Annex 2 Priority Project

No	Sector	Project Title	
A-4	Primary Industry	Outer City Agriculture Promotion Program	
A-7	Fillinary mousury	Vegetable and Fruit Processing Project	
B-4	Secondary Industry	Upgrading of Small and Micro Industries	
B-6	Secondary moustry	Garment and Footwear Industry Revitalization Project	
C-4	Tertiary Industry	Tourism Master Plan for Greater Capital	
E-1	Legal and Institution Framework	Dispatch Experts from Japan for facilitating the Legal and Institutional Framework of the SPZ	
E-2		Computerization of Customs Clearance Procedures	
F-1	Urban Planning	Enhancement of Planning and Enforcement Mechanism of Urban Planning	
F-3		Pilot Urban Master Plan for Sihanoukville	
G-3	Human Resources Development	Strengthening Sihanoukville Municipal Vocational Trainin Center	
G-6		Assistance for Rural Entrepreneurship Development	
H-2	Rural Development	Income Generation Activities for Farmers in Kandal Province (supporting NGO Project income generation)	
I-1	Environment	Capacity Enhancement for Effective Enforcement of Environmental Legislation	
I-3		Construction of Controlled Landfill Site	
J-2	Transportation	Container Distribution Center Project	
J-6		Phnom Penh Urban Transport Project	
J-9		Route 48 Upgrading Project	
K-1	Water Resources	Master Plan Study on National Water Resources Development and Management	
K-4		Improvement of Urban Water Supply in Sihanoukville	
L-5	Electricity	220kv Transmission Line between Kampot and Sihanoukville	
M-1	Telecommunications	Nourishment of Qualified IT Related Human Resources	
M-2		Development of Optical Fiber cable Network between Phnom Penh and Sihanoukville	
N-1	FZ Development	Development of Wastewater Treatment Plant (WWTP) for the Sihanoukville Port Free Zone	
N-2		Development of Solid Waste landfill for the Sihanoukville Port Free Zone	

Table Priority Project List

A. Primary Industry

Project Name	Outer City Agriculture Promo	tion Program	n	
Backgrounds	Demand of vegetables and fruits of urban people, hotels, trade companies and			
	factories increase year by year in Phnom Penh. Therefore, there is high potential for			
	introduction or expansion of high value	e crops including	g vegetables, fr	uits and a part of
	fodder crops. For the vegetables, how	ever, low marke	t prices are wi	dely observed in
	the dry season since many farmers cul	ltivate vegetable	s using home g	gardens, the river
	banks and irrigated areas. Therefore,	the introduction	of new techn	iques, especially
	the adjustment of the cropping pattern			
	stabilize the supply of vegetables a	ll year-round.	In the fruits	or fodder crops,
	production of those crops is rather sma			
	stable market price is expected. To he	edge the risk to	introduction of	of new crops and
	techniques, demonstration plots and as	ssociated farmer	training shoul	d be promoted in
	the program target area.			
Project Purposes	To enhance farm income through expansion of crop diversification and			and modernized
	agriculture in outer city area.			
Target Year	2005 (3 years)			
(Project Period)				
Beneficiaries	Local people in outer city area of Phno	om Penh		
(Target Group,				
Target Area)				
Activities	- Feasibility Study			
	- Technical assistance for overal			
	management calendar, selection	, design and e	stablishment o	of demonstration
	plots,			
	- Implementation of training program for extension staff of Ministry of Agriculture			
	and Forestry,			
	- Operation and maintenance of dem			
	- Implementation of technical guida			
	- Technical assistance for formulati			
	- Implementation of agricultural		ent and basel	ine survey, and
	monitoring and evaluation (M&E)	•		
Executing	Ministry of Agriculture and Forestry, I	Provincial Gover	mment	
Organization				
Outputs(Results)	- The cultivated area of value added cr		-	led
	- As result of the above, income of far	mers is enhanced	1.	
Inputs (Project Cost)	US 5.0 million			
Finance	Budget of Government or Assistance of		• • • •	
Implementation	Activity	2003	2004	2005
Schedule	Feasibility Study			
	Detailed Design			
	Training extension staff and establishing demonstration plots			
	Technical assistance to farmers and			
	Implementation of various survey			
	mentioned above			
Evaluation	Financial and Economic Analysis show	•	•	
(Including Results of	needs assessment and baseline survey	should be done	e for monitorin	g and evaluation
IEE)	survey during the implementation.			
SW of EIA (if	Un-necessary			
necessary), Mitigation				
for Impacts				
Location Map	Phnom Penh			
Project Image Photo etc.				

A.	Primary	Industry
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A-7

Project Name	Vegetable and Fruit Processing	g Project			
Backgrounds	Raw vegetables and fruits are so che				
	strong power in the negotiation with f			-	
	due to the difficulties to change crop			-	
	fruits as well as to keep those in the sto		-	-	
	fruits is highly recommendable. How			knowledge or	
	experience of processing activities usin				
	Therefore, proposed training center				
	activities for vegetables and fruits, In a institutional and financial training to f				
	6	0 1	, 0	U	
	addition, the public orientation program will be made to explain how to participate the community managed agro-processing unit (CMAU). The initial inputs including				
	equipment and materials will be provided to community. The cost of those inputs will				
	be subsidized to some extent. How		•	-	
	carefully considering government polic		•		
	, , , , , , , , , , , , , , , , , , , ,	5		1 5	
Project Purposes	To increase value of vegetables and fruits through processing activities.				
Target Year	2005 (3 years)				
(Project Period)		2003 (5 yours)			
Beneficiaries	Farmers, especially women, in Interme	diate Area			
(Target Group,					
Target Area)					
Activities	Feasibility Study and Basic Design	,			
	• Detailed designing,				
	• Training program to staff in the Ce	nter,			
	• Construction of building, and				
	• Installation of equipment.				
Executing	Ministry of Agriculture and Forestry, F	rovincial Gover	nment		
Organization					
Outputs(Results)	Increase in household income through	selling processed	d vegetables and	fruits.	
Inputs	US 10.0 million				
(Project Cost)					
Finance	Budget of Government or Assistance of	f Donor			
Implementation	Activity	2003	2004	2005	
Schedule	Feasibility Study				
	Detailed Design				
	Training stuff in the center		==		
	Construction of building and		==	========	
	Installation of Equipment				
Evaluation	Financial and Economic Analysis sho	•		7. IEE is not	
(Including Results	conducted because Environmental Imp	act is not anticip	ated.		
of IEE)					
SW of EIA (if	Un-necessary				
necessary),Mitigatio					
n for Impacts Location Map	Intermediate Area				
Project Image					
Photo etc.					
1 11010 CU.					

