1.4		
Maize						
Sweet Potato						
Groundnut						
Green Bean						
Sesame						
Vegetables						
Chili						
Sugar Cane						
Mulberry						2.0

Table O.2.4 Production (1/5)

Crop	Without Project				With Project				(Unit : ton)	
	Winter-Spring		Summer-Autum		Winter-Spring		Summer-Autum		Total	With - Without
	Winter	Summer	Winter	Summer	Winter	Summer	Winter	Summer		
Paddy (Irrigated)	203	158	0	0	520	488	0	0	1,008	648
Paddy (Rainfed)	84	0	20	0	104	0	0	0	0	-104
Maize	0	0	0	0	0	0	0	0	0	0
Sweet Potato	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0

Note : Winter-Spring is from late January to May.
 Summer-Autum is from early June to middle September.
 Summer is from early July to middle November.
 Winter is late September to middle January.
 Green bean is including green bean and soybean.
 Annual Crops as sugarcane and mulberry are placed in Winter-Spring column for calculation.

Crop	Without Project				With Project				(Unit : ton)	
	Winter-Spring		Summer-Autum		Winter-Spring		Summer-Autum		Total	With - Without
	Winter	Summer	Winter	Summer	Winter	Summer	Winter	Summer		
Paddy (Irrigated)	194	149	0	0	620	580	0	0	1,200	858
Paddy (Rainfed)	116	0	72	0	187	0	0	0	0	-187
Maize	0	0	0	28	28	0	150	0	150	122
Sweet Potato	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0

Table O.2.4 Production (2/5)

Crop	Without Project						With Project			(Unit : ton)	
	Winter-Spring	ummer-Autum	Summer	Winter	Total	Winter-Spring	ummer-Autum	Summer	Winter	Total	With - Without
	430	330	0	0	760	930	870	0	0	1,800	1,040
Paddy (Irrigated)	430	330	0	0	760	930	870	0	0	1,800	1,040
Paddy (Rainfed)	105	0	65	0	170	0	0	0	0	0	-170
Maize	0	0	0	28	28	0	0	0	140	140	112
Sweet Potato	0	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0	0

Crop	Without Project						With Project			(Unit : ton)	
	Winter-Spring	ummer-Autum	Summer	Winter	Total	Winter-Spring	ummer-Autum	Summer	Winter	Total	With - Without
	430	330	0	0	760	992	928	0	0	1,920	1,160
Paddy (Irrigated)	430	330	0	0	760	992	928	0	0	1,920	1,160
Paddy (Rainfed)	126	0	78	0	204	0	0	0	0	0	-204
Maize	0	0	0	70	70	0	0	0	220	220	150
Sweet Potato	0	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0	0

Table O.2.4 Production (3/5)

Crop	Without Project				With Project				(Unit : ton)	
	Winter-Spring		Summer-Autum		Winter-Spring		Summer-Autum		Total	With - Without
	Winter	Summer	Winter	Summer	Winter	Summer	Winter	Summer		
Paddy (Irrigated)	1,139	0	886	0	2,024	5,200	4,880	0	10,080	8,056
Paddy (Rainfed)	1,313	39	0	0	1,352	0	0	0	0	-1,352
Maize	0	0	0	70	70	0	0	300	300	230
Sweet Potato	0	0	0	315	315	0	0	378	378	63
Groundnut	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0

Crop	Without Project				With Project				(Unit : ton)	
	Winter-Spring		Summer-Autum		Winter-Spring		Summer-Autum		Total	With - Without
	Winter	Summer	Winter	Summer	Winter	Summer	Winter	Summer		
Paddy (Irrigated)	0	0	0	0	0	650	610	0	1,260	1,260
Paddy (Rainfed)	120	20	0	0	140	0	0	0	0	-140
Maize	54	0	0	0	54	0	0	100	100	46
Sweet Potato	0	0	0	0	0	0	0	0	0	0
Groundnut	42	0	0	0	42	0	0	0	0	-42
Green Bean	0	0	21	0	21	0	20	0	20	-1
Sesame	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	150	150	150
Chili	8	0	0	0	8	24	0	0	24	16
Sugar Cane	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0

Table O.2.4 Production (4/5)

Crop	Total Irrigation Improvement Sub-project Area						Total						(Unit : ton)	
	Without Project			With Project			Without Project			With Project			With - Without	
	Winter-Spring	ummer-Autum	Summer	Winter	Total	Winter-Spring	ummer-Autum	Summer	Winter	Total	With - Without	Without - With		
Paddy (Irrigated)	2,395	1,852	0	0	4,246	8,912	8,356	0	0	17,268	13,022	-2,156		
Paddy (Rainfed)	1,863	0	293	0	2,156	0	0	910	910	660	660	0		
Maize	54	0	0	196	250	0	0	378	378	63	63	0		
Sweet Potato	0	0	0	315	315	0	0	0	0	-42	-42	0		
Groundnut	42	0	0	0	42	0	20	0	20	-1	-1	0		
Green Bean	0	21	0	0	21	0	0	0	0	150	150	0		
Sesame	0	0	0	0	0	0	0	0	0	24	24	0		
Vegetables	0	0	0	0	0	24	0	0	0	0	0	0		
Chili	8	0	0	0	8	0	0	0	0	0	0	0		
Sugar Cane	0	0	0	0	0	0	0	0	0	0	0	0		
Mulberry	0	0	0	0	0	0	0	0	0	0	0	0		

Crop	Total Agricultural Area						Total						(Unit : ton)	
	Without Project			With Project			Without Project			With Project			With - Without	
	Winter-Spring	ummer-Autum	Summer	Winter	Total	Winter-Spring	ummer-Autum	Summer	Winter	Total	With - Without	Without - With		
Paddy (Irrigated)	14,245	19,609	0	0	33,854	24,346	31,494	0	0	55,840	21,986	-291		
Paddy (Rainfed)	7,529	0	1,091	0	8,620	7,285	0	1,044	0	8,328	1,354	0		
Maize	1,764	0	0	1,662	3,426	2,090	0	0	2,690	4,780	1,977	0		
Sweet Potato	4,581	0	0	5,306	9,887	5,497	0	0	6,367	11,864	561	0		
Groundnut	2,856	0	0	0	2,856	3,417	0	0	0	3,417	59	0		
Green Bean	0	441	0	0	441	0	500	0	0	500	5	0		
Sesame	0	30	0	0	30	0	35	0	0	8,732	1,580	0		
Vegetables	1,200	3,192	0	2,760	7,152	1,440	3,830	0	3,462	74	26	0		
Chili	48	0	0	0	48	74	0	0	0	12,180	2,100	0		
Sugar Cane	10,080	0	0	0	10,080	12,180	0	0	0	1,300	120	0		
Mulberry	1,180	0	0	0	1,180	1,300	0	0	0	0	0	0		

Table O.2.4 Production (S/S)

Crop	Without Project				With Project				Total	(Unit : ton) With - Without
	Winter-Spring		Summer		Winter-Spring		Summer			
	Winter-Spring	Summer	Winter-Spring	Summer	Winter-Spring	Summer	Winter-Spring	Summer		
Paddy (Irrigated)	11,851	17,757	0	798	29,608	15,454	23,138	0	38,572	8,964
Paddy (Rainfed)	5,666	0	0	0	6,464	7,285	0	1,044	8,528	1,864
Maize	1,710	0	0	0	3,176	2,090	0	0	3,870	694
Sweet Potato	4,581	0	0	0	9,572	5,497	0	0	11,486	1,914
Groundnut	2,814	0	0	0	2,814	3,417	0	0	3,417	603
Green Bean	0	420	0	0	420	0	480	0	480	60
Sesame	0	30	0	0	30	0	35	0	35	5
Vegetables	1,200	3,192	0	0	7,152	1,440	3,830	0	8,582	1,430
Chili	40	0	0	0	40	50	0	0	50	10
Sugar Cane	10,080	0	0	0	10,080	12,180	0	0	12,180	2,100
Mulberry	1,180	0	0	0	1,180	1,300	0	0	1,300	120

Crop	Without Project				With Project				Total	(Unit : ton) With - Without
	Winter-Spring		Summer		Winter-Spring		Summer			
	Winter-Spring	Summer	Winter-Spring	Summer	Winter-Spring	Summer	Winter-Spring	Summer		
Paddy (Irrigated)	0	3,780	0	0	3,780	0	4,680	0	4,680	900
Paddy (Rainfed)	0	0	156	0	156	0	0	0	0	-156
Maize	0	0	0	0	0	0	0	0	0	0
Sweet Potato	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0

Table O.2.5 Farm Gate Price

Crop	(Unit : VND / kg)	
	Financial Price	Economic Price
Paddy (Irrigated)	1,800	2,030
Paddy (Rainfed)	1,800	2,030
Maize	1,800	1,580
Sweet Potato	400	400
Groundnut	4,700	2,470
Green Bean	6,600	6,600
Sesame	6,500	6,500
Vegetables	2,000	2,000
Chili	10,600	10,600
Sugar Cane	200	200
Mulberry	5,500	5,500

Note : Finance prices are average prices of last one year in Nam Dan District.

Green bean is including green bean and soybean.

Table O.2.6 Gross Production Value (Financial Price 1/5)

Crop	(Unit : million VND)									
	Without Project					With Project				
	Winter-Spring	ummer-Autum	Summer	Winter	Total	Winter-Spring	ummer-Autum	Summer	Winter	Total
Paddy (Irrigated)	365	284	0	0	648	936	878	0	0	1,814
Paddy (Rainfed)	151	0	35	0	186	0	0	0	0	-186
Maize	0	0	0	0	0	0	0	0	0	0
Sweet Potato	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0
Total	516	284	35	0	834	936	878	0	0	1,814

Note : Winter-Spring is from late January to May.
 Summer-Autum is from early June to middle September.
 Summer is from early July to middle November.
 Winter is late September to middle January.
 Green bean is including green bean and soybean.
 Annual Crops as sugarcane and mulberry are placed in Winter-Spring column for calculation.

Crop	(Unit : million VND)									
	Without Project					With Project				
	Winter-Spring	ummer-Autum	Summer	Winter	Total	Winter-Spring	ummer-Autum	Summer	Winter	Total
Paddy (Irrigated)	348	267	0	0	616	1,116	1,044	0	0	2,160
Paddy (Rainfed)	208	0	129	0	337	0	0	0	0	-337
Maize	0	0	0	50	50	0	0	0	270	220
Sweet Potato	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0
Total	556	267	129	50	1,003	1,116	1,044	0	270	2,430

Table O.2.6 Gross Production Value (Financial Price 2/5)

Crop	Without Project				With Project				Total	(Unit : million VND) With - Without
	Winter		Summer		Winter		Summer			
	Winter-Spring	ummer-Autum	Summer	Winter	Winter-Spring	ummer-Autum	Summer	Winter		
Paddy (Irrigated)	774	594	0	0	1,368	1,674	0	0	3,240	1,872
Paddy (Rainfed)	189	0	117	0	306	0	0	0	0	-506
Maize	0	0	0	50	50	0	0	252	252	202
Sweet Potato	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0
Total	963	594	117	50	1,724	1,674	0	252	3,492	1,768

Crop	Without Project				With Project				Total	(Unit : million VND) With - Without
	Winter		Summer		Winter		Summer			
	Winter-Spring	ummer-Autum	Summer	Winter	Winter-Spring	ummer-Autum	Summer	Winter		
Paddy (Irrigated)	774	594	0	0	1,368	1,670	0	0	3,456	2,088
Paddy (Rainfed)	227	0	140	0	367	0	0	0	0	-367
Maize	0	0	0	126	126	0	0	396	396	270
Sweet Potato	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0
Total	1,001	594	140	126	1,861	1,670	0	396	3,852	1,991

Table O.2.6 Gross Production Value (Financial Price 3/5)

Crop	Without Project				With Project				Total	(Unit : million VND)
	Winter-Spring		Summer		Winter-Spring		Summer			
	ummer-Autum	Winter	ummer-Autum	Winter	ummer-Autum	Winter	ummer-Autum	Winter		
Paddy (Irrigated)	2,049	0	1,594	0	3,643	9,360	0	0	18,144	14,501
Paddy (Rainfed)	2,363	0	0	70	2,433	0	0	0	0	-2,433
Maize	0	0	0	0	126	0	0	0	540	414
Sweet Potato	0	0	0	0	126	0	0	0	151	25
Groundnut	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0
Total	4,412	0	1,594	70	6,328	9,360	0	8,784	691	18,835

Crop	Without Project				With Project				Total	(Unit : million VND)
	Winter-Spring		Summer		Winter-Spring		Summer			
	ummer-Autum	Winter	ummer-Autum	Winter	ummer-Autum	Winter	ummer-Autum	Winter		
Paddy (Irrigated)	0	0	0	0	0	1,170	0	0	2,268	2,268
Paddy (Rainfed)	216	35	0	0	251	0	0	0	0	-251
Maize	97	0	0	0	97	0	0	180	180	85
Sweet Potato	0	0	0	0	0	0	0	0	0	0
Groundnut	197	0	0	0	197	0	0	0	0	-197
Green Bean	0	0	139	0	139	0	0	132	132	-7
Sesame	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	300	300	300
Chili	85	0	0	0	85	254	0	0	254	170
Sugar Cane	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0
Total	595	35	139	0	769	1,424	0	1,230	480	3,134

