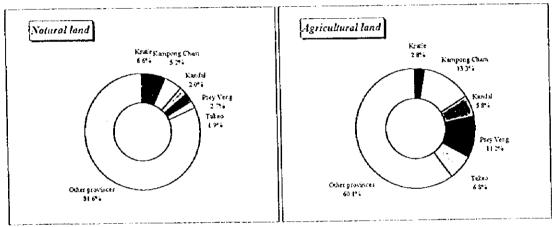
# TABLES AND FIGURES

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Items		Year	Kratie	Kampong Cham	Kandal	Prey Veng	Takeo	Other provinces	Cambodia
Actual Figures									
Natural land	(km <sup>2</sup> )	1992	12,061	9,358	3,663	4,847	3,430	148,176	
		1973	821	3,324	1,086	2,552	2,113	21,134	31,030
Agricultural land	(km <sup>2</sup> )	1985	735	4,306	1,526	3,547	2,150	19,756	32,020
•••		1992	1,096	5,218	2,276	4,390	2,644	23,520	39,144
Distribution									<u> </u>
Natural land		1992	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		1973	6.8%	35.5%	29.6%	52.7%	61.6%	14.3%	
Agricultural land		1985	6.1%	46.0%	41.7%	73.2%	62.7%	13.3%	
		1992	9.1%	55.8%	62.1%	90.6%	77.1%	15.9%	21.6%

Table E.I.1 Land Data of Kratic, Kampong Cham, Kandal, Prey Veng and Takeo

Source: The Cambodia Land Cover Atlas 1985/87 - 1992/93, Mekong Secretariat and LUMO, MAFF



Source Table E 11.

Figure E.1.1 Natural and Agricultural Land Distribution of the five provinces

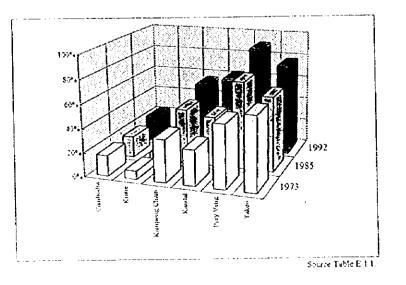
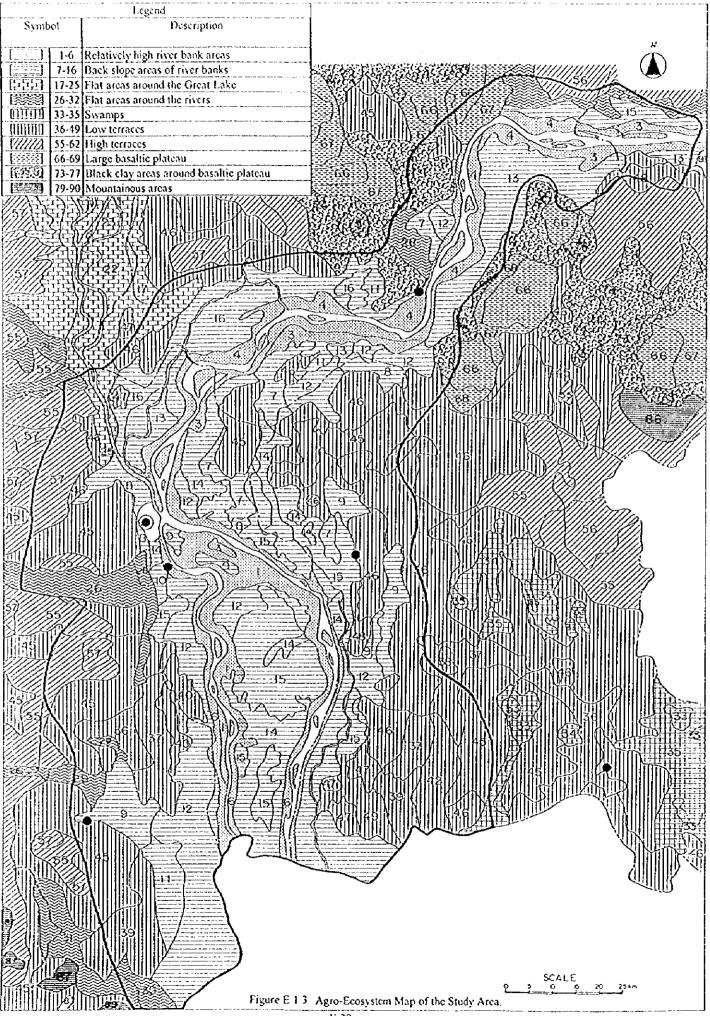


Figure E.J.2 Ratio of Agricultural I and by Province



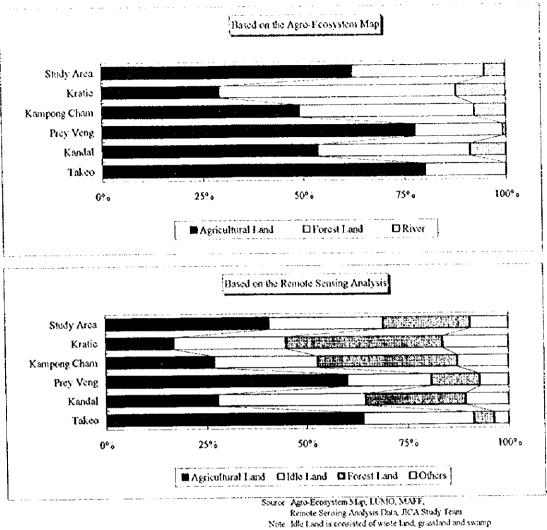
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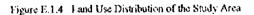
Table E.1.2. Land Use Data by Major Vegetation in the Study Area Based on the Agro-Ecosystem Map

E-39

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1.347     1.000     329     4451     31     321     34     452     33     04     071     31     06     03     34     42     03     06     01     11     24     24     20       113     87     28     71     24     29     33.3     0.4     0.7     11     0.8     07     29     30.5     342     0.3     0.6     01     11     24     24     0.0       F     113     87     29     36.3     0.4     0.7     10     05     34     4.2     0.3     0.6     01     11     24     24     0.0       F     Rescanse pade     Cr     Creats and annual crops     F     Fortest     2.9     30.5     34.2     0.6     0.1     11     24     24     0.0       F     Rescan pade     Cr     Creats and annual crops     F     Fortest     7.2     29     30.5     34.2     0.6     0.1     11     24     24     0.0       F     Rescan pade     Cr     Creats and annual crops     F     Fortest     7.2     29     30.5     34.2     0.6     0.1     11     24     24     24     0.0	$\frac{1.347}{113} \frac{1.000}{87} \frac{329}{28} \frac{345}{71} \frac{340}{29} \frac{31}{83} \frac{31}{04} \frac{341}{07} \frac{341}{29} \frac{341}{37} \frac{341}{29} \frac{321}{37} \frac{341}{08} \frac{321}{05} \frac{341}{34} \frac{321}{05} \frac{341}{03} \frac{321}{05} \frac{341}{05} \frac{321}{05} \frac{341}{05} \frac{321}{05} \frac{342}{05} \frac{331}{05} \frac{321}{05} \frac{341}{05} \frac{341}$	Somong	0					5			_	-	ł	-1		1	5	1	ſ	11		Ł	1	y.		4-			\$10; \$
113  87  28  71  24  29  353  04  07  11  08  29  37  06  02: 0.8  0.7  29! 30.5  342  95  92! 25  92  92  92  92  92  92  92  92  92  92	115  87  28  71  24  29  353  04  07  11  08  29  37  06  02: 08  07  29: 303  342  96  02: 34  4-1 93  94  F Legend of Major Vegetation R Wet settom paddy Cr Cereals and annual ctops F Fortest F Floatme rice Be Blash	TOTAL		-	L.	-		<u>8</u> 45			-1	18			1	1	3		۱,	5					- E -				5
F Legend of Major Vegetation R Wet satison paddy Cr. Cercel's and annual crops F FR Floating from C B Bubber DR Provesson paddo R R Rubber	<ul> <li>Legend of Major Vegotation</li> <li>R. Wet scasson paddy</li> <li>Ct. Correals and annual ctops</li> <li>F. Flowing new</li> <li>B. Flowing new</li> </ul>	Distribution (*•)	ĺ	ļ	<u>i</u>				24			0.7			3 7	- 1	0.8		ľ	4				57		-		1	
R Wet season peddy Cr Corceals and annual crops F FR Floating noc DR Fry wasan meddy Rb Rubber	R Wet season paddy Cr. Coreals and annual crops F CP Eleanne new Br Bush	urce Auro-bcosv-	tem Map, Li	MO, M	21			egend of	(Major V	egelation																			
<u>ሕ ኢ</u>	ስ ስ		-					R K	ct season	poddy			kd annual	crops		rest													
Drv wason naddv – Rh								FP FL	oating no			fish																	
and inverse (in	Dry season paddy Rh								TV season	onddy		ubber																	
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		Ag	ricultural L	and			I sle I	and		
Province	Dry Season Paddy	Wet Season Paddy	Upland Crops	Plantetion	Sub Total (A)	Waste Tand	Grassland	Swamp	Sub Total	
Kratie	3,400	1,600	0	0	5,000	900	200	7,100	8,200	13,200
Kampong Cham	27,600	39,000	200	10,500	77,300	1,900	5,600	66,200	73,700	151,000
Prey Veng	132,700		400	100	183,200	1,600	7,900	53,900	63,400	246.60
Kandal	29,600	· · · · · · · · · · · · · · · · · · ·		1,300	112,100	800	19,600	121.100	141,500	253.60
Takco	12,700			0	98,200	2,800	18.000	21,200	42.000	140.20
Tetal	206,000			11,900	+75.800	8.000	51,300	269,500	328,800	\$04.60

#### Table E.I.4 Agricultural Land Use Distribution in the Study Area

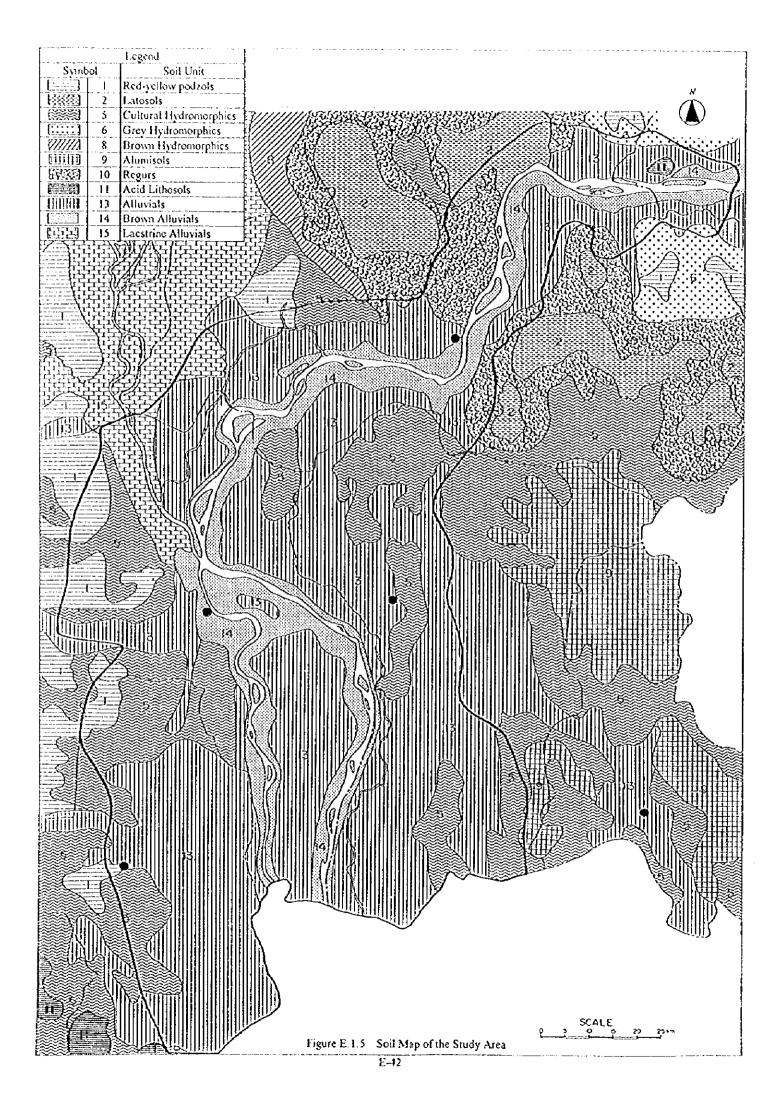
Source Remote Sensing Analysis, ECA Shidy Team

As	gro-	Eco	\$\$\$	tem	$M_{i}$	p
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(Unit : ha)

			Ma	jor Vegetat	ion				
Province	Dry Scason Paddy	Wet Season Paddy	Hoating rice	Rice and cereals	Cercals annual crops	Rubber	Tetal (C)	Ratio of (A) (C)	Ratio of (B) (C)
Kratic	0	6,800	0	0	2,500	0	9,300	54°o	1.42° o
Kampong Cham	0	69.600	19.300	7.500	46.600	3,500	146,500	53° o	103%
Prev Veng	15,700	216.700	23.200	0	0	0	255.600	72° o	96° e
Kandal	2.800	129,200	5.600	0	57,300	0	194.900	58° o	130°e
Takco	14,400	102,400	15,900	0	300	0	133,000	74%	105%
Total	32,900	524,700		7.500	106.700	3.500	739.300	64° 0	109%

Source Agro-Ecosystem Map. LUMO, MAFF



				1.5 Soit								(Unit	: km²)
Soil Unit	Red-yellow podzols	I atosols	Cultural Hydromorphics	Grey Hydromorphics	Brown Hydromorphics	Numisols	Regurs	Acid Lithosols	Aluvials	Brown Altuvials	sleivult. Alluvials	River	Total
Symbol	1	2	5	6	8	9	10	11	13	14	15		
Cratie	0	0	0	24	0	0	0	15	144	73	0	38	294
Campong Cham	64	110	185	37	9	0	511	0	1,271	554	71	206	3,018
O Reang Ov	0	6	18	0	0	0	59	0	21	0	0	0	10
Koh Sotin	0	0	5	0	0		0	0	67	61	0	0	13
Srey Santhel	0	0	60	0	0		0	0	179	122	0	0	361
Kang Meas	0	0	0	0	0		0	0	194	78	0 0	54	32(
Kroch Chhmar	0	0	0	10	0		17	0	230	125	0	8	39(
Thong Khmum	0	26	0	0	0	· · · · · · · · · · · · · · · · · · ·	115	0	5.4	35	0	3	23
Stung Trang	0	78	0	21	Û		142	0		40	0 0	64	45
Kampong Seim	0	0	0	0	0		149	0	106	93		60	408
Prey Chhor	10		97	0			29	0	76	0	0	<u>&gt;</u>	220
Cheung Prey	54	0	5	0			0	0		0	0	7	150
Batheay	0	0		0			0	0	131	0	71	<u> </u>	20 2
Dambe	<u> </u>	0	0	6			0	0	19	0	0	0	3.52
Prey Veng	0	0	1.080	0	· · · · · · · · · · · · · · · · · · ·			0		54	0		3,524 17
Peam Ro	0	0	·····	Ú				0		12	0	4 15	40
Peam Chor	0		27	0			0	0		42			40
Kanh Chreach	0			0			0	0		0		0	30
Sithor Kandal	0	0						0		0	• • • • • • • • • • • • • • • • • • • •	U ()	55
Pearcang				0						0		0	24
Kampong Leav	0			0			· · · · · · · · · · · · · · · · · · ·			0		0	45
Prey Veng	0		· · · · · · · · · · · · · · · · · · ·				0	0				0	32
Ba Phnom	0			0						0		Ő	5
Kamehay Mear	0					) 14 ) 82	0			0		ő	40
Kampong Travek	0											- v	46
Prea Sdech	0											0	11
Measang	204	1		+			· · · · · · · · · · · · · · · · · · ·				L	288	3.46
Kandal Ksach Kandal													28
	0								129				26
Muk Kampoul	0						·		233	· · · · · · · · · · · · · · · · · · ·			4
Lvea Em	0			(a) (1) (1) (1) (1) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2	<u>.</u>	0 (					<b>.</b>		39
Kean Svay													
Saang										106			37
Leuk Dek		· · · · · · · · · · · · · · · · · · ·											
Koh Thom Ponhea Leu	48		85							a server prove the second state			
Ang Snourl	142					****							
Kandal Stung	142												
Takeo	60		) 478			_+ _							
Bati	54		25										
Prey Kabass	(		) 234					j i			· · · · · · · · · · · · · · · · · · ·		
Angkor Berey	· · · · · · ·								) 294				
Borey Cholasa									17:	and the second s			
Treang			0 12				0		0 10				
Trankek							ő Ö		8				
Sounong			6						0 U				
TOTAL	32					9 10		-					
Distribution (%)	2.												

### Table E.1.5 Soil Distribution in the Study Area by Soil Map

Source : Soil Map. LUMO, MAFF



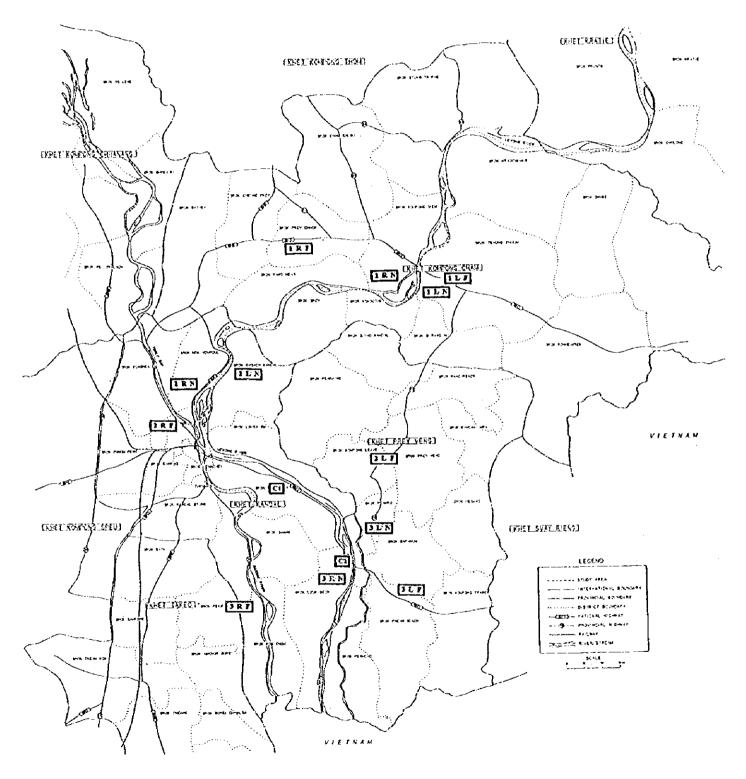


Figure E.1.6 Map of Soil Samples for Chemical Analysis

				NHN.	N-07	P.O.	С, Ж	CaO	0 <sup>g</sup> M	Fic	M	NaCl	с ц	Color
Site	100mixs	_	5					Contraction of	Entranceble	Available (	(Exchanocable	(Salts)	(Electric	
		(KCI)	(OH)	$(KCI)   (H_2O)   (Ammonia)$	(Nitrate	(Available	(Exchangeable	(Exchangeable (Exchangeable (Exchangeable	(ENCRAINGCAOLO					
	_			Nitrogen)	Nitrogen)	Phosphorus)	Potassium)	Calcium)	Magnosium)	[ron]	Manganeec)		Conductivity	
				(lion a (10)	(Inc/100e soil)		(me/100g soil)	(mg/100g soil)	(mg/100g soil)	(uudd)	(mdd)	(%)	( μ S/cm)	
			4	Tros Mont Mill	in a south in	4		100	75	Ŷ	Ŷ	0.01	72.1	7.5YR2/3
	1 L F	6.8		1				~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	5	Y	2	0100	1.0	10YR3/3
	1 R F	6.0	4.7	V	V	\$	10	00	10	2				2/20220
	л г с	2 T	5 3	5	V	Ŷ	s	\$0	1	20	Ŷ	<00.0>	0.41	0/CVI AT
-	4 4 4 6 4 6			1	1	\$	5	70	6	85	15	0.005	68.2	7.5YR3/3
Vew/	4 7					22 22	15	<\$0	[	20	۷ ک	≪0.005	32.2	7.5YR5/6
Hon		1	2.0			Y	15	55	25	30	Ŷ	0.01	201.9	7.5YR3/4
Mckong	3 R F		70	7	,		Y I	001	75	85	15	0.010	201.9	•
River	Man.	6.8	4	•	*						5	Sec.	1	
	Yün	4	4.7	1	•	Ś	S	09 0		07				
		< <b>x x x</b>	\$ 5		-	5.7	9.7 <b>**</b>	73.8	19.7	38.8	10.0	0.00	0.co	
				7	7	V	15	75	15	7	Ŷ	<0.005	110.5	7.5 YR3/4
_	22				1		20	70	10	100	Ŷ	0.005	84.9	7.5YR3/4
	χį.	<u>, , , , , , , , , , , , , , , , , , , </u>				× ×	35	8	10	60	Ŷ	<0.005	24.3	7.SYR3/3
	-	4			7	) *	20	150	10	10	<5	<0.05	112.2	2.5Y4/2
Mong	_	0.1	<u>, ,</u>		75		10	<50	1	10	5	0.010	16.2	7.5YR5/6
Mckong	16		) t ) t			10	20	100	10	\$	5	10'0	99.0	7.5YR3/3
Kiver	х Л Л	- 1	1 0	7	7		20	150	15	100	~	0.010	112.2	T
	Mak	7.7	c./	•		~		04	1	6	5	0.005	16.2	1
	ЧŸ	4.7	4	•	-			020	03	37.4	5.0	0.008	74.5	•
	Avg.	 9	6.2	•	•	C. '	10.5	0.07			X	200 00 200	81.1	7.5YR3/5
Control		7.5	>7.5	V	⊽	Ŷ	70			2	) r		80.5	10VR3/4
	2	3.5	4	v	v	7	15	001	^	1	` 	V.VIV	2.20	

