

## **ANNEX N. PROJECT IMPLEMENTATION AND COST ESTIMATE**



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TABLE N.1.1 PROJECT FEATURES FOR 12 MODEL AREAS AND THEIR COSTS

1. Areas, Population and Farm Households	Sagayao (Region-1)	Talugog ARC (Region-1)	Cotabato ARC (Region-2)	Morales ARC (Region-3)	Maulum ARC (Region-4)	Pagasa ARC (Region-5)	Abante Estate (Region-6)	San Vicente ARC (Region-7)	Marikong ARC (Region-8)	Silas ARC (Region-9)	Kubuli ARC (Region-11)	Maki ARC (Region-13)
a) Study Area	375	167	480	100	321	307	269	375	330	173	327	200
b) Ratio of Area less than 10% of Land Slope (%)	71	77	88	95	70	81	24	85	48	55	38	30
c) Proposed Cultivation Area (less than 30%)	310	145	428	99	264	246	108	210	210	114	121	115
1.2 Population												
a) Total Population	1,156	660	808	2,611	1,700	817	2,219	2,348	1,503	1,616	2,468	3,181
b) Farm Household (Barangay)	180	163	108	479	302	142	400	432	327	423	560	560
c) Farm Household (Study Area)	180	139	179	63	257	120	114	276	247	116	150	150
d) Farm Household (Study Area)	179 (95%)	110 (79%)	179 (88%)	16 (25%)	219 (76%)	120 (100%)	75 (67%)	219 (95%)	236 (96%)	117 (85%)	117 (85%)	150 (96%)
e) Farm Household (Study Area)	10	29	58	47	98	0	38	80	0	112	2	150
1.3 Proposed Main Crop	Paddy Rice	Paddy Rice	Corn, Banana	Mango, Vegetable	Corn, Coconut	Coconut, Coffee	Coconut, Banana	Corn, Coconut	Coconut, Corn	Corn, Mango	Corn, Mango	Coconut, Banana
2. Agricultural and Rural Infrastructure Facilities												
a) Agricultural Costs												
1) Nursery	161	0.05 ha	2,058	1 ha	2,058	0.15 ha	1 ha	2,058	0.05 ha	1 ha	1 ha	2,058
2) Training & On-farm Demonstration Farm	195	1 place	195	1 place	195	1 place	1 place	195	1 place	1 place	1 place	195
3) Livestock Quarantine	300	15 heads	300	15 heads	300	15 heads	15 heads	300	15 heads	300	15 heads	300
4) Animal Breeding Center	215	20 sq. m	215	20 sq. m	215	20 sq. m	20 sq. m	215	20 sq. m	215	20 sq. m	215
5) Poultry Incubator	80	1 unit	80	1 unit	80	1 unit	1 unit	80	1 unit	80	1 unit	80
Sub-Total	651	3,260	3,160	3,160	3,160	3,160	3,160	3,160	3,160	3,160	3,160	3,160
b) Agricultural Infrastructure Development												
1) Irrigation Development	5,635	2,794	5,635	1,400	5,635	5,635	5,635	5,635	5,635	5,635	5,635	5,635
2) Drainage Improvement	1,200	1 ha	1,200	1 ha	1,200	1 ha	1 ha	1,200	1 ha	1,200	1 ha	1,200
3) Farm Roads Development	5,750	2,700	5,750	3,000	5,750	3,000	3,000	5,750	3,000	5,750	3,000	5,750
4) Farm Land Conservation	11,664	6,760	11,664	5,565	10,800	14,380	900	11,664	900	11,664	900	11,664
Sub-Total	23,249	12,254	23,249	10,965	22,935	31,220	45,540	23,249	31,220	23,249	31,220	23,249
c) Rural Infrastructure Development												
1) Rural Roads Development	11,513	1.5 km	11,513	1.5 km	11,513	1.5 km	1.5 km	11,513	1.5 km	11,513	1.5 km	11,513
2) Rural Water Supply Development	2,180	5 places	2,180	5 places	2,180	5 places	5 places	2,180	5 places	2,180	5 places	2,180
3) Other Social Infrastructure	500	1 place	500	1 place	500	1 place	1 place	500	1 place	500	1 place	500
4) Rural Electrification	15,000	15 km	15,000	15 km	15,000	15 km	15 km	15,000	15 km	15,000	15 km	15,000
5) Strengthening Motor Pool for O & M works	29,173	25,400	29,173	21,940	22,935	31,220	45,540	29,173	31,220	29,173	31,220	29,173
Sub-Total	38,366	47,688	38,366	33,876	38,716	51,250	91,796	38,366	51,250	38,366	51,250	38,366
d) Post-Harvest & Agro-Industry Facilities												
1) Agricultural Machinery	33	LS	33	LS	33	LS	LS	33	LS	33	LS	33
2) Post-Harvest & Agro-Industry Facilities	2,563	1,454	2,563	1,454	2,563	1,454	1,454	2,563	1,454	2,563	1,454	2,563
Sub-Total	2,596	1,454	2,596	1,454	2,596	1,454	1,454	2,596	1,454	2,596	1,454	2,596
e) Institutional Development												
1) Community Development Program	670	1 place	670	1 place	670	1 place	1 place	670	1 place	670	1 place	670
Sub-Total	45,104	37,748	45,104	33,876	38,716	51,250	91,796	45,104	51,250	45,104	51,250	45,104
2.2 Community Development & Support Services	LS	3,842	3,842	3,842	3,842	3,842	3,842	3,842	3,842	3,842	3,842	3,842
TOTAL	115,642	115,642	115,642	115,642	115,642	115,642	115,642	115,642	115,642	115,642	115,642	115,642
2.3 Associated Costs												
a) Pre-Engineering Cost (5% of 2.1)	2,255	LS	2,255	LS	2,255	LS	LS	2,255	LS	2,255	LS	2,255
b) Administration Cost (10% of 2.1+2.2)	4,865	LS	4,865	LS	4,865	LS	LS	4,865	LS	4,865	LS	4,865
c) Consulting Services (refer to Table 2.1-2)	14,254	LS	14,254	LS	14,254	LS	LS	14,254	LS	14,254	LS	14,254
TOTAL	21,374	LS	21,374	LS	21,374	LS	LS	21,374	LS	21,374	LS	21,374
2.4 Land Acquisition	528	LS	528	LS	528	LS	LS	528	LS	528	LS	528
TOTAL	116,170	116,170	116,170	116,170	116,170	116,170	116,170	116,170	116,170	116,170	116,170	116,170
2.5 Physical Contingency (10% of 2.1+2.2)	4,865	LS	4,865	LS	4,865	LS	LS	4,865	LS	4,865	LS	4,865
GRAND TOTAL	142,542	142,542	142,542	142,542	142,542	142,542	142,542	142,542	142,542	142,542	142,542	142,542
3. Classification of Model Areas												
3.1 Classification of Model Areas												
a) By Various Elements of Present Conditions												
b) By Project Development Type												
3.2 Selection of Typical Model Areas												

\* Many beneficiaries reside outside of the Project Area, hence, the farm household is larger than the barangay household.

Table N.1-2 Summary of Project Cost (1/2)

Table N.1-2 Summary of Project Cost (1992)						
Description	Sappaac ARC (Region-CAR)	Taiugtog ARC (Region-I)	Cofcaville ARC (Region-II)	Montilla ARC (Region-III)	Maulawin ARC (Region-IV)	Pag-Asa ARC (Region-V)
	(Region-CAR)	(Region-I)	(Region-II)	(Region-III)	(Region-IV)	(Region-V)
1. Construction Cost						
A. Agricultural Development	951	3,260	951	3,160	3,360	3,360
B. Agricultural Infrastructure Development	11,684	6,760	15,873	5,565	10,600	14,386
C. Rural Infrastructure Development	29,173	25,400	24,332	21,940	22,930	31,220
D. Post-Harvest Development	2,626	1,656	5,872	2,343	2,158	1,614
E. Institutional Development	670	670	670	670	670	670
Sub-total (A - E)	45,104	37,746	47,698	33,678	39,718	51,250
2. Community Development & Support Services						
A. Agricultural Support Services	2,047	2,047	2,047	2,047	2,047	2,047
B. Institutional Development	1,795	1,795	1,795	1,795	1,795	1,795
	3,842	3,842	3,842	3,842	3,842	3,842
3. Associated Cost						
A. Pre-Engineering Cost (5% of 1)	2,255	1,887	2,385	1,684	1,986	2,563
B. Administration Cost (10% of 1 & 2)	4,895	4,159	5,154	3,752	4,356	5,509
C. Consulting Services (10% of 1)	4,510	3,775	4,770	3,368	3,972	5,125
Sub-total (A - C)	11,660	9,821	12,309	8,804	10,314	13,197
4. Land Acquisition	528	600	1,016	600	600	600
5. Physical Contingency (10% of 1 & 2)	4,895	4,159	5,154	3,752	4,356	5,509
Total (1 - 5)	66,029	56,168	70,019	50,676	58,830	74,398

Table N.1-2 Summary of Project Cost (2/2)

( ₪ '000 )

Description	Abiera ARC (Region-VI)	San Vicente ARC (Region-VII)	Marangog- Leyte ARC (Region-VIII)	Silae ARC (Region-X)	Kipalili ARC (Region-XI)	Mat-i ARC (Region-XII)
1. Construction Cost						
A. Agricultural Development	3,360	3,360	951	951	3,360	3,050
B. Agricultural Infrastructure Development	600	11,690	13,257	9,407	10,956	400
C. Rural Infrastructure Development	45,540	31,880	34,461	19,280	30,930	7,800
D. Post-Harvest Development	1,566	2,272	1,686	2,284	2,015	772
E. Institutional Development	670	670	670	670	670	670
Sub-total (A - E)	51,736	49,872	51,025	32,592	47,931	12,702
2. Community Development & Support Services						
A. Agricultural Support Services	2,047	2,047	2,047	2,047	2,047	2,047
B. Institutional Development	1,795	1,795	1,795	1,795	1,795	1,795
	3,842	3,842	3,842	3,842	3,842	3,842
3. Associated Cost						
A. Pre-Engineering Cost (5% of 1)	2,587	2,494	2,551	1,629	2,397	635
B. Administration Cost (10% of 1 & 2)	5,558	5,371	5,487	3,643	5,177	1,654
C. Consulting Services (10% of 1)	5,174	4,987	5,103	3,259	4,793	1,270
Sub-total (A - C)	13,318	12,852	13,140	8,531	12,367	3,560
4. Land Acquisition	600	600	366	498	600	600
5. Physical Contingency (10% of 1 & 2)	5,558	5,371	5,487	3,643	5,177	1,654
Total (1 - 5)	75,054	72,538	73,860	49,106	69,917	22,358

Table N. 1-3(1) (1/2)

## Breakdown of Project Cost for Each Marginal Area

## 2. Talugtug ARC (Region- I)

Description	Q'ty	Unit	Unit rate (P'000)	Amount (P'000)
<b>A. Agricultural Development</b>				
1) Nursery				
a) Land for seed bed/nursery/green house/etc.	1,500	sq.m	0.02	30
b) Mist house/Green house & pot bed/Garage	460	sq.m	2	920
c) Office and warehouse	180	sq.m	3.5	630
d) Machinery and tools	1	lot	478	478
				2,058
2) Training & On-farm Demonstration Farm				
a) Land preparation	1	lot	50	50
b) Pick-up	1	unit	390	390
c) Motorbike	3	unit	80	240
d) Office furniture/equipment	1	lot	32	32
e) Audio visual equipment	1	lot	100	100
				812
3) Livestock Dispersal				
a) Carabao (female)	10	head	20	200
4) Animal Breeding Center				
a) Carabao (male)	1	head	40	40
b) Animal shed	20	sq.m	3.5	70
				110
5) Poultry Incubator				
a) Poultry incubator (kerosene type)	1	unit	80	80
Sub-total of A				3,260
<b>B. Agricultural Infrastructure Development</b>				
1) Irrigation Development				
a) Shallow open well w/ pump & pipes	20	place	150	3,000
				3,000
2) Drainage Improvement				
a) Drainage canals	44	ha	15	660
3) Farm Roads Development				
a) New construction (gravel)	3	km	900	2,700
				2,700
4) Farm Land Conservation				
a) Contour tree planting	20	ha	20	400
Sub-total of B				6,760
<b>C. Rural Infrastructure Development</b>				
1) Rural Roads Development				
a) Improvement/Rehabilitation	1.2	km	1,000	1,200
b) Upgrading/Concreting	0.3	km	3,000	900
c) River crossing (foot bridge)	50	l.m	100	5,000
d) Multi purpose pavement	2	place	200	400
e) Strengthening motor pool	1	lot	15,000	15,000
f) Public transport	1	lot	300	300
				22,800



Cont'd: Table N. 1-3(1) (2/2)

2) Rural Water Supply Development			
a) Deep well w/ hand pump (level-1)	5 place	240	1,200
b) Water treatment plant	5 unit	50	250
			1,450
3) Other Social Infrastructure Development			
a) Const. of health center	1 lot	180	180
b) Pramedical supplies/equipment/facilities	1 lot	100	100
c) Const. of primary school (4 classrooms)	1 lot	720	720
d) Expansion to multi-purpose center	1 lot	150	150
			1,150
Sub-total of C			25,400
D. Post-Harvest Development			
1) Agricultural Machinery			
a) Hand tractor	2 unit	41	82
b) Sprayer	8 "	15	120
			202
2) Post-Harvest & Agro-Industry Facilities			
a) Multi-purpose dryer	1 place	386	386
b) Reaper	3 unit	35	105
c) Rice thresher (foot type)	4 "	2	8
d) Rice thresher (w/ prime mover)	1 "	42	42
e) Winnower	2 "	2	4
f) Rice agro-industry center	1 place	909	909
			1,454
Sub-total of D			1,656
E. Institutional Development			
1) Community Development Program			
a) Pick-up	1 unit	390	390
b) Motorbike	1 "	80	80
c) Office furniture/equipment	1 lot	200	200
			670
Sub-total of E			670
Total of Talugtog ARC			37,746

Table N. 1-3(2) (1/2)

## Breakdown of Project Cost for Each Marginal Area

4. Montilla ARC (Region-III)

Description	Q'ty	Unit	Unit rate (P,000)	Amount (P,000)
<b>A. Agricultural Development</b>				
1) Nursery				
a) Land for seed bed/nursery/green house/etc.	1,500	sq.m	0.02	30
b) Mist house/Green house & pot bed/Garage	460	sq.m	2	920
c) Office and warehouse	180	sq.m	3.5	630
d) Machinery and tools	1	lot	478	478
				2,058
2) Training & On-farm Demonstration Farm				
a) Land preparation	1	lot	50	50
b) Pick-up	1	unit	390	390
c) Motorbike	3	unit	80	240
d) Office furniture/equipment	1	lot	32	32
e) Audio visual equipment	1	lot	100	100
				812
3) Livestock Dispersal				
a) Carabao (female)	5	head	20	100
4) Animal Breeding Center				
a) Carabao (male)	1	head	40	40
b) Animal shed	20	sq.m	3.5	70
				110
5) Poultry Incubator				
a) Poultry Incubator (kerosene type)	1	unit	80	80
Sub-total of A				3,160
<b>B. Agricultural Infrastructure Development</b>				
1) Irrigation Development				
a) Tank Irrigation system	7	ha	200	1,400
b) Spring development (same with rural water)	2	place	-	0
				1,400
2) Drainage Improvement				
a) Drainage canals	7	ha	15	105
3) Farm Roads Development				
a) New construction (gravel)	2.2	km	900	1,980
b) -do- (concrete)	0.4	km	2,200	880
c) River crossing (spillway bridge)	20	l.m	50	1,000
				3,860
4) Farm Land Conservation				
a) Contour tree planting	10	ha	20	200
Sub-total of B				5,565
<b>C. Rural Infrastructure Development</b>				
1) Rural Roads Development				
a) Improvement/Rehabilitation	4	km	1,000	4,000
b) Multi purpose pavement	2	place	200	400
c) Strengthening motor pool	1	lot	15,000	15,000
d) Public transport	1	lot	300	300
				19,700

