

CHAPTER 5

FRAMEWORK FOR SOCIO-ECONOMY
AND TOURISM DEMAND

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5.1 Regional Socio-Economy

5.1.1 Population

1) Population in the study region

Population censuses in Indonesia since independence have been carried out in 1961, 1971 and 1980. Population figures for these years are given in Table 5-1, in summary form for the whole of Indonesia, Java island, DKI Jakarta, West Java Province and the study region. According to the 1980 census, the study region supported a population of 1,803,945 consisting of 1,109,186 in Kabupaten Serang and 694,759 in Kabupaten Pandeglang. The population in the study region was 6.6% of whole population in the Province. The Krakatau Islands are uninhabited.

The population in the study region is unevenly distributed due to its topography. It is relatively dense in the northern and eastern parts but sparse in the southern and western parts. The population density for the study region was 400 persons/km² in 1980. This figure is lower than those for the whole of Java island (690 persons/km²) and West Java Province (593 persons/km²). The population density in the Kab. Serang was 591 persons/km² and in Kab. Pandeglang 264/km² in 1980.

The figures in Table 5-1 indicate the accelerated urbanization in the study region, especially in Kab. Serang. But as for the population distribution between urban and rural areas, the population in the urban area was 10.4% in the whole study region in 1980. This figure was much lower than the national average of 22.4% and West Java Province of 21.0%, and especially in Kab. Pandeglang it was only 6.8%.

Table 5-1 POPULATION IN INDONESIA, JAVA, WEST JAVA, DKI JAKARTA AND THE STUDY REGION IN 1961, 1971 AND 1980

Area (km ²)	Population			Density (Persons/km ²)		Urbanization (1980)		Household (1980)	Growth Rate (%)	
	1971	1980	1971	1980	Ratio (%)	No.	No.			
(1) Indonesia	1,919,443	119,208,229	147,490,298	62	77	22.4	32,845,769	30,263,000/c	4.87	2.32
(2) Java	132,187	76,086,327	91,269,528	576	690	NA	NA	19,622,000/c	4.65	2.02
(3) West Java	46,300	21,623,529	27,449,840	467	593	21.0	5,770,868	6,100,713	4.50	2.66
(4) DKI Jakarta	590	4,576,009	6,503,227	7,761	11,023	100.0	6,503,227	1,164,000/c	5.59	3.93
(5) Study Region	4,512/a	1,433,469	1,803,945	317	400	10.4	187,245	375,139	4.81	2.59
Serang	1,876	859,467	1,109,186	458	591	12.6	139,984	231,022	4.80	2.87
Pandeglan	2,636	572,002	694,759	217	264	6.8	47,261	144,117	4.82	2.14

Remarks: /a Excluding the Krakatau Island

/b Distribution ratio of the urban population to the total population.

/c Round figures.

/d Average household size.

Source: Population Census 1971, 1980.

The average population per household in the study region was 4.8 in 1980. This size is slightly higher than for Java island (4.6) and West Java Province (4.5), but a little lower than the national average (4.9) as shown in Table 5-1.

The average growth rate of population per annum in the study region for the periods 1961-1971 and 1971-1980 are estimated to be 2.15% and 2.59% respectively. This shows that the growth rate has been increasing in recent years, especially in Kab. Serang (2.87%). As shown in Table 5-1, such a tendency towards population growth is increasingly evident throughout Indonesia. However, it is not expected that the population in the study region will grow at such a high rate in future. The population growth rate of 2.59% in the study region is close to that in West Java Province (2.66%) but higher than the national average (2.32%). It is very high, however, as compared with the average for Java 2.02% .

Table 5-2 shows the population distribution by Kecamatan within the study region. The Kecamatans of Serang and Pandeglang, which include the administrative centers of the two Kabupatens, had populations of 111,278 and 48,659 in 1980. The Kecamatans of Cilegon and Pulomerak, which are industrial centers, had populations of 51,200 and 89,628. These four Kecamatans had a population of 300,765 in total or 16.7% of the total population in the study region. Urban areas are also found in the following three Kecamatans: Kramatwatu, Ciruas and Ciomas.