Table O.2.6 Gross Production Value (Financial Price 4/5)

Crop	Without Project				With Project				Total	(Unit : million VND)	
	Winter		Summer		Winter		Summer			Total	With - Without
	Winter-Spring	summer-Autum	Summer	Winter	Winter-Spring	summer-Autum	Summer	Winter			
Paddy (Irrigated)	4,310	3,333	0	0	7,643	16,042	0	0	31,082	23,440	
Paddy (Rainfed)	3,354	0	527	0	3,880	0	0	0	0	-3,880	
Maize	97	0	0	353	450	0	0	0	1,638	1,188	
Sweet Potato	0	0	0	126	126	0	0	0	151	25	
Groundnut	197	0	0	0	197	0	0	0	0	-197	
Green Bean	0	139	0	0	139	0	132	0	132	-7	
Sesame	0	0	0	0	0	0	0	0	0	0	
Vegetables	0	0	0	0	0	0	0	0	300	300	
Chili	85	0	0	0	85	254	0	0	254	170	
Sugar Cane	0	0	0	0	0	0	0	0	0	0	
Mulberry	0	0	0	0	0	0	0	0	0	0	
Total	8,043	3,471	527	479	12,520	16,296	15,173	2,089	33,558	21,038	

Crop	Without Project				With Project				Total	(Unit : million VND)	
	Winter		Summer		Winter		Summer			Total	With - Without
	Winter-Spring	summer-Autum	Summer	Winter	Winter-Spring	summer-Autum	Summer	Winter			
Paddy (Irrigated)	25,642	35,296	0	0	60,937	43,822	56,690	0	100,512	39,574	
Paddy (Rainfed)	13,552	0	1,963	0	15,516	13,112	0	1,879	14,991	-525	
Maize	3,175	0	0	2,991	6,166	3,762	0	0	8,604	2,437	
Sweet Potato	1,832	0	0	2,122	3,955	2,199	0	0	4,746	791	
Groundnut	13,423	0	0	0	13,423	16,060	0	0	16,060	2,637	
Green Bean	0	2,911	0	0	2,911	0	3,500	0	3,300	389	
Sesame	0	195	0	0	195	0	228	0	228	33	
Vegetables	2,400	6,384	0	5,520	14,304	2,880	7,661	0	17,465	3,161	
Chili	509	0	0	0	509	784	0	0	784	276	
Sugar Cane	2,016	0	0	0	2,016	2,436	0	0	2,436	420	
Mulberry	6,490	0	0	0	6,490	7,150	0	0	7,150	660	
Total	69,040	44,785	1,963	10,633	126,422	92,206	67,878	1,879	176,275	49,853	

Table O.2.6 Gross Production Value (Financial Price 5/5)

Crop	Without Project				With Project				(Unit : million VND)	
	Winter-Spring		Summer-Autum		Winter-Spring		Summer-Autum		With	Without
	Winter	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Total	Total
Paddy (Irrigated)	21,331	0	31,963	0	53,295	27,780	41,649	0	69,429	16,135
Paddy (Rainfed)	10,198	1,437	0	0	11,635	13,112	0	1,879	14,991	3,356
Maize	3,078	0	0	2,638	5,716	3,762	0	0	6,966	1,249
Sweet Potato	1,832	0	0	1,996	3,829	2,199	0	0	4,594	766
Groundnut	13,226	0	0	0	13,226	16,060	0	0	16,060	2,834
Green Bean	0	2,772	0	0	2,772	0	3,168	0	3,168	396
Sesame	0	195	0	0	195	0	228	0	228	33
Vegetables	2,400	6,384	0	5,520	14,304	2,880	7,661	0	17,165	2,861
Chili	424	0	0	0	424	530	0	0	530	106
Sugar Cane	2,016	0	0	0	2,016	2,436	0	0	2,436	420
Mulberry	6,490	0	0	0	6,490	7,150	0	0	7,150	660
Total	60,996	1,437	41,314	10,155	113,902	75,910	52,705	1,879	142,717	28,815

Crop	Without Project				With Project				(Unit : million VND)	
	Winter-Spring		Summer-Autum		Winter-Spring		Summer-Autum		With	Without
	Winter	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Total	Total
Paddy (Irrigated)	0	0	6,804	0	6,804	0	8,424	0	8,424	1,620
Paddy (Rainfed)	0	281	0	0	281	0	0	0	0	-281
Maize	0	0	0	0	0	0	0	0	0	0
Sweet Potato	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0
Total	0	281	6,804	0	7,085	0	8,424	0	8,424	1,339

Table O.2.10 Production Cost (Financial Price 1/5)

Crop	(Unit : million VND)									
	Without Project					With Project				
	Winter-Spring	ummer-Autum	Summer	Winter	Total	Winter-Spring	ummer-Autum	Summer	Winter	Total
Paddy (Irrigated)	182	165	0	0	347	466	423	0	0	890
Paddy (Rainfed)	114	0	34	0	147	0	0	0	0	543
Maize	0	0	0	0	0	0	0	0	0	-147
Sweet Potato	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0
Total	296	165	34	0	494	466	423	0	0	890
										395

Note : Winter-Spring is from late January to May.
 Summer-Autum is from early June to middle September.
 Summer is from early July to middle November.
 Winter is late September to middle January.
 Green bean is including green bean and soybean.
 Annual Crops as sugarcane and mulberry are placed in Winter-Spring column for calculation.

Crop	(Unit : million VND)									
	Without Project					With Project				
	Winter-Spring	ummer-Autum	Summer	Winter	Total	Winter-Spring	ummer-Autum	Summer	Winter	Total
Paddy (Irrigated)	182	165	0	0	347	583	529	0	0	1,112
Paddy (Rainfed)	178	0	124	0	302	0	0	0	0	765
Maize	0	0	0	27	27	0	0	0	130	-302
Sweet Potato	0	0	0	0	0	0	0	0	0	103
Groundnut	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0
Total	361	165	124	27	676	583	529	0	130	1,242
										566

Table O.2.10 Production Cost (Financial Price 2/5)

Crop	Without Project				With Project				Total	(Unit : million VND)	
	Summer		Winter		Summer		Winter			Total	With - Without
	Winter-Spring	ummer-Autum	ummer-Autum	Winter	Winter-Spring	ummer-Autum	ummer-Autum	Winter			
Paddy (Irrigated)	405	366	0	0	771	874	794	0	0	1,668	897
Paddy (Rainfed)	162	0	112	0	275	0	0	0	0	0	-275
Maize	0	0	0	27	27	0	0	0	121	121	94
Sweet Potato	0	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0	0
Total	568	366	112	27	1,073	874	794	0	121	1,789	716

Crop	Without Project				With Project				Total	(Unit : million VND)	
	Summer		Winter		Summer		Winter			Total	With - Without
	Winter-Spring	ummer-Autum	ummer-Autum	Winter	Winter-Spring	ummer-Autum	ummer-Autum	Winter			
Paddy (Irrigated)	405	366	0	0	771	933	847	0	0	1,780	1,008
Paddy (Rainfed)	195	0	135	0	330	0	0	0	0	0	-330
Maize	0	0	0	67	67	0	0	0	190	190	123
Sweet Potato	0	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0	0
Total	600	366	135	67	1,168	933	847	0	190	1,970	802

Table O.2.10 Production Cost (Financial Price 3/5)

Crop	Without Project				With Project				Total	(Unit : million VND)		
	Winter-Spring		Summer-Autum		Winter-Spring		Summer-Autum			Winter	Summer	With - Without
	0	926	0	0	4,664	4,234	0	0				
Paddy (Irrigated)	1,026	0	0	0	1,952	0	0	0	0	0	8,898	6,947
Paddy (Rainfed)	1,774	0	67	0	1,842	0	0	0	0	259	0	-1,842
Maize	0	0	0	67	67	0	0	0	0	90	259	192
Sweet Potato	0	0	0	66	66	0	0	0	0	0	0	24
Groundnut	0	0	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0	0	0
Total	2,800	926	67	133	3,926	4,664	4,234	0	349	0	9,247	5,321

Crop	Without Project				With Project				Total	(Unit : million VND)		
	Winter-Spring		Summer-Autum		Winter-Spring		Summer-Autum			Winter	Summer	With - Without
	0	34	0	0	583	529	0	0				
Paddy (Irrigated)	0	0	0	0	0	0	0	0	0	0	1,112	1,112
Paddy (Rainfed)	162	34	0	0	196	0	0	0	0	0	0	-196
Maize	74	0	0	0	74	0	0	0	86	12	86	12
Sweet Potato	0	0	0	0	0	0	0	0	0	0	0	0
Groundnut	125	0	0	0	125	0	0	0	0	0	0	-125
Green Bean	0	0	0	0	34	29	0	0	0	0	29	-5
Sesame	0	0	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	71	71	71	71
Chili	18	0	0	0	18	46	0	0	0	0	46	27
Sugar Cane	0	0	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0	0	0
Total	380	34	34	0	447	629	558	0	157	0	1,343	896

Table O.2.10 Production Cost (Financial Price 4/5)

Crop	(Unit : million VND)									
	Without Project					With Project				
	Winter-Spring	summer-Autum	Summer	Winter	Total	Winter-Spring	summer-Autum	Summer	Winter	Total
Paddy (Irrigated)	2,202	1,987	0	0	4,188	8,103	7,357	0	0	15,460
Paddy (Rainfed)	2,585	0	506	0	3,091	0	0	0	0	0
Maize	74	0	0	188	262	0	0	0	786	786
Sweet Potato	0	0	0	66	66	0	0	0	90	90
Groundnut	125	0	0	0	125	0	0	0	0	0
Green Bean	0	34	0	0	34	0	29	0	0	29
Sesame	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	71	71
Chili	18	0	0	0	18	46	0	0	0	46
Sugar Cane	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0
Total	5,005	2,020	506	254	7,785	8,149	7,386	0	947	16,481

Crop	(Unit : million VND)									
	Without Project					With Project				
	Winter-Spring	summer-Autum	Summer	Winter	Total	Winter-Spring	summer-Autum	Summer	Winter	Total
Paddy (Irrigated)	13,377	21,675	0	0	35,052	18,912	26,733	0	0	45,645
Paddy (Rainfed)	11,337	0	1,887	0	13,224	8,465	0	1,353	0	9,818
Maize	2,421	0	0	1,592	4,013	2,441	0	0	2,353	4,794
Sweet Potato	960	0	0	1,112	2,072	1,076	0	0	1,262	2,338
Groundnut	8,516	0	0	0	8,516	8,507	0	0	0	8,507
Green Bean	0	708	0	0	708	0	748	0	0	748
Sesame	0	56	0	0	56	0	62	0	0	62
Vegetables	599	1,592	0	1,377	3,567	661	1,757	0	1,590	4,008
Chili	109	0	0	0	109	148	0	0	0	148
Sugar Cane	1,552	0	0	0	1,552	1,605	0	0	0	1,605
Mulberry	363	0	0	0	363	410	0	0	0	410
Total	39,233	24,031	1,887	4,080	69,231	42,225	29,300	1,353	5,206	78,084

Table O.2.10 Production Cost (Financial Price 5/5)

Crop	Without Project				With Project				Total	With - Without
	Without Project		With Project		Without Project		With Project			
	Winter-Spring	ummer-Autum	Summer	Winter	Winter-Spring	ummer-Autum	Summer	Winter		
Paddy (Irrigated)	11,175	19,688	0	0	10,808	19,576	0	0	30,184	-679
Paddy (Rainfed)	8,752	0	1,381	0	8,465	0	1,353	0	9,818	-315
Maize	2,347	0	0	1,404	2,441	0	0	1,567	4,008	257
Sweet Potato	960	0	0	1,046	1,076	0	0	1,172	2,248	242
Groundnut	8,391	0	0	0	8,507	0	0	0	8,507	117
Green Bean	0	674	0	0	0	719	0	0	719	45
Sesame	0	56	0	0	0	62	0	0	62	6
Vegetables	599	1,592	0	1,377	661	1,757	0	1,520	3,938	371
Chili	91	0	0	0	102	0	0	0	102	12
Sugar Cane	1,552	0	0	0	1,605	0	0	0	1,605	53
Mulberry	363	0	0	0	410	0	0	0	410	47
Total	34,229	22,011	1,381	3,826	34,076	21,915	1,353	4,259	61,603	156

Crop	Without Project				With Project				Total	With - Without
	Without Project		With Project		Without Project		With Project			
	Winter-Spring	ummer-Autum	Summer	Winter	Winter-Spring	ummer-Autum	Summer	Winter		
Paddy (Irrigated)	0	3,952	0	0	0	4,391	0	0	4,391	439
Paddy (Rainfed)	0	0	270	0	0	0	0	0	0	-270
Maize	0	0	0	0	0	0	0	0	0	0
Sweet Potato	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0
Total	0	3,952	270	0	0	4,391	0	0	4,391	169

Table O.2.11 Net Production Value (Financial Price 1/5)

Crop	(Unit : million VND)									
	Without Project					With Project				
	Winter-Spring	summer-Autum	Summer	Winter	Total	Winter-Spring	summer-Autum	Summer	Winter	Total
Paddy (Irrigated)	182	119	0	0	301	470	455	0	0	925
Paddy (Rainfed)	38	0	1	0	39	0	0	0	0	624
Maize	0	0	0	0	0	0	0	0	0	-39
Sweet Potato	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0
Total	220	119	1	0	340	470	455	0	0	925

Note : Winter-Spring is from late January to May.
 Summer-Autum is from early June to middle September.

