

6 機材管理状況

List of Procured Equipment to LIPI and PHPA, as of Nov 97 (Equipment of FY95, FY96)							
Name (English)	Company	Model	Accessories	Qty	Ref.	Temp.	95
35mm Camera	Nikon	F50		1	JICA/95/P/001	PHPA	95
(Accessories)	Nikon	28-70mm	Additional Lens	1	JICA/95/P/002	PHPA	95
(Accessories)	Nikon	20-35mm	Additional Lens	1	JICA/95/P/003	PHPA	95
(Accessories)	Nikon	75-300mm	Additional Lens	1	JICA/95/P/004	PHPA	95
(Accessories)	Nikon	SB26	Speed Light	1	JICA/95/P/005	PHPA	95
8mm video	Sony	HI-8 (CCD-TR880E)	(set)	1	JICA/95/P/006	PHPA	95
GIS software	ESRI	ArcInfo		1	JICA/95/P/007	LIPI	95
GIS software	Earth Resource Mapping	ER Mapper		1	JICA/95/P/008	LIPI	95
Application Sw	Microsoft	Office 95		1	JICA/95/P/009	LIPI	95
Application Sw	Microsoft	Office 95		2	JICA/95/P/010	LIPI	95
Application Sw	Microsoft	Office 95		3	JICA/95/P/011	LIPI	95
Application Sw	Microsoft	Office 95		4	JICA/95/P/012	PHPA	95
Application Sw	Microsoft	Office 95		5	JICA/95/P/013	PHPA	95
Ethernet Card	Xircom	PCMCIA PS-CEM-28		1	JICA/95/P/014	LIPI	95
Ethernet Card	Xircom	PCMCIA PS-CEM-28		2	JICA/95/P/015	LIPI	95
Ethernet Card	Xircom	PCMCIA PS-CEM-28		3	JICA/95/P/016	PHPA	95
Printer Network Unit	HP	Jet Direct EX plus3		1	JICA/95/P/017	LIPI	95
Printer Network Unit	HP	Jet Direct EX plus4		2	JICA/95/P/018	PHPA	95
Laser Printer	HP	LaserJet 5L		1	JICA/95/P/019	PHPA	95
UPS	APC	(600VA)		1	JICA/95/P/020	LIPI	95
UPS	APC	(600VA)		2	JICA/95/P/021	PHPA	95
Digitizer	Calcomp	Drawing Board (A0)		1	JICA/95/P/022	LIPI	95
Desktop PC	HP	HP VECTRA VL 5-100		1	JICA/95/P/023	PHPA	95
Desktop PC	HP	HP VECTRA VL 5-100		2	JICA/95/P/024	LIPI	95
Notebook PC	Toshiba	Satellite Pro 4100DI		1	JICA/95/P/025	PHPA	95
Notebook PC	Toshiba	Satellite Pro 4100DI		2	JICA/95/P/026	PHPA	95
Notebook PC	Toshiba	Satellite Pro 4100DI		3	JICA/95/P/027	LIPI	95
Digital Planimeter	Tanaya	Planix 7		1	JICA/95/P/028	PHPA	95
Stereoscope	Topcon	Type AU-3		1	JICA/95/P/029	PHPA	95
(Accessories)	Topcon	Type AU-3	eye mirror (6X)	1	JICA/95/P/030	PHPA	95
GPS	Trimble	Scout Master		1	JICA/95/P/031	95	95
GPS	Trimble	Scout Master		2	JICA/95/P/032	95	95
GPS	Trimble	Scout Master		3	JICA/95/P/033	95	95
Tranceiver	ICON	IC-02H		1	JICA/95/P/034	PHPA	95
(Accessories)	ICON	BC35	Battery Charger	1	JICA/95/P/035	PHPA	95
Tranceiver	ICON	IC-02H		2	JICA/95/P/036	PHPA	95
(Accessories)	ICON	BC35	Battery Charger	2	JICA/95/P/037	PHPA	95
Tranceiver	ICON	IC-02H		3	JICA/95/P/038	PHPA	95
(Accessories)	ICON	BC35	Battery Charger	3	JICA/95/P/039	PHPA	95
Tranceiver	ICON	IC-02H		4	JICA/95/P/040	PHPA	95
(Accessories)	ICON	BC35	Battery Charger	4	JICA/95/P/041	PHPA	95
Tranceiver	ICON	IC-02H		5	JICA/95/P/042	PHPA	95
(Accessories)	ICON	BC35	Battery Charger	5	JICA/95/P/043	PHPA	95
Digital Transit Compass	Topcon	DT-130		1	JICA/95/P/044	PHPA	95
(Accessories)	Topcon	DT-130	Tripod	1	JICA/95/P/045	PHPA	95
Dissecting kit	SHIGA KONCHU	SG277		1	JICA/95/P/046	LIPI	95
Dissecting kit	SHIGA KONCHU	SG270		1	JICA/95/P/047	LIPI	95
Digital Balance	ISHIDA	CWS 2S		1	JICA/95/P/048	LIPI	95
Digital Balance	ISHIDA	CWS 2S		2	JICA/95/P/049	LIPI	95
Digital Balance	ISHIDA	CWS 2S		3	JICA/95/P/050	LIPI	95
Digital Balance	ISHIDA	CWS 2S		4	JICA/95/P/051	LIPI	95
Caliper	Mitsuyo	NM18, 180mm		1	JICA/95/P/052	LIPI	95
Caliper	Mitsuyo	NM18, 180mm		2	JICA/95/P/053	LIPI	95
Caliper	Mitsuyo	NM18, 180cm		3	JICA/95/P/054	LIPI	95
Caliper	Mitsuyo	NM18, 180mm		4	JICA/95/P/055	LIPI	95
Caliper	Mitsuyo	NM18, 180mm		5	JICA/95/P/056	LIPI	95
Caliper	Mitsuyo	N30W, 300mm		1	JICA/95/P/057	LIPI	95
Caliper	Mitsuyo	N30W, 300mm		2	JICA/95/P/058	LIPI	95
Caliper	Mitsuyo	N30W, 300mm		3	JICA/95/P/059	LIPI	95
Caliper	Mitsuyo	N30W, 300mm		4	JICA/95/P/060	LIPI	95
Caliper	Mitsuyo	N30W, 300mm		5	JICA/95/P/061	LIPI	95
Spiegel Refractor	TEC International	TI-1001		1	JICA/95/P/062	LIPI	95
pH Meter	TOA	QVC-1A		1	JICA/95/P/063	LIPI	95
(Accessories)	TOA	QVC-1A	Sensor	1	JICA/95/P/064	LIPI	95
(Accessories)	TOA	QVC-1A	Cleaning Sol. for DO	1	JICA/95/P/065	LIPI	95
(Accessories)	TOA	QVC-1A	Test Tube (2P)	1	JICA/95/P/066	LIPI	95
(Accessories)	TOA	QVC-1A	Standardization Set	1	JICA/95/P/067	LIPI	95
pH Meter	TOA	QVC-1A		2	JICA/95/P/068	LIPI	95
(Accessories)	TOA	QVC-1A	Sensor	2	JICA/95/P/069	LIPI	95