The population growth in Kecamatans with the urban areas are generally high. Especially the population in Kec. Pulomerak and Cilegon showed the high average growth rate of over 4% per annum during the period of 1971-80 as shown in Table 5-3. As for the population density, the three Kecamatans of Cilegon, Serang and Pandeglang were over 1,200 persons/km² in 1980, while in the southern five

Table 5-2 POPULATION DISTRIBUTION BY KECAMATAN IN THE STUDY REGION IN 1961, 1971, 1980 AND 1980-85

Kecamatan	Census				Resident Registration				
	1961	1971	1981	1980	1981	1982	1983	1984	1985
<Kabupaten Serang>									
1. Serang	61,476	79,675	111,278	111,525	111,599	111,782	111,984	112,201	114,560
2. Taktakan	19,069	21,732	28,131	28,131	31,811	32,161	30,258	32,763	32,750
3. Kasemen	22,901	30,573	42,326	42,375	42,296	41,701	41,974	42,474	42,429
4. Kramatwatu	17,545	21,726	28,614	28,709	27,993	28,372	28,895	29,904	29,544
5. Waringinkurung	14,765	17,193	20,969	20,969	21,056	21,201	21,564	22,088	23,243
6. Ciruas	24,821	28,855	32,970	33,354	33,595	33,929	34,040	35,347	35,574
7. Walantaka	22,181	27,266	34,798	34,798	35,046	35,234	35,409	35,982	36,093
8. Kragilan	23,994	29,955	34,676	34,739	34,811	34,835	35,113	36,672	37,017
9. Cikande	35,891	42,749	52,265	52,265	52,419	52,404	52,675	52,522	52,909
10. Pontang	25,335	29,288	33,124	33,344	33,580	33,865	34,198	34,410	34,532
11. Tirtayasa	37,490	40,461	49,251	49,435	50,431	50,811	51,252	51,445	51,664
12. Carenang	31,771	34,521	40,686	40,800	40,865	41,008	41,187	41,501	41,578
13. Pamarayan	29,058	32,974	41,085	41,189	41,977	42,379	43,379	43,460	44,571
14. Kopo	28,634	33,500	43,440	43,716	44,098	44,224	45,050	45,426	45,759
15. Cikeusal	41,120	48,003	60,620	60,615	60,698	60,689	61,182	61,098	61,371
16. Petir	39,208	41,542	53,957	51,518	52,185	52,736	52,928	53,970	54,384
17. Cilegon	27,775	34,402	51,200	51,284	51,745	51,834	51,974	52,005	52,440
18. Bojonegara	29,203	33,782	40,444	40,500	40,699	41,399	41,769	42,170	42,953
19. Pulomerak	44,600	58,655	89,628	89,917	91,305	92,015	93,551	95,482	97,772
20. Anyer	23,355	27,836	37,947	38,080	38,103	38,313	38,420	38,706	39,077
21. Cinangka	24,088	29,674	36,992	37,010	37,076	37,262	39,823	40,625	39,964
22. Mancak	17,579	20,241	25,654	25,654	25,803	26,228	26,964	27,655	27,492
23. Ciomas	15,363	18,269	22,431	22,381	22,415	22,468	22,606	22,714	23,173
24. Baros	18,253	21,326	25,119	25,237	26,016	26,411	28,121	28,874	28,533
25. Pabuaran	20,342	24,291	30,324	30,342	30,534	30,886	31,080	31,631	32,097
26. Padarincang	24,424	33,978	41,240	41,240	42,064	42,448	44,510	45,530	45,052
Total	720,241	862,467	1,109,169	1,109,127	1,120,220	1,126,595	1,139,906	1,156,655	1,166,531
<Kabupaten Pandeglang>									
1. Pandeglang	29,726	35,699	48,654	48,654	48,709	49,038	49,262	49,314	49,670
2. Cadasari	28,025	33,265	42,877	42,877	43,463	43,705	44,053	44,779	47,229
3. Panjar	28,602	33,879	41,062	41,062	40,970	41,138	41,305	41,787	43,011
4. Cimanuk	37,997	43,883	49,895	49,895	50,340	50,604	51,054	51,332	51,699
5. Mandalawangi	20,293	23,574	29,244	29,244	30,326	30,987	31,184	31,738	32,032
6. Menes	25,904	31,363	37,573	37,573	37,565	38,928	39,337	40,324	40,446
7. Saketi	30,174	39,492	46,126	46,126	45,858	45,949	46,098	46,042	47,630
8. Bojong	27,373	36,059	44,219	44,219	45,016	44,136	44,076	44,284	43,672
9. Munjul	24,666	38,720	46,349	46,349	47,423	48,074	49,215	49,786	51,175
10. Labuan	27,217	35,941	45,357	45,357	45,794	46,069	46,444	46,607	47,367
11. Jiput	25,779	30,725	35,520	35,520	35,118	34,946	35,392	36,906	37,097
12. Pagelaran	38,744	55,334	68,042	68,042	65,021	65,380	65,665	66,879	67,091
13. Cibaliung	18,704	22,656	25,294	25,294	25,525	26,043	28,644	28,443	28,983
14. Cimanggu	21,878	27,158	32,061	32,061	32,267	32,462	35,896	36,697	34,124
15. Cigeulis	42,925	62,576	75,217	75,217	79,812	79,985	81,531	82,416	77,159
16. Cikeusik	11,115	23,621	27,269	27,269	27,187	27,241	27,807	27,910	28,209
Total	439,122	573,945	694,759	694,759	700,394	704,685	716,963	725,244	726,594
<Study Region>									
Total	1,159,363	1,436,412	1,803,928	1,803,886	1,820,614	1,831,280	1,856,869	1,881,899	1,893,125

