

NO	ACTIVITIES	AREA NAME	AREA (1000 HA)	SCALE	YEAR	MINISTRY OF PUBLIC WORKS				REMARK
						SEC. GEN. - RAL	INSPEC. - WATER RESOUR. - CES	DIREC. - HIGHWAY	DIREC. - URBAN & DE-VELOP. - PLANNING	
4	BIOMASS ESTIMATION	BANTEN	393.68	1:200,000	1982	X				PRS
		CJ(CICISADANE- JAKARAYA-GI- BEET)	725.89	1:200,000	1983	X				PRS
		D.A.S. CIMA- NUK	238.87	1:200,000	1984	X	X			PRS
		EAST KALIMAN- TAN	1,783.81	1:200,000	1985	X				PRS, MIN. OF FORESTRY
		AGAT(IRJA)	200.00	1:200,000	1985		X			
5	SOIL COLOR ESTIMA- TION	CJC	725.89	1:500,000	1983	X				PRS
6	GEOLOGICAL CLASSI- FICATION	BANTEN	393.68	1:200,000	1982	X				PRS
		CENTRAL JAVA		1:200,000	1982	X				PRS
		D.A.S. CIMA- NUK	238.87	1:200,000	1984	X	X			PRS
7	GEO MORPHOLOGICAL CLASSIFICATION	BANTEN	393.68	1:200,000	1982	X				PRS
		CENTRAL JAVA	400.00	1:200,000	1982	X				PRS
		D.A.S. CIMA- NUK	238.87	1:200,000	1984	X	X			PRS
8	RIVER PATTERN CLASSIFICATION	D.A.S. PENALI COMAL	270.19	1:200,000	1986	X	X			PRS
		D.A.S. DANAU TOBA	259.59	1:200,000	1986	X				PRS, MIN. OF FORESTRY
		D.A.S. RIAM KIWA-KANAN	303.94	1:200,000	1986/ 1987	X				"
		D.A.S. CITA- RUM	454.34	1:200,000	1986	X				"
		D.A.S. MUSI	300.00	1:200,000	1986/ 1987	X				"
		D.A.S. PALU	150.00	1:200,000	1986/ 1987	X				"
9	LINEARMENT	BANTEN	393.68	1:200,000	1982	X				PRS
		CENTRAL JAVA	4,000.00	1:200,000	1982	X				PRS
		D.A.S. CIMA - NUK	238.87	1:200,000	1984	X	X			PRS

DEPARTMENT OF PUBLIC WORKS

NO	ACTIVITIES	AREA NAME	AREA (1000 HA)	SCALE	YEAR	MINISTRY OF PUBLIC WORKS				REMARK
						SEC. GENERAL	INSPEC. GENERAL	DIREC. WATER RESOURCES	DIREC. HIGHWAY AND BRIDGE	
III RESULT OF DIGITIZER PROCESSING										
1 ELEVATION CLASSIFICATION										
		BANTEN	393.68	1:200,000	1982	X				PRS
		CJC	725.89	1:200,000	1984	X				PRS
		D.A.S. CIMANUK	238.87	1:200,000	1984	X				PRS
		D.A.S. PEMALI GUMAL	270.19	1:200,000	1985	X	X			PRS
		P. JAWA, MADURA AND BALI	13,556.87	1:6000,000	1985			X		
		WEST SUMATERA	8,000.00	1:500,000	1986			X		
		SOUTH SUMATE- RA	5,666.23	1:500,000	1986			X		
		D.A.S. CITARUM	454.34	1:500,000	1986	X				PRS, MIN. OF FORESTRY
2 RAINFALL CLASSIFICATION										
		KEPALA BURUNG (IRJA)	19,176.00	1:1000,000	1984			X		
		CJC	725.89	1:200,000	1984	X				PRS
		BANTEN	393.68	1:200,000	1982	X				PRS
		D.A.S. PEMALI COMAL	238.87	1:200,000	1985		X			
		WEST SUMATERA RAT	8,000.00	1:500,000	1986			X		
		SOUTH SUMATE- RA	5,666.23	1:500,000	1986			X		
		KEPALA BURUNG (IRJA)	19,176.00	1:1000,000	1984			X		
		P. JAWA, MADURA AND BALI	13,556.87	1:6000,000	1985			X		

MINISTRY OF PUBLIC WORKS											
NO	ACTIVITIES	AREA NAME	AREA (1000 HA)	SCALE	YEAR	SEC. -				REMARK	
						GENE- RAL	INSPEC. - GENERAL	DIRECT. - GEN.	DIRECT. - GEN.		DIRECT. - GEN.
3	SLOPE CLASSIFICATION	BANYEN	393.68	1:200,000	1982	X					PRS
		CJC	725.89	1:200,000	1983	X					PRS
		KEPALA BURUNG (IRJA)	19,176.00	1:1000,000	1984				X		
		D.A.S. PEMALI COMAL	270.19	1:200,000	1985	X		X			PRS
		D.A.S. CIMA NUK	238.89	1:200,000	1984	X		X			PRS
		D.A.S. DANAU TOBA	259.59	1:200,000	1986	X					PRS, MIN. OF FORESTRY
		D.A.S. RIAR KIWA-KANAN	303.94	1:200,000	1986/ 1987	X					"
		D.A.S. CITA SUM	454.34	1:200,000	1986	X					"
		D.A.S. MUSTI	300.00	1:200,000	1986/ 1987	X					"
		D.A.S. PALU	150.00	1:200,000	1986/ 1987	X					"
		WEST SUMATERA	8,000.00	1:500,000	1985				X		
		SOUTH SUMATE- RA	5,666.23	1:500,000	1986				X		
	4	SOIL CLASSIFICATION	CJC	725.89	1:200,000	1984	X				PRS
		BANTEN	393.68	1:200,000	1982	X					PRS
		D.A.S. PEMALI COMAL	238.87	1:200,000	1985			X			
		WEST SUMATERA	8,000.00	1:500,000	1986				X		
		SOUTH SUMATE- RA	5,666.23	1:500,000	1986				X		
		KEPALA BURUNG (IRJA)	19,176.00	1:1000,000	1984				X		
		P. JAWA, MADURA AND BALI	13,526.87	1:6000,000	1985				X		

NO	ACTIVITIES	AREA NAME	AREA (1000 HA)	SCALE	YEAR	MINISTRY OF PUBLIC WORKS						REMARK
						SEC. GEN. PLAN	INSPEC. WATER RESOUR. CES	DIRECT. HIGHWAY	DIRECT. URBAN & LAND DE-VELOP. PLANING	DIRECT. GEN. OF RE-SEARCH	CENTER FOR RE-	
III RESULT OF LAND EVALUATION FROM DATA BASE												
1	MONITORING OF LAND COVER CHANGING	JAKARTA	500.00	1:200,000	1983	X						PRS
		BANTEN	393.68	1:200,000	1982	X						PRS
2	EVALUATION OF AGRICULTURAL LAND	P. JAWA, MADURA AND BALI	113,526.87	1:6000,000	1985				X			
		REPALA BURUNG (TRJA)	19,176.00	1:1000,000	1984				X			
		WEST SUMATERA	8,000.00	1:500,000	1986				X			
		SOUTH SUMATERA	5,666.23	1:500,000	1986				X			
3	EVALUATION OF FLOODED AREA	BANJEN	393.68	1:200,000	1982	X						PRS
		D.A.S. PERALTA COMAL	238.67	1:200,000	1985	X		X				PRS
4	EVALUATION OF CRITICAL LAND	D.A.S. DANAU TOBA	259.59	1:200,000	1986	X						PRS, MIN. OF FORESTRY
		D.A.S. RIAN KIRIA-KANAN	303.94	1:200,000	1986/1987	X						"
		D.A.S. CITA RUM	454.34	1:200,000	1986	X						"
		D.A.S. MUSI	300.00	1:200,000	1986/1987	X						"
		D.A.S. PALU	150.00	1:200,000	1986/1987	X						"
4	EVALUATION OF FOREST AREA	D.A.S. PERALTA COMAL	238.67	1:200,000	1985			X				PRS, MIN. OF FORESTRY
		D.A.S. CITA RUM	454.34	1:200,000	1986	X						PRS, MIN. OF FORESTRY
5	EVALUATION OF FOREST VOLUME	EAST KALI-MANTAN	1,783.81	1:200,000	1985	X						PRS, SURTA ABRI, MIN. IGF FORESTRY

IMPLEMENTATION SCHEDULE PLAN

NO.	ACTIVITY	1988/1989	1989/1990	1991/1992	1992/1993	1993/1994
1	PRODUCTION OF THEMATIC & EVALUATION MAP (NSS).					
2a	ESTABLISHMENT OF GUIDELINE FOR FORMULATION OF RURAL DEVELOPMENT PLAN IN LAND.	CONCEPT	CASE STUDY AREA	IMPLEMENTATION OF THE MODEL		
2b	ESTABLISHMENT OF GUIDELINE FOR FORMULATION OF RURAL DEVELOPMENT PLANE IN SWAMPY LAND.		CONCEPT	CASE STUDY AREA	IMPLEMENTATION OF THE MODEL	
3	ESTABLISHMENT OF A METHOD FOR PRODUCTION OF EVALUATION MAPS IN CRITICAL LAND ( LAND CONSERVATION MAPS IN CRITICAL LAND ).	CONCEPT	CASE STUDY AREA	CASE STUDY AREA	IMPLEMENTATION OF THE MODEL	IMPLEMENTATION OF THE MODEL
4	ESTABLISHMENT OF DATA BASE SYSTEM.		DATA	BASE TRAINING & IMPLEMENTATION		
5	TRAINING FOR REGIONAL DATA CENTER.		TRAINING R/S TECH (P/C)	TRAINING DATA BASE (P/C)	IMPLEMENTATION DATA BASE SYSTEM (P/C)	

Annex IV.

5.(1).

In Rp 1000,-

NO.	BUDGET YEAR		1985/1985	1986/1987	1987/1988	TOTAL
	ITEM					
1.	BUILDING		-	-	-	-
2.	MATERIAL CONSUMPTION		53.905,-	38.380,-	23.241,-	115.526,-
3.	OPERATION		91.320,-	93.561,-	183.648,-	368.529,-
4.	COMMISSION		98.520,-	85.700,-	10.000,-	194.220,-
5.	SALARY		-	-	-	-
			243.745,-	217.641,-	216.889,-	678.275,-

## BUDGET ALLOCATION AND PLAN

5.(2).

In Rp 1000,-

NO.	ITEM	BUDGET YEAR	1988/1989	1989/1990	1990/1991	1991/1992	1992/1993	TOTAL
1.	<u>INDONESIA</u> <u>SIDE.</u> BUILDING		-	-	-	-	-	-
2.	MATERIAL CONSUMPTION		22.633,-	24.068,-	24.162,-	25.018,-	25.236,-	121.117,-
3.	OPERATION		183.018,-	200.410,-	200.436,-	204.182,-	204.052,-	992.098,-
4.	COMMISSION		10.000,-	15.000,-	12.500,-	12.500,-	12.500,-	62.500,-
5.	SALARY		PM	PM	PM	PM	PM	PM
			215.651,-	239.478,-	237.099,-	241.700,-	241.788,-	1.113.840,-

LIST OF SPOT DATA ON REMOTE SENSING PROJECT PUSDATA P-U.

(APRIL 1988).

NO.	K / J	SATELLITE	DATA ACQUISITION	LEV.	A R E A	MSS.	PANC.	FORMAT	QUAL. CCZ	NOTES
1	284/362	SPOT1	HRV2	25 JUN 1986	18 JAKARTA-TANGERANG	X		BIL	5%	
2	284/363	SPOT1	HRV2	30 JUL 1987	18 JAKARTA		X	BIL	0%	
3	284/364	SPOT1	HRV2	30 JUL 1987	18 JAKARTA		X	BIL	0%	
4	285/362	SPOT1	HRV2	11 AUG 1986	18 PEKASI	X		BIL	0%	
5	300/363	SPOT1	HRV2	10 JUN 1986	18 PURWAKARTA-JATILUHUR	X		BIL	10%	
6	302/351	SPOT1	HRV2	27 JUN 1986	18 KALSEL (S. NEGARA)	X		BIL	20%	
	303/351	SPOT1	HRV2	31 FEB 1987	18 KALTIM (SAMARINDA)	X		BIL	10%	
				31 FEB 1987	18 KALTIM	X		BIL	10%	



LIST OF LANDSAT MSS DATA ON REMOTE SENSING PROJECT, PUSDATA P-2U.  
BY DECEMBER 1987.