Name(English)	Company	Model	Accessories	Qty	Inv. No.	Rec'd	Unit Price	Total Price
(Accessories)	TOA	QWC-1A	Cleaning Sol. for OO	2	JICA/95P/070	LIPI	95	
(Accessories)	TOA	QWC-1A	Test tube (2P)	2	JICA/95P/071	LIPI	95	
(Accessories)	TOA	QWC-1A	Standardization Set	2	JICA/95P/072	LIPI	95	
Sleeping Bag	Alpina			1	JICA/95P/073	PHPA	95	
Sleeping Bag	Alpina			2	JICA/95P/074	PHPA	95	
Sleeping Bag	Alpina			3	JICA/95P/075	PHPA	95	
Sleeping Bag	Alpina			4	JICA/95P/076	PHPA	95	
Sleeping Bag	Alpina			5	JICA/95P/077	LIPI	95	
Sleeping Bag	Alpina			6	JICA/95P/078	LIPI	95	
Sleeping Bag	Alpina			7	JICA/95P/079	LIPI	95	
Sleeping Bag	Alpina			8	JICA/95P/080	LIPI	95	
Tent	WENTZEL	Trans Rocky I		1	JICA/95P/081	PHPA	95	
Tent	WENTZEL	Trans Rocky I		2	JICA/95P/082	LIPI	95	
Ground sheet for tent	Mont bel	Moonlight tent mat #7		1	JICA/95P/083		95	
Ground sheet for tent	Mont bel	Moonlight tent mat #7		2	JICA/95P/084		95	
Ground sheet for tent	Mont bel	Moonlight tent mat #7		3	JICA/95P/085		95	
Ground sheet for tent	Mont bel	Moonlight tent mat #7		4	JICA/95P/086		95	
Ground sheet for tent	Mont bel	Moonlight tent mat #7		5	JICA/95P/087		95	
Ground sheet for tent	Mont bel	Moonlight tent mat #7		6	JICA/95P/088		95	
Ground sheet for tent	Mont bel	Moonlight tent mat #7		7	JICA/95P/089		95	
Ground sheet for tent	Mont bel	Moonlight tent mat #7		8	JICA/95P/090		95	
Mosquito net				8pcs	JICA/95P/091		95	
Lantern	Coleman	229-740J		1	JICA/95P/092	PHPA	95	
Lantern	Coleman	229-740J		2	JICA/95P/093	PHPA	95	
Lantern	Coleman	229-740J		3	JICA/95P/094	LIPI	95	
Lantern	Coleman	229-740J		4	JICA/95P/095	LIPI	95	
Cooking Stove(Kerosine)	Coleman	442-700J		1	JICA/95P/096	PHPA	95	
Cooking Stove(Kerosine)	Coleman	442-700J		2	JICA/95P/097	LIPI	95	
Cooking Set(Large)	Morita	Hard Kocher 01149		1	JICA/95P/098	PHPA	95	
Cooking Set(Large)	Morita	Hard Kocher 01149		2	JICA/95P/099	LIPI	95	
Binoculars	Nikon	Shutle(8X23)		3	JICA/95P/100	PHPA	95	
Binoculars	Nikon	Shutle(8X23)		4	JICA/95P/101	PHPA	95	
Binoculars	Nikon	Shutle(8X23)		5	JICA/95P/102	PHPA	95	
Binoculars	Nikon	Shutle(8X23)		6	JICA/95P/103	LIPI	95	
Binoculars	Nikon	Shutle(8X23)		7	JICA/95P/104	LIPI	95	
Binoculars	Nikon	Shutle(8X23)		8	JICA/95P/105	LIPI	95	
Binoculars	Nikon	Shutle(8X23)		9	JICA/95P/106	LIPI	95	
Binoculars	Nikon	Shutle(8X23)		10	JICA/95P/107	LIPI	95	
Binoculars	Nikon	Shutle(8X23)		11	JICA/95P/108	LIPI	95	
Binoculars	Nikon	Shutle(8X23)		12	JICA/95P/109	LIPI	95	
Transit Compass	Ushikata	S-27		1	JICA/95P/110	LIPI	95	
(Accessories)	Ushikata	S-27	Tricod	1	JICA/95P/111	LIPI	95	
Transit Compass	Ushikata	S-27		2	JICA/95P/112	LIPI	95	
(Accessories)	Ushikata	S-27	Tricod	2	JICA/95P/113	LIPI	95	
Clinometer	TEC International	TS-1095		1	JICA/95P/114	PHPA	95	
Clinometer	TEC International	TS-1095		2	JICA/95P/115	PHPA	95	
Clinometer	TEC International	TS-1095		3	JICA/95P/116	PHPA	95	
Clinometer	TEC International	TS-1095		4	JICA/95P/117	PHPA	95	
Clinometer	TEC International	TS-1095		5	JICA/95P/118	PHPA	95	
Pocket Compass	Tamaya	825		1	JICA/95P/119	PHPA	95	
Pocket Compass	Tamaya	825		2	JICA/95P/120	PHPA	95	
Pocket Compass	Tamaya	825		3	JICA/95P/121	PHPA	95	
Pocket Compass	Tamaya	825		4	JICA/95P/122	PHPA	95	
Pocket Compass	Tamaya	825		5	JICA/95P/123	PHPA	95	
Pocket Compass	Tamaya	825		6	JICA/95P/124	LIPI	95	
Pocket Compass	Tamaya	825		7	JICA/95P/125	LIPI	95	
Pocket Compass	Tamaya	825		8	JICA/95P/126	LIPI	95	
Pocket Compass	Tamaya	825		9	JICA/95P/127	LIPI	95	
Pocket Compass	Tamaya	825		10	JICA/95P/128	LIPI	95	
Altimeter	Thommen	TX-22		1	JICA/95P/129	PHPA	95	
Altimeter	Thommen	TX-22		2	JICA/95P/130	PHPA	95	
Altimeter	Thommen	TX-22		3	JICA/95P/131	PHPA	95	
Altimeter	Thommen	TX-22		4	JICA/95P/132	PHPA	95	
Altimeter	Thommen	TX-22		5	JICA/95P/133	PHPA	95	
Altimeter	Thommen	TX-22		6	JICA/95P/134	LIPI	95	
Altimeter	Thommen	TX-22		7	JICA/95P/135	LIPI	95	
Altimeter	Thommen	TX-22		8	JICA/95P/136	LIPI	95	
Altimeter	Thommen	TX-22		9	JICA/95P/137	LIPI	95	
Altimeter	Thommen	TX-22		10	JICA/95P/138	LIPI	95	
Field telescope	Carlton	Zoom 60S		1	JICA/95P/139	PHPA	95	