Cont'd: Table N. 1-3(2) (2/2)

2) Rural Water Supply Development			
a) Spring development (level-I)	2 place	130	260
b) Spring development (level-II)	1 place	500	500
			760
3) Rural Electrification			
a) Electric power line construction	4 km	300	1,200
4) Other Social Infrastructure Development			
a) Const. of health center	1 lot	180	180
b) Paramedical supplies/equipment/facilities	1 lot	100	100
			280
Sub-total of C			21,940
D. Post-Harvest Development			
1) Agricultural Machinery			
a) Tractor	1 unit	1,525	1,525
b) Sprayer	4 unit	15	60
			1,585
2) Post-Harvest & Agro-Industry Facilities			
a) Warehouse with solar dryer	1 place	758	758
			758
Sub-total of D			2,343
E. Institutional Development			
1) Community Development Program			
a) Pick-up	1 unit	390	390
b) Motorbike	1 "	80	80
c) Office furniture/equipment	1 lot	200	200
			670
Sub-total of E			670
Total of Montilla ARC			33,678

Table N. 1-3(3) (1/2)

## Breakdown of Project Cost for Each Marginal Area

## 5. Maulawin ARC (Region-IV)

Description	Q'ty	Unit	Unit rate (₱'000)	Amount (₱'000)
<b>A. Agricultural Development</b>				
1) Nursery				
a) Land for seed bed/nursery/green house/etc.	1,500	sq.m	0.02	30
b) Mist house/Green house & pot bed/Garage	460	sq.m	2	920
c) Office and warehouse	180	sq.m	3.5	630
d) Machinery and tools	1	lot	478	478
				2,058
2) Training & On-farm Demonstration Farm				
a) Land preparation	1	lot	50	50
b) Pick-up	1	unit	390	390
c) Motorbike	3	unit	80	240
d) Office furniture/equipment	1	lot	32	32
e) Audio visual equipment	1	lot	100	100
				812
3) Livestock Dispersal				
a) Carabao (female)	15	head	20	300
4) Animal Breeding Center				
a) Carabao (male)	1	head	40	40
b) Animal shed	20	sq.m	3.5	70
				110
5) Poultry Incubator				
a) Poultly Incubator (kerosene type)	1	unit	80	80
Sub-total of A				3,360
<b>B. Agricultural Infrastructure Development</b>				
1) Irrigation Development				
a) Small water impounding dam	1	place	4,900	4,900
b) Irrigation facilities	20	ha	38	760
				5,660
2) Drainage Improvement				
a) Drainage canals	20	ha	15	300
3) Farm Roads Development				
a) New construction (gravel)	2.4	km	900	2,160
b) -do- (concrete)	0.4	km	2,200	880
c) River crossing (spillway bridge)	20	l.m	50	1,000
				4,040
4) Farm Land Conservation				
a) Contour tree planting	30	ha	20	600
Sub-total of B				10,600
<b>C. Rural Infrastructure Development</b>				
1) Rural Roads Development				
a) Improvement/Rehabilitation	4.7	km	1,000	4,700
b) Upgrading/Concreting	0.3	km	3,000	900
c) Multi purpose pavement	3	place	200	600
d) Strengthening motor pool	1	lot	15,000	15,000

Cont'd: Table N. 1-3(3) (2/2)

e) Public transport	1 lot	300	300
			<u>21,500</u>
2) Rural Water Supply Development			
a) Deep well w/ hand pump (level-1)	4 place	240	960
b) Water treatment plant	4 unit	50	200
			<u>1,160</u>
3) Other Social Infrastructure Development			
a) Rehabil. of elementary school	1 lot	20	20
b) Paramedical supplies/equipment/facilities	1 lot	100	100
c) Const. of barangay hall	1 lot	150	150
			<u>270</u>
Sub-total of C			<u>22,930</u>
D. Post-Harvest Development			
1) Agricultural Machinery			
a) Hand tractor	2 unit	41	82
b) Sprayer	6 unit	15	90
			<u>172</u>
2) Post-Harvest & Agro-Industry Facilities			
a) Multi-purpose dryer	3 place	386	1,158
b) Reaper	2 unit	35	70
c) Warehouse with solar dryer	1 place	758	758
			<u>1,986</u>
Sub-total of D			<u>2,158</u>
E. Institutional Development			
1) Community Development Program			
a) Pick-up	1 unit	390	390
b) Motorbike	1 "	80	80
c) Office furniture/equipment	1 lot	200	200
			<u>670</u>
Sub-total of E			<u>670</u>
Total of Maulawin ARC			<u>39,718</u>

Table N. 1-3(4) (1/2)

## Breakdown of Project Cost for Each Marginal Area

## 6. Pag-Asa ARC (Region-V)

Description	Q'ty	Unit	Unit rate (P'000)	Amount (P'000)
<b>A. Agricultural Development</b>				
1) Nursery				
a) Land for seed bed/nursery/green house/etc.	1,500	sq.m	0.02	30
b) Mist house/Green house & pot bed/Garage	460	sq.m	2	920
c) Office and warehouse	180	sq.m	3.5	630
d) Machinery and tools	1	lot	478	478
				2,058
2) Training & On-farm Demonstration Farm				
a) Land preparation	1	lot	50	50
b) Pick-up	1	unit	390	390
c) Motorbike	3	unit	80	240
d) Office furniture/equipment	1	lot	32	32
e) Audio visual equipment	1	lot	100	100
				812
3) Livestock Dispersal				
a) Carabao (female)	15	head	20	300
4) Animal Breeding Center				
a) Carabao (male)	1	head	40	40
b) Animal shed	20	sq.m	3.5	70
				110
5) Poultry Incubator				
a) Poultry incubator (kerosene type)	1	unit	80	80
Sub-total of A				3,360
<b>B. Agricultural Infrastructure Development</b>				
1) Irrigation Development				
a) Small water impounding dam	1	place	4,900	4,900
b) Irrigation facilities	12	ha	38	456
				5,356
2) Drainage Improvement				
a) Drainage canals	12	ha	15	180
3) Farm Roads Development				
a) New construction (gravel)	4.5	km	900	4,050
b) -do- (concrete)	1	km	2,200	2,200
c) River crossing (spillway bridge)	40	l.m	50	2,000
				8,250
4) Farm Land Conservation				
a) Contour tree planting	30	ha	20	600
Sub-total of B				14,386
<b>C. Rural Infrastructure Development</b>				
1) Rural Roads Development				
a) Improvement/Rehabilitation	10.5	km	1,000	10,500
b) Upgrading/Concreting	0.5	km	3,000	1,500
c) Multi purpose pavement	4	place	200	800
d) Strengthening motor pool	1	lot	15,000	15,000

Cont'd: Table N. 1-3(4) (2/2)

e) Public transport	1 lot	300	300
			<u>28,100</u>
2) Rural Water Supply Development			
a) Deep well w/ hand pump (level-1)	9 place	240	2,160
			<u>2,160</u>
3) Other Social Infrastructure Development			
a) Const. of additional classroom (3)	1 lot	540	540
b) Rehabil. of barangay health center	1 lot	20	20
c) Paramedical supplies/equipment/facilities	1 lot	100	100
d) Expansion to multi-purpose center	1 lot	300	300
			<u>960</u>
Sub-total of C			<u>31,220</u>
D. Post-Harvest Development			
1) Agricultural Machinery			
a) Sprayer	2 unit	15	30
			<u>30</u>
2) Post-Harvest & Agro-Industry Facilities			
a) Multi-purpose dryer	2 place	386	772
b) Reaper	1 unit	35	35
c) Rice thresher (foot type)	2 unit	2	4
d) Winnowing	1 unit	2	2
e) Warehouse with solar dryer	1 place	758	758
f) Corn sheller (handy type)	1 unit	13	13
			<u>1,584</u>
Sub-total of D			<u>1,614</u>
E. Institutional Development			
1) Community Development Program			
a) Pick-up	1 unit	390	390
b) Motorbike	1 "	80	80
c) Office furniture/equipment	1 lot	200	200
			<u>670</u>
Sub-total of E			<u>670</u>
Total of Pag-Asa ARC			<u>51,250</u>

Table N. 1-3(5) (1/2)

## Breakdown of Project Cost for Each Marginal Area

7. Abiera Estate (Region-VI)

Description	Q'ty	Unit	Unit rate (₱,000)	Amount (₱,000)
<b>A. Agricultural Development</b>				
1) Nursery				
a) Land for seed bed/nursery/green house/etc.	1,500	sq.m	0.02	30
b) Mist house/Green house & pot bed/Garage	460	sq.m	2	920
c) Office and warehouse	180	sq.m	3.5	630
d) Machinery and tools	1	lot	478	478
				2,058
2) Training & On-farm Demonstration Farm				
a) Land preparation	1	lot	50	50
b) Pick-up	1	unit	390	390
c) Motorbike	3	unit	80	240
d) Office furniture/equipment	1	lot	32	32
e) Audio visual equipment	1	lot	100	100
				812
3) Livestock Dispersal				
a) Carabao (female)	15	head	20	300
4) Animal Breeding Center				
a) Carabao (male)	1	head	40	40
b) Animal shed	20	sq.m	3.5	70
				110
5) Poultry Incubator				
a) Poultry Incubator (kerosene type)	1	unit	80	80
Sub-total of A				3,360
<b>B. Agricultural Infrastructure Development</b>				
1) Farm Land Conservation				
a) Contour tree planting	30	ha	20	600
Sub-total of B				600
<b>C. Rural Infrastructure Development</b>				
1) Rural Roads Development				
a) Improvement/Rehabilitation	4.3	km	1,000	4,300
b) Upgrading/Concreting	0.5	km	3,000	1,500
c) New construction (gravel)	6.4	km	1,400	8,960
d) -do- (concrete)	1	km	3,400	3,400
e) River crossing (spillway bridge)	100	l.m	75	7,500
f) Multi purpose pavement	3	place	200	600
g) Strengthening motor pool	1	lot	15,000	15,000
h) Public transport	1	lot	300	300
				41,560
2) Rural Water Supply Development				
a) Deep well w/ hand pump (level-1)	4	place	240	960
b) Spring development (level-1)	2	place	130	260
c) Water treatment plant	6	unit	50	300
				1,520
3) Rural Electrification				
a) Electric power line construction	5.5	km	300	1,650



Cont'd: Table N. 1-3 (5) (2/2)

4) Other Social Infrastructure Development			
a) Const. of additional classroom (3)	1 lot	540	540
b) Rehabil. of barangay health center	1 lot	20	20
c) Paramedical supplies/equipment/facilities	1 lot	100	100
d) Expansion to multi-purpose center	1 lot	150	150
			810
Sub-total of C			45,540
D. Post-Harvest Development			
1) Agricultural Machinery			
a) Sprayer	2 unit	15	30
			30
2) Post-Harvest & Agro-Industry Facilities			
a) Multi-purpose dryer	2 place	386	772
b) Rice thresher (foot type)	2 unit	2	4
c) Winnowing	1 unit	2	2
d) Warehouse with solar dryer	1 place	758	758
			1,536
Sub-total of D			1,566
E. Institutional Development			
1) Community Development Program			
a) Pick-up	1 unit	390	390
b) Motorbike	1 "	80	80
c) Office furniture/equipment	1 lot	200	200
			670
Sub-total of E			670
Total of Abiera Estate			51,736

Table N. 1-3(6) (1/2)

## Breakdown of Project Cost for Each Marginal Area

## 8. San Vicente ARC (Region-VII)

Description	Q'ty	Unit	Unit rate (₱'000)	Amount (₱'000)
<b>A. Agricultural Development</b>				
1) Nursery				
a) Land for seed bed/nursery/green house/etc.	1,500	sq.m	0.02	30
b) Mist house/Green house & pot bed/Garage	460	sq.m	2	920
c) Office and warehouse	180	sq.m	3.5	630
d) Machinery and tools	1	lot	478	478
				2,058
2) Training & On-farm Demonstration Farm				
a) Land preparation	1	lot	50	50
b) Pick-up	1	unit	390	390
c) Motorbike	3	unit	80	240
d) Office furniture/equipment	1	lot	32	32
e) Audio visual equipment	1	lot	100	100
				812
3) Livestock Dispersal				
a) Carabao (female)	15	head	20	300
4) Animal Breeding Center				
a) Carabao (male)	1	head	40	40
b) Animal shed	20	sq.m	3.5	70
				110
5) Poultry Incubator				
a) Poultry incubator (kerosene type)	1	unit	80	80
Sub-total of A				3,360
<b>B. Agricultural Infrastructure Development</b>				
1) Irrigation Development				
a) Small water impounding dam	1	place	4,900	4,900
b) Irrigation facilities	10	ha	38	380
				5,280
2) Drainage Improvement				
a) Drainage canals	10	ha	15	150
3) Farm Roads Development				
a) New construction (gravel)	4	km	900	3,600
b) -do- (concrete)	0.8	km	2,200	1,760
c) River crossing (spillway bridge)	2	l.m	50	100
				5,460
4) Farm Land Conservation				
a) Contour tree planting	40	ha	20	800
Sub-total of B				11,690
<b>C. Rural Infrastructure Development</b>				
1) Rural Roads Development				
a) Improvement/Rehabilitation	5.7	km	1,000	5,700
b) Upgrading/Concreting	0.3	km	3,000	900
c) New construction (gravel)	3.6	km	1,400	5,040
d) -do- (concrete)	0.4	km	3,400	1,360
e) River crossing (spillway bridge)	20	l.m	75	1,500

Cont'd: Table N. 1-3(6) (2/2)

f) Multi purpose pavement	3 place	200	600
g) Strengthening motor pool	1 lot	15,000	15,000
h) Public transport	1 lot	300	300
			<u>30,400</u>
2) Rural Water Supply Development			
a) Deep well w/ hand pump (level-1)	2 place	240	480
			<u>480</u>
3) Other Social Infrastructure Development			
a) Const. of primary school (4 classrooms)	1 lot	720	720
b) Const. of day care center	1 lot	180	180
c) Paramedical supplies/equipment/facilities	1 lot	100	100
			<u>1,000</u>
Sub-total of C			<u>31,880</u>
D. Post-Harvest Development			
1) Agricultural Machinery			
a) Hand tractor	2 unit	41	82
b) Sprayer	6 unit	15	90
			<u>172</u>
2) Post-Harvest & Agro-Industry Facilities			
a) Multi-purpose dryer	1 place	386	386
b) Reaper	3 unit	35	105
c) Rice thresher (foot type)	3 unit	2	6
d) Rice thresher (w/ prime mover)	1 unit	42	42
e) Winnower	3 unit	2	6
f) Warehouse with solar dryer	2 place	758	1,516
g) Corn sheller (handy type)	3 unit	13	39
			<u>2,100</u>
Sub-total of D			<u>2,272</u>
E. Institutional Development			
1) Community Development Program			
a) Pick-up	1 unit	390	390
b) Motorbike	1 "	80	80
c) Office furniture/equipment	1 lot	200	200
			<u>670</u>
Sub-total of E			<u>670</u>
Total of San Vicente ARC			<u>49,872</u>

Table N. 1-3(7) (1/2)