NO.	PATH/R3M	SCENE-ID	DATA ACQUISITION NO.	AREA	BULK ENHANCE/FORMAT	QUA.	KETERANGAN
			CCT	CHIPS	PROSES	PROSES	%CC.
	110766		02/04/85				
1	1111/56	4070201180	17/05/84	040584			BIL
2	1111/57	5008401211	24/05/84	170584			BIL
3	1112/59	4070901212	24/06/84	240684			BIL 40%
4	1112/60	5007501241	15/05/84	150584			BIL 8.0
5	1112/66	5013901275	13/07/84	180784			BIL
6	1112/67	5013901281	18/07/84	180784			BIL CCRS UNCORRECTED
7	1113/59	4074801271	02/08/84	020884			BIL
8	1113/60	4068801285	15/05/84	140584			BIL
9	1113/66	5043401352	08/05/85	090585			EDC-BSQ 20%
10	1113/66	4073001302	17/07/84		221234	221284	BIL
11	1113/67	5022601354	13/10/84	131084			EDC-BSQ
12	1114/59	5044101384	16/05/85	160585			BIL
13	1114/67	5013701402	15/07/84	160784			BIL
14	1115/61	5024001453	27/10/84	221284			BSQ-AM
15	1115/66		28/03/85	280385			BIL
16	1116/58	4102501455	07/06/85		070785		EDC-BSQ 30%
17	1116/60	4102501461	08/05/85		140685		BUC-BSQ
18	1116/61	4102501464	05/05/85	060585			BSQ-AM
19	1115/62	4045501522	30/03/85		150685	030785	BSQ
20	1116/66	5003701514	27/05/84		071284	071284	BIL
21	1117/57	4022201563	09/10/84	091084			EDC-BSQ
22	1117/58	4098401514	25/03/85	250385			EDC-BSQ
23	1117/59	4104801515	29/05/85		220785	230785	BIL
24	1117/60	45017401573	22/08/84	220884	*	050785	BIL
25	1117/61	45017401575	22/08/84	220884			BIL
26	1117/61	4504601580	21/05/85				CURS 70% TK-LAPAN
27	1117/62	4504401583	19/04/85				CURS
28	1117/63	4048001533	02/11/84				CURS
29	1117/65	4074201544	27/06/84		*		BIL
30	1117/66	4068001554	25/05/84	060285			BIL
31	1118/NS	5013302043	12/07/84				BSQ
32	1118/57	4503890204	25/03/85				BSQ
33	1118/58	4503890203	25/03/85				BSQ

34	118/59	+1405501575	105/06/85	4	KALYENG					BSQ	
35	118/61	+14076701590	121/08/84	4	KALYENG					CCRS	
36	118/61	+15048502041	129/05/85	5	KALYENG						
37	118/62	+14055020051	101/05/84	4	KALSEL (MARABAHAN)						
38	118/62	+14076701592	121/08/84	4	KALYENG (MUARA KAPUAS)				100335110685	CCRS	
39	118/62	+15014902034	120/07/84	5	KALSEL (MARABAHAN)						
40	118/62	+15048502043	129/06/85	5	KALYENG						20%
41	118/65	+14065502020	101/05/84	4	MADURA					BSQ-AM	
42	118/65	+1411901593	108/08/85	4	JATENG (BRANTAS)				2904861290486	BSQ	
43	118/66	+14075102005	105/09/84	4	JATIM (KEPANJEN-LUMAJANG)						
44	119/NS		22/11/86		JATENG						
45	119/62	+15038002111	135/03/85	5	KALYENG					CCRS	
46	119/65	+15010802101	117/05/84	5	JATENG				2904861290486	CCRS	B.O
47	119/65	+15025202115	108/11/84	5	JATENG				*	CCRS	10%
48	119/66	+15010802104	117/05/84	5	PACITAN TELUK POPOH				*	CCRS	B.O
49	120/NS	+1409302037	105/03/87	4	SEMAANG - YOGYA				*	CCRS	DARAT BAGUS
50	120/60	+15008302131	123/05/84	5	KALBAR (BUKIT KELINTANG)				*	CCRS	
51	120/61	+14056902114	115/05/84	4	KALBAR (STANTANG)				*	CCRS	80%
52	120/62	+15014702154	126/07/84	5	KALBAR (NANGAPINOH)				930785	CCRS	
53	120/65	+14066902130	115/05/84	5	KALYENG (PEMALI-COMAL)				*	CCRS	G.O
54	121/NS	+1410802191	128/07/85	4	CIREBON					CCRS	20%
55	121/NS	+14070802191	123/05/84	4	JABAR-JATENG (CIREBON)				*	CCRS	10%
56	121/63	+14070802165	123/06/84	4	KALBAR						
57	121/60	+14070802172	123/05/84	4	KALBAR				150186	CCRS	10%
58	121/61	+14070802174	123/06/84	4	KALBAR				*	CCRS	
59	121/62	+15045802225	102/05/85	5	KALBAR				*	CCRS	
60	122/NS	+15008102261	127/05/84	5	KALBAR					CCRS	
61	122/NS	+15008102254	121/05/84	5	KALBAR					CCRS	TK LAPAN
62	122/59	+14095502230	125/02/85	5	KALBAR				*	CCRS	
63	122/60	+14090702231	108/07/85	4	KALBAR					CCRS	40%
64	122/61	+14098702234	129/03/85	4	IP. KARIMATA					CCRS	20%
65	122/62	+14098702241	129/03/85	4	IP. BALITUNG					CCRS	
66	122/64	+14098702245	121/05/84	4	JABAR					CCRS	
67	122/64	+15013502282	122/06/84	5	JAKARTA				080187	CCRS	LAOT (B.A)
68	122/64	+15081702243	127/05/84	5	JAKARTA				*	CCRS	10%
69	122/NS	+15013502285	122/06/84	5	JABAR					CCRS	
70	122/65	+15054502295	128/08/85	5	PELABUHAN RATU					CCRS	
71	122/65	+15081702243	127/05/85		BANDUNG (BAG.KIRI)					CCRS	20%
72	123/NS	+1413802249	127/05/85	4	BANTEN				190187	CCRS	
73	123/57	+14134602212	123/03/86	4	P. NATUNA					CCRS	TK LAPAN
74	123/64	+14070802231	121/05/84	4	SEL. SUNDA				*		
75	123/64	+14107402302	124/05/85	4	SEL. SUNDA						
76	123/64	+14113802294	127/03/85	4	BANTEN					CCRS	
77	123/65	+14070602341	121/06/84	4	BUJUNG KULON				*	CCRS	20%
78	124/61	+14104902360	130/05/85	4	SUMSEL					CCRS	
79	124/62	+14104902363	130/05/85	4	SUMSEL					CCRS	

NO.	PATH/ROW	SCENE-ID	DATA ACQUISITION NO.	AREA	BULK ENHANCE	FORMAT	QUA.	KETERANGAN
					PROSES		ACC.	
80	124/63	4104902365	130/05/85	SUMSEL (D. RANAU, TEL. SEMANGKA	*	CCRS	G.O	
81	124/62	5084702352	126/06/86	SUMSEL (D. RANAU, TEL. SEMANGKA	*	CCRS	G.O	
82	125/60	4104902371	130/05/85	SUMSEL			20%	
83	125/60	4076802415	122/08/84	SAMATERA	0205836			
84	125/62	4076802424	122/08/84	PEMBILAHAN, KEP. LINGGA RIAU	*			
85	125/63	5039002481	126/03/85	MUSI	*		40%	
86	125/63	5007002454	10/05/84	JAMBI	*	CCRS		
87	125/63	5039002483	126/03/85	BENGGKULU		CCRS		
88	125/63	4140802365	124/05/85	BENGGKULU	*	CCRS		
89	126/59	4096702485	09/03/85	BENGGKULU				
90	126/61	4098302483	125/03/85	RIAU		CCRS		
91	126/61	4104702482	130/05/85	KERINCI		CCRS		
92	126/62	5036502542	10/03/85	BENGGKULU		CCRS	20%	
93	126/62	4107902483	29/06/85	BENGGKULU		BIL		
94	126/63	5007702513	17/05/84	BENGGKULU		CCRS		
95	127/59	4105402533	104/06/85	SUMTENG		CCRS		
96	127/59	5084802590	28/05/85	RIAU		BIL	10%	
97	127/60	4143802482	123/06/86	SUMBAR	*			
98	127/61	5084602595	23/05/84	SUMBAR			10%	
99	128/58	4089303001	108/05/84	SUMUT				
100	128/59	4089303003	08/05/84	SUMUT		CCRS		
101	128/60	4107703001	27/05/85	SUMUT		CCRS	5%	
102	129/58	4105203053	102/05/85	ACEH	*			
103	129/59	5084203113	126/05/85	SUMUT			10%	
104	130/56	5084203115	126/05/85	SUMUT				
105	130/56	4091503110	116/01/85	ACEH		CCRS		
106	130/57	5085703162	101/06/85	ACEH				
107	130/57	4105903121	16/01/85	ACEH		CCRS	40%	
108	131/57	4105903112	109/05/85	ACEH			10%	
109	131/58	4079403174	17/09/84	ACEH				
110	131/56	4167403121	114/02/87	ACEH	*			
111	131/57	4167403123	14/02/87	ACEH	*			

NO.	PATH/ROW	SCENE-ID	DATA ACQUISITION NO.	CHIPS	SAT.	AREA	BULK PROSES	ENHANCE PROSES	FORMAT	QUA. %CC	KETERANGAN
1	1122/64		114/07/83	-	-	JAKARTA			BIL		
2	1122/65		114/04/83	-	-	UJUNG KULON			BIL		
3	1122/66	8222890	12700129/04/81	-	-	2 SUMBANG TIMUR			BIL		
4	1123/66		110/07/82	-	-	SUMBANG BESAR			BIL		
5	1123/65	8222800	123100307/04/81	-	-	2 SUMBANG BARAT			BIL		
6	1125/66	8211940	012330130/04/78	-	-	2 BALI-JABAR			BIL		
7	1126/65		113/04/78	-	-	MADURA			BIL		
8	1125/65	8211770	127240113/04/78	-	-	2 JEMBER			BIL		
9	1129/65	8300510	2080X0125/04/78	-	-	3 CIREBON			BIL		
10	1130/64	8301600	2125X0112/03/78	-	-	3 CIREBON			BIL		
11	1130/64		127/03/82	-	-	CIREBON			BIL		
12	1130/65		27/03/82	-	-	BANDUNG			BIL		
13	1131/64	8251602	141500121/06/76	-	-	2 JAKARTA			BIL		
14	1131/65		127/09/82	-	-	PELABUHAN RATU			BIL		
15	1132/63	8105402	431500120/03/82	-	-	1 KOTA AGUNG			BIL		

NO.	PATH/ROW	SCENE-ID	DATA ACQUISITION NO.	CHIPS	SAT.	AREA	BULK PROSES	ENHANCE PROSES	FORMAT	QUA. %CC	KETERANGAN
1	1120/64	8301860	1192X0109/07/78	-	-	3 SULSEL			BIP2		
2	1120/67	8223240	121300105/03/81	-	-	2 SUMBANG SELATAN			BIP2		
3	1125/65	8106302	032500127/08/72	-	-	1 SURABAYA			BIP2		
4	1126/66	8302270	1481X0118/10/73	-	-	3 BLAMBANGAN			BIP2		
5	1127/66	8104802	094500109/09/72	-	-	1 MALANG			BIP2		
6	1128/65	8110302	15500103/11/72	-	-	1 YOGYAKARTA			BIP2		
7	1128/65	8106702	143500123/03/72	-	-	1 SEWANG			BIP2		
8	1129/65	8106802	024500129/09/72	-	-	1 CIREBON			BIP2		
9	1130/64	8251602	082500120/06/76	-	-	2 PAYANGKAN			BIP2		
10	1130/65	8251502	065500120/06/76	-	-	BANDUNG			BIP2		
11	1131/64	8139402	333500121/08/73	-	-	1 JAKARTA			BIP2		
12	1131/64		127/03/82	-	-	JAKARTA			BIP2		
13	1131/65	8212720	200140117/07/78	-	-	2 PELABUHAN RATU			BIP2		
14	1131/65	8251602	143500121/06/75	-	-	2 PELABUHAN RATU			BIP2		

15	132/54	8205590203500	130/05/77	-	LAMPUNG	BIP2
16	133/61	83010902304X0	122/06/73	-	3 JAMSI - BANGKA	BIP2
17	133/62	83010902310X0	122/05/73	-	3 PALEMANG	BIP2
18	133/63	83010902315X0	122/08/73	-	3 LAMPUNG	BIP2
19	133/74		115/09/72	-	LAMPUNG	BIP2
20	134/62	8132502485500	13/06/73	-	1 SAROLANGUN	BIP2
21	135/60	8132802524500	14/06/73	-	1 PEKAN BARU	BIP2
22	135/61	8132802549500	14/06/73	-	1 BUKIT TINGGI	BIP2
23	135/59	82143902335X0	131/12/78	-	2 PAKAN BARU	BIP2
24	136/60	8132702592500	15/05/73	-	1 PAKAN BARU	BIP2
25	136/61	8105702591500	13/09/72	-	1 PADANG	BIP2
26	137/58	8282802342500	129/04/77	-	2 ASAHAN	BIP2
27	137/59	8282802342500	129/04/77	-	2 ASAHAN	BIP2
28	137/60	8109403059500	125/10/72	-	1 ASAHAN	BIP2
29	138/57	8143703075500	110/03/73	-	1 MEDAN	BIP2
30	138/58	8143703081500	10/03/73	-	1 D. TCSA	BIP2
31	138/59	8143703084500	10/03/73	-	1 D. TCSA	BIP2
32	139/57	8111403159500	114/11/72	-	1 MEDAN	BIP2
33	139/58	8115803154500	07/01/73	-	1 MEDAN	BIP2
34	140/56	82117302431X0	09/04/78	-	2 ACEH	BIP2
35	140/57	8154703171500	21/01/74	-	1 ACEH	BIP2
36	141/56	82117402480X0	10/04/73	-	2 ACEH	BIP2

NO.	PATH/ROW	SCENE-ID	DATA ACQUISITION NO.	AREA	BULK PROCESS	ENHANCE	FORMAT	QUA.	KETERANGAN
			CCF	CHIPS	SAT.			%CC.	
1	100/64	4054300122	12/01/84	-	4	PERBATASAN	BIL		BIL
2	100/65	4019300134	25/01/83	-	4	PERBATASAN	BIL		BIL
3	100/66	4019300140	25/01/84	-	4	PERBATASAN	CCRSKRIH-BA		CCRSKRIH-BA
4	101/65	4007200180	29/05/82	-	4	IRIAN (S. DIGUL)	T012B51301285		BILRT8-BA
5	101/65		25/09/82	-	4	IRIAN (S. DIGUL)	BIL		BIL G.Q
5	101/65		20/01/85	-	4	IRIAN (S. DIGUL)	BIL		BIL G.Q
6	102/62		13/12/84	-		IRIAN	BIL		BIL
7	102/63	4054300242	110/01/84	-	4	IRIAN	BIL		BIL
8	102/64		16/04/85	-		IRIAN	BIL		BIL

9	102/64	+		20/01/85				IRIAN		BIL
10	102/65		3175123384	20/12/82			3	IRIAN TIMUR		BIL
11	103/62		4005500290	09/09/82			4	IRIAN		BIL
12	104/62		4004600345	30/08/82			4	IRIAN		BIL
13	104/63		4050900370	07/12/83			4	IRIAN		BIL
14	105/62		4005300411	05/09/82			4	IRIAN		BIL
15	105/62		4014700424	11/12/82			4	KEPALA BURUNG		BIL
16	105/63		4022800434	01/03/83			4	KEPALA BURUNG		BIL
17	106/61		4052300483	21/12/83			4	YEMBUNI		BIL
18	106/62	+	4058700482	23/02/84			4	KEPALA BURUNG		BIL
19	106/63		4033100503	12/06/83			4	KEPALA BURUNG		BIL
20	103/62		2211200070	04/11/80			2	PERBATASAN		BIL
21	103/62		2236400040	14/07/81			2	PERBATASAN		BIL
22	108/63		2240000035	19/08/81			2	PERBATASAN		BIL
23	108/64		2223900070	10/03/81			2	IRIAN BARAT		BIL
24	108/65		2240000044	19/08/81			2	IRIAN		BIL
25	108/65			11/09/84			2	IRIAN		BIL
26	109/63		2256400124	29/01/82			2	IRJA		BIL
27	109/64		2254400130	29/01/82			2	IRJA		BIL
28	110/63				82			IRIAN		BIL
29	113/61		3066500324	30/12/79			3	KEPALA BURUNG		BIL
30	113/61		2224400342	15/03/81			2	KEPALA BURUNG		BIL
31	113/61			15/03/81			2	MANDUKWARI		BIL
32	114/60		3068400375	18/01/80			3	WARWANDI		BIL
33	114/61		2220900401	08/02/81			2	KEPALA BURUNG		BIL
34	115/61		3174700514	18/12/82			3	KEPALA BURUNG		BIL

LIST OF SPOT DATA ON REMOTE SENSING PROJECT PUSDATA P.U.

(APRIL 1988).

NO.	K / J	SATELLITE DATA ACQUISITION	LEV.	A R E A	MSS.	PANC.	FORMAT	QUAL. ICC	NOTES
1	1284/362	SPOT1 HRV2	25 JUN 1986	18 JAKARTA-YANGERANG	X		BIL	5%	
2	1284/363	SPOT1 HRV2	30 JUL 1987	18 JAKARTA		X	BIL	0%	
3	1284/364	SPOT1 HRV2	30 JUL 1987	18 JAKARTA		X	BIL	0%	
4	1285/362	SPOT1 HRV2	11 AUG 1986	18 BEKASI	X		BIL	0%	
5	1286/363	SPOT1 HRV2	10 JUN 1986	18 PURWAKARTA-JATILURUR	X		BIL	10%	
6	1300/354	SPOT1 HRV2	27 JUN 1986	18 KALSEL (S. NEGARA)	X		BIL	20%	
7	1302/351	SPOT1 HRV2	31 FEB 1987	18 KALYIM (SAMARINDA)	X		BIL	10%	
8	1303/351	SPOT1 HRV2	31 FEB 1987	18 KALYIM	X		BIL	10%	

LIST OF LANDSAT MSS DATA ON REMOTE SENSING PROJECT, PUSDATA P.T.U.  
BY DECEMBER 1987.

NO.	PATH/RUN	SCENE-ID	DATA ACQUISITION NO.	AREA	BULK PROCESSING PROCES	FORMAT	QUANTIFICATION	KETERANGAN
			CCY	CHIPS SAT.			%C.	
	110766		02/04785					
1	1111/66	4070201180	17/05/84	040584	4	P. ROTI (KEP. SOLOR&ALOR)	BIL	
2	1111/67	5008401211	24/05/84	170684	5	KEP. SOLDR (KUPANG, P. TIMOR)	BIL	
3	1112/59	4070901212	24/05/84	240684	4	SULUT	BIL	40%
4	1112/60	5007501241	15/05/84	150584	5	SULUT	BIL	8.0
5	1112/66	5013901275	18/07/84	180784	5	FLORES BARAT	BIL	
6	1112/67	5013901281	18/07/84	180784	5	P. SAMU	BIL	CCRS UNCORRECTED
7	1113/59	4074801271	12/03/84	020884	4	SULUT	BIL	
8	1113/60	4068801285	14/03/84	140584	4	GORONTALO & KEP. TUGIAN	BIL	
9	1113/66	5043401352	09/05/85	090585	5	FLORES	EDC-BSQ	20%
10	1113/66	4073001302	17/07/84		4	FLORES TENGAH	BIL	
11	1113/67	5022601354	13/10/84	131084	5	NTB	EDC-BSQ	
12	1114/59	5044101384	16/05/85	160585	5	SULAWESI	BIL	
13	1114/67	5013701402	16/07/84	160784	5	SUMBA - BARAT	BIL	
14	1115/61	5024001453	27/10/84	221284	4	DONGGALA SULTENG	BSQ-AM	
15	1115/66		28/03/85	280385	4	SUMBAWA	BIL	
16	1116/58	4102501455	07/06/85		4	KALTIM	EDC-BSQ	30%
17	1116/50	4102501461	06/05/85		4	BONTANG	BSQ-BSQ	
18	1116/61	4102501464	06/05/85	060585	4	SAMARINDA	BSQ-AM	
19	1116/62	5045501522	30/05/85		5	TANJUNG ARU	BSQ	
20	1116/66	5006701514	27/05/84		5	BALI TIMUR-LOMBOK	BIL	
21	1117/57	5022201563	09/10/84	091084	5	LENGKALINAU	EDC-BSQ	30%
22	1117/58	4098401514	26/03/85	260385	4	KALTIM	EDC-BSQ	
23	1117/59	4104801515	29/05/85		4	KALTIM	BIL	
24	1117/60	5017401573	22/03/84	220384	5	KALTIM LUNGRANT	BIL	
25	1117/61	5017401575	22/03/84	220384	5	MARA PANJANG	BIL	
26	1117/61	5044601580	21/05/85		5	KALSEL	CCRS	70% TK-LAPAN
27	1117/62	5041401583	19/04/85		5	KALSEL		
28	1117/63	403001533	12/11/84		4	KALSEL		
29	1117/65	4071201544	27/06/84		4	JATIM - MADURA TIMUR	BIL	
30	1117/66	4068001554	26/03/84	060285	4	SEL. BALI	BIL	
31	1118/NS	5013502043	12/07/84		5	MADURA - JATIM	BSQ	
32	1118/57	5038902044	25/03/85		5	KALUT	BSQ	
33	1118/56	5038902031	25/03/85		5	KALUT	BSQ	



351118759	+	4103501575	05/06/85	4	KALITENG				BSQ
351118761	+	4076701590	21/08/84	4	KALITENG				CCRS
361118761	+	5048502041	29/06/85	5	KALITENG				
371118762	+	4065502005	01/05/84	4	KALSEL (MARABAHAN)				
381118762	+	4076701592	21/08/84	4	KALITENG (MUJAYA KAPUAST)		1006855110985		CCRS
391118762	+	5014902034	20/07/84	5	KALSEL (MARABAHAN)				
401118762	+	5048502043	29/06/85	5	KALITENG				20%
411118765	+	4065502020	01/05/84	4	MADURA				BSQ-AM
421118765	+	4113901593	08/08/85	4	JATENG (BRANTAS)		2904861290486		BSQ
431118766	+	4075102005	05/08/84	4	JATIM (KEPANJEN-LUMAJANG)				
4411197NS			22/11/86		JATENG				
451119762	+	5038302111	18/03/85	5	KALITENG		*		CCRS
461119765	+	5010802101	17/06/84	5	JATENG		2904861290486		CCRS 18-Q
471119765	+	5028202115	08/11/84	5	JATENG		*		CCRS 10%
481119766	+	5010802104	17/06/84	5	PACITAN TELUK POPDH		*		CCRS 5-Q
4911207NS									
501120759	+	4169302037	05/03/87	4	SEMARANG - YUGYA		*		CCRS DARAT BAGUS
511120760	+	4066902114	15/05/84	5	KALBAR (BUKIT KELINTANG)		*		CCRS
511120761	+	5014702154	26/07/84	5	KALBAR (MANGAPINOH)		230735		CCRS 80%
521120762	+	4066902130	15/05/84	4	KALITENG		*		CCRS
531120765	+	5011502163	14/05/84	5	JATENG (PENALI-COMAL)		*		CCRS 6-Q
5411217NS									
5511217NS									
561121753	+	4070802163	23/06/84	4	JABAR-JATENG (CIREBON)		*		CCRS 20%
571121760	+	4070802172	23/06/84	4	KALBAR				CCRS 10%
581121761	+	4070802174	23/06/84	4	KALBAR		150136		CCRS 10%
591121762	+	5045802225	02/05/85	5	KALBAR		*		CCRS
6011227NS									
6111227NS									
621122759	+	4095502230	25/02/85	5	KALBAR		*		CCRS TK LAPAN
631122760	+	4090702231	08/07/85	4	KALBAR				CCRS 40%
641122761	+	4098702234	29/03/85	4	P. KARIMATA				CCRS 20%
651122762	+	4098702241	29/03/85	4	P. BALITUNG				CCRS
661122764	+	4098702245	21/05/84	4	JABAR				CCRS
671122764	+	5013302282	22/06/84	5	JAKARTA				CCRS
681122764	+	5081702243	27/05/86	5	JAKARTA		080137		CCRS LAUT (B-A)
6911227NS							*		CCRS LAUT (B-A)
701122765	+	5054502295	28/08/85	5	PELABUHAN RATU				CCRS
711122765	+	5081702243	27/05/86	5	BANDUNG (BAG-KIRT)				CCRS 20% TK.LAPAN(DARAT BAGUS)
7211237NS									
731123757	+	4134602242	23/03/86	4	P. NATUNA		190187		CCRS
741123764	+	4107052311	21/05/84	4	SEL. SUNDA		*		CCRS TK.LAPAN
751123764	+	4107402302	24/06/85	4	SEL. SUNDA				
761123764	+	4113802294	27/08/85	4	BANTEN				CCRS
771123765	+	4070602341	21/06/84	4	UJUNG KULON		*		CCRS 20%
781124761	+	4104902360	30/05/85	4	SUNSEL				CCRS
791124762	+	4104902363	30/05/85	4	SUNSEL				CCRS

NO.	IPATH/RON	SCENE-ID	DATA ACQUISITION NO.	CC	CRPS	ISAT	AREA	PROSES	FORMAT	QUA.	KETERANGAN
80	1124763	4104902365	30705785	300585	4		SUMSEL ID. RANAU, TEL. SEMANGKA	*		CCRS	G.Q.
	1124763	45084702352	26/06/86	5			SUMSEL ID. RANAU, TEL. SEMANGKA	*		CCRS	G.Q.
81	1124764	4104902371	30705785	4			SUMSEL				20%
	1125760	4076802415	10/05/84				SOHATERA	1020586			
	83	1125762	4076802424	22/08/84	4		PEMBILAHAN, KEP. LINGGA RIAU	*			
	84	1125762	45039002481	25/03/85	4		MUSI	*			40%
	85	1125763	45007002454	10/05/84	5		JAMBI	1210985	*	CCRS	
	86	1125763	45039002483	26/03/85	5		BENGKULU			CCRS	
	86	1125763	4140802365	24/05/85	4		BENGKULU	*		CCRS	
	87	11267NS	4096702485	09/03/85	4		BENGKULU				
	88	1126759	4107902471	29/06/85	4		BENGKULU				
	89	1126759	45042902575	04/05/85	5		RIAU			CCRS	
	90	1126761	4098302483	25/03/85	4		KERINCI			CCRS	
	91	1126761	4104702482	30/05/85	4		BENGKULU			CCRS	20%
	92	1126762	45036502542	01/03/85	5		BENGKULU			BIL	
	93	1126762	4107902483	29/08/85	4		BENGKULU			CCRS	
	94	1126763	45007702513	17/05/84	5		BENGKULU			CCRS	
	95	112759	4105402533	04/06/85	4		SUMTENG			CCRS	
	96	112759	45045402590	28/06/85	5		RIAU			BIL	
	97	112760	4143802482	23/06/86	4		SUMBAR	*			10%
	97	112761	45043402595	23/06/84	5		SUMBAR				10%
	98	1128758	4069303001	08/06/84	4		SJUMUT				
	99	1128759	4069303003	08/06/84	4		SUMUT			CCRS	
	100	1128760	4107703001	27/06/85	4		SUMUT			CCRS	5%
	101	11297NS		09/03/85			ACEH	*			
	101	1129758	4105203053	02/06/85	4		ACEH				
	102	1129759	45048203113	12/05/85	5		SUMUT				10%
	103	1129760	45048203115	26/06/85	5		SUMUT				
	104	1130756	4091503110	16/01/85	4		ACEH			CCRS	
	105	1130756	45045703162	01/06/85	5		ACEH				
	106	1130757	4105903112	16/01/85	4		ACEH			CCRS	140%
	107	1130757	4105903112	09/06/85	4		ACEH				10%
	108	11317NS	4079403174	17/09/84	4		ACEH	*			
	1131756	4167403121	14/02/87	4			ACEH	*			
	1131757	4167403123	14/02/87	4			ACEH	*			

NO.	PATH/ROW	SCENE-ID	DATA ACQUISITION NO.	CHIPS	SAT.	AREA	BULK ENHANCE PROSES	FORMAT	QUA.	KETERANGAN
1	122/64		14/07/83	-	-	JAKARTA		BIL		
2	122/55		14/04/83	-	-	UJUNG KULON		BIL		
3	122/66	8222890127200	29/04/81	-	2	SUMBARA TIMUR		BIL		
4	123/66		11/07/82	-	-	SUMBARA BESAR		BIL		
5	123/66	8222900122100	03/04/81	-	2	SUMBARA BARAT		BIL		
6	125/66	82119401223X0	30/04/78	-	2	BALI-JABAR		BIL		
7	126/65		13/04/78	-	-	MADURA		BIL		
8	126/66	82117701272X0	13/04/78	-	2	JEMBER		BIL		
9	129/65	8300510209X0	25/04/78	-	3	CIREBON		BIL		
10	130/64	83016002125X0	12/08/79	-	3	CIREBON		BIL		
11	130/64		27/08/82	-	-	CIREBON		BIL		
12	130/65		27/08/82	-	-	BANDUNG		BIL		
13	131/64	8251602141500	21/06/76	-	2	JAKARTA		BIL		
14	131/65		27/09/82	-	-	PELABUHAN RATU		BIL		
15	132/63	8105402431500	20/03/82	-	1	KOTA AGUNG		BIL		

NO.	PATH/ROW	SCENE-ID	DATA ACQUISITION NO.	CHIPS	SAT.	AREA	BULK ENHANCE PROSES	FORMAT	QUA.	KETERANGAN
1	120/64	83018601182X0	09/07/78	-	3	SULSEL		BIP2		
2	120/57	8223240121300	06/03/81	-	2	SUMBARA SELATAN		BIP2		
3	126/65	8106502032500	27/08/72	-	1	SURABAYA		BIP2		
4	126/66	83022701481X0	18/10/73	-	3	BLAMBANGAN		BIP2		
5	127/66	8104802094500	09/09/72	-	1	MALANG		BIP2		
6	128/65	8110302154500	03/11/72	-	1	YOGYAKARTA		BIP2		
7	128/65	8106702145500	29/09/72	-	1	SEARANG		BIP2		
8	129/65	8106802204500	29/09/72	-	1	CIREBON		BIP2		
9	130/64	8251502082500	20/06/76	-	2	PAKSIKUNAN		BIP2		
10	130/65	8251502085500	20/06/76	-	-	BANDUNG		BIP2		
11	131/64	8139402313500	21/08/73	-	1	JAKARTA		BIP2		
12	131/64		27/08/82	-	-	JAKARTA		BIP2		
13	131/65	8212702001X0	17/07/78	-	2	PELABUHAN RATU		BIP2		
14	131/65	8251602143500	21/06/75	-	2	PELABUHAN RATU		BIP2		

15	132/64	820890208500	30/05/77	-	LAMPUNG	BIP2
16	133/61	8301090234X0	22/06/73	3	JAMBI - BANGKA	BIP2
17	133/62	83010902310X	22/06/78	3	PALEMBANG	BIP2
18	133/63	83010902315X	22/06/78	3	LAMPUNG	BIP2
19	133/64	83010902315X	15/09/72	-	LAMPUNG	BIP2
20	134/62	813250248500	13/06/73	1	SARILANGUN	BIP2
21	135/60	812360253500	14/06/73	1	PEKAN BARU	BIP2
22	135/61	813260254050	14/06/73	1	BUKIT TINGGI	BIP2
23	136/59	82143902335X	31/12/78	2	PAKAN BARU	BIP2
24	136/60	813270259250	15/06/73	1	PAKAN BARU	BIP2
25	136/61	810570259150	18/09/72	1	PADANG	BIP2
26	137/58	828280234250	29/04/77	2	ASAHAN	BIP2
27	137/59	823280234450	29/04/77	2	ASAHAN	BIP2
28	137/60	810940305050	25/10/72	1	ASAHAN	BIP2
29	138/57	814370307550	10/03/73	1	MEDAN	BIP2
30	138/58	814370308150	10/03/73	1	D. TOBA	BIP2
31	138/59	814370308450	10/03/73	1	D. TOBA	BIP2
32	139/57	811140315350	14/11/72	1	MEDAN	BIP2
33	139/58	8111680315450	10/07/73	1	MEDAN	BIP2
34	140/56	82117302431X	10/09/78	2	ACEH	BIP2
35	140/57	815470317150	21/01/74	1	ACEH	BIP2
36	141/56	82117402430X	10/04/73	2	ACEH	BIP2

NO.	PATH/ROW	SCENE-ID	DATA ACQUISITION NO.	AREA	BULK ENHANCEMENT PROCESSES	QUANT	KETERANGAN
			CC1			%C.	
1	1100/64	4054300122	12701/84	PERBATASAN			BIL
2	1100/65	4019300134	25/01/83	PERBATASAN			BIL
3	1100/66	4019300143	25/01/84	PERBATASAN			CURSKIP=BA
4	1101/65	4007300180	29/06/82	IRIAN (S. DIGUL)	101235	301285	BILRIB=BA
5	1101/65		26/09/82	IRIAN (S. DIGUL)			BIL G.Q
6	1101/65		20/01/85	IRIAN (S. DIGUL)			BIL G.Q
7	1102/62	4054300242	13/12/84	IRIAN			BIL
8	1102/63		10/01/84	IRIAN			BIL
9	1102/64		15/04/85	IRIAN			BIL

91102/64 +		20/01/85						BIL
101102/55	3175123384	20/12/82	-	3	IRIAN			BIL
111103/52	4005500290	08/09/82	-	4	IRIAN			BIL
121104/52	4004600345	13/03/82	-	4	IRIAN			BIL
131104/53	4050900370	07/12/83	-	4	IRIAN			BIL
141105/52	4005300411	05/09/82	-	4	IRIAN			BIL
151105/62	4014700424	11/12/82	-	4	KEPALA BURUNG			BIL
161105/53	4022800434	01/03/83	-	4	KEPALA BURUNG			BIL
171106/61	4052300483	21/12/83	-	4	TEMBUNI			BIL
181106/62	4058700482	23/02/84	-	4	KEPALA BURUNG			BIL
191106/63	4033100503	12/06/83	-	4	KEPALA BURUNG			BIL
201103/52	2211200070	06/11/80	-	2	PERSAYASAN			BIL
211103/52	2236400040	14/07/81	-	2	PERSAYASAN			BIL
221108/63	2210800035	19/08/81	-	2	PERSAYASAN			BIL
231108/64	2229000070	10/03/81	-	2	IRIAN BARAT			BIL
241103/55	2240000044	19/03/81	-	2	IRIAN			BIL
251108/65		11/09/84	-	2	IRIAN			BIL
261109/63	2256400124	29/01/82	-	2	IRJA			BIL
271103/64	2254400130	29/01/82	-	2	IRJA			BIL
281113/53		82	-		IRIAN			BIL
291113/61	3065500324	30/12/79	-	3	KEPALA BURUNG			BIL
301113/61	2224400342	15/03/81	-	2	KEPALA BURUNG			BIL
311113/61		15/03/81	-	2	MANDARRI			BIL
321114/60	3088400375	18/01/90	-	3	WARMANDI			BIL
331114/61	2220900401	09/02/81	-	2	KEPALA BURUNG			BIL
341115/61	3174700514	16/12/82	-	3	KEPALA BURUNG			BIL

EXPERTS DISPATCHMENT

ITEM	1st year	2nd year	3rd year	4th year	5th year	Total
Long Term						
1. Team Leader					→	1 person
2. Coordinator					→	1 person
3. Software Dev.					→	1 person
4. Hardware Dev.					→	1 person
5. System Dev.					→	1 person
Short Term						
1. Agriculture						
2. Forestry						
4. Hydrology						
5. Computer Science						
6. Others						
			5 - 10 persons		→	5 - 10 persons



REPUBLIK INDONESIA

DEPARTEMEN PEKERJAAN UMUM

JALAN PATTIMURA NO.20 KEBAYORAN BARU -- JAKARTA

SPEECH BY SECRETARY GENERAL OF  
THE MINISTRY OF PUBLIC WORKS OF THE REPUBLIC OF INDONESIA  
AT THE MEETING :

Project Formulation Survey TEAM for Remote Sensing Engineering  
Project on Site Selection System for Development Agricultural  
Infrastructure (VTA-6)

Ladies and gentlemen, distinguished guest,

First of all, may we extend our heartiest thanks for your willingness to fulfil our invitation, which we have sent to you within such a pressing time due to several matters that we could not overcome. May we your apologize for this.

Furthermore, may we, on behalf of the Ministry of Public Works, extend our thanks to the

"Project Formulation Survey TEAM for Remote Sensing Engineering  
Project on Site Selection System for Development of Agricultural  
Infrastructure (VTA-6)".

which right at the moment is starting its visit to Indonesia, within the framework of studying cooperation between the Government of the Republic of Indonesia (Ministry of Public Works) and the Government of Japan for a grant in the field of Remote Sensing (JICA).

This cooperation which has been started under study is the second cooperation and is continuation of the first cooperation that took place from 1980 up to 1987.

According to the reports we received from the Government of Japan as well as the Government of the Republic of Indonesia, the first cooperation being finished, may be said is successful.



REPUBLIK INDONESIA

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REPUBLIK INDONESIA

DEPARTEMEN PEKERJAAN UMUM

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The success has been mainly in promoting cooperation between experts sent by the Government of Japan with their counterparts from Indonesia, which in its turn will strengthen the relation between the two nations, Japan and Indonesia.

Besides that, technically speaking the success of cooperation in the field of remote sensing covers :

1. Effectivity in transfer of technology in the field of remote sensing.
2. Effectivity in developing human resources in the field of remote sensing through education and training program conducted in Japan as well as Indonesia.
3. Effectivity in the provision and supply of hardware and software.
4. Effectivity in the collection of satellite image data in the form of data yet unprocessed as well as already processed.
5. Effectivity in limited utilization of results in remote sensing by units within and outside the Ministry of Public Works.

The urgency of continued cooperation required in the field of remote sensing are mainly :

1. The remote sensing technology itself is a still developing technology and hence needs to be continually improved, so as to become more and more practical and useful for human life.
2. In connection of the above, the existing hardware and software, although it can still be utilized, yet require further improvement.
3. In view of the very limited domestic resources, human resources as well as other resources, cooperation with developed countries is likely requisite, in this regard the Japanese Government that has initiated the first stage



REPUBLIK INDONESIA

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JALAN PATTIMURA NO. 20 KEBAYORAN BARU — JAKARTA

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cooperation.

We sincerely hope that the next stage cooperation which is now being studied will be more successful than the previous one.

We render the widest opportunity to all units of government organisations in Indonesia, chiefly in the Ministry of Public Works, to cooperate in remote sensing technology with the PUSDATA, Ministry of Public Works.

In accordance with the existing laws and regulation, to be used for the sake of a success in the development we have programmed.

In conclusion, we wish the Project Formulation Survey TEAM good luck and may you have a successful work. and if in this work, the TEAM faces any difficulties or is in need of any thing do not hesitate to contact us or the Head of PUSDATA, we hope we can be of help to you.

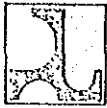
Thank you.

Jakarta, 24 May 1988

Secretary General  
Ministry of Public Works

AGENDA JOINT MEETING  
TEAM SURVEY DARI JEPANG  
( PROJECT VTA-6 )

1. 09.00 - 09.15 Pembukaan oleh Bapak Sekretaris Jenderal.
2. 09.15 - 09.45 Penjelasan maksud dan tujuan Team Survey dari JICA untuk Proyek VTA-6.
3. 09.45 - 10.15 Penjelasan Bapak Sekretaris Jenderal Departemen Pekerjaan Umum tentang Proyek Remote Sensing di Departemen Pekerjaan Umum.
4. 10.15 - 12.00 Diskusi mengenai Proyek Remote Sensing lanjutan ( VTA-6 ) dipimpin oleh Bapak Sekretaris Jenderal Pekerjaan Umum.
5. 12.00 Penutupan



DEPARTEMEN PEKERJAAN UMUM

PUSAT PENGOLAHAN DATA DAN PEMETAAN

JALAN PATTIMURA 20 KEBAYORAN BARU - JAKARTA SELATAN TEL. 732262, 735588 pes. 291

Jakarta, May 27, 1988.

Mr. Kazuo KIMURA  
Team Leader for Project Formulation  
Survey in Indonesia,  
Japan International Cooperation Agency (JICA).

Re : The JICA Remote Sensing Technical Cooperation Project  
in the Ministry of Public Works.

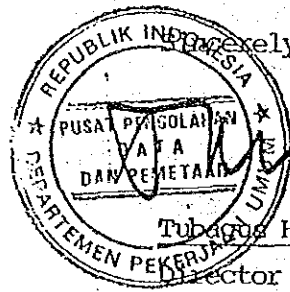
Dear Mr. Kimura,

The Ministry of Public Works (DPU) of the Republic of Indonesia expresses its view to the Team of JICA Project Formulation Survey concerning to Remote Sensing in Indonesia, with regard to the project from view points of common use of equipments which is provided by the Japanese Government, whereas the task execution should be in accordance with the Indonesian regulations, in the following items :

1. Pre-processed data to which original data are transformed through radiometric and geometric correction, are smoothly delivered.
2. Ministry of Public Works will be able to perform pre-processing for users whenever they bring their original remote sensing data to the Ministry of Public Works, complimented by official request.
3. Ministry of Public Works may accept officials from other governmental organizations for the utilization of equipments for training for the time being.

4. As for the common utilization of imagery data bank which Ministry of Public Works requested to establish during the phase II of the Remote Sensing Project for Development of Agricultural Infrastructure, Ministry of Public Works will deliver the pre-processed data from the data bank to users, in ordinary format established at Ministry of Public Works.

Thank you very much for your kind cooperation.



Sincerely yours,

Tubagus Haedar Ali.  
Director of Center for  
Data Processing and  
Mapping, M.P.W.

MINUTES OF DISCUSSIONS

ON

THE REMOTE SENSING ENGINEERING PROJECT PHASE II

FOR

THE DEVELOPMENT OF AGRICULTURAL INFRASTRUCTURE

IN

THE REPUBLIC OF INDONESIA

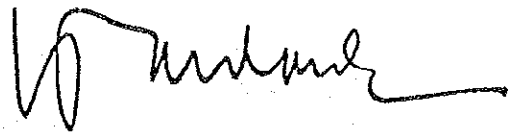
1. In response to the request made by the Government of the Republic of Indonesia for the Remote Sensing Engineering Project Phase II for the Development of Agricultural Infrastructure under Ministry of Public Works ( hereinafter referred to as "the Project" ), the Government of Japan has sent, through Japan International Cooperation Agency ( hereinafter referred to as "JICA" ) which is an official agency for implementing technical cooperation programs of the Government of Japan, a team headed by Mr. Kazuo KIMURA, Deputy Director, Construction Department, Kinki Regional Agricultural Administration Office, Ministry of Agriculture, Forestry and Fisheries ( hereinafter referred to as "JICA Team" ) to conduct project formulation survey from 22th May to 1st June, 1988.
2. The JICA Team has held a series of discussions and exchanged views with the authorities concerned of the Government of Indonesia, taking into consideration the Proposed Terms of Reference on the Project.
3. A list of attendants in the meeting is attached in Annex I.
4. In the course of the project formulation survey, concerning Technical Cooperation, the Framework of Technical Cooperation attached in Annex II was worked out by both parties.
5. In the above mentioned context concerning Technical Cooperation, the Indonesian side requested the JICA Team that the Japanese side take further steps necessary for the implementation of the Project.

6. The Indonesia side and the JICA Team agreed to recommend to their respective Governments the above mentioned results of the project formulation survey.
7. Besides the survey, the JICA Team has also carried out survey and exchanged views with the authorities concerned of the Government of Indonesia on the present situation of a plan for "Image Processing Laboratory for Oil and Gas Research" under the Ministry of Mines and Energy, and, in this connection, Japanese and the Indonesian sides have agreed to continue the study on relevant items including the possibility of the common use of equipment and materials in order to contribute to the efficient fulfillment of the technical cooperation.

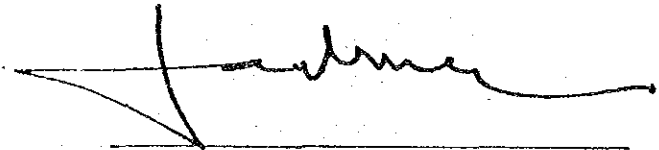
Jakarta, 30th May, 1988



Kazuo KIMURA  
Leader of the Team for Project  
Formulation Survey, JICA



Tubagus Haedar Ali  
Director of Center for Data  
Processing and Mapping, M.P.W.



Witness  
Dr. Rachman Subroto  
Director of Research and  
Development Center for Oil and  
Gas Technology, M.M.E.

ANNEX I.

LIST OF ATTENDANTS IN THE MEETING

I. Indonesian Side

1. Ministry of Public Works

Ir. Harun Al Rasjid	Secretary General
Drs. Suroso	Head of Remote Sensing Division
Drs. Soedarminto	Bureau of Technical Cooperation

2. Ministry of Mining and Energy

Dr. Bona Situmorang  
Dr, Subijanto

3. Cabinet Secretariate

Wachid Salim	Head of Multilateral Cooperation Division
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II. Japanese Side

1. Team for Project Formulation Survey

Mr. Kazuo Kimura	Leader
Mr. Mamoru Ishikawa	Member
Mr. Shinsuke Ota	"
Mr. Yasuhiko Noguchi	"
Mr. Kouya Tsukada	"
Mr. Toshio Michino	"
Mr. Kazuo Nagai	:

2. Embassy of Japan

Mr. Goichiro Yukawa	First Secretary
Mr. Satoshi Ueda	Second Secretary
Mr. Takashi Honda	Second Secretary

3. JICA Office in Indonesia

Mr. Satoru Hagiwara



## ANNEX II.

### FRAMEWORK OF TECHNICAL COOPERATION ON THE REMOTE SENSING ENGINEERING PROJECT PHASE II FOR THE DEVELOPMENT OF AGRICULTURAL INFRASTRUCTURE

#### I. Objectives of the Project

With the intention of assisting in the smooth promotion of agricultural development in Indonesia, and taking into consideration the results of Japan's previous project (the Remote Sensing Engineering Project for the Development of Agricultural Infrastructure) in this area, a technical cooperation project covering the below-specified subjects will be executed.

1. Production of thematic maps and evaluation maps necessary for formulation of Agricultural Development Plans
2. Establishment of Guidelines for Development of Agricultural Infrastructure
3. Establishment of Data Base System for the Collection and Use of Agricultural Development Data and Information
4. Training

#### II. Indonesian Agency in Charge of the Project

Center for Data Processing and Mapping, Ministry of Public Works

#### III. Site of Project

Center for Data Processing and Mapping, Ministry of Public Works

#### IV. Term of Cooperation

Five (5) years

#### V. Activities of Cooperation

1. Production of thematic maps and evaluation maps necessary for formulation of Agricultural Development Plans
  - (1) Production of thematic maps  
Production of land-use maps and cultivated field inventory maps covering the whole Indonesia.
  - (2) Development of a method for production of evaluation maps
    - (1) Establishment of a method for production of evaluation maps in swampy land
    - (2) Establishment of a method for production of evaluation maps in critical land
  
2. Establishment of Guidelines for Development of Agricultural infrastructure (in Collaboration of Relevant Organizations)
  - (1) Establishment of guidelines for formulation of rural development plans
    - 1) Establishment of guidelines for formulation of rural development plans in inland
    - 2) Establishment of guidelines for formulation of rural development plans in swampy land
  - (2) Establishment of guidelines for formulation of irrigation and drainage plans
    - 1) Establishment of guidelines for formulation of irrigation and drainage plans in inland
    - 2) Establishment of guidelines for formulation of irrigation and drainage plans in swampy land
  - (3) Production of farm land conservation maps in critical land

3. Establishment of Data Base System for Collection and Use of Agricultural Development Data and Information

- (1) Establishment of data collection and archives system for the formulation of thematic maps of the whole Indonesia at the center (PUSDATA)
- (2) Supply of thematic maps and other information to the regional data centers
- (3) Collection and supply of data for agricultural development by the regional data centers to the center (PUSDATA)

4. Training

The training of officials from the regional data centers and relevant organizations in utilization of remote sensing techniques at the center (PUSDATA).

VI. Measures to be taken by Japanese side

1. Dispatch of Experts

Japanese long-term experts are as follows :

- (1) Team Leader
- (2) Coordinator
- (3) Expert in the fields of :
  - a. Agricultural Development Planning
  - b. Software Development
  - c. System Development

Note : Short-term experts will be dispatched when necessity arises for the smooth implementation of the project.

2. Acceptance of counterpart personnel

Acceptance annually of 2 to 4 Indonesian counterparts in the sectors of remote sensing utilization and agricultural development planning in Japan during the cooperation period.

### 3. Provision of equipment

Necessary equipment and materials for implementation of the project would be provided within budgetary limitation.

## VII. Measures to be taken by the Indonesia side

1. Provision of land, building facilities needed for the implementation of the project
2. Assignment of counterparts and other administrative personnel
3. Firm budgetary allocation for the implementation of the Project

## VIII. Joint Committee

### 1. Members

#### (1) Chairman :

Secretary General, Ministry of Public Works

#### (2) Indonesian side :

- 1) Director of Center for Data Processing and Mapping, Ministry of Public Works
- 2) Directorate General of Agency for Research and Development, Ministry of Public works
- 3) Directorate General of Water Resources Development, Ministry of Public Works
- 4) Directorate General of Highways, Ministry of Public Works
- 5) Directorate General of Human Settlement, Ministry of Public Works
- 6) Representative of National Coordinating Agency for Survey and Mapping (BAKOSURTANAL)
- 7) Representative of National Institute of Aeronautics and Space (LAPAN)
- 8) Representative of Ministry of Agriculture
- 9) Representative of Ministry of Forestry
- 10) Representative of Ministry of National Economy and Social Development (BAPPENAS)
- 11) Representative of Ministry of Finance
- 12) Other personnel appointed by chairman

(3) Japanese side :

- 1) Team Leader
- 2) Coordinator
- 3) Experts
- 4) Resident representative of JICA Indonesi Office
- 5) Personnel concerned to be dispatched by HICA Head Quater, if necessary

Note : Representative of Embassy of Japan may attend as observer.

2. Functions

- (1) To work out annual plan
- (2) To review the Project activities
- (3) To review and exchange views on major issues

3. Meetings

At least once a year

IX. Others

1. For the smooth implementation of the Project, working groups consisting of staff from the relevant organizations will be organized under the Joint Committee.

(3) Japanese side :

- 1) Team Leader
- 2) Coordinator
- 3) Experts
- 4) Resident representative of JICA Indonesi Office
- 5) Personnel concerned to be dispatched by HICA Head Quater, if necessary

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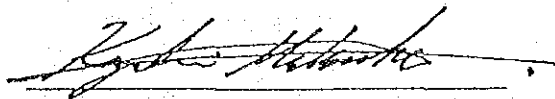
1. For the smooth implementation of the Project, working groups consisting of staff from the relevant organizations will be organized under the Joint Committee.

THE RECORD OF DISCUSSIONS  
BETWEEN THE AUTHORITIES CONCERNED OF THE GOVERNMENT OF JAPAN  
AND THE GOVERNMENT OF THE REPUBLIC OF INDONESIA  
ON THE JAPANESE TECHNICAL COOPERATION FOR  
THE REMOTE SENSING ENGINEERING PROJECT PHASE II (VTA-6)  
FOR THE DEVELOPMENT OF AGRICULTURAL INFRASTRUCTURE

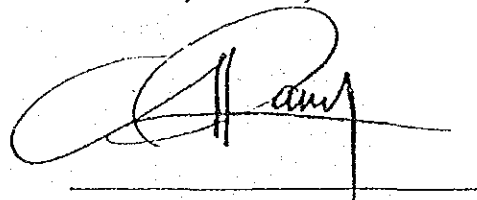
The Japan International Cooperation Agency (hereinafter referred to as "JICA"), with regard to the recommendation of the Minutes of Discussions of the Project Formulation Survey dated May 30, 1988, had a series of discussions through the Resident Representative of JICA in Indonesia with the authorities concerned of the Government of the Republic of Indonesia in view of the desirable measures to be taken by both Governments for the Japanese Technical Cooperation Program concerning the Remote Sensing Engineering Project Phase II for the Development of Agricultural Infrastructure.

As a result of the discussions, JICA and the authorities concerned of the Government of the Republic of Indonesia agreed to recommend to their respective Governments the matters referred to in the document attached hereto.

Jakarta, June 6, 1988



for Mr. Yasuo Kitano  
Resident Representative  
in Indonesia  
Japan International Cooperation  
Agency



Harun Al Rasjid  
Secretary General  
Ministry of Public Works

THE ATTACHED DOCUMENT

I. COOPERATION BETWEEN BOTH GOVERNMENTS

1. The Government of Japan and the Government of the Republic of Indonesia will cooperate with each other in implementing the Remote Sensing Engineering Project Phase II (hereinafter referred to as "the Project") for assisting in the smooth promotion of agricultural development in the Republic of Indonesia.
2. The Project will be implemented in accordance with the Master Plan which is given in I on the Annex.

II. DISPATCH OF JAPANESE EXPERTS

1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take the necessary measures through JICA to provide, at its own expense, services of the Japanese experts as listed in II of the Annex through the normal procedures under the Colombo Plan Technical Cooperation Scheme.
2. Privileges, exemptions and benefits to be granted by the Government of the Republic of Indonesia to the Japanese experts and their families in the Republic of Indonesia will be no less favorable than those granted to experts of third countries or of international organizations such as the United Nations who are performing similar missions, and will include the followings :
  - (1) Exemption from income taxes and charges of any kind imposed on or in connection with the living allowances remitted from abroad in relation to the implementation of the Project;
  - (2) Exemption from import and export duties and any other charges imposed in respect of personal and household effects which may be brought in from abroad or taken out of the Republic of Indonesia;



- (3) Exemption from import taxes, import sales taxes, sales taxes and other taxes, and charges of any kind imposed on or in connection with the purchase in the Republic of Indonesia by the Japanese experts of one motor vehicle per expert;
- (4) Free local medical services and facilities for the Japanese experts and their families.

### III. PROVISION OF MACHINERY AND EQUIPMENT

1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take the necessary measures through JICA to provide, at its own expense, such machinery, equipment and other materials (hereinafter referred to as "the Equipment") necessary for the implementation of the Project as listed in III of the Annex through the normal procedures under the Colombo Plan Technical Cooperation scheme.
2. The Equipment will become the property of the Government of the Republic of Indonesia upon being delivered CIF to the Indonesian authorities concerned at the ports and/or airports of disembarkation, and will be utilized exclusively for the implementation of the Project in consultation with the Japanese experts referred to in II of the Annex.
3. All equipment and machinery provided by Japanese Technical Cooperation for the Remote Sensing Engineering Project (from April, 1980 to March, 1987) will be used for the implementation of the Project.
4. In case any other remote sensing engineering project in such sector as natural resources development be implemented as a technical cooperation project by the Government of Japan, in the future in the Republic of Indonesia, such project should be able to use commonly as far as possible those machinery and equipment.

#### IV. SPECIAL MEASURES TO BE TAKEN BY THE GOVERNMENT OF JAPAN

In order to assure the smooth implementation of the Project, in accordance with the laws and regulation in force in Japan, the Government of Japan will take the necessary measures through JICA to supplement a part of the local expenditures such as travel allowances related to travel tour and field training for instructors and trainees, special instructors' fee, supply cost of training materials, etc., within the Republic of Indonesia.

#### V. TRAINING OF INDONESIAN PERSONNEL IN JAPAN

1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take the necessary measures through JICA to accept, at its own expense, the Indonesian personnel connected with the Project for technical training in Japan through the normal procedures under the Colombo Plan Technical Cooperation Scheme.
2. The Government of the Republic of Indonesia will take the necessary measures to ensure that the knowledge and experience acquired by the Indonesian personnel who have received technical training in Japan will be utilized effectively for the implementation of the Project.

#### VI. SERVICES OF INDONESIAN COUNTERPART AND ADMINISTRATIVE PERSONNEL

1. In accordance with the laws and regulations in force in the Republic of Indonesia, the Government of the Republic of Indonesia will take necessary measures to secure, at its own expense, the necessary services of Indonesian counterpart and administrative personnel as listed in IV of the Annex.

2. The Government of the Republic of Indonesia will allocate the necessary number of suitably qualified personnel corresponding to the number of Japanese experts to be dispatched by the Government of Japan, as specified in II on the Annex, for the effective and successful transfer of technology under the Project.

VII. MEASURES TO BE TAKEN BY THE GOVERNMENT OF THE REPUBLIC OF INDONESIA

1. In accordance with the laws and regulations in force in the Republic of Indonesia, the Government of the Republic of Indonesia will take the necessary measures to provide at its own expense :
  - (1) Land, buildings and facilities as listed in V of the Annex;
  - (2) Supply or replacement of machinery, equipment, instruments, vehicles, tools, spare parts, image data (LANDSAT, SPOT and other Satellite data), and any other materials necessary for the implementation of the Project other than those provided through JICA under III above;
  - (3) Transportation facilities and travel allowances for the official travel of Japanese experts within the Republic of Indonesia;
  - (4) Suitably furnished accommodation for the Japanese experts and their facilities.
2. In accordance with the laws and regulation in force in the Republic of Indonesia, the Government of the Republic of Indonesia, will take the necessary measures to meet :
  - (1) Expenses necessary for the transportation of the Equipment within the Republic of Indonesia, as well as for the installation, operation and maintenance thereof.
  - (2) Customs duties, internal taxes and any other charges imposed on the Equipment in the Republic of Indonesia.
  - (3) All running expenses necessary for the implementation of the Project.

## VIII. ADMINISTRATION OF THE PROJECT

1. The Secretary General, Ministry of Public Works, will bear overall responsibility for the implementation of the Project.
2. The Director of Center for Data Processing and Mapping as the Head of the Project, will be responsible for the administrative and managerial matters of the Project.
3. The Japanese Team Leader will provide necessary recommendations and advice on technical and administrative matters concerning the implementation of the Project to the Head of the Project.
4. The Japanese experts will give necessary technical guidance and advice through joint research to the Indonesia counterpart personnel on matters pertaining to the implementation of the Project.
5. For the effective and successful implementation of the Project, a Joint Committee will be established with the functions and composition as referred to in VI of the Annex.
6. The Project will be implemented in close collaboration with the Ministry of Agriculture, National Cooperating Agency for Survey and Mapping (BAKOSURTANAL), National Institute of Aeronautics and Space (LAPAN) and other relevant agencies.

IX. CLAIMS AGAINST JAPANESE EXPERTS

The Government of the Republic of Indonesia undertakes to bear claims, if any should arise, against the Japanese experts engaged in the Project, resulting from, occurring in the course of, or otherwise connected with the discharge of their official functions in the Republic of Indonesia except for those arising from the willful misconduct or gross negligence of the Japanese experts.

X. MUTUAL CONSULTATION

There will be mutual consultation between the two Governments on any major issues arising from, or in connection with this Attached Document.

XI. TERM OF COOPERATION

The duration of the Technical Cooperation for the Project under this Attached Document will be five (5) years from June 6, 1988.

## A N N E X

### I. MASTER PLAN

#### 1. Objectives of the Project

The Project aims at smooth promotion of the development of agricultural infrastructure in the Republic of Indonesia through the following activities to be conducted at the Center for Data Processing and Mapping, based on the results obtained through the activities of the Remote Sensing Engineering Project conducted from April 1, 1980 to March 31, 1987.

#### 2. The Japanese Technical Cooperation included in the Project

(1) Production of thematic maps and evaluation maps necessary for formulation of Agricultural Development Plans

1) Production of thematic maps

2) Development of a method for production of evaluation maps

(2) Establishment of Guidelines for Development of Agricultural Infrastructure (in Collaboration of Relevant Organizations)

1) Establishment of guidelines for formulation of rural development plans

2) Establishment of guidelines for formulation of irrigation and drainage plans

3) Production of farm land conservation maps in critical land

(3) Establishment of Data Base System for Collection and Use of Agricultural Development Data and Information

(4) Training

The Training of officials from the regional data centers and relevant agencies in utilization of remote sensing techniques at the Center (PUSDATA)

## II. JAPANESE EXPERTS

1. Team Leader
2. Coordinator
3. Experts in the fields of :
  - (1) Agricultural Development Planning
  - (2) Software Development
  - (3) System Development

Note : Short-term experts will be dispatched when necessity arises, for the smooth implementation of the Project.

## III. LIST OF EQUIPMENT

1. Equipment, machinery, instruments, tools, spare parts and other materials for laboratory and field survey
2. Audio-visual equipment
3. Vehicles and their spare parts
4. Books and other necessary printed matters
5. Other necessary equipment and materials related to the Project

## IV. LIST OF INDONESIAN COUNTERPART AND ADMINISTRATIVE PERSONNEL

1. Head of the Project (Director of Center for Data Processing and Mapping, Ministry of Public Works)
2. Deputy head of the Project
3. Counterpart personnel in the fields of :
  - (1) Agricultural development planning
  - (2) Software development
  - (3) System development
  - (4) Other fields concerned with the Project mutually agreed upon as necessary
4. Administrative Personnel
  - (1) Administrative officer
  - (2) Accounting officers

- (3) Typists
- (4) Key punchers
- (5) Other necessary officers
- 5. Other necessary personnel mutually agreed upon :

#### V. LIST OF LAND, BUILDINGS AND FACILITIES

- 1. Land, buildings and facilities for the Project
- 2. Rooms and space necessary for the installation and storage of machinery, equipment and materials provided by the Government of Japan
- 3. Office space and necessary facilities for the Japanese Team Leader, Coordinator and Experts
- 4. Other facilities mutually agreed upon as necessary

#### VI. JOINT COMMITTEE

##### 1. Functions

The Joint Committee will meet at least once a year and whenever necessity arises, and work :

- (1) To formulate the Annual Work Plan of the Project in line with the Tentative Schedule of Implementation formulated under the framework of this Record of Discussions;
- (2) To review the overall progress of the Project as well as the achievement of the above mentioned Annual Work Plan;
- (3) To review and exchange views on major issues arising from or in connection with the Project.

##### 2. Composition

###### (1) Chairman :

Secretary General, Ministry of Public Works

###### (2) Indonesian side :

- 1) Director of Center for Data Processing and Mapping,  
Ministry of Public Works



- 2) Directorate General of Agency for Research and Development, Ministry of Public Works
- 3) Directorate General of Water Resources Development, Ministry of Public Works
- 4) Directorate General of Highways, Ministry of Public Works
- 5) Directorate General of Human Settlement, Ministry of Public Works
- 6) Representative of National Coordinating Agency for Survey and Mapping (BAKOSURTANAL)
- 7) Representative of National Institute of Aeronautics and Space (LAPAN)
- 8) Representative of Ministry of Agriculture
- 9) Representative of Ministry of Forestry
- 10) Representative of Ministry of National Economy and Social Development (BAPPENAS)
- 11) Representative of Ministry of Finance
- 12) Other personnel appointed by chairman

(3) *Japaneses side :*

- 1) Team Leader
- 2) Coordinator
- 3) Experts
- 4) Resident Representative of JICA Indonesia Office
- 5) Personnel concerned to be dispatched by JICA Head Quarter, if necessary

Note : Representative of the Embassy of Japan may attend the Joint Committee as observer.

インドネシア側要請書の付属  
説明ペーパー（仮訳）

I. リモートセンシング技術プロジェクト  
（VTA-6）暫定概念

II. 組織

- 管理面での改編
- 運営面での改編

III. VTA-6実施計画

インドネシア政府から日本国政府へ要請された技術援助の中に、リモートセンシング技術プロジェクト（VTA-6）がある。

リモートセンシング技術協力プロジェクトの目的と計画は、プロジェクト目的に関連した追加的な説明を行った上で提示されることになる。

上記の件は別に、公共事業省令及び情報・地図センター下の地方事務所の確立に関連した、公共事業省の計画に基づいた運営面における情報・地図センター（PUSDATA）の組織に関し、追加的な説明が必要となる。

リモートセンシング技術の（実施）計画は、既に農業開発基盤整備に重点を置き、農業分野全体の開発計画の実施の中で考えられている。

上記の説明項目は次の通りである。

I. リモートセンシング技術計画（VTA-6）暫定概念

II. 組 織

- 管理面での改編
- 運営面での改編

III. VTA-6 プロジェクト計画の実施

農業開発基盤整備のための適地選定システムに関するリモートセンシング技術プロジェクトのT/Rが、この説明ペーパーの追加的な内容である。

プロジェクト終了後のインドネシアの将来計画

既に日本政府へ要請済であるプロジェクトの将来計画は、農業開発基盤整備のための適地選定システムに関するリモートセンシング技術プロジェクト（VTA-6）である。

将来計画の追加的な説明として、インドネシア政府は、農業開発基盤整備計画に必要な情報作成に関する事業実施に重点を置いている。

特にインドネシア政府は、以下の4つの項目に重点を置いて要請している。

- (1) 灌漑開発可能地域
- (2) 湿地開発可能地域
- (3) 農地保全（限界地との区分）
- (4) 農村における土地利用

インドネシア側から準備されたプロジェクトの将来計画の概念は、Annex 1の通り。

## Annex 1

# 1. 農業開発基盤整備のための適地選定システムに関するリモートセンシング技術プロジェクトの暫定概念

## 1. 目的

農業開発基盤整備のためのリモートセンシングプロジェクト(RTA-58)で習得した基礎技術を応用して、農業開発計画を地域開発計画とバランスを取って行うために必要な情報システム構築。

最終目標は、農業開発計画に資するデータ処理技術の確立。

## 2. プロジェクトの内容

リモートセンシング技術の実用化に基づく必要とされるデータ処理技術は、第4次5カ年計画の農業部門と長期開発計画のスタディに関する以下の主要政策達成のための基礎となる。

- 1) 農業資源開発計画は、集約化・多様化した方策であると同時に、天然資源及び環境保全と均衡をとり、統合した方法で推進すること。
- 2) 農業開発は、地域開発計画、農村開発計画と調整を図りつつ行うこと。  
土地利用、土地所有の適切な管理は、公正分配の原則に基づき行うこと。
- 3) 農業省、漁業省の協同組合組織を通じた開発計画策定への参画を促進すること。  
消費者及び農業者・漁業者等生産者の両方に適正価格を保証するため、農業の協同化を含めた市場組織化の展開を促進すること。

## 3. 実施機関

センターの実施機関は、公共事業省の関連部局により実施される。農村開発計画に直接的に活用できる主題図を提供できる組織とする。

他方、情報・統計センターの下で成功裡に終了する現行プロジェクトの基礎技術が重要な意味を持つ。

## 4. 業務範囲

### 1) (計画実施機関の)計画策定に資する主題図作成技術の開発

以下の潜在能力を持った地域に対する技術的情報の識別は、殆ど利用できる情報のない外額の農業開発計画実施に極めて重要である。

- a) 灌漑開発可能地域
- b) 湿地開発可能地域
- c) 農地保全(限界地)

#### d) 農村における土地利用

経済的・合理的なリモートセンシングシステムを活用して、農業開発計画に必要な主題図（TM）を作成する実用技術を更に進めていくこと。

主題図作成のために要求される技術は、フェーズIで開発された主題図作成の基礎技術を応用して、新しい主題図作成システム開発をすることである。

#### 2) 計画策定のためのより効率的な主題図作成のデータベースの確立

全インドネシアに必要不可欠で、且つ基礎的なデータの体系化に資するため及び外領における上述のa)～b)の計画策定のための主題図作成。

以下は、データ収集・体系化の方策である。

a) ランドサットデータソースにより収集された全国的な基礎データを中央事務所で集積するシステムの体系化を行うこと。

b) 中央事務所に集積された基礎データを、パーソナルコンピュータを利用して地方事務所へ提供すること。

c) 地方事務所及び計画・立証化データの収集部局の技術者に対するグラントルースの実施。

#### 3) 地方事務所及び関連部局の基礎的技術者に対するリモートセンシング研修コースの実施。

グラントルース作業コースは、地方事務所スタッフに対するカリキュラムが含まれる。

### 5. 長期専門家

1) チームリーダー

2) 業務調整

3) ソフトウェア専門家 計画、システム修正等に役立つ主題図のソフトウェア開発に関する指導

4) ハードウェア専門家 情報処理システムの操作・維持に関する指導

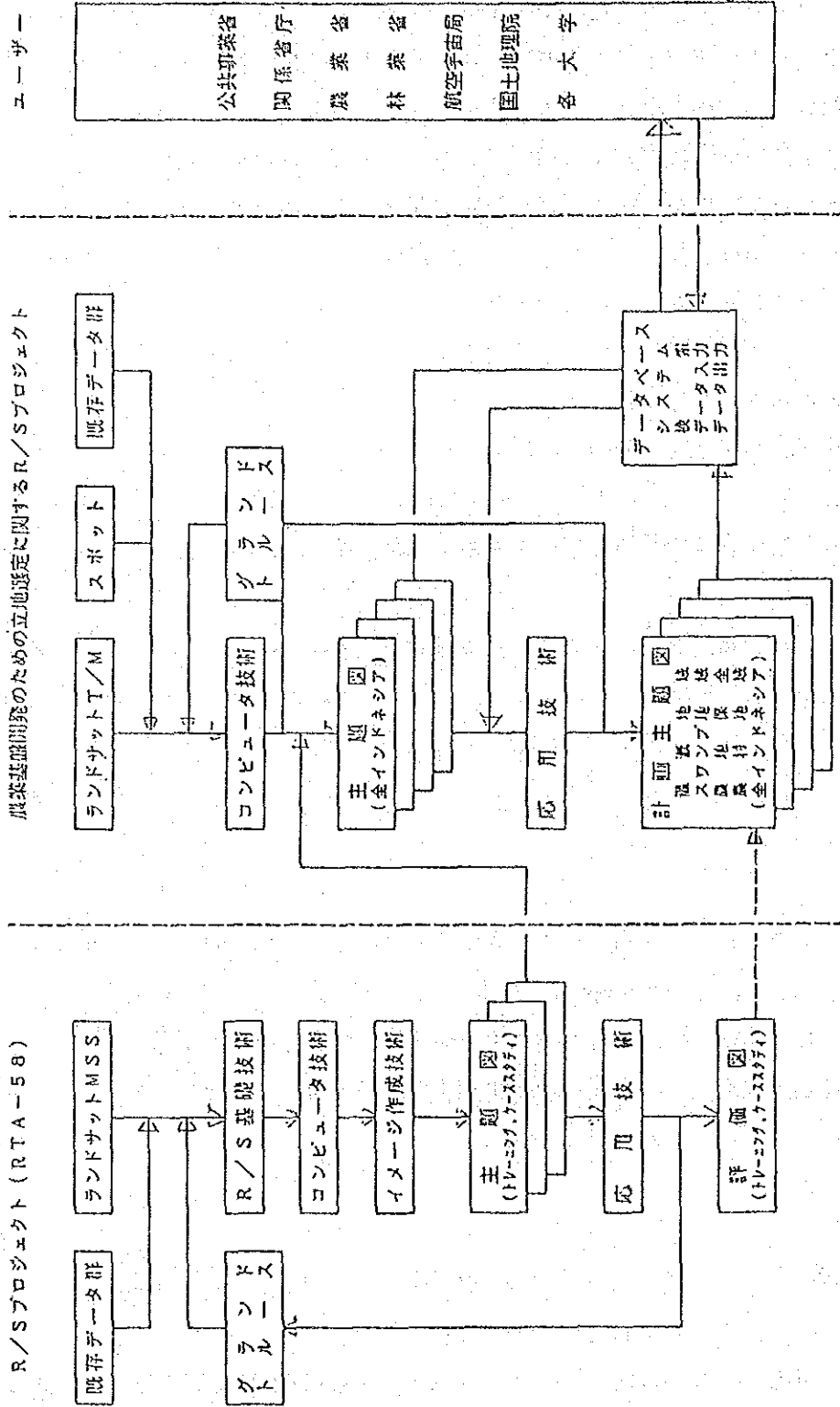
5) 農業開発計画専門家 農業開発計画策定におけるリモートセンシング技術応用に関する指導

## II. 組織

公共事業省の組織は、水資源総局長、道路総局長、住宅総局長、研究開発庁長官、監察官からなる。

現在、情報・地図センターは、管理面では官房長、運営面では研究開発庁長官の指揮下に置かれている。

# リモートセンシングプロジェクトの今後の展開



データ処理及び地図作成の省内業務を、より効果的に運営するため、地方事務所が設立されることとなった。

公共事業省の組織図は Annex 2 である。

－ 管理面での改編 －

組織規則に関する大統領令 № 44 / 1979, 部局の組織に関する大統領令 № 15 / 1984, № 47 / 1983 及び公共事業省組織に関する公共事業省令 № 211 / KPTS / 1984 に基づき、情報・地図センター ( PUSDATA ) は、管理面では公共事業省官房長の命令下に置かれることとなった。

組織図は Annex 3

－ 運営面での改編 －

公共事業省令 № 519 / KPTS / 1986 に基づき、情報・地図センターの運営面での活動は、研究開発庁長官の命令下に置かれることとなった。

上記の省令の目的は、公共事業省内の事務の効率化を目指すもので、これにより、情報・地図センターは公共事業省研究開発庁長官の命令下に置かれ、活動していくこととなる。

本省令は Annex 4 (略)

－ 地方情報センター －

計画策定に用いる地域情報提供システムを一層向上させるため、公共事業省、情報・地図センター内に、地方情報センターを設立することとなった。

公共事業省は、4つの地方情報センターの設立を計画している。

( ブキッティンギ、ジャカルタ、デパーサル、ウジュンパンダン )

Annex 5 (略)

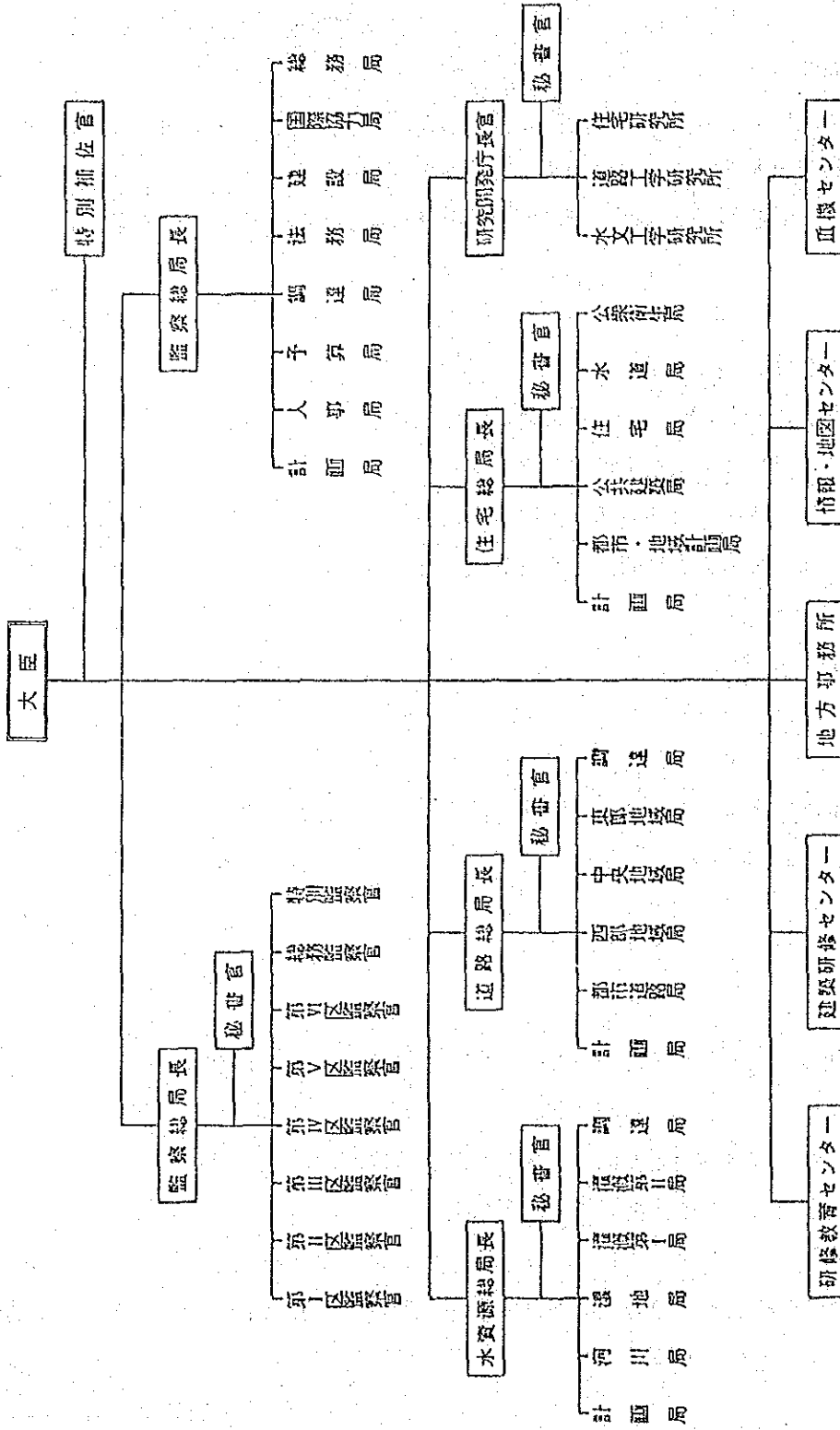
### Ⅲ. リモートセンシングプロジェクト ( V T A - 6 ) 実施計画

リモートセンシングプロジェクト ( V T A - 6 ) の実施には、土地利用、土壌水分量、農地不適地の解明、土地及び湿地状況の評価が含まれる。

これらの主題図は、カリマンタン、スマトラ、ジャグ等湿地地域の干拓、農地不適地の解明による農地保全等に関連する公共事業省、外務省、運輸省、農業省、農業開発基盤整備に係る他の機関により利用される。

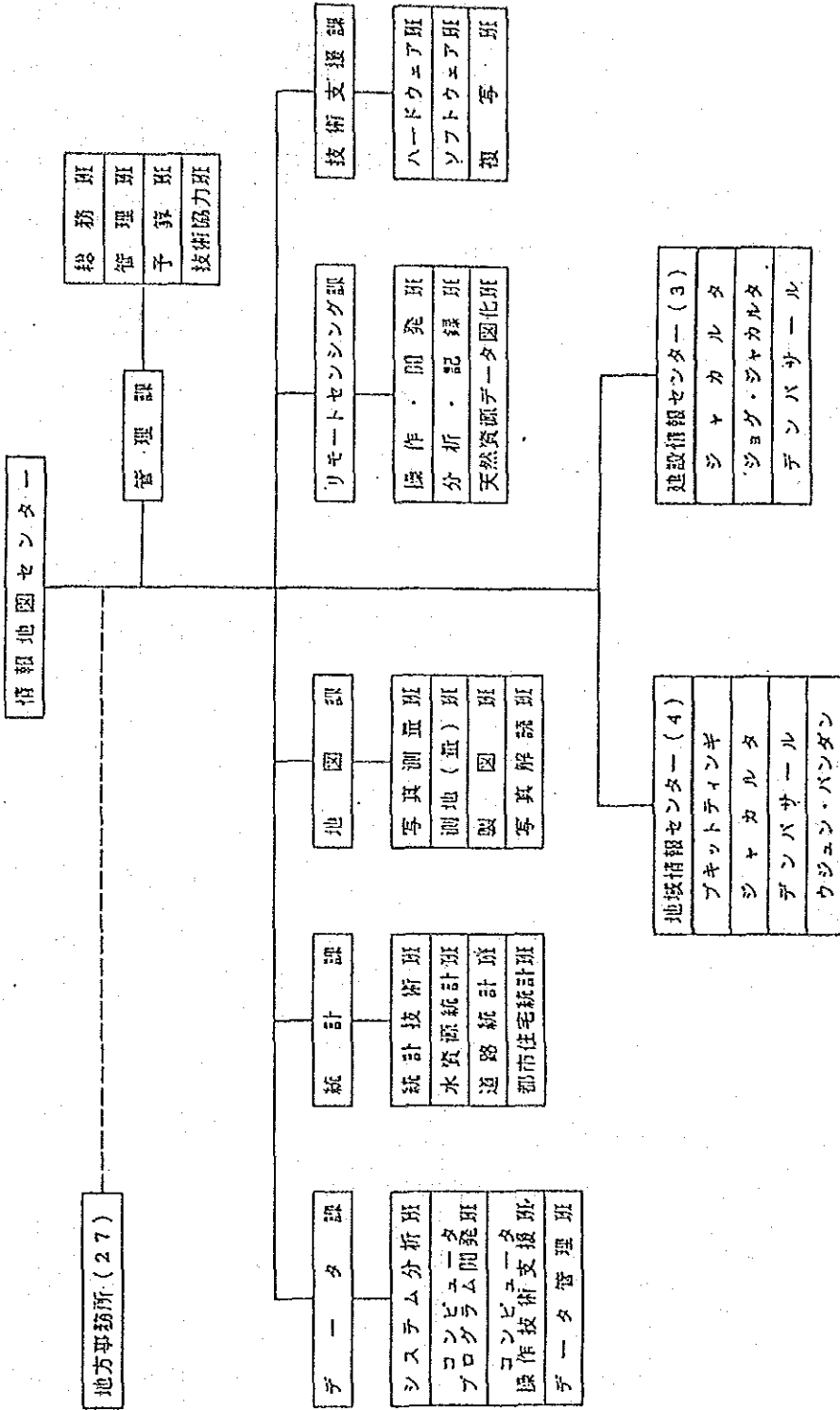
プロジェクト実施計画は Annex 6

公共事業組織系統





情報地図センター



## リモートセンシングプロジェクト(VTA-6)実施計画

No	プロジェクト名	リモートセンシングプロジェクト				アウトプットのタイプ		関係省庁
		土地利用	土壌水分	限界地推定	土地評価	湛水		
I	(実施中)							
1	アサハン河流域開発計画	✓	✓		✓			公共事業省
2	ネガラ流域灌漑開発計画	✓	✓		✓			公共事業省
3	トクン・バンクウェイセカンプ河流域開発計画	✓	✓		✓			公共事業省
4	シィタルム河上流沈殿物調整計画	✓		✓		✓		公共事業省, 林業省
5	湿地干拓システム計画フェーズII	✓	✓		✓			公共事業省, 移住省
6	シマンドリ河流域生態解明計画	✓		✓				公共事業省
II	(計画中)							
1	ロカン河流域灌漑開発計画	✓	✓		✓			公共事業省
2	その他10灌漑計画	✓	✓		✓			公共事業省
3	米生産に係る収量予想等のスタディ	✓						公共事業省, 農業省, 中央統計局, 航空宇宙局
4	7河川上流流域における沈殿物調整に関するスタディ	✓		✓				公共事業省, 林業省

## リモートセンシング技術に関する口頭質問事項

## 1. 公共事業省情報統計センターに関して

## (1) 処理および処理データの詳細について

- ① LANDSAT MSS/TM, SPOT および航空機によって得られるR/Sデータの処理は可能か？
- ② 処理可能なデータについて, それぞれのフォーマットおよびレベルはどのようなものか？
- ③ R/Sデータ処理は, 通常どのようにして行うのか(全体的な処理フロー)？

## (2) 補正処理の詳細に関して

- ① どのような補正処理が可能か/実施しているか？
- ② 輝度補正のアルゴリズムの内容はどのようなものか？
- ③ 幾何補正のアルゴリズムの内容はどのようなものか？

## (3) 出力形態の詳細に関して

- ① R/S処理データの標準出力は紙出力かフィルム出力か？
- ② 最終出力の投影法はどのようなものがあるか？  
(インドネシアで使われている通常の投影法は何か？)
- ③ 出力の際にどのような補正処理および手順を行うか？
- ④ 出力磁気テープのフォーマットはどのようなものか？
- ⑤ 出力データの特性および品質で留意すべき点があるか？

## (4) 処理システムの詳細に関して

- ① 使用している計算機は何か？
- ② オペレーティングシステムは何か？
- ③ 計算機の構成はどのようなものか？
- ④ 入出力装置の構成はどのようなものか？

## (5) 保有ソフトウェアの詳細に関して

- ① 処理ルーチンはどのようなものか？
- ② 各々のルーチンの内容は？
- ③ その目的は？
- ④ その特性は？

## (6) プログラミング開発の状況に関して

- ① プログラマーの数は？

② 使用可能なプログラミング言語は何か？

(7) 共有データベースに対する同センターの見解に関して

- ① 保有データの種類は何か？
- ② その数は？
- ③ データの保存形態はどのようなものか？
- ④ データベースのアクセス方法はどのようなものか？
- ⑤ データの属性はどのようなものがあるか？

## 2. 鉱山エネルギー省MIGAS / LEMIGAS に対して

(1) データベースに対する見解に関して

- ① 公共事業省情報統計センターが保有する資料を使用することが可能か？
- ② データベースの策定に関し、どのように考えているのか？

(2) スペースに対する情報に関して

- ① 使用電源はどのようなものか？
- ② 必要な電気工事および設備はどのようなものか？
- ③ その他、据付工事で留意すべき点はあるか？

(3) 処理形態構成に関して

使用する電子計算機（ワークステーション）のCPUおよび入出力装置等の設備に関して、留意すべき点はあるか？

(4) ソフトウェアに関して

処理ソフトウェアに関して、留意すべき点はあるか？

(5) 研修生に関して

- ① 研修生の経験はどのようなものか？
- ② 研修生の教育背景はどのようなものか？
- ③ 現地／派遣研修生の規模についてどのように考えているのか？

(6) 技術協力の進め方に関して

- ① 技術協力期間
- ② 望ましい研修システムはどのようなものか？







JICA