Table E.1.6 Results of Soil Analysis of 14 Samples by Portable Analyser

Note: \*\* means statistically significant at 5% level.

od Land Use

Toestion and Land Use	and Lar					
	Course and			Location		Land Use
010	21112					111.at Doddy
		L F Kampong Cham	Thong Khroum Toul Pres Hea	[ou] Pres Flea	Ehro	
	1 0 1	D F Kamono Cham	Prev Chhor	Trapang	Trapang Kra	Wet Paddy
1.2.2		Dom Vone	Prev Vene	Mebon	Mebon	Wet Paddy
Vial-one	2 D 1 C	Dhom Perh	Russi Kev	Knownh	Knoumh	Wei Paddy
Direction	4	F Drov Vene	Prea Sdoch	Romchak	Chong Roas	Wet Paddy
	ייי גע זע	Kandal	Noh Thom	Svey Ta Mck	Prek Doung	Dry paddy
		1 MIXamone Cham	Thong Nhmum	Tonic Boet	Donmao Kraum	Upland Field (upland paddy)
A1000	6	P. N.V. amone Cham	Kampong Seim Koh Roka	Koh Roka	Tamcang	Dry paddy
Malano	- 10	2 1 N Kandal	Ksach Kandal Prea Tamea	Prea Tamca	Kompong Romrai	Wet Paddy
Pint		P N Kandal	Muk Kampoul Bak Keng	Bak Keng	Bak Keng	t'pland Field (maize)
		N Prov Vone	Pcam Ro	Babaung	Choukeboy	Wot Paddy
		Landal	Louk Dek	Prck Ton Loap	Spean Dek	Upland Field (preparation)
Control	- -	L'anda!	Nion Svav	Bonca Dek	Prek Pol	Colmatage Canal
	- C	Kandal	Leuk Dek	Kampong Phum Mai	l Nrau	River Bank
	•					

Sitc	Symbol	Soil		Particle :	Particle Size Distribution	mbution		ų	N.L.	Š	CEC	Ça²t	×3W	K.	Na <sup>*</sup>	Base	1-P_0,	A-P2Os		ЧĊ
		Mowture	Clay	Fure Silt	Sih	Pine Sand	Sand	(Total (	(Total)	(Carbon- (	(Cation Exchange	(Evchangeable	(Exchangeable	(Exchangeable	(Exchangeable	Saturation	(Total	(Available	(0 1-0 1-0	(CK)
								Carbon)	Nitrogen)	Nitrogen	Capacity)	Calanum	Magnesum)	Potessum);	Sodium		Inordeord	Phosphonus		
		(°°)	( a, b)	(0,0)	(°,0)	(0, <sub>0</sub> )	( 0,0 )	ŝ	(o.,,)	Ratio)	(meg/100g soil)	(meq/100g soil)	(meq.100g.soil)	(meq/100g soil)	(meq/100g soil)	(0.0)	(%)	(mdd)		
	ILF	5.5	47.5	20.6	8.1	6.8	6.7	17,44	1.61	10.82	24.60	11.60	4.50	2.93	0.42	79.1%	0.800	195	5.8	6.4
	IRF	0.5	12.5	19.0	19.5	15.1	32.0	7.87	0.62	12.75	7.95		2.25	0.72	0.13	61.0%	0.107	24	5.1	4
	2 L F	1.5	30. 1	38.2	25.5	24.3	2.6	4.09	0.34	11.92	5.60		1.25	0.73	0.20	52.3%	0.061	5	\$ 7	
Away	2 R F	00	49.4	25.1	3.9	1	3.7	25.16	2.74	9.17	24.70	5.16	4.25	2.50	1.37	53.8%	0.235	55	4.6	
trom.	SLF	2.0	10.8	27.1	212		4 1	10.18	0.72	14.14	5.60		1.00	1.17	0,17	73.0%	0.063	12	5.3	4
Mckong	3 R F	0.6	34.6	19.7	5.6	1	0.3	15.64	1.10	14.25	19.62	7.75	3.00	4.37	0.18	78.0%	0.970	169	5.5	5.3
River	1	5.5	49.4	49.7	25.5	34.7	32.0	25.16	2.74	14.25	24.70	11.60	4.50	4.37	1.37	79.1%	0.970	195	5.8	1 53
	.eW	0.5	7.8	19.0	1	3.1	50		2.0	9.17	5.60	0.75	00'1	0.72	0.13	52.3%	0.061	7	4.6	5.6
	Ave	45	27.1	29.91	-		8.4	1.1	1.19	12.17	14.68	4.79	2.71	2.07	0.41	66.2%	0.375	77	5.2	
-16	L L L		16.6	25.3	30.3	25.9	0.2	8.27	0.69	12.05	10.70	4.25	2.00	2.34	0.25	82.6%	0.480	64	5.6	4.9
	I R N	1	40.7	42.1	11.5	1		22.67	2.68	8.47	19.40	6.10	3.50	3.90	0.66	73.0%	0.750	081	5.2	4.5
	ы Г И	5.0	17.4	31.1	18.5		2	6.85	0.65	10.52	9.50	3.25	1.25	2.44	0.27	75.9%	0.362	150	5.5	1.1
Nong	N N N	1.0	18.3	5 8	27.0			9.11	0.58	15.63	10.70	3.50	2.75	2.60	1.34	95.2%	0.395	8	7.0	
Mckong	3 T N	1.0	8.4	21.8	25.6		10.1	6.94	0.58	16.11	6.12	1.00	1.00	1.16	0.17	54.4%	0.900	10	5.0	4
River	3 R N	2.0	23.4	30,0	26.2	16.2	0.4	7.68	0 75	10.18	11.97	3.75	2.25	4.15	0.38	88.0%	1.000	151	6.2	6.1
	.XeM.	0.4	40.7	1.5	30.3	[	10.1	22.67	2.68	15.63	19.40	6.10	3.50	4.15	1.34	95.2%	1.000	180	7.0	6.5
	Υ. Έ	1.0	8.4	21.8	11.5	1	0.2	6.85	0.58	8.47	6.12	1.00	1.00	1.16	0.17	54.4%	0.362	10	5.0	7
	Avg.	<u>4.</u> [	20.8	28.8	23.2		2.0	10.25	0.99	11.46	11.40	3.64	2.13	2.77	0.51	78.2%	0.648	105	5.8	5.2
Control C		1.5	16.6	7 [7]	23.8	4.2	1.4	9.90	0.72	13.74	10:20	3.75	2.50	2.44	0.12	86.4%	1.170	165	6.6	¢
	c 2	4.5	11.3	8.9	11.4	64.4	1.5	3.53	0.27	12.89	8.43	3.50	1.75	1,74	0.18	85.1%	0.430	62	6.3	6.9
				Í																

Table E.I.7 Results of soil analysis of 14 samples by Soil Laboratory, DOA

Note: Analysis is conducted by Soil Laboratory, Department of Agronomy, MAUF.

	Paddy	÷	Additional		Population	Balance of
Item	production	paddy for	food	available for		food's
		consumption(1)	crops	consumption(2)		rice(3)
	(ton)	(ton)	(ton)	(ton)	(person)	(ton)
		1	992/93			<u></u>
Kandal	171,430	145,730	24,000		886,770	29,300
Kampong Cham	242,000	205,700	20,000	147,530	1,441,700	-86,020
Prey Veng	264,450	224,800	8,000	147,380	942,800	-5,360
Takeo	297,400	252,790	11,000	167,730	694,700	55,180
Kratie	47,090	40,030	6,000	30,820	228,000	-6,110
Other Provinces	1,186,610	1,008,730	30,000	655,410	4,494,430	-131,290
Total	2,221,000	1,888,000	100,000	1,270,560	9,430,000	-257,100
		1	993/94			
Kandal	166,635	141,640	23,675	111,491	\$89,050	-32,535
Kampong Cham	283,645	241,099	20,100	169,581	1,412,300	-59,211
Prey Veng	272,007	231,206	7,600	150,948	925,525	1,015
Takeo	309,455	263,037	11,800	174,883	626,910	73,323
Kratie	42,279	35,937	5,800	28,081	231,000	-9,341
Other Provinces	1,299,104	1,104,237	30,770	715,445	4,505,455	-14,489
Total	2,383,350	2,025,847	99,975	1,356,047	9,500,000	-183,000
		1	995/96			
	Paddy	Remaining	Converted	Population	Food	Balance
	production	paddy for	into milled		requirement	
		consumption(1)	rice(2)		per year(4)	
	(ton)	(ton)	(ton)	(person)	(ton)	(ton)
Kandal	249,125	211,756	131,289	984,400	148,841	-17,552
Kampong Cham	325,000	276,250	171,275	1,513,500	228,841	-57,566
Prey Veng	549,625	467,181	289,652	990,300	149,733	139,919
Takeo	437,312	371,715	230,463	753,300	113,899	116,564
Kratie	44,350	37,698	23,373	228,500	34,549	-11,176
Other Provinces	1,826,605	1,552,614	962,621	5,174,570	782,395	180,226
Total	3,447,827	2,930,653	1,817,005	10,500,000	1,587,600	229,405

Table E.1.8 Estimation of Food Production by Province, 1992/93, 1993/94 and 1995/96

Note: (1)-Totally 15% deduction (8% for seed, 2% for animal feeds, 5% for post-harvest loss) (2)-Conversion rate from paddy to rice : 62%

(3)-Average annual consumption of milled rice : 162 kg/person

(4)-Average annual consumption of milled rice : 151.2 kg/person

Source : Bulletin of Agricultural Statistics and Studies, Dep't of Planning and Statistics. MAFF. Agricultural Statistics 1995. Dep't of Planning and Statistics. MAFF.

PADDY	80.81	81 82	82 83	83 84	84 85	85 86	86 87	87 88	88 89	89.90	90 91	91-92	92.93	93.94	9195	95 96
Cultivated Area (1000hn)	<u></u>		ì	Î	Î		î			1		1				
Dry season												1				
Phnom Penh	0.3	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.8	0.6	1.3	1.3
Kandal	25.0	34.0	32.0	28.5	30.0	30.0	30.0	32.0	37.0	36.0	36.0	38.0	34.0	39.1	38.8	44.3
Kompong Cham	10.0	17.0	16.0	15.0	16.0	14.5	12.0	15.0	19.0	20.0	21.0	19.0	19.0	19.5	20.4	23.6
Proy Veng	15.0	31.0	29.0	22.5	23.0	20.0	25.0	22.0	26.0	25.0	27.0	27.0	27.0	30.0	31.6	56.7
Takco	23.5	38.0	26.0	33.0	31.0	32.0	30.0	33.0	36.0	39.0	39.0	49.0	40.0	42.0	42.6	52.7
Cratic	3.5	5.0	4.0	4.0	4.0	5.0	6.0	6.0	6.0	5.0	5.0	6.0	5.0	5.5	5.5	5.4
Other Provinces	17.7	24.5	20.5	12.5	14.0	14.5	18.0	20.0	19.0	19.0	21.0	18.0	17.2	18.3	26.9	32.1
Cambodia	95.0	150.0	128.0	116.0	119.0	117.0	122.0	129.0	144.0	145.0	150.0	149.0	143.0	155.0	170.0	216.0
Rainy season																
Phnom Penh	2.1	1.5	1.5	2.5	2.0	2.0	9.0	9.0	12.0	12.0	12.0	12.0	8.9	8.1	8.6	8.6
Kandal	55.0	52.0	54.0	52.5	46.0	48.0	37.0	32.0	45.0	61.0	\$7.0	57.0	47.3	45.2	45.0	48.5
Kompong Cham	137.0	135.0	139.0	145.0	130.0	120.5	142.0	110.0	143.0	159.0	157.0	160.0	160.8	161.9	170.0	167.5
Prey Veng	174.0	175.0	207.0	210.5	197.0	197.0	209.0	186.0	225.0	242.0	238.0	227.0	227.0	198.7	195.7	229.3
Takco	141.5	90.0	127.0	135.0	105.0	110.0	153.0	121.0	179.0	180.0	172.0	181.0	176.3	174.2	185.2	184.9
Kratic	14.5	13.0	15.0	16.0	21.0	18.0	19.0	18.0	23.0	24.0	24.0	23.0	22.2	22.3	26.3	21.3
Other Provinces	818.9	876.5	1,002.5	1,062.5	798.0	849.5	844.0	773.0	1,108.0	1,109.0	1,080.0	1,101.0	1,058.6	1,091.1	1,123.2	1,209.9
Cambodia	1,346.0	1,343.0	1,546.0	1,624.0	1,299.0	1,345.0	1,413.0	1,249.0	1,735.0	1,787.0	1,740.0	1,761.0	1,701.0	1,701.6	1,754.0	1,870.0
Harvested Area (1000ha)																
Phnom Penh	3.0	2.0	2.0	3.0	3.0	3.0	10.0	10.0	12.0	12.0	12.0	9.0	8.4	8.7	7.3	8.3
Kandal	80.0	65.0	84.0	75.0	52.0	77.0	66.0	63.0	69.0	91.0	90.0	92.0	74.0	81.1	66.0	87.8
Kompong Cham	147.0	140.0	150.0	155.0	86.0	135.0	154.0	124.0	157.0	177.0	175.0	175.0	179.3	181.1	141.4	191.1
Prey Veng	189.0	170.0	228.0	226.0	97.0	216.0	232.0	207.0	249.0	261.0	260.0	218.0	221.3	228.2	177.6	261.7
Takeo	167.7	106.0	148.0	163.0	89.0	142.0	182.0	154.0	213.0	212.0	210.0	185.0	203.4	207.4	189.1	229.9
Kratie	18.0	16.0	17.0	19.0	17.0	22.0	24.0	24.0	29.0	28.0	28.0	27.0	26.9	27.1	25.5	26.0
Other Previnces	835.3	\$18.0	986.0	971.0	634.0	855.0	852.0	788.0	1,096.0	1,080.0	1,080.0	1,013.0	971.8	1,090.1	887.1	1,119.2
Cambodia	1,440.0	1,317.0	1,615.0	1,612.0	978.0	1,450.0	1,520.0	1,370.0	1,825.0	1,861.0	1,855.0	1,719.0	1,685.0	1,823.6	1,494.0	1,924.0
Production (1000ton)																
Phnom Penh	3.3	3.0	4.0	6.0	6.0	4.0	13.0	16.0	19.0	23.0	19.0	19.0	12.0	10.2	12.3	15.8
Kandal	97.0	125.0	163.0	151.0	108.0	143.0	140.0	142.0	125.0	179.0	124.0	177.0	171.4	166.6	210.2	249.1
Kompong Cham	195.0	210.6	214.0	251.8	118.0	200.0	234.0	186.0	214.0	253.0	215.0	257.0	242.0	283.6	220.0	325.0
Prey Veng	201.0	185.0	267.0	280.0	154.0	228.0	320.0	240.0	310.0	357.0	310.0	275.0	264.5	272.0	205.3	549.6
Takco	166.0	118.0	154.0	204.0	120.0	187.0	268.0	225.0	314.0	331.0	314.0	293.0	297.4	309.5	242.1	437.3
Kratic	28.0	24.0	26.0	28.0	23.0	29.0	42.0	41.0	\$1.0	49.0	52.0	44.0	47.1	42.3	40.4	44.4
Other Provinces	1.026.7	823.4	1.121.0	1,118.2	731.0			965.0	1,467.0	1.480.0	1,466.0	1,335.0	1,186.6	1,299.1	1,292.7	1,826.6
Cambodia	1,717.0	1,490.0	1,949.0	2,039.0	1,260.0	1,812.0	2,093.0	1,815.0	2,500.0	2,672.0	2,500.0	2,400.0	2,221.0	2,383.4	2,223.0	3,417.8
Yield (ton ha)						T										
Phnom Penh	1.10			2.00	2.00	1.33	1.30	1.60	1.58	1.92	1.58	2.11	1.43	1.18	1.68	1.90
Kandal	1.21		1	2.01	2.08	1.86	2.12	2.25	1.81	1.97	1.38	1.92	2.32	2.06	3.18	2.84
Kompong Cham	1.33			1.62	1.37	1.48	1.52	1.50	1.36	1.43	1.23	1.47	1.35	1.57	1.56	1
Prey Veng	1.06	1.09	1.17	1.24	1.59	1.05	1.38	1.16	1.24	1.37	1.19	1.26	1.19	1.19	1.16	2.10
Takeo	0.99		1.04	1.25	1.35	1.32	1.47	1.46	1.47	1.56	1.50	1.58	1.46	1.49	1.28	1.90
Kratic	1.56		1.53	1.47	1.35	1.32	1.75	1.71	1.76	1.75	1.86	1.63	1.75	1.56	1.59	1.7
Other Provinces	1 23	1	1.14	1	1.15		1.26	1.22		1.37	1.36	1.32	1.22	1.19	1.46	1.63
Cambodia	1.19	1.13			of Planci		-	1.32	1.37	1.44	1.35	1.40	1.32	1.31	1.49	1.7

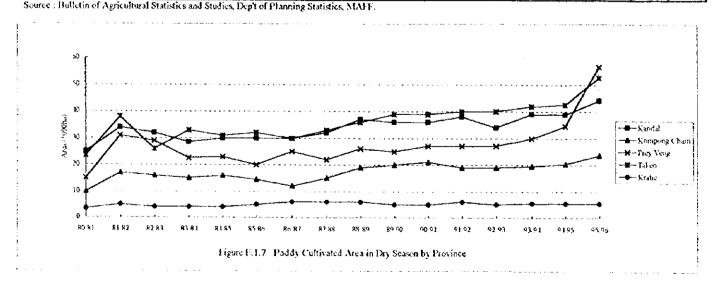
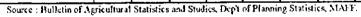
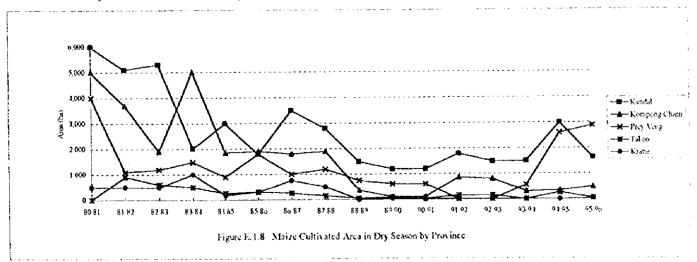


Table F.1.10 Cultivated Harvested Area, Production a	nd Yield of Maize by Province from 1980-81 to 1995-96
--	---