B. Secondary Indu	stry			B	
Project Name	Upgrading of Small and Micro	Industries			
Backgrounds	Based on the data of the number of ent	terprises, 99 per	cent belongs to	small and micro	
	enterprises (SME) owned by domestic	-	-	blems to develop	
	further and shift to modern technology				
Project Purposes	1) Fostering the traditional SME and p			siness incubation,	
	aiming at rearing the domestic capi	-			
	2) Extending support for getting inform				
	3) Extending support for getting finance		it and new busi	iness incubation.	
	4) Fostering managers and marketing e	experts.			
Target Year	2005 (3 years)				
(Project Period)					
Beneficiaries	Entrepreneurs and employees of small	and micro indu	stries.		
(Target Group,					
Target Area) Activities	1) Providing support to get access f	or needed info	rmation about	tachnology and	
Activities	marketing.	of fileeded fillo	ination about	technology and	
	2) Promoting the further activation of	the existing fin	ancial support	facility including	
	Mekong Project Development Facility		uneitai support	idenity including	
	3) Promotion of the business seeds rese	•	ess incubation.		
	4) Fostering nurturing of the managers				
		5) Assisting the formation of the business association/network among the business			
	circles.				
	6) Establishing the implementation body for implementing the above which should be				
	formed jointly by the government a				
Executing	Ministry of Industry, Mines and	Energy and t	he private se	ector	
Organization		0.			
Outputs(Results)	1) Modernizing and upgrading of	the existing	SME and inc	cubation of new	
	businesses.				
	2) Fostering the domestic capital an	d entrepreneurs	as well as the	e human resource	
T	of managers and market experts.	//E	4		
Inputs (Project Cost)	Sending experts (SME financing, SM incubation); estimated cost US\$0.5 mil	-		ig, new business	
(Project Cost) Finance	incubation), estimated cost 0.550.5 min	111011 101 24 M/M	/1		
	A - 4 ⁹ ⁹ 4	2002	2004	2005	
Implementation	Activity	2003	2004	2005	
Schedule	Study on the scope and structure of				
	the new organization				
	Discussion and coordination among the Government and the				
	the Government and the concerned circles of the private				
	sector				
	Taking necessary legislative				
	procedure and establishment of the				
	new organization				
Evaluation	This project will make sizable cont	ribution to rea	ring the dom	estic capital and	
	entrepreneurs which is the prerequisite		-	-	
(Including Results			6		
	country.				
of IEE)	country.				
of IEE) SW of EIA (if					
of IEE) SW of EIA (if necessary),Mitigatio					
of IEE) SW of EIA (if necessary),Mitigatio n for Impacts					

Induct DC л

B. Secondary Industry

B-6

Project Name	Garment and Footwear Indust	ry Revitaliza	ation Project		
Backgrounds	Garment and footwear industry is a staple industry for Cambodia, currently employing approximately 200,000 of people and earning 70 % of export value. This is an incomparable local resource to Cambodian economy. The strength of Cambodian garment and footwear industry is closely related with the existing quota under GSP. With possible dismantling of the quota in 2005, revitalization of the industry to survive and recapture the export market after 2005 is imperative to Cambodia In order that the Cambodian garment and footwear industry stays in business after				
Project Purposes	2005, active promotion needs to be file markets other than USA; providing	2005, active promotion needs to be filed by assisting the marketing of the products in markets other than USA; providing vocational training to potential and current garment workers for higher skills and supporting Cambodian garment manufactures to grow.			
Target Year	Project implementation is planned to be completed in 2005.				
(Project Period)					
Beneficiaries		• 200,000 employed by the garment industry.			
(Target Group,	• Target Area is in and around Phnom Penh, where most of the garment factories				
Target Area) Activities	are located.	footwaar to EL	and Asian mar	zota	
Activities	 Export promotion of garment and footwear to EU and Asian markets SME support for domestic garment and footwear manufactures by utilizing various multinational funding (ex. MPDF, Asia Foundation, etc.) 				
Executing	MIME				
Organization					
Outputs(Results)	Sustaining of employment in garment competitiveness of related local manufa		industries and e	enhancement of	
Inputs	Sending experts (Industrial development); estimated cost US\$0.5 million for 24 M/M				
(Project Cost)					
Finance					
Finance Implementation	Activity	2003	2004	2005	
Finance	Study on the scope of the project and implementing organization	2003	2004	2005	
Finance Implementation	Study on the scope of the project and implementing organization Discussion and coordination among the Government and the concerned circles of the private sector		2004	2005	
Finance Implementation	Study on the scope of the project and implementing organization Discussion and coordination among the Government and the concerned			2005	
Finance Implementation Schedule Evaluation (Including Results of IEE)	Study on the scope of the project and implementing organizationDiscussion and coordination among the Government and the concerned circles of the private sectorTakingnecessarylegislative	=====	===== up-keeping of	======================================	
Finance Implementation Schedule Evaluation (Including Results of IEE) SW of EIA (if	Study on the scope of the project and implementing organizationDiscussion and coordination among the Government and the concerned circles of the private sectorTakingnecessarylegislative procedureThis project will make sizable control	=====	===== up-keeping of	======================================	
Finance Implementation Schedule Evaluation (Including Results of IEE) SW of EIA (if necessary),Mitigatio	Study on the scope of the project and implementing organizationDiscussion and coordination among the Government and the concerned circles of the private sectorTakingnecessarylegislative procedureThis project will make sizable control	=====	===== up-keeping of	======================================	
Finance Implementation Schedule Evaluation (Including Results of IEE) SW of EIA (if necessary),Mitigatio n for Impacts	Study on the scope of the project and implementing organization Discussion and coordination among the Government and the concerned circles of the private sector Taking necessary legislative procedure This project will make sizable contri industry of garment and rearing anothe	=====	===== up-keeping of	======================================	
Finance Implementation Schedule Schedule Evaluation (Including Results of IEE) SW of EIA (if necessary),Mitigatio n for Impacts	Study on the scope of the project and implementing organizationDiscussion and coordination among the Government and the concerned circles of the private sectorTakingnecessarylegislative procedureThis project will make sizable control	=====	===== up-keeping of	======================================	
Finance Implementation Schedule Evaluation (Including Results of IEE) SW of EIA (if necessary),Mitigatio n for Impacts	Study on the scope of the project and implementing organization Discussion and coordination among the Government and the concerned circles of the private sector Taking necessary legislative procedure This project will make sizable contri industry of garment and rearing anothe	=====	===== up-keeping of	======================================	