Summer is from early July to middle November.
 Winter is late September to middle January.

Green bean is including green bean and soybean.
 Annual Crops as sugarcane and mulberry are placed in Winter-Spring column for calculation.

Crop	(Unit : million VND)									
	Without Project					With Project				
	Winter-Spring	summer-Autum	Summer	Winter	Total	Winter-Spring	summer-Autum	Summer	Winter	Total
Paddy (Irrigated)	166	103	0	0	268	533	515	0	0	1,048
Paddy (Rainfed)	29	0	5	0	35	0	0	0	0	779
Maize	0	0	0	24	24	0	0	0	140	-35
Sweet Potato	0	0	0	0	0	0	0	0	0	117
Groundnut	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0
Total	195	103	5	24	327	533	515	0	140	1,188

Table O.2.11 Net Production Value (Financial Price 2/5)

Crop	Without Project				With Project				(Unit : million VND)	
	Winter-Spring		Summer		Winter-Spring		Summer		Total	With - Without
	Winter	Summer	Winter	Summer	Winter	Summer	Winter	Summer		
Paddy (Irrigated)	369	228	0	0	597	800	0	0	1,572	975
Paddy (Rainfed)	27	0	5	0	31	0	0	0	0	-31
Maize	0	0	0	24	24	0	0	131	131	108
Sweet Potato	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0
Total	395	228	5	24	652	800	0	131	1,703	1,051

Crop	Without Project				With Project				(Unit : million VND)	
	Winter-Spring		Summer		Winter-Spring		Summer		Total	With - Without
	Winter	Summer	Winter	Summer	Winter	Summer	Winter	Summer		
Paddy (Irrigated)	369	228	0	0	597	853	0	0	1,676	1,080
Paddy (Rainfed)	32	0	5	0	38	0	0	0	0	-38
Maize	0	0	0	59	59	0	0	206	206	147
Sweet Potato	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0
Total	401	228	5	59	693	853	0	206	1,882	1,189

Table O.2.11 Net Production Value (Financial Price 3/5)

Crop	Without Project				With Project				Total	(Unit : million VND)	
	Summer		Winter		Summer		Winter			Total	With - Without
	Winter-Spring	summer-Autum	Winter-Spring	summer-Autum	Winter-Spring	summer-Autum	Winter-Spring	summer-Autum			
Paddy (Irrigated)	1,023	668	0	0	1,692	4,696	0	0	9,246	7,554	
Paddy (Rainfed)	589	0	3	0	591	0	0	0	0	-591	
Maize	0	0	0	59	59	0	0	0	281	222	
Sweet Potato	0	0	0	60	60	0	0	0	61	1	
Groundnut	0	0	0	0	0	0	0	0	0	0	
Green Bean	0	0	0	0	0	0	0	0	0	0	
Sesame	0	0	0	0	0	0	0	0	0	0	
Vegetables	0	0	0	0	0	0	0	0	0	0	
Chili	0	0	0	0	0	0	0	0	0	0	
Sugar Cane	0	0	0	0	0	0	0	0	0	0	
Mulberry	0	0	0	0	0	0	0	0	0	0	
Total	1,612	668	3	119	2,402	4,696	0	342	9,588	7,186	

Crop	Without Project				With Project				Total	(Unit : million VND)	
	Summer		Winter		Summer		Winter			Total	With - Without
	Winter-Spring	summer-Autum	Winter-Spring	summer-Autum	Winter-Spring	summer-Autum	Winter-Spring	summer-Autum			
Paddy (Irrigated)	0	0	0	0	0	587	0	0	1,156	1,156	
Paddy (Rainfed)	54	0	1	0	55	0	0	0	0	-55	
Maize	23	0	0	0	23	0	0	94	94	71	
Sweet Potato	0	0	0	0	0	0	0	0	0	0	
Groundnut	72	0	0	0	72	0	0	0	0	-72	
Green Bean	0	105	0	0	105	0	0	0	103	-1	
Sesame	0	0	0	0	0	0	0	0	0	0	
Vegetables	0	0	0	0	0	0	0	229	229	229	
Chili	67	0	0	0	67	209	0	0	209	142	
Sugar Cane	0	0	0	0	0	0	0	0	0	0	
Mulberry	0	0	0	0	0	0	0	0	0	0	
Total	216	105	1	0	322	796	672	323	1,791	1,469	

Table O.2.11 Net Production Value (Financial Price 4/5)

Crop	(Unit : million VND)									
	Without Project					With Project				
	Winter-Spring	summer-Autum	Summer	Winter	Total	Winter-Spring	summer-Autum	Summer	Winter	Total
Paddy (Irrigated)	2,108	1,346	0	0	3,454	7,938	7,684	0	0	15,622
Paddy (Rainfed)	769	0	21	0	789	0	0	0	0	12,168
Maize	23	0	0	165	188	0	0	0	852	-789
Sweet Potato	0	0	0	60	60	0	0	0	61	664
Groundnut	72	0	0	0	72	0	0	0	0	1
Green Bean	0	105	0	0	105	0	103	0	0	-72
Sesame	0	0	0	0	0	0	0	0	0	-1
Vegetables	0	0	0	0	0	0	0	0	229	0
Chili	67	0	0	0	67	209	0	0	0	229
Sugar Cane	0	0	0	0	0	0	0	0	0	142
Mulberry	0	0	0	0	0	0	0	0	0	0
Total	3,039	1,451	21	225	4,735	8,147	7,787	0	1,143	17,077

Crop	(Unit : million VND)									
	Without Project					With Project				
	Winter-Spring	summer-Autum	Summer	Winter	Total	Winter-Spring	summer-Autum	Summer	Winter	Total
Paddy (Irrigated)	12,265	13,621	0	0	25,886	24,910	29,957	0	0	54,867
Paddy (Rainfed)	2,215	0	77	0	2,292	4,647	0	526	0	28,981
Maize	754	0	0	1,399	2,154	1,321	0	0	2,489	2,881
Sweet Potato	872	0	0	1,010	1,883	1,123	0	0	1,284	1,656
Groundnut	4,907	0	0	0	4,907	7,553	0	0	0	2,407
Green Bean	0	2,203	0	0	2,203	0	2,552	0	0	7,553
Sesame	0	139	0	0	139	0	166	0	0	2,552
Vegetables	1,802	4,792	0	4,143	10,737	2,219	5,903	0	5,334	166
Chili	400	0	0	0	400	636	0	0	0	166
Sugar Cane	464	0	0	0	464	831	0	0	0	27
Mulberry	6,127	0	0	0	6,127	6,740	0	0	0	2719
Total	29,806	20,754	77	6,553	57,190	49,981	38,578	526	9,107	98,191

Table O.2.11 Net Production Value (Financial Price 5/5)

Crop	(Unit : million VND)										
	Without Project					With Project					Total
	Winter-Spring	summer-Autum	Summer	Winter	Total	Winter-Spring	summer-Autum	Summer	Winter	Total	
Paddy (Irrigated)	10,156	12,275	0	0	22,432	16,972	22,273	0	0	39,245	16,813
Paddy (Rainfed)	1,447	0	56	0	1,503	4,647	0	526	0	5,173	3,671
Maize	731	0	0	1,234	1,965	1,321	0	0	1,636	2,957	992
Sweet Potato	872	0	0	950	1,823	1,123	0	0	1,223	2,346	523
Groundnut	4,835	0	0	0	4,835	7,553	0	0	0	7,553	2,718
Green Bean	0	2,098	0	0	2,098	0	2,449	0	0	2,449	351
Sesame	0	139	0	0	139	0	166	0	0	166	27
Vegetables	1,802	4,792	0	4,143	10,737	2,219	5,903	0	5,104	13,227	2,490
Chili	333	0	0	0	333	428	0	0	0	428	94
Sugar Cane	464	0	0	0	464	831	0	0	0	831	367
Mulberry	6,127	0	0	0	6,127	6,740	0	0	0	6,740	613
Total	26,767	19,304	56	6,328	52,455	41,834	30,791	526	7,964	81,114	28,659

Crop	(Unit : million VND)										
	Without Project					With Project					Total
	Winter-Spring	summer-Autum	Summer	Winter	Total	Winter-Spring	summer-Autum	Summer	Winter	Total	
Paddy (Irrigated)	0	2,852	0	0	2,852	0	4,033	0	0	4,033	1,181
Paddy (Rainfed)	0	0	11	0	11	0	0	0	0	0	-11
Maize	0	0	0	0	0	0	0	0	0	0	0
Sweet Potato	0	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0	0
Total	0	2,852	11	0	2,863	0	4,033	0	0	4,033	1,170

Table O.2.12 Benefit of Agro-processing Complex

Item	Unit Price (VND/kg)	Volume (ton)	Value (million VND)
Expenditure			
Rice Mill			
Paddy	1,800	558	1,004
Groundnut Oil Mill			
Groundnut	5,800	38	220
Feed Mill			
Maize	1,800	60	108
Sweet Potato	400	45	18
Dry Fish	1,300	8	10
Sub-total			1,361
Income			
Rice Mill			
White Rice	3,500	363	1,271
Processing Charge	40	612	24
Groundnut Oil Mill			
Edible Oil	12,500	15	188
Feed Mill			
Mixed Feed	2,300	200	460
Sub-total			1,942
Net Profit			581

Table O.2. 13 Benefit of Market-oriented Forwarding Center

Item	Unit Price (VND/kg)	Volume (ton)	Value (million VND)
Expenditure			
Fresh Products			
Mustered Green	1,200	25	30
Chinese Spinach	1,900	25	48
Green Onion	6,800	25	170
Bitter Guard	2,700	25	68
Beans and Tubers			
Maize	1,800	42	76
Sweet Potato	400	110	44
Groundnut	4,700	40	188
Green Bean	6,600	8	53
Sub-total			675
Income			
Fresh Products			
Mustered Green	3,000	25	75
Chinese Spinach	6,300	25	158
Green Onion	9,500	25	238
Bitter Guard	6,100	25	153
Beans and Tubers			
Maize	2,300	42	97
Sweet Potato	1,000	110	110
Groundnut	7,100	40	284
Green Bean	8300	8	66
Sub-total			1,180
Net Profit			504

Table O.2.14 Benefit of Rural Road Improvement Sub-project

Transportation Cost Reduction	Unit	Without Project	With Project	
Agricultural Production	ton	107,050	107,050	
Rate of Transportation	percent	25	25	
Transportation Amount	ton	26,763	26,763	
Transportation Mean		Bicycle	Bicycle	Truck
Rate	percent	100	50	50
Transportation Amount	ton	26,763	13,381	13,381
Loading Capacity	ton	0.03	0.03	1.50
Number of Vehicle	1,000 pcs	892	446	9
Transportation Period	minutes	100	80	30
Operation Unit Price	1,000VND/day	20	20	
	1,000VND/hr			50
Transportation Cost	million VND	2,478	991	223
	million VND	2,478	1,214	
Sub-total of Benefit				1,264
Products Quality Increment	Unit			
Financial Net Production Value of Vegetable	million VND			13,456
Economic Net Production Value of Vegetable	million VND			11,491
Object Rate	percent			60
Financial Net Production Value of Vegetable				8,074
Economic Net Production Value of Vegetable				6,895
Rate of Quality Increment	percent			3
Sub-total				
Financial Price	million VND			242
Economic Price	million VND			207
Annul Total				
Financial Price	million VND			1,506
Economic Price	million VND			1,471

Table O.2.15 Annual Avoided Damage by Environmental Conservation Sub-project

Item	Unit Price	Volume	Value
1. Damage of Lemon Field	(thou. VND / m ²)	(m ² / year)	(thou. VND / year)
No. 1 Site	10	20	200
No. 2 Site	10	10	100
No. 3 Site	10	20	200
Sub-total		50	500
2. Damage of Residential House	(thou. VND / house)	(house / 10 year)	(thou. VND / year)
No. 1 Site	25,000	1	2,500
No. 2 Site	50,000	1	5,000
No. 3 Site	25,000	1	2,500
Sub-total		3	10,000
3. Damage of Soil Run-off	(thou. VND / m ³)	(m ³ / year)	(thou. VND / year)
No. 1 Site	30	20	600
No. 2 Site	30	10	300
No. 3 Site	30	30	900
Sub-total		60	1,800
Total			12,300

Note : Damage of residential houses are occurred each 10 years.