Item/Equip	Company	Model	Accessories	Qty	Ref	Unit	Price
MD portable Recorder	Sharp	MD-M25-B		2	JICA/95P/140	LIPI	95
Parabolic Microphone	Sony	ECM PB1C		1	JICA/95P/141	LIPI	95
Infrared Nightscope	Nova Light	NVT-2001		1	JICA/95P/142	LIPI	95
(Accessories)			T-mount	1	JICA/95P/143	LIPI	95
(Accessories)		NVT-300	Zoom Lens	1	JICA/95P/144	LIPI	95
(Accessories)			Adapter for cameras	1	JICA/95P/145	LIPI	95
(Accessories)			C-mount	1	JICA/95P/146	LIPI	95
(Accessories)	KENKO	RX-103	CCO Camera	1	JICA/95P/147	LIPI	95
Cage trap	Tomahawk	2020 (small)		200pcs	JICA/95P/148	LIPI	95
Cage trap	Tomahawk	205 (medium)		50pcs	JICA/95P/149	LIPI	95
Cage trap	Tomahawk	207 (large)		50pcs	JICA/95P/150	LIPI	95
Aerial Insect Trap	Ishizaki Denki	MC-8200		1	JICA/95P/151	LIPI	95
Portable Generator	Honda	EX300		1	JICA/95P/152	LIPI	95
Aerial Insect Trap	Ishizaki Denki	MC-8200		2	JICA/95P/153	LIPI	95
Portable Generator	Honda	EX300		2	JICA/95P/154	LIPI	95
Laser Printer	HP	Lasejet 5L		2	JICA/95P/155	LIPI	95
4 Wheel drive vehicle	GM	Civoret Trooper		2	JICA/95P/156	LIPI	95
4 Wheel drive vehicle	GM	Civoret Trooper		1	JICA/95P/157	PHPA	95
Copying Machine	Cannon	NP4050		1	JICA/95P/158	LIPI	95
(Accessories)			Sorter	1	JICA/95P/159	LIPI	95
(Accessories)			Additional tray	1	JICA/95P/160	LIPI	95
Copying Machine	Cannon	NP4050		2	JICA/95P/161	PHPA	95
(Accessories)			Sorter	2	JICA/95P/162	PHPA	95
(Accessories)			Additional tray	2	JICA/95P/163	PHPA	95
Air Conditioner	Toshiba	RAS-18UKR1		1	JICA/95P/164	LIPI	95
Air Conditioner	Toshiba	RAS-18UKR1		2	JICA/95P/165	PHPA	95
35mm Camera	Nikon	F70		1	JICA/95P/001	PHPA	95
(Accessories)	Nikon	Zoom Nikkor 75-300mm		1	JICA/95P/002	PHPA	95
8mm Video Camera	Sony	CCO IR330		1	JICA/95P/003	PHPA	95
8mm Video Camera	Sony	CCO IR430E		1	JICA/95P/004	LIPI	95
GIS software	Esri	Arcview		1	JICA/95P/005	LIPI	95
GIS software	Esri	Arcinfo		2	JICA/95P/006	PHPA	95
GIS software	Earth Resource Mapping	ER Mapper		2	JICA/95P/007	PHPA	95
Image processing s/w	Adobe	Photoshop v.4.0 for win95/NT		1	JICA/95P/008	LIPI	95
Image processing s/w	Adobe	Photoshop v.4.0 for win95/NT		1	JICA/95P/009	PHPA	95
DataBase CD-ROM	Oxford	Index Kewensis	Manual	1	JICA/95P/010	LIPI	95
CD-ROM writer	HP	HP6020s	Data Cable, AC Cable	1	JICA/95P/011	LIPI	95
MO disk drive	Pinnacle Micro	TAHOE		2	JICA/95P/012	LIPI	95
MO disk drive	Pinnacle Micro	TAHOE		3	JICA/95P/013	PHPA	95
External HDD	Seagate	DCI 551	Cable, etc	1	JICA/95P/014	PHPA	95
External HDD	Seagate	DCI 551	Cable, etc	2	JICA/95P/015	PHPA	95
External HDD	Seagate	DCI 551	Cable, etc	3	JICA/95P/016	LIPI	95
External HDD	Seagate	DCI 551	Cable, etc	4	JICA/95P/017	LIPI	95
XY Plotter	Calcomp			1	JICA/95P/018	LIPI	95
(Accessories)		Stand		1	JICA/95P/019	LIPI	95
slidemaker	Polaroid	Digital Palette HR5000	s/w Cable	1	JICA/95P/020	LIPI	95
slidemaker	Polaroid	Digital Palette HR5000	s/w Cable	2	JICA/95P/021	PHPA	95
Laser Printer	HP	HP Lasejet 5	Cable, tray, instal. s/w	1	JICA/95P/022	LIPI	95
Laser Printer	HP	HP Lasejet 5	Cable, tray, instal. s/w	2	JICA/95P/023	PHPA	95
Color Printer	HP	HP Deskjet 690C		1	JICA/95P/024	PHPA	95
Color Printer	HP	HP Deskjet 690C		2	JICA/95P/025	LIPI	95
UPS	JICA	UPS 601B		1	JICA/95P/026	LIPI	95
UPS	JICA	UPS 601B		2	JICA/95P/027	PHPA	95
image scanner	HP	Scanjet 4C		1	JICA/95P/028	LIPI	95
image scanner	HP	Scanjet 4C		2	JICA/95P/029	PHPA	95
Digitizer	Calcomp	31480		1	JICA/95P/030	PHPA	95
(Accessories)			Stand	1	JICA/95P/031	PHPA	95
Desktop PC	HP	HP VECTRA VL		1	JICA/95P/032	LIPI	95
(Accessories)	HP	HP 1024	CRT (14")	1	JICA/95P/033	LIPI	95
Desktop PC	HP	HP VECTRA VL		2	JICA/95P/034	LIPI	95
(Accessories)	HP	HP 1024	CRT (14")	2	JICA/95P/035	PHPA	95
Notebook PC	Toshiba	Satellite Pro 420COT	Cable, FO Drive, Case	1	JICA/95P/036	LIPI	95
Notebook PC	Toshiba	Satellite Pro 420COT	Cable, FO Drive, Case	2	JICA/95P/037	PHPA	95
Slide Screen	JM	Triposcreen		1	JICA/95P/038	PHPA	95
Slide Projector	KOOAK	EKTAPRO 9000	Remote Control, etc.	1	JICA/95P/039	PHPA	95
Video Monitor	SONY	Trinitron 14" (KVG14)		1	JICA/95P/040	PHPA	95
Video Recorder	SONY	SLVCR90CH		1	JICA/95P/041	PHPA	95
Portable Generator	Honda	EM1000F		1	JICA/95P/042	PHPA	95
Portable Generator	Honda	EM1000F		1	JICA/95P/043	PHPA	95
Set of Drafting Tools				1	JICA/95P/044	PHPA	95

Name (English)	Company	Model	Accessories	Qty	Ref. Price	Unit Price
Set of Drafting Tools				2	JICA/96P/045	PHPA 95
Trace Stand				1	JICA/96P/046	PHPA 95
Desktop Light Box				1	JICA/96P/047	PHPA 95
Wet type Copying Machine	Cannon	CO 330AE		1	JICA/96P/048	PHPA 95
(Accessories)			A1 Cassette	1	JICA/96P/049	PHPA 95
(Accessories)	ASAHI	step up & down	Transformer	1	JICA/96P/050	PHPA 95
Map storage shelf	Mobi Plan	MP 120		1	JICA/96P/051	PHPA 95
GPS	Trimble	EnsignXL		1	JICA/96P/052	95
(Accessories)			External Antenna	1	JICA/96P/053	95
(Accessories)			Car battery adapter	1	JICA/96P/054	95
GPS	Trimble	EnsignXL		2	JICA/96P/055	95
(Accessories)			External Antenna	2	JICA/96P/056	95
(Accessories)			Car battery adapter	2	JICA/96P/057	95
Copying Machine	Toshiba	1550		1	JICA/96P/058	PHPA 95
Lux Meter	EXTECH	model 401025		1	JICA/96P/059	LIPI 95
(Accessories)			Carrying case	1	JICA/96P/060	LIPI 95
Lux Meter	EXTECH	model 401025		2	JICA/96P/061	LIPI 95
(Accessories)			Carrying case	2	JICA/96P/062	LIPI 95
Lux Meter	EXTECH	model 401025		3	JICA/96P/063	LIPI 95
(Accessories)			Carrying case	3	JICA/96P/064	LIPI 95
Lux Meter	EXTECH	model 401025		4	JICA/96P/065	LIPI 95
(Accessories)			Carrying case	4	JICA/96P/066	LIPI 95
Rain Gauge	Ota Keiki	No 34T (RH)		1	JICA/96P/067	PHPA 95
Thermo Hygrometer	Ota Keiki	MB		1	JICA/96P/068	PHPA 95
Thermometer	Embryo Safe			1	JICA/96P/069	PHPA 95
Thermometer	Embryo Safe			2	JICA/96P/070	PHPA 95
Thermometer	Embryo Safe			3	JICA/96P/071	PHPA 95
Thermometer	Embryo Safe			4	JICA/96P/072	PHPA 95
Thermometer	Embryo Safe			5	JICA/96P/073	PHPA 95
Thermometer	Embryo Safe			6	JICA/96P/074	LIPI 95
Thermometer	Embryo Safe			7	JICA/96P/075	LIPI 95
Thermometer	Embryo Safe			8	JICA/96P/076	LIPI 95
Thermometer	Embryo Safe			9	JICA/96P/077	LIPI 95
Thermometer	Embryo Safe			10	JICA/96P/078	LIPI 95
Barometer	Pfeifel	Alt Plus A2		1	JICA/96P/079	PHPA 95
Barometer	Pfeifel	Alt Plus A2		2	JICA/96P/080	PHPA 95
Barometer	Ich	Alt Plus A2		3	JICA/96P/081	PHPA 95
Stereo Microscope	NIKON	SXZ-1B-D		1	JICA/96P/082	LIPI 95
(Accessories)	NIKON	MAD13030	Illuminator	1	JICA/96P/083	LIPI 95
Stereo Microscope	NIKON	SXZ-1B-D		2	JICA/96P/084	LIPI 95
(Accessories)	NIKON	MAD13030	Illuminator	2	JICA/96P/085	LIPI 95
Triocular Microscope	NIKON	SXZ-2T-D		1	JICA/96P/086	LIPI 95
(Accessories)	NIKON		Camera etc.	1	JICA/96P/087	LIPI 95
(Accessories)	NIKON		Illuminator	1	JICA/96P/088	LIPI 95
Triocular Microscope	NIKON	SXZ-2T-D		2	JICA/96P/089	LIPI 95
(Accessories)	NIKON		Camera etc.	2	JICA/96P/090	LIPI 95
(Accessories)	NIKON		Illuminator	2	JICA/96P/091	LIPI 95
Radio Telemetry Receiver	ATS	Field Master R161N		1	JICA/96P/092	LIPI 95
Radio Telemetry Antenna	ATS	3 Element Folding Yagi		1	JICA/96P/093	LIPI 95
Radio Telemetry Transmitter (small)	ATS	5C Standard, Mammal Collar		1	JICA/96P/094	LIPI 95
Radio Telemetry Transmitter (small)	ATS	5C Standard, Mammal Collar		2	JICA/96P/095	LIPI 95
Radio Telemetry Transmitter (small)	ATS	5C Standard, Mammal Collar		3	JICA/96P/096	LIPI 95
Radio Telemetry Transmitter (small)	ATS	5C Standard, Mammal Collar		4	JICA/96P/097	LIPI 95
Radio Telemetry Transmitter (small)	ATS	5C Standard, Mammal Collar		5	JICA/96P/098	LIPI 95
Radio Telemetry Transmitter (small)	ATS	5C Standard, Mammal Collar		6	JICA/96P/099	LIPI 95
Radio Telemetry Transmitter (small)	ATS	5C Standard, Mammal Collar		7	JICA/96P/100	LIPI 95
Radio Telemetry Transmitter (small)	ATS	5C Standard, Mammal Collar		8	JICA/96P/101	LIPI 95
Radio Telemetry Transmitter (small)	ATS	5C Standard, Mammal Collar		9	JICA/96P/102	LIPI 95
Radio Telemetry Transmitter (small)	ATS	5C Standard, Mammal Collar		10	JICA/96P/103	LIPI 95
Radio Telemetry Transmitter (medium)	ATS	58C Std, Medium Mammal Collar		1	JICA/96P/104	LIPI 95
Radio Telemetry Transmitter (medium)	ATS	58C Std, Medium Mammal Collar		2	JICA/96P/105	LIPI 95
Radio Telemetry Transmitter (medium)	ATS	58C Std, Medium Mammal Collar		3	JICA/96P/106	LIPI 95
Radio Telemetry Transmitter (medium)	ATS	58C Std, Medium Mammal Collar		4	JICA/96P/107	LIPI 95
Radio Telemetry Transmitter (medium)	ATS	58C Std, Medium Mammal Collar		5	JICA/96P/108	LIPI 95
Radio Telemetry Transmitter (large)	ATS	8C (x2), Std Large Mammal Collar		1	JICA/96P/109	LIPI 95
Radio Telemetry Transmitter (large)	ATS	8C (x2), Std Large Mammal Collar		2	JICA/96P/110	LIPI 95
Radio Telemetry Transmitter (large)	ATS	8C (x2), Std Large Mammal Collar		3	JICA/96P/111	LIPI 95
Radio Telemetry Transmitter (large)	ATS	8C (x2), Std Large Mammal Collar		4	JICA/96P/112	LIPI 95
Radio Telemetry Transmitter (large)	ATS	8C (x2), Std Large Mammal Collar		5	JICA/96P/113	LIPI 95
Waterproof Pocket Camera	Cannon	Prima ASIA		1	JICA/96P/114	LIPI 95