C. Tertiary Indus	
Project Name	Tourism Master Plan for Greater Capital Area
Backgrounds	Phnom Penh is a tourism gateway for foreign tourists offering several cultural and historical tourism resources and attractions including Royal Palace, Silver Pagoda, National Museum, Toul Sleng Genocide Museum, etc. In recent years, an increasing number of foreign tourist only visiting Angkor Wat temples in Siem Reap coming by a directly flight arrive to visit Siem Reap by direct flight from Bangkok and other cities in neighboring countries. Most foreign tourists spend only one or two days visiting major tourist sites in Phnom Penh.
	Phnom Penh is designated as one of four priority development areas by the RGC, but it still remains opportunities for improvement and development of tourist sites, accommodation, information services and so on in order to attract more tourists and increase the tourist's length of stay.
	In the past, Tourism Development Strategy for Phnom Penh (July, 1996, UNDP, WTO) and Greater Phnom Penh Tourism Development Strategy (2001, ADB) were prepared bur there is no master plan in Phnom Penh yet.
	Referring to the previous studies, Greater Phnom Penh area (Phnom Penh and Kandal Province) is necessary to prepare and formulate a tourism Master Plan for short and long term including tourism development guideline feasibility analysis of projects/programs.
Project Purposes	To analyze current situation of tourism industry in Greater Phnom Penh Area and find development potential.To provide an appropriate tourism planning and development guideline of Greater
	Phnom Penh Area for MOT and relevant agencies. To prepare effective implementation measure for proposed projects/program for shot-long term.
Target Year (Project Period)	Master plan preparation period; 2003-5 (2 –3 years), Master plan period is 15 years.
Beneficiaries (Target Group, Target Area)	Locals engaged in tourism and service business in Phnom Penh and Kandal Province Domestic and foreign tourists, private sector (tourism business operator, hotels, etc), MOT, local government
Activities	- Analysis of existing condition for tourism sector
	Field survey of tourist sitesAnalysis of development constraints and potential
	- Tourism demand projection
	 Tourism development framework, development scenario and strategies Proposing projects and programs
	- Feasibility Study of selected projects and programs
	- Implementation and management, marketing plan
Executing	 Holding seminar and workshop Ministry of Tourism in collaboration with Phnom Penh Municipality, Ministry of
Organization	Public Works, relevant ministries, Kandal Provincial government and private sectors
Outputs(Results)	- Improve existing tourist sites and enhance cultural and historical value
	- Increase in income of local people and reduction of poverty
	 Increase in tourist's length of stay and tourist expenditure Revitalizing tourism and service business and increasing employment opportunity
	- Growth of domestic and foreign tourists in Greater Phnom Penh
Inputs (Project Cost)	Requiring total of 50 men months of experts; estimated cost US\$1.7 million
Finance	Technical assistance by international agency or donor

C. Tertiary Industry

Implementation	Activity	2003	2004	2005
Schedule	Preparation of Scope of Work	=	2004	2003
	Data collection and analysis			
	Tourism Master Plan Framework			
	Selection of Priority			
	projects/program and FS			
	Preparation of Final Report and			
	holding seminar			
Evaluation(Includin				
g Results of IEE)				
SW of EIA (if				
necessary),Mitigatio				
n for Impacts				
Location Map	Study area covers Phnom Penh M	Municipality	and Kandar P	rovince.
	NR5 Pho Pent Para Rang			
Project Image Photo etc.				

Project Name	Dispatch of Experts from Japan for Facilitating the Legal and Institutional Framework of the SPZ
Backgrounds	
	The RGC has long been considering the introduction of Special Promotion
	Zone to promote FDI and activate national and regional economies. In SEDI
	II, the establishment of the SPZ is one of the policy targets and its intention has
	been repeatedly reported in its implementing report.
	In spite of its strong will and policy, there has not been any legal framework provided for establishing such SPZ, except for the Sub-Decree of 1995 on the appointment of Stung Hav Industrial Zone. The real purpose, legal and institutional framework, preferential treatment provided to the investors to locate in the Zone, detailed rules on the business activities of the investors of the licensing and approval procedures have never been seriously examined This might be due to the lack of experiences and capacities in the RGC for implementing such a policy. Among ASEAN members, some countries already succeeded in the economic take-off by utilizing the similar scheme for quite a while. China also introduced "one country-two schemes" policy some twenty years ago. For attracting FDI and letting market-oriented economy works in the country, they introduced so-called "Economic Special Zones" and recorded remarkable success. Those countries are still very much in need of FDI for their economic growth and there can be seen the hard competition among the Asian countries to promote FDI in own country. China is making over-all success in such competition again and the other Asian countries now seem to concentrate their efforts to the selected field where they think they still keep the competitiveness over China. In view of such tendency, there is not much time left for
	Cambodia and the country shall start serious efforts on implementing the attractive SPZ to promote FDI. To assist such efforts of the RGC, it is recommendable that the RGD would invite from outside some specialists with experiences and knowledge of implementing the legal and institutional series.
Project Purneses	framework for the similar zone. Promote FDI in Cambodia
Project Purposes	• Present and give advise to the RGC officials in charge regarding the development concept of the SPZ
	 Coordinate the interests among relevant governmental sections Streamline the investment procedures and licensing process necessary for the exports-imports activities by utilizing the SPZ Being consulted about the measures of the operation management of the SPZ
	 Being constitued about the measures of the operation management of the SPZ Facilitate the formation of legal and institutional framework for the SPZ Assist the RGC officials in drafting the law and regulations regarding the
	SPZ
Toward Voor (Dr. ' (• Cooperate with the RGC for fund raising
Target Year (Project	2005 (2003 – 2005)
period) Beneficiaries	Private sector investors and regional inhabitants. Newly employed
(Target Group, Target	incremental workers.
Area) Activities	• Number of Specialists: Each one specialist for forming legal and institutional framework
	• Duration of Dispatch: Minimum for two years: Until the development planning will be completed

E. Legal and Institution Framework

	Sub-Decree on the Implementation of the	Low (After t	the promula	ation of the
	Sub-Decree on the implementation of the SPZ Law)	Law (Alter	the promulg	ation of the
		· · ····· : · · · · · · · · · · · · · ·	a a a a a d'a a d	
	Above dispatch will be implemented in	•	-	o the work
T	schedule and necessity. (3 weeks/time x 4 t	•		
Executing Organizations				
	The MOC, MIME and other relevant ministries shall cooperate with the CDC.			
Outputs	Improve Cambodia's competitiveness in at	0		
(Results)	Increase in FDI and local private inv	estment, wh	ich lead to	o industrial
	development of Cambodia			
Inputs	The consulting fees and related expenses such as traveling cost are estimated to			estimated to
(Project Cost)	be around US\$0.5 million.			
Finance	Donation fund to be provided by the intern	ational dono	rs	
Implementation Schedule	Activities	2003	2004	2005
	Study on the desirable concept of the			
	prospective SPZ. Form the initial			
	concept plan of legal and institutional			
	framework, together with the incentive			
	plans to be provided to the investors in			
	the SPZ. Draft the Law and the			
	Sub-Decree on the Implementation of the			
	Law.			
	Coordinate the interests among the			
	relevant sections. Facilitate the			
	promulgation of the Law.			
	Assist in searching for the financing			
	source to establish the SPZ.			
Evaluation	IEE will not be applicable.	!		
SW of EIA, Mitigation of	··· ·· ···			
Impacts				
Location Map				
Project Image Photo, etc.				