Table O.3.1 Border Parity Prices for Traded Agricultural Outputs and Inputs

Items	Unit	Output			Input		
		Paddy	Oil	Maize	Urea	Phosphate	Potassium
2005 World Market Price (Current) ¹⁾	USD/ton	348.0	659.0	274.0	187.0	44.0	135.0
2005 World Market Price (Constant 1990) ¹⁾	USD/ton	238.0	450.0	187.0	128.0	30.0	92.0
2005 World Market Price (Constant 1997) ²⁾	USD/ton	289.7	547.7	227.6	153.5	36.5	112.0
Quality Differential ³⁾	%	95	100	90	100	100	100
Adjusted Price	USD/ton	275.2	547.7	204.8	155.8	36.5	112.0
Ocean Freight and Insurance to Hon Ngu	USD/ton	20.0	30.0	30.0	30.0	30.0	30.0
CIF at Cua Lo Port	USD/ton	255.2	517.7	174.8	185.8	66.5	142.0
Handling from Large Ship to Smaller	USD/ton	2.0	2.0	2.0	2.0	2.0	2.0
Freight from Hon Ngu to Cua Lo Port	USD/ton	3.0	3.0	3.0	3.0	3.0	3.0
Handling from Small Ship to Warehouse	USD/ton	2.0	2.0	2.0	2.0	2.0	2.0
Value in Port Warehouse	USD/ton	248.2	510.7	167.8	192.8	73.5	149.0
Equivalent to VND/kg ⁴⁾	VND/kg	2,904	5,975	1,964	2,256	860	1,743
Transportation and Marketing Charges from/to Nam Dan District ⁵⁾	VND/kg	47	47	47	47	47	47
Price in the Study Area	VND/kg	2,857	5,928	1,917	2,302	907	1,790
Processing Rate ⁶⁾	%	68	35	65	100	100	100
Equivalent to Raw Product Price	VND/kg	1,943	3,321	1,569	2,302	907	1,790
Processing Charge ⁷⁾	VND/kg	40	840	0	0	0	0
By-product from Processing ⁸⁾	VND/kg	140	0	0	0	0	0
Transport and Marketing Costs from/to Farm ⁹⁾	VND/kg	10	10	10	10	10	10
Farm-gate Price	VND/kg	2,033	2,471	1,579	2,312	917	1,800
Farm-gate Price for Economic Evaluation	VND/kg	2,030	2,470	1,580	2,310	920	1,800

Note :

- 1) Forecasted Price by World Bank
 - 2) Adjusted by G-5 MUY (Unit Value Index in US Dollar Terms of Manufactures Exported from the G-5 Countries) Index of 1.2171 (Current / 1997 Constant)
 - 3) Qualities are assumed those of World Market
 - 4) Exchange Rate : 1:1,700 VND/USD
 - 5) Transportation and Marketing Charges 46.8 VND/kg
 - 6) Processing Recovery of Groundnut 70%
 - 7) Processing Charge of Rice 40 VND/kg
Processing Charge of Groundnut 840 VND/kg
 - 8) Processing of 1 kg of Paddy Produces 0.1 kg of Bran with Price 1,400 VND/kg
 - 9) Transportation and Marketing Charges 10 VND/kg
 - 10) Agricultural Outputs and Inputs
 - Rice : Thai, White, Milled, 5% Broken, Government Standard, FOB, Bangkok
 - Groundnut Oil : Any Origin, CIF, Rotterdam
 - Groundnut Meal : Argentine, 48/50%, CIF, Rotterdam
 - Maize : US, No.2, Yellow, FOB, Gulf Ports
 - Urea : Varying Origins, Bagged, Spot, FOB, West Europe
 - Phosphate : Phosphate Rock, Moroccan, 70% BPL, Contract, f.a.s. Casablanca
 - Potassium : Potassium Chloride, Standard Grade, Spot, FOB, Vancouver
- Source : Commodity Markets and Developing Countries, World Bank, February 1996.

Table O.3.2 Gross Production Value (Economic Price 1/5)

Crop	(Unit : million VND)										
	Without Project					With Project					Total
	Winter-Spring	summer-Autum	Summer	Winter	Total	Winter-Spring	summer-Autum	Summer	Winter	Total	
Paddy (Irrigated)	411	320	0	0	731	1,056	991	0	0	2,046	1,315
Paddy (Rainfed)	171	0	40	0	210	0	0	0	0	0	-210
Maize	0	0	0	0	0	0	0	0	0	0	0
Sweet Potato	0	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0	0
Total	582	320	40	0	941	1,056	991	0	0	2,046	1,105

Note : Winter-Spring is from late January to May.
 Summer-Autumn is from early June to middle September.
 Summer is from early July to middle November.
 Winter is late September to middle January.
 Green bean is including green bean and soybean.
 Annual Crops as sugarcane and mulberry are placed in Winter-Spring column for calculation.

Crop	(Unit : million VND)										
	Without Project					With Project					Total
	Winter-Spring	summer-Autum	Summer	Winter	Total	Winter-Spring	summer-Autum	Summer	Winter	Total	
Paddy (Irrigated)	393	301	0	0	694	1,259	1,177	0	0	2,436	1,742
Paddy (Rainfed)	234	0	145	0	380	0	0	0	237	0	-380
Maize	0	0	0	44	44	0	0	0	0	237	195
Sweet Potato	0	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0	0
Total	627	301	145	44	1,118	1,259	1,177	0	237	2,673	1,555

Table O.3.2 Gross Production Value (Economic Price 2/5)

Crop	Without Project				With Project				Total	(Unit : million VND)	
	Summer		Winter		Summer		Winter			Total	With - Without
	Winter-Spring	ummer-Autum	Summer	Winter	Winter-Spring	ummer-Autum	Summer	Winter			
Paddy (Irrigated)	873	670	0	0	1,543	0	0	0	0	3,654	2,111
Paddy (Rainfed)	213	0	132	0	345	0	0	0	0	0	-345
Maize	0	0	0	44	44	0	0	0	221	221	177
Sweet Potato	0	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0	0
Total	1,086	670	132	44	1,932	1,888	1,766	221	0	3,875	1,943

Crop	Without Project				With Project				Total	(Unit : million VND)	
	Summer		Winter		Summer		Winter			Total	With - Without
	Winter-Spring	ummer-Autum	Summer	Winter	Winter-Spring	ummer-Autum	Summer	Winter			
Paddy (Irrigated)	873	670	0	0	1,543	0	0	0	0	3,898	2,355
Paddy (Rainfed)	256	0	158	0	414	0	0	0	0	0	-414
Maize	0	0	0	111	111	0	0	348	348	348	237
Sweet Potato	0	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0	0
Total	1,129	670	158	111	2,068	2,014	1,884	348	0	4,245	2,178

Table O.3.2 Gross Production Value (Economic Price 3/5)

Crop	Without Project						With Project			(Unit : million VND)	
	Winter-Spring	Summer-Autum	Summer	Winter	Total	Winter-Spring	Summer-Autum	Summer	Winter	Total	With - Without
	2,311	1,798	0	0	4,109	10,556	9,906	0	0	20,462	16,354
Paddy (Irrigated)	2,665	0	79	0	2,744	0	0	0	0	0	-2,744
Paddy (Rainfed)	0	0	0	111	111	0	0	0	474	474	363
Maize	0	0	0	126	126	0	0	0	151	151	25
Sweet Potato	0	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0	0
Total	4,976	1,798	79	237	7,089	10,556	9,906	0	625	21,088	13,998

Crop	Without Project						With Project			(Unit : million VND)	
	Winter-Spring	Summer-Autum	Summer	Winter	Total	Winter-Spring	Summer-Autum	Summer	Winter	Total	With - Without
	0	0	0	0	0	1,370	1,238	0	0	2,558	2,558
Paddy (Irrigated)	244	0	40	0	283	0	0	0	0	0	-283
Paddy (Rainfed)	85	0	0	0	85	0	0	0	158	158	73
Maize	0	0	0	0	0	0	0	0	0	0	0
Sweet Potato	104	0	0	0	104	0	0	0	0	0	-104
Groundnut	0	0	0	0	0	0	0	0	0	0	0
Green Bean	0	139	0	0	139	0	132	0	0	132	-7
Sesame	0	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	300	300	300
Chili	85	0	0	0	85	254	0	0	0	254	170
Sugar Cane	0	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0	0
Total	517	139	40	0	696	1,574	1,370	0	458	3,402	2,707

Table O.3.2 Gross Production Value (Economic Price 4/5)

Crop	(Unit : million VND)											
	Without Project						With Project					
	Winter-Spring	summer-Autum	Summer	Winter	Total	Winter-Spring	summer-Autum	Summer	Winter	Total	With - Without	
Paddy (Irrigated)	4,861	3,759	0	0	8,619	18,091	16,963	0	0	35,054	26,435	
Paddy (Rainfed)	3,782	0	594	0	4,376	0	0	0	0	0	-4,376	
Maize	85	0	0	310	395	0	0	0	1,438	1,438	1,043	
Sweet Potato	0	0	0	126	126	0	0	0	151	151	25	
Groundnut	104	0	0	0	104	0	0	0	0	0	-104	
Green Bean	0	139	0	0	139	0	132	0	0	132	-7	
Sesame	0	0	0	0	0	0	0	0	0	0	0	
Vegetables	0	0	0	0	0	0	0	0	300	300	300	
Chili	85	0	0	0	85	254	0	0	0	254	170	
Sugar Cane	0	0	0	0	0	0	0	0	0	0	0	
Mulberry	0	0	0	0	0	0	0	0	0	0	0	
Total	8,917	3,897	594	436	13,844	18,346	17,095	0	1,889	37,329	23,486	

Crop	(Unit : million VND)											
	Without Project						With Project					
	Winter-Spring	summer-Autum	Summer	Winter	Total	Winter-Spring	summer-Autum	Summer	Winter	Total	With - Without	
Paddy (Irrigated)	28,918	39,806	0	0	68,724	49,422	63,933	0	0	113,355	44,631	
Paddy (Rainfed)	15,284	0	2,214	0	17,498	14,788	0	2,119	0	16,907	-592	
Maize	2,787	0	0	2,626	5,413	3,302	0	0	4,250	7,552	2,139	
Sweet Potato	1,832	0	0	2,122	3,955	2,199	0	0	2,547	4,746	791	
Groundnut	7,054	0	0	0	7,054	8,440	0	0	0	8,440	1,386	
Green Bean	0	2,911	0	0	2,911	0	3,300	0	0	3,300	389	
Sesame	0	195	0	0	195	0	228	0	0	228	33	
Vegetables	2,400	6,584	0	5,520	14,304	2,880	7,661	0	6,924	17,465	3,161	
Chili	509	0	0	0	509	784	0	0	0	784	276	
Sugar Cane	2,016	0	0	0	2,016	2,436	0	0	0	2,436	420	
Mulberry	6,490	0	0	0	6,490	7,150	0	0	0	7,150	660	
Total	67,291	49,295	2,214	10,268	129,068	91,401	75,122	2,119	13,721	182,362	53,294	

Table O.3.2 Gross Production Value (Economic Price 5/5)

Crop	Without Project				With Project				(Unit : million VND)	
	Summer		Winter		Summer		Winter		Total	With - Without
	Winter-Spring	summer-Autum	Summer	Winter	Winter-Spring	summer-Autum	Summer	Winter	Total	With - Without
Paddy (Irrigated)	24,057	36,047	0	0	31,530	46,971	0	0	78,301	18,197
Paddy (Rainfed)	11,502	0	1,620	0	14,788	0	2,119	0	16,907	3,785
Maize	2,702	0	0	2,316	3,302	0	0	2,812	6,114	1,097
Sweet Potato	1,832	0	0	1,996	2,199	0	0	2,395	4,594	766
Groundnut	6,951	0	0	6,951	8,440	0	0	0	8,440	1,489
Green Bean	0	2,772	0	0	0	3,168	0	0	3,168	396
Sesame	0	195	0	0	0	228	0	0	228	33
Vegetables	2,400	6,384	0	5,520	2,880	7,661	0	6,624	17,165	2,861
Chili	424	0	0	0	530	0	0	0	530	106
Sugar Cane	2,016	0	0	0	2,436	0	0	0	2,436	420
Mulberry	6,490	0	0	0	7,150	0	0	0	7,150	660
Total	58,373	45,398	1,620	9,832	73,055	58,027	2,119	11,832	145,033	29,808

Crop	Without Project				With Project				(Unit : million VND)	
	Summer		Winter		Summer		Winter		Total	With - Without
	Winter-Spring	summer-Autum	Summer	Winter	Winter-Spring	summer-Autum	Summer	Winter	Total	With - Without
Paddy (Irrigated)	0	7,673	0	0	0	9,500	0	0	9,500	1,827
Paddy (Rainfed)	0	0	317	0	0	0	0	0	0	-317
Maize	0	0	0	0	0	0	0	0	0	0
Sweet Potato	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0
Total	0	7,673	317	0	0	9,500	0	0	9,500	1,510