MAIZE	80 81	81 82	82.83	83 81	84 85	85 86	86 87	87 88	88 89	89 90	90.91	91.92	92 93	93.94	9195	95 96
Whin ated Area (ha)	ĺ	Ī					T						1			
Dry season		1					1			1						
Phaom Peah	100	60	60	70	60	20	100	50	40]	50	50	50	40	60	240	158
KanJal	6,000	5,100	5,300	2,030	3,000	1,800	3,500	2,800	1,500	1,200	1,200	.800	1,500	1,510	3,000	1.640
Kompong Cham	5,000	3,700	1,900	5,000	1,850	1,900	1,800	1,900	360	100	110	850	800	300	340	46
Prev Veng	4,000	1,100	1,200	1,500	900	1,800	1,000	1,200	750	600	600	0	0	550	2,600	2,87
Takco	0	900	600	500	250	300	250	150	50	90	20	150	140	U,	250	3
Kratic	500	\$00	500	1,000	180	300	750	500	0	40	0	0	0	5	0	2
Other Provinces	4,400	6,640	6,440	4,900	2,760	3,880	2,100	1,600	1,400	920	1,020	550	520	912	1,570	1,38
Total	20.000	18,000	16,000	15,000	9,000	10,000	9,500	8,200	4,100	3,000	3,000	3,400	3,000	3,337	8,000	6,58
Rainy season																
Phnom Perh	100	140	149	130	190	180	200	350	260	150	160	200	160	230	220	36
Kandal	9,000	9,400	20,000	8,570	10,800	13,000	11,000	11,000	15,400	15,400	11,260	17,450	17,040	15,500	15,700	15,49
Kompong Cham	40,000	40,300	28,100	16,400	11,500	11,600	10,200	10,000	11,640	11,900	10,390	13,300	12.800	9,840	10,260	11.17
Prey Veng	3,000	4,900	3,300	3,000	4,500	3,600	4,600	2,800	3,550	4,350	5,780	4,700	4,250	3,640	5,700	4,30
Takco	2,000	1,100	1.000	1.100	500	800	750	650	950	900	570	\$10	510	700	452	34
Kratic	3,500	2,500	2,500	1,200	1,920	2,000	1.850	2,000	3,000	4,460	4,340	4,250	4,200	2,205	2,100	2,37
Other Provinces	24,400	20,660	14,960	14,600	10,190	9,520	8,000	8,200	33,400	10,840	8,500	8,190	8,040	7,854	9,558	10,95
Total	82,000	-	70,000	45,000	39,600	40,700	36,600	35,000	48,200	48,000	44,000	48,600	47,000	39,969	44,000	45,00
Harvested Area (ha)	T	,														
Phnom Fenh	200	200	200	150	200	200	300	350	300	200	210	250	200	280	460	51
Kandal	15,000			9,000	10,100	14,000	13,800	12,970	16,750	15,970	14,370	18,400	17.640	17,000	15,200	14.70
	44,500	· ·		18,200	12,900	-				11,520	10,010	13,360	12,770	10,100	2,930	9,12
Kompong Cham Prov Mono	6,500				5.000		5,200	1	4,200	4,710	6,280	4,500	4,200	4,190	6,200	630
Prey Veng Takeo	2,000	· ·	· ·	950	700	· ·	1 '	1 '	750		580	650	610	700	700	37
	4,000		1	1.850	1,850	1 .	I		2,800	4,300	4,290	4,200	4,150	2,210	1,012	2,02
Kratie	28,800			14.850		1		· ·	10.300	11,330	9,260	8.640	8,400	8,433	10,498	12,00
Other Provinces	101,000						· ·			-	45,000			42,913	37,000	15,0
Total	101,000	/ 8J,000	1 01,000	49,000	4.,000	10,000	4.,000	10.000								<u>.</u>
Production (ton)	2.20	200	200	150	250	200	350	300	280	200	400	290	250	290	460	5
Phnom Penh	200								6		28,400		22,250			
Kandal	15,000		1	1	1			1 '			19,700		16.000	1 · · ·		· ·
Kompong Cham	44,000	1	-	•		1 1				4,700	12.120			1 ·		
Prey Veng	7,000					1 -					1,110		790			
Takco	2,000		1		1	1 1					8,430			E	1	
Kratie	4,000	1				•	1								5	
Other Provinces	28,80							1 1			88,000			•		
Total	101,00	0 85,000	51,000	43,000	1 43,000	42,000	1 31,000	/ 33,000	41,000	1 34,005	03,000	00,000		1	1	+
Yield (ton ha)				]				A.P.	0.93	1.00	1.90	1.16	1.25	1.04	1.00	1
Phnom Penh	1.0	1							4	1		1				-
Kandal	1.0					4				-				•		
Komeong Cham	0.9						1						1 · ·			
Prey Veng	1.0										1					
Takeo	1.0						-	-				•				E
Kratie	1.0		1		-			-					1		1	
Other Provinces	1.0												1			
Cambodia				-		ing Statist					1	1				





MUNGBEAN	80.81	81 82	82 83	83 84	84 85	85 86	86 87	87.88	88-89	89.90	90.91	91/92	92.93	93.94	94.95	95 96
"ultivated Area (ha)	حد مد مد	and a start of the start of the start of the start of the start of the start of the start of the start of the s	e antesses a			10 a a 7 a a a a a	ad in the second									
Dry season												1				
Panom Punh	0	0	0	ol	0	300	20	30	20	6	0	20	20	0	0	0
Kapdal	100	500	300	200	200	500	400	600	1,000	650	600	300	1,100	2,285	2,700	2.750
Kompong Cham	2,000	2,000	1,200	700	800	2.000	\$00	4,000	5,000	3,100	2,000	1.400	2,400	2,285	360	370
Prey Veng	0	200	100	600	100	400	600	200	400	490	700	150	2,400	20 940	1,100	1,200
Takco	100	1,000	400	1.000	300	400 500	400	400	200	300	500	500	400	10	520	1,200 530
Kratie	100	200	200	1.000	650	1,000	200	260	300	100	300	0	200	0		
Other Provinces	2,700	5,100	3,800	4,500	2,950	3,800	4,589	3.510	4.080	2,954	2,900	3,530	2,580	879	0	0
Total	5,000	9,000	6,000	8,000	5,000	8,500	7,000	9,000	4,080	7,600	7,000	5,900	7,000	-	5,320	5,390
Rainy season	7,000	3,005	0,000	0,000	3,000	0,500	1,000	9,000	11,000	/,000		3,300	7,000	4,134	10,000	10,240
Phoon Peah	0	0	0	900	400	500	70	60	30	14	0					
Kandal	500	1,100	900	2,000	400 800	1,500	1,900	1,400	2.000	14	2,800	40 900	40	1	0	6
	5,000	15,000	15,100	14,900	14,800	1,300	8,700	10,000	25,000	9,000	-		1,900	210	120	177
Kompong Cham Provi Venn	200	10,000 800	1,000	1,200	14,800	900	800	1,000	,		7,000	12,000	8,600	10,575	9,800	8,912
Prey Veng Takeo	1.000	2,000	1,900	1,300	1,900	1,800	900	1,000	1,100 800	1,510 710	1,300 1,000	450 1,900	900	136	440	9
Kratie	500	1,000	1,800	2,500	1,900	2,000	600	1,100	700	460	600 600	400	1,000	800	730	730
Other Provinces	7,800	15,100	15,300	14,200	14,350	13,800	10,030	9,310	8,370				600	400	440	355
Total	15,000	35,000	36,000	37,000	35,000		23,000	24,000	38,000	8,856 22,400	8,300	8,410	7,960	4,759	5,470	5,151
and the second sec	13,000	33,000	.30,000	37,000	33,000	34,500	2.,000	24,000	38,000	22,400	21,000	24,100	21,000	16,881	17,000	15,340
Harvested Area (ha)			_													
Phnora Penh	0	0	0	800	200		50	60	35	15	0	••	50	1	0	6
Kan3al	500	1,400	1,000	2,000	900		2,000	1,800	2,760	2,000	3,000		2,500	2,438	2,700	
Kompong Cham	5,800		16,000		15,000	1	9,000	13,700	28,600	11,000	8,800		9,800	10,595	10,100	9,200
Prey Veng	100	800	1,000	1.500	800		1,200	1,040	1,095	1,800	1,500	560	,	1,076	1,100	· ·
Takeo Kratis	1,000	2,700	,	,	2,000		<b>.</b> .	1,300	950	900	1,400	2,100	1,200	810	1,230	1,240
	400	800	1,400		2,000			1,150	715	350	200	200	650	400	430	
Other Provinces	8,200				14,100			9,950	9,845	9,935	9,600	9,740	8,750	5,505	10,440	
Ĩ ota]	16,000	39,000	37,000	49,000	35,000	39,000	26,000	29,000	44,000	26,000	25,000	27,000	24,000	20,825	26,000	25,150
Production (ton)										1						
Phnom Penh	0	-	-		50				14		0	20	30		0	( '
Kandal	200			1				<i>,</i>	1,300		2,000	750	1,120	1,166	1,900	
Kompong Cham	4,000	• ·	1 '			1 1			14,000	6,200	4,000	5,900	6,000	5,320	7,370	7,82(
Prey Veng	90						1		709	800	900	280	700	525	1,350	1,375
Takeo	500					- ,			700		700	850	800	407	670	
Kratie	200	1		,					447	200	200	80	300	200	210	170
Other Provinces	5,010				5,300	· · ·	-	· ·	4,830	5,291	4,200	5,120		3,269	5,500	7,15
Total	10,000	21,000	18,000	20,000	16,000	21,000	16,000	23,000	22,000	14,000	12,000	13,000	14,000	10,887	17,000	19,550
Yield (ton ha)	1	1	1		1		1									
Phaom Peah	0.00			1	0.25				0.40			0.40	0.60	0.00	0.00	0.8
Kandal	0.40			1					0.47	0.50	0.67	0.75	0.45	0.48	0.70	0.8
Kompong Cham	0.69								0.49	0.56	0.45	0.44	0.61	0.50	0.73	0.8
Ptey Veng	0.90								0.65	0.44	0.60	0.50	0.67	0.49	1.23	1.2
Takco	0.50	1							0.74	0.56	0.50	0.40	0.67	0.50	0.54	0.6
Kratie	0.50						0.60	0.78	0.63	0.57	0.29	0.40	0.46	0.50	0.49	0.5
Other Provinces	0.61	0.46	0.48	0.42	0.38	0.45	0.69	0.67	0.49	0.53	0.44	0.53	0.58	0.59	0.53	0.6
Cambodia	0.63	0.54	0.49	0.50	0.46	0.54	0.62	0.79	0.50							

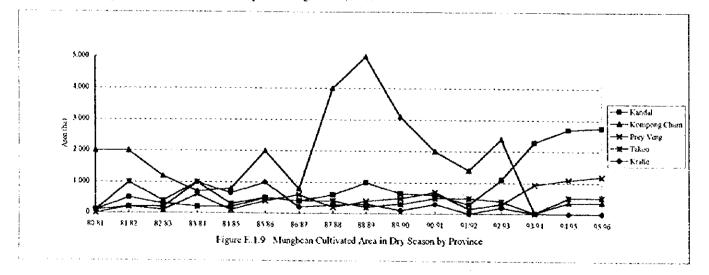
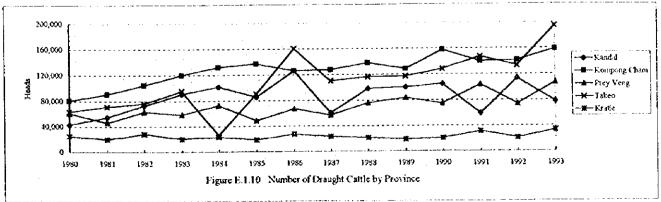


Table E.1.12 Animal Hasbandry by Province from 1980 to 1993

		1001	1022	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
	1980	1981	1982	1993	1984						أمشكك		*	
Cows						C 100	5,680	22,290	25,000	25,600	27,000	28,142	29,500	30,280
Phnom Penh	2,270	2,680	5,000	4,050	4,050	5,100		189,630	195,600	223,200	227,000	271,677	267,000	255,120
Kandal	60,380	97,090	134,800	142,300	166,600	171,500	178,670	-	274,100	285,100	343,000	325,581	333,000	339,270
Kompong Cham	130,000	125,700	165,700	191,000	201,500	274,000	285,560	280,140		185,400	160,000	164,793	175,000	183,850
Prev Veng	70,690	73,700	82,600	91,690	110,610	98,200	103,060	142,660	151,300	260,300	251,000	294,090	313,000	323 630
Takeo	81,580	106,250	125,500	149,200	191,000	181,400	190,400	226,050	231,000	· · ·	46,000	49,490	50,000	53,010
Kratie	32,000	28,800	28,990	31,100	36,640	36,000	42,000	38,930	42,100	40,600			1,300,500	1,356,840
Other Provinces	392,080	482,780	600,410	658,660	722,510	793,800	899,630	952,300	971,900	075,800	1,124,000	2 2 2 2 000	1,300,300	
Total	772,000	917,0001	1,143,000 1	,271,0001	,436,0001	,560,000	,705,000	1,852,000	1,891,000	2,095,000	2,181,000	2,257,000	2,403,000	2,342,000
Buffaloes												180	2,000	120
Phnom Penh	220	370	600	350	500	300	280	260	300	300	1,000			
Kandal	12,680	9,100	9,400	5,800	5,500	6,000	6,360	6,180	6,300	6,400	6,000	8,604	8,000	7,620
Kompong Cham	65,820	65,650	76,470	86,000	72,400	82,700	85,710	90,470	92,300	95,400	101,000	102,098	112,000	110,940
Prey Veng	38,700	74,800	73,630	88,000	153,000	106,200	110,690	109,260	110,600	126,400	105,000	124,664	132,000	134,530
Takeo	20,600	4,650	5,870	6,300	6,800	5,700	5,930	6,950	7,100	6,400	6,000	6,580		6,980
Kratie	24,800	25,600	25,900	25,800	24,300	27,700	29,030	31,450		33,400	36,000	40,840	-	42,910
Other Provinces	212,180	223,530	290,130	327,750	340,500	384,400	397,000	414,430	457,900	470,700	481,000	472,034		520,630
Total	375,000	404,000	482,000	540,000	603,000	613,000	635,000	659,000	709,000	739,000	736,000	755,000	804,000	823,730
Pigs														
Phnom Penh	300	2,970	7,010	\$5,750	9,600	32,000	15,700	33,000	18,500	20,800	20,000	21,797		32,730
Kandal	8,900	23,580	79,590	\$6,600	\$2,800	100,000	\$0,\$00	108,500	110,600	124,400	111,000	115,659		132,690
Kompong Chara	13,360	62,590	87,600	95,400	106,900	101,000	109,900	112,000	129,000	174,700	120,000	117,925	242,000	272,260
Prey Veng	24,750	1,250	48,500	69,690	75,200	208,000	81,000	207,000	99,800	152,300	100,000	144,834	183,000	206,960
Takco	6,490	36,590	75,700	97,600	137,400	102,000	82,900		139,900	167,200	125,000	151,885	190,000	394,440
Kratie	3,850	7,920	9,600	8,450	5,500	6,000	32,100	7,500	33,200	37,300	37,000	75,500	91,000	79,440
Other Provinces	73,350	95,100	-	450,510	591,600		758.600	678,500	969,000	1,060,300			1,163,000	
Total	131,000	233,000	723,000		1,009,000			1.251.000	1,500,000	1,737,000	1,515,000	1,550,000	2,043,000	2,122,680
Poultry	131,000	233,000	72.0,000	024,000	1,007,000	.,,	.,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<u> </u>				1	
Phnom Penh	800	44,560	75,800	93,900	88,900	130,500	133,900	145,500	165,000	189,300	208,000	668,353	206,000	220,590
	262,300	427,150			631,500		0.041,500	-			1 '	910,859	1,063,000	983,830
Kandal	1 1	•	· ·	1,004,280	755,400					1,126,400		965,370	1,128,000	1,397,290
Kompong Cham	302,700	· ·	59,560		341,300	631,500						· ·	1,024,000	
Prey Veng	639,230	-			646,400				1,689,000					2,452,990
Takeo	131,530	6								195,300				
Kratie	57,350	79,120	889,700	76,670	91,800	110,000	h 810 700	136.000	4,828,900	1 535 800				
Other Provinces	1,048,090	1,421,590	13,201,410	2,223,710	2.875,400	x 200 000	0 247.000	161 000	0 20,000	8 717 000	8 163 000	8 816 000	0 901.000	0,692,180
Total	2,442,000	2,883,000	1,779,000	1,595,000	p,430,000	0,198,000	1,241,00	//,104,000	f	<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>		3,010,000	1,70,000	0,002,000
Draught Catile						2 600	2.00	5,900	12,500	11,500	22,000	5,400	12,500	7,650
Phnom Penh	1,550						1 · ·			-	• · ·	1 1		
Kandal	43,300	· ·		1 '	1			1 1	· ·		1		1	
Kompong Cham	80,400		4			1			1				1	
Prey Veng	60,700										· ·		· · · ·	· · ·
Takeo	63,280	71,340												1 .
Kratie	25,100	-											1 1	
Other Provinces	287,670	350,790									510,000			
Total	562,000	635,000	703,000	811,000	832,000	780,000	786,00	0 893,00	0 952,000	912,000	1,018,000	1,042,000	1,050,000	1,183,890
Draught Buffalocs					1					<u> </u>				
Phnom Penh	180		1											
Kandal	200	6,200	6,130	5,400										
Kompong Cham	48,600	54,000	45,870	65,500										
Prey Veng	29,500	62,600	59,200	68,100	34,300	73,800	73,00							
					1 10 000	4,000	4,40	0 5,00	0] 4,500	3,900	)] 4,000	7,89	3 4,200	1,16
Takeo	18,800	) 3,400	0 3,370	) 840	19,000	4,000								
Takeo Kratie	18,800				· ·		-		0 22,200	20,200	24,000	31,87	0 26,400	33,38
	19,860	19,480	19,350	19,050	30,000	19,200	23,80 286,50	0 27,96 0 258,10	0 22,200 0 291,500	20,200	24,000 311,450	31,87 295,01	0 26,400 9 299,200	) 33,38 ) 308,74

Source : Bulletin of Agricultural Statistics and Studies, Dep't of Planning Statistics, MAFF.



E-51

1995/96 by Province
Statistics of Paddy in
Table F.1.13

ACTUAL FIGURE

							M	Wet Season							
Decements			Colfr	Cultivated Area by Kind	by Kind (	(ha)			Harvested		Damaged Area (ha)	<b>А</b> тса (ha)		Production	Yield
LIVING		Early		Mcdium	Late	Floating	Upland	Total	Arca	Flood	Drought	Insect	Total		······
	H H	Others	Total						(pa)					(ton)	(ton/ha)
Kandal	\$ 664	2.553	8.217	ĺ	17,494		1.736		44.361	3.888	298	0	4,186	98.925	2.23
Vomeno Chem		ſ			74.936	864	8.127	1	167.500	0	0	0	0		1.60
Den Viero	22016			87 307	87 307 92 775		0	229.331	205.025	22.087	0	2,219	24.306	348,425	1.70
	20007	181.81		PEO FL	25.069	7	0	184.865	177.159	7.706	0	0	7.706		1.65
		307 1		15 736	15 736 4 982		745	1	20,532	734	0	0	734		1.60
	1919 00	72 670	91	1	215 256	12.790	10,606	605.150	614.577	34,415	298	2.219	36.932	1.040.512	1.69
Suo Lotat Cambodia	99.965	254.333		1	672.517	83,889	37.889 1	1.869.981	1,709,041	147.235	8.774	4.941	160.950	60.950 2.802.827	1.64
Cuturo			1		and the second se		A DESCRIPTION OF A DESC								

			Dry Season					Total		
Province	Cultivated	Harvested	Damaged	Production	Yield	Cultivated	Harvested	Damaged Production	Production	Yield
	Arca	Area	Arca			Arca	Arca	Arca		
	(Jha)	(ha)	(ha)	(ton)	(ton/ha)	(ha)	(ha)	(ha)	(ton)	(ton/ha)
C. Kandal		ļ			3.45	92.694	1	4.857		2.84
-				ļ	2.41	191.140				1.70
Duev Vong	56.720		0	201.200	i	286.051	261.745	24.306		2.10
			0	145 000	1	237.577			i	1.90
Lanco			0	11.500	1	26.696		734	44.350	1.71
Sub Total	Ê		671	564.900	1	834,158	796.555	37,603	1.605.412	2.02
Cambodia						2.085.981	1.924.041	161.940	161.940 3.447.827	1.79

DISTRIBUTION

Province	Early		5 L							1124 4	
<u> </u>	Earl		Wet Season	HO?			Ě	Wet	Â	Wet	Å
		N	Medium	ato	Floating	Upland	Season	Scason	Scason	Season	Scason
	н Ш	Others									
Kandal	6.1%	2.8%	18.8%	18.9%		1.9%	47.6%	50.5%	49.5%	39.7%	60.3%
Kambao Cham	2 3%	12.6%	28.8%	39.2%		4.3%	12.4%	87.6%	12.4%	82.5%	17.5%
	7 7%	9.2%	30.5%	32.4%		0.0%	19.8%	78.3%	21.7%	63.4%	36.6%
Takon 25.4%	>5.4%	7.6%	31.2%	10.6%		0.0%	22.2%	77.1%	22.9%	66.8%	33.2%
Kratie	1.1%	5.6%	51.5%	18.7%	0.0%	2.8%	20.3%	79.1%	20.9%	74.1%	25.9%
stal	11.1%	8.7%	29.7%	25.8%		1.3%	21.9%	77.2%	22.8%	64.8%	35.2%
	4.8%	12.2%	34.6%	32.2%	4.0%	1.8%	10.4%	88.8%	11.2%	81.3%	18.7%

Source: Agricultural Statistics 1995, Department of Planning and Statistics, MAFF

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- Fable E 1 14	Basic Apricultural Statistics of Paddy and Other Five Major Crops by Distinct, I	Kratie
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					fable E f	14 Basic	Agricultar	d Statisti	es of Pall	y and Othe	r Fise Ma	jor Crops	by Distant	, Mate					-
	Kratie																	Year 1993	) 
N.	5 District	1				Paddy								!	Sung bea	a			
		Fla	nted area	(ha)	<b>F</b> re	diation (t	ബ	3	held (ton?	ia)	Fla	nted area (	hat	Fr<	duction (t	on)	<u>Y</u>	ield (ton b	<u>a)</u>
		Total	Witt scason	Dery scarce	Total	N'et Sea on	Ocy season	Total	Wet seasons	Dry season	Total	Wel seasor:	Dry season	Total	Wel season	Day seasou	Tetal	Wid season	Dysees
1	Pick Prasap	3,905	1,840	2,065	7,024	2,760	4,261	1.799	1 500	2 (65	163	163		- 58			0.000	0.000	
	Childong	3,857	2,165	1,692	6, 61	3,248	3,519	1 754	1 500	2 (80	0			()				·	<u>ا</u>
3	Sanibo	5,818	5,808	40	7,630	7,550	80	1.305	1 300	2 000	50	50		30			0.600	0 600	: 
1	4 Kratie	9,479	7,847	1,632	15,198	11,271	3,427	1 603	1 500	2 100	130	130		78	-18	l	0.600	· · · · · · · · · · · · · · · · · · ·	1
5	5 Srioul	3,518	3,518	1	5,981	5,981		1.700	1.700	· -	9	9		5	5	1	0 600		+
	Total	26.601	21.178	5.429	42 599	31.309	11,290	1 601	1.478	2 (80	352	352	6	211	211	0	0.600	0.000	