Sources: Population Census 1961, 1971, 1980.

Kabupaten Serang Dalam Angka 1977-81, 1983, 1984 and Statistik Kabupaten Serang 1982.

Pandeglang Dalam Angka 1980, 1981, 1982 and Statistik Kabupaten Pandeglang 1983-1984.

Penduduk Jawa Barat Hasil Registrasi Penduduk Akhir Tahun 1985.

Table 5-3 POPULATION GROWTH RATE DURING THE PERIOD OF 1961-85 AND POPULATION PER DESA, SQUARE KILOMETER AND HOUSEHOLD BY KECAMATAN IN THE STUDY REGION IN 1985

Kecamatan	Average Growth Rate per Annum (%)				Desa	Area (km ²)	Household	Population		
	1961-71	1971-80	1980-85	/a				/Desa	/km ²	/Household
<Kabupaten Serang>										
1. Serang	2.63	3.78	0.54		20	90.65	21,061	5,728.00	1,263.76	5.44
2. Taktakan	1.32	2.91	3.09		12	61.49	6,600	2,729.17	532.61	4.32
3. Kasemen	2.93	3.68	0.03		11	60.56	9,804	3,857.18	700.61	4.33
4. Kramatwatu	2.16	3.11	0.58		13	48.94	6,070	2,272.62	603.68	4.87
5. Waringinkurung	1.53	2.23	2.08		11	65.86	4,611	2,113.00	352.92	5.04
6. Ciruas	1.52	1.49	1.30		14	37.62	8,939	2,541.00	67.54	3.98
7. Walantaka	2.09	2.75	0.73		16	47.89	7,286	2,255.81	753.66	4.95
8. Kragilan	2.24	1.64	1.28		14	45.63	7,523	2,644.07	811.24	4.92
9. Cikande	1.76	2.26	0.25		21	82.68	12,146	2,519.48	639.93	4.36
10. Pontang	1.46	1.38	0.70		15	74.31	7,786	2,302.13	464.70	4.44
11. Tirtayasa	0.77	2.21	0.89		23	90.64	11,312	2,246.26	570.00	4.57
12. Carengan	0.83	1.84	0.38		17	54.93	9,887	2,445.76	756.93	4.21
13. Pamarayan	1.27	2.47	1.59		17	73.44	9,133	2,621.82	606.90	4.88
14. Kopo	1.58	2.93	0.92		19	85.18	10,648	2,408.37	537.20	4.30
15. Cikeusal	1.56	2.63	0.25		25	98.93	12,702	2,954.84	620.35	4.83
16. Petir	0.58	2.95	1.09		20	94.77	12,218	2,719.20	573.85	4.45
17. Cilegon	2.16	4.52	0.45		16	42.19	10,682	3,277.50	1,242.95	4.91
18. Bojonegara	1.47	2.02	1.18		18	68.40	9,140	2,386.28	627.97	4.70
19. Pulomerak	2.78	4.82	1.69		24	92.80	21,509	4,073.83	1,053.58	4.55
20. Anyer	1.78	3.50	0.52		11	95.56	7,661	3,552.45	408.93	5.10
21. Cinangka	2.11	2.48	1.55		13	128.41	8,981	3,074.15	311.22	4.45
22. Mancak	1.42	2.67	1.39		13	94.01	5,691	2,114.77	292.44	4.83
23. Ciomas	1.75	2.31	0.70		10	50.54	5,173	2,317.30	458.51	4.48
24. Baros	1.57	1.84	2.49		13	39.35	5,761	2,194.85	725.11	4.95
25. Pabuaran	1.80	2.50	1.13		13	76.82	7,237	2,489.00	417.82	4.44
26. Padarincang	3.36	2.18	1.78		13	74.40	11,074	3,465.54	605.54	4.07
Total (or Average)	(1.78)	(2.87)	(1.01)		412	1,876.00	250,635	(2,831.39)	(621.82)	(4.65)
<Kabupaten Pandeglang>										
1. Pandeglang	1.85	3.50	0.41		9	35.90	8,785	5,520.56	1,383.98	5.66
2. Cadasari	1.73	2.86	1.95		27	63.62	9,019	1,749.22	742.86	5.24
3. Panjar	1.71	2.16	0.93		25	75.16	8,390	1,720.44	572.26	5.13
4. Cimanuk	1.45	1.44	0.71		25	61.22	9,531	2,067.96	844.48	5.42
5. Mandalawangi	1.51	2.42	1.84		15	50.41	6,596	2,135.47	635.43	4.86
6. Menes	1.93	2.03	1.48		18	44.05	8,655	2,247.00	918.18	4.67
7. Saketi	2.73	1.74	0.64		27	81.72	9,838	1,764.07	582.84	4.84
8. Bojong	2.79	2.92	-0.25		16	85.77	10,364	2,729.50	509.18	4.21
9. Munjul	4.61	2.02	2.00		27	252.30	12,081	1,895.37	202.83	4.24
10. Labuan	2.82	2.69	0.87		18	45.13	9,481	2,631.89	1,049.72	5.00
11. Jiput	1.77	1.62	0.87		21	60.37	8,777	1,766.52	614.49	4.23
12. Pagelaran	3.63	2.32	-0.28		33	150.23	16,305	2,033.06	446.59	4.11
13. Cibaliung	1.94	1.23	2.76		19	402.60	6,524	1,525.42	71.99	4.44
14. Cimanggu	2.19	1.86	1.26		19	503.22	7,687	1,796.00	67.81	4.44
15. Cigeulis	3.84	2.07	0.51		21	457.17	17,638	3,674.24	168.78	4.37
16. Cikeusik	7.83	1.61	0.63		14	242.33	6,155	2,014.93	116.41	4.58
Total (or Average)	(2.71)	(2.14)	(0.90)		334	2,611.20	155,826	(2,175.40)	(278.26)	(4.66)
<Study Region>										
Total (or Average)	(2.15)	(2.59)	(0.97)		746	4,487.20	406,431	(2,537.70)	(421.89)	(4.66)