Table O.3.3 Unit Production Cost (Economic Price)

Crop	Irrigation Improvement Sub-project Area						With Project Summer	Winter	Without Project				With Project Summer	Winter		
	Winter-Spring		ummer-Autum		Summer				Winter-Spring		ummer-Autum				Summer	
Paddy (Irrigated)	3,881	3,105	2,144	3,715	3,455	2,897	2,042	5,037	4,773	2,283						
Paddy (Rainfed)	3,881	3,105	2,144	3,715	3,455	2,897	1,607	5,037	4,773	1,817						
Maize																
Sweet Potato																
Groundnut																
Green Bean																
Sesame																
Vegetables																
Chili																
Sugar Cane																
Mulberry																
								2,460		1,265			4,522			

Crop	Out of Irrigation Improvement Sub-project Area						With Project Summer	Winter	Without Project				With Project Summer	Winter		
	Winter-Spring		ummer-Autum		Summer				Winter-Spring		ummer-Autum				Summer	
Paddy (Irrigated)	3,881	3,105	2,144	3,715	3,455	2,897	2,042	3,965	3,533	2,841						
Paddy (Rainfed)	3,881	3,105	2,144	3,715	3,455	2,897	1,607	3,172	3,533							
Maize								2,275								
Sweet Potato								1,707								
Groundnut								3,815								
Green Bean																
Sesame																
Vegetables																
Chili																
Sugar Cane																
Mulberry																
								4,412		1,155						
								2,350		1,270						
								6,662		4,412						
								2,350								

Table O.3.6 Production Cost (Economic Price 1/5)

Crop	(Unit : million VND)									
	Without Project					With Project				
	Winter-Spring	summer-Autum	Summer	Winter	Total	Winter-Spring	summer-Autum	Summer	Winter	Total
Paddy (Irrigated)	198	177	0	0	375	406	386	0	0	792
Paddy (Rainfed)	123	0	50	0	174	0	0	0	0	417
Maize	0	0	0	0	0	0	0	0	0	-174
Sweet Potato	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0
Total	321	177	50	0	549	406	386	0	0	792
										244

Note : Winter-Spring is from late January to May.
 Summer-Autum is from early June to middle September.
 Summer is from early July to middle November.
 Winter is late September to middle January.
 Green bean is including green bean and soybean.
 Annual Crops as sugarcane and mulberry are placed in Winter-Spring column for calculation.

Crop	(Unit : million VND)									
	Without Project					With Project				
	Winter-Spring	summer-Autum	Summer	Winter	Total	Winter-Spring	summer-Autum	Summer	Winter	Total
Paddy (Irrigated)	198	177	0	0	375	508	483	0	0	990
Paddy (Rainfed)	194	0	185	0	379	0	0	0	0	616
Maize	0	0	0	46	46	0	0	0	184	-379
Sweet Potato	0	0	0	0	0	0	0	0	0	138
Groundnut	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0
Total	392	177	185	46	799	508	483	0	184	1,174
										375

Table O.3.6 Production Cost (Economic Price 2/5)

Crop	(Unit : million VND)										
	Without Project					With Project					Total
	Winter-Spring	ummer-Autum	Summer	Winter	Total	Winter-Spring	ummer-Autum	Summer	Winter	Total	
Paddy (Irrigated)	440	393	0	0	833	762	724	0	0	1,486	653
Paddy (Rainfed)	176	0	168	0	344	0	0	0	0	0	-344
Maize	0	0	0	46	46	0	0	0	172	172	126
Sweet Potato	0	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0	0
Total	616	393	168	46	1,223	762	724	0	172	1,657	434

Crop	(Unit : million VND)										
	Without Project					With Project					Total
	Winter-Spring	ummer-Autum	Summer	Winter	Total	Winter-Spring	ummer-Autum	Summer	Winter	Total	
Paddy (Irrigated)	440	393	0	0	833	812	772	0	0	1,585	752
Paddy (Rainfed)	211	0	202	0	413	0	0	0	0	0	-413
Maize	0	0	0	114	114	0	0	0	270	270	156
Sweet Potato	0	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0	0
Total	651	393	202	114	1,360	812	772	0	270	1,855	494

Table O.3.6 Production Cost (Economic Price 3/5)

Crop	Without Project				With Project				(Unit : million VND)	
	Summer		Winter		Summer		Winter		Total	With - Without
	Winter-Spring	ummer-Autum	Summer	Winter	Winter-Spring	ummer-Autum	Summer	Winter	Total	With - Without
Paddy (Irrigated)	1,114	994	0	0	4,062	3,862	0	0	7,924	5,816
Paddy (Rainfed)	1,926	0	101	0	2,027	0	0	0	2,027	-2,027
Maize	0	0	0	114	0	0	0	368	368	254
Sweet Potato	0	0	0	126	0	0	0	136	136	10
Groundnut	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0
Total	3,040	994	101	240	4,375	3,862	0	504	8,428	4,053

Crop	Without Project				With Project				(Unit : million VND)	
	Summer		Winter		Summer		Winter		Total	With - Without
	Winter-Spring	ummer-Autum	Summer	Winter	Winter-Spring	ummer-Autum	Summer	Winter	Total	With - Without
Paddy (Irrigated)	0	0	0	0	0	483	0	0	990	990
Paddy (Rainfed)	176	0	50	0	227	0	0	0	-227	-227
Maize	73	0	0	0	73	0	0	123	123	50
Sweet Potato	0	0	0	0	0	0	0	0	0	0
Groundnut	121	0	0	0	121	0	0	0	-121	-121
Green Bean	0	40	0	0	40	29	0	29	-10	-10
Sesame	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	99	99	99
Chili	24	0	0	0	24	0	0	0	52	29
Sugar Cane	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0
Total	394	40	50	0	484	512	0	272	1,294	810

Table O.3.6 Production Cost (Economic Price 4/5)

Crop	Without Project						With Project						(Unit : million VND)			
	Winter-Spring		ummer-Autum		Winter		Winter-Spring		ummer-Autum		Summer		Winter		Total	With - Without
	2,390	2,134	0	757	0	4,524	7,057	6,710	0	0	0	0	0	13,768		
Paddy (Irrigated)	2,806	0	0	0	0	3,563	0	0	0	0	0	0	0	0	0	-3,563
Paddy (Rainfed)	73	0	0	0	519	392	0	0	0	0	0	0	1,116	1,116	724	0
Maize	0	0	0	0	126	126	0	0	0	0	0	0	136	136	10	0
Sweet Potato	121	0	0	0	0	121	0	0	0	0	0	0	0	0	-121	0
Groundnut	0	40	0	0	0	40	0	29	0	0	0	0	0	29	-10	0
Green Bean	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0	0	0	99	99	99	0
Vegetables	24	0	0	0	0	24	52	0	0	0	0	0	0	52	29	0
Chili	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	5,414	2,174	0	757	446	8,790	7,110	6,740	0	1,352	0	0	15,201	6,411	8,040	0

Crop	Without Project						With Project						(Unit : million VND)			
	Winter-Spring		ummer-Autum		Winter		Winter-Spring		ummer-Autum		Summer		Winter		Total	With - Without
	14,520	23,286	0	2,823	0	37,806	19,344	28,135	0	0	0	0	0	47,479		
Paddy (Irrigated)	12,306	0	0	0	0	15,129	9,622	0	0	0	0	0	0	11,642	-3,487	0
Paddy (Rainfed)	2,371	0	0	0	2,708	5,079	2,419	0	0	0	0	0	3,638	6,057	978	0
Maize	1,837	0	0	0	2,128	3,965	1,935	0	0	0	0	0	2,244	4,180	215	0
Sweet Potato	8,254	0	0	0	0	8,254	8,328	0	0	0	0	0	0	8,328	74	0
Groundnut	0	831	0	0	0	831	0	879	0	0	0	0	0	879	48	0
Green Bean	0	70	0	0	0	70	0	77	0	0	0	0	0	77	6	0
Sesame	934	2,484	0	0	2,148	5,565	986	2,622	0	0	0	0	2,366	5,973	408	0
Vegetables	142	0	0	0	0	142	180	0	0	0	0	0	0	180	39	0
Chili	1,602	0	0	0	0	1,602	1,648	0	0	0	0	0	0	1,648	46	0
Sugar Cane	472	0	0	0	0	472	512	0	0	0	0	0	0	512	40	0
Mulberry	42,438	26,671	0	2,823	6,984	78,914	44,974	31,712	2,020	8,249	0	0	86,934	8,040	0	0
Total	42,438	26,671	0	2,823	6,984	78,914	44,974	31,712	2,020	8,249	0	0	86,934	8,040	0	0

Table O.3.6 Production Cost (Economic Price 5/5)

Crop	Without Project				With Project				Total	(Unit : million VND)	
	Summer		Winter		Summer		Winter			With - Without	Total
	Winter-Spring	ummer-Autum	Summer	Winter	Winter-Spring	ummer-Autum	Summer	Winter			
Paddy (Irrigated)	12,130	21,151	0	0	33,282	12,286	0	0	33,711	-430	76
Paddy (Rainfed)	9,500	0	2,066	0	11,566	9,622	0	2,020	11,642	0	254
Maize	2,298	0	0	2,389	4,687	2,419	0	0	4,941	2,522	205
Sweet Potato	1,837	0	0	2,002	3,839	1,935	0	0	4,043	2,108	195
Groundnut	8,132	0	0	0	8,132	8,328	0	0	8,328	0	58
Green Bean	0	791	0	0	791	0	849	0	849	0	6
Sesame	0	70	0	0	70	0	77	0	77	0	309
Vegetables	934	2,484	0	2,148	5,565	986	0	2,267	5,874	0	10
Chili	118	0	0	0	118	128	0	0	128	0	46
Sugar Cane	1,602	0	0	0	1,602	1,648	0	0	1,648	0	40
Mulberry	472	0	0	0	472	512	0	0	512	0	1,629
Total	37,024	24,497	2,066	6,538	70,124	37,865	24,972	2,020	71,753	6,897	

Crop	Without Project				With Project				Total	(Unit : million VND)	
	Summer		Winter		Summer		Winter			With - Without	Total
	Winter-Spring	ummer-Autum	Summer	Winter	Winter-Spring	ummer-Autum	Summer	Winter			
Paddy (Irrigated)	0	4,245	0	0	4,245	0	0	0	4,717	0	472
Paddy (Rainfed)	0	0	404	0	404	0	0	0	0	0	-404
Maize	0	0	0	0	0	0	0	0	0	0	0
Sweet Potato	0	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0	0
Total	0	4,245	404	0	4,649	0	4,717	0	4,717	0	68

Table O.3.7 Net Production Value (Economic Price 1/5)

Crop	Without Project				With Project				(Unit : million VND)	
	Without Project		Total		With Project		Total			
	Summer	Winter	Summer-Autum	Winter-Spring	Summer	Winter	Summer-Autum	Winter		
Paddy (Irrigated)	0	0	143	0	356	0	604	0	1,254	898
Paddy (Rainfed)	-11	0	0	36	0	0	0	0	0	-36
Maize	0	0	0	0	0	0	0	0	0	0
Sweet Potato	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0
Total	-11	0	143	392	649	0	604	0	1,254	862

Note : Winter-Spring is from late January to May.
 Summer-Autum is from early June to middle September.
 Summer is from early July to middle November.
 Winter is late September to middle January.
 Green bean is including green bean and soybean.
 Annual Crops as sugarcane and mulberry are placed in Winter-Spring column for calculation.