Name (English)	Company	Model	Accessories	Qty	Rel #	Tempet	Ex
Waterproof Pocket Camera	Cannon	Prima ASIA		2	JICA/96P/115	LIPI	96
Waterproof Pocket Camera	Cannon	Prima ASIA		3	JICA/96P/116	LIPI	96
Waterproof Pocket Camera	Cannon	Prima ASIA		4	JICA/96P/117	LIPI	96
Waterproof Pocket Camera	Cannon	Prima ASIA		5	JICA/96P/118	LIPI	96
Waterproof Pocket Camera	Cannon	Prima ASIA		6	JICA/96P/119	LIPI	96
Waterproof Pocket Camera	Cannon	Prima ASIA		7	JICA/96P/120	LIPI	96
Waterproof Pocket Camera	Cannon	Prima ASIA		8	JICA/96P/121	LIPI	96
Waterproof Pocket Camera	Cannon	Prima ASIA		9	JICA/96P/122	LIPI	96
Waterproof Pocket Camera	Cannon	Prima ASIA		10	JICA/96P/123	LIPI	96
Waterproof Pocket Camera	MINOLTA	350L		1	JICA/96P/124	LIPI	96
Waterproof Pocket Camera	MINOLTA	350L		2	JICA/96P/125	LIPI	96
Waterproof Pocket Camera	MINOLTA	350L		3	JICA/96P/126	LIPI	96
Waterproof Pocket Camera	MINOLTA	350L		4	JICA/96P/127	LIPI	96
Waterproof Pocket Camera	MINOLTA	350L		5	JICA/96P/128	LIPI	96
Waterproof Pocket Camera	MINOLTA	350L		6	JICA/96P/129	LIPI	96
Waterproof Pocket Camera	MINOLTA	350L		7	JICA/96P/130	LIPI	96
Waterproof Pocket Camera	MINOLTA	350L		8	JICA/96P/131	LIPI	96
Waterproof Pocket Camera	MINOLTA	350L		9	JICA/96P/132	LIPI	96
Waterproof Pocket Camera	MINOLTA	350L		10	JICA/96P/133	LIPI	96
Parabolic type Microphone	Sony	ECM-PB1C		2	JICA/96P/134	LIPI	96
Cage trap (very small)				50pcs	JICA/96P/135	LIPI	96
Sherman Folding	Sherman			50pcs	JICA/96P/136	LIPI	96

## 7 プロジェクト概要説明

# Biodiversity Conservation Project

- Outline and Review of Phase I -

### 1. Background

- Indonesia-U.S.-Japan Joint Project: The Project is jointly conducted by Indonesia, the USA and Japan under the scheme of Common Agenda between the Governments of Japan and the U.S.

### 2. Term

1 July 1995 - 30 June 1998 (for three years)

### 3. Objectives and Scheme

#### (1) OVERALL GOAL

To support the achievement of the objectives of the National Strategy of Biodiversity Management and Biodiversity Action Plan for Indonesia (BAPI).

#### (2) PROJECT PURPOSE

To strengthen the institutional capacity to conserve biodiversity of both the Indonesian Institute of Sciences (LIPI) and the Directorate General of Forest Protection and Nature Conservation (PHPA), Ministry of Forestry, in order to contribute to the achievement of the objectives of BAPI.

### 4. Main Activities

- (a) to develop a database for biodiversity information in the Research and Development Center for Biology (RDCB), LIPI;
- (b) to enhance scientific capability of RDCB researchers in taxonomy and other specific studies on biology and to conduct biological research, surveys and mapping of Gunung Halimun National Park (GHNP);
- (c) to develop a management model which integrates conservation of GHNP and development of its surrounding regions;
- (d) to promote public awareness on biodiversity conservation;
- (e) to promote effective exchanges and utilization of biodiversity data and information between LIPI and PHPA.

## 5. Review of Activities

### (1) Implementation Framework

Joint Coordinating Committee (ICC) and three components: (a) Information Processing & Network; (b) Research & Survey; (c) National Park Planning & Management

### (2) Cooperation & Institutional Network

- USAID: Several meetings were held between USAID, KEHATI and JICA. At the meetings, the project has requested that USAID provide assistance to a program in GHNP through the Indonesian Biodiversity Fund managed by KEHATI in order to enhance cooperation in the project.
- GEF: Exchange of information between the GEF project and this project was also conducted during the visit of the GEF consultants. Following renovation by the GEF project, the collections are expected to be moved to the Cibinong Zoological building. A biodiversity database will also be developed in collaboration with the GEF project.
- Other organizations: Further contact and cooperation has been promoted with other institutes/organizations, such as the Consortium on Mt. Gede, Panagrango, Halimun, and Salak, the Consultative Group on Indonesian Forestry (CGIF), the Center for International Forestry Research (CIFOR) and other domestic and international NGOs. Members of the project conducted presentations at several meetings/workshops including international conferences in order to introduce the project and establish institutional networks.

### (3) Workshop and Reports

- Workshop I (5 March 1996): The aim was to bring the members of the project together to set the annual objectives, and share their views on the project in order to cooperate to achieve the project objectives. The Implementation Framework of the project was announced.
- Workshop II (25-26 March 1997): This workshop was mainly aimed at enhancing awareness of the project with local governments and promoting coordination between the park management plan and the development plan for surrounding regions. Also reports of the project activities were presented.
- Reports: Reports of the project activities, such as Vol.1 'General Review of the Project' and Vol.2 'The Inventory of Natural Resources in Gunung Halimun National Park', and a Draft Management Plan were published. Also some brochures of the project were produced. A guide book of GHNP is under drafting.

