

Annex A : Worksheets

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Worksheet 2: Urban Population Estimates Alternative Strategies

Worksheet 3: Rural Population Estimates Alternative Strategies

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TOTAL POPULATION ESTIMATES: ALTERNATIVE STRATEGIES

Worksheet 1

District	1998 Total Population	2005 Trend (Alternative 1)		Alternative 2 Total Pop	Alternative 3 Total Pop	Alternative 4 Total Pop	Preferred Total Pop
		Change 98-05	Total Pop				
Botum Sakor	18,822	9,465	28,287	10,000	20,000	35,000	20,000
Kiri Sakor	6,289	3,163	9,452	15,000	8,000	10,000	8,000
Koh Kong	8,817	4,434	13,251	25,000	11,000	20,000	11,000
Smach Mean Chey	29,329	14,749	44,078	60,000	50,000	15,000	50,000
Mondol Seima	12,569	6,321	18,890	30,000	25,000	6,539	25,000
Srae Ambel	38,435	19,328	57,763	40,000	60,000	75,000	60,000
Thma Bang	2,880	1,448	4,328	10,000	4,000	7,000	4,000
Kampong Seila	14,965	7,526	22,491	8,539	20,539	30,000	20,539
Koh Kong	132,106	66,433	198,539	198,539	198,539	198,539	198,539

URBAN POPULATION ESTIMATES: ALTERNATIVE STRATEGIES

Worksheet 2

District	1998 Urban Population	2005 Trend (Alternative 1) Change 98-05	Urban Pop	Alternative 2 Urban Pop	Alternative 3 Urban Pop	Alternative 4 Urban Pop	Preferred Urban Pop
Botum Sakor	0	0	0	2,000			
Kiri Sakor	0	0	0	4,500			
Koh Kong	0	0	0	5,000			
Smach Mean Chey	15,511	7,800	23,311	48,000	50,000	13,000	40,000
Mondol Seima	0	0	0	20,000	25,000	5,039	20,000
Srae Ambel	14,979	7,533	22,512	20,000	60,000	21,669	45,000
Thma Bang	0	0	0	2,000			
Kampong Seila	0	0	0	4,500			10,000
Koh Kong	30,490	15,333	45,823	106,000	135,000	39,708	115,000

RURAL POPULATION ESTIMATES: ALTERNATIVE STRATEGIES

Worksheet 3

District	1998 Rural Population	2005 Trend (Alternative 1)		Alternative 2 Rural Pop	Alternative 3 Rural Pop	Alternative 4 Rural Pop	Preferred Rural Pop
		Change 98-05	Rural Pop				
Botum Sakor	18,822	9,465	28,287	8,000	20,000	35,000	20,000
Kiri Sakor	6,289	3,163	9,452	10,500	8,000	10,000	8,000
Koh Kong	8,817	4,434	13,251	20,000	11,000	20,000	11,000
Smach Mean Chey	13,818	6,949	20,767	12,000	-	2,000	10,000
Mondol Seima	12,569	6,321	18,890	10,000	-	1,500	5,000
Srae Ambel	23,456	11,795	35,251	20,000	-	53,331	15,000
Thma Bang	2,880	1,448	4,328	8,000	4,000	7,000	4,000
Kampong Seila	14,965	7,526	22,491	4,039	20,539	30,000	10,539
Koh Kong	101,616	51,100	152,716	92,539	63,539	158,831	83,539

KOH KONG EMPLOYMENT ESTIMATES: ALTERNATIVE STRATEGIES

Worksheet 4

Employment Sector	1998 Employment	2005 Trend Employment	Alternative 2 Employment	Alternative 3 Employment	Alternative 4 Employment	Preferred Employment
Primary	53.2	53.2	N/A	N/A	N/A	
Secondary	7.4	7.4	N/A	N/A	N/A	
Tertiary	39.4	39.4	N/A	N/A	N/A	
Total	100	100	N/A	N/A	N/A	