Crop	Without Project				With Project				(Unit : million VND)	
	Without Project		Total		With Project		Total			
	Summer	Winter	Summer-Autum	Winter-Spring	Summer	Winter	Summer-Autum	Winter		
Paddy (Irrigated)	0	0	125	319	0	0	695	0	1,446	1,126
Paddy (Rainfed)	-40	0	0	1	0	0	0	0	0	-1
Maize	0	0	0	-1	0	0	0	0	53	54
Sweet Potato	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0
Total	-40	-1	125	319	751	0	695	0	1,499	1,180

Table O.3.7 Net Production Value (Economic Price 2/5)

Crop	(Unit : million VND)									
	Without Project					With Project				
	Winter-Spring	ummer-Autum	Summer	Winter	Total	Winters-Spring	ummer-Autum	Summer	Winter	Total
Paddy (Irrigated)	433	277	0	0	710	1,126	1,042	0	0	2,168
Paddy (Rainfed)	37	0	-36	0	1	0	0	0	0	1,459
Maize	0	0	0	-1	-1	0	0	0	49	-1
Sweet Potato	0	0	0	0	0	0	0	0	0	51
Groundnut	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0
Total	470	277	-36	-1	709	1,126	1,042	0	49	2,218

Crop	(Unit : million VND)									
	Without Project					With Project				
	Winter-Spring	ummer-Autum	Summer	Winter	Total	Winters-Spring	ummer-Autum	Summer	Winter	Total
Paddy (Irrigated)	433	277	0	0	710	1,201	1,111	0	0	2,313
Paddy (Rainfed)	45	0	-44	0	1	0	0	0	0	1,603
Maize	0	0	0	-3	-3	0	0	0	78	-1
Sweet Potato	0	0	0	0	0	0	0	0	0	81
Groundnut	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0
Total	477	277	-44	-3	707	1,201	1,111	0	78	2,391

Table O.3.7 Net Production Value (Economic Price 3/5)

Crop	(Unit : million VND)									
	Without Project					With Project				
	Winter-Spring	summer-Autum	Summer	Winter	Total	Winter-Spring	summer-Autum	Summer	Winter	Total
Paddy (Irrigated)	1,198	803	0	0	2,001	6,494	6,044	0	0	12,539
Paddy (Rainfed)	739	0	-22	0	717	0	0	0	0	-717
Maize	0	0	0	-3	-3	0	0	0	106	109
Sweet Potato	0	0	0	-0	-0	0	0	0	15	15
Groundnut	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0
Total	1,937	803	-22	-4	2,714	6,494	6,044	0	121	12,659
										9,945

Crop	(Unit : million VND)									
	Without Project					With Project				
	Winter-Spring	summer-Autum	Summer	Winter	Total	Winter-Spring	summer-Autum	Summer	Winter	Total
Paddy (Irrigated)	0	0	0	0	0	812	756	0	0	1,567
Paddy (Rainfed)	68	0	-11	0	57	0	0	0	0	-57
Maize	13	0	0	0	13	0	0	0	35	23
Sweet Potato	0	0	0	0	0	0	0	0	0	0
Groundnut	-18	0	0	0	-18	0	0	0	0	18
Green Bean	0	99	0	0	99	0	103	0	0	103
Sesame	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	201	201
Chili	61	0	0	0	61	202	0	0	0	141
Sugar Cane	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0
Total	124	99	-11	0	212	1,014	858	0	236	2,108
										1,896

Table O.3.7 Net Production Value (Economic Price 4/5)

Crop	Without Project				With Project				Total	(Unit : million VND)	
	Summer		Winter		Summer		Winter			With - Without	Total
	Summer	Autum	Winter-Spring	ummer-Autum	Summer	ummer-Autum	Winter	Summer			
Paddy (Irrigated)	2,471	1,624	0	0	4,095	11,034	0	0	0	21,286	17,191
Paddy (Rainfed)	976	0	-163	0	813	0	0	0	0	321	-813
Maize	13	0	0	-10	3	0	0	0	0	15	318
Sweet Potato	0	0	0	-0	-0	0	0	0	0	15	15
Groundnut	-18	0	0	0	-18	0	0	0	0	0	18
Green Bean	0	99	0	0	99	0	0	0	0	103	4
Sesame	0	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	201	201
Chili	61	0	0	0	61	202	0	0	0	202	141
Sugar Cane	0	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0	0
Total	3,503	1,723	-163	-10	5,053	11,236	0	537	0	22,128	17,075

Crop	Without Project				With Project				Total	(Unit : million VND)	
	Summer		Winter		Summer		Winter			With - Without	Total
	Summer	Autum	Winter-Spring	ummer-Autum	Summer	ummer-Autum	Winter	Summer			
Paddy (Irrigated)	14,398	16,520	0	0	30,918	30,078	0	0	0	65,876	34,958
Paddy (Rainfed)	2,978	0	-608	0	2,369	5,165	99	0	0	5,265	2,895
Maize	416	0	0	-82	334	883	0	0	612	1,495	1,161
Sweet Potato	-5	0	0	-6	-11	264	0	0	302	566	576
Groundnut	-1,199	0	0	0	-1,199	112	0	0	0	112	1,312
Green Bean	0	2,080	0	0	2,080	0	0	0	0	2,421	341
Sesame	0	125	0	0	125	0	0	0	0	151	26
Vegetables	1,466	3,900	0	3,372	8,739	1,894	0	4,558	0	11,491	2,753
Chili	367	0	0	0	367	604	0	0	0	604	237
Sugar Cane	414	0	0	0	414	788	0	0	0	788	374
Mulberry	6,018	0	0	0	6,018	6,638	0	0	0	6,638	620
Total	24,853	22,625	-608	3,284	50,154	46,427	99	5,472	0	95,408	45,254

Table O.3.7 Net Production Value (Economic Price 5/5)

Crop	(Unit : million VND)										
	Without Project					With Project					Total
	Winter-Spring	summer-Autum	Summer	Winter	Total	Winter-Spring	summer-Autum	Summer	Winter	Total	
Paddy (Irrigated)	11,927	14,896	0	0	26,823	19,044	25,546	0	0	44,590	17,767
Paddy (Rainfed)	2,002	0	-445	0	1,556	5,165	0	99	0	5,265	3,708
Maize	404	0	0	-73	331	883	0	0	291	1,174	843
Sweet Potato	-5	0	0	-5	-10	264	0	0	287	551	561
Groundnut	-1,182	0	0	0	-1,182	112	0	0	0	112	1,294
Green Bean	0	1,981	0	0	1,981	0	2,319	0	0	2,319	338
Sesame	0	125	0	0	125	0	151	0	0	151	26
Vegetables	1,466	3,900	0	3,372	8,739	1,894	5,039	0	4,357	11,291	2,552
Chili	306	0	0	0	306	402	0	0	0	402	96
Sugar Cane	414	0	0	0	414	788	0	0	0	788	374
Mulberry	6,018	0	0	0	6,018	6,638	0	0	0	6,638	620
Total	21,350	20,902	-445	3,294	45,100	35,190	33,055	99	4,935	73,279	28,179

Crop	(Unit : million VND)										
	Without Project					With Project					Total
	Winter-Spring	summer-Autum	Summer	Winter	Total	Winter-Spring	summer-Autum	Summer	Winter	Total	
Paddy (Irrigated)	0	3,428	0	0	3,428	0	4,783	0	0	4,783	1,355
Paddy (Rainfed)	0	0	-87	0	-87	0	0	0	0	0	87
Maize	0	0	0	0	0	0	0	0	0	0	0
Sweet Potato	0	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0	0
Green Bean	0	0	0	0	0	0	0	0	0	0	0
Sesame	0	0	0	0	0	0	0	0	0	0	0
Vegetables	0	0	0	0	0	0	0	0	0	0	0
Chili	0	0	0	0	0	0	0	0	0	0	0
Sugar Cane	0	0	0	0	0	0	0	0	0	0	0
Mulberry	0	0	0	0	0	0	0	0	0	0	0
Total	0	3,428	-87	0	3,341	0	4,783	0	0	4,783	1,442

Table O.3.8 Disbursement of Economic Cost of Tangible Sub-projects

Route	Amount			Disbursement (mill. VND)																
	L/C	F/C	Total	1			2			3			4			5			6	
	(mill. VND)	(mill. VND)	(mill. VND)	L/C	F/C	T/C	L/C	F/C	T/C	L/C	F/C	T/C	L/C	F/C	T/C	L/C	F/C	T/C	L/C	F/C
IRRIGATION AND DRAINAGE IMPROVEMENT																				
1 Ho Thanh Irrigation System	6,113	961	7,074							57	226	283	6,056	735	6,791					
2 Tang den Irrigation System	9,813	1,447	11,260										92	368	460	9,721	1,079	10,800		
3 Cua Ong Irrigation System	8,498	1,134	9,632										74	296	370	8,424	838	9,262		
4 Rao Bang Irrigation System	7,094	817	7,911							60	238	298	7,034	579	7,613					
5 Num Dung Irrigation System	18,366	3,383	21,749	163	652	815	18,203	2,731	20,934											
6 Nam Cuong Irrigation System	8,161	1,156	9,317				79	315	394	8,082	841	8,923								
7 Nam Nam Dike	3,356	437	3,793				31	125	156	3,325	312	3,637								
Total	61,400	9,335	70,735	163	652	815	18,313	3,171	21,484	11,523	1,617	13,141	13,256	1,978	15,234	18,145	1,917	20,062		
AGRICULTURAL SUPPORTING SYSTEM																				
1 Agricultural Extension Center	96	1,951	2,047	2	6	8	94	1,945	2,039											
2 Seed Supply Center	3,098	18,443	21,541	16	62	78	3,082	18,381	21,463											
3 Agricultural Mechanization Center	5,968	35,110	41,078	70	279	349	5,898	34,831	40,729											
TOTAL	9,161	55,504	64,665	87	347	434	9,074	55,157	64,231											
AGRO-INDUSTRY AND MARKETING																				
1 Agro-processing Complex	0	0	0																	
2 Market-oriented Forwarding Center	0	0	0																	
TOTAL	0	0	0																	
EDUCATION																				
1 School Electrification	0	0	0																	
2 Rehabilitation of School Facilities	0	0	0																	
TOTAL	0	0	0																	
RURAL ROAD IMPROVEMENT																				
1 Route 15A Northern Part	14,073	2,708	16,781	139	555	694	13,934	2,153	16,087											
2 Route 15A Southern Part	29,288	10,062	39,350	328	1,310	1,638	28,960	8,752	37,712											
3 42 Dike Road	10,372	3,732	14,104							117	468	585	10,255	3,264	13,519					
4 Phan Boi - Chua Road	11,212	4,038	15,250							126	505	631	11,086	3,533	14,619					
9 Nam Nam Dike Road	11,182	4,209	15,391				127	508	635	11,055	3,701	14,756								
10 Nam Kim- Nam Phuc - Nam Cuong Road	12,211	7,159	19,370				160	640	800	12,051	6,519	18,570								
Total	88,337	31,908	120,245	466	1,865	2,332	43,181	12,053	55,234	23,349	11,192	34,542	21,341	6,797	28,138					
RURAL ELECTRIFICATION																				
Region 1	26,187	8,547	34,734							281	1,125	1,406	25,906	7,422	33,328					
Region 2	14,135	4,616	18,751	152	607	759	13,983	4,009	17,992											
Region 3	15,597	5,092	20,689				168	670	838	15,429	4,422	19,851								
Total	55,919	18,255	74,174	152	607	759	14,151	4,679	18,830	15,710	5,547	21,257	25,906	7,422	33,328					
RURAL WATER SUPPLY																				
Public Water Supply System (Dried-up Area)	0	0	0																	
Public Water Supply System (Inundation Area)	0	0	0																	
Material Supply of Filter Tank	0	0	0																	
Total	0	0	0																	
ENVIRONMENTAL CONSERVATION																				
Erosion Control	1,799	145	1,944													16	66	82	1,783	79
GRAND TOTAL	314,170	150,105	464,275	869	3,471	4,340	84,717	75,060	159,777	50,582	18,357	68,939	60,503	16,197	76,701	18,161	1,983	20,144	1,783	79

Table O.3.9 Cost and Benefit Flow of Tangible Sub-projects (EIRR)

(Unit: million VND)