(4) Experts, Counterpart-training

- Long-term experts: five(5) (FY95/96-96/97) ; seven(7) (FY97/98-98/99)
- Short-term experts: three(3) (FY95); eight(8) (FY96-97)
- Counterpart-training in Japan: two(2) (FY95); four(4) (FY96); five(5) (FY97)

(5) Facilities and equipment

(Grant Aid)

- Zoological Building      LIPI      Cibinong      8,209 m<sup>2</sup>
- Headquarters      PHPA      Kabandungan      725 m<sup>2</sup>
- Research Station      PHPA      Cikaniki      287 m<sup>2</sup>
- Nature Conservation Information Center (NCIC)  
   PHPA      Bogor      371 m<sup>2</sup>
- Equipment for each facilities LIPI / PHPA

(Technical Cooperation)

- Canopy Walkway      PHPA      Cikaniki      (planning)
- Equipment for technical cooperation      LIPI / PHPA

(6) Research Component

Two one-hectare permanent plots have so far been established in GHNP in order to study vegetation structure and to monitor forest dynamics. One of the two is near the research station. Animal studies are also being conducted at these plots and other areas in GHNP in order to be integrated with the vegetation studies. Results of these studies, for instance, show relationships between altitude and species richness. Several reports of studies were produced.

(7) Information Component

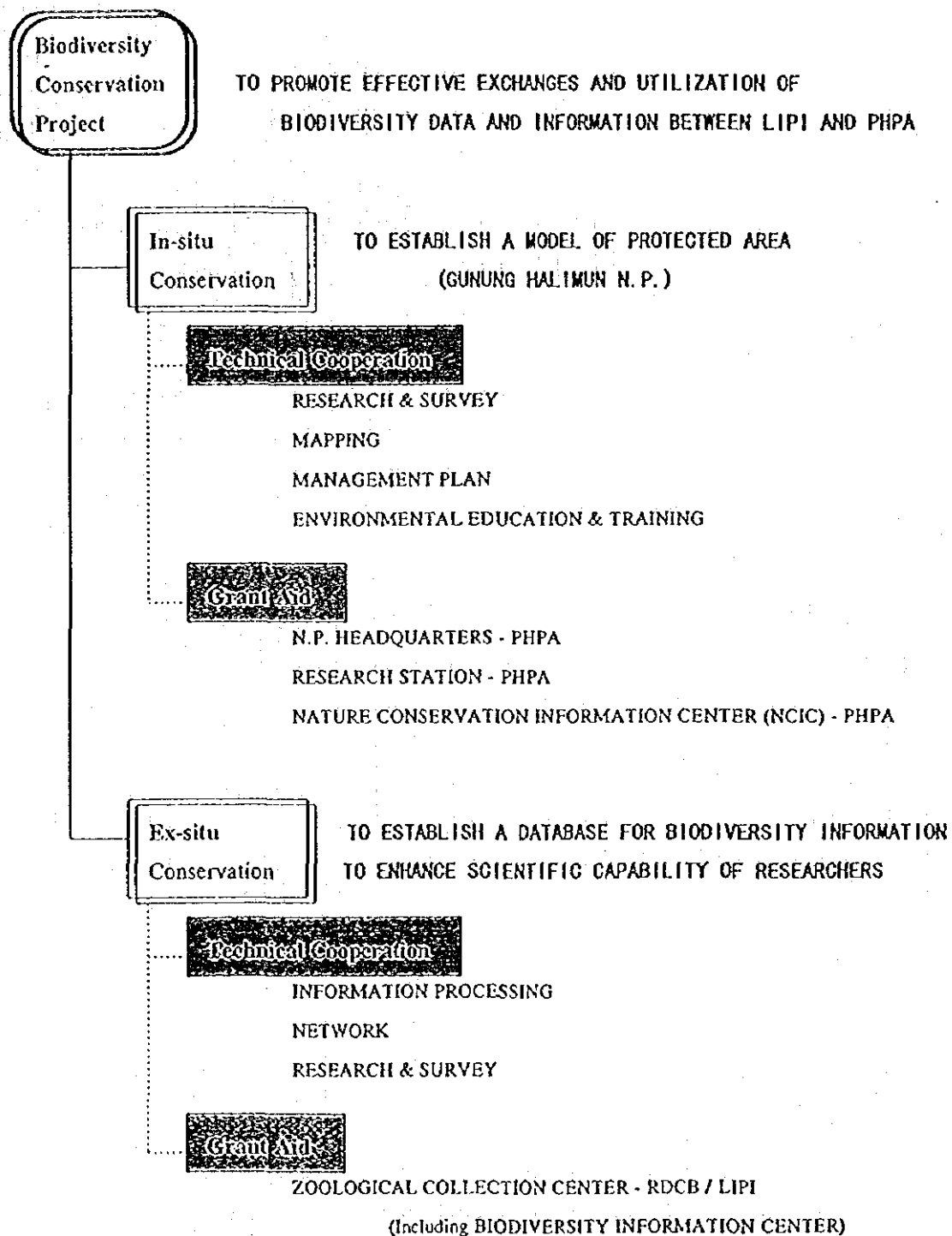
Results from these research projects and existing studies on the park conducted by other projects/institutions, including biological information from park rangers, are to be entered into databases connected with the Geographical Information System (GIS). A Needs Survey has been conducted in preparation for development of the databases.

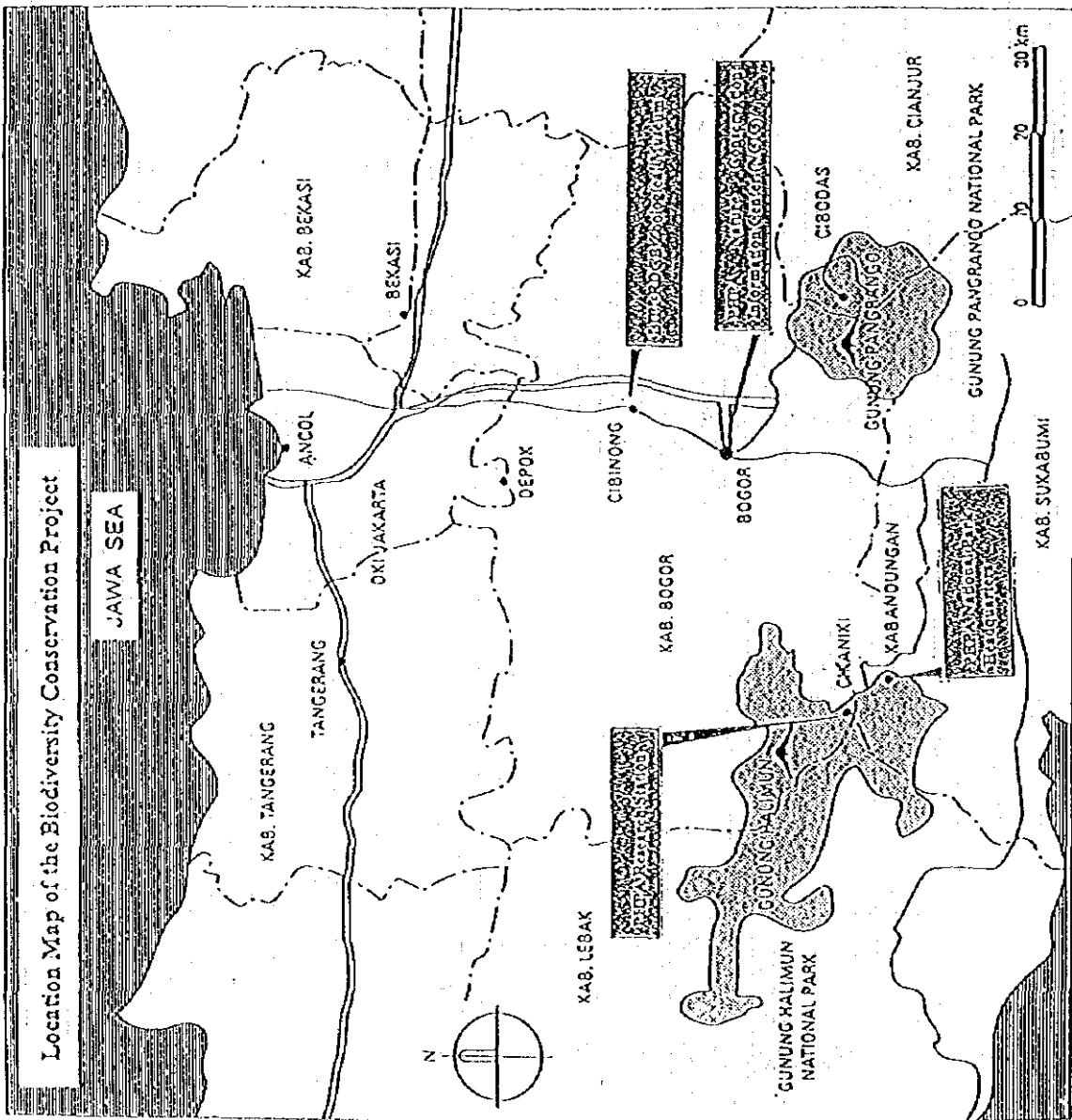
(8) Management Component

A Draft Management Plan for GHNP was prepared using the data from the above-mentioned research. The national park was classified into several zones such as Core Zone, Wilderness Zone and Intensive Use Zone, in accordance with the importance for conservation and potential for utilization. Feasibility studies for developing environmental education and eco-tourism programs were also conducted. A planned guide book to the park will contribute to both environmental education and eco-tourism.