KOH KONG URBANISATION: ALTERNATIVE STRATEGIES 2005

Criteria 1

District	1998		2005 Trend (Alternative 1)		Alternative 2		Alternative 3		Alternative 4		Preferred	
	Urban Population	% Total Pop in urban areas	Urban Population	% Total Pop in urban areas	Urban Population	% Total Pop in urban areas	Urban Population	% Total Pop in urban areas	Urban Population	% Total Pop in urban areas	Urban Population	% Total Pop in urban areas
Total	30,490	23.08	45,823	23.08	106,000	53.39	135,000	68.00	39,708	20.00	115,000	57.92
GAM Rating				0		1		1		-1		1

KOH KONG EMPLOYMENT: ALTERNATIVE STRATEGIES 2005

Criteria 2

	% of employment in Secondary & Tertiary sectors					
	1998	2005 Trend	Alternative 2	Alternative 3	Alternative 4	Preferred
Total	46.80	46.80	N/A	N/A	N/A	N/A
GAM Rating						

KOH KONG ACCESSIBILITY: ALTERNATIVE STRATEGIES 2005

Criteria 3

Origin	2005 Trend				Alternative 2				Alternative 3				Alternative 4				Preferred Strategy			
	Destination	Origin Pop	Trip (min)	Total Time	Destination	Origin Pop	Trip (min)	Total Time	Destination	Origin Pop	Trip (min)	Total Time	Destination	Origin Pop	Trip (min)	Total Time	Destination	Origin Pop	Trip (min)	Total Time
Botum Sakor	Srae Ambel	28,287	85	2,404,404	Srae Ambel	10,000	85	850,000	Srae Ambel	20,000	85	1,700,000	Srae Ambel	35,000	85	2,975,000	Srae Ambel	20,000	85	1,700,000
Kiri Sakor	Srae Ambel	9,452	120	1,134,190					Srae Ambel	8,000	120	960,000	Srae Ambel	10,000	120	1,200,000	Srae Ambel	8,000	120	960,000
Koh Kong	Smach Mean Chey	13,251	83	1,099,820					Smach Mean Chey	11,000	83	913,000	Smach Mean Chey	20,000	83	1,660,000	Smach Mean Chey	11,000	83	913,000
Mondol Seima	Smach Mean Chey	18,890	30	566,689																
Thma Bang	Srae Ambel	4,328	180	779,090	Srae Ambel	10,000	180	1,800,000	Srae Ambel	4,000	180	720,000	Srae Ambel	7,000	180	1,260,000	Srae Ambel	4,000	180	720,000
Kampong Seila	Srae Ambel	22,491	50	1,124,526					Srae Ambel	20,539	50	1,026,950	Srae Ambel	30,000	50	1,500,000				
Total		96,698		7,108,720		20,000		2,650,000		63,539		5,319,950		102,000		8,595,000		43,000		4,293,000
Average				74				133				84				84				100
GAM Rating				1				0				0				0				0

Note: Destinations are Levels 1 to 5 in the Urban Hierarchy. Origins are Levels 6 & 7.

KOH KONG PRIME AGRICULTURE NEEDED: ALTERNATIVE STRATEGIES 2005

Criteria 4

District	2005 Trend				Alternative 2			Alternative 3			Alternative 4			Preferred Strategy		
	Change 98-05 Urban Pop	Land Need (hectares)	Prime Land (hectares)	Prime Land Factor	Change 98-05 Urban Pop	Land Need (hectares)	Prime Land (hectares)	Change 98-05 Urban Pop	Land Need (hectares)	Prime Land (hectares)	Change 98-05 Urban Pop	Land Need (hectares)	Prime Land (hectares)	Change 98-05 Urban Pop	Land Need (hectares)	Prime Land (hectares)
9.1 Botum Sakor	0	-	0	0.90	2,000	12	11	0	0	0	0	0	0	0	0	0
9.2 Kiri Sakor	0	-	0	0.20	4,500	27	5	0	0	0	0	0	0	0	0	0
9.3 Koh Kong	0	-	0	1.00	5,000	30	30	0	0	0	0	0	0	0	0	0
9.4 Smach Mean Chey	7,800	47	47	1.00	32,489	195	195	34,489	207	207	-2,511	-15	-15	24,489	147	147
9.5 Mondol Seima	0	-	0	0.90	20,000	120	108	25,000	150	135	5,039	30	27	20,000	120	108
9.6 Srae Ambel	7,533	45	41	0.90	5,021	30	27	45,021	270	243	6,690	40	36	30,021	180	162
9.7 Thma Bang	0	-	0	0.60	2,000	12	7	0	0	0	0	0	0	0	0	0
9.8 Kampong Seila	0	-	0	0.90	4,500	27	24	0	0	0	0	0	0	10,000	60	54
9 Koh Kong	15,333	92	87		75,510	453	408	104,510	627	585	9,218	55	48	84,510	507	471
GAM Rating			0				-1			-1			1			-1