Year	Initial										O/M										Net		Present Value
	Support	Road	Electro	Environ	Total	Irrig/Dr	Support	Road	Electro	Environ	Total	Enviro	Environ	Total	Enviro	Environ	Total	Benefit	Cash	Flow	Benefit	Net	
1	815	435	2,332	759	0	4,341	0	0	0	0	0	0	0	0	0	0	0	0	-4,341	3,793	0	-7,93	
2	21,484	64,230	55,234	18,930	0	159,778	0	0	0	0	0	0	0	0	0	0	0	0	-159,778	121,960	0	-121,960	
3	13,141	0	34,942	21,257	0	68,940	659	744	301	1,703	0	0	0	0	0	0	0	0	34,310	-31,333	47,111	26,216	
4	15,235	0	28,138	33,328	0	76,701	1,117	1,202	637	2,956	0	0	0	0	0	0	0	0	43,637	-56,021	46,412	25,425	
5	20,062	0	0	0	82	20,144	1,217	1,582	1,202	4,001	0	0	0	0	0	0	0	0	47,486	23,341	12,291	24,172	
6	0	0	0	1,582	1,862	1,341	0	1,582	1,202	0	4,125	0	0	0	0	0	0	0	50,175	44,188	2,603	22,315	
7	0	0	0	0	0	1,341	0	1,582	1,202	0	4,125	0	0	0	0	0	0	0	50,187	46,062	1,603	19,701	
8	0	0	0	0	0	1,341	0	1,582	1,202	0	4,125	0	0	0	0	0	0	0	50,187	46,062	1,600	17,037	
9	0	0	0	0	0	1,341	0	1,582	1,202	0	4,125	0	0	0	0	0	0	0	50,187	46,062	1,223	14,885	
10	0	0	0	0	0	1,341	0	1,582	1,202	0	4,125	0	0	0	0	0	0	0	50,187	46,062	1,069	13,005	
11	0	0	0	0	0	1,341	0	1,582	1,202	0	4,125	0	0	0	0	0	0	0	50,187	46,062	934	11,362	
12	0	0	0	0	0	1,341	0	1,582	1,202	0	4,125	0	0	0	0	0	0	0	50,187	46,062	816	9,927	
13	0	0	0	0	0	1,341	0	1,582	1,202	0	4,125	0	0	0	0	0	0	0	50,187	46,062	713	8,673	
14	0	0	0	0	0	1,341	0	1,582	1,202	0	4,125	0	0	0	0	0	0	0	50,187	46,062	623	7,577	
15	0	0	0	0	0	1,341	0	1,582	1,202	0	4,125	0	0	0	0	0	0	0	50,187	46,062	544	6,676	
16	0	0	0	0	0	1,341	0	1,582	1,202	0	4,125	0	0	0	0	0	0	0	50,187	46,062	475	5,784	
17	0	0	0	0	0	1,341	0	1,582	1,202	0	4,125	0	0	0	0	0	0	0	50,187	46,062	415	5,053	
18	0	0	0	0	0	1,341	0	1,582	1,202	0	4,125	296	0	0	0	0	0	0	50,187	45,766	389	4,415	
19	0	0	0	0	0	1,341	0	1,582	1,202	0	4,125	111	0	0	0	0	0	0	50,187	45,951	326	3,857	
20	0	0	0	0	0	1,341	0	1,582	1,202	0	4,125	0	0	0	0	0	0	0	50,187	46,062	277	3,270	
21	0	0	0	0	0	1,341	0	1,582	1,202	0	4,125	0	0	0	0	0	0	0	50,187	46,062	242	2,944	
22	0	0	0	0	0	1,341	0	1,582	1,202	0	4,125	0	0	0	0	0	0	0	50,187	46,062	211	2,572	
23	0	0	0	0	0	1,341	0	1,582	1,202	0	4,125	0	0	0	0	0	0	0	50,187	46,062	185	2,247	
24	0	0	0	0	0	1,341	0	1,582	1,202	0	4,125	145	0	0	0	0	0	0	50,187	45,917	167	1,963	
25	0	0	0	0	0	1,341	0	1,582	1,202	0	4,125	0	0	0	0	0	0	0	50,187	46,062	141	1,715	
26	0	0	0	0	0	1,341	0	1,582	1,202	0	4,125	0	0	0	0	0	0	0	50,187	46,062	123	1,499	
27	0	0	0	0	0	1,341	0	1,582	1,202	0	4,125	0	0	0	0	0	0	0	50,187	46,062	108	1,309	
28	0	0	0	0	0	1,341	0	1,582	1,202	0	4,125	0	0	0	0	0	0	0	50,187	46,062	94	1,144	
29	0	0	0	0	0	1,341	0	1,582	1,202	0	4,125	0	0	0	0	0	0	0	50,187	46,062	82	999	
30	0	0	0	0	0	1,341	0	1,582	1,202	0	4,125	-156	0	0	0	0	0	0	50,187	46,218	69	875	
Total	70,737	64,665	120,246	74,174	1,944	331,766	36,518	0	43,078	33,190	0	111,265	396	0	0	0	0	0	295,138	103,941	54,631	246,458	

Note: O/M cost and replacement cost of Agricultural Supporting Services Sub-projects are evaluated in the production cost of crops. Benefit of Rural Road Improvement Sub-project includes lost land productivity (VND 32 million) as negative benefit.

B/C = 1.0000
 NPV = 0 million VND
 IRR = 14.459 %

Table O.3.11 Sensitivity Analysis, Including Cost of Intangible Sub-projects (EIRR)

Year	Initial					Cost					Benefit					Net					
	Subst	Repl	Repl	Intr	Water	Highway	Support	Road	Electricity	Water	Water	Total	Highway	Support	Water	Electricity	Annual Net Value	Present Value	Cost	Benefit	Net
1	815	435	2532	739	0	0	0	0	0	0	0	0	0	0	0	0	-4,341	0	-4,341	3,903	-4,341
2	21,496	64,230	52,234	1,600	0	0	0	0	0	0	0	0	0	0	0	0	169,960	0	-169,960	137,300	-137,300
3	13,141	0	34,342	21,257	0	2,474	7,538	78,972	659	0	744	501	0	0	0	0	80,900	9,985	28,179	676	510
4	15,235	0	24,128	33,328	0	2,929	7,239	86,869	1,117	0	1,202	637	0	0	0	0	90,292	13,243	28,179	1,094	1,091
5	20,962	0	0	0	0	82	2,929	7,239	10,312	0	1,382	1,202	0	0	0	0	33,904	13,924	28,179	1,439	2,040
6	0	0	0	0	0	1,862	2,929	7,239	12,630	1,341	1,382	1,202	0	0	0	0	17,008	18,517	28,179	1,439	2,040
7	0	0	0	0	0	1,862	2,929	7,239	9,713	1,341	1,382	1,202	0	0	0	0	13,013	18,517	28,179	1,439	2,040
8	0	0	0	0	0	1,862	2,929	7,239	9,713	1,341	1,382	1,202	0	0	0	0	13,013	18,517	28,179	1,439	2,040
9	0	0	0	0	0	1,862	2,929	7,239	9,713	1,341	1,382	1,202	0	0	0	0	13,013	18,517	28,179	1,439	2,040
10	0	0	0	0	0	1,862	2,929	7,239	9,713	1,341	1,382	1,202	0	0	0	0	13,013	18,517	28,179	1,439	2,040
11	0	0	0	0	0	1,862	2,929	7,239	9,713	1,341	1,382	1,202	0	0	0	0	13,013	18,517	28,179	1,439	2,040
12	0	0	0	0	0	1,862	2,929	7,239	9,713	1,341	1,382	1,202	0	0	0	0	13,013	18,517	28,179	1,439	2,040
13	0	0	0	0	0	1,862	2,929	7,239	9,713	1,341	1,382	1,202	0	0	0	0	13,013	18,517	28,179	1,439	2,040
14	0	0	0	0	0	1,862	2,929	7,239	9,713	1,341	1,382	1,202	0	0	0	0	13,013	18,517	28,179	1,439	2,040
15	0	0	0	0	0	1,862	2,929	7,239	9,713	1,341	1,382	1,202	0	0	0	0	13,013	18,517	28,179	1,439	2,040
16	0	0	0	0	0	1,862	2,929	7,239	9,713	1,341	1,382	1,202	0	0	0	0	13,013	18,517	28,179	1,439	2,040
17	0	0	0	0	0	1,862	2,929	7,239	9,713	1,341	1,382	1,202	0	0	0	0	13,013	18,517	28,179	1,439	2,040
18	0	0	0	0	0	1,862	2,929	7,239	9,713	1,341	1,382	1,202	0	0	0	0	13,013	18,517	28,179	1,439	2,040
19	0	0	0	0	0	1,862	2,929	7,239	9,713	1,341	1,382	1,202	0	0	0	0	13,013	18,517	28,179	1,439	2,040
20	0	0	0	0	0	1,862	2,929	7,239	9,713	1,341	1,382	1,202	0	0	0	0	13,013	18,517	28,179	1,439	2,040
21	0	0	0	0	0	1,862	2,929	7,239	9,713	1,341	1,382	1,202	0	0	0	0	13,013	18,517	28,179	1,439	2,040
22	0	0	0	0	0	1,862	2,929	7,239	9,713	1,341	1,382	1,202	0	0	0	0	13,013	18,517	28,179	1,439	2,040
23	0	0	0	0	0	1,862	2,929	7,239	9,713	1,341	1,382	1,202	0	0	0	0	13,013	18,517	28,179	1,439	2,040
24	0	0	0	0	0	1,862	2,929	7,239	9,713	1,341	1,382	1,202	0	0	0	0	13,013	18,517	28,179	1,439	2,040
25	0	0	0	0	0	1,862	2,929	7,239	9,713	1,341	1,382	1,202	0	0	0	0	13,013	18,517	28,179	1,439	2,040
26	0	0	0	0	0	1,862	2,929	7,239	9,713	1,341	1,382	1,202	0	0	0	0	13,013	18,517	28,179	1,439	2,040
27	0	0	0	0	0	1,862	2,929	7,239	9,713	1,341	1,382	1,202	0	0	0	0	13,013	18,517	28,179	1,439	2,040
28	0	0	0	0	0	1,862	2,929	7,239	9,713	1,341	1,382	1,202	0	0	0	0	13,013	18,517	28,179	1,439	2,040
29	0	0	0	0	0	1,862	2,929	7,239	9,713	1,341	1,382	1,202	0	0	0	0	13,013	18,517	28,179	1,439	2,040
30	0	0	0	0	0	1,862	2,929	7,239	9,713	1,341	1,382	1,202	0	0	0	0	13,013	18,517	28,179	1,439	2,040
Total	20,737	66,665	1,202,456	73,174	0	1,044	23,651	65,839	431,216	50,314	0	43,878	31,190	0	0	0	4,205,344,161	396	0	4,205,344,161	396

Note: O/M cost and Replacement cost of the Agricultural Supporting Network Projects are evaluated in the production unit of wage.

10/1C = 1.0000
 NPV = 0 million VND
 IRR = 11.220 %

Table O.3.12 Sensitivity Analysis, Including Cost of Intangible Sub-projects (EB/C and ENPV)

Year in which Cash flow occurs	Cost												Benefit												Net Present Value													
	Subproj.				OM				Replacement				Annual Net Value				Inflow		Outflow																			
Chk.	High/Dm.	Support.	Road.	Electr.	Environ.	Fibers.	Water.	Total.	High/Dm.	Support.	Road.	Electr.	Environ.	Fibers.	Water.	Total.	High/Dm.	Support.	Road.	Electr.	Environ.	Fibers.	Water.	Total.	Flow	Cost	Benefit	Net										
1	815	433	2,332	799	0	0	0	4,341	0	0	0	0	0	0	0	0	4,341	0	0	0	0	0	0	0	0	0	0	0	0	0								
2	21,046	64,230	33,234	19,830	0	2,474	7,206	109,840	0	0	0	0	0	0	0	0	109,840	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
3	13,341	0	34,542	21,257	0	2,474	7,206	76,072	689	0	744	301	0	0	225	1,928	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
4	15,233	0	28,138	33,328	0	2,059	7,239	86,869	1,117	0	1,202	637	0	0	467	3,433	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
5	20,642	0	0	0	0	2,929	7,239	30,212	1,212	0	1,382	1,202	0	0	694	4,992	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
6	0	0	0	0	0	1,862	7,239	12,000	1,341	0	1,582	1,202	0	0	933	5,038	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
7	0	0	0	0	0	2,474	7,239	9,713	1,341	0	1,582	1,202	0	0	1,175	5,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
8	0	0	0	0	0	2,474	7,239	9,713	1,341	0	1,582	1,202	0	0	1,175	5,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
9	0	0	0	0	0	2,474	7,239	9,713	1,341	0	1,582	1,202	0	0	1,175	5,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
10	0	0	0	0	0	2,474	7,239	9,713	1,341	0	1,582	1,202	0	0	1,175	5,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
11	0	0	0	0	0	0	0	0	0	0	1,582	1,202	0	0	1,238	3,833	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
12	0	0	0	0	0	0	0	0	0	0	1,582	1,202	0	0	1,238	3,833	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
13	0	0	0	0	0	0	0	0	0	0	1,582	1,202	0	0	1,238	3,833	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
14	0	0	0	0	0	0	0	0	0	0	1,582	1,202	0	0	1,238	3,833	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
15	0	0	0	0	0	0	0	0	0	0	1,582	1,202	0	0	1,238	3,833	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
16	0	0	0	0	0	0	0	0	0	0	1,582	1,202	0	0	1,238	3,833	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
17	0	0	0	0	0	0	0	0	0	0	1,582	1,202	0	0	1,238	3,833	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
18	0	0	0	0	0	0	0	0	0	0	1,582	1,202	0	0	1,238	3,833	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
19	0	0	0	0	0	0	0	0	0	0	1,582	1,202	0	0	1,238	3,833	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
20	0	0	0	0	0	0	0	0	0	0	1,582	1,202	0	0	1,238	3,833	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
21	0	0	0	0	0	0	0	0	0	0	1,582	1,202	0	0	1,238	3,833	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
22	0	0	0	0	0	0	0	0	0	0	1,582	1,202	0	0	1,238	3,833	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
23	0	0	0	0	0	0	0	0	0	0	1,582	1,202	0	0	1,238	3,833	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
24	0	0	0	0	0	0	0	0	0	0	1,582	1,202	0	0	1,238	3,833	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
25	0	0	0	0	0	0	0	0	0	0	1,582	1,202	0	0	1,238	3,833	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
26	0	0	0	0	0	0	0	0	0	0	1,582	1,202	0	0	1,238	3,833	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
27	0	0	0	0	0	0	0	0	0	0	1,582	1,202	0	0	1,238	3,833	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
28	0	0	0	0	0	0	0	0	0	0	1,582	1,202	0	0	1,238	3,833	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
29	0	0	0	0	0	0	0	0	0	0	1,582	1,202	0	0	1,238	3,833	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
30	0	0	0	0	0	0	0	0	0	0	1,582	1,202	0	0	1,238	3,833	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Total	90,337	64,663	120,246	74,174	3,944	23,033	65,819	431,216	36,538	0	43,078	17,190	0	0	4,405	154,191	306	0	0	0	0	0	0	0	0	464	860	276,267	501,981	789,033	79,714	54,631	793	1,305,103	808,830	344,276	371,079	26,562