E. Legal and Institution Project Name	Computerization of Customs Clearance Procedures
Backgrounds	The CED currently operates the customs clearance work manually. Th
Dackgrounus	manual method obviously delays the customs clearance work manually. In manual method obviously delays the customs clearance process, allows the
	leakage of the possible taxation, makes the trade statistics incorrect, forces the
	investors (exporters and importers) to deal with the duplicated documentation
	work (for example, the VAT refund procedures) and reporting to the relevant
	government sections. The human contacts unavoidably occurred by th
	manual method is said to allow the request for the unofficial charges and fee
	during the course of customs clearance.
	In 1998, the CED started to examine the possibility of introducing ASYCUDA
	(Automated System to the Customs Data), which is a package softwar
	developed by UNCTAD, to apply to the customs clearance and once update
	the introduction plan in 2000. The CED finally gave up the introduction pla
	because of the budgetary constraint.
	Although the CED is now working on the installation plan of compute
	systems with assistance of UNDP under Technical Cooperation Action Pla
	(TCAP), the scope of installing such computer system is said to be limited to
	general use at inside of the CED. As of October 28, 2002, UNDP started th
	recruit of IT Development Officer in Cambodia for strengthening the advisor
	and planning activities to the CED in the field of IT development. Accordin
	to the Reform Program 2002 - 2008 of the CED, they plan to develop and
	implement the Customs Automation System in between 2002 and 2006.
	Among ASEAN member countries, Singapore, Malaysia, Thailand and
	Indonesia have already installed the computerized customs clearance system
	Those systems are believed to contribute considerably to facilitate carg
	reporting, shorten the customs clearance time, value customs duty and ta
	precisely, establish the traders profile, realize effective Post Clearance Aud
	(PCA) scheme, produce more accurate trade statistics and make revenu
	analysis easier. The problem of unofficial cost arise in the customs clearance
	process would not be solved by simply installing the computerized system (b)
	avoiding human contacts) but the computerization of the customs clearance
Project Purposes	process would bring enormous benefits to both the investors and the RGC.
r toject r utposes	The computerization of customs clearance procedures has the following objectives:
	 Simplifying the customs clearance operation
	 Harmonizing with PSI scheme
	 Enabling the advance cargo reporting
	 Eliminating unnecessary physical inspection by establishing Database of
	traders
	Widening the PCA opportunities
	Realizing smooth flow of goods
	• Providing the investors with the opportunities for planned and rationalized
	operations, which promote the trade activities
	• Avoiding duplicate documentation among the relevant governmentation
	sections
	• Preparing accurate trade and revenue statistics in time so that they could
	contribute to well-planned policy making
Target Year (Project period)	2005 (2003 - 2004)
Beneficiaries	Importers and exporters. Prospective FDI providers. Private industrial sectors
(Target Group, Target	
Area)	
Activities	Sector to be covered by the new computerized system
	The computerized system is to be installed in the CED, including Head Quarter

E. Legal and Institution Framework

Nippon Koei/ IDCJ/ KRI International

	and main boarder gates such as Sihanouk	vill Port, Pl	nom Penh	Airport and
	major gates (3- 4 places as the first stage)			
	Systems			
	ASYCUDA, EDI or self-development soft	ware		
	Necessary hardware			
	Contents of the System			
	Customs declaration systems for exports an	nd imports		
	Selection system of automatic approval for		arance	
	Preparation for intelligent audit			
	Database for PIA			
	Preparation and supply of Profile data			
	Application to handle bond-related procedu	ires		
	Application to handle customs duties, excis		VAT	
	Application to handle VAT refund	se taxes and	V7.11	
	Application to handle the investors' reporti	ng to the CF)C	
	Automatic preparation of trade statistics an	-		
Executing Organizations	The CED, Ministry of Economy and F			onduct the
Executing Organizations	implementation of the system, with cooper			
	MIME and other relevant ministries.	ation of the	Tax Departin	lent, MOC,
		1	. f	
	Outside software consultants with good	-	-	
	customs operations and computer hardware			
	Local software houses would have to be	e involved f	or preparing	the future
<u> </u>	maintenance work.			
Outputs	Improve Cambodia's competitiveness in tra			-
(Results)	Increase in FDI and local private inv	estment, wh	nich lead to	industrial
	development of Cambodia			
	Strengthen the activities in the SPZ			
Inputs	ASYCUDA is said to cost US\$2 to 2.5			-
(Project Cost)	software, the estimated cost would vary	according	to the scop	e of work.
	Hardware cost is subject to the estimation.			
Finance	Donation fund to be provided by the intern	ational dono		1
Implementation Schedule	Activities	2003	2004	2005
	Research on the current procedures and			
	required scopes of the system. Future			
	needs and requirements have also to be			
	studied. Outline the desirable system			
	and estimating the expected cost of			
	implementation including the hardware.			
	Complete basic system design.			
	Complete system design and start			
			1	1
	programming			
	programming Complete programming and test run.			
	Complete programming and test run.			
Evaluation	Complete programming and test run. Start formal operation by the end of year			
Evaluation SW of EIA, Mitigation of	Complete programming and test run. Start formal operation by the end of year IEE will not be applicable.			
SW of EIA, Mitigation of	Complete programming and test run. Start formal operation by the end of year IEE will not be applicable.			
SW of EIA, Mitigation of Impacts	Complete programming and test run. Start formal operation by the end of year IEE will not be applicable.			
SW of EIA, Mitigation of	Complete programming and test run. Start formal operation by the end of year IEE will not be applicable.			

F. Urban Planning Project Name	Enhancement of Planning and Enfor	rcement Mecha	nism of Urban	F- Planning
Backgrounds	The urban planning and enforcement			
Duckgrounds	Although the Law on Land Use Plan			
	the need for development master plan	-		-
	planning, the substance and methodolo			
	Enforcement of the master plans ar			
	instrumentation. The Law provide			
	instrument. The procedure of const			
	Law, nor any guidelines are in effect			
	guidelines, the construction permissio			
	and unpredictability for developers and		iny fosters foon	i for uncertainty
	The imperative task of urban planning		eides in the onl	ancomont of the
	planning and enforcement mechanism			
	for urban planning, specifics of the u	iroan plaining		it procedure are
Ducio et Durun e con	still widely open for substantiation.	-1:-h: d-1:	of the descelars	
Project Purposes	The objective of this project is to estal			
	and land use plan, and to establish			
	construction permissions fro develop			
	prerequisite conditions for specific typ	be of construction	on in specific zo	oning area needs
	to be established clearly.	DOM:	1	
7T 4 X 7	These criteria shall be officially annou	nced by RGM i	n due form.	
Target Year	2003			
(Project Period)			0.0	
Beneficiaries	The general population of Cambodia,		00	
(Target Group,	(Target group; Urban population 2 mil	lion in 2000)		
Target Area)		1 14 1 11		
Activities	1) Compilation of the Guideline for Un			
	- Procedures and methodologies for	-	Master Plan	
	- Requirements for Development M	laster Plan		
	- Requirement for Land Use Plan			
	- Procedures for approval			
	2) Technology transfer and capacity bu			olanning
Executing	Ministry of Land Management, Urban	Planning and C	onstruction	
Organization				
Outputs(Results)	1) Provision of practical guideline for			
	Plan stipulated by the Law on Land			
	2) Ensuring effective management of	urban growth a	nd thereby allev	viating the urbar
	poverty			
	3) Establishing a stable and transpa	•	construction	permission, and
	thereby promoting investments for	development		
-			0.0.	<u> </u>
Inputs	Expatriate expert providing advices an	a consultancy 1	8 Person/month	n; estimated cost
(Project Cost)	US\$0.4 million			
Finance	Grant based technical assistance			
	Activity	2003	2004	2005
	Dispatch of Experts	=====	========	
		<u> </u>	ļ	ļ
Evaluation	IEE will not be applicable.			
(Including Results				
of IEE)				
SW of EIA	Not necessary			
Location Map	Urban Areas in Cambodia			
Project Image				
Photo etc.				