Remark: /a Based on the resident registrations.

Sources: Population Census 1961, 1971, 1980.

Kabupaten Serang Dalam Angka 1977-81, 1983, 1984 and Statistik Kabupaten Serang 1982.

Pandeglang Dalam Angka 1980, 1981, 1982 and Statistik Kabupaten Pandeglang 1983-1984.

Penduduk Jawa Barat Hasil Registrasi Penduduk Akhir Tahun 1985.

Kecamatans of Cigeulis, Munjul, Cimanggu, Cibaliung and Cikeusik it was below 200 persons/km² and the growth rate was also low. A disparity in the population distribution is seen among Kecamatans within the study region as shown in Fig. 5-1.

In the study region, the population under 15 years of age accounts for 45.0% of the whole, (Kab. Serang for 44.4% and Kab. Pandeglang for 45.8%), which means that the average age is low compared with those of Indonesia (40.8%), West Java Province (42.2%) and DKI Jakarta (38.2%). By contrast, the ratio of population between 15 and 49 years of age is low, especially in the male group. This is because persons who belong to this group are working in other places, especially in DKI Jakarta, in order to get additional income.

2) Labour force and employment in the study region

In the study region, the population aged 10 and over was 1,215,634 in 1980, corresponding to 67.4% of the whole population. The economically active population was estimated to be some 552,000, using the ratio of economically active to the whole population aged 10 and over in West Java Province (45.4%) because of the lack of relevant data for the study region. The number of economically active population in the study region corresponds to nearly 30% of the total population.

Most of the population is occupied in agriculture. Although the share of the agricultural sector is now generally decreasing in Indonesia and West Java, this sector in the study region still has an extremely high share of industry as a whole as shown by the number of farm households which was 69.6% of total households in 1980. This figure is fairly high compared with 53.2% for West Java Province as shown in Table 5-4. From the point

of view of regional development, it is evident that the agriculture sector should be emphasized.

Table 5-4 NUMBER OF FARM HOUSEHOLDS IN WEST JAVA AND THE STUDY REGION IN 1980

	No. of Households		Ratio (1) / (2) x 100
	(1) Farm	(2) Total	
West Java	3,246,164	6,100,713	53.2
Study Region	260,991	375,139	69.6
Kab. Serang	150,568	231,022	65.2
Kab. Pandeglang	110,423	144,117	76.6

Source: Population census 1980.

3) Population projection in the study region

A population projection for the year of 2000 was carried out by BPS based on the census data. According to the projection, the population of the whole Indonesia, West Java Province and DKI Jakarta in the year of 2000 will be 222.75 million, 37.66 million and 11.02 million respectively. In the present study, the population for the year of 2000 is estimated based on these results. The population in the final target year of 2010 is projected based on the population pyramids in 2000 divided by age groups of five years, using the mortality rate and the fertility rates for women from 15 to 49 years old in Indonesia, West Java Province and DKI Jakarta.

The total population within the study region is estimated to be some 2.26 million in 1990, 2.49 million in 1995, 2.71 million in 2000, and 3.12 million in the target year of 2010, including 1.98 million in Kab. Serang and 1.14 million in Kab. Pandeglang as shown in Table 5-5. The population per km² will reach 692 persons in 2010. This figure is close to that of Java island in 1980.

Table 5-5 POPULATION PROJECTIONS IN INDONESIA, WEST JAVA,
DKI JAKARTA AND THE STUDY REGION, 1985-2000

(UNIT: X 10³)

	Census			Projection				Annual Growth Rate (%)					
	1980	1985	1990	1995	2000	2010	1980-1985	1985-1990	1990-1995	1995-2000	2000-2010		
(1) Indonesia	1,480,402	1,651,536	1,834,571	2,027,470	2,227,536	2,624,412	2.21	2.12	2.02	1.90	1.65		
(2) West Java	275,556	309,731	342,880	376,575	409,468	471,066	2.56	2.05	1.89	1.69	1.41		
(3) DKI Jakarta	65,280	78,904	93,812	110,169	127,954	166,510	3.86	3.52	3.27	3.04	2.67		
(4) Study Region	18,039	20,390	22,605	24,877	27,089	31,237	2.48	2.08	1.93	1.72	1.43		
Kab. Serang	11,092	12,629	14,087	15,583	17,053	19,829	2.63	2.21	2.04	1.82	1.52		
Kab. Pandeglang	6,948	7,761	8,518	9,294	10,036	11,408	2.24	1.88	1.76	1.55	1.29		

Source: JICA Study Team projections based on BPS, Proyeksi Penduduk Indonesia 1980-2000.

The disparity of the population distribution in the study region is increasing steadily. The population density of Kab. Pandeglang will be 433 persons/km² in 2010, while that of Kab. Serang will reach 1,057 persons/km² and will exceed that of West Java Province (1,017 persons/km²).

The population in the northwestern part of study region will grow more than expected due to the acceleration of industrialization in Cilegon and the improvements in infrastructures such as Jakarta-Merak highway. The average growth rates of population per annum in the study region will show a decreasing tendency. They are estimated to be 2.08% during the period of 1985-1990, 1.93% during the period of 1990-1995, 1.72% during the period of 1995-2000 and 1.43% during the period of 2000-2010. The average growth rates per annum in Kab. Serang will exceed those of Kab. Pandeglang and West Java Province.

In accordance with the decrease in mortality due to improvements in health services, the average age in the study region is rising. The population aged 10 and over in the study region is estimated to be some 1.64 million in 1990, 1.86 million in 1995, 2.07 million in 2000, and 2.48 million in the target year of 2010, corresponding to 79.4% of the whole population as shown in Table 5-6.

The economically active population in the study region is projected at some 825,000 in 1990, 947,000 in 1995, 1,073,000 in 2000 and 1,320,000 in 2010, using the ratio of projected economically active population to the whole population aged 10 and over in the Province [see Table 5-6]. However the school enrollment rate of the younger population will be higher in future, so projection of the labor force have been attempted in this study to cover the population aged 15 and over. The results are in fact close to the figures mentioned above. An estimated

labor force in the study region of giving around 1.30 million in the target year of 2010.

Table 5-6 LABOR FORCE PROJECTIONS IN THE STUDY REGION
IN 1990-2000

Unit: x 100

	1990	1995	2000	2010
(1) Total Population	22,605	24,877	27,089	31,237
(2) No. of Aged 10 & Over	16,429	18,613	20,745	24,802
(3) No. of Aged 15 & Over	13,537	15,576	17,721	21,615
(4) No. of Economically	8,247	9,474	10,725	13,195
(5) No. of Labor Force	8,014	9,237	10,526	12,883
(2)/(1) (%)	72.7	74.8	76.6	79.4
(3)/(1) (%)	59.9	62.6	65.4	69.2
(4)/(2) /a (%)	50.2	50.9	51.7	53.2
(5)/(3) /a (%)	59.2	59.3	59.4	59.6

Remark: /a The labor force project of West Java Province in Bancangan Rencana Tata Ruang Wilayah Dan Recana Pembangunan Propinsi Daerah Tingkat I Java Barat, Feb. 1986.

Source: JICA Study Team Projections

5.1.2 GRDP and regional income

1) GRDP in Banten region

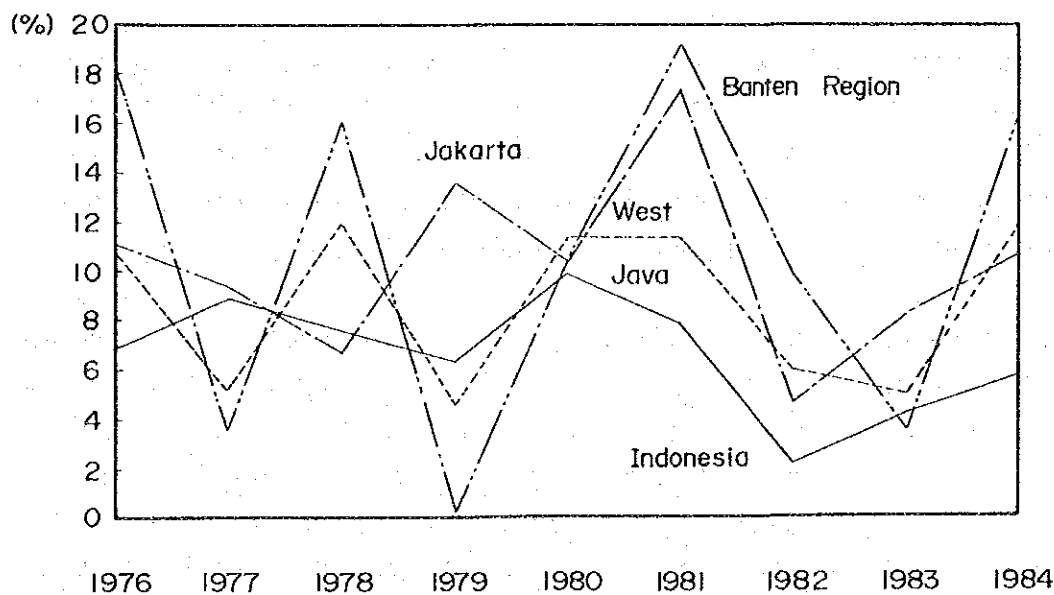
The time-series data on the Gross Regional Domestic Product (GRDP) of study region are not available. In this study, therefore, the GRDP of Banten region, comprising three Kabupatens of Serang, Pandeglang and Lebak, is analyzed by making use of available data.

According to the statistical office of West Java Province, the GRDPs of Banten region and West Java Province were respectively Rp.782 billion and 11,592 billion at current prices in 1984 [refer to Annex I(B), Tables I(A)-5 ~ 7], from which the GRDP of Banten region may be seen to have been 6.7% of that of West Java Province. This figure is very close to the ratio of population in the study region,

excluding Kab. Lebak, to the whole population in West Java Province, which implies that GRDP per capita of the study region is below the average of that of West Java Province.

The economic growth rate, the average GRDP growth rate of Banten region at constant 1975 prices, was 10.0% per annum during the period of 1978-84. This figure is higher than 8.5% for West Java Province and 6.1% for Indonesia, but slightly lower than 10.8% for DKI Jakarta. Such a high growth rate in Banten region seems to be due to the boosting effects of industrialization in the northwestern part of study region. Remarkable growth rates may be observed in the manufacturing sector (132.4%), especially in large and medium size industry (378.4%) in 1980, which in part is attributable to the inauguration of PT. Krakatau Steel, and to the construction sector which continues to grow [refer to Annex I(A), Table I(A)-6]. However, the economic growth rate of Banten region extremely fluctuates strongly from year to year, seemingly reflecting the fluctuation of agricultural production [see