Notes: Urban land requirement based on the following hectarage per 1000 population:

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Prime Land Factor is the proportion of selected Agricultural Soil Suitability surrounding each urban area

District	1998			2005 Trend			Alternative 2			Alternative 3			Alternative 4			Preferred Strategy		
	Rural Density Pop/Km2	Affected Land (km2)	Rural Pop in Affected Land	Rural Pop Density/Km2	Rural Pop in Affected Land	% increase in Rural Pop	Rural Pop Density/Km2	Rural Pop in Affected Land	% increase in Rural Pop	Rural Pop Density/Km2	Rural Pop in Affected Land	% increase in Rural Pop	Rural Pop Density/Km2	Rural Pop in Affected Land	% increase in Rural Pop	Rural Pop Density/Km2	Rural Pop in Affected Land	% increase in Rural Pop
9.1 Botum Sakor	17.4	159.8	2,786.5	26.2	4,187.8	50.3	7.4	1,184.4	(57.5)	18.5	2,960.9	6.3	32.4	5,181.6	86.0	18.5	2,960.9	6.3
9.2 Kiri Sakor	10.1	13.2	133.0	15.2	200.0	50.3	16.9	222.1	67.0	12.8	169.2	27.2	16.1	211.6	59.0	12.8	169.2	27.2
9.3 Koh Kong	5.7	324.3	1,845.8	8.6	2,773.9	50.3	12.9	4,186.8	126.8	7.1	2,302.7	24.8	12.9	4,186.8	126.8	7.1	2,302.7	24.8
9.4 Smach Mean Chey	153.7	65.2	10,016.9	231.0	15,054.1	50.3	133.5	8,699.0	(13.2)	0.0	0.0	(100.0)	22.2	1,449.8	(85.5)	111.2	7,249.2	(27.6)
9.5 Mondol Seima	9.3	264.4	2,456.7	14.0	3,692.1	50.3	7.4	1,954.5	(20.4)	0.0	0.0	(100.0)	1.1	293.2	(88.1)	3.7	977.3	(60.2)
9.6 Srae Ambel	11.0	316.1	3,471.9	16.5	5,217.9	50.3	9.4	2,960.4	(14.7)	0.0	0.0	(100.0)	25.0	7,894.0	127.4	7.0	2,220.3	(36.1)
9.7 Thma Bang	0.9	31.7	27.1	1.3	40.7	50.3	2.4	75.2	177.8	1.2	37.6	38.9	2.1	65.8	143.1	1.2	37.6	38.9
9.8 Kampong Seila	16.6	338.3	5,617.4	25.0	8,442.2	50.3	4.5	1,516.1	(73.0)	22.8	7,709.7	37.2	33.3	11,261.1	100.5	11.7	3,956.0	(29.6)
9 Koh Kong	9.1	1,513.1	26,355.3	13.8	39,608.7	50.3	8.3	20,798.6	(21.1)	5.7	13,180.2	(50.0)	14.3	30,543.9	15.9	7.5	19,873.3	(24.6)
GAM Rating						-1			1			1			0			1