F. Urban Planning				F-
Project Name	Pilot Urban Master Plan for S	ihanoukville		
Backgrounds	The most important strategy of urban			
	pilot model of urban planning comb	-	-	-
	pilot Urban Master Plan shall include			
	as stipulated in the Law, together wi	th a guideline f	for enforcement	, particularly in
	regard to construction permission.			
Project Purposes	The objective of the pilot Urban Master Plan is not only to construct a solid urban planning base for a specific city, but to establish methodologies, assumptions and procedures for urban master plans that follow. It will also serve as the first draft plan to be contemplated by the National Committee for approval. Formulation of the pilot Urban Master Plan shall in involve Department of Urban Planning and relevant regional office of MLMUPC, Municipality/Province and relevant agencies/organization.			
Target Year	2003			
(Project Period)				
Beneficiaries	The general population of Sihanoukvil			0
(Target Group,	(Target group; Urban population of Sil	nanoukville, 80,	000 in 2000)	
Target Area)				
Activities	1) Formulation of the Urban Master Pl			
	- Planning framework; Establishi	ng planning p	arameters such	as population
	employment, tourism, industry etc.			
	- Development Master Plan incl			
	planning of urban structure; popula			
	infrastructure planning of water			communication
	environmental management; and recreational area planning			
	- Land Use Plan with a zoning plan with residential, commercial, industria			
	recreational, public, defense and other relevant categories; relevant regulatory			
	criteria; and an enforcement plan 2) Technology transfer and capacity building of counterpart in urban planning			
	3) Submittal of Urban Master Plan to N			
Executing	Ministry of Land Management, Urba			
Organization	with Sihanoukville Municipality	in Flamming and	Construction	
Outputs(Results)	1) Alleviation of urban poverty as a co	mbined affect a	with the improve	amont of Port of
Outputs(Results)	Sihanoukville and development of S			
	2) Effective management of urban grow			
	3) Establishing of methodologies, assu			oan master plan
	in other cities of Cambodia that will			Press Press
	4) Support for the enhancement of plan		cement mechan	ism of the urbar
	planning practices in Cambodia	C		
Inputs	Expatriate consultancy, combined with	h local resource	s, with necessar	ry guidance and
(Project Cost)	consultancy from the expatriate. Total			
- · ·	(Grant for technical assistance US\$1.7	million)		
Finance	Grant aid from international donor for	t/a		
Implementation	Activity	2003	2004	2005
Schedule	1) Formulation of the Urban Master		========	
	Plan of Sihanoukville			
	Planning Framework			
	Development Master Plan			
	Land Use Plan			
	2) Technology transfer		========	
	3) Submittal for Approval			*
Evaluation	The proposed pilot urban master pla	an will play a	key role in th	e balanced and
(Including Results	sustainable management of urban env		-	
of IEE)	land resources in the urban areas.			

F. Urban Planning

Nippon Koei/ IDCJ/ KRI International

I			
	approval, this pilot project will open a road for sub		
	urban centers. (This project was not a subject of IE	E)	
SW of EIA (if necessary),Mitigatio n for Impacts	EIA will not be necessary, as this pilot project does not involve any immediate change of the physical environment. Considerations will be made to facilitate necessary protection of good natural environment and sustainable use of natural resources. This project would also mitigate the possible negative effects of absence of an approved urban master plan.		
Location Map	CIVIAX KAMPONE SACM CIVIAX	Municipality of Sihanoukville Two national parks and the forest conservation area will be excluded for land use and urban development plan. The existing urban centers are located in the western part of the Municipality.	
Project Image Photo etc.	Central city area of Sihanoukville		

G. Human Resources Development

G-3

Project Name	Strengthening Sihanoukville N			
Backgrounds	There are 2 Upper Secondary School			
	and JVC) and 1 Municipal Vocational	Fraining School	in Sihanoukvill	e.
	In Sihanoukville, there are a few garme			
	working in these factories. It is more		-	-
	with Cambodian workers. Cambodian			
	with Cambodian subordinates. There			in Phnom Penh
	where garment factories supervisor car			
Project Purposes	1) To train instructors of garment cour	se in the Traini	ng Center in ord	ler to better teach
	garment production management.			
Target Year	2005 (3 Years)			
(Project Period)				
Beneficiaries	1. Sihanoukville Municipal Vocational	Training Cente	r instructors,	
(Target Group,	2. Garment factories in Sihanoukville			
Target Area)				
Activities	1. To design course curricula together			
	2. To arrange equipment and materials			
	3. To implement training program (20)			year)
Executing	Sihanoukville Municipal Vocational Tr			
Organization	Department of Education, Sport and Youth of Sihanoukville Municipality			
Outputs (Results)	1. Sihanoukville Municipal Vocational Training Center instructors become able to teach			
	production management of garment fac			
	2. Rural women entrepreneurial groups			
Inputs	Japanese experts (Garment production management); 24 M/M			
(Project Cost)	2. Sewing machine and ancillary equip	ment about Jap	anese Yen 10 mi	llion value
	Total input US\$0.6million			
Finance	Technical cooperation (Development S		.	ł
Implementation	Activity	2003	2004	2005
Schedule				
	Course preparation		=	
	Course implementation			
Evaluation			·	
(Including Results				
of IEE)				
SW of EIA	Not required			
Location Map	Sihanoukville Municipal Vocational Tr	aining Center L	ocated in Mittha	apheap District
I.	i t	C		