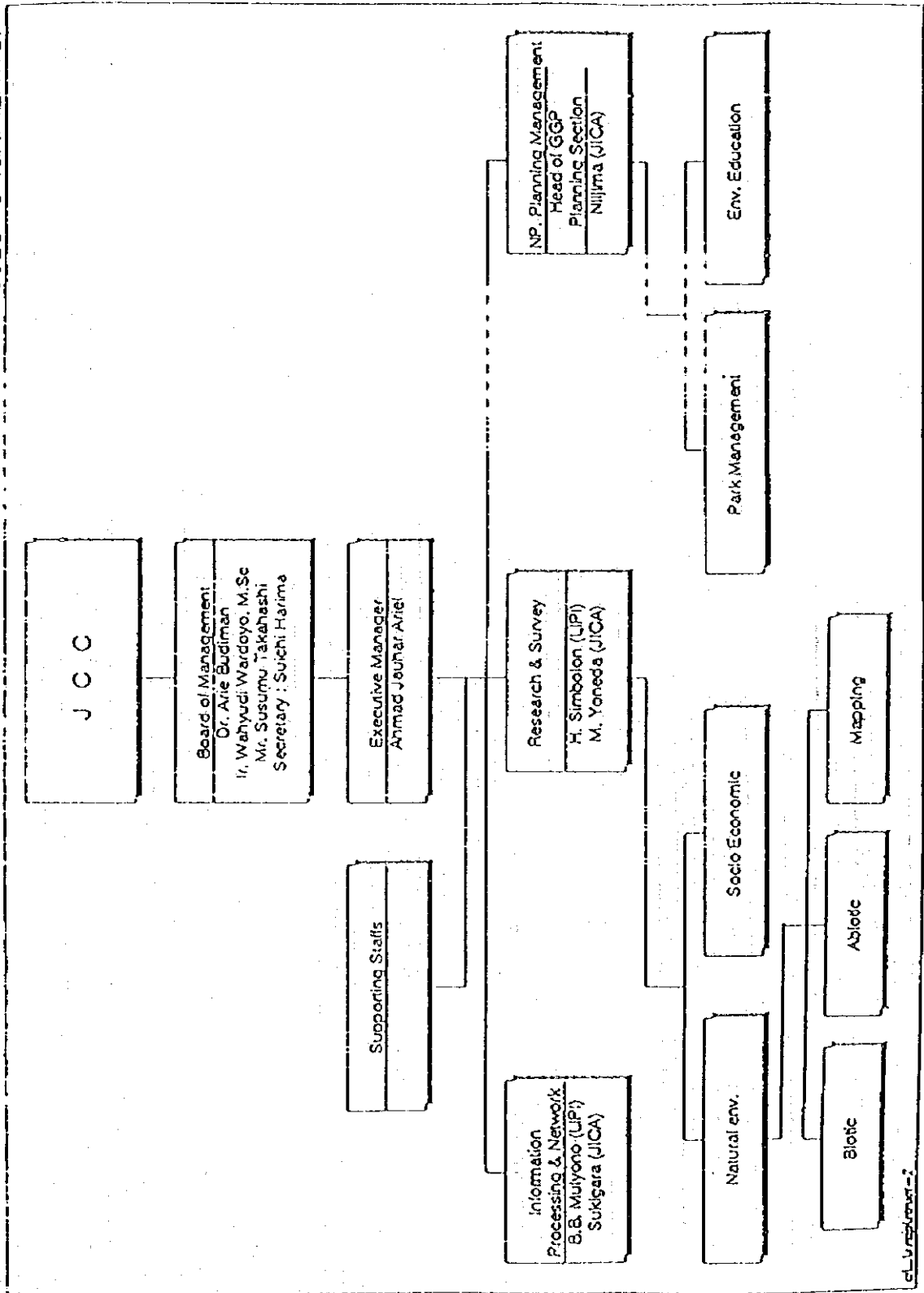


### Scheme of the Biodiversity Conservation Project





ANNEX II-2 PROJECT ORGANIZATION



of 13 pages

### Outputs and Implementation Framework of the Biodiversity Conservation Project

Outputs	Activities	Main Component(s)
<p>(1) Institutional capability to manage biodiversity information in the field of zoology and botany is enhanced in the Research and Development Center for Biology (RDCB), LIPI.</p>	<p>(1)-i To survey the potential organizations which will be the data providers and/or data users for the future nationwide network of biodiversity information.</p> <p>(1)-ii To examine utilization purpose of biodiversity information.</p> <p>(1)-iii To develop a standard for the database for biodiversity information and collection management: taking into account other related programs.</p>	<p>- Information Processing &amp; Network</p>
<p>(2) Scientific capability of researchers in the Zoological and Botanical Division of RDCB, LIPI is enhanced in taxonomy and other specific studies on biology.</p>	<p>(2) To conduct biological research, surveys and mapping of GHNPs.</p>	<p>- Research &amp; Survey</p>
<p>(3) Management plan of Gunung Halimun National Park (GHNPs) is developed as a model of in-situ conservation and comprehensive research field of biodiversity. Management plan is to be integrated in the regional development of its surrounding regions.</p> <p>(4) Institutional capability to carry out the park management plan is strengthened through the activities of (3) above.</p> <p>(5) Public awareness on biodiversity conservation is promoted in the surrounding area of GHNPs.</p>	<p>(3)-i To develop management model which integrates conservation of GHNPs and development of its surrounding regions.</p> <p>(3)-ii To study information on natural and social environment within and surrounding GHNPs.</p> <p>(3)-iii To provide publications, audiovisual materials, and other materials, in order to promote public awareness on biodiversity conservation.</p> <p>(4) To train the park management personnel.</p>	<p>- National Park Planning &amp; Management</p>
<p>(6) Effective exchanges and utilization of biodiversity data and information are promoted between LIPI and PHPA.</p>	<p>(5) To proceed effective exchanges and utilization of data and information on biodiversity between LIPI and PHPA.</p>	<p>- Information Processing &amp; Network</p> <p>- Research &amp; Survey</p> <p>- NP, Plan. &amp; Management</p>

List of Experts (FY 95/96-97/98<sup>1)</sup>)