-													=	· · · · · ·	ಕ ಜನಾ ಸಂಗರ್ಶ ಇಂ				·····
No	District					Maire								• • • • • • • •	vegetable	\$			
1		Pla	oted area (	(ha)	Fre	duction (t	on)	Y	ield (ton h	a)	Pla	nted area	<u>ha)</u>	Fic	duction (t	<u></u>	<u>Y</u>	ield (ton?	(a)
		Total	Wet sea was	Dry season	Tetal	Wet sees an	Day season	Total	Wet season	Dry season	Total	Wel season	Dry seasou	Total	Wet scasou	Dry 84500	Total	Wet season	Dry scasou
1	Frek Frasap	580	580		812	812		1.400	1.400		301	92	209	2,559	782	1,777	8 500	8 500	8 500
2	Chhlong	330	330		462	462		1.400	1.400		255	105	150	2,169	893	1,276	8 501	8.500	8 507
3	Sambo	550	550		550	\$50		1 000	1 000		97	97		825	825		8 500	\$ 500	···
4	Kratie	682	682		955	955		1 400	1.400		140	5	135	1,190	43	1,148	8 500	8 500	8 500
5	Snoul	23)	231	<u> </u>	231	231		1.000	1 000	-	102	102		867	867		8 500	8 500	+
	Total	2,373	2,373	0	3,010	3,010	0	1 268	1 268		895	401	494	1,609	3,409	4,200	8 501	8 500	8.502
Citration of the local division of the local								· · · · ·											

<b>k</b> – –	District					weet pota									Sesame				
No	USGRI	Pla	nted area (	ha)		stuction (		Y	ield (ton1	12)	Pla	nted area (	ha)	Fr	duction (t	(m)	Y	ield (ton h	1 <b>a</b> )
				Ony season	Total	Wei sea son	Dry season	Total	Wet scalar	Dry season	Total	Wet seavon	Dry sea-on	Total	Wet season	Dry season	Total	Wet seawa	00 813.00
T	ftek Basap	248	90	158	\$98	366	632	4 024	4.067	4 000	422	422		253	253		0.600		And the state of t
2	Chhlong	30	4	26	122	18	10-1	4 053	4.400	4 0 0 0	228	228		137	137		0 600	0.600	
13	Sambo	145	145		876	.580	296	6011	4000	-	0			0	<b></b>			·	
4	Kratie	79	5	74	20	20		0 253	4 000	0.000	3	3		2			0.600	0.600	
5	Snoul	33	33		132	132		4 000	4 000	· · ·	0	L		0	L			L	
<b>—</b>	Total	535	277	258	2,148	1,116	1.032	4.014	4 027	4.000	653	653	0	392	392	Ú	0 600	0.600	

Source Provincial Agricultural Office

Table E 115 Basic Agricultural Statistics of Paddy and Other Five Major Crops by District, Prey Veng

	Prey Veng			La	ble E I I I	Basic A	greestarat	DI AFBERCS	отвану	and Other	ense stajo	i citiça oy	Diracci (	NJ THE				Year 1995	
No	District		<u> </u>			Paddy								Maire	(yellow &	*hite)			
	Erbailet	Pla	nted area t	ha)	Pro	dection (t	on)	Y	ield (ton h	al	Fla	nted area (	ha)	Fro	duction (1	ont	Y	ield (ton h	.1)
		Total	Wet season	Dry season	Total	Witt season	Dry seases	Total	Wet season	Exp season	Total	Wet season	Diy scasou			Dry seaso		Wet season	
1	Pearn Ro	7,834	2,334	5,500	27,558	5,972	21,586	3 518	2 559	3 925	1,720	820	900	1,966	1,066	900			
2	Peam Chor	12,011	2,226	9,785	49,501	3,512	45,989	4,121	1 578	4.00	4,710	2,330	2,380	5,409	3,029	2,330	1148	1.300	1.000
3	Karh Chreach	23,168	23,168	0	36,536	36,536	0	1.577	1517	·	0	0	Q	0	0	<u>0</u>	·		
4	Sithor Kandal	17,334	15,434	1,900	28,731	25,208	3,523	1.657	1 633	1 854	195	94	101	223	122	<u>101</u>	1.145		
5	Peareang	31,458	25,858	5,600	63,942	47,320	16,622	2 033	1 8 30	2 968	590	2:0	320	671	351	320	1.137	1 300	1000
	Frey Veng DC	24,387	23,467	920	36,108	33,808	2,300	1 151	1.441	2 500	0	0	0	0		0	•		
7	Kampong Leav	32,230	4,720	7,500	38,430	12,530	25,900	3145	2 655	3.453	845	380	465	<u>959</u>	494	465		+	
	Ba Fhriom	18,328	15,628	2,700	32,677	24,863	7,814	1 8	1 591	2 894	4	2	2	<u>5</u>	3	2	1.150		
9	Prea Sdech	25,613	19,113	6,530	60,654	36,985	23,669	2 3 65	1 935	3.625	24	12	12	28	16	12	1150	f	• • • • • • • • • • • • • • • • • • • •
10	Kamehøy Mear	21,014	20,840	174	27,610	27,175	435	1 3) 4	1 304	2 500	33	11	27	41	11	27	1.087		
	Kampong Travek	40,103	30,103	10,000	91,647	51,201	40,446	2 285	1.70	4 0 4 5	175	80	95	199	101	95	113	1 300	1.600
	Mesang	22,282	22,064	218	39,081	38,427	651	1.75	1.742	3.000		0	<u> </u>	<u> </u>	<u> </u>	0	i	<u> </u>	
<b>—</b>	Total	255,782	201,955	50,827	532,475	343,537	188,938	2.083	16*6	3717	8,301	3,999	4,302	9,501	5,199	4 302	1149	1300	3 000

<u></u>	District	-			\$	weet pota	to								Sugarcan				
		Pla	nted area	(ba)		duction ()		Ŷ	ield (ton t	a)	Plá	nted area (	hat	Pre	doction (b	on)	<u> </u>	ield (ton h	3)
		Total		Dry station		Wet scasm		Ictal	Wet scasou	01 8452	Tetal	Wet season	Dry season	Total	Ilies season				Dry scalor:
1	Pearn Ro	Û	0	0	0	0	0				45	20	25	1,225	600	625	27 222	30,000	_25.000
2	Peam Chor	0	6	0	¢	0	0		·		0	0	(J	<u>0</u>	0			:	
3	Kanh Chreach	0	0	0	0	0	0				0	6	0	0		6		·'	
4	Sithor Kandal	0	- U	0	Û	0	0				0	0	0	U	<u> </u>	0	-		
	Pearcang	80	25	55	333	113	220	4156	4 500	4 000	55	20	35	1.475	600	875	26 818	36/600	25.000
	Frey Veng DC	112	30	87	483	135	348	4.1.28	4 500	4 000	404	150	254	10,850	4,500	6,350		+	• • • • • • • • • • • • • • • • • • •
<u> </u>	Kampong Leav	Ú	0	0	Ú	0	0		·		6	3	3	165	90	5	27 500	30 000	
<b>-</b>	Ba Phnom	31	4	30	138	18	1.20	4 0 59	4 500	4 000	15	6	9	- 405	1\$0	225	27 000	30.000	25 (())
	Prea Silech	5	1	2	22	14	8	4 300	4 500	4 000	0	9	e	Ų	0	0			
D	Kamchay Mear	60	-	53	241	32	212	4 058	4 500	1 000	18	2	16	460	60	-160		· · · · · · · · · · · · · · · · · · ·	t
·	Kampong Travek	75	X	55	310	90	226	4133	4 500	4 000	41	6	35	1.055	180	875	25 732		<u>1 25.000</u>
a	Mesang	0		0 0	0	0	0	[	]		0	0	0	0	0	Ú	- <u> </u>	l	·
	Total	371	- 89	282	1,529	401	1,128	4130	4 500	4.000	584	207	317	15,635	6,210	9,425	26 72	30.000	25.000

No	District				Mangh	ean & Gre	undout								Sesame				
		Pla	nted area (	hat	Fre	soluction (1	on)	Ŷ	ield (ton h	a)	Fla	nted area (	ha)	Fre	objection (R	<u>(n)</u>	<u> </u>	ield (ion h	<u>e</u>
		-	Wet season		Total	Wet seasons	City Scillend	Total	Wet seasing	Dry season	Total	Wel season	Day season	Total	Wet season	00,80300	Total	Wet season	
5	PeanRo	24	35	39	41	21	.0	0.547	0.600	0 500	58	31	31		17	11	0 500	0.500	
	Peam Chor	122	60	62	61	36	31	0 549	0.600	0.500	810	420	420	4.0	210	210	0.500	0.500	0.500
3	Kanh Chreach	0	0	0	0	0	Ų	•	-	-	0	0	6	0	()	0		· ·	·
4	Sithor Kandal	70	35	35	39	21	18	0.550	0.600	0 500	98	49	- 49	49	25	25	0.500	0.500	
5	Pearcang	0	0	0	0	0	0	•	-	-	50	X	30	25	10	15	0.500	0.500	0.500
6	Prey Veng DX	0	0	0	0	0	0	-	-		0	0	0	<u> </u>	0	<u>0</u>	ļ		
	Kampong Leav	0	0	0	Ç	Q Q	0		· .		0	0	0	0	0	0	· · · · · · · · · · · · · · · · · · ·		
	Ba Playon	0	0	0	0	0	0	-		-	12	6	6	6	3	3	0.50		0.500
9	Frea Sdech	0	0	0	0	0	()		-		68	31	31	31	יו	17	0.500	0.500	0 500
10	Kamchay Mear	0	0	0	C	0	6				с С	0	0	Ú	0	6	·	· · · · · · · · · · · · · · · · · · ·	·
11	Kampong Iravek	Q	0	Ú.	0	6	Ú				150	50	100	- 5	25	<u>):</u>	0.500	0.500	0.500
	Mesang	0	C	0	0	0	0	-	· ·	l		0	1	0	0	0		<u> </u>	
	Total	266	130	136	146	- 8	63	0.542	0.600	0 500	1,286	613	613	643	30-	337	0 500	0 500	0.500

Total 266 130 136 Source Previncial Agricultural Office

Table E116 Basic Agricultural Statistics of Paddy and Other Five Major Orops by District, Kampong Cham

	Kampang Cham			1 81 10	6110 1	жыс түргө	CUNUERAN STA	11 DAT 82 3 GAT 8	3 FLY 101-1	Other Priv	e is sajor u	tops by th	HUEK <b>G, K</b> ati	spong una	เกม			Year 1995	
K.	District	<u>.</u>				Paddy		<u></u> ,		i		<u></u>			Malze			100177.	<u> </u>
		Pla	tes area (	ha)	Pro	duction (t	on)	Yi	eld (ton h	A1	Fla	त्तरते घरव (	ha)	Fro	duction (t	on)	Y	eld (ton h	a)
		Total	Wet season	Dry seasou	Total	Wet season	Dry season	Total	Wel season	Day scesup	Total	Wet seeson		Tetal	Wet season			Wet season	
1	O Rearg Ov	19,369	18,456	913	31,502	29,219	2 283	1.626	1.583	2 50)	754	754	0	905	905	Q	1 200	1 200	
2	Koh Sotu	1,415	510	535	2,686	816	1,870	1 859	1.600	2 000	1,650	1,600	50	1,695	1,660	35	1.027	1 038	0.700
3	Stey Sauthel	11,003	8,466	2,537	19,141	12,515	6,596	1.740	1.482	2 600	1,332	1,297	35	1,325	1 297	28	0 995	1 000	0 800
4	Kang Meas	5,363	2,500	2,863	10,748	3,572	7,176	2 004	1.429	2 506	1.063	1,050	13	1,470	1,457	13	1 383	1.388	1.000
5	Kanipong Cham	175	130	45	319	202	117	1.823	1 554	2 600	3	0	3	3	0	3	1 000		1.000
6	Kreen Chhmar	5,550	2,900	2,650	11,390	5,030	6,360	2 052	1.734	2 400	3,175	3,175	<u> </u>	4,118	4,718	0	1.436	1.486	-
12	Thong Khasan	23,050	21,500	1,550	41,333	37,148	4,185	1.793	1.728	2 700	1,046	1,046	0	1,301	1.307	0	1 250	1 250	-
8	Stung Trang	8,226	6,774	1,452	14,005	10,375	3,630	1.703	1 532	2 500	158	758	0	616	616	0	0813	0813	-
12	Kanipong Seim	8,372	6,320	2,052	15,445	10,520	4,925	1 845	1.665	2 400	415	400	15	540	520	20	1.301	1 300	1333
10	Prey Clibor	20,000	18,500	1,500	34,250	30,500	3,750	1.713	1 649	2 500	5	5	<u> </u>		7	0	1.490	1.400	
<u><u>u</u></u>	Chearg Prey	13,795	12,144	1,651	24,432	20,304	4,128	1.711	1 672	2 500	5	5	0	6	6	0	1 200	1 200	
12	Batheay	22,072	16,800	5,272	41,329	27,622	13,707	1 872	1.644	2 600	. 8		0	10	10	0	1.250	1 250	-
12	Dambe	11,620	11,500	120	18,769	18,457	312	1 615	1.605	2 600	416	416	0	513	513	0	1 233	1 233	
14	Memot Pongea Krek	13,600 20,500	13,500	100	22,440	22,170	270	1 650	1 6 1 2	2 700	405	405	0	403	403	0	0.995	0.995	
16	Chandler Leu	7,000	7,000	0	33,130	33,130	0	1.616	1.616		163	163	0	211	211		1 294	1 294	
10	Total	191,140	167,500	23,640	11,415	<u>11,415</u> 273,025	0 59,309	<u>1631</u> 1.739	1.631 1.630		95	95		133	133	0	1.400	1.400	···
	1043		101,100	23,040		213,023	19,309	1.139	1 050	2 509	11,293	11,177	116	13,862	13,763	97	1 227	1.231	0 853
<b>K</b> .	District	r				lungbeau								···· · · · · · · · · · · · · · · · · ·	-				
ľ	DBART	 Pfa	nted area (	hat		duction (1		v.	eld (ton'h			nted area (	1.)		Sesame	<u>`</u>			
1			Wel seasou				Dry season			ay Dry season	Total	Wet season	£		duction (1 Wet servar			eld (ton h	K
1	O Reang Ov	0	0		0	0	0			Ch) SCESUL	150	150	LAY SCE.OU	14		Uty season 0	<u>Total</u> 0.093	Wet season 0 093	Dry sensito
2	Koh Sotin	\$0	0	80	28	Ŷ	28	0 350		0 350	900	500	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	270	<u>14</u> 270	0	0.093	0 300	
15	Srey Santhel	219	21	198	75	6	69	0 3 1 1	0.305	0318	141	141	¥	49	49	0	0.343	0.343	
	Kang Meas	91	17	77	33	6		0 3 4 7	0.329	0 351	130	130	ŏ	40	40	0	0.343	0 308	
5	Kanipong Cham	0	0	0	Ú	0	0	•			0	0	o	0		0	V.503	0.000	
6	Kroch Chlumar	525	525	Ú	82	82	0	0.156	0 1 5 6	-	620	6.0	0	267	261	0	0.431	0.431	
12	Illong Khaum	669	669	- 0	335	335	0	0.501	0 501		1,106	1,106	0	442	442	0	0.400	0.400	
8	Stung Trang	602	552	50	272	254	18	0.452	0.460	0 360	757	753	0	341	341	0	0.450	0.450	
. 2.	Kampong Seim	83	83	0	28	28	0	0.337	0 337		170	170	0	73	73	0	0.429	0.429	
10	Prey Chhor	250		0	95	95	0	0.126	0126	•	5	5	0	2	2	0	0.400	0.400	
11	Cheung Prey	0		0	<u> </u>	0		·	· · · · · · · · · · · · · · · · · ·		0	0	0	0	0	0	-		-
112	Batheay	0				0				<u>.</u>	0	0	0	0	0	0	-		-
13	Dambe Memot	<u>179</u> 300		0	· · · · · · · · · · · · · · · · · · ·	57	• <u>•</u>	0 318	0 318	·	285	285	0	100	100	0	0 351	0 351	-
15	Ponnea Krek	289	300 289	0	<u>126</u> 145	126	• • • • • • • • •	0.420	0.420		185	185	<u></u> 9	70	70	0	0.378	0.378	
16	• • • • • • • • • • • • • • • • • • • •	5,537	5,537	0	235	145 235			0.502		555	555	0	141	141	0	0 254	0 25 1	
	Total	9,327	8,922	405	1.511	1.369	• · · · · · · · · · · · · · · · · · · ·	0.042	0012	0 3 5 5	613	613		0	0	0	0.000	0 000	
<b>6</b>		1	<u> </u>				<u></u>		0153	0.331	5,617	5,617	0	1,809	1,809	0	0 322	0 322	
No	District	T		t		Soybean									T->				
	1		used area			oduction (		Ý	ield (ton1	na)	PI	inted area	(ha)	Pr.	Tobaceo soluction (t	00)	1.	ield (ton h	
	+		Wei seasou	Dry seaso	Total	Wet seaso	TT SCIECE	Total	Wet season	Dry season	Total		Dry season	Total	Wet season	Ory season		Wei seison	
ι÷	O Reang Ov Keh Sotin	80		9	<u> </u>		0	-		· · ·	0	0	0	0	0	0		-	-
5	Srey Sauthel	80		0	80 C				1.000		1.740	0		245	0	745	0.428		0.428
F	Kang Meas				· · · · ·				••••• •		582 703	0		266	0	266	0.457		0.457
5	Kanpong Cham	C	0	0		Č	0		<u> </u>	<u> </u>	<u> </u>	0		<u>341</u> 0	0 0	<u>341</u> 0	0.485		0.485
6	Kroch Chlumar	525		0	.,	1,050	0	2 000	2 000	· · ·	4,260	ŏ		2,434		2,434	0 571		0.571
1.7	Thong Khmum	2,652		0		2,652			1.000		1,480	0		719	ŏ	719	0.486		0.486
8	Stung Trang	1,800		- 9	2,5.0	2,520			1.400	·	805	0	805	363	0	368	0 457	-	0.457
	Kamporg Sein Prey Chhor	123			123	123			1 000		1,542	0		661	0	661	0.429	-	0.429
- h	Change Train	t	h	t	1 1,040	1 1 0 13	4 <u>v</u>		1100		0	0	0	10	0	l	· ·		

1,480 805 1,542 8 Stung Trang 9 Kampong Seim 10 Prey Chhor 1,800 123 950 2,500 123 1,045 2,520 123 1,045 1 400 1 600 1 100 1.800 805 1,542 0 0 1.400 363 368 661 0.457 0 Û 123 950 Ġ 0 1 000 . .... 0 0 0 0 1100 0 0 Ó 0 0 11 Cheung Prey 6 0 Ú \_\_\_\_0 11 Cheung rrey 12 Batheay 13 Dambe 14 Memot 15 Pornea Krek 16 Chamkar Leu Total ¢ 0 Đ Ō Ū C  $\overline{\mathbf{o}}$ 0 Ô ¢ 1 Û 0 õ C Ô 1,266 633 633 Q 1,266 Q 2 000 2 000 Ö ē 0 0 0 385 385 0 385 0 1 000 1 000 0 Ú ō Ú 0 0 Ó 0 ( ¢ cu 7,420 7,420 al 14,568 14,568 Source Provincial Agricultural Office 0 0 8,904 18,025 0 0 ¢ 8,904 18,025 1 200 1 237 1 200 0 0 0 0 0 0 0 0 0\_ 0 11,112 5,531 5,534 0.498