G. Human Resources Development

G-6

Project Name	Assistance for Rural Entrepres	neurshin De	velopment	G-0
Backgrounds	There is growing number of young		_	1 underemployed
Dackgrounus	Providing productive employment for		- ·	
	important issue. Facilitation of private			
	Employment creation should not be			
	attention shall be given to self-emplo	1	1 4	
	many of the rural young women migh			
	casual employment.	t be left as surp	ius agricultural	workers of left in
	Takaev and Kampong Spue province	as are located	along the Pou	itas No. 3 and 4
	respectively and their proximity to Phr		-	
Project Purposes	1) To improve the quality of life of run			auvantage.
r toject r urposes	2) To strengthen capacity of provincial		ficials and TVE	T Dopt of
	MoEYS through jointly undertaking th	-		I Dept. of
	- To identify new value added products	-		
	- To provide rural women with entrepr		no gorial trainin	
Tangat Vac-	- To explore marketing strategy for exi 2005 (3 Years)	sung and new V	and added pro	uuets
Target Year (Project Period)	2003 (3 16018)			
Beneficiaries	1. Provincial government officials (V	ion governor's	office and Diam	ning Donartmant)
(Target Group,				
	and Technical and Vocational Education and Training Department of MoEYS,			
Target Area) Activities	 Rural young women in Takaev and Kampong Spue Provinces To conduct study jointly with Cambodian provincial government officials on rural 			
Activities		bodian provinc	iai government	officials off rural
	women entrepreneurship	a with young (Tombodiona wi	ahing to start their
	2. To provide entrepreneurship trainin			
	own business (e.g. how to prepare business plan, basics of accounting, business law,			
	marketing) at Provincial Training Centers of Kampong Speu and Takeo, and at private training institutes.			
	3. To provide financial assistance (micro credit) for those wishing to start up a business			
	utilizing Self Employment Generation		-	start up a busiliess
Executing	Technical and Vocational Education			nent MoEVS and
Organization	Takaev and Kampong Spue Provincial	-		nent, woll is and
Outputs (Results)	1. Provincial government officials	-	to provide en	transproneurial and
Outputs (Results)	managerial training and advice	become able	to provide en	incpreneuriai and
	2. Rural women entrepreneurial groups	are identified	and trained	
Inputs	1. Japanese experts (e.g., Business D			cinatory Planning
(Project Cost)	and Food Processing)	evelopment, iv	larketing, 1 arti	cipatory r laming
(I Toject Cost)	2. Provincial government staff			
	Total input; 50M/M, estimated cost US	\$1 3million		
Finance	Technical cooperation	φ1.5mm0n		
	≜	2002	2004	2005
Implementation Schedule	Activity	2003	2004	2005
Schedule	Master Plan			
	Pilot Project			
Evaluation				
(Including Results				
of IEE)				
SW of EIA	Not required			
Location Map	Entire Takaev and Kampong Spi	ue Provinces		
-	Takaev province - population 790 thou		a – 3,563km	
	Kampong Spue Province - population			17km
	poing space 1 to three population			

Project Name	Income Generation Activities	s for farme	ers in Kand	al Province
	(supporting a NGO project inc	come generat	tion)	
Backgrounds	Recent economic growth of Phnom Per			e economy in
	Kandal Province. Intensive vegetable	e production, fo	ood-processing,	and handicraft
	making targeting at the Municipality			as their family
	business have high potentially to gener	ate additional in	ncome.	
Project Purposes	Income generation of farmers in Kanda	al province		
Target Year	2005			
(Project Period)				
Beneficiaries	Farmers who have already experienced	U	1	1 0
(Target Group,	or handicrafts making as their small fa	amily business,	and have land a	nd intentions to
Target Area)	enhance the business.			
Activities	Farmers who have already experienced	-	-	
	or handicrafts making as their small fa	amily business,	and have land a	nd intentions to
D (*	enhance the business.	· .1		. 1 1
Executing	International or Cambodian NGO w	ith support fro	om PAFF, PRL	, and relevan
Organization	provincial organizations. Increases of income of the farmers.	In ano din a thain	production skills	
Outputs(Results)	Setting-up preparatory functions	10 0	1	
	cooperatives.		g agricultural	of craftsmer
Inputs	International or Cambodian NGO (exp	orts of agricultu	re agriculture f	ood processing
(Project Cost)		-	-	
(110jeer Cost)	and handicrafts, experts of marketing and accounting, experts of operation of production cooperatives), materials for training, cost for marketing and marketing			
	survey.	or training, cos	t for marketing	and marketing
	Total input US $0.12 @ 3 years = US$) 4 million		
Finance	JICA Grass Root Project Grant			
Implementation	Activity	2003	2004	2005
Schedule	1) Identifying potential markets in	2005	2004	2003
Schedule	Phnom Penh Municipality and			
	potential products			
	2) Researching potentiality to utilize			
	the past experiences of farmers			
	3) Formulation of production skill			
	training based on the result from 1)			
	and 2) Conducting the skill training			
	for production			
	4) Purchasing of the products from			
	the farmers by the NGOs			
	5) Selling of the products by the			
	NGOs in the market			
	NGOs in the market 6) Conducting skill training for			
	NGOs in the market			
	NGOs in the market 6) Conducting skill training for			
	NGOs in the market 6) Conducting skill training for marketing and accounting			
	 NGOs in the market 6) Conducting skill training for marketing and accounting 4) Purchasing of the products from the farmers by the NGOs 			
	NGOs in the market6) Conducting skill training for marketing and accounting4) Purchasing of the products from			
	 NGOs in the market 6) Conducting skill training for marketing and accounting 4) Purchasing of the products from the farmers by the NGOs 5) Selling of the products by the 			
	 NGOs in the market 6) Conducting skill training for marketing and accounting 4) Purchasing of the products from the farmers by the NGOs 5) Selling of the products by the NGOs in the market 			
	 NGOs in the market 6) Conducting skill training for marketing and accounting 4) Purchasing of the products from the farmers by the NGOs 5) Selling of the products by the NGOs in the market 6) Conducting skill training for 			
Evaluation	 NGOs in the market 6) Conducting skill training for marketing and accounting 4) Purchasing of the products from the farmers by the NGOs 5) Selling of the products by the NGOs in the market 6) Conducting skill training for marketing and accounting 			
Evaluation (Including Results	 NGOs in the market 6) Conducting skill training for marketing and accounting 4) Purchasing of the products from the farmers by the NGOs 5) Selling of the products by the NGOs in the market 6) Conducting skill training for marketing and accounting 7) Evaluation IEE is not required 			

H. Rural Development

SW of EIA	Not Required
Location Map	Office of MOE, Office of DOE in SNV, PP, Kandal, Takaev, Kampong Spuew,
	Kampot, and Kaoh Kong
Project Image	
Photo etc.	