## Breakdown of Project Cost for Each Marginal Area

11. Kipatitit ARC (Region-X 1)

Description	Q'ty	Unit	Unit rate (P,000)	Amount (P,000)
<b>A. Agricultural Development</b>				
1) Nursery				
a) Land for seed bed/nursery/green house/etc.	1,500	sq.m	0.02	30
b) Mist house/Green house & pot bed/Garage	460	sq.m	2	920
c) Office and warehouse	180	sq.m	3.5	630
d) Machinery and tools	1	lot	478	478
				2,058
2) Training & On-farm Demonstration Farm				
a) Land preparation	1	lot	50	50
b) Pick-up	1	unit	390	390
c) Motorbike	3	unit	80	240
d) Office furniture/equipment	1	lot	32	32
e) Audio visual equipment	1	lot	100	100
				812
3) Livestock Dispersal				
a) Carabao (female)	15	head	20	300
4) Animal Breeding Center				
a) Carabao (male)	1	head	40	40
b) Animal shed	20	sq.m	3.5	70
				110
5) Poultry Incubator				
a) Poultry Incubator (kerosene type)	1	unit	80	80
Sub-total of A				3,360
<b>B. Agricultural Infrastructure Development</b>				
1) Irrigation Development				
a) River Intake/Diversion dam	1	place	1,000	1,000
b) Irrigation facilities	12	ha	38	456
				1,456
2) Drainage Improvement				
a) Drainage canals	12	ha	15	180
3) Farm Roads Development				
a) New construction (gravel)	6	km	900	5,400
b) -do- (concrete)	0.6	km	2,200	1,320
c) River crossing (spillway bridge)	40	m	50	2,000
				8,720
4) Farm Land Conservation				
a) Contour tree planting	30	ha	20	600
Sub-total of B				10,956
<b>C. Rural Infrastructure Development</b>				
1) Rural Roads Development				
a) Improvement/Rehabilitation	7.6	km	1,000	7,600
b) Upgrading/Concreting	0.4	km	3,000	1,200
c) Multi purpose pavement	6	place	200	1,200
d) Strengthening motor pool	1	lot	15,000	15,000

Cont'd: Table N. 1-3(7) (2/2)

e) Public transport	1 lot	300	300
			25,300
2) Rural Water Supply Development			
a) Deep well w/ hand pump (level-1)	7 place	240	1,680
			1,680
3) Rural Electrification			
a) Electric power line construction	9 km	300	2,700
4) Other Social Infrastructure Development			
a) Const. of health center	1 lot	180	180
b) Paramedical supplies/equipment/facilities	1 lot	100	100
c) Expansion to multi-purpose center	1 lot	150	150
d) Const. of additional classroom (3)	1 lot	540	540
e) Const. of home economics building	1 lot	180	180
f) Equipment/facilities for home economics build	1 lot	100	100
			1,250
Sub-total of C			30,930
D. Post-Harvest Development			
1) Agricultural Machinery			
a) Sprayer	3 unit	15	45
			45
2) Post-Harvest & Agro-Industry Facilities			
a) Multi-purpose dryer	3 place	386	1,158
b) Reaper	1 unit	35	35
c) Rice thresher (foot type)	2 unit	2	4
d) Winnower	1 unit	2	2
e) Warehouse with solar dryer	1 place	758	758
f) Corn sheller (handy type)	1 unit	13	13
			1,970
Sub-total of D			2,015
E. Institutional Development			
1) Community Development Program			
a) Pick-up	1 unit	390	390
b) Motorbike	1 "	80	80
c) Office furniture/equipment	1 lot	200	200
			670
Sub-total of E			670
Total of Kipat III ARC			47,931

Table N. 1-3(8) (1/2)

## Breakdown of Project Cost for Each Marginal Area

## 12. Mat-I ARC (Region-X III)

Description	Q'ty	Unit	Unit rate (P'000)	Amount (P'000)
<b>A. Agricultural Development</b>				
1) Nursery				
a) Land for seed bed/nursery/green house/etc.	1,500	sq.m	0.02	30
b) Mist house/Green house & pot bed/Garage	460	sq.m	2	920
c) Office and warehouse	180	sq.m	3.5	630
d) Machinery and tools	1	lot	478	478
				2,058
2) Training & On-farm Demonstration Farm				
a) Land preparation	1	lot	50	50
b) Pick-up	1	unit	390	390
c) Motorbike	3	unit	80	240
d) Office furniture/equipment	1	lot	32	32
e) Audio visual equipment	1	lot	100	100
				812
3) Animal Breeding Center				
a) Carabao (male)	1	head	40	40
b) Animal shed	20	sq.m	3.5	70
				110
4) Poultry Incubator				
a) Poultry incubator (kerosene type)	1	unit	80	80
Sub-total of A				3,060
<b>B. Agricultural Infrastructure Development</b>				
1) Farm Land Conservation				
a) Contour tree planting	20	ha	20	400
Sub-total of B				400
<b>C. Rural Infrastructure Development</b>				
1) Rural Roads Development				
a) New construction (gravel)	2	km	1,400	2,800
b) -do- (concrete)	0.5	km	3,400	1,700
c) River crossing (spillway bridge)	40	l.m	75	3,000
d) Multi purpose pavement	1	place	200	200
				7,700
2) Other Social Infrastructure Development				
a) Paramedical supplies/equipment/facilities	1	lot	100	100
				100
Sub-total of C				7,800
<b>D. Post-Harvest Development</b>				
1) Post-Harvest & Agro-Industry Facilities				
a) Multi-purpose dryer	2	place	386	772
				772
Sub-total of D				772

Cont'd:Table N. 1-3(8) (2/2)

E. Institutional Development

1) Community Development Program

a) Pick-up	1 unit	390	390
b) Motorbike	1 "	80	80
c) Office furniture/equipment	1 lot	200	200
			670
			<u>670</u>

Sub-total of E

Total of Mat-i ARC

12,702

**Table N. 1-4 Breakdown of Community Development & Support Services Cost  
(For Four Years Duration)**

Description	Q'ty	Unit	Unit	Amount		Total
			Rate	F/C	L/C	
			P	P	P	P
<b>A. Agricultural Support Services</b>						
1) Training & Demonstration Farm						
a. Personnel services						
- Technologist (1)	2.5	M/M	16,500	0	41,250	41,250
- Site forest ranger (1)	2.5	M/M	11,000	0	27,500	27,500
- Development workers (4)	48.0	M/M	6,000	0	288,000	288,000
b. Supplies and materials						
- Farming input & materials	l.s.	-	-	0	25,000	25,000
- Teaching materials	l.s.	-	-	0	12,500	12,500
- Training materials	l.s.	-	-	0	3,500	3,500
- Office supplies	l.s.	-	-	0	2,000	2,000
c. Travel allowance	l.s.	-	-	0	60,000	60,000
e. Miscellaneous expence	l.s.	-	-	0	40,000	40,000
Sub-Total				0	499,750	499,750
2) Animal Husbandry						
a. Supplies/consumables/vaccines	l.s.	-	10,000	0	10,000	10,000
b. Miscellaneous expence	1	lot	2,000	0	2,000	2,000
Sub-Total				0	12,000	12,000
Total of A (Annual)				0	511,750	511,750
Total for 4 Years				0	2,047,000	2,047,000
<b>B. Institutional Development</b>						
1) Community Development Program						
a. Personnel services						
- Community dev. worker (1)	12	M/M	16,500	0	198,000	198,000
- Specialist (3)	9	M/M	11,000	0	79,200	79,200
- Assistant (1)	3	M/M	9,500	0	14,250	14,250
- Secretary (1)	3	M/M	9,500	0	28,500	28,500
b. Supplies and materials	l.s.	-	-	0	12,000	12,000
c. Travel allowance	l.s.	-	-	0	42,000	42,000
d. Fuel/oil for vehicles	l.s.	-	-	0	30,000	30,000
e. Miscellaneous expence	l.s.	-	-	0	45,000	45,000
Total of B (Annual)				0	448,950	448,950
Total for 4 Years				0	1,795,800	1,795,800
Grand Total				0	3,842,800	3,842,800



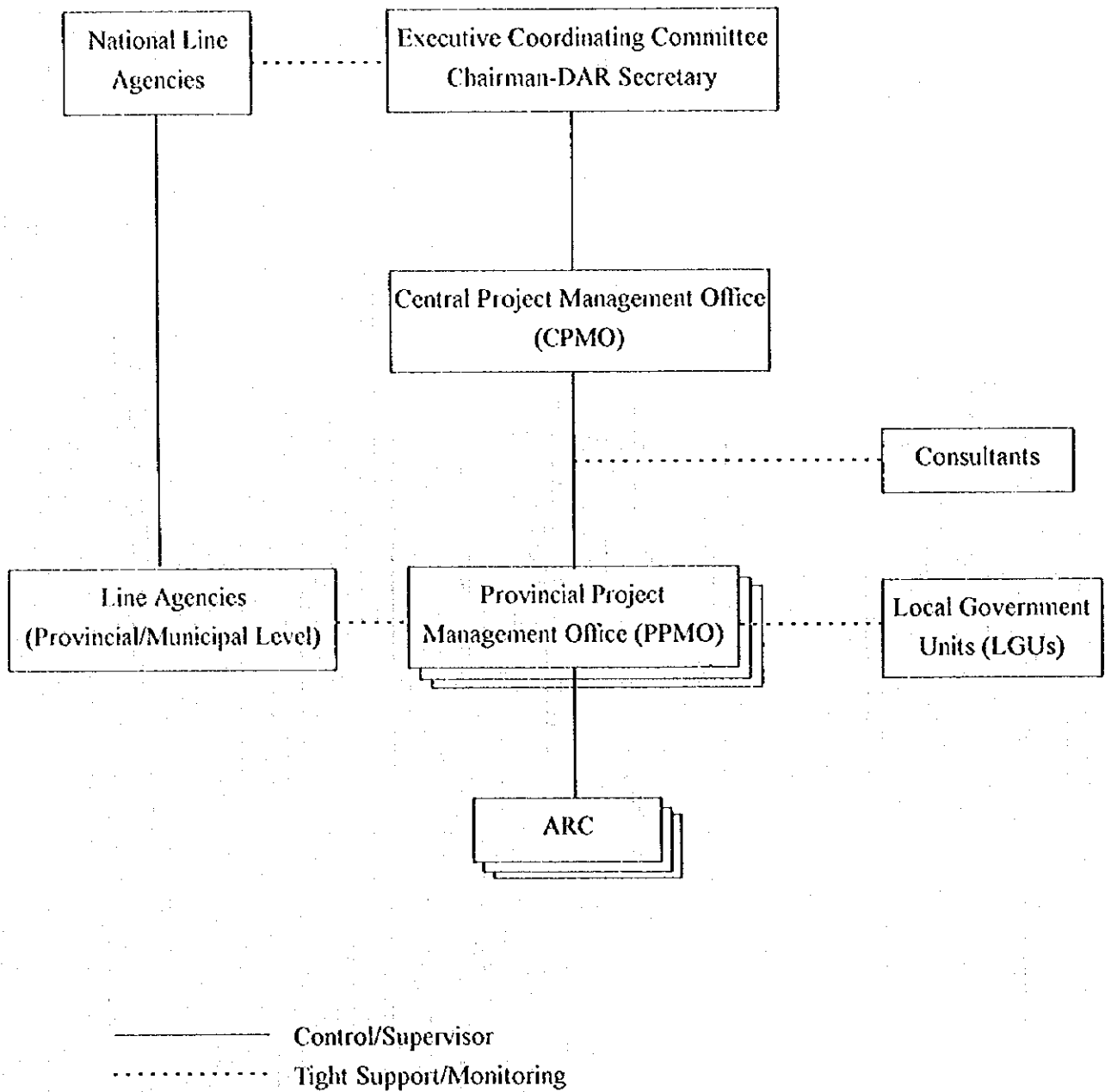
Table N.1-5 Summary of Annual O &amp; M Cost

( 千 )

Description	Sappaac ARC (CAR)	Talugtog ARC (Region-I)	Cofcaville ARC (Region-II)	Montilla ARC (Region-III)	Maulawin ARC (Region-IV)	Pag-Asa ARC (Region-V)
Operation and Maintenance Cost						
A. Agricultural Development	9,510	32,600	9,510	31,600	33,600	33,600
B. Agricultural Infrastructure Development	116,840	67,600	158,730	55,650	106,000	143,860
C. Rural Infrastructure Development	291,730	254,000	243,320	219,400	229,300	312,200
D. Post-Harvest Development	65,650	41,400	146,800	58,575	53,950	40,350
E. Institutional Development	6,700	6,700	6,700	6,700	6,700	6,700
Total (A - E)	490,430	402,300	565,060	371,925	429,550	536,710

Description	Abiera Estate (Region-VI)	San Vicente ARC (Region-VII)	Marangog- Leyte ARC (Region-VIII)	Silae ARC (Region-X)	Kipalili ARC (Region-X I)	Mat-i ARC (Region-X III)
Operation and Maintenance Cost						
A. Agricultural Development	33,600	33,600	9,510	9,510	33,600	30,600
B. Agricultural Infrastructure Development	6,000	116,900	132,570	94,070	109,560	4,000
C. Rural Infrastructure Development	455,400	318,800	344,610	192,800	309,300	78,000
D. Post-Harvest Development	39,150	56,800	42,150	57,100	50,375	19,300
E. Institutional Development	6,700	6,700	6,700	6,700	6,700	6,700
Total (A - E)	540,850	532,800	535,540	360,180	509,535	138,600