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0.498

Table E117	Basic Agricultural Statistics of Packly and Other Five Major Crops by District, Kandal
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				Τé	bte E I V	<sup>a</sup> Dasie A	gricultural	Statistics	ofFadBy	and Other	Five Maj	or Crops b	by District,	Nan 141				Year 1995	
E ····	Kandal						<del></del> .		<u></u>	 I	······································			1999 - 1992 - 1992 - 1992 - 1992 - 1992 - 1992 - 1992 - 1992 - 1992 - 1992 - 1992 - 1992 - 1992 - 1992 - 1992 -	Malae			initian di Stature	27-2057
No	District			r		Paddy	<u> </u>	V.	dd (ton h	<u>.                                    </u>	Ela.	sted area (	161	- Eu-	hotion (k	<b>m</b>	Y	eld (ton ha	15
			ted area ()			tection (to			Nel sessio			14'et se 15:00			Wet set in		Total	Wet season	Dry sealar
	<del></del>			Ry sealor		Wet season 1 19,997	18,183	3116	2 757	3 633	514	504	10	783	771	12	1 5 2 3	1 530	1.200
H	Kaadi Kardal	12,251	7,251	5,000	<u>33,185</u> 9,900	1,045	8,855	3125	2 49 4	3 221	308	274	31	589	518	\$1	1.912	2 000	1 206
-2	Muk Kampoul	3,168	419				15,771	3.942	3.421	3 966	1,8)?	1,184	613	3,698	2,960	738	2019	2 500	1 1 39
1	Lvea Em	4,162	185	3,977	<u>16,405</u> 20,822	<u>634</u> 4,537	16,285	3 828	1.091	4 100	1,681	1,615	69	2 630	2,517	83	1.562	1 \$77	1 203
Ľ	Kean Svay	5,410	1,468	3,972			25.031	2 647	1 914	3 360	3,440	2,803	637	1,445	3,439	1 006	1 292	1 227	1 579
E.	Saang	14,693	7,243	7,150	38,897	13,863	12,240	4 805	2 285	5 100	4,590	4,400	190	7,642	7,505	144	1 666	1.706	0 758
6	Leuk Dek	2,681	281	2,400	12,832		30,146	3 2 2 3	1 820	3 974	4,550	4,434	116	7.07 1	6,935	139	1 555	1 561	1 1 98
1	Koh Thom	11,650	4,065	7,585	37,516	7,400	16,650	2 8 3 2	1917	3 700	50	50		75	75		1 500	1 500	-
8	Ponhea Leu	8,914	4,414	4,500	25,243	8,593	10,000	2 005	2 006	1 855	0			0				· · · · · · · · · · ·	-
	Ang Shourl	11,064	11,009	55	22,182	22,080	1,367	1.924	1.915	2100	6	47	15	57	39	18	0919	0.830	1 200
10	Kundal Stung	13,046	12,395	651	25,104	23,731	687	1 366	0.551	3 351	201	182	22	211	200	31		1.099	1.409
Πī	Takhinau	704	459	205	962	102,801		2 827	2 (183	1 770				27,331	25.019	2 21 2	1 580	1615	1 271
L	Total	87,776	19,232	38,544	248,128	102,801	140.350	2 82 (]	2008			<u>L 1936</u>					- mining a	<u></u> 1	
· · · · ·															regetable	· · · · · · · · · · · · · · · · · · ·			1
No	District	l				lungbeau									duction (t			eld (ton'h	
			uted area (	· · · · · · · · · · · · · · · · · · ·		duction (6	<u></u>		eld (ton h			ented acea			Wet season	· · · · · · · · · · · · · · · · · · ·		Wei seisan	
			Wet season		~ ~ ~ ~ ~ ~ ~	Wei set on			Riel season		Total	Wet season		3.050	1.000	2,050	4,781	4 335	5 600
1	Ksach Karxla	197	27	170	115	5	110	0.581	0185	0.617	638	228		4,410	+20	4,020	4 540	4 200	4 502
2	Muk Kampoul	0			0				·		978	85		1,296	765	531	4,782	5 000	1 500
3	Lvea Em	896		896	582		582	0.650	·	0.650	271	153			960	504	4816	5.000	4 500
4	Kean Svay	65		65	42		42	0 5 1 6		0646	301	192	112	1,461	5,155	10,380	5 322	5,000	5 198
5	Saang	398	45	353	242	33	229	0.608	0 289	0 6 4 9	2,919		1,888	9.9	125	854	4512	5 000	4.443
6		554		554	342		342	0.617	·	0.617	217	25			420	7,810		3 500	4 000
7	Koh Thom	1,470		1,470	1,412	12	1,400	0 961	<u> </u>	0.952	2.080		<u> </u>	<u>8,260</u>	\$20			4,000	5 000
8	Portice Leu	10	10		5	5		0 500	0 500	∔i	204			<u>8.20</u> 522	300	20		5128	+ 519
9	Ang Shourt	0			0		<b></b> .	-			105				712	122		4 000	1,706
14	Kandal Stong	85		8	21	16	5	0.244	0 205	0.625	321			<u>956</u> 734	189	545		9.450	4.504
11	Takhmau	24		24	18	3	35	0.750		0.625		20		38 056	10.946	27,110		4 739	
L	Totai	3,200	160	3,540	2,779		2,725	0 751	0 338	0,7-0	8,178	2,310	<u>1 5,864</u>	23,036	10,240	<u>[</u>	<u> </u>		
																<u> </u>			
N	District	T			S	weet Pola	ito							1	Peaput		ı -		
	1	PI.	uted area	(ha)	ា	oduction (	ton)	۲	'ield (ton'	ha)		anted area		·	nduction (	· · · · · · · · · · · · · · · · · · ·	+	ield (top 1	
		Total	Wel season	Dry season	Total	Wet season	Un season	Total	Wel seaso	n Dry seasor			n Dry seasor			DO SEASO			Dry seaso
1	Ksach Kaudal	92	- 46	46	437	184	253	4,750							13				
2	Muk Kampoul	4	1	4	20		20			5.000		2	39	41	ļ	47			1 205
	Lvea Em	1	2	5	38	8	30	5.429	4 000			2	1 1	2	11	ļ'	1.000		1.000
	Kean Syav	18	1	19	108		108	6 000		6.000	) 30	əl	30	31	1	31	1 133	I -	1.133

_							30	5,429	4 000	6 000	2		1	,	1	i 1	1.000	1.000	1.000
3	Lvea Em		2	<u> </u>		8													1.133
1	Kean Svay	18		18	108	]	108	6 000	1	6.000	30		30			31	1133		
_	Saang	189	11	178	1,018	39	979	5 386	3 545	5.500	1,240	51	1,189	1,458	31	1,421			1 200
	Leuk Dek	205		205	1 205		1,205	5 878		5878	5	5		5	5		1 000	1.000	
	Koh Thom	3 18		318			2,(\$3		-	6.000	131	4	127	103	2	101	0 786	0.500	0.795
_	Ponhea Leu	0			0				-	·	0		L	0					
	Ang Spourt	5	2	3	24	6	18	4 800	3 000	6 000	0	l		0			•	· · · · ·	·
	Sandal Stong	32	18	14	138	54	84	4 313	3 000	6 600	0	L	L	0					·
	Takhmau	Ú		1	0						52		52	60	·	60			1154
ľ	Total	200	79	821	5,0 6	291	4, 85	5.640	3.684	5 828	1,639	131	1,508	1, 99	52	1.747	1 098	0 191	1158
<u></u>	the second second second second second second second second second second second second second second second s	Provincial	Agricultura	10ffice	·	4,													

Table E 1 18 Basic Agricultural Statistics of Paddy and Other Five Major Crops by District, Takeo

				3	at le L	18 Basic	Agreetes	al Statistic	s of Faddy	r arel Othe	t lac Ma	jor Crops	by District,	Takes					
	Takeo																	Year 1995	5
5	District					Paddy								5	aret Potal	1.			
	ļ	Fla	ared area §	ha)	Pro	duction (t	on)	Y	eld (ton b	<u>a)</u>	<u> </u>	nted area	hay	Fre	duction (t	on)	Y	ieto (tou h	a)
		Total	Wel seasons	Dry seesce	Telat	Wet season	Dry season	Tetal	N'ol scasse	Dry seesop	Total	Wet season	Ory season	Total	Woll seasons	Day sealing	Total	Wet see son	Dry season
1	Bati	29,495	25,180	4,315	55,147	42,202	12,945	1870	1.676	3 000	91	21	70	319	735	245	3 500	3 500	3 500
2	Prey Kabasa	24,147	19,705	4,412	46,825	33,499	13,326	1 939	1.700	3 000	50	40	10	175	140	35	3 500	3 500	3 500
3	Angkor Borey	11,275	3,400	2,875	29,177	5,552	23,625	2 588	1 633	_ 3 000	19	0	19	67	0	66.5	3 500	-	3 500
4	Samrong	25,473	20,172	5,300	50,797	34,897	15,900	1 991	1.730	3 000	49	25	24	172	87.5	81	3 500	3 500	3 500
5	Takco PC	7,019	4,019	3,000	16,918	7,918	9,000	2 410	1 970	3 000	8	8	0	28	28	0	3 500	3 500	
6	Iran Kak	33,516	33,546	Û	53,614	53,674	0	1 600	1 600		72	0	72	252	0	252	3 500		3 500
7	Borey Cholasar	15,540	4,917	10,593	38,210	6,431	31,779	2 459	1 300	3.000	80	¢ (	80	280	6	280	3 500		3 500
8	Trearg	34,298	28,295	6,603	61,525	49,516	18,009	1 969	1.750	3.000	190	40	150	665	140	525	3 500	3 500	3.500
9	Koh Andel	17,150	12,950	4,200	28,140	15,510	12,600	1 641	1 200	3 000	260	32	238	910	132	798	3.500	3 500	3 500
10	Kui Vong	31,917	24,945	7,602	20,616	49,640	21,006	2 211	1 990	3 600	167	17	150	585	59.5	525	3 500	3 500	3 500
	Total	229,889	127,159	\$2,730	457,059	298,869	158,190	1 988	1 687	3 660	986	183	803	3,451	6105	2,8105	3 500	3 500	3 500
No	District					Mungbeat	1								Cassava				
		Fla	nted area (	(ha)	Pr	duction (	എ	Ŷ	eld (ton h	(a)	. Pla	क्षाटचे कारव	(ba)	Pro	duction (t	on)	Ϋ́Υ	ield (ton?	a)
		Total	Wid season	Dry scalog	Tota)	Wet seasons	Day seasons	Total	Wet seatoni	Dry scasop	Total	Witt season	Dry sensor	Total	Wet sea sou	Dry season	Total	Wel season	Day season
1	Bati	63	31	32	37.8	18.6	19.2	0.600	0.600	0.600	86	21	65	387.0	94.5	292 5	4 500	4 500	4 500
2	Frey Kabasa	57	25	32	312	150	192	0.600	0.600	0.600	86	-40	46	387.0	180.0	207.0	4 500	4 500	4 500
3	Anglier Borey	23	9	11	13.8	5.4	84	0 600	0.600	0.600	0			00					-
4	Samong	26	11	15	156	66	90	0.600	0 600	0.600	16	?8	18	207.0	126 0	81 Ú	4 500	4 500	4 500
5	Takeo PC	2	2	1	12	3.2		0 600	0.600	-	5	<u>s</u>		22.5	225		4 500	4 500	-
6	Tram Kak	102		102	_61 2		61.2	0.600	-	0.000	37		37	166.5		166.5	4 500		\$ 500
7	Borey Cholasar	155	• • • • • • • • • • • • • • • • • • •	100	93.0	33.0	60.0	0.660	0.600	0.600	37	1	37	166.5		166.5	4 500	·	4 500
8	Treang	"6		31	45.6	27.0	186	0 600	0.600	0.600	63		23	283.5	180.0	103.5	4 500	4 500	1 500
9	Koh Andet	284	32	252	170.4	19 2	151 2	0.600	0 600	0.600	249	32	217	1,120.5	1410	976.5	4 500	4 500	4 500
10	Kin Vong	<u>157</u>		152	912	3.0		0.600	0.600	0.600	. 87	<u>۹</u> ۶	- 78	391.5	40.5	351 0	4 500	4 500	4 500
	<u>Total</u>	945	215	730	567.0	1290	438.0	0.600	0.600	0.600	<i>co</i> e	175	521	3,1320	787.5	2,341.5	4 500	4 500	1 500
											_								
No	District	L				Maire		· · · · ·							Vegetable				
l I		·	utted area	1		oduction (			ield (ton1			สมเสราร โรงทาน			oduction (t			field (ton't	
-	Rati	Total	+	Dry season			Do seison		Wet sensor	Dry stason			Dry seasu		Wetselson			Wel season	
5	Frey Kabasa	30			270				0 900	<u> </u>	40			3,663	675 450	2,983	9.000		

		Total	Wet season	Dry season	Total	Wet season	Day season	Total	Wet season	Dry season	Total	Wet season	Dry seasu	Total	Wei seisen	Dry season	Total	Web season	Dry season
	Riti	0	0	0	00	00	0.0	-		-	407	75	332	3,663	675	2,988	9.000	9.000	9.000
2	Frey Kabass	30	30	0	27.0	27.0	0.0	0 900	0 900	-	92	50	42	828	450	378	9.000	9.000	9.000
3	Angkor Borey	10	3	ר	9.0	27	63	0.900	0.900	0.900	301	40	261	2,709	360	2,349	9.000	9.000	9.000
	Samrong	. 0	0	0	00	0.0	0.0	•		•	538	328	210	4,842	2,952	1,890	9.000	9.000	9.000
5	Tal co PC	0	0	<u> </u>	00	00	0.0			-	23	23		267	207		9.000	9.000	
	Trein Kak	25	0	25	22.5	00	22.5	0 900		0 900	317		317	2,853		2,853	9.000		9.000
	Borey Cholasar	52	2	50	46 8	18	15 0	0.900	0.900	0 900	47	23	24	423	207	216	9,000	9000	9.000
	Treang	1	()	7	63	00	63	0 900		0 900	102	60	42	918	540	378	9.000	9.000	9.000
	Koh An let	56	6	56	50.4	00	50.4	0 900	-	0 900	447	83	364	4,023	747	3,276	9.000	9.000	9.000
10	Kin Vong	195	0	195	175 5	0.0	175.5	0 900		0 900	204	19	185	1,836	171	1,665	9.000	9000	9.000
	Total	375	35	310	337.5	31.5	306.0	6 900	0.900	0 900	2,4 8	701	1,771	22,302	6,302	15,993	9.000	9.000	9.000
	Source	Provincial	Agriculture	Office			-								<u> </u>	•			

Table E.1.19 Production, Planted Area and Yield of the Study Area

			١	Vet Season		1	<b>Dry Season</b>			Total	
Стор	Item		Production	Planted Area	Yield	Production	Planted Area	Yield	Production	Planted Area	Yield
			(ton)	(ha)	(ton ha)	(ton)	(ha)	(ton ha)	(ton)	<u>(ha)</u>	(ton ha)
Paddy	Whole Five Provinces	(A)	1,050,000	620,000	1.69	563,000	171,000	3.29	1,613,000	791,000	2.04
	Study Area	(B)	599,000	342,000	1.75	443,000	129,000	3.43	1,042,000	171,000	2 21
	Ratio	(B'A)	57° e	55° o	103° o	79%	75%	10 19 .	65%6	60%	108%
Maize	Whole Five Provinces	(A)	47,000	33,100	1.42	6,900	6,500	1.06	53,900	39,600	1.36
1	Stud <u>y</u> Arca	(B)	39,000	26,600	1.47	6,600	6,100	1.08	45,600	32,700	1.39
	Ratio	(B'A)	83° o	80° o	103° a	96° a	94° o	102° o	85° ó	83° o	102° a
Mungbean	Whole Five Provinces	<b>(Λ)</b>	1,800	9,800	0.18	3,400	4,800	0.71	5,200	14,600	0.36
	Study Area	(B)	500	1.500	0.33	3,100	4,300	0.72	3,600	5,800	0.62
	Ratio	(B'A)	28% 0	15%0	181° o	91°°	90° o	102° o	69°a	40° o	174%
Vegetable	Whole Three Provinces <sup>11</sup>	(A)	20,700	3,400	6.09	47,300	8,100	5.84	68,000	11,500	5.91
	Study Area	(B)	14,800	2,700	5.48	37,400	7.000	5.34	52,200	9,700	5.38
	Ratio	(B'A)	719.	79° d	90° a	79*0	86° o	91°,	77%	84%	91°
Sweet Potato	Whole Four Provinces <sup>2)</sup>	(A)	2,400	600	4.00	9,800	2,200	4.45	12,200	2,800	4.30
	Study Area	(B)	1,000	300	3.33	6,600	1,300	5.08	7,600	1,600	4.75
	Ratio	(BA)	42°o	50° •	83° (	67%	59°o	114%	62°a	57° o	109%
Sesame	Whole Three Provinces <sup>31</sup>	(A)	6,300	6,900	0.91	300	700	0.43	6,600	7,600	0.87
	Study Area	(B)	2,600	3,000	0.87	300	600	0.50	2,900	3,600	0.81
	Ratio	(B'A)	41°o	43°5	95°	l 100° o	86° a	117%	440	47*.	93*

Source: Provincial Agricultural Office

Note: Based on the district area distribution to the Study Area, all data are proportioned.

<sup>9</sup>-The vegetable data of Kampong Cham and Prey Veng are not included.

<sup>49</sup>-The sweet potato data of Kampong Cham are not included.

<sup>3)</sup>. The sesame data of Kandal and Takco are not included.

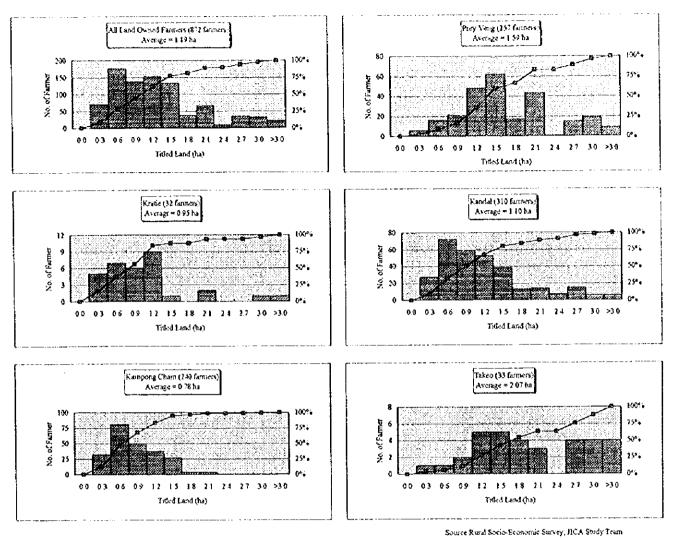


Figure E.1.11 Histograms of Number of Farmers by Titled Land Area by Province

				(	lassificatio	11			
i	Land Owned Farmer (872)			2) Tenant Farmer (25)					
Province	Paddy Pra	cticing Far	mer (855)						
	Wet	Dry	Dry and Wet	Not Paddy	Dry Paddy	Not Paddy	Unknown	TOTAL	Distribution
	Season	Season	Season	Practicing	Practicing	Practicing			(%)
	Pađđy	Paddy	Paddy	Farmer	Farmer	Farmer			
Kratie	6	18	8	0	0	2	0	34	3.8%
Kampoog Cham	90	64	77	9	1	8	0	249	27.7%
Prey Veng	87	81	89	0	0	1	0	258	28.7%
Kandal	48	159	95	8	1	12	3	326	36.2%
Takeo	L I	4	28	0	0	0	0	33	3.7%
TOTAL	232	326	297	17	2	23	3	900	100.0%
Distribution (%)	25.8%	36.2%	33.0%	1.9%	0.2%	2.6%	0.3%	100.0%	·

Table E.1.20 Classification of Interviewed Farmers in the Study Area

Source : Rural Socio-Economic Survey, JICA Study Team

Farm	er Type / Province		Numb	er of L	Jpland	d Croj	ps Pra	cticir	ig Far	mers	Upland Crops
0	lo. of Farmers)		i [	Nun	ber o	f Prac	ticing	g Upla	ind Ci	rops	Introducing
				1	2	3	4	5	6	7	Ratio (%)
Wet Season	Kratie	(6)	2	2							33.3
Paddy	Kampong Cham	(90)	41	10	17	5	8		1		45.6
Practicing	Prey Veng	(87)	33	9	6	13	4			1	37.9
Farmer	Kandal	(48)	7	3	2	2					14.6
	Takeo	(l)	0								0.0
	TOTAL	(232)	83	24	25	20	12		1	1	35.8
Dry Season	Kratie	(18)	10	3	3	3	1				55.6
Paddy	Kampong Cham	(64)	49	5	19	19	5		1		76.6
Practicing	Prey Veng	(81)	51	35	8	7	1				63.0
Farmer	Kandal	(159)	109	48	45	9	7				68.6
	Takeo	(4)	0								0,0
	TOTAL	(326)	219	91	75	38	14		1		67.2
Wet and Dry	Kratie	(8)	2	1	1						25,0
Season	Kampong Cham	(77)	20	7	10	2	1				26.0
Paddy	Prey Veng	(89)	38	17	9	9	3	,			42.7
Practicing	Kandal	(95)	65	27	34	3	1		[		68.4
Farmer	Takeo	(28)	8	3	2	3			;		28.6
	TOTAL	(297)	133	55	56	17	5				44.8
Not Paddy	Kampong Cham	(9)	9		3	3	3				100.0
Practicing	Kandal	(8)	8	2	3	1	2				100.0
Farmer	TOTAL	(17)	17	2	6	4	5				100.0
TOTAL	Kratie	(32)	14	6	4	3	1			:	43.8
	Kampong Cham	(240)	119	22	49	29	17		2		49.6
	Prey Veng	(257)	122	61	23	29	8			1	47.5
	Kandat	(310)	189	80	84	15	10	[			61.0
	Takeo	(33)	8	3	2	3					24.2
	TOTAL	(872)	452	172	162	79	36	;	2	1	51.8

Table E.1.21 Number of Upland Crops Practicing Farmers in the Study Area

Source: Rural Socio-Economic Survey, JICA Study Team

Note: Following 36 crops are practiced in the Study Area. Vegetables: Fnut-bottle gourd, chili, eucumber, eggplant, melon, pumpkin, tomato, watermelon, wax gourd