I. Environment

Project Name	Capacity Enhancement for Legislation	Effective Enfo	rcement of E	Invironmental
Backgrounds	The enforcement system for the environmental legislation has not been sufficient Cambodia. Although environment related basic legislation have been establish step by step since the enactment of the Law on Environment Protection and Natu Resource Management in 1996, the enforcement system itself cannot satisfy to purpose of the laws. Insufficient law enforcement has no effect on prevention environmental degradation. Effective enforcement of the environment (MOE) and the provincial/municip departments of environment, enactment of procedures and guidelines for la obedience, standardized pollution control system which covers wide range pollution sources, and sufficient number of expertise. It is not until to above-mentioned factors are satisfied that the effective law enforcement becom practicable.			een established ion and Natural not satisfy the n prevention of utional capacity incial/municipal lelines for law wide range of not until the
Project Purposes	 To strengthen technical and institutional capacity of MOE and provincial and municipal departments of environment for effective law enforcement To support making procedures and guideline (and relevant laws if necessary) for effective law enforcement To train MOE and DOE staff for strict pollution source control and effective law enforcement 			
Target Year (Project Period)	2004~07 (more than 2 years)			
Beneficiaries	Staff of Ministry of Environme	ent and Provinc	ial/Municipal I	Departments of
(Target Group, Target Area)	Staff of Ministry of Environment and Provincial/Municipal Departments of Environment			
Activities	 Supporting to make procedures and guidelines for effective law enforcement, Supporting to establish additional or detailed environmental legislation if necessary Educating and training MOE and DOE officials based on the procedures and guidelines Making the rounds of supervision to the provincial/municipal departments of environment 			
Executing Organization	Ministry of Environment, Provincia	/Municipal Depar	rtments of Enviro	onment
Outputs(Results)	Capacity for strict enforcement of e effective environmental management	t will be accompli	ished.	trengthened and
Inputs (Project Cost)	Japanese experts or senior volunteer Estimated cost US\$0.6million	s, related equipme	ent	
Finance	Technical Assistance or Expert Disp		1	
Implementation Schedule	Activity	2003	2004	2005
	Dispatch of Experts			
Evaluation (Including Results of IEE)	IEE is not required		<u> </u>	
SW of EIA	Not Required			
Location Map	Office of MOE, Office of DOE Kampot, and Kaoh Kong	n SNV, PP, Kan	idal, Takaev, Ka	ampong Spuew,
Project Image Photo etc.				

I. Environment

Project Name	Construction of Controlled La	ndfill Site			
Backgrounds	In Sihanoukville, the volume of solid waste has been increasing with the population increase and industrial development. The municipality has an eight hectors dump site, but the site is not fully controlled. The collection and disposal of solid waste is consigned to the private company, but only 30% of discharged waste has been collected. The capacity of the company is limited at this stage, and the improvement of waste collection and management system cannot be expected in the short run. The amount of solid waste discharged in Sihanoukville is about 80 tons in 1998. However, it is anticipated that the volume of solid waste will be about 220 tons in 2005 and 540 tons in 2008. To cope with the rapid increase of solid waste volume and to appropriately dispose of high volume of solid waste, upgrading present solid waste management system, including construction of controlled landfill site, is imperative and urgently required.				
Project Purposes	1) To facilitate appropriate solid waste				
	2) To cope with predicted increase of se		arge		
	3) To improve living conditions of loca4) To prevent negative health impact ca		printa solid way	sta disposal	
Target Year	2 years	used by mapping	opriate solid was	ste uisposai	
(Project Period)					
Beneficiaries	Local people, Local Enterprises, Sihano	oukville Munici	pality		
(Target Group,					
Target Area)					
Activities	 F/S (including EIA) and D/D of controlled landfill site Construction of controlled landfill site Training for the municipal staff or responsible private company on operation and maintenance 				
Executing Organization	Sihanoukville Municipality, Private Wa	ste Service Cor	npany (P.M. Ras	sy)	
Outputs (Results)	By upgrading the present least controlled landfill site, discharged solid waste will be appropriately disposed. The establishment of controlled landfill site will mitigate negative impact on the surrounding environment and reduce health risk of the people living near the landfill site.				
Inputs (Project Cost)	Construction Materials, Construction Equipment and Vehicles, Expert for F/S and D/D, and landfill site management, Initial Operation Cost F/S and D/D, roughly estimated cost is US\$3.0million				
Finance	Loan or grant from various financial from the private waste service company		overnment budg	get, expenditure	
Implementation	Activity	2003	2004	2005	
Schedule	F/S, D/D				
	Construction			==	
	Training for operation/maintenance				
Evaluation (Including Results of IEE)					
SW of EIA (if necessary),Mitigati on for Impacts	EIA is required				



Project Name	Container Distribution Center	· Project		
Backgrounds	The exporters around Phnom Penh pa			
	because of its location. There are se	veral small inlar	d container dep	oots but a larger
	facility is required.			
Project Purposes	To improve and modernalize container	r inflows and out	flows.	
Target Year	2007			
(Project Period)				
Beneficiaries	Both exporters and importers. Transp	portation compar	nies.	
(Target Group,				
Target Area)				
Activities	- Bonded Inland Container Depot for b			
	- One-stop service for all documenta	ation for export	and import in	cluding custon
	clearance.			
	- Electric Data Interchange.	c 1		
	- Including a Container Freight Station			r load.
Executing	MOC, MPWT, two Port Authorities, an	1		
Organization	A private company under PFI contract	can operate the	yard.	
Outputs(Results)	Rehabilitation of rail beds.			
	Establishment of signal and communic	cation system		
T	Introduction of new rolling stocks Loan from financial institutions.			
Inputs (Designate Cost)	PFI is also appropriate.			
(Project Cost)	11 1	US\$12 million	including the d	atail daaian
Finance	Roughly estimated implantation cost is Domestic Budget. Soft loan from do		menualing the a	etan design.
	Activity	2003	2004	2005
Implementation Schedule	Site Selection	1	2004	2005
Scheune	Feasibility Study	===		
			===	
	Detailed Design Construction			2006-
Evaluation				2000-
(Including Results	See IEE report.			
of IEE)				
SW of EIA (if				
necessary),Mitigatio				
n for Impacts				
Location Map	40ha area to be selected.			
Location mup	One potential site is the expansion of c	current Inland Co	ontainer Depot a	long Route 4.
Project Image			intuition 2 oport	
Photo etc.		and the second s		
		1		
	Through Project 4	STOR		
	Section and the section of the secti		1	
	AR TE TO BE AR IN		1	
	11 完全里望 音音。			
	Subtract College States of States		Contraction of the local division of the loc	
	ALL AND AN ALL AND ALL			
		and built and the second se		
	Container Stacking Yard			

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J. Transportation				J-6
Project Name	Phnom Penh Urban Transp			
Backgrounds	Traffic congestion in Phnom Penh is a growing problem and JICA prepared the Urban			
	Transport Master Plan in 2001. It	is necessary to imp	lement the propo	osed projects.
Project Purposes	To mitigate the traffic congestion.			
	To improve air quality.			
Target Year	2002-2005 Detailed design and fina	ancing		
(Project Period)	2003-2008 Construction			
Beneficiaries	Phnom Penh residents.			
(Target Group, Target Area)	Transportation operators.			
Activities	- Outer Ring Road and Route 4 By			
	- Public transportation development			
	- Traffic management improvement	t		
Executing	MPWT and Phnom Penh Municipa	lity		
Organization				
Outputs (Results)	Decrease of traffic congestion in inner city.			
Inputs	Government budget.			
(Project Cost)	Loan or grant from various financia	al institutions.		
	Private Finance Initiative is also appropriate.			
	Roughly estimated implantation co	st is US\$85 million,	including the de	tail design.
Finance				
Implementation	Activity	2003	2004	2005
Schedule	Detailed Design	===	======	
	Financing Arrangement		=====	
	Construction			====
Evaluation	Effective to promote international	trade.		
(Including Results of IEE)	See also IEE report.			
SW of EIA (if	EIA is necessary for resettlement	and natural conditio	ns.	
necessary),Mitigatio n for Impacts				
Location Map				
Location Mad				
Project Image				