**FIGURE N.1-1 ORGANIZATION CHART FOR PROJECT IMPLEMENTATION**



**FIGURE N.1-2 ORGANIZATION CHART FOR O&M**

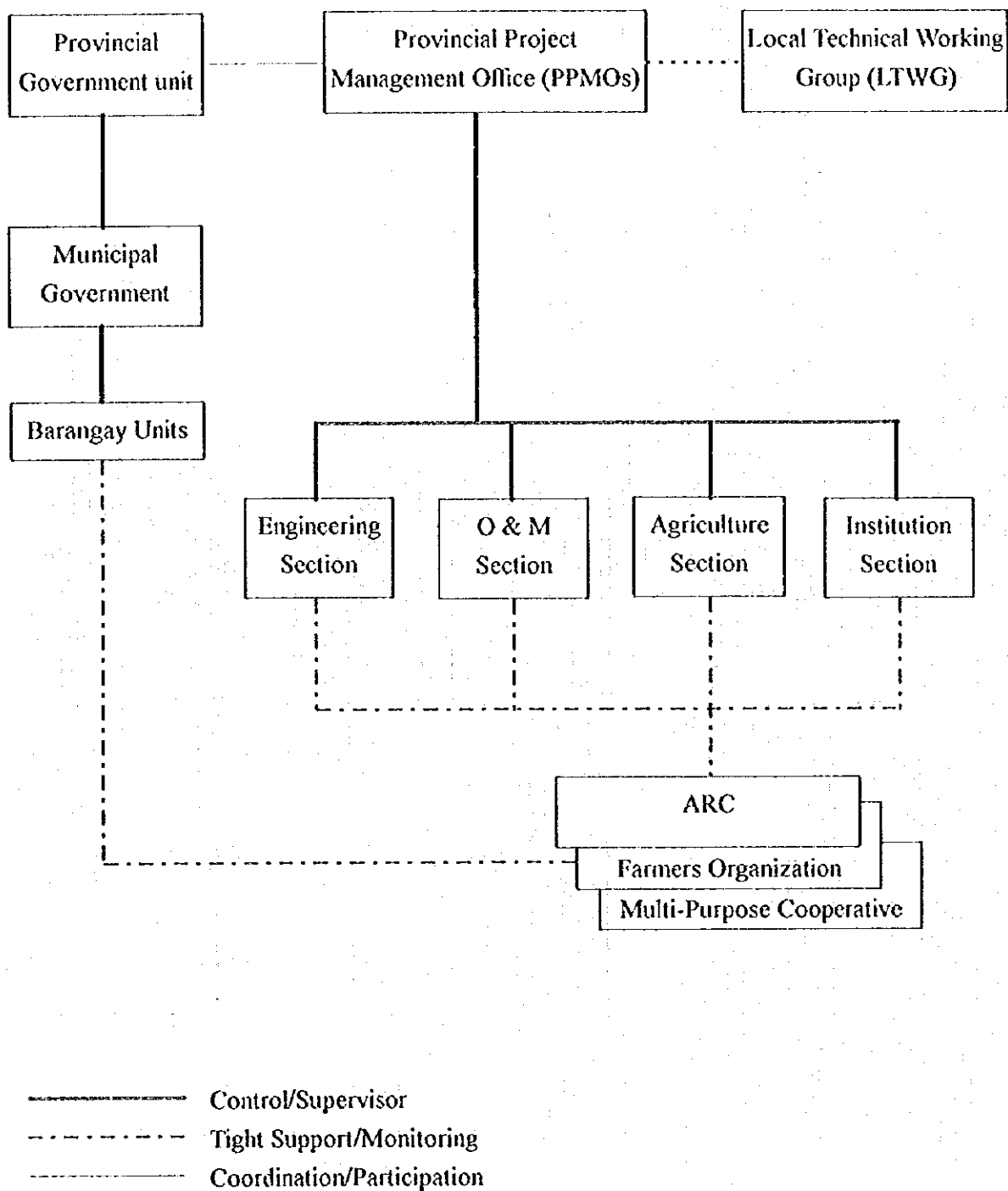


TABLE N.2-1

PROJECT FEATURES FOR TYPICAL MODEL AREAS AND THEIR COSTS

Item	Sappaac (Region-CAR)		Cofcaville ARC (Region-2)		Marangog ARC (Region-8)		Sifae ARC (Region-10)	
1. Areas, Population and Farm Household								
1.1 Areas (ha)								
a) Study Areas	375		490		330		164	
b) Ratio of Area less than 18% of Land Slope (%)	70		73		46		58	
c) Proposed Cultivation Area (less than 30%)	263		358		152		95	
1.2 Population								
a) Total Population	1,159		1,326		1,309		564	
b) Farm Household	189		179		247		115	
Permanent	179(95%)		55(30%)		238(96%)		3(3%)	
Transient	10		124		9		112	
1.3 Proposed Main Crop	Paddy Rice + Upland Crop(Garlic)		Paddy + Paddy + Upland (Mungbean)		Paddy Rice + Upland (Squash)		Paddy + Paddy + Upland (Mungbean)	
2. Agricultural and Rural Infrastructural Facilities	Q'ty	Cost	Q'ty	Cost	Q'ty	Cost	Q'ty	Cost
2.1 Construction Costs		(P'000)		(P'000)		(P'000)		(P'000)
a) Agricultural Development								
1) Nursery	0.05 ha	161	0.05 ha	161	0.05 ha	161	0.05 ha	161
2) Training & On-farm Demonstration Farm	1 place	195	1 place	195	1 place	195	1 place	195
3) Livestock Dispersal	15 heads	300	15 heads	300	15 heads	300	15 heads	300
4) Animal Breeding Center	50 sq. m	215	50 sq. m	215	50 sq. m	215	50 sq. m	215
5) Poultry Incubator	1 unit	80	1 unit	80	1 unit	80	1 unit	80
Sub-Total		951		951		951		951
b) Agricultural Infrastructure Development								
1) Irrigation Development	1 SWID	5,635	1 SWID	2,794	1 Intake	6,859	2 Intake	3,433
2) Drainage Improvement	1,200 m	299	600 m	165	-	-	1,480 m	699
3) Farm Roads Development	3.3 km	5,750	8.7 km	12,914	3.2 km	6,398	2.7 km	5,075
4) Farm Land Conservation	-	-	-	-	-	-	-	-
Sub-Total		11,684		15,873		13,257		9,407
c) Rural Infrastructure Development								
1) Rural Roads Development	6.8 km	11,513	3.8 km	8,872	9.6 km	17,581	LS	600
2) Rural Water Supply Development	9 places	2,160	-	-	1 place	1,450	5 places	1,200
3) Other Social Infrastructure	LS	500	LS	460	LS	430	LS	1,430
4) Rural Electrification	-	-	-	-	-	-	3.5 km	1,050
5) Strengthening Motor Pool for O & M works	LS	15,000	LS	15,000	LS	15,000	LS	15,000
Sub-Total		29,173		24,332		34,461		19,280
d) Post-Harvest & Agro-Industry Facilities								
1) Agricultural Machinery	LS	33	LS	1,545	LS	56	LS	51
2) Post Harvest & Agro-Industry Facilities	2 places	2,593	2 places	4,327	2 places	1,630	1 place	2,233
Sub-Total		2,626		5,872		1,686		2,284
e) Institutional Development								
1) Community Development Program	1 place	670	1 places	670	1 place	670	1 place	670
Sub-Total		670		670		670		670
TOTAL		45,104		47,698		51,025		32,592
2.2 Community Development & Support Services	LS	3,842		3,842	LS	3,842	LS	3,842
TOTAL		3,842		3,842		3,842		3,842
2.3 Associated Costs								
a) Pre-Engineering Cost (5% of 2.1)	LS	2,255	LS	2,385	LS	2,551	LS	1,630
b) Administration Cost (10% of (2.1+2.2))	LS	4,895	LS	5,154	LS	5,487	LS	3,642
c) Consulting Services (refer to Table N.2-13)	LS	7,104	LS	7,104	LS	7,104	LS	7,104
TOTAL		14,254		14,643		15,142		12,376
2.4 Land Aquisition	LS	528		1,016		366		498
TOTAL		528		1,016		366		498
2.5 Physical Contingency (10% of 2.1+2.2)		4,895		5,154		5,487		3,642
GRAND TOTAL		68,622		72,353		75,861		52,951
2.6 Total Project Costs for Four Typical Models	269,787							
3. Project Evaluation (EIRR,%)	12		12		9		19	
4. Classification of Model Areas								
3.1 Classification of Model Areas								
a) By Various Elements of Present Conditions	Cluster-1		Cluster-2		Cluster-3		Cluster-3	
b) By Project Development Type	Type-I, II		Type-III		Type-IV		Type-IV	

Table N.2-2 Breakdown of Construction Cost for Sappaac ARC (Region-CAR)

(₱'000)					
Description	Q'ty	Unit	Unit Rate	Amount	
				F/C	L/C
Total					
A. Agricultural Development					
1) Nursery					
a) Land preparation for seed and seedling bed	500	sq.m	0.02	0	10
b) Compost house	20	sq.m	2	8	32
c) Office and warehouse	9	sq.m	3.5	6	25
d) Machinery and tools	1	lot	80	40	40
				54	107
					161
2) Training & Demonstration Farm					
a) Farm preparation	3	ha	40	0	120
b) Motorcycle	2	unit	25	50	0
c) Office furniture/equipment	1	lot	25	0	25
				50	145
					195
3) Carabao Dispersal					
a) Carabao (female)	15	head	20	0	300
4) Carabao Mini Breeding Station (Bull Camp)					
a) Carabao (male)	1	head	40	0	40
b) Animal shed	50	sq.m	3.5	35	140
				35	180
					215
5) Poultry Development					
a) Poultry incubator (kerosene type)	1	unit	80	0	80
Sub-total of A				139	812
					951
B. Agricultural Infrastructure Development					
1) Irrigation Development					
a) Creek intake	1	place	200	60	140
b) Transmission pipeline (PE pipe $\phi$ 100mm)	950	l.m	0.88	836	0
c) Excavation and pipe installation	1	lot	-	0	418
d) Small water impounding dam	1	place	1,854	640	1,214
e) Delivery pipeline (PE pipe $\phi$ 100mm)	410	l.m	0.88	361	0
f) Excavation and pipe installation	1	lot	-	0	180
g) Distribution canal (open canal)	2,830	l.m	0.45	255	1,019
					1,274

h) Other related structures	1 lot	-	215	297	512
			2,367	3,268	5,635
2) Drainage Development					
a) Drainage canal	1,200 l.m	0.2	48	192	240
b) Drainage culvert (RC $\phi$ 300mm)	8 place	4	6	26	32
c) Other related structures	1 lot		5	22	27
			60	239	299
3) Farm Roads Development					
a) New construction (gravel surface)	1.84 km	1,163	856	1,284	2,140
b) -do- (concrete surface)	1.46 km	2,459	2,154	1,436	3,590
c) Culvert (RC $\phi$ 300mm)	5 place	4	4	16	20
			3,014	2,736	5,750
Sub-total of B			5,441	6,243	11,684
C. Rural Infrastructure Development					
1) Rural Roads Development					
a) Improvement (Barangay road with gravel surface)	4.5 km	984	1,771	2,657	4,428
b) Upgrading (Barangay road with concrete surface)	2.3 km	2,899	4,001	2,667	6,668
c) Creek crossing (spillway type, RC $\phi$ 300mm*1, L=10m)	1 place	97	39	58	97
d) Culvert (RC $\phi$ 300mm)	5 place	4	4	16	20
e) Public transport vehicle	1 lot	300	240	60	300
			6,055	5,458	11,513
2) Rural Water Supply Development					
a) Deep well with hand pump (level-1)	9 place	240	1,296	864	2,160
3) Other Social Infrastructure Development					
a) Rehabilitation/improvement of elementary school	1 lot	20	6	14	20
a) Const. of day care center	1 lot	180	54	126	180
c) Const. of barangay hall/multi-purpose center	1 lot	180	54	126	180
d) Rehabilitation/improve. of barangay health center	1 lot	20	6	14	20
e) Paramedical supplies/equipment/facilities	1 lot	100	30	70	100
			150	350	500
4) Strengthening Motor Pool for O/M Works					
a) Supply of O/M equipment to Municipal Gov.	1 lot	15,000	15,000	0	15,000
Sub-total of C			22,501	6,672	29,173

<b>D. Post-Harvest Development</b>									
1) Agricultural Machinery									
a) Sprayer	6 unit	2.9	17	0	17				
b) Animal drawn plow	6 unit	1.2	2	5	7				
c) Comb-tooth harrow	6 unit	1.0	2	4	6				
d) Animal drawn sledge	6 unit	0.5	1	2	3				
			22	11	33				
2) Post-Harvest & Agro-Industry Facilities									
a) Multi-purpose dryer	2 place	395.5	237	554	791				
b) Mechanical dryer	1 unit	106.0	32	74	106				
c) Reaper	2 unit	90.0	54	126	180				
d) Rice thresher (foot type)	7 unit	1.9	4	9	13				
e) Rice thresher (engine type)	1 unit	48.5	15	34	49				
f) Winnower	7 unit	2.0	4	10	14				
g) Warehouse	1 unit	659.0	198	461	659				
h) Rice agro-industry center	1 place	718.5	216	503	719				
i) Corn sheller (handy type)	5 unit	12.5	19	44	63				
			778	1,815	2,593				
			800	1,826	2,626				
Sub-total of D									
<b>E. Institutional Development</b>									
1) Community Development Program									
a) Pick-up	1 unit	390	390	0	390				
b) Motorbike	1 "	80	80	0	80				
c) Office furniture/equipment	1 lot	200	0	200	200				
			470	200	670				
			470	200	670				
Sub-total of E									
Total of Sappaac ARC									
			29,351	15,753	45,104				

Table N.2-3 Breakdown of Construction Cost for Cofcaville ARC (Region-11)

Table N-2-3 Breakdown of Construction Cost for Colca Valley ARC (Region 1)					
Description	Q'ty	Unit	Unit Rate	Amount	
				F/C	L/C
Total					
(₹'000)					
A. Agricultural Development					
1) Nursery					
a) Land preparation for seed and seedling bed	500	sq.m	0.02	0	10
b) Compost house	20	sq.m	2	8	32
c) Office and warehouse	9	sq.m	3.5	6	25
d) Machinery and tools	1	lot	80	40	40
				54	107
					161
2) Training & Demonstration Farm					
a) Farm preparation	3	ha	40	0	120
b) Motorcycle	2	unit	25	50	0
c) Office furniture/equipment	1	lot	25	0	25
				50	145
					195
3) Carabao Dispersal					
a) Carabao (female)	15	head	20	0	300
					300
4) Carabao Mini Breeding Station (Bull Camp)					
a) Carabao (male)	1	head	40	0	40
b) Animal shed	50	sq.m	3.5	35	140
				35	180
					215
5) Poultry Development					
a) Poultry incubator (kerosene type)	1	unit	80	0	80
					80
Sub-total of A				139	812
					951
B. Agricultural Infrastructure Development					
1) Irrigation Development					
a) Small water impounding dam	1	place	2,000	688	1,312
b) Irrigation canal (delivery & distribution)	1,200	l.m	0.45	108	432
c) Other related structures	1	lot	-	80	174
				876	1,918
					2,794
2) Drainage Development					
a) Drainage canal	650	l.m	0.2	26	104
b) Drainage culvert (RC $\phi$ 300mm)	5	place	4	4	16
					20



c) Other related structures	1 lot	-	3	12	15
			33	132	165
<hr/>					
3) Farm Roads Development					
a) New construction (gravel surface)	7.25 km	1,163	3,373	5,059	8,432
b) -do- (concrete surface)	1.4 km	2,459	2,066	1,377	3,443
c) Creek crossing (spillway type, RC $\phi$ 300mm*5, L=25m)	4 place	254	406	610	1,016
d) Culvert (RC $\phi$ 300mm)	6 place	4	5	19	24
			5,849	7,065	12,914
			6,753	9,115	15,873
<hr/>					
C. Rural Infrastructure Development					
1) Rural Roads Development					
a) Improvement (Provincial road with gravel surface)	0.3 km	1,278	153	230	383
b) Improvement (Barangay road with gravel surface)	1.6 km	984	630	945	1,574
c) Upgrading (Barangay road with concrete surface)	1.9 km	2,899	3,305	2,203	5,508
d) Creek crossing (spillway type, RC $\phi$ 300mm*5, L=25m)	2 place	254	203	305	508
e) -do- (spillway type, RC $\phi$ 300mm*1, L=10m)	6 place	97	233	349	582
f) Culvert (RC $\phi$ 300mm)	4 place	4	3	13	16
g) Public transport vehicle	1 lot	300	240	60	300
			4,767	4,105	8,872
<hr/>					
2) Other Social Infrastructure Development					
a) Const. of additional classroom/bldg. (2)	1 lot	360	108	252	360
b) Paramedical supplies/equipment/facilities	1 lot	100	30	70	100
			138	322	460
<hr/>					
3) Strengthening Motor Pool for O/M Works					
a) Supply of O/M equipment to Municipal Gov.	1 lot	15,000	15,000	0	15,000
			19,905	4,427	24,332
<hr/>					
D. Post-Harvest Development					
1) Agricultural Machinery					
a) Tractor	1 unit	1,433.3	1,433	0	1,433
b) Hand tractor	2 unit	34.3	21	48	69
c) Sprayer	12 unit	2.9	35	0	35
d) Animal drawn plow	3 unit	1.2	1	3	4
e) Comb-tooth harrow	3 unit	1.0	1	2	3

f) Animal drawn sledge	3 unit	0.5	0	1	2
			1,491	54	1,545
2) Post-Harvest & Agro-Industry Facilities					
a) Multi-purpose dryer	2 place	395.5	237	554	791
b) Mechanical dryer	1 unit	106.0	32	74	106
c) Reaper	2 unit	90.0	54	126	180
d) Rice thresher (foot type)	3 unit	1.9	2	4	6
e) Rice thresher (engine type)	1 unit	48.5	15	34	49
f) Winnowing	3 unit	2.0	2	4	6
g) Warehouse	2 unit	659.0	395	923	1,318
h) Rice agro-industry center	1 unit	863.5	259	604	864
i) Corn sheller (handy type)	6 unit	12.5	23	53	75
j) Corn agro-industry center	1 place	934.0	280	654	934
			1,298	3,029	4,327
Sub-total of D		2,789	3,083	5,872	
E. Institutional Development					
1) Community Development Program					
a) Pick-up	1 unit	390	390	0	390
b) Motorbike	1 "	80	80	0	80
c) Office furniture/equipment	1 lot	200	0	200	200
			470	200	670
Sub-total of E		470	200	670	
Total of Cofcaville ARC					
		30,061	17,637	47,698	



h) Pipeline river crossing					
	2 place	200	120	280	400
			4,093	2,765	6,859
2) Farm Roads Development					
a) New construction (gravel surface)	1.95 km	1,163	907	1,361	2,268
b) -do- (concrete surface)	1.25 km	2,459	1,844	1,230	3,074
c) Creek crossing (spillway type, RC $\phi$ 300mm*5, L=25m)	4 place	254	406	610	1,016
d) Culvert (RC $\phi$ 300)	10 place	4	8	32	40
			3,166	3,232	6,398
Sub-total of B					
			7,259	5,998	13,257
C. Rural Infrastructure Development					
1) Rural Roads Development					
a) Improvement (Barangay road with gravel surface)	7.9 km	984	3,109	4,664	7,774
b) Upgrading (Barangay road with concrete surface)	1.7 km	2,899	2,957	1,971	4,928
c) River crossing (spillway type, RC $\phi$ 600mm*30, L=100m)	1 place	1,910	764	1,146	1,910
d) -do- (spillway type, RC $\phi$ 600mm*35, L=200m)	1 place	2,630	1,052	1,578	2,630
e) Culvert (RC $\phi$ 300)	10 place	4	8	32	40
f) Public transport vehicle	1 lot	300	240	60	300
			8,130	9,451	17,581
2) Rural Water Supply Development					
a) Rehabilitation of spring box (level-II)	1 place	130	0	130	130
b) Supply pipeline (GI pipe, $\phi$ 63mm) w/ fittings	30 l.m	0.35	11	0	11
c) -do- (GI pipe, $\phi$ 50mm) w/ fittings	410 l.m	0.30	123	0	123
d) -do- (GI pipe, $\phi$ 38mm) w/ fittings	1,570 l.m	0.19	298	0	298
e) -do- (GI pipe, $\phi$ 25mm) w/ fittings	2,420 l.m	0.13	315	0	315
f) -do- (GI pipe, $\phi$ 19mm) w/ fittings	160 l.m	0.08	13	0	13
g) Excavation and pipe installation	1 lot	-	0	380	380
h) Water tank (V= 3.6 cu.m)	2 place	44	30	58	88
i) Water quality analysis	1 lot	2	0	2	2
j) Communal faucet ( $\phi$ 13mm * 2 faucets)	13 place	7	91	0	91
			880	570	1,450
3) Other Social Infrastructure Development					
a) Construction of barangay health center	1 lot	180	54	126	180
b) Paramedical supplies/equipment/facilities	1 lot	100	30	70	100
c) Expansion of barangay hall to multi-purpose center	1 lot	150	45	105	150