D/C = 1.0782
 NPV = 26,063 million VND
 D.R. = 10.000 %

Table O.4.1 Cost and Benefit Flow of Tangible Sub-projects (FIRR)

Year in	Cost													Benefit				Net		Present Value							
	OM													Annual Net Value				Cash			Benefit						
	Initial	Electri.	Environ.	Total	Irri/Dra	Support	Road	Electri.	Environ.	Total	Support	Road	Electri.	Environ.	Total	Inflow	Outflow	Flow	Cost			Benefit	Net				
1	815	435	2,332	759	0	4,341	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-3,975	0	-3,975		
2	22,397	65,175	58,091	19,285	0	164,948	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-164,948	136,310	-30,638		
3	13,949	0	36,368	21,759	0	72,076	659	4,744	744	301	0	6,447	0	0	0	0	0	0	0	0	0	0	0	37,063	41,460	-4,397	
4	16,201	0	29,657	34,162	0	80,020	1,117	4,744	1,202	637	0	7,700	0	0	0	0	0	0	0	0	0	0	0	40,710	47,011	-6,301	
5	21,434	0	0	0	82	21,536	1,217	4,744	1,582	1,202	0	8,745	0	0	0	0	0	0	0	0	0	0	0	43,804	13,523	30,281	
6	0	0	0	0	1,992	1,992	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	0	0	0	0	0	0	45,717	34,856	10,861
7	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	0	0	0	0	0	0	45,729	36,860	8,869
8	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	0	0	0	0	0	0	45,729	36,860	8,869
9	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	0	0	0	0	0	0	45,729	36,860	8,869
10	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	0	0	0	0	0	0	45,729	36,860	8,869
11	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	0	0	0	0	0	0	45,729	36,860	8,869
12	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	0	0	0	0	0	0	45,729	36,860	8,869
13	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	0	0	0	0	0	0	45,729	36,860	8,869
14	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	0	0	0	0	0	0	45,729	36,860	8,869
15	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	0	0	0	0	0	0	45,729	36,860	8,869
16	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	0	0	0	0	0	0	45,729	36,860	8,869
17	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	0	0	0	0	0	0	45,729	36,860	8,869
18	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	0	0	0	0	0	0	45,729	36,860	8,869
19	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	0	0	0	0	0	0	45,729	36,860	8,869
20	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	0	0	0	0	0	0	45,729	36,860	8,869
21	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	0	0	0	0	0	0	45,729	36,860	8,869
22	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	0	0	0	0	0	0	45,729	36,860	8,869
23	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	0	0	0	0	0	0	45,729	36,860	8,869
24	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	0	0	0	0	0	0	45,729	36,860	8,869
25	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	0	0	0	0	0	0	45,729	36,860	8,869
26	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	0	0	0	0	0	0	45,729	36,860	8,869
27	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	0	0	0	0	0	0	45,729	36,860	8,869
28	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	0	0	0	0	0	0	45,729	36,860	8,869
29	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	0	0	0	0	0	0	45,729	36,860	8,869
30	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	0	0	0	0	0	0	45,729	36,860	8,869
Total	74,816	65,610	126,448	75,965	2,074	344,913	16,518	132,832	43,078	37,190	0	244,617	0	0	0	0	0	0	0	0	0	0	0	0	294,124	264,797	29,327

D/C = 1.0000
 NPV = 0 million VND
 IRR = 9.2000 %

Table O.4.2 Cost and Benefit Flow of Tangible Sub-projects (FB/C and FNPV)

(Unit: million VND)

Year in	Cost										Benefit										Net							
	Initial		Environ.		Road		Support		Total		Outflow		Annual Net Value		Inflow		Total		Cash	Benefit								
Code	Irmy/Dra	Support	Road	Electri.	Environ.	Total	Irmy/Dra	Support	Road	Electri.	Environ.	Total	Irmy/Dra	Support	Road	Electri.	Environ.	Total	Flow	Benefit								
1	815	435	2,332	719	0	4,341	0	0	0	0	0	4,341	0	0	0	0	0	0	0	-4,341	4,005	0	-4,005					
2	22,397	65,175	38,091	19,285	0	104,948	0	0	0	0	0	104,948	0	0	0	0	0	0	0	-104,948	140,375	0	-140,375					
3	13,940	0	36,368	21,759	0	72,076	650	4,744	744	301	0	6,447	0	0	0	0	0	0	37,063	-41,460	61,647	29,097	-32,549					
4	16,201	0	29,657	34,162	0	80,020	1,117	4,744	1,202	637	0	7,700	0	0	0	0	0	0	40,710	-47,011	63,531	29,484	-34,047					
5	21,454	0	0	0	82	21,536	1,219	4,744	1,582	1,202	0	8,745	0	0	0	0	0	0	43,804	-33,523	20,231	29,266	9,015					
6	0	0	0	1,992	1,992	3,984	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	45,717	-34,856	6,694	28,177	21,483					
7	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	45,729	-36,860	5,043	26,001	20,958					
8	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	45,729	-22,912	11,968	23,986	12,018					
9	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	45,729	-36,860	4,292	22,127	17,836					
10	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	45,729	-36,860	3,929	20,413	16,454					
11	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	45,729	-35,635	4,157	18,831	14,674					
12	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	45,729	-36,860	3,309	17,372	14,003					
13	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	45,729	-19,832	9,075	16,026	6,950					
14	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	45,729	-36,860	2,867	14,784	11,917					
15	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	45,729	-36,860	2,645	13,638	10,993					
16	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	45,729	-36,860	2,440	12,581	10,141					
17	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	45,729	-36,860	2,251	11,606	9,355					
18	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	296	66,487	0	0	0	0	45,729	-29,923	17,713	10,707	-7,006					
19	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	111	1,225	0	0	0	0	45,729	-35,524	2,204	9,877	7,673					
20	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	45,729	-36,860	1,767	9,112	7,345					
21	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	45,729	-36,860	1,630	8,406	6,776					
22	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	45,729	-36,860	1,504	7,754	6,250					
23	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	45,729	-19,832	4,051	7,154	3,102					
24	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	145	0	0	0	0	0	45,729	-36,715	1,301	6,599	5,298					
25	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	45,729	-36,860	1,181	6,088	4,907					
26	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	45,729	-36,860	1,089	5,616	4,527					
27	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	45,729	-35,635	1,144	5,181	4,037					
28	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	45,729	-22,912	2,385	4,779	2,395					
29	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	0	0	0	0	0	0	45,729	-36,860	855	4,409	3,554					
30	0	0	0	0	0	0	1,341	4,744	1,582	1,202	0	8,869	-156	-9,090	0	0	0	0	45,729	-46,096	-33	4,067	4,100					
Total	74,816	65,610	126,448	75,965	-2,074	344,913	36,518	159,832	43,078	32,190	0	244,617	398	123,034	0	0	0	123,431	712,961	364,410	802,452	41,008	34,631	295,124,797	551,836	385,339	403,160	17,800

B/C = 1.0462
 NPV = 17,800 million VND
 D.R. = 8.4000 %

Table O.4.3 Cash Flow of Investment and Repayment Schedule

(Unit : million VND)

Year Order	Foreign Loan	Govern. Finance	Total Invest.	Accumulated Foreign Loan	Capital Repayment	Balance F. Loan	Interest Payment	Annual Total Repayment
1	3,255	1,085	4,340	3,255	0	3,255	65	65
2	139,011	46,337	185,348	142,266	0	142,266	2,845	2,845
3	70,742	23,581	94,323	213,008	0	213,008	4,260	4,260
4	83,258	27,753	111,011	296,267	0	296,267	5,925	5,925
5	35,963	11,988	47,951	332,230	0	332,230	6,645	6,645
6	29,704	9,901	39,605	361,934	0	361,934	7,239	7,239
7	11,834	3,945	15,778	373,767	0	373,767	7,475	7,475
8	12,635	4,212	16,847	386,402	0	386,402	7,728	7,728
9	13,499	4,500	17,998	399,901	0	399,901	7,998	7,998
10	14,426	4,809	19,235	414,327	0	414,327	8,287	8,287
11					20,716	393,611	7,872	28,589
12					20,716	372,894	7,458	28,174
13					20,716	352,178	7,044	27,760
14					20,716	331,462	6,629	27,346
15					20,716	310,745	6,215	26,931
16					20,716	290,029	5,801	26,517
17					20,716	269,313	5,386	26,103
18					20,716	248,596	4,972	25,688
19					20,716	227,880	4,558	25,274
20					20,716	207,164	4,143	24,860
21					20,716	186,447	3,729	24,445
22					20,716	165,731	3,315	24,031
23					20,716	145,014	2,900	23,617
24					20,716	124,298	2,486	23,202
25					20,716	103,582	2,072	22,788
26					20,716	82,865	1,657	22,374
27					20,716	62,149	1,243	21,959
28					20,716	41,433	829	21,545
29					20,716	20,716	414	21,131
30					20,716	0	0	20,716
Total	414,327	138,109	552,436		414,327		137,189	551,516
							Total Repayment / Loan	133%

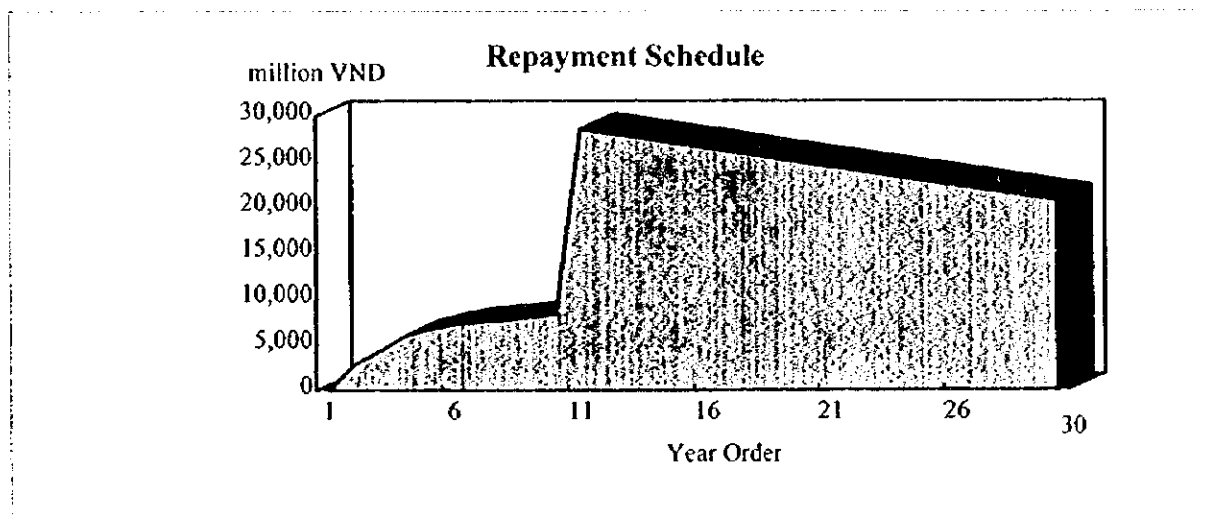


Table O.4.4 Increase in Agricultural Income per Average Farmer

(Unit : thou. VND)

Irrigation System Area	Farm Size	Without Project		With Project		Increased Net Income	ith / Without		
		Gross Income	Production Cost	Net Income	Gross Income			Production Cost	Net Income
Ho Thanh Reservoir System	0.362	3,775	2,237	1,538	8,210	4,026	4,184	2,646	2.7
Trang Den Reservoir System	0.446	4,472	3,015	1,457	10,838	5,538	5,299	3,843	3.6
Cua Ong Reservoir System	0.446	5,127	3,190	1,937	10,383	5,320	5,063	3,125	2.6
Rao Bang Reservoir System	0.446	5,188	3,256	1,932	10,737	5,490	5,247	3,315	2.7
Nam Dong Pumping System	0.362	2,864	1,777	1,087	8,523	4,184	4,339	3,252	4.0
Nam Cuong Pumping System	0.362	2,320	1,349	971	9,455	4,053	5,403	4,431	5.6
Average of Irrigation Improvement Sub-project Area	0.434	3,854	2,396	1,458	10,329	5,073	5,256	3,799	3.6
Average of Total Agricultural Area	0.434	4,770	2,612	2,158	6,651	2,946	3,705	1,547	1.7
Average of out of Irrigation Improvement Sub-project Ar	0.434	4,898	2,642	2,256	6,137	2,649	3,488	1,232	1.5

Note : Gross income includes value income.
Production cost excludes family labor cost.