I Transportation

J. Transportation	ortation
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J-9

Project Name	Route 48 Upgrading Project			J-7		
Backgrounds	The National Route 48 is a new co	astal route whi	ch connects Si	hanoukville and		
Dackgrounus	Eastern Seaboard in Thailand. It					
				-		
	Thailand and Cambodia. The Royal Thai Army almost completed the upgrade to laterite pavement but it is far from stable transportation for all seasons.					
	-	-				
	Thai Prime Minister pledged additional support for four bridges and asphalt pavement in November 2002. However, it has been frozen since January 2003.					
Ducto of Duran or or						
Project Purposes	This project intends to construct four In some mountainous area, road geome		-	route to asphan.		
Target Year	2006		loved.			
(Project Period)	2000					
(1 loject l'ellou)						
Beneficiaries	Sihanoukville industrial companies.					
(Target Group,	Kaoh Kong residents.					
Target Area)	C C					
Activities	Feasibility Study (Traffic Demand For	ecast)				
	Detailed Design	,				
	Construction					
Executing	MPWT.					
Organization						
Outputs(Results)	Creation of new trading route between Thailand and Cambodia.					
Inputs	(Rough estimate)					
(Project Cost)	US\$ 50 million for pavement of 160km.					
(US\$ 10 million for four bridges (total length of 1,600m)					
Finance	MPWT budget and donor assistance.					
1 munee	Construction by PFI is also possible.					
Implementation	Activity	2003	2004	2005		
Schedule	Feasibility Study (Demand Forecast)	===	2001	2005		
	Detailed Design					
	Construction (-2007)			=		
Evaluation	This contributes to industrial promotion.					
(Including Results	IEE is necessary for all aspects.	011.				
of IEE)	The is necessary for an aspects.					
SW of EIA (if	Intensive EIA is necessary for natural	l environment.				
necessary),Mitigatio						
n for Impacts						
Location Map	✓ 241km 3.5h →	Saien near	tel tel and	A Contraction		
•	ALLAN	あった事	tage of the second	The Area		
		C	PREAM VINEAR STUNG	THENG THE THE		
	THAILAND PATRAMEAND					
	Bangkok	11.5h(8h)	APOND THE REAL PROPERTY OF			
		- Aller	CAMBODIA	AMONDULKIN S		
	420km 5.5h					
	Legend	PURDAT - CHRINAN	Phnom -	N BAR		
	4 5h(2 5h) Length 25h					
	48 2.011 Ho Chi					
	Current Passing Time A A Minh					
	Passing after 160km					
	Passing after 160km	a the second and the		The Annie DONE		
	Passing after Time Rehabilitation 4.5h(2.5h)	and an and	6h(4h)	73km		
	Passing after 160km	le		73km		

Project Image Photo etc.		
	Mountainous Section	Lowland Section

Project Name	Master Plan Study on National Water Resources Development and Management			
Backgrounds	Though Cambodia has rich water resources for irrigation and water supply uses, the			
Dackgrounus	development of water resources is still in primitive condition. Irrigation area ratio to			
	· · · ·			
	the whole rice field is only 16.6%, which is caused by low rice products particularly			
	during the dry season. The low service ratio for water supply is also observed that 140° of the when even is a supplied water through size connection, and 400°			
	only 14% of the urban people are supplied water through pipe connection, and 40% of			
	the population depended on the ground water through deep wells. Water resources			
	development and management is therefore important and urgently needed to improve			
	living standard of the people, but there is no comprehensive master plan for			
	development yet. Nationwide Master Plan Study is therefore required for the further			
	development of water resources for irrigation, hydropower, water supply, and flood			
	control purposes.			
Project Purposes	1) To prepare inventory of water users for all the river system and			
	groundwater,			
	2) To identify possible development area for irrigation, drainage, hydropower			
	flood control and so on,			
	3) To estimate water demand for irrigation, domestic, industrial water,			
	4) To identify possible dam/reservoir sites for irrigation, water supply			
	hydropower and flood control purposes,			
	5) To formulate long-term improvement plan for water supply,			
	6) To formulate basin conservation / management plan			
	7) To propose institutional arrangement, regal set-up and capacity building			
	measures for efficient project implementation and O&M.			
	8) To propose human resources development plan for water administration,			
	9) To formulate environmental management plan			
	10) To formulate master plan for integrated water resources development for			
	the whole country.			
Target Year	- Master Plan Study (2003- 2006: 3~4 years)			
(Project Period)	- Target Year of Master Plan : 2025 or 2030 (20 years)			
Beneficiaries	1) Target Group: all water users,			
(Target Group,	2) Target Area: All river system except along the Main Mekong River,			
Target Area)				
Activities	1) Data collection and development of GIS, data base and inventory lists, etc.			
	2) Field inspection, water user survey,			
	3) Hearing survey / Public consultation meetings,			
	4) Various Analysis (hydrological, hydrogeological, potential, modeling),			
	5) Identification and evaluation of water resources development projects,			
	6) Water demand and supply analysis,			
	7) Preparation of master plan of water resources development and			
	comprehensive management,			
	8) Various Seminars / Workshops, Technical Transfer,			
Executing	Ministry of Water Resources and Meteorology (MOWRAM),			
Organization	Cambodia National Mekong Committee (CNMC)			
Outputs(Results)	1) Long term water resources development plan,			
	2) National inventory or water users,			
	3) Manual for drinking water treatment,			
	4) Nation-wide GIS data base,			
	5) Simulation model for rainfall-runoff model for all the river system			
	6) Master Plan of Water Resources Development and Management			
Inputs	6) Master Plan of Water Resources Development and Management US\$1.2 Million (250 M/M)			
Inputs (Project Cost) Finance				

K. Water Resources

Nippon Koei/ IDCJ/ KRI International

Implementation	Activity	2003	2004	2005	
Schedule	Data collection	=======	=====		
	Field inspection				
	Development of GIS and data base	====	====		
	Analysis			==	
	Identification of projects			===	
	Preparation of master plan				
	Seminars, W/S, T/Transfer,	= =	=	= =	
Evaluation	B/C: Benefit is not able to evaluate din				
(Including Results	IEE : No environmental impact because		0		
of IEE)	TEE : No environmental impact becau	se of only teenin	ical study and p	nammg.	
SW of EIA (if	Not required				
necessary),	Not required				
mitigation for					
Impacts					
Location Map	Target area is whole country.				
Project Image	Image: Construction of the second of the				
Project Image Photo etc.					