4) Strengthening Motor Pool for O/M Works			129	301	430
a) Supply of O/M equipment to Municipal Gov.	1 lot	15,000	15,000	0	15,000
Sub-total of C			24,139	10,322	34,461
D. Post-Harvest Development					
1) Agricultural Machinery					
a) Hand tractor	1 unit	34.3	10	24	34
b) Sprayer	5 unit	2.9	15	0	15
c) Animal drawn plow	3 unit	1.2	1	3	4
d) Comb-tooth harrow	3 unit	1.0	1	2	3
e) Animal drawn sledge	3 unit	0.5	0	1	2
			27	30	57
2) Post-Harvest & Agro-Industry Facilities					
a) Multi-purpose dryer	2 place	395.5	237	554	791
b) Mechanical dryer	1 unit	106.0	32	74	106
c) Rice thresher (engine type)	1 unit	48.5	15	34	49
d) Warehouse w/ solar dryer	1 unit	659.0	198	461	659
e) Corn sheller (handy type)	2 unit	12.5	8	18	25
			489	1,141	1,630
Sub-total of D			516	1,170	1,686
E. Institutional Development					
1) Community Development Program					
a) Pick-up	1 unit	390	390	0	390
b) Motorbike	1 "	80	80	0	80
c) Office furniture/equipment	1 lot	200	0	200	200
			470	200	670
Sub-total of E			470	200	670
Total of Marangog-Leyte ARC			32,523	18,502	51,025

Table N.2-5 Breakdown of Construction Cost for Silae ARC (Region-X)

(₹'000)					
Description	Q'ty	Unit	Unit Rate	Amount	
				F/C	L/C Total
A. Agricultural Development					
1) Nursery					
a) Land preparation for seed and seedling bed	500	sq.m	0.02	0	10
b) Compost house	20	sq.m	2	8	32
c) Office and warehouse	9	sq.m	3.5	6	25
d) Machinery and tools	1	lot	80	40	40
				54	107
					161
2) Training & Demonstration Farm					
a) Farm preparation	3	ha	40	0	120
b) Motorcycle	2	unit	25	50	0
c) Office furniture/equipment	1	lot	25	0	25
				50	145
					195
3) Carabao Dispersal					
a) Carabao (female)	15	head	20	0	300
4) Carabao Mini Breeding Station (Bull Camp)					
a) Carabao (male)	1	head	40	0	40
b) Animal shed	50	sq.m	3.5	35	140
				35	180
					215
5) Poultry Development					
a) Poultry incubator (kerosene type)	1	unit	80	0	80
					80
Sub-total of A				139	812
					951
B. Agricultural Infrastructure Development					
1) Irrigation Development					
(Dalaacutan area)					
a) Creek Intake	1	place	200	60	140
b) Delivery canal	250	l.m	0.45	23	90
c) Farm pond	1	place	1,587	577	1,010
d) Distribution canal	1,400	l.m	0.45	126	504
e) Other related structures	1	lot	-	79	174
(Silalae area)					253

f) Creek intake	1 place	200	60	140	200
g) Distribution canal	870 l.m	0.45	78	313	392
h) Other related structures	1 lot	-	14	45	59
			1,016	2,417	3,433
2) Drainage Development					
a) Drainage canal	1,480 l.m	0.2	59	237	296
b) Drainage culvert (RC $\phi$ 300mm)	9 place	4	7	29	36
c) Improvement of creek (small)	350 l.m	0.1	7	28	35
d) Improvement of creek (large)	1,500 l.m	0.3	90	360	450
e) Other related structures	1 lot	-	16	65	82
			180	719	899
3) Farm Roads Development					
a) New construction (gravel surface)	2.2 km	1,163	1,023	1,535	2,559
b) -do- (concrete surface)	0.5 km	2,459	738	492	1,230
c) Creek crossing (spillway type, RC $\phi$ 600mm*2, L=25m)	2 place	286	229	343	572
d) -do- (spillway type, RC $\phi$ 300mm*5, L=25m)	1 place	254	102	152	254
e) -do- (spillway type, RC $\phi$ 300mm*1, L=10m)	4 place	97	155	233	388
f) Culvert (RC $\phi$ 600mm)	2 places	8.8	4	14	18
g) -do- (RC $\phi$ 300mm)	14 places	4	11	45	56
			2,267	2,814	5,075
	Sub-total of B		3,457	5,950	9,407
C. Rural Infrastructure Development					
1) Rural Roads Development					
a) Public transport vehicle (Silae & Dalacutan)	2 lot	300	480	120	600
2) Rural Water Supply Development					
a) Deep well with hand pump (level-I)	5 place	240	720	480	1,200
3) Rural Electrification					
a) Electric power line construction (single phase)	3.5 km	300	840	210	1,050
4) Other Social Infrastructure Development (Silae area)					
a) Paramedical supplies/equipment/facilities (Dalacutan area)	1 lot	100	30	70	100
b) Construction of primary school/bldg. (4)	1 lot	720	216	504	720
c) Construction of barangay health center	1 lot	180	54	126	180

d) Paramedical supplies/equipment/facilities	1 lot	100	30	70	100
e) Construction of day care center	1 lot	180	54	126	180
f) Expansion of barangay hall to multi-purpose center	1 lot	150	45	105	150
			429	1,001	1,430

5) Strengthening Motor Pool for O/M Works  
a) Supply of O/M equipment to Municipal Gov.

	1 lot	15,000	15,000	0	15,000
Sub-total of C			17,469	1,811	19,280

#### D. Post-Harvest Development

##### 1) Agricultural Machinery

a) Hand tractor	1 unit	34.3	10	24	34
b) Sprayer	3 unit	2.9	9	0	9
c) Animal drawn plow	3 unit	1.2	1	3	4
d) Comb-tooth harrow	3 unit	1.0	1	2	3
e) Animal drawn sledge	3 unit	0.5	0	1	2
			21	30	51

##### 2) Post-Harvest & Agro-Industry Facilities

a) Multi-purpose dryer	1 place	395.5	119	277	396
b) Mechanical dryer	1 unit	106.0	32	74	106
c) Reaper	1 unit	90.0	27	63	90
d) Rice thresher (engine type)	1 unit	48.5	15	34	49
e) Warehouse with solar dryer	1 unit	659.0	198	461	659
f) Corn agro-industry center	1 unit	934.0	280	654	934
			670	1,563	2,233

Sub-total of D

691	1,593	2,284
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#### E. Institutional Development

##### 1) Community Development Program

a) Pick-up	1 unit	390	390	0	390
b) Motorbike	1 "	80	80	0	80
c) Office furniture/equipment	1 lot	200	0	200	200
			470	200	670

Sub-total of E

470	200	670
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Total of Sillae ARC

22,226	10,366	32,592
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**Table N.2-6 Breakdown of Community Development & Support Services Cost  
(For Four Years Duration)**

Description	Q'ty	Unit	Unit Rate	Amount		Total
				F/C	L/C	
			₱	₱	₱	₱
<b>A. Agricultural Support Services</b>						
1) Training & Demonstration Farm						
a. Personnel services						
- Technologist (1)	2.5	M/M	16,500	0	41,250	41,250
- Site forest ranger (1)	2.5	M/M	11,000	0	27,500	27,500
- Development workers (4)	48.0	M/M	6,000	0	288,000	288,000
b. Supplies and materials						
- Farming input & materials	l.s.	-	-	0	25,000	25,000
- Teaching materials	l.s.	-	-	0	12,500	12,500
- Training materials	l.s.	-	-	0	3,500	3,500
- Office supplies	l.s.	-	-	0	2,000	2,000
c. Travel allowance	l.s.	-	-	0	60,000	60,000
e. Miscellaneous expense	l.s.	-	-	0	40,000	40,000
Sub-Total				0	499,750	499,750
2) Animal Husbandry						
a. Supplies/consumables/vaccines	l.s.	-	10,000	0	10,000	10,000
b. Miscellaneous expense	1	lot	2,000	0	2,000	2,000
Sub-Total				0	12,000	12,000
Total of A (Annual)				0	511,750	511,750
Total for 4 Years				0	2,047,000	2,047,000
<b>B. Institutional Development</b>						
1) Community Development Program						
a. Personnel services						
- Community dev. worker (1)	12	M/M	16,500	0	198,000	198,000
- Specialist (3)	9	M/M	11,000	0	79,200	79,200
- Assistant (1)	3	M/M	9,500	0	14,250	14,250
- Secretary (1)	3	M/M	9,500	0	28,500	28,500
b. Supplies and materials	l.s.	-	-	0	12,000	12,000
c. Travel allowance	l.s.	-	-	0	42,000	42,000
d. Fuel/oil for vehicles	l.s.	-	-	0	30,000	30,000
e. Miscellaneous expense	l.s.	-	-	0	45,000	45,000
Total of B (Annual)				0	448,950	448,950
Total for 4 Years				0	1,795,800	1,795,800
Grand Total				0	3,842,800	3,842,800

Table N.2-7 Breakdown of Road Construction Cost

## 1) Provincial Road Improvement/Upgrading

(per km)

Description	Unit	Unit Rate (P)	Gravel Surface		Concrete Surface	
			Q'ty	Amount (P'000)	Q'ty	Amount (P'000)
Temporary works	L.S.	--		213		692
Clearing & grubbing	sq.m	5	0	0	0	0
Earth excavation	cu.m	55	0	0	0	0
Rock excavation	cu.m	360	0	0	0	0
Sub grade preparation	sq.m	12	9000	108	9000	108
Embankment/borrow	cu.m	185	960	178	960	178
Sub-base course	cu.m	240	660	158	660	158
Base course (Gravel pavement)	cu.m	340	900	306	0	0
Concrete pavement	sq.m	450	0	0	6,000	2,700
Grouted riprap	cu.m	1,050	300	315	300	315
Total Cost per km				1,278		4,151

## 2) Barangay Road Improvement/Upgrading

Description	Unit	Unit Rate (P)	Gravel Surface		Concrete Surface	
			Q'ty	Amount (P'000)	Q'ty	Amount (P'000)
Temporary works	L.S.	--		164		483
Clearing & grubbing	sq.m	5	0	0	0	0
Earth excavation	cu.m	55	0	0	0	0
Rock excavation	cu.m	360	20	7	20	7
Sub grade preparation	sq.m	12	6000	72	6000	72
Embankment/borrow	cu.m	185	600	111	600	111
Sub-base course	cu.m	240	460	110	460	110
Base course (Gravel pavement)	cu.m	340	600	204	0	0
Concrete pavement	sq.m	450	0	0	4,000	1,800
Grouted riprap	cu.m	1,050	300	315	300	315
Total Cost per km				984		2,899

## 3) Farm Road New Construction

Description	Unit	Unit Rate (P)	Gravel Surface		Concrete Surface	
			Q'ty	Amount (P'000)	Q'ty	Amount (P'000)
Temporary works	L.S.	--		268		568
Clearing & grubbing	sq.m	5	6,000	30	6,000	30
Earth excavation	cu.m	55	3,060	168	3,060	168
Rock excavation	cu.m	360	340	122	340	122
Sub grade preparation	sq.m	12	3500	42	3500	42
Embankment/borrow	cu.m	185	250	46	250	46
Sub-base course	cu.m	240	310	74	310	74
Base course (Gravel pavement)	cu.m	340	375	128	0	0
Concrete pavement	sq.m	450	0	0	2,500	1,125
Grouted riprap	cu.m	1,050	270	284	270	284
Total Cost per km				1,163		2,459

Table N.2-8 Construction Cost for Small Water Impounding Dam  
in Sappac ARC

Description	Q'ty	Unit	Unit Rate	Amount		
				F/C	L/C	Total
			₱	₱	₱	₱
1. Temporary Works		L.S.	-	147,763	280,231	427,993
2. Clearing and Grubbing	1,313	sq.m	10	0	13,130	13,130
3. Diversion & Care of River		L.S.	-	82,090	153,495	235,586
4. Earth Work						
-Excavation	889	cu.m	65	23,114	34,671	57,785
-Dam embankment	2,502	cu.m	160	160,128	240,192	400,320
-Toe rock	68	cu.m	640	8,704	34,816	43,520
-Filter drain	46	cu.m	640	5,888	23,552	29,440
-Boulder riprap	65	cu.m	650	0	42,250	42,250
-Grass sodding	481	sq.m	30	0	14,430	14,430
5. Concrete/Structure Work						
-Outlet works						
•Outlet pipe(SP ϕ 200mm)	25	m	1,900	47,500	0	47,500
•Gate valve (ϕ 200 mm)	1	unit	32,000	32,000	0	32,000
•Excavation	10.0	cu.m	60	0	600	600
•Backfill	5.0	cu.m	55	0	275	275
•Concrete	5.0	cu.m	5,800	5,800	23,200	29,000
•RSB	400	kg	25	5,000	5,000	10,000
•Grouted riprap	1.8	cu.m	1,600	0	2,880	2,880
•Gravel bedding	0.8	cu.m	700	0	560	560
-Spillway w/ Bridge						
•Excavation	176	cu.m	60	0	10,560	10,560
•Backfill	57	cu.m	55	0	3,135	3,135
•Concrete	40.2	cu.m	5,800	46,632	186,528	233,160
•RSB	3,220	kg	25	40,250	40,250	80,500
•Grouted riprap	6	cu.m	1,600	0	9,600	9,600
•Gravel bedding	12.5	cu.m	700	0	8,750	8,750
-Misc. works		L.S.	-	35,436	58,268	93,704
6. Road						
-Gravel surface	31.2	cu.m	720	0	22,464	22,464
-Sub-base course	22.9	cu.m	240	0	5,496	5,496
Total				640,306 (640,000)	1,214,332 (1,214,000)	1,854,638 (1,854,000)

Table N.2-9 Construction Cost for Small Water Impounding Dam  
in Cofcavill ARC

Description	Q'ty	Unit	Unit Rate P	Amount		
				F/C P	L/C P	Total P
1. Temporary Works		L.S.	-	158,709	302,868	461,577
2. Clearing and Grubbing	1,347	sq.m	10	0	13,470	13,470
3. Diversion & Care of River		L.S.	-	88,172	166,015	254,187
4. Earth Work						
-Excavation	897	cu.m	65	23,322	34,983	58,305
-Dam embankment	2,165	cu.m	160	138,560	207,840	346,400
-Boulder riprap	46	cu.m	650	0	29,900	29,900
-Grass sodding	469	sq.m	30	0	14,070	14,070
5. Concrete/Structure Work						
-Outlet works						
•Outlet pipe(SP φ 150mm)	24	m	1,300	31,200	0	31,200
•Gate valve (φ 150 mm)	1	unit	23,000	23,000	0	23,000
•Excavation	10.0	cu.m	60	0	600	600
•Backfill	5.0	cu.m	55	0	275	275
•Concrete	5.0	cu.m	5,800	5,800	23,200	29,000
•RSB	400	kg	25	5,000	5,000	10,000
•Grouted riprap	1.8	cu.m	1,600	0	2,880	2,880
•Gravel bedding	0.8	cu.m	700	0	560	560
-Spillway w/ Bridge						
•Excavation	181	cu.m	60	0	10,860	10,860
•Backfill	60	cu.m	55	0	3,300	3,300
•Concrete	40.5	cu.m	5,800	46,980	187,920	234,900
•RSB	3,240	kg	25	40,500	40,500	81,000
•Grouted riprap	5.9	cu.m	1,600	0	9,440	9,440
•Gravel bedding	11.8	cu.m	700	0	8,260	8,260
-Misc. works		L.S.	-	30,496	58,559	89,055
6. Road						
-Gravel surface	53.3	cu.m	720	0	38,376	38,376
-Sub-base course	39.8	cu.m	240	0	9,552	9,552
7. Temporary road	240	l.m.	1,000	96,000	144,000	240,000
Total				687,738 (688,000)	1,312,428 (1,312,000)	2,000,166 (2,000,000)

**Table N.2-10 Construction Cost for Water Tank for Rural Water Supply  
in Marangog-Leyte ARC**

Description	Q'ty	Unit	Unit Rate ₱	Amount		
				F/C ₱	L/C ₱	Total ₱
Concrete	3.94	cu.m	5,800	4,570	18,282	22,852
Gravel bedding	0.86	cu.m	700	0	602	602
RSB	413.00	kg	25	5,163	5,163	10,325
Excavation	7.25	cu.m	60	0	435	435
Backfilling	4.56	cu.m	55	0	251	251
G.I. pipe (ϕ50mm w/ fittings)	6.1	m	300	1,830	0	1,830
Gate valve (ϕ50mm)	2	unit	800	1,600	0	1,600
Installation of pipes & valves		L.S.		0	1,715	1,715
Miscellaneous works		L.S.		1,316	2,645	3,961
<b>Total</b>				<b>14,479</b>	<b>29,092</b>	<b>43,571</b> <b>(44,000)</b>

**Table N.2-11 Construction Cost for Water Tank for Tank Irrigation System  
in Marangog-Leyte ARC**

Description	Q'ty	Unit	Unit Rate ₱	Amount		
				F/C ₱	L/C ₱	Total ₱
Concrete	3.94	cu.m	5,800	4,570	18,282	22,852
Gravel bedding	0.79	cu.m	700	0	553	553
RSB	413.00	kg	25	5,163	5,163	10,325
Excavation	7.03	cu.m	60	0	422	422
Backfilling	4.49	cu.m	55	0	247	247
G.I. pipe (ϕ50mm w/ fittings)	5.0	m	300	1,500	0	1,500
G.I. pipe (ϕ38mm w/ fittings)	2.3	m	190	437	0	437
Gate valve (ϕ75mm)	1	unit	1,000	1,000	0	1,000
Gate valve (ϕ38mm)	1	unit	600	600	0	600
Installation of pipes & valves		L.S.		0	1,769	1,769
Miscellaneous works		L.S.		1,327	2,643	3,970
<b>Total</b>				<b>14,597</b>	<b>29,078</b>	<b>43,675</b> <b>(44,000)</b>

Table N.2-12 Construction Cost for Farm Pond for Irrigation System  
in Silae ARC (Dalacutan Area)

Description	Q'ty	Unit	Unit Rate	Amount		
				F/C	L/C	Total
			₱	₱	₱	₱
1. Temporary Works		L.S.	-	133,169	233,167	366,336
2. Clearing and Grubbing	1,900	sq.m	10	0	19,000	19,000
3. Diversion & Care of River		L.S.	-	73,983	126,371	200,353
4. Earth Work						
-Excavation	1,180	cu.m	65	30,680	46,020	76,700
-Dam embankment	3,250	cu.m	160	208,000	312,000	520,000
-Boulder riprap	73	cu.m	650	0	47,450	47,450
-Grass sodding	750	sq.m	30	0	22,500	22,500
-Gravel pavement	28	cu.m	720	0	20,160	20,160
5. Concrete/Structure Work						
-Outlet works						
•Outlet pipe(SP ϕ 150mm)	12	m	1,300	15,600	0	15,600
•Gate valve (ϕ 150 mm)	1	unit	23,000	23,000	0	23,000
•Excavation	15.82	cu.m	60	0	949	949
•Backfill	14.29	cu.m	55	0	786	786
•Concrete	5.0	cu.m	5,800	5,800	23,200	29,000
•RSB	400	kg	25	5,000	5,000	10,000
•Grouted riprap	1.4	cu.m	1,600	0	2,240	2,240
•Gravel bedding	0.8	cu.m	700	0	560	560
-Spillway						
•Excavation	22.1	cu.m	60	0	1,326	1,326
•Backfill	10.4	cu.m	55	0	572	572
•Concrete	4.6	cu.m	5,800	5,336	21,344	26,680
•RSB	370	kg	25	4,625	4,625	9,250
•Grouted riprap	1.4	cu.m	1,600	0	2,240	2,240
•Gravel bedding	1.8	cu.m	700	0	1,260	1,260
-Stair		L.S.	14,000	0	14,000	14,000
-Misc. works		L.S.	-	11,872	15,620	27,493
6. Access road	150	l.m.	1,000	60,000	90,000	150,000
<b>Total</b>				<b>577,065</b> (577,000)	<b>1,010,390</b> (1,010,000)	<b>1,587,455</b> (1,587,000)

Table N.2-13

## Consulting Service Costs for Two Marginal Areas

Description	Quantity	Unit	Rate ('000 P)	Total Amount	
				F/C ('000 P)	I/C ('000 P)
<b>1. Preparation Works (2 month)</b>					
1.1 Foreign Currency					
Consultants Remuneration	2	month	750	1500	
Out-of-Pocket Expenses					
International Travel Expenses	1	trip	42	42	
Reimbursable Cost Items and Others (10%)		LS		151	
Miscellaneous (10%)		LS		170	
Sub-Total				<u>1,866</u>	
1.2 Local Currency					
Consultants Remuneration	-	month	100		0
Consultants Per Diem					
Foreign	2	month	115		230
Local	-	month	80		0
Living Allowance and Quarters					
Foreign	2	month	20		40
Local	-	month	10		0
Local Communication and Transportation		LS			54
Printing of Report		LS			45
Miscellaneous (10%)		LS			37
Sub-Total					<u>406</u>
<b>2. Detailed Design and Construction Supervision (24 month)</b>					
2.1 Foreign Currency					
Consultants Remuneration	4	month	750	3,000	
Out-of-Pocket Expenses					
International Travel Expenses	2	trip	42	84	
Reimbursable Cost Items and Others (10%)				308	
Miscellaneous (10%)				339	
Sub-Total				<u>3,731</u>	
2.2 Local Currency					
Consultants Remuneration	20	month	100		2,000
Consultants Per Diem					
Foreign	4	month	115		460
Local	20	month	80		1,600
Living Allowance and Quarters					
Foreign	4	month	20		80
Local	16	month	10		160
Local Communication and Transportation		LS			627
Printing of Report		LS			581
Miscellaneous (10%)		LS			551
Sub-Total					<u>6,059</u>
<b>3. Institutional Development and Support Services (42 month)</b>					
3.1 Local Currency					
Consultants Remuneration (Local)	-	month	100		0
Consultants Per Diem (Local)	-	month	80		0
Living Allowance and Quarters (Local)	-	month	15		0
Local Communication and Transportation		LS			1,008
Printing of Report		LS			941
Miscellaneous (10%)					195
Sub-Total					<u>2,144</u>
<b>Total</b>				<u>5,597</u>	<u>8,609</u>

Note : Schedule of consulting services is given in Figure N.2-1.

Table N.2-14 Breakdown of Project Cost for Sappaac ARC (Region - CAR)

Description	Qty	Unit	Unit Rate	Amount		Implementing Agencies										Total	
				F/C	L/C	Total	OOA										
							DAR	DA	DPWH	NIA	DTI	DOH	LGU	PCC	LGU		ARC
1. Construction Cost																	
1.1 Agricultural Development																	
1) Nursery																	
a) Land for seed and seedling bed	500 sqm		0.02	0	10	10										10	10
b) Compost house	20 sqm		2	8	32	40											40
c) Office and warehouse	9 sqm		3.5	6	25	31											31
d) Machinery and tools	1 lot		80	40	40	80											80
				54	107	161											161
2) Training & On-farm Demonstration Farm																	
a) Farm Preparation	3 ha		40	0	120	120											120
b) Motorcycle	2 unit		25	50	0	50											50
c) Office furniture/equipment	1 lot		25	0	25	25											25
				50	145	195											195
3) Carabao Dispersal																	
a) Carabao (female)	15 head		20	0	300	300											300
				0	300	300											300
4) Carabao Mini Breeding Station Bull Camp																	
a) Carabao (male)	1 head		40	0	40	40											40
b) Animal shed	50 sqm		3.5	35	140	175											175
				35	160	195											195
5) Poultry Incubator																	
a) Poultry Incubator (kerosene type)	1 unit		80	0	80	80											80
				139	812	951											951
Sub-Total of 1.1																	
1.2 Agricultural Infrastructure Development																	
1) Irrigation Development																	
a) Creek intake	1 place		200	60	140	200											200
b) Transmission pipeline (PE pipe ø 100mm)	950 lm		0.85	836	0	836											836
c) Excavation and pipe installation	1 lot		-	0	418	418											418
d) Small water impounding dam	1 place		1,854	640	1,214	1,854											1,854
e) Delivery pipeline (PE pipe ø 100mm)	410 lm		0.88	361	0	361											361
f) Excavation and pipe installation	1 lot		-	0	180	180											180
g) Distribution canal (open canal)	2,820 lm		0.45	255	1,019	1,274											1,274
h) Other related structures	1 lot		-	2,558	3,288	5,846											5,846
2) Drainage Development																	
a) Drainage canal	1,200 lm		0.2	48	192	240											240
b) Drainage culvert (RC ø 300mm)	8 place		4	6	26	32											32
c) Other related structures	1 lot		-	5	22	27											27
				59	240	299											299
3) Farm Road Development																	
a) New construction (gravel surface)	2 km		1,163	856	1,264	2,140											2,140
b) -do- (concrete surface)	1 km		2,459	2,154	1,436	3,590											3,590
c) Culvert (RC ø 300mm * 1)	5 place		4	4	16	20											20
				3,014	2,736	5,750											5,750
Sub-Total of 1.2																	
				5,439	6,244	11,683											11,683
1.3 Rural Infrastructure Development																	
1) Rural Roads Development																	
a) Improvement (Barangay road with gravel surface)	4.5 km		984	1,771	2,657	4,428											4,428
b) Upgrading (Barangay road with concrete surface)	2.3 km		2,859	4,001	2,667	6,668											6,668
c) Creek crossing (sallyway type, RC ø 300mm*1, L=10m)	1 place		97	39	58	97											97
d) Culvert (RC ø 300mm)	5 place		4	4	16	20											20
e) Public transport vehicle	1 lot		300	240	60	300											300
				5,055	5,458	11,513											11,513
2) Rural Water Supply Development																	
a) Deep well with hand pump (level-1)	9 place		240	1,296	864	2,160											2,160
																	2,160
3) Other Social Infrastructure Development																	
a) Rehabilitation/improvement of elementary school	1 lot		20	6	14	20											20
b) Construction of day care center	1 lot		180	54	126	180											180
c) Construction of barangay hall/multi-purpose center	1 lot		180	54	126	180											180
d) Rehabilitation/improve of barangay health center	1 lot		20	6	14	20											20
e) Paramedical supplies/equipment/facilities	1 lot		100	30	70	100											100
				150	350	500											500
4) Strengthening Motorpool for OIM Works																	
a) Supply of OIM equipment to Municipal Gov.	1 lot		15,000	15,000	0	15,000											15,000
				22,501	6,672	29,173											29,173
Sub-Total of 1.3																	
1.4 Post-Harvest Development																	
1) Agricultural Machinery																	
a) Sproyer	6 unit		2.9	17	0	17											17
b) Animal drawn plot	6 unit		1.2	2	5	7											7
c) Comb-tooth harrow	6 unit		1.0	2	4	6											6
d) Animal drawn sledge	6 unit		0.5	1	2	3											3
				22	11	33											33
2) Post-Harvest & Agro-Industry Facilities																	
a) Multi-purpose dryer	2 place		395.5	237	564	791											791
b) Mechanical Dryer	1 unit		106.0	32	74	106											106
c) Reeper	2 unit		90.0	54	126	180											180
d) Rice thresher (foot type)	7 unit		1.9	4	9	13											13
e) Rice thresher (engin type)	1 unit		48.5	15	34	49											49
f) Winnower	7 unit		2.0	4	10	14											14
g) Warehouse	1 unit		659.0	198	461	659											659
h) Rice agro-industry center	1 place		718.5	216	503	719											719
i) Corn shelter (hand type)	5 unit		12.5	778	1,815	2,593											2,593
				800	1,826	2,626											2,626
Sub-Total of 1.4																	
1.5 Institutional Development																	
1) Community Development Program																	
a) Pick-up	1 unit		390	390	0	390											390
b) Motorcycle	1 "		80	80	0	80											80
c) Office furniture/equipment	1 lot		200	470	200	670											670
				470	200	670											670
Sub-Total of 1.5																	
Total				29,350	15,765	45,103	0	514	13,								





Table N.2-16 Breakdown of Project Costs for Marangog ARC (Region-VIII)

Description	Qty	Unit	Rate	Amount		Implementing Agencies										PCC	LGU	ARC	Total		
				F/C	L/C	Total	DAR	DA	DPWH	NIA	DTI	DOM	LGU	PCC	LGU					ARC	Total
1. Construction Cost																					
1.1 Agricultural Development																					
1) Nursery	500	sq m	0.02	0	10	10												10	10		
a) Land preparation for seed and seedling bed	20	sq m	2	6	32	40												40	40		
b) Compost house	9	sq m	3.5	6	25	32												32	32		
c) Office and warehouse	1	lot	60	54	107	162												60	60		
d) Machinery and tools																		10	162		
2) Training & On-farm Demonstration Farm																					
a) Farm Preparation	3	ha	40	0	120	120												100	120		
b) Motorcycle	2	unit	25	50	0	50												50	50		
c) Office furniture/equipment	1	lot	25	0	25	25												25	25		
d) Office furniture/equipment	1	lot	50	50	145	195												100	195		
3) Carabao Dispersal																					
a) Carabao (female)	15	head	20	0	300	300												300	300		
b) Carabao (male)																		300	300		
4) Carabao Mini Breeding Station (Bul Camp)																					
a) Carabao (male)	1	head	40	0	40	40												40	40		
b) Animal shed	50	sq m	3.5	35	140	175												175	175		
5) Poultry Incubator																					
a) Poultry incubator (kerosene type)	1	unit	60	0	60	60												60	60		
b) Poultry incubator (kerosene type)				138	812	951												80	951		
Sub-Total of 1.1																		340	951		
1.2 Agricultural Infrastructure Development																					
1) Irrigation Development																					
a) River intake	2	piece	200	120	280	400												400	400		
b) Concrete water tank (2.0m x 2.0m x 2.0m)	13	lm	44	195	377	572												572	572		
c) Pipeline (PE pipe, 100mm w/ fittings)	2,650	ld	0.86	2,508	0	2,508												2,508	2,508		
d) -do- (PE pipe, 75mm w/ fittings)	950	place	0.59	561	0	561												561	561		
e) -do- (PE pipe, 50mm w/ fittings)	990	lm	0	267	0	267												267	267		
f) -do- (PE pipe, 30mm w/ fittings)	1,680	lm	0	302	0	302												302	302		
g) Excavation and pipe installation	1	lot	200	0	1,829	1,829												1,829	1,829		
h) Pipeline river crossing	2	piece	200	120	280	400												400	400		
2) Farm Roads Development																					
a) New construction (gravel surface)	1.95	km	1,163	907	1,361	2,268												2,268	2,268		
b) -do- (concrete surface)	1.25	km	2,459	1,844	1,230	3,074												3,074	3,074		
c) Creek crossing (spitway type, RC, 300mm x 35, L=25m)	4	place	254	406	610	1,016												1,016	1,016		
d) Culvert (RC, 300)	10	place	4	8	32	40												40	40		
Sub-Total of 1.2																		6,398	6,398		
1.3 Rural Infrastructure Development																					
1) Rural Roads Development																					
a) Improvement (Barangay road with gravel surface)	7.9	km	984	3,109	4,664	7,773												7,773	7,773		
b) Upgrading (Barangay road with concrete surface)	1.7	km	2,899	2,957	1,971	4,928												4,928	4,928		
c) River crossing (spitway type, RC, 600mm x 30, L=100m)	1	place	1,910	764	1,146	1,910												1,910	1,910		
d) -do- (spitway type, RC, 600mm x 35, L=200m)	1	place	2,630	1,052	1,578	2,630												2,630	2,630		
e) Culvert (RC, 300)	10	place	4	8	32	40												40	40		
f) Public transport vehicle	1	lot	300	240	50	300												300	300		
2) Rural Water Supply Development																					
a) Rehabilitation of spring box (level-II)	1	piece	130	0	130	130												130	130		
b) Supply pipeline (GI pipe, 63mm w/ fittings)	30	lm	0.35	11	0	11												11	11		
c) -do- (GI pipe, 50mm w/ fittings)	410	lm	0.30	123	0	123												123	123		
d) -do- (GI pipe, 38mm w/ fittings)	1,570	lm	0.19	298	0	298												298	298		
e) -do- (GI pipe, 25mm w/ fittings)	2,420	lm	0.13	315	0	315												315	315		
f) -do- (GI pipe, 19mm w/ fittings)	160	lm	0.08	13	0	13												13	13		
g) Excavation and pipe installation	1	lot	0	360	0	360												360	360		
h) Water tank (V=3.6 cum)	2	piece	44	30	50	88												88	88		
i) Water quality analysis	1	lot	2	0	2	2												2	2		
j) Communal faucet (1.3mm x 2 faucets)	13	piece	7	91	0	91												91	91		
2) Other Social Infrastructure Development																					
a) Construction of barangay health center	1	lot	180	54	126	180												180	180		
b) Paramedical supplies/equipment/facilities	1	lot	100	30	70	100												100	100		
c) Expansion of barangay hall to multi-purpose center	1	lot	150	45	105	150												150	150		
4) Strengthening Motorpool for OHM Works																					
a) Supply of OHM equipment to Municipal Gov.	1	lot	15,000	15,000	0	15,000												15,000	15,000		
Sub-Total of 1.3																		15,000	15,000		
1.4 Post-Harvest Development																					
1) Agricultural Machinery																					
a) Hand tractor	1	unit	34.3	10	24	34												34	34		
b) Sprayer	5	unit	2.9	15	0	15												15	15		
c) Animal drawn plow	3	unit	1.2	1	3	4												4	4		
d) Comb-tooth harrow	3	unit	1.0	1	2	3												3	3		
e) Animal drawn wedge	3	unit	0.5	0	1	2												2	2		
2) Post-Harvest & Agro-Industry Facilities																					
a) Multi-purpose dryer	2	piece	395.5	237	554	791												791	791		
b) Mechanical dryer	1	unit	106.0	32	74	106												106	106		
c) Rice thresher (foot type)	1	unit	48.5	15	34	49												49	49		
d) Warehouse w/ solar dryer	1	unit	659.0	190	461	659												659	659		
e) Corn sheller (handy type)	2	unit	12.5	6	16	25												25	25		
Sub-Total of 1.4																		1,630	1,630		
1.5 Institutional Development																					
1) Community Development Program																					
a) Pick-up	1	unit	390	390	0	390												390	390		
b) Motorcycle	1	lot	200	0	200	200												80	200		
c) Office furniture/equipment	1	lot	470	470	200	670												200	670		
Sub-Total of 1.5																		670	670		
Total of Marangog ARC																					
2. Community Development & Support Services																					
2.1 Agricultural Support Services																					
2.2 Institutional Development																					
Total																					
3. Associated Cost																					
3.1 Pre-engineering Cost (5% of 1)																					
3.2 Administration Cost (10% of 1+2)																					
3.3 Consulting Services (refer to Table N.2-13)																					

Table N.2-17

Description		Qty	Unit	Unit Rate	Amount		Total	Implementing Agencies								Total
					F/C	L/C		ODA				PCC				
								DA	DAR	DPWH	NIA	DTI	DOH	LGU	ARC	
(P.000)																
1. Construction Cost																
1.1 Agricultural Development																
1) Nursery																
a) Land preparation for seed and seedling bed																
b) Compost house																
c) Office and warehouse																
d) Machinery and tools																
2) Training & On-farm Demonstration Farm																
a) Farm Preparation																
b) Motorcycle																
c) Office furniture/equipment																
3) Carabao Dispensal																
a) Carabao (female)																
b) Carabao (male)																
c) Animal shed																
d) Poultry incubator																
a) Poultry incubator (kerosene type)																
Sub-Total of 1.1																
1.2 Agricultural Infrastructure Development																
1) Irrigation Development																
a) Check intake																
b) Delivery canal																
c) Farm pond																
d) Distribution canal																
e) Other related structures																
(Silage area)																
f) Creek intake																
g) Distribution canal																
h) Other related structures																
2) Drainage Development																
a) Drainage canal																
b) Drainage culvert (RC = 300mm)																
c) Improvement of creek (small)																
d) Improvement of creek (large)																
e) Other related structures																
3) Farm Roads Development																
a) New construction (gravel surface)																
b) -do- (concrete surface)																
c) creek crossing (spillway type, RC = 600mm*2, L=25m)																
d) -do- (spillway type, RC = 300mm*5, L=25m)																
e) -do- (spillway type, RC = 300mm*7, L=10m)																
f) Culvert (RC = 600mm)																
g) Culvert (RC = 300mm)																
Sub-total of 1.2																
1.3 Rural Infrastructure Development																
1) Rural Roads Development																
a) Public transport vehicle (Silage & Delineation)																
2) Rural Water Supply Development																
a) Deep well with hand pump (level-1)																
b) Rural Electrification																
c) Electric power line construction (single phase)																
d) Other Social Infrastructure Development																
(Silage area)																
a) Paramedical supplies/equipment/facilities																
(Delineation area)																
b) Construction of primary school/bldg. (4)																
c) Construction of barangay health center																
d) Paramedical supplies/equipment/facilities																
e) Construction of day care center																
f) Expansion of barangay hall to multi-purpose center																
5) Strengthening Motor Pool for OIM Works																
a) Supply of OIM equipment to Municipal Gov.																
Sub-total of 1.3																
1.4 Post-Harvest Development																
1) Agricultural Machinery																
a) Hand Tractor																
b) Sprayer																
c) Animal drawn plow																
d) Comb-tooth harrow																
e) animal drawn sledge																
2) Post-Harvest & Agro-Industry Facilities																
a) Multi-purpose dryer																
b) Mechanical dryer																
c) Reaper																
d) Rice Thresher (engine type)																
e) Warehouse with solar dryer																
f) Corn agro-industry center																
Sub-total of 1.4																
1.5 Institutional Development																
1) Community Development Program																
a) Pick-up																
b) Motorcycle																
c) Office furniture/equipment																
Sub-total of 1.5																
Total of Silage ARC																
2. Community Development & Support Services																
2.1 Agricultural Support services																
2.2 Institutional Development																
Total																
3. Associated Cost																
3.1 Pre-engineering Cost (5 % of 1)																
3.2 Administration Cost (10 % of 1+2)																
3.3 Consulting Services (refer to Table N.2-1.3)																
Total																
4. Land Acquisition																
5. Physical contingency (10 % of 1+2)																
Grand-Total																



Table N.2-18

## Consulting Service Costs for Two Marginal Areas for Specified Implementing Agencies Concerned

Description	Quantity	Unit	Rate (000 P)	Total Amount		Implementing Agencies									
				FC (000 P)	LC (000 P)	ODA	DAR	DA	DPWH	NIA	DTI	DENR	DOH	LGUs	
1. Preparation Works (2 month)															
1.1 Foreign Currency															
Consultants Remuneration	2	month	750	1,500		1,500									
Out-of-Pocket Expenses															
International Travel Expenses	1	trip	42	42		42									
Reimbursable Cost Items and Others (10%)		LS		154		154									
Miscellaneous (10%)		LS		170		170									
Sub-Total				1,666		1,666									
1.2 Local Currency															
Consultants Remuneration	12	month	100		1,200		1,200								
Consultants Per Diem															
Foreign	2	month	115		230		230								
Local	12	month	80		960		960								
Living Allowance and Quarters															
Foreign	2	month	20		40		40								
Local	12	month	10		120		120								
Local Communication and Transportation		LS			291		291								
Printing of Report		LS			269		269								
Miscellaneous (10%)		LS			311		311								
Sub-Total					3,424		3,424								
2. Detailed Design and Construction Supervision (24 month)															
2.1 Foreign Currency															
Consultants Remuneration	4	month	750	3,000		3,000									
Out-of-Pocket Expenses															
International Travel Expenses	2	trip	42	84		84									
Reimbursable Cost Items and Others (10%)				308		308									
Miscellaneous (10%)				339		339									
Sub-Total				3,731		3,731									
2.2 Local Currency															
Consultants Remuneration	64	month	100		6,400	1,600	200	1,100	500	300	300	300	100	2,000	
Consultants Per Diem															
Foreign	4	month	115		460	460									
Local	64	month	80		5,120	1,280	160	880	400	240	240	240	80	1,600	
Living Allowance and Quarters															
Foreign	4	month	20		80	80									
Local	32	month	10		320	80	10	55	25	15	15	15	5	100	
Local Communication and Transportation		LS			627	184.4	18.4	101.4	46.1	27.7	27.7	27.7	9.2	184.4	
Printing of Report		LS			538	538									
Miscellaneous (10%)		LS			1,355	398.5	39.9	219.2	99.6	59.8	59.8	59.8	19.9	398.5	
Sub-Total					14,900	10,829	266.3	2,355.6	1,070.7	642.4	642.4	642.4	214.1	4,282.9	
3. Institutional Development and Support Services (42 month)															
3.1 Local Currency															
Consultants Remuneration (Local)	42	month	100		4,200									4,200	
Consultants Per Diem (Local)	42	month	80		3,360									3,360	
Living Allowance and Quarters (Local)	-	month	15		0									0	
Local Communication and Transportation		LS			1,003									1,003	
Printing of Report		LS			941			941						941	
Miscellaneous (10%)					951			91						857	
Sub-Total					10,460			1,033						2,425	
Total					5,597	28,781	2,680	5,425	2,356	1,071	642	642	642	214	13,708

Note: Schedule of consulting services is given in Figure N.2-1.

Table N.2-19 Disbursement Schedule of The Project Cost for Sappaac ARC (Region-CAR)  
(Unit: ₪' 000)

Work/Cost Items	1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	Total Cost
<b>A. Project Implementation Schedule</b>							
1. Administration							
2. Land Acquisition							
3. Pre-Engineering Works							
4. Consulting Services							
5. Construction Works							
a) Agricultural Development							
b) Agri. Infrastructure Develop.							
c) Rural Infrastructure Develop.							
d) Post-Harvest Development							
e) Institutional Development							
6. Community Development & Support Services							
<b>B. Project Cost</b>							
1. Administration Cost	820	815	815	815	815	815	4,895
2. Land Acquisition Cost	264	264	--	--	--	--	528
3. Pre-Engineering Works Cost	2,255	--	--	--	--	--	2,255
4. Consulting Services Cost	--	3,552	3,552	--	--	--	7,104
5. Construction Cost	--	--	--	--	--	--	951
a) Agricultural Development	--	951	--	--	--	--	951
b) Agri. Infrastructure Develop.	--	3,894	7,790	--	--	--	11,684
c) Rural Infrastructure Develop.	--	9,724	19,449	--	--	--	29,173
d) Post-Harvest Development	--	--	2,626	--	--	--	2,626
e) Institutional Development	--	670	--	--	--	--	670
6. Community Development & Support Services Cost	--	--	961	961	960	960	3,842
7. Physical Contingency	--	1,527	3,080	96	96	96	4,895
<b>Total</b>	<b>3,339</b>	<b>21,397</b>	<b>38,273</b>	<b>1,872</b>	<b>1,871</b>	<b>1,871</b>	<b>68,623</b>

Table N.2-20 Disbursement Schedule of The Project Cost for Cofcaville ARC (Region-II)  
(Unit: ₦'000)

Work/Cost Items	1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	Total Cost
<b>A. Project Implementation Schedule</b>							
1. Administration							
2. Land Acquisition							
3. Pre-Engineering Works							
4. Consulting Services							
5. Construction Works							
a) Agricultural Development							
b) Agri. Infrastructure Develop.							
c) Rural Infrastructure Develop.							
d) Post-Harvest Development							
e) Institutional Development							
6. Community Development & Support Services							
<b>B. Project Cost</b>							
1. Administration Cost	854	860	860	860	860	860	5,154
2. Land Acquisition Cost	508	508	--	--	--	--	1,016
3. Pre-Engineering Works Cost	2,385	--	--	--	--	--	2,385
4. Consulting Services Cost	--	3,552	3,552	--	--	--	7,104
5. Construction Cost	--	951	--	--	--	--	951
a) Agricultural Development	--	5,291	10,582	--	--	--	15,873
b) Agri. Infrastructure Develop.	--	8,110	16,222	--	--	--	24,332
c) Rural Infrastructure Develop.	--	--	5,872	--	--	--	5,872
d) Post-Harvest Development	--	670	--	--	--	--	670
e) Institutional Development	--	--	--	--	--	--	--
6. Community Development & Support Services Cost	--	--	961	961	960	960	3,842
7. Physical Contingency	--	1,503	3,363	96	96	96	5,154
<b>Total</b>	<b>3,747</b>	<b>21,445</b>	<b>41,412</b>	<b>1,917</b>	<b>1,916</b>	<b>1,916</b>	<b>72,353</b>

Table N.2-21 Disbursement Schedule of The Project Cost for Marangog-Leyte ARC (Region-VIII)  
(Unit: ₱'000)

Work/Cost Items	1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	Total Cost
<b>A. Project Implementation Schedule</b>							
1. Administration							
2. Land Acquisition							
3. Pre-Engineering Works							
4. Consulting Services							
5. Construction Works							
a) Agricultural Development							
b) Agri. Infrastructure Develop.							
c) Rural Infrastructure Develop.							
d) Post-Harvest Development							
e) Institutional Development							
6. Community Development & Support Services							
<b>B. Project Cost</b>							
1. Administration Cost	912	915	915	915	915	915	5,487
2. Land Acquisition Cost	183	183	--	--	--	--	366
3. Pre-Engineering Works Cost	2,551	--	--	--	--	--	2,551
4. Consulting Services Cost	--	3,552	3,552	--	--	--	7,104
5. Construction Cost	--	951	--	--	--	--	951
a) Agricultural Development	--	4,419	8,838	--	--	--	13,257
b) Agri. Infrastructure Develop.	--	11,487	22,974	--	--	--	34,461
c) Rural Infrastructure Develop.	--	--	1,686	--	--	--	1,686
d) Post-Harvest Development	--	670	--	--	--	--	670
e) Institutional Development	--	--	--	--	--	--	--
6. Community Development & Support Services Cost	--	--	961	961	960	960	3,842
7. Physical Contingency	--	1,754	3,445	96	96	96	5,487
<b>Total</b>	<b>3,646</b>	<b>23,931</b>	<b>42,371</b>	<b>1,972</b>	<b>1,971</b>	<b>1,971</b>	<b>75,862</b>



Table N.2-22 Disbursement Schedule of The Project Cost for Silae ARC (Region-X)  
(Unit: ₹' 000)

Work/Cost Items	1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	Total Cost
<b>A. Project Implementation Schedule</b>							
1. Administration							
2. Land Acquisition							
3. Pre-Engineering Works							
4. Consulting Services							
5. Construction Works							
a) Agricultural Development							
b) Agri. Infrastructure Develop.							
c) Rural Infrastructure Develop.							
d) Post-Harvest Development							
e) Institutional Development							
6. Community Development & Support Services							
<b>B. Project Cost</b>							
1. Administration Cost	607	607	607	607	607	607	3,642
2. Land Acquisition Cost	249	249	--	--	--	--	498
3. Pre-Engineering Works Cost	1,629	--	--	--	--	--	1,629
4. Consulting Services Cost	--	3,552	3,552	--	--	--	7,104
5. Construction Cost	--	951	--	--	--	--	951
a) Agricultural Development	--	3,135	6,272	--	--	--	9,407
b) Agri. Infrastructure Develop.	--	6,426	12,854	--	--	--	19,280
c) Rural Infrastructure Develop.	--	--	2,284	--	--	--	2,284
d) Post-Harvest Development	--	670	--	--	--	--	670
e) Institutional Development	--	--	--	--	--	--	--
6. Community Development & Support Services Cost	--	--	961	961	960	960	3,842
7. Physical Contingency	--	1,118	2,236	96	96	96	3,642
<b>Total</b>	<b>2,485</b>	<b>16,708</b>	<b>28,766</b>	<b>1,664</b>	<b>1,663</b>	<b>1,663</b>	<b>52,949</b>

Table N.2-23 Summary of Construction and O & M Costs for Specified Implementing Agencies Concerned for Sappasac ARC

Description	DAR	DA	DPWH	NIA	DTI	DOH	PCC	LGU	ARC	TOTAL
1. Construction Costs ('000 peso)										
a. Agricultural Development		481					340	100	30	951
b. Agricultural Infrastructure Development				5,933				5,750		11,683
c. Rural Infrastructure Development			13,393			300		15,480		29,173
d. Post-Harvest Development		33			2,593					2,626
e. Institutional Development								670		670
Total (A - E)		514	13,393	5,933	2,593	300	340	22,000	30	45,104
2. Operation and Maintenance Costs (peso)										
a. Agricultural Development		4,810					3,400	1,000	300	9,510
b. Agricultural Infrastructure Development				59,340				57,500		116,840
c. Rural Infrastructure Development			133,930			3,000		154,800		291,730
d. Post-Harvest Development		1,000			37,300					38,300
e. Institutional Development								6,700		6,700
Total (A - E)		5,810	133,930	59,340	37,300	3,000	3,400	220,000	300	463,080

Table N.2-24 Summary of Construction and O&M Costs for Specified Implementing Agencies for Cofcaville ARC

Description	DAR	DA	DPWH	NIA	DTI	DOH	PCC	LGU	ARC	TOTAL
1. Construction Costs (" 000 peso)										
a. Agricultural Development		481					340	100	30	951
b. Agricultural Infrastructure Development				2,959				12,915		15,874
c. Rural Infrastructure Development			8,932			100		15,300		24,332
d. Post-Harvest Development		1,544			4,328					5,872
e. Institutional Development								670		670
Total (A - E)		2,025	8,932	2,959	4,328	100	340	28,985	30	47,699
2. Operation and Maintenance Costs (peso)										
a. Agricultural Development		4,810					3,400	1,000	300	9,510
b. Agricultural Infrastructure Development				29,600				129,130		158,730
c. Rural Infrastructure Development			89,320			1,000		153,000		243,320
d. Post-Harvest Development		128,100			293,300					421,400
e. Institutional Development								6,700		6,700
Total (A - E)		132,910	89,320	29,600	293,300	1,000	3,400	289,830	300	839,660

Table N.2-25 Summary of Construction and O & M Costs for Specified Implementing Agencies Concerned for Marangog ARC

Description	DAR	DA	DPWH	NIA	DTI	DOH	PCC	LGU	ARC	TOTAL
1. Construction Costs (' 000 peso)										
a. Agricultural Development		481					340	100	30	951
b. Agricultural Infrastructure Development				6,859				6,398		13,257
c. Rural Infrastructure Development			18,732			280		15,450		34,461
d. Post-Harvest Development		1,686								1,686
e. Institutional Development								670		670
Total (A - E)		2,167	18,732	6,859	-	280	340	22,618	30	51,025
2. Operation and Maintenance Costs (peso)										
a. Agricultural Development		4,810					3,400	1,000	300	9,510
b. Agricultural Infrastructure Development				68,600				63,970		132,570
c. Rural Infrastructure Development			187,310			2,800		154,500		344,610
d. Post-Harvest Development		17,800			13,300					31,100
e. Institutional Development								6,700		6,700
Total (A - E)		22,610	187,310	68,600	13,300	2,800	3,400	226,170	300	524,490

Table N.2-26 Summary of Construction and O & M Costs for Specified Implementing Agencies Concerned for Silae ARC

Description	DAR	DA	DPWH	NIA	DTI	DOH	PCC	LGU	ARC	TOTAL
1. Construction Costs										
a. Agricultural Development		481					340	100	30	951
b. Agricultural Infrastructure Development				4,332				5,076		9,408
c. Rural Infrastructure Development			1,920			560		16,800		19,280
d. Post-Harvest Development		51			2,231					2,282
e. Institutional Development								670		670
Total (A - E)		532	1,920	4,332	2,231	560	340	22,646	300	32,591
2. Operation and Maintenance Costs (peso)										
a. Agricultural Development		4,810					3,400	1,000	300	9,510
b. Agricultural Infrastructure Development				43,330				50,740		94,070
c. Rural Infrastructure Development			19,200			5,600		168,000		192,800
d. Post-Harvest Development		17,700			221,600					239,300
e. Institutional Development								6,700		6,700
Total (A - E)		22,510	19,200	43,330	221,600	5,600	3,400	226,440	300	542,380

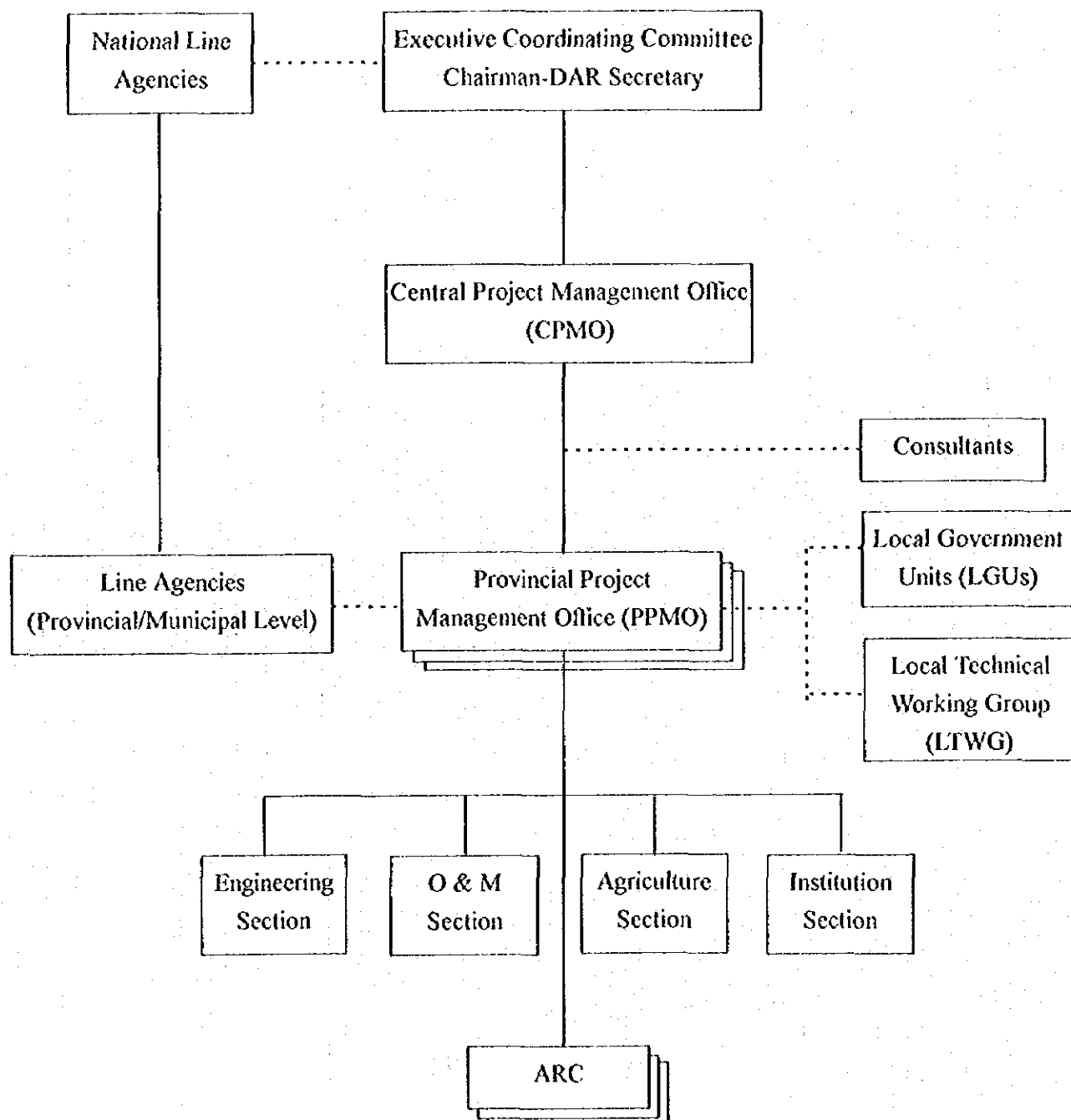
FIGURE N-2-1 PROPOSED SCHEDULE FOR CONSULTING SERVICES

Description	1st Year			2nd Year			3rd Year			4th Year			5th Year			6th Year			Man-Month	
																			Foreign	Local
1. Preparation Works																				
1.1 Institutional Capability Building & Social Preparation																				
1) Team Leader																			2	(12)
2) Rural Sociologist																			2	(12)
Total																				
2. Detailed Design and Construction Supervision																				
2.1 Detailed Design																				
1) Team Leader																			2	4
2) Rural Sociologist																			(2)	(2)
3) Agronomist																			(4)	(4)
4) Farming Organization and Agricultural Extension Expert																			(2)	(2)
5) Livestock Specialist																			(2)	(2)
6) Geologist																			(2)	(2)
7) Design Engineer																			(6)	(6)
8) Post-Harvest Expert																			(2)	(2)
9) Cost Estimator																			(2)	(2)
10) Economist																			(2)	(2)
11) Environmental Expert																			(2)	(2)
Sub-Total																			2	4(28)
2.2 Tender Procedure																				
1) Specialist for Tender Document and Specification																			(2)	(2)
Sub-Total																				(2)
2.3 Construction Supervision																				
1) Project Engineer (Leader)																			2	16
2) Agronomist																			(4)	(4)
3) Rural Sociologist																			(8)	(8)
4) Structure Engineer																			(8)	(8)
Sub-Total																			2	16(20)
Total																			4	16(48)
3. Institutional Development and Support Services																				
1) Rural Sociologist																			(18)	(18)
2) Support Service Expert																			(24)	(24)
Total																				(42)
Grand-Total																			6	20(102)

Note :  
 — : Foreign Consultants  
 — : Local Consultants

FIGURE N.2-2

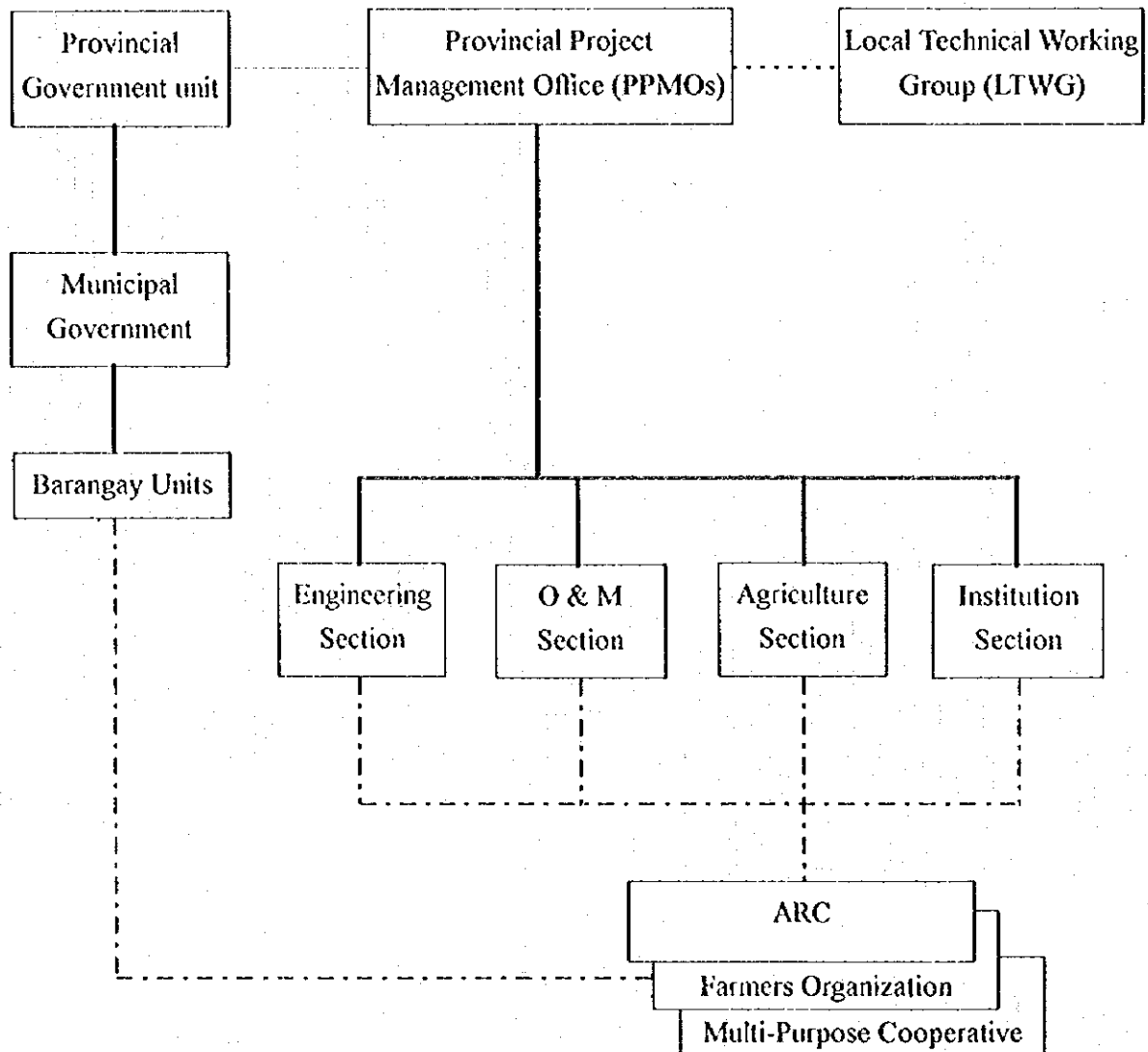
PROPOSED ORGANIZATION CHART FOR PROJECT IMPLEMENTATION



———— Control/Supervisor  
 ..... Tight Support/Monitoring

FIGURE N.2-3

ORGANIZATION CHART FOR O&M



- Control/Supervisor
- - - - - Tight Support/Monitoring
- ..... Coordination/Participation /Extension