Leaf and Stem-cabbage, chinese kale, lettuce, onion

Root-cassava, radish, ginger, lotus, sweet potato, taro, yambean

Legume: longbean, mungbean, peanut, soybean

Industrial Crop: mat grass, sesame, tobacco Fruit tree: banana, cashewnut, coconut, jack fruit, lime, mango, papaya

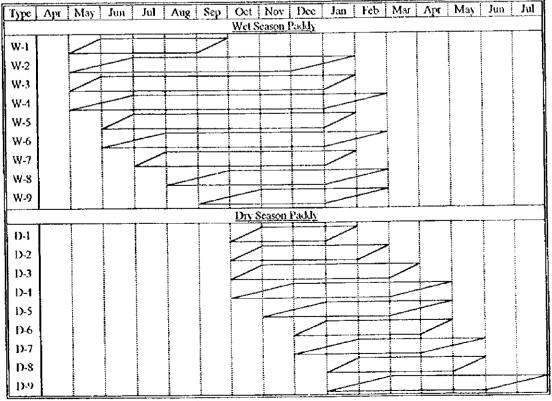
Others: maize, sugarcane

Farme	r Type / Province	<u> </u>	Maize	Cucum ber	Mung bean	Tobacco	Sesame	Chili	Peanut	Sweet Potato	Feg plant	Cabhago		Total	AVG. No. of Crops / Farmer
Wet Paddy	Kratie	(2)	2	0	0	0	0	0	0	0	0	0	0	2	1.00
Practicing	Kampong Cham	(41)	24	7	10	13	12	2	4	3	2	0	20	97	2.37
Farmer	Prey Veng	(33)	6	17	2	0	2	0	0	3	10	4	39	83	2.52
	Kandal	(7)	3	0	4	0	0	0	0	0	0	1	5	В	1.86
	Takeo	(0)	-			-	·	-		<u> </u>	· · · ·	<u> </u>	•	-	
	TOTAL	(83)	_35	24	16	13	14	2	4	6	12	5	64	195	2.35
Dry Paddy	Krabe	(10)	3	1	0	5	6	0	1	1	0	0	5	22	2.20
Practicing	Kampong Cham	(49)	40	9	4	.32	22	4	3	1	2	1	8	126	2.57
Farmer	Prey Veng	(51)	45	6	3	2	7	0	11	0	0	1	1	76	1.49
ļ	Kandal	(109)	68	16	27	4	2	20	2	8	0	4	42	193	1.77
	Takeo	(0)	-	-	-	•		-	-	<u> </u>	<u> </u>	· ·	<u> </u>	•	• 
	TOTAL	(219)	156	32	- 34	43	37	2.1	17	10	2	6	56	417	1.90
Wet and Dry	Kratie	(2)	0	0	0	1	0	0	0	0	0	0	2	3	1.50
Paddy	Kampong Cham	(20)	12	2	3	9	4	1	0	1	0	1	4	37	1.85
Practicing	Prey Veng	(38)	4	15	3	0	4	0	2	3	5	3	35	74	1.95
Farmer	Kandal	(65)	42	4	17	4	6	6	2	1	0	5	21	108	1.66
	Takeo	(8)	2	2	4	0	0	0	0	0	1	0	7	16	2.00
	TOTAL	(133)	60	23	27	14	14	7	4	5	6	9	69	238	1.79
Not Paddy	Kampong Cham	(9)	7	0	i	9	5	0	0	0	2	0	3	27	3.00
Practicing	Kandal	(8)	6	1	2	0	2	2	1	0	1	0	4	19	2.38
Farmer	TOTAL	(17)	13	1	3	9	7	2	1	0	3	0	7	46	2.71
TOTAL	Kratie	(14)	5	1	0	6	6	0	1	1	0	0	7	27	1.93
	Kampong Cham	(119)	83	18	18	63	43	7	7	5	6	2	35	287	2.41
	Prey Veng	(122)	55	38	8	2	13	0	13	6	15	8	75	233	1.91
	Kanda!	(189)	119	21	50	8	10	28	5	9	1	10	72	333	1.76
	Takco	(8)	2	2	4	0	0	0	0	0	1	0	7	16	2.00
	TOTAL	(452)	264	80	80	79	72	35	26	21	23	20	196	\$96	1.98
	Ratio (%)		58%	18%	18 +	17%	160 .	8° o	6%	5° o	500	400	43° o	<u>L -</u>	

Table E.1.22 Number of Upland Crops Practicing Farmers by Crop in the Study Area

Source: Rural Socio-Economic Survey, JICA Study Team

Note: Data are plural answers.

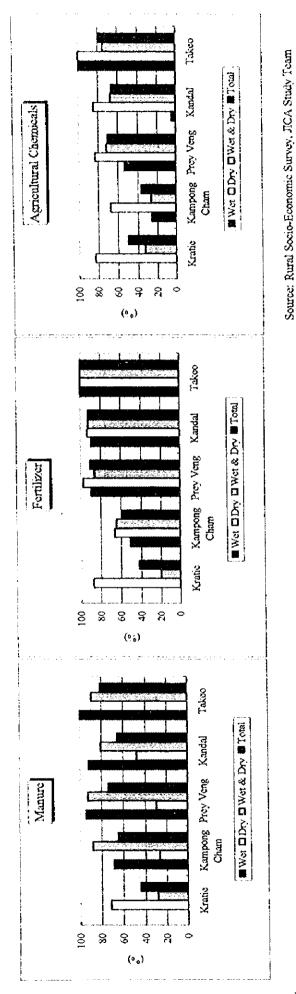


Source: Rural Socio-Feonomic Survey, JICA Study Team

Note W-2,3,5 and 6 are dominant in vert season.

D-3.5.6 and 8 are dominant in dry seasson.

### Figure E.1.12 Cropping Patterns of Paddy in the Study Area



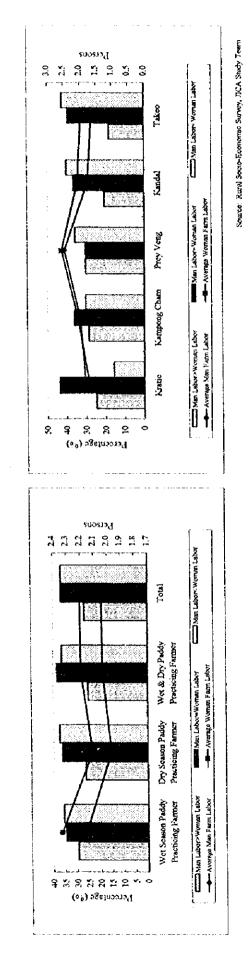


Figure E.1.14 Ratios of Farmers who Have Equal Number of both Man and Woman Labor or not and Agricultural Labor per Household by Sex, Paddy Cropping Type. Province

Figure E.1.13 Ratio of Manure. Fertilizer and Agricultural Chemicals Using Farmer in the Study Area.

Dry Season Paddy			Ŵ	et Seas	on Pa	addy	
1 IR36	IR-I	ĩ	IR36	iR-I		neang ouy	1.
2 IR42			IR42			neang reus	
3 IR64			1R66		_	neang youn	-1
4 IR66			IR64	IR-U		phka ampil	7
5 IR72	{ }		1R92			phka daung	1
6 IR 105	IR-U		bonla pdau	M	-	phka knhey	
7 IR43			chantors pluk			phka sla	
81R46	1		chhrna lact			prech	-
9 IR504	1	_	chomreun ple	1		sar	
10/IR54	1		chong bonla	1 '	h	angpaong	U
11 IR57			kngoak pung	1	_	beykontom	-
12 1858	ł		krohom	1	<u></u>	bromolple	
13 IR62	1	_	kul phear	1		chang ray phdau	-1
14 IR92	$\mathbf{I}$		neang koy	1	54	chhma sar	-1
15 chomreun ple	M	-	neang meas	1		chomreus	~~
16 chonteasplok	$+$ $\sim$		neang nu	1	1	khmau	
lan	-		neang ouk	1		kong kakdek	-1
17 thnot	┨		neang oux	-		nea sorkonla	{
18 neang sor	-		phdau pen	-	<b></b>	phka phdau	-
19 kloeng			phnom roun	-		sailveng	-
20 mhos	-1		pi rom			sar krangnol	{
21 phka sla	-		rech	4	P		
22 phngea prum	-	J	·				
23 popey	-		sambok angkrang	-		<u></u>	
24 pram muoy kuor	-		smang moan	-			
25 prech	4	<b></b>	smoeu	-			
26 rech	<u> </u>	-	srau sar	-	-	<u> </u>	
27 054			7 thnot	•••			
28 1.5	-	_	tong chhouk	+	╀		
29 B.H	-		ehhma prom	L,			
30 bromolple		_	Cehhmar chang kom	-			
31 kapalboh	_	-	l kloeng		-	<u> </u>	
32 khmau	_		2 kong neam	-		-h	
33 kong kakdek			3 kong plok	-			
34 kromoun sar	4		4 koun kranh		-	+	
35 M.T.L	_		5 krochok chab	_	-		
36 thai seed			6 mat sary		-		
			7 mhos				<u>}</u>
<b>[</b>			8 mohaple	_			
	_ <b>_</b>		9 neang chen	_			
		4	0 neang minh	<u> </u>			<u></u>

Table E 1.23 Paddy Varieties Cultivated in the Study Area

Note: IR-Hdentified IR Varieties, IR-U: Unidentified IR Varieties

M:Medium Duration Paddy(120-150 days), L.Late Duration Paddy(>150 days)

U:Unidentified Varieties

Source:Rural Socio-Economic Survey, JICA Study Team

Table E.1.24 Number of Farmers who Used Fertilizer in the Study Area.

Agricultural	Farmer Ty	pe by Practic	ing Paddy		
Chemicals Name	Dry Paddy	Dry & Wet Paddy	Wet Paddy	Total	Remark
Urea	256	230	129	615	
16-20-0	103	79	81	263	Japan -2KR
18-46-0	2	20	29	51	
15-15-15	15	6	3	24	Mainly for Upland Fields
16-16-8+13s	0	2	2	4	

Note: Data are plural answers.

Source: Rural Socio-Economic Survey, JICA Study Team

Agricult	lural	Farmer T	ype by Practici	ng Paddy		
Chemicals		Dry	Dry & Wet	Wet	Total	WHO
Name		Paddy	Paddy	Paddy		Class
Methyl Parathion	(insecticide)	89	48	10	147	la
Monocrotophos	(insecticide)	71	27	5	103	lb
Endrin	(insecticide)	25	18	13	56	lb
Meviophos	(insecticide)	15	3	2	20	la
DDT	(insecticide)	5	7	5	17	11
Diazinon	(insecticide)	7	4	0	11	11
Zine Phosphide	(rodenticide)	2	7	0	9	lb
2,4D	(herbicide)	2	5	0	7	11
Methamidophos	(insecticide)	2	0	0	2	lb
Fenobucarb	(insecticide)	1	0	0	1	11
Endosulfan	(insecticide)	1	0	0	1	11
Unidentified		25	8	10	43	•

Table E.1.25 Number of Farmers who Used Agricultural Chemicals in the Study Area

Note: Data are plural answers.

WHO Class Ia:Extremely hazardous, Ib:Highly hazardous, IE:Moderately hazardous Source: Rural Socio-Economic Survey, JICA Study Ream

				Established		Number	of Staff		Expenditure	Concerned
Туре	Loc	ation	Crop	Year	Profes-	Tech	nician	Others	in 1995	Organization
					sional	1st grade	2nd grade		(Riel)	
Research	Kampong Speu	Prey Pdau	Rice	1981	3		2	12	9,685,241	-
Station	Kandal	Toul Krasing	Rice	1986	0	3	0	12	16,761,100	-
	Kandal	Dey Eth <sup>0</sup>	Rice	1967	2	7	6	14	3,618,000	-
	Kandal	Banteay Dek	Maize	1989	0	S	0	12	7,423,500	-
	Kandal	Kbal Koh	Vegetable	1985	1	8	2	0	10,149,610	
	Svay Rieng	Kouk Trob	Rice	1985	2	2	4	0	12,966,125	
Agricultural	Svay Rieng	Ta Saang	Rice	1987	3	1	0	1	10,453,750	The second second second second second second second second second second second second second second second se
Development	Takco	Tonle Bati	Ricc	1986	l	5	3	8	6,930,000	-
Center	Kandal	Sre Ampil <sup>2)</sup>	Rice	-	-	-	-	-	12,141,085	-
	Takeo	Kabal Po	Rice & Veg.	1989	0	1	0	0	350,000	-
	Svay Rieng	Pollors	Rice & Veg	1989	1	4		1	9,646,600	-
Rural	Kampong Speu	Veal Pong	Rice	1984	2	0	0	0	N/A	World Vision
Development	Kandal	Kandal Stung	Rice	1984	I	0	0	0	Ν/Λ	World Vision
Center	Kandal	Kop Srau	Rice	1987	1	4	1	0	3.420.950	-
State Farm	Kampong Cham	Chamkar Loeu	Cotton	1982	2	4	3	39	20,515.560	-
	Kampot	Kampong Som	Black Pepper	1981	0	0	4	27	19,240,560	•
	Battambong	Toul Samrong <sup>3)</sup>	Rice	1979/82	2	2	6	59	Ν/Λ	-
	Kandal	Kop Stau	Rice	1986	1	4	3	9	N/A	HEKS
National Cattle Breeding Station	Takeo	Tamau <sup>4)</sup>	Cattle	1982	2		3	25	N/A	VVS

Table E.1.26 Research Institutes under the Department of Agronomy, MAFF

Source: Administration Section, Department of Agronomy, MAFF.

Note: 1)-United with Sre Ampil Agricultural Development Center.

2)-United with Dey Eth Vegetable Research Station.

3)-From 1979 to 1982, under provincial gov't management. 4)-Managed by Department of Animal Production, MAFF.

Cooperation with Estat Nain Objootives To u Main Objootives To u To u To u To i Trai Remarks The Fert Remarks The Name Sre Cooperation with Re-	Established in 1987 by World Couroil of Churches The support ended in 1989. To increase pooly production by obtaining higher yields from improved technology To undertake farmer training by helping key farmers to help each other To upgrade technical akills of the staff	Cooperation with	Established in 1987 by World Council of Churches
	blished in 1987 by World Countou of Linucates support ended in 1989. merease paddy production by obtaining higher visidis from improved technology indertake farmer training by helping key farmers to help cash other apgrade technical skills of the staff		
	support chacks in 1989. norease paddy production by obtaining higher vields from improved technology indertake farmer training by helping key farmers to help cach other nograde technical skills of the staff	о С С С С С С С С С С С	The support ended in 1989.
	norease paddy production by obtaining higher yields from unproved technology indertake farmer training by helping key farmers to help cach other apgrade technical skills of the staff	Main Aim	To increase raddy moduction by obtaining higher violds from improved technology
	ndertake farmer training by helping key farmers to help caon other 19xrada teohnical skills of the staff		To understa formate training by helming key farmers to help cach other
	upgrade technical skills of the staff	VIAIN UDJOGUVOS	10 unovade technical skills of the staff
			To improve soil fertility
	To improve soil tertuitty	Main Activitics	Fight demonstration farms
	Eight demonstration farms		Tractic waters and the shown
	Provision of rural credit solicinc		
	Fertilizer distribution		Fortulizer distribution
	Training farmors		Training farmers
	The contor has a full range of farm machinory, including 4-wheel tractor, but most of	Remarks	The center has a full range of larm machinery, molucing 4-windle machine on most of
	them is not currently functional.		them is not currently hunchonal.
	Ammil Research and Asrickural Development Station, Kandal	Name	Kabal Po Agricultural Development Center. Takeo
	Powershiphed in 1085 with the assistance of Manitese (an Italian NGO).	Cooperation with	Established in 1989 by DOA in collaboration with ACR.
T	The support entered in the 1777.	Main Aim	To increase socio-coonomic status by increasing agricultural productivity
Ney Features 1 In		Main Objectives	To be an efficient and functional training center for farmers
			To conduct higher level experimentation in cooperation with IRRL FAO and others
<del>, T</del>	The formation of a Farm Water Users Association is one of acuvilies.		To conduct locally designed research and seed replication in response to local farmer
The	The objective of the association is to encourage farmers to manage and maintain the	,	
	infrastructure of their irrigation system without reliance on government.		
Main Activities Num	Nine extension officers have dual responsibilities for water management and extension		10 conduct farmer light infaits and deutytish anytis
	of paddy production technology.		To facilitate the delivery of services and agricultural inputs to tartiets
Remarks The	The irrigation solution supported by the station covers an area of 3000 ha and supports		I to Irain larmers in community organization with empirate outilization second
	greater than 7000 families.		management
			To link with other government departments and other organizations for the purpose of
ſ	Wandal Come Arrichtmai Develonment Center, Kandal		maximizing efficiency of human, physical and financial resources
Т	National (Aug. 20) have a solid brook on the ACR	Main Activities	Research on paddy
5	ablished in 1999 by LYAL IN COMPANY AND COMPANY AND CALL AND CALL AND CALL AND CALL AND CALL AND CALL AND CALL		Farmor and government staff training
l	The increase accounting the more series activity the fooduotivity		On-larm domonstration
Т			Extension
Main Objectives 101		Kemarks	Activities are directed almost exclusively at farmers in the 3 surrounding communes.
10	To conduct higher level experimentation in ecopetation will mean and the very very		
0 <u>1</u>	To conduct locally designed research and scod replication in response to 100al larmer		
	priorities and physical conditions	Variac	Kep Srutt Mate Farm, Kandai
To	To conduct farmer field trials and demonstrations	Cooperation with	Re-established in 1985 by Kussian assitance and managed by LUCA III 1700
70	To faoilitate the dolivery of services and agricultural inputs to farmers	805N	
	To train farmers in community organization with emphasis on irrigation scheme	Main Aim	Paddy weed multiplication and distribution
2		Remarks	There is severe bird damage due to earlier maturity of HYV paddy than local varieties
Ĕ	The training of the construction of the organizations for the purpose of		grown by adjoining farmers.
	maximizing efficiency of human, physical and financial resources		Since 1993, sales to farmers and ADCs have been nil due to low quality and quantity
Main Activition Rev	Recearch on raddy		
	Famer and overment staff training		
5			
EX	Extension		

Table E.1.27 Activity Descriptions of Research institutes under the Management of DOA

Table E. 1.27 Continued

Name	Kouk Trob Recearch Station, Syay Rieng
Cooperation with	
Main Aim	To select the best paddy varieties under appropriate technology in the local low
	fortility, acidic soils which are obtractorized by two main crops - sandy soils and
	black soils.
Main Objectives	Research on both paddy
	Improvement of soil fertility using sustainable technology
	Demonstration of new and improved paddy varieties and fertilizer usage
	Multiplication and corrification of high vielding paddy varieties
Main Activities	Sustainable agricultural research, especially on paddy production
	- Cropping system research
	<ul> <li>Integrated nutrient management</li> </ul>
	- Varietal improvement trials
Remarks	Most research is carried out in collaboration with IRRI.

NCTIBIAS	VION RECEIPTING ON THE OVEROUT ATOM TO A THE TE
Name	Prev Pdan Research Station, Kampong Speu
Cooperation with	Re-established in 1936 with the assistance of PADEK.
NGQ.	The support ended in 1994,
Main Aims	Research into varietal testing and solection
	Develop appropriate technology in nee production
Main Objectives	Research on both paddy and other crops
•	Improvement of soil fortility
	Extension of improved varieties and appropriate technology to researchers, extension
1024	workers and farmers
Main Activities	Scleation of high yielding varieties
-	Nultiplication of certified seed
-	Conservation of traditional varieties for use in future breeding programmes
••• <b>••</b> ••	Development of appropriate technology, including cropping systems technology
	Extension to local farmers
Remarks	Nowadays, most research is conducted on behalf of other organizations such as IRRI.
	FAO nad JICA.
	Main achievements in recent years
7.477.7	- Collection of 3000 varieties for germ plasm storage
	- Release of IR 64, IR50. IR72, B 198 and B 66 to farmers
	- Purification of 6 traditional varietics
Name	Ta Saang Agricultural Development Center, Svay Rieng
Cooperation with	Established in 1988 by the NGO CIDSE.
200V	The support ended in 1993.
Main Am	To extend appropriate technology in paddy production
Main Objectives	To upprade knowledge and skill of center technical staff
	To improve the very poor soils by introduction of Integrated Nutrient Management
	and by way of introduction of integrated cropping systems

To distribute farm inputs To extend technology to farmors by way of field demonstration. filed days, training Maim activities are now cooperated with IRRL FAO and JICA. (farm trials into insect incidence, fortilizer trials, varietal trials)

Remarks

Source: "A Stratogic Review and 5 year Funding Proposal", October, 1995, DOA, MAFF

Table E.1.28 Number of Traince and Graduate in Royal University of Agneulture (former Cham Car Daung Agricultural Institute). 1985-1992.

Faculty	Number of Traince	Graduate
Agronomy	250	138
Veterinary	192	85
Forestry	234	120
Fishery	189	82
Mechanics	110	89
First Year for all Facultics	179	-
Total	1154	514

Source : Bulletin of Agricultural Statistics and Studies, MAFF.