KOH KONG PROXIMITY TO MAJOR ROADS: ALTERNATIVE STRATEGIES 2005													Criteria 7	
District	1998			2005 Trend		Alternative 2		Alternative 3		Alternative 4		Preferred Strategy		
	Rural Density Pop/Km ²	Area (km ²) < 5 km to Major Rd	Rural Pop close to road	Rural Pop Density/Km ²	Rural Pop close to road	Rural Pop Density/Km ²	Rural Pop close to road	Rural Pop Density/Km ²	Rural Pop close to road	Rural Pop Density/Km ²	Rural Pop close to road	Rural Pop Density/Km ²	Rural Pop close to road	
9.1	Botum Sakor	17.4		0.0	26.2	0.0	7.4	0.0	18.5	0.0	32.4	0.0	18.5	0.0
9.2	Kiri Sakor	10.1		0.0	15.2	0.0	16.9	0.0	12.8	0.0	16.1	0.0	12.8	0.0
9.3	Koh Kong	5.7		0.0	8.6	0.0	12.9	0.0	7.1	0.0	12.9	0.0	7.1	0.0
9.4	Smach Mean Che	153.7		0.0	231.0	0.0	133.5	0.0	0.0	0.0	22.2	0.0	111.2	0.0
9.5	Mondol Seima	9.3		0.0	14.0	0.0	7.4	0.0	0.0	0.0	1.1	0.0	3.7	0.0
9.6	Srae Ambel	11.0	335.8	3,688.5	16.5	5,543.4	9.4	3,145.1	0.0	0.0	25.0	8,386.5	7.0	2,358.8
9.7	Thma Bang	0.9		0.0	1.3	0.0	2.4	0.0	1.2	0.0	2.1	0.0	1.2	0.0
9.8	Kampong Seila	16.6	411.5	6,832.1	25.0	10,267.8	4.5	1,844.0	22.8	9,376.9	33.3	13,696.2	11.7	4,811.5
9	Koh Kong	9.1	747.3	10,520.7	13.8	15,811.2	8.3	4,989.0	5.7	9,376.9	14.3	22,082.7	7.5	7,170.3
	% Rural Population Total			10.35		10.35		5.39		14.76		13.90		8.6
	Total Urban Population			30,490		45,823		106,000		135,000		39,708		115,000
	Total Population			41,011		61,634		110,989		144,377		61,791		122,170
	% Total Population			31.04		31.04		55.90		72.72		31.12		61.5
	GAM Rating					-1		0		1		-1		1

Districts with Hospital Cover	1998				2005 Trend			Alternative 2			Alternative 3			Alternative 4			Preferred Strategy		
	Area ¹⁾ Served	Pop. within area served	% Pop. served	Existing Beds (no.)	Pop. within area served	2005 Beds Required	% increase required	Pop. within area served	2005 Beds Required	% increase required	Pop. within area served	2005 Beds Required	% increase required	Pop. within area served	2005 Beds Required	% increase required	Pop. within area served	2005 Beds Required	% increase required
Botum Sakor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kiri Sakor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Koh Kong	137.1	3,915	44.4		5,884	5.9		4,440	4.4		4,884	4.9		8,881	8.9		4,884	4.9	
Smach Mean Chey	100.4	28,550	97.3	59	42,907	42.9		14,602	14.6		48,672	48.7		14,602	14.6		48,672	48.7	
Mondol Seima	522.5	12,495	99.4		18,778	18.8		24,853	24.9		24,853	24.9		6,501	6.5		24,853	24.9	
Srae Ambel	886.2	31,576	82.2	23	47,455	47.5		49,293	49.3		49,293	49.3		61,616	61.6		49,293	49.3	
Thma Bang	48.4	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-
Kampong Seila	368.8	7,743	51.7		11,637	11.6		20,696	20.7		10,627	10.6		15,522	15.5		10,627	10.6	
Total	2,063	84,279	63.8	82	126,661	127	54	113,884	114	39	138,329	138	69	107,121	107	31	138,329	138	69
Area/Population not served %	9,096.4	47,827	36.2		71,878	72		84,655	85		60,210	60		91,418	91		60,210	60	
Total						199	142		199	142		199	142		199	142		199	142
GAM Rating							-1			-1			-1			-1			-1

Notes: 1) Area served is number of Km² within a 20km radius of hospital.

Based on the following number of persons per 1,000