1) as of October, 1997

Name	Field	Assign	Period	Japanese Source Institution
S. Takahashi	Chief Advisor	LIPI	4/9/95-30/6/98	Environment Agency
S. Harima	Coordinator	LIPI	14/8/95-30/6/98	JICA
N. Sukigara	Information Processing & Network	LIPI	19/9/95-18/9/97	Japan Wildlife Research Center
M. Yoneda	Natural Environment Research & Survey	PHPA	9/1/96-8/1/98	Japan Wildlife Research Center
K. Nijijima	National Park Planning & Management	PHPA	18/9/95-17/9/97	PREC Institute Inc.
Y. Sakuma	Information Processing & Network (Database Management)	LIPI	1/7/97-30/6/98	NDC Corporation
T. Suzuki	Information Processing & Network (GIS)	LIPI	1/7/97-30/6/98	Pasco International Inc.
H. Horiuchi	National Park Planning & Management	PHPA	1/7/97-30/6/98	Environment Agency
K. Harada	Environmental Education	PHPA	1/7/97-30/6/98	NDC Corporation
M. Okamoto	Environmental Education	PHPA	29/2/96-1/6/96	Environment Agency
S. Komeda	Animal Ecology (Bird)	LIPI	6/4/96-7/6/96	Yamashina Institute for Ornithology
Y. Oshima	Forest Ecology	LIPI	6/4/96-25/4/96	Japan Wildlife Research Center
E. Suzuki	Forest Ecology	LIPI	29/7/96-7/9/96	Kagoshima University
M. Okamoto	Environmental Education (1)	PHPA	23/1/96-21/2/96	Environment Agency
N. Sakaguchi	Animal Ecology (Mammal)	LIPI	29/1/96-20/1/97	Environment Agency
H. Horiuchi	National Park Planning & Management (Eco-tourism)	PHPA	3/12/96-24/1/97	Environment Agency
M. Kaneko	Information Processing & Network (Information System)	LIPI	17/2/97-17/2/97	Hokkaido Institute of Environment Sciences
K. Iwazuki	Plant Taxonomy	LIPI	9/3/97-22/3/97	Rikkyo University
H. Sayama	Environmental Education (2)	PHPA	12/3/97-30/4/97	Environment Agency
S. Ueno	Animal Taxonomy	LIPI	7/4/97-21/4/97	National Science Museum
S. Kamitani	Plant-Animal Interaction	LIPI	28/7/97-31/8/97	Kyushu University
H. Kojima	Animal Taxonomy	LIPI	28/7/97-31/8/97	Kyushu University
E. Suzuki	Forest Ecology	LIPI	13/10/97-28/11/97	Kagoshima University

Long-term

(FY 95/96)

Short-term  
(FY96/97)

(FY97/98)

## List of Counterpart Training (FY 95/96-96/97)

Name	Field of Training	Inst.	Period	Main Training Institution (Japan)
FY 95/96	Research Management	LIPI	28/3/96-27/4/96	Environment Agency, National Park Office (Okinawa), JWRC, Tokyo Univ., Hokkaido Institute of Environmental Sciences, National Institute for Environmental Studies
	National Park Management	PHPA	28/3/96-27/4/96	Environment Agency, N.P. Office (Fakone, Okinawa, Unzen), JWRC, N.P. Association
FY 96/97	Information Management	LIPI	19/1/97-14/2/97	Environment Agency, JWRC, Hokkaido Institute of Environmental Sciences, National Institute for Environmental Studies, National Geographical Institute
	Forest Ecology	LIPI	20/1/97-3/3/97	Environment Agency, JWRC, N.P. Office (Yakushima, West Hokkaido), Kagoshima Univ., Hokkaido Univ.
	Forest Inventory	PHPA	12/2/97-14/3/97	Environment Agency, JWRC, N.P. Office (Yakushima, West Hokkaido, Daisetsuzan, Nikko), National Forest Agency
	National Park Management	PHPA	12/2/97-14/3/97	Environment Agency, JWRC, N.P. Office (Yakushima, West Hokkaido, Daisetsuzan, Nikko), National Forest Agency

## Progress Report of the Project

- Following operation plan by the minutes of discussion on July, 1996 -

JICA long-term expert team

This progress report of the project is prepared based on a plan of operation for whole period (1996 - 1998) in the minutes of discussion between the Japanese consultation team and the authorities concerned of the Government of the Republic of Indonesia in July 1996.

### 1. Main Activities and Output (July 1995 - September 1997)

#### (1) Workshop

Title	Date (location)	Theme and Presentation
1. Workshop I	5 March, 1996 (Bogor)	Presentation and discussion on framework and planning of the project
2. Workshop II	25-26 March, 1997 (Cisarua)	Presentation of first year progress of the project and regional development plan around Halimun N. P.

#### (2) Report and Management Plan

Title	Published
1. Interim Report of Research and Survey Component	October, 1996
2. Gunung Halimun National Park Management Plan (Draft)	January, 1997
3. Research and Conservation of Biodiversity in Indonesia Vol. I: General Review of the Project, Vol. II: The Inventory of Natural Resources in GHNP	August, 1997
4. Gunung Halimun National Park Management Plan (Final Draft)	September, 1997

## 2. Progress Table following operation plan on July, 1996

### 1). Over All Issue

Output (Object)	Activities	Target	Input	Progress	Note
Project management and evaluation	Joint coordination committee	Over all issue evaluation	Implementation Plan, Report of Activities.	JCC meeting has not been held. The input was conducted by letter and explanation to each member.	Meeting between JCC member & JICA Consultation Mission
	Workshop	Evaluation & Institution-to- Institution Network	Presentation & Discussion	Workshop I : 5 March 96 Workshop II : 25-26 March 97	Consortium & Other Meetings

### 2). Research and Survey Component

(1) Biotic Component (see attached paper for detail activities of the biotic component)

General Note: Activities and progress of the biotic component in Gunung Halimun National Park go smoothly until now.

Output (Object)	Activities	Target	Input	Progress	Note
(1) Institutional capability is enhanced (LIPI)	Forest Vegetation Ecology	Vegetation classification and map	Field survey and analysis (5 visits, 1996; 1 visit, 1997) Supported by short term expert	Vegetation and forest dynamics report in GHNP (Volume II). Vegetation map of LANDSAT is not yet finished	Budget problem between Geotek-LIPI and RDCB-LIPI for map
(2) Scientific capability is enhanced (LIPI)	Floristic study	Floristic distribution	Field survey and identification (2 visits, 1996). Supported by short term expert	Floristic study report and plant list in GHNP (Volume II) (preliminary report)	Budgetary cuts for field study in 1997
	Wildlife ecology	Status study of Importance sp. (Primates, Carnivores)	Field survey and analysis (3 visits, 1996; 1 visit, 1997) Supported by short term expert	Primates and carnivore study report (Volume II). Presentation in a workshop for Javan Gibbon conservation (August, 1997)	Conducting wildlife study in monitoring study in Cikaniki (from June, 1997)
	Faunastic study	Animal distribution	Field survey and analysis (5 visits, 1996; 5 visits, 1997). Supported by short term expert	Fauna report and fauna list (mammals and birds, 1996) in GHNP. Fauna report of other group will be reported after 1997 survey	Budgetary cuts for field study in 1997

RDCB-LIPI: Research and Development Center for Biology, The Indonesian Institute of Science  
Geotek-LIPI: Research and Development Center for Geotechnology, The Indonesian Institute of Science



(2) Abiotic Component

General Note: Activities and progress of abiotic component, specially mapping section for study of Gunung Halimun National Park are behind. Some thematic maps are not yet prepared by Geotek-LIPI (Research and Development Center for Geotechnology) because of budget issues between RDCB-LIPI and Geotek-LIPI. Thematic maps which we need as base line information for study and park management planning were prepared from aerial photo or other existing maps. Information component of JICA and RDCB-LIPI will prepare some thematic maps by end of 1997.

Output (Object)	Activities	Target	Input	Progress	Note
(1) Institutional capability is enhanced (LIPI)	Remote sensing	Thematic map	Discussion for adjustment of LANDSAT map and ground truth with Geotek-LIPI	Vegetation map of LANDSAT is not yet finished by Geotek-LIPI. JICA - RDCB-LIPI information team is preparing the vegetation map in 1997.	Budget problem between Geotek -LIPI and RDCB - LIPI for mapping
(2) Scientific capability is enhanced (LIPI)	Physiography and geological hazards	Geological map	Discussion for classification of slope etc.	Topographic map of GHNK for GIS was prepared by Geotek-LIPI, but hazard map is not yet. JICA - RDCB-LIPI information team is preparing the hazard map from topo-map in 1997.	Budget problem between Geotek -LIPI and RDCB - LIPI for mapping
	Land use	Land use map	Discussion for adjustment of LANDSAT map and ground truth with Geotek-LIPI	Land use map of LANDSAT is not yet finished by Geotek-LIPI. JICA - RDCB-LIPI information team will prepare the map in 1997 with together vegetation map.	Budget problem between Geotek -LIPI and RDCB - LIPI for mapping
	Soil	Soil map	Filed study and analysis (by Geotek-LIPI)	Soil study report and map (Volume II)	Improvement of precision of mapping
	Hydrology / Climate	Hydrological map	Field study, water quality analysis (by Geotek-LIPI)	Water quality analysis and climate report (Appendix table in report Vol. II). Hydrological map will be prepared using GIS in 1997 by JICA-LIPI team	Budget problem between Geotek -LIPI and RDCB - LIPI for mapping

(3) Socio-economic components

General Note: Field study and data collection of the socio economic component overlap with activities of park management component. After review of the field study by PEP/PPT-LIPI team in 1996, existing reports and data collecting by park management component, some activities planned in 1996 were canceled because new progress by additional field study is not expected.