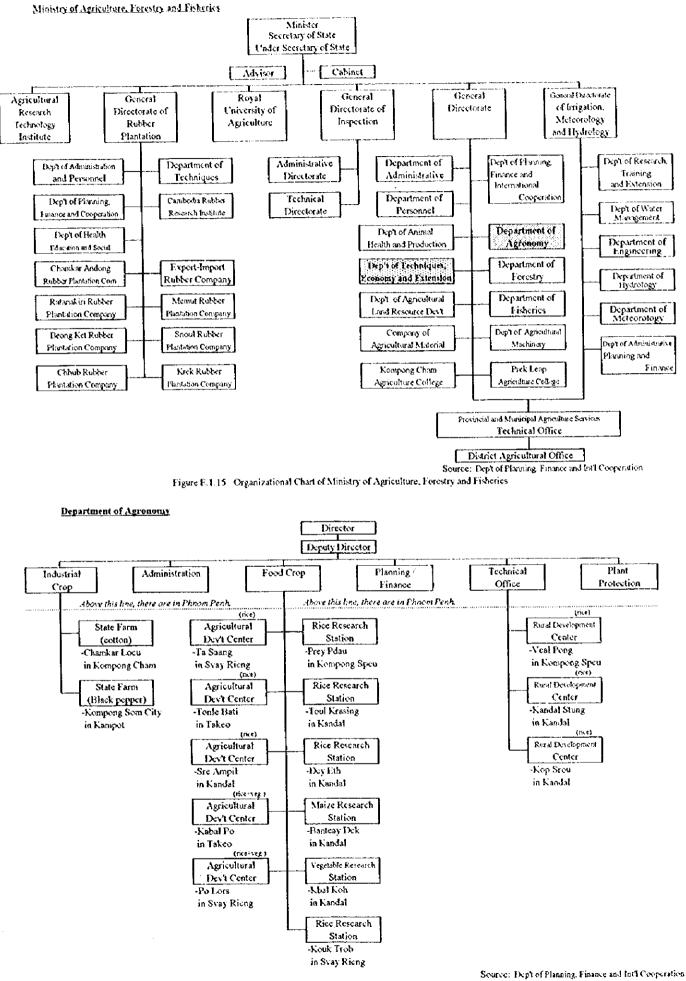


Figure E.1.16 Organizational Chart of Department of Agronomy, MAFF

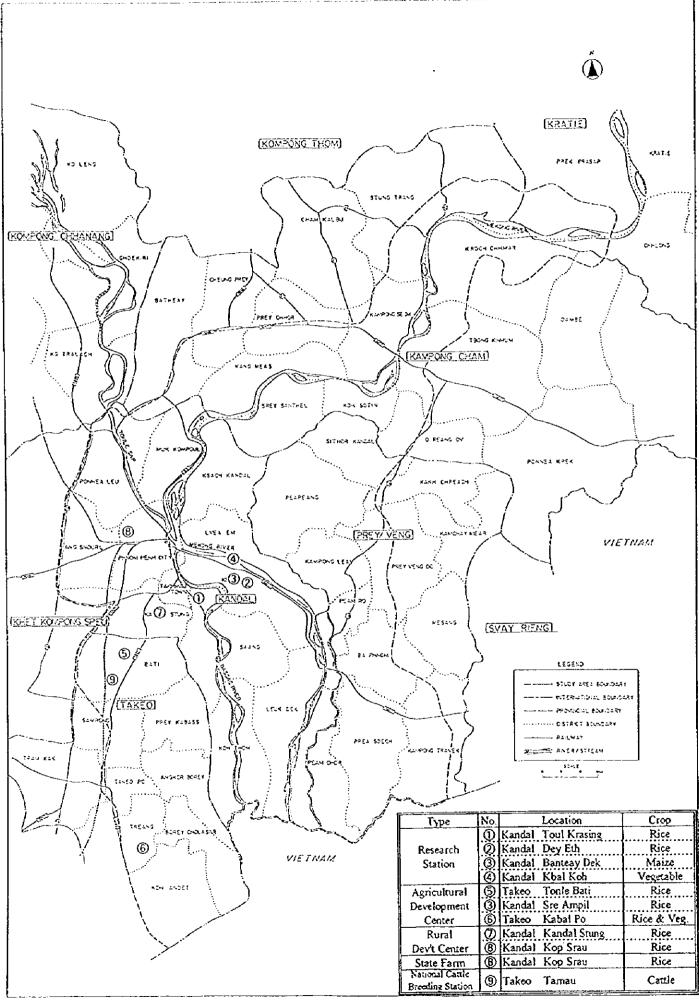
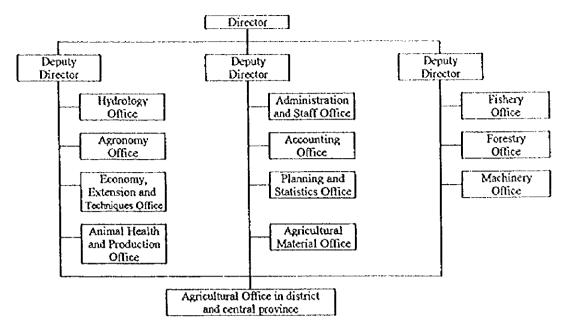


Figure E.1.17 Research Institutes Existing in the Study Area

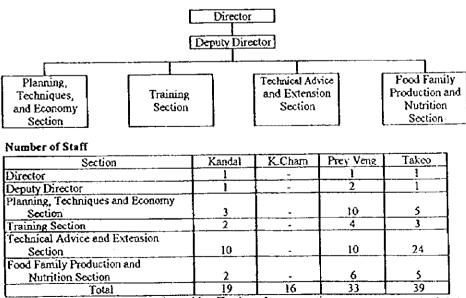


#### Number of Staff

Section	Kandal	K.Cham	Prey Veng	Takeo
Hydrology Office	39	38	76	81
Agronomy Office	9	24	41	6
Economy, Extension and Techniques				
Office	19	16	40	39
Animal Health and Production Office	37	35	43	27
Administration and Staff Office	19	46	21	23
Accounting Office	8	l	13	6
Planning and Statistics Office	8	12	11	3
Agricultural Material Office	13	10	14	16
Fishery Office	100	37	67	31
Forestry Office	44	64	43	26
Machinery Office	24	18	30	14
Agricultural Office in district	I			
and central province	148	115	176	121
Total	468	415	575	393

Source: Provincial Agricultural Office

Figure E.1.18 Organizational Chart of Provincial Agricultural Office



Note: In Kompong Cham Province, this office is under preparation. Source: Provincial Agricultural Office

Figure E.1.19 Organizational Chart of Economy, Extension and Techniques Office in Provincial Agricultural Office

Drainat Davalanmant	1001.2 Device the Device Mission
Project Development	1994,2 Project Design Mission
	1994,9 Project Design Document (PDD)
	1994,11 Appraisal Mission
	1995,8 Appointed Managing Consultants
	1995,11 Project Inception Phase
	1996,3 Project Implementation Document (PID)
	1996,5 Project Implementation Phase
	2000,11 Project Completion
Project Cost	Australian Government Aust\$: 10,116,000
	Cambodian Government Aust\$: 123,000
Project Strategies	-Strengthen the institutional capacity of DTEE to implement an effective national
	extension service
	-Achieve a target of 484 trained Agricultural Extension Workers (AEW) operating
	in 968 communes in 21 provinces - 1 AEW per 2 communes
	-Identify a key village within each commune to be the initial focus for extension
	activities
	-Conduct participatory extension planning and training needs analysis to produce
	village, commune, district and provincial extension plans
	-Link with other organizations involved with rural community development to
	provide a coordinated approach to extension
	-Decentralize short course training and emphasize on-the-job training in 12 provinces
	-Provide a higher level of on-the-job training support to 3 target provinces;
	Kampong Cham, Svay Rieng, Battambang
	-Establish a media unit to reinforce and complement the extension effort
	-Provide transport to extension workers to enable them to access their target
	groups and villages
	COMPLETE CONTRACTOR AND AND AND AND AND AND AND AND AND AND
	-Provide credit to facilitate community and micro enterprises derived from the
Project (Cool	implemented extension process
Project Goal	To contribute to the achievement of food security in selected communities of
	Cambodia through the development, delivery and utilization of a national agricultural
	extension system
Project Components	Component 1 Agricultural Extension Organization and Development
	Purpose To establish an operational national agricultural extension system in
	MAFF implemented through the DTEE
	Component 2 Agricultural Education Strengthening
	Purpose Strengthen agricultural education at Prek Leap Agricultural College to
	enhance long term technical capability of MAFF and other agencies
	with an extension role
	Component 3 Joint Community/MAFF Participation for Agricultural Development
	Purpose Enhance village capability on selected communities to improve
	agricultural productivity, food security and income through the
	extension system
	Component 4 Project Management
	Purpose Establish a monitoring and evaluation system applicable to management
	of the national agricultural extension system which enables adequate
	project reporting
Ľ	

 Table E.1.29
 Outline of Cambodia Australia Agricultural Extension Project (CAAEP)

Source. "CAAEP Launch Seminar" brochure, 8 may 1996

## Table E.1.30 Distribution plan of agricultural material by district.

	Kandal Province, 1991	<u></u>			Feit	5701			·· ·	Flooded Area Agricultural Material								
	District	<u> </u>		Dry Seaso				Wet Season	Wet Season Project Supporting			Persionse		brais	Machine	Threating	H⊃e	
	27590 144	13-45-0		Urea	Origin	16-20-0	Origin	Urea	Origia	Seed	Urea	Diaziran	Sunisitrir.	Sumichion.	Spriner	Sprayer	Machire	
		(1 <b>um</b> )		(wa)		(100)		(kon)		Rate(1)	(003)	(P)	Φ.	(1)	(set)	(set)	(1/1)	(121)
1	Kasch Kandal	200	FAO		Japan					10	5	35	5		5	2		50
	Muk Kampoul	202	FAQ		Jepan												}	50
	Lves Em	80	FAO	129	FAO							270		40	5	<b> </b>	<u>}</u>	50
_	Kean Svay	5	FAO	. 8	ADB			8	FAO			37	· · · · · · · · · · · · · · · · · · ·	5		ļ	<u> </u>	24
_	Saang	80	FAQ	50	Japan			2	FAO			270	80		5	2		50
	Leuk Dek	181	FAO	22	ADB			20	FAO		L	L			5	2	<b></b>	50
_	Koh Thom	246	FAO	20	Japan			10	FAO			<b>.</b>			5	2		50
_	Ponhea Leu	249	· · · · · · · · · · · · · · · · · · ·		ADB					<u> </u>		20		<u>-</u>		ļ		50
	Ang Spourt	91	FAO	25.5	FAO			56.497	FAO	25	5	90	20	10	]]	·	<b>.</b>	50
	Kandal Stang	417		135	FAO		1	42.25	FAO	56	10		<b>↓</b>	┣───	8	š <b>i</b>	<u> </u>	250
	Takhmeu	27	FAO	25	ADB	Ţ	Ţ.		<u> </u>	3	1	1,000		<b> </b>	J	4	<u> </u>	50
-	Other Areas	160.95	ADB	158.35	ADB	76.25	Ispen	40.25	FAO	ļ	<b> </b>	70		2	11	4	2 1	63
- ا	Total	1938.95	i	1069.85	T.	76.25	1	198.997	1	94	20	1,792	185	62	50	) 10	<u>  1</u>	781

Source: Agricultural Material Office, Kandal Province

Kampong Cham Provi	1				Rainy	Season I	994/95					1	Dry Season 1995/96		
	Dath 1	Paddy Fertilizer			Agricultural Material							Paddy		Forthern	
District	Projected	18-46-0	thea	16-20-0		Pesticide		Hand	Machine	Rice	Hoe	Projected	15-15-15	Urea	16-20-0
District	Area				Diazincu	Sumisidrin	Surnichton	Sprayer	Sprayer	ма		Area			
	(La)	(100)	(ion)	(1001)	0	0	0	(941)	(201)	(201)	(571)	(ha)	(00)	(100)	(ton)
1 O Reang Ov	18,590	124	165,45	25.65	200	50	35	3	1		70			22	21
2 Koh Sotin	1,048	7	9.35	2.45	50	20					20			27	- 28
3 Srey Seathel	7,040	42	62.65	9.7	100		15	3			30			105	110
4 Kang Meas	2,821	18.5	25.1	3.85	100		10	2			20			106	110
5 Kampong Cham	130	1.7	4.35	1.55		the second second second second second second second second second second second second second second second s	5	1			10			2	
6 Kroch Chhmar	3,052	20.5	27.15	4.2	210			3			70			102	
7 Thong Khmam	21,717	390	193.25	29.95					1		80			62	6
8 Stung Trang	7,021	42.5	62.45	9.65						<u> </u>	30			66	
9 Kampong Seim	6,530	43.5	58.1	9						<b></b>	30			60	
10 Prey Chhor	18,793	126	167.25	25.9	200				1		80				
11 Choung Prey	12,975	160	115.45	17.9	160						50			55	
12 Bathcay	16,498	110	142.8	22.75	200				1	<b></b>	60			91	÷
13 Dambe	11,554	30	50		200	-				ļ	45		Y	4	ļ
14 Memot	13,645	28.45	50		140				<u>ال</u>	<b> </b>	45		<b></b>	l	ļ
15 Ponnea Krek	20,758	186.8	184.75	20.65					41	<b>I</b>	80	-		l	<b></b>
16 Chamkar Leu	7,128	47.5	63.45		_	the second second second second second second second second second second second second second second second s			1 1	ļ	30			7	<u> </u>
17 April Material Office		60	100			80	25	10	) 3	<b>I</b>	20		10	62	6
8 Reservation		30	100	20.5	j		J		5	4 1	30	-		l	
Total	169 300	1468.45	1581 55	241.5	2450	800	400	60	) 10	1	800	21,000	50	830	86

Source: Agricultural Material Office, Kampong Cham Province

	Takeo Province, 1995								
			Fertilizer		Pesticide	Hand	Machine	Hoe	Seed
	District	15-15-15	18-46-0	Urea		Sprayer	Sprayer		Rice
		(ton)	(ton)	(ton)	(1)	(set)	(set)	(set)	(ton)
1	Bati		211	230					20
	Prey Kabass		194	2.56					25
	Angkor Borey		100	175.5					40
	Samrong		135	48					20
	Takeo PC		20	62					0
6	Tram Kak		205	314					0
_	Borey Cholasar		85	0					35
	Treang		145	125					20
_	Koh Andet		115	298.5		<u> </u>	<u> </u>		60
10	Kiri Vong		130	101.35			<b> </b>		60
_	Sange Storehouse		133	170.65		L	L		0
	Ochombok Storehouse	40	1397	949	100			800	0
	Total	40	2870	2730	100	7(	10	800	280

Source: Agricultural Material Office, Takeo Province

Data	Place	Period	No. of Data	Symbol	Remarks
	Kratie	1981 - 1995	15	A	
	K.Cham	1981 - 1995	15	В	
Paddy	P.Veng	1981 - 1995	15	C	
Production	Kandal	1981 - 1995	15	Đ	1
	Takeo	1981 - 1995	15	E	
	Kratie	1981 - 1994	11	RI	Lack of data for 1989-1991
Rainfall	K.Cham	1981 - 1995	14	R2	Lack of data for 1990
	P.Veng	1984 - 1995	12	R3	
	Pochentong	1981 - 1995	15	R4	1
	Takeo	1985 - 1995	11	R5	
ligh Water Level	Phnom Penh	1981 - 1995	15	WL	(Chaktomuk)

Table E.2.1 Data Used for Correlation Analysis between Paddy Production and Hydro-Meteorological Data

Source: Production Data-Bulletin of Agricultural Statistics and Studies, MAFF Hydro-Meteorological Data-Same as Annex C "Hydrology"

Table E.2.2 Results of Correlation Analysis between Paddy Production and Hydro-Meteorological Data

Paddy Production	and	High	Water	Level

Y-Axis	X-Axis	Coefficient of
		Correlation
A	WL	r=-0.60*
В	WL	r=-0.20
С	WL	r=-0.23
D	WL	r=0.11
E	WL	r≈-0.41
C <sup>1)</sup>	WL.	r=-0,64*

Paddy Production and Rainfall
during July and August

Y-Axis	X-Axis	Coefficient of
		Correlation
<u>A</u>	RI	r=-0.29
B	<b>R</b> 2	r=0.39
С	R3	r=0.76**
D	R4	r=0.12
E	R5	r=0.25

### Note: C<sup>11</sup>-Omitting 1995 data

The symbols of \* and \*\* mean 5% and 1 % significant, respectively.

### Paddy Production and Annual Rainfall

Y-Axis	X-Axis	Coefficient of Correlation
Λ	DA	
<u>A</u>	<u></u>	r=-0.09
В	R2	r=0.37
C	R3	r=0.49
D	R4	r=0.18
E	R5	r=0.43

### Paddy Production and Rainfall during September and October

The second second second second second second second second second second second second second second second se							
Y-Axis	X-Axis	Coefficient of					
		Correlation					
A	RI	r=0.41					
В	R2	r=0.29					
C	R3	r=0.07					
D	R4	r=-0.09					
E	R5	г=0.37					

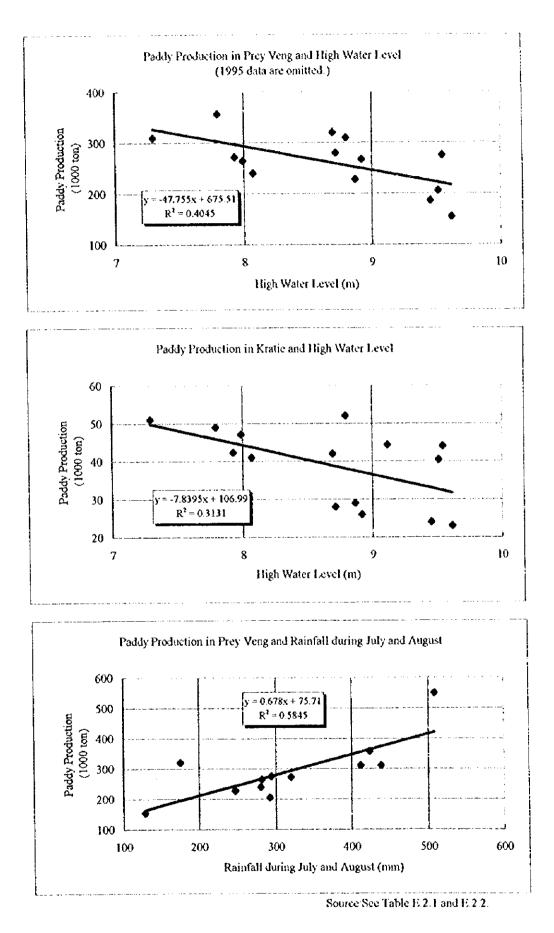
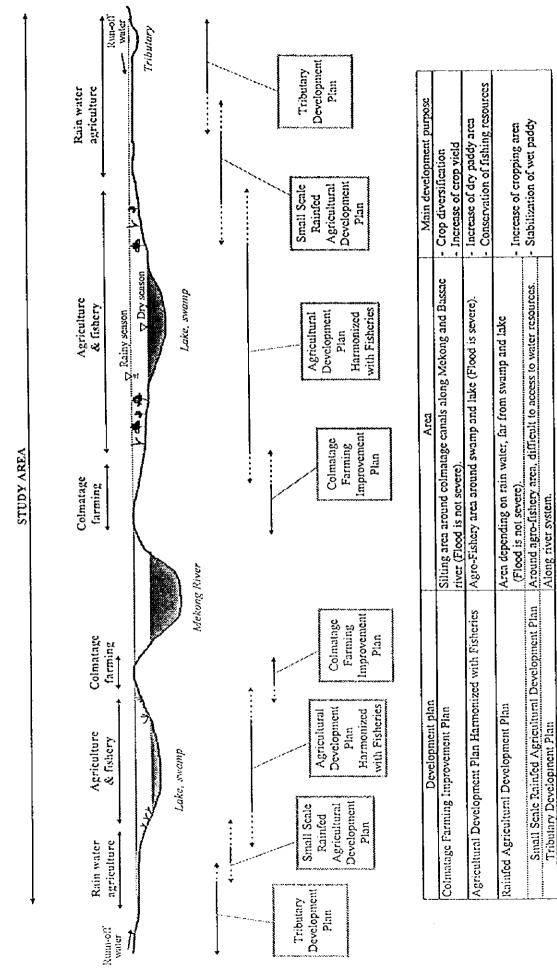


Figure E.2.1 Significant Correlation Analyses between Paddy Production and Hydro-Meteorological Data