Output (Object)	Activities	Target	Input	Progress	Note
(1) Institutional capability is enhanced (LIPI)	Demography	Demography status of GHNP	Field study, statistic data collecting, and analysis	Field report by PEP-LIPI and PPT-LIPI. Statistic data on demography was also gathered by park management planning (PHPA) team (Appendix table in report Vol. II)	PHPA team collected statistic data more efficiently than LIPI team
(2) Scientific capability is enhanced (LIPI)	Economic status	Socio economic status	Field study, statistic data collecting, and analysis	Field report by PEP-LIPI and PPT-LIPI. Statistic data on economic status was also gathered by park management planning (PHPA) team	PHPA team collected statistic data more efficiently than LIPI team
	Ethnobiology	Biodiversity utilization	Bibliographical study	Making reference note. Plants list utilized by local people will be prepared in report in 1997	Canceled field study because there are enough bibliographies

PEP-LIPI: Center for Economics and Development Studies, The Indonesian Institute of Science

PTT-LIPI: Center for Population and Manpower Studies, The Indonesian Institute of Science

### 3). National Park Planning and Management Component

General Note: In this phase, most of this component work was spent on making management plan of GHNP which consists of BOOK I, II and III. But some actual management action, such as environment education was carried out.

Output (Object)	Activities	Target	Input	Progress	Note
(1) Management plan of GHNP as model of conservation (PHPA)	Management and policy	Compiling Management Plan (BOOK II)	Reference survey and review	Management Plan (draft Book II; January, 1997) Summary of Draft Management Plan Book II (Volume I)	Finish end of FY 1996
	Institutional policy	Ditto	Reference survey and review	Management Plan (draft Book II; January, 1997) Summary of Draft Management Plan Book II (Volume I)	Finish end of FY 1996
(2) Institutional capability is strengthened (PHPA)	Regional Development	Ditto	Reference survey and review	Management Plan (draft Book II; January, 1997) Summary of Draft Management Plan Book II (Volume I)	Finish end of FY 1996
(3) Public Awareness	Ecotourism	Ditto	Reference and Field survey and	Management Plan (draft Book II; January, 1997) Summary of Draft	Finish end of FY 1996

is promoted

		review. Supported by short term expert.	Management Plan Book II (Volume I) Short term expert report(Vol. I)	
Environment education	Ditto	Reference and Field survey and review. Supported by short term experts.	Management Plan (draft Book II; January, 1997) Summary of Draft Management Plan Book II (Volume I) Short term experts reports (Vol. I)	Finish end of FY 1997; I
Zonation	Ditto	Reference and Field survey and review. Making maps. Supported by short term experts.	Management Plan (draft Book II; January, 1997) Summary of Draft Management Plan Book II (Volume I) Zonation Map and some basic maps	Finish end of FY 1996
Draft management plan	Draft management plan (Book II)	Compiling the above 6 activities results. Meetings. Supported by short term experts.	Management Plan (draft Book II; January, 1997) Summary of Draft Management Plan Book II (Volume I)	Finish end of FY 1996
Action plan	Draft management plan (Book I)	Compiling the above 7 activities results. Meetings.	Management Plan (draft Book I; September, 1997)	Finish end of FY 1997; II
Architect Landscape	Draft management plan (Book III)	Reference and Field survey and review. Compiling the above 7 activities results. Meetings.	Management Plan (draft Book III; September, 1997)	Finish end of FY 1997; II
Public Awareness	Guide book Trials of Community Awareness	Reference study and meetings Reference and Field survey and review. Actual trials	Contents and some sections Some field reports of pre-surveys Actual trials not yet	Guide book is now written by PHPA and LIPI members

Management plan (final draft)	Final management plan (Book I, II and III)	Meetings and reviews.	Management Plans (draft Book I, II and III; September, 1997)	
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#### 4). Information Processing and Network Component

General Note: The focused system development is a little bit behind the schedule due to some obstacles to definite user requirement and to collect data at the primary stage. To develop a prototype systems which have not much data is a sure-step to expand composite biodiversity databases and network systems in collaborated with GIS. As described on the table below, two prototypes have been developed on field survey record and park management activities. At the last stage of this phase, prototypes are to be linked and made up into a integrated system. The installed computers have made enable to train counterparts practically on hardware, software and management knowledge.

Output (Object)	Activities	Target	Input	Progress	Note
(1) Institutional capability to information is enhanced (LIPI)	User needs survey	User needs	Discussion on user requirement for data of research and park management	Clarifying user requirements and organizing a workgroup to definite them	Decision making board required not only on needs but on specification of systems
	D/B on bibliography	Reference and distribution	Discussion on the collection referring to biodiversity	Making data sheets to be stored in the database and designing the systems in details	Limited to the data on TNGH
(2) Effective exchange of data LIPI - PHPA	D/B on specimen	Existing information	Relationship with GEF project and investigation of specimen data	Based on the GEF database, designing systems with data input form	Should be designed including faunastic specimen
	D/B on field record	Distribution	Discussion with researchers and managers	Designed a prototype with photo and map data	To be linked GIS data
	D/B on management unit	Tool for management	Discussion based on the monthly report of park management activities,	Limited to wild life observation record, a prototype system developed	To be linked GIS data and to analyze local characteristics for setting the units
	D/B administration	Procedure to administrative database and network systems	Installed hardware and software at BIC and NCIC site	Being trained for new hardware and software through the courses and practicing how to manage the systems	To be enhanced for the more advanced systems

**Field Study Record of the Biotic Component**  
(April 1996 - September 1997)

(1) Objectives of the biotic component

- Inventory (flora and fauna (mammals and birds))
- Vegetation study for vegetation classification and land truth of Land sat data
- Making permanent study plot for forest dynamics research
- Habitat - distribution data (including density) of primates and birds
- Contribution for park management plan based on the biological data

(2) Activities and results

Group (Chief Researcher)	No. visit	Activities (method)	Result	Note (next step)
Vegetation (H. Simbolon)	4 + 1	21 transect study	Two cluster of vegetation types; <1,200 m and >1,200m	Additional study and ground truth for LANDSAT data
Floristic study (Harry Wiradinata)	2	Collection of plant	About 500 higher plants were founded (1996)	Additional study for more complete list and comparison with other area
Forest dynamics (Simbolon/Suzuki)	1 +(1)	Making 2 per-manent plots	No. of trees were about 950 in both plot but less species richness in higher altitude plot	Measuring tree growth, death and regeneration. Making more plots in lower area
Primates study (Sugardjito)	2 + 1	Line transect census (total 128 km)	Higher density were recorded in south-eastern part. The density dropped >1,200m asl.	Detail study on habitat - density for ecolourism and conservation. Rehabilitation plan of gibbon
Carnivore (Camera trap study)(Sugardjito /Sakaguchi)	1 (+ 4) (Cik aniki )	8 camera trap and 11 live trap x 3 weeks	3 carnivores including leopard were taken picture and a palm civet was radio tracked	Camera trap study in corridor forest of G. Halimun - G. Salak. Conducting monthly camera trap study in Cikaniki
Small mammals (Suyanto)	3 + 1	Collection by traps and nets	Collected 237 specimens and 27 species	Additional study for more complete list and habitat - distribution data
Birds (Asep/Komeda)	2 + 1	Mist-netting study	Recorded altitudinal distribution of 34 birds species in Cikaniki. Check list of bird (203 species)	Biocommunity study of bird at Malasari
Reptile	0 + 1	Collection by trap and hand	Recorded 10 + species	Identification and intra-specific variation study
Mollucs (terrestrial and fresh water)	0+1	Collection by hand	Recorded 5 + species	Identification and comparison with other area
Insect (including plant - animal interaction)	0+1	Collection by trap, fogging	Collected more than 10,000 species and 10,000 individual	Identification, reporting of new species, seasonal change, and plant - insect community analysis

No. of Visit: Numbers after + show visit time in 1997 (first numbers show visit time in 1996)











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