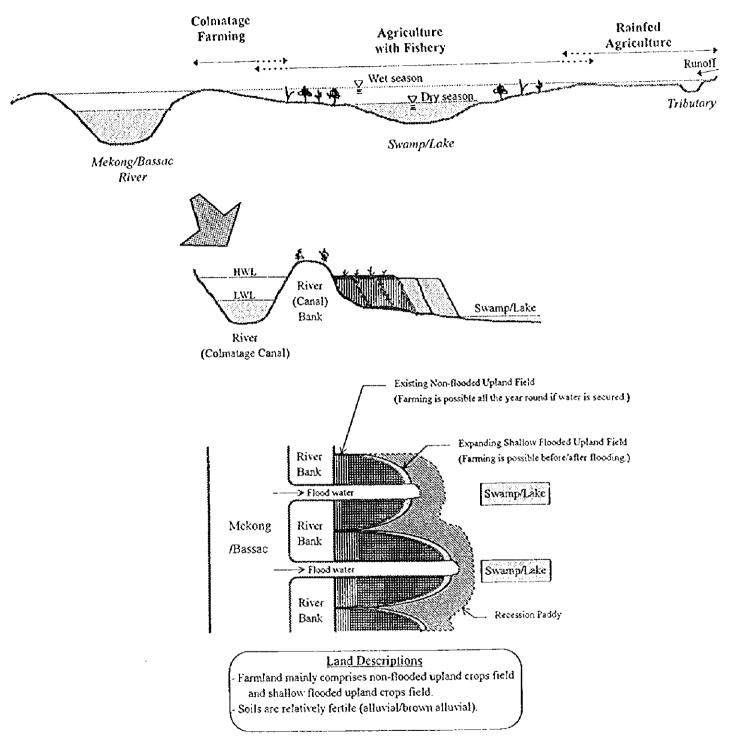


Figure E.3.2 Outline of Land Use in Colmatage Farming Areas

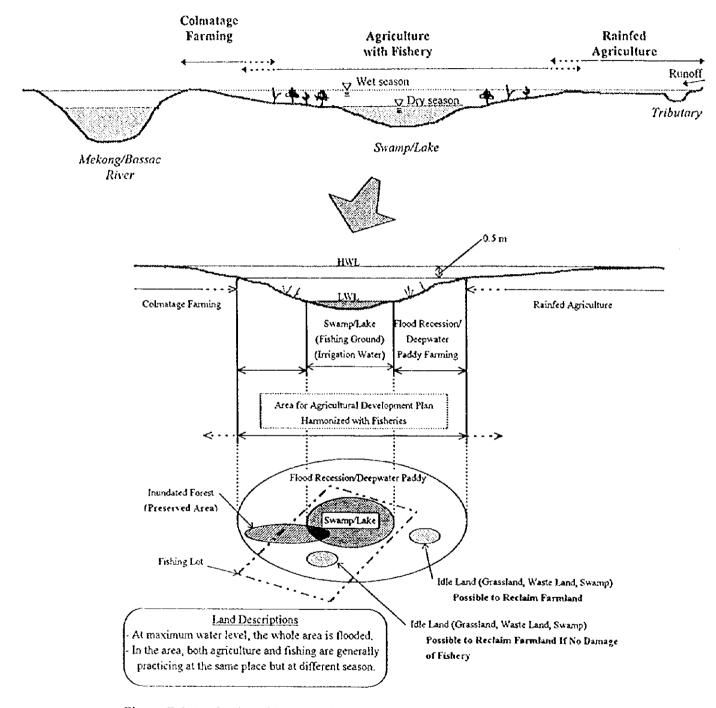
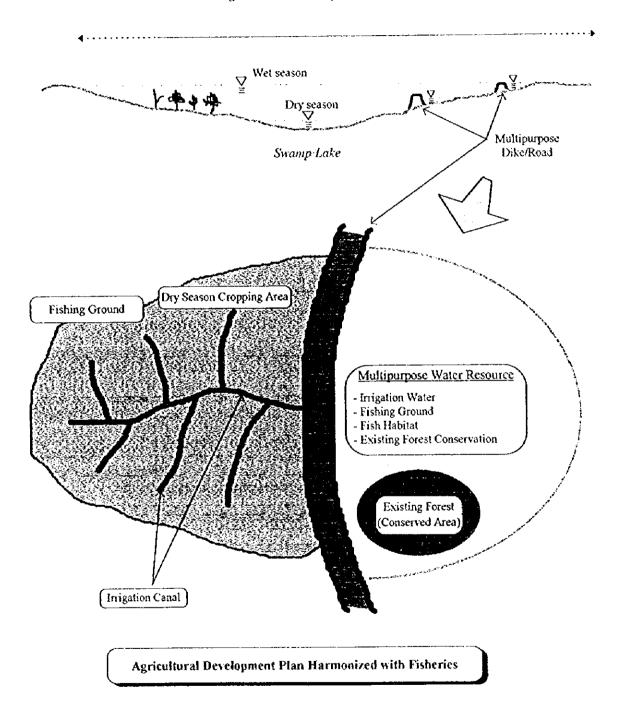
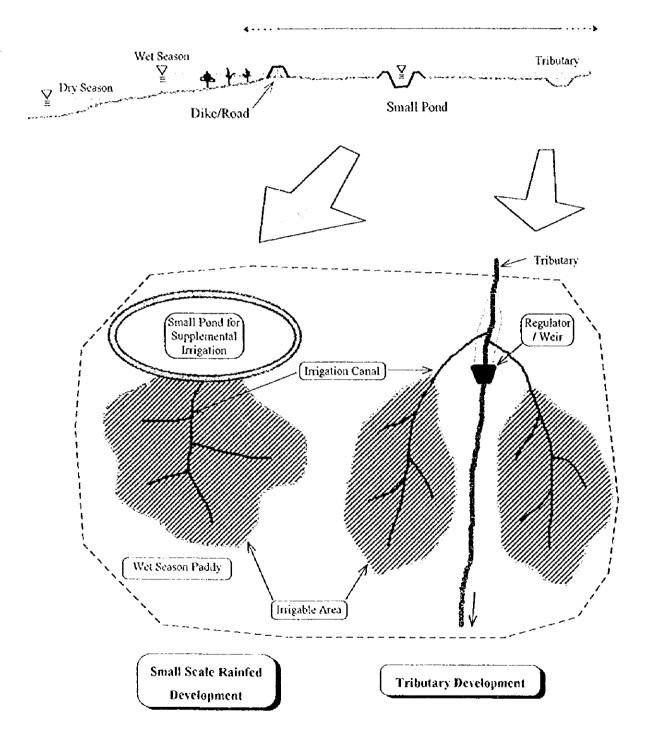


Figure E.3.3 Outline of Land Use in the Areas for Agricultural Development Plan Harmonized with Fisheries



The Area for Agricultural Development Plan Harmonized with Fishery

Figure E.3.4 Outline of Agricultural Development Plan Harmonized with Fisheries



### The Area for Rainfed Agricultural Development Plan

Figure E.3.5 Outline of Rainfed Agricultural Development Plan

Table E.4.1	Planted Area	and Production	of the Study	Area by Zono
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Item	Season	Crop	Zone 1	Zone 2	Zone 3	Zone 4	Zone S	Zone 6	Zone 7	Zone 8	Zone 9	Zone 10	Zone 11	Zone 12	Zone 13	Total
Planted		Paddy	13,807	11.361	12,185	57,580	47,055	6,893	4,062	48 984	10,725	4,315	90,943	2.529	31,361	341,800
	Season		2,938	3,364	138	1,005	1,137	1,884	298	66	4,910	8,350	34	2,437	48	26,609
(ba)		Mungbean	747	99	225	42	22	33	\$	102	57	0	102	65	0	1,499
(na)	ł	Vegetable*	22	0	0	32	23	326	177	411	1,254	142	356	0	0	2,743
		Sweet Potato**	14	0	0	17	35	37	0	38	14	0	87	0	12	254
		Sesamo***	1,085	1,113	58	159	55	12	0	0	0	0	0	424	54	2,962
	Diy	Paddy	4,202	5,565	2,220	4,902	18,693	10,302	5,325	7,317	11,790	9,721	28,265	10,500	10,582	129,415
	Season	Maize	9	96	5	160	1,175	1,008	34	13	729	285	74	2,497	55	6,139
		Mungbean	15	269	0	133	49	1.039	0	39	480	1,963	270		0	4,324
		Vegetable*	43	0	0	57	41	430	895	481	2,044	2,131	829	0	0	6,952
		Sweet Potato**	26	0	0	35	89	40	4	85	221	530	270		27	1,327
		Sesame***	0	7	0	48	61	12	0		0	0	0		77	629
	Total	Paddy	18,009	16,926	14,404	62,482	65,749	17,195	9,387	56,331	22,515	14,036			41,943	471,215
		Maize	2,947	3,460	143	1,165	2,312	2,892	332	79			103	4,934	103	32,748
		Mungbean	762	368	225	175	71	1,072	5	141	538	1,963	372		0	5,822
		Vegetable*	66	0	C	89		756		892		and the second second second	1,185	- Contractor of the	0	9,694
		Sweet Polato**	40	0	0	53	124	77		123			357			1,581
		Sesame***	1,085	1,120	58			24				-			1	3,591
Production	Wet	Paddy	23,017	17,360	20,176			18,924	7,649				150,987			598,855
(ton)	Season	Maize	4,096	3,835	179	· · · · · · · · · · · · · · · · · · ·		3,959								39,02
		Mungbean	240	20	34								61			
i		Vegetable*	189	0	0								3,200			14,82 96
		Sweet Potato**	56					148							. <b>.</b>	
		Sesame***	1,053									· · · · · · · · · · · · · · · · · · ·				442,98
	Dry	Paddy	10,085	13,429										************	a second and a second second	
	Season	Maize	12			157										
		Mungbean	5										and the state of a state of the			
	1	Vegetable*	369				A					and an annual second second				
	i i	Sweet Polato**	103		0						an an an an an an an an an an an an an a			212		
		Sesame***	(			$\frac{2^{2}}{2}$						· ·	235,78			
	Total	Paddy	33,101	30,789			1 150,268			9 112,04						
		Maize	4,107							4 8 2 5						
	1	Mungbean	24													
	1	Vegetable*	55													
	1	Sweet Potato**	159								di kanadaran ka			0 42-	***	
	i	Sesame***	1,05	<u>1,11</u>	3 51	B 16	0 62	2 1:	2	0	0 (	0	<u> </u>	<u>v 42</u> -	<u>1 00</u>	1 2,94

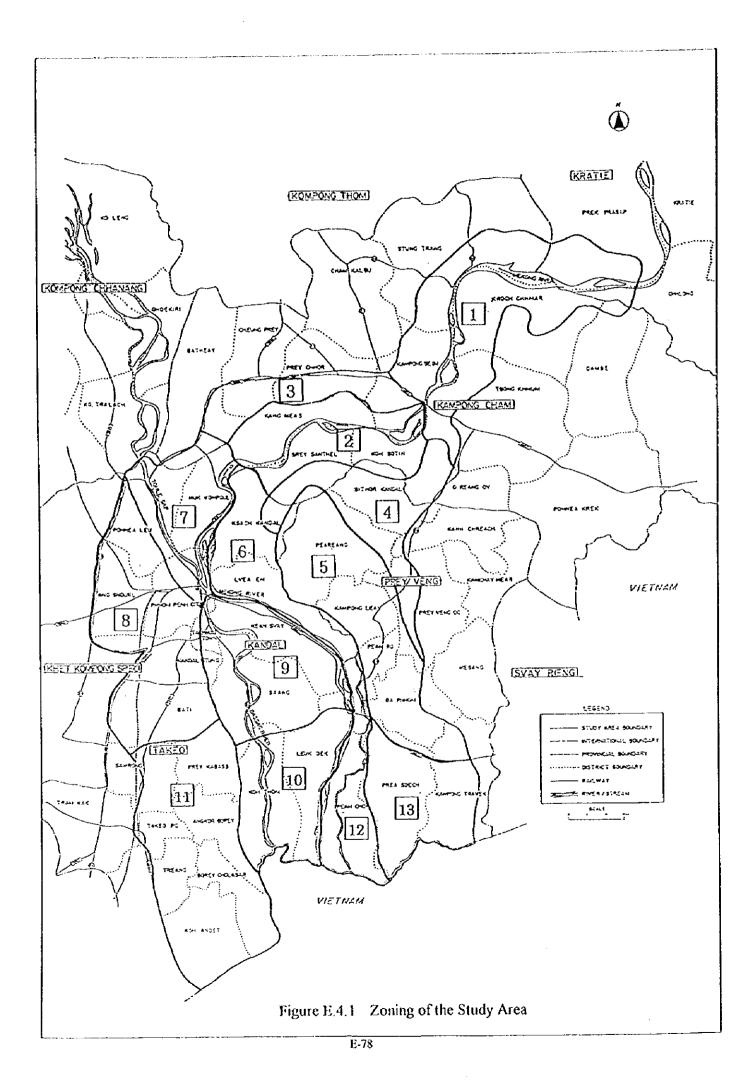
Source Provincial Agricultural Office

Note: Provide a Agricultural Office Note: Based on the district area distribution to the Study Area, all dida are proportioned \*-The vegetable data of Kampong Chain and Prey Veng are not included \*\*-The sweet poteto data of Kampong Chain are not included \*\*\*-The sesame data of Kandal and Takeo are not included

Table E.4.2	Classification of 13 Zenes by Agricultural Characteristics
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Турс	<u> </u>	Λ	B	С	D	E
Zone No		Zone 3,4,8	Zone 5,11,13	Zone 1,2	Zone 6,7,9	Zone 10,12
Main Crop T	ypes	Paddy	Paddy	Paddy + Upland Crops	Paddy + Upland Crops	Paddy + Upland Crops
Cultivated C	rops	Paddy	Paddy	Paddy, Cercal	Paddy, Cereal, Legume, Vegetable	Paddy, Cereal, Legume, Vegetable
Farming Sea	ason	Wet	Wet + Dry	Wet	Wet + Dry (Wet Season : Paddy > Upland Crops)	Wet + Dry (Wet Season : Upland Crops > Paddy)
	Item 1	Total Paddy Planted Area / Total Planted Area > 90%	Total Paddy Planted Area / Total Planted Area > 90%	Total Upland Crops Planted Area / Total Planted Area > 10%	Total Upland Crops Planted Area / Total Planted Area > 10%	Total Upland Crops Planted Area / Total Planted Area > 10%
Characteristics	Item 2	Wet Season Planted Area / Total Planted Area > 80%	Wet Scason Planted Arca / Total Planted Arca < 80%	Wet Season Planted Area / Total Planted Area > 70%	Wet Season Planted Area / Total Planted Area < 70% (Wet Season : Paddy > Upland Crops)	Wet Season Planted Area / Total Planted Area < 70% (Wet Season : Upland Crop > Paddy)

Source: ACA Study Team (Original statistics, collected from the concerned provinces, are modified in accord with area proportion to the zone.)



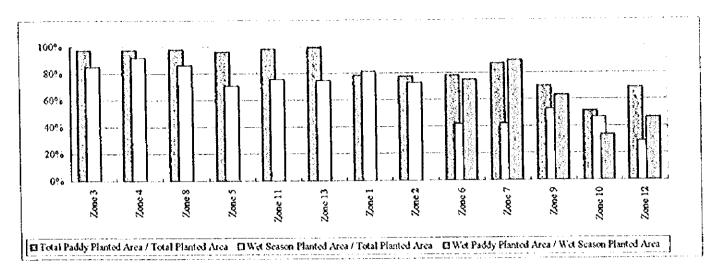
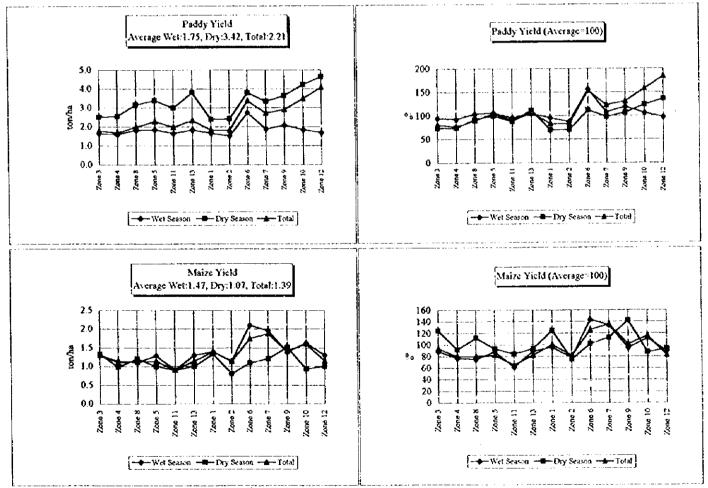


Figure E.4.2 Classification of 13 Zones by Some Agricultural Characteristics



Source: JICA Study Team (Original statistics, collected from the provinces concerned, are modified in accord with area proportion to the zone.) Figure E.4.3 Vield of Paddy and Maize by Zone

Zone
of Each
Target e
icultural Development
E.4.3 Apr
Table E

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	True of Main Conning Bottom?	ing Dattorn <sup>12</sup>		V			в		C I			D		ш	
			Tana 2	Vana 1	70008	Zomo S	Zone 11	Zone 13	Zone 1	Yone 2	Zone 6	Zone 7	Zone 9	Zone 10	Zone 12
	ZODC NO.	<u>.</u>	C DEO7		0 7807/	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	11 2001			;	f				Dadder
			Paddy	Paddy	Paddy	Paddy	Paddy	Paddy	Paddy	raddy +	Yaddy +	raddy	racor +	1 2 2 2 3 3 4	100 +
		{						•	+ [orreal	Crim's	Cereal	Vecetable	Cereal	Paddy	Cercal
		Wet Season			· .		•••••				+		+	•	
	Major										Vegetable		Vcgetable		
<del>- • • • •</del>	Culturation		•	•	-	Paddv	Paddv	Paddy	Paddy	Paddy	Paddy	Paddy	Paddy	Vobeq	Paddy
						•	• • • • • •				+	+	÷	+	+
	-	Dry Season									Legume	Vegetable	Vegetable	Vegetable	Cereal
4 														+	
15%54	,									<u> </u>				Legume	
		West Conver	yy 1	191	181	185	166	1.85	1.67	1.53	2.75	1.88	2.08	1.85	1.70
Conditions	Ľ	Der Centon	2 50	25.0	91	3 30	3.00	3.81	2.40	2.41	3.81	3.35	3.64 2	4.22	4.65
		Wot Conton	00.4	1 1 2	011	1 20	06 0	130	1.39	1.14	2.10	1.96	1.39	1.63	1.30
	Marke Yicid	WCI SCANOII	AC.1	0000	200 I	1 00	000	1 00	133	0.80	60 1	1.21	1.52	0.94	1.00
	(ton/ha)	LDTV Scason	с <u>.</u> 1	0.70	77.1	 			2 Y C	02	6	4	96	154	35
E	Evisting C	Existing Colmatage Canal	72			•	2	•		3	Ĭ	•			:
-80	Evisting	Small	1	6	6	29	5	71	6	4	C1	_	t		10
<u>.</u>	Inization	Medium	6	12	5	19	24	8	5	3	6	5	16	4	×
	Sveteme	Tarec	Į		•	÷		•	•	•	4		-	•	
	Fristing ?	Fristing National Road	NR 6	F	NR 2.3.4	<b>NR 15</b>	NR 2.3	NR I	•	•	1	NR 5.6A	NR I	•	1
	Tyme of	i(1) Colmatage	0	1	,	1	4	1	0	0	4	4	0	0	0
2 2 2	Davis Plan <sup>2)</sup>	(2) Acri with Fish.	0	0	•	0	0	0	0	0	0	0	ø	0	Ø
<b>T</b> <b>1</b> 1 1 1 1 1 1 1 1 1 1 1 1 1		(3) Rainfed Aeri	0	Ø	Ø	0	0	0	0	0	۷	4	4	4	⊲
	1 Wet Season	Variety Improvement	0	0	0	0	0	0	0	0	0	0	0	0	0
	Paddy	Yield Improvement	0	0	-		0	1	0	0	•••••	;	1	1	0
	2 Dry Season	Area Expansion	, ,	1		1	•	1	0	0	0	0	0	0	0
A contraction of the second		Vield Immovement	-	1		0	0	1	0	0	1	0	,	1	ł
Taract	]~	Cereals/Lemmes	,	0		0	1	0	0	0	1		1	0	0
1 m fr	I Inland Crons	Vegetables	0	1	0	1	0	1	1	-	0	0	0	1	1
	A Day Suscon	Corcale/Leonmes	С	0	0	0	0	0	0	0	1	3	1	0	0
	Upland Crops	Vegetables		1	1	1		-		1	0	0	0	1	1
Main	A Poddy Cronning Zone in Wet Season	ne in Wet Season					j.	Basic Plan <sup>2)</sup> (	(1):Colmatage Farming Improvement Plan	Farming Im	provement Pl	E			
Cropping	B.Paddy Cropping Zon	B: Paddy Cropping Zone in both Wet & Dry Season							(2). Agricultural Development Plan Harmonized with Fisheries	al Developme	ant Plan Harr	nonizod with	l Fisheries		
Pattern <sup>13</sup>	C:Paddy + Upland Cro	C:Paddy + Upland Crops Cropping Zone in Wet Scason 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	kason Ant & Dery So	acon (Wet Par	tdv > Wet Un	land Crops)		<i></i>	(3): Ramon Agneumura Development Fiam @: There are many possible areas.	groundra u	evelopinent r s areas.				

D:Paddy + Upland Crops Cropping Zone in both Wet & Dry Season (Wet Paddy > Wet Upland Crops) E:Paddy + Upland Crops Cropping Zone in both Wet & Dry Season (Wet Upland Crops > Wet Paddy)

There are many possible areas.
 There are moderate possible areas.
 There are a few possible areas.
 There are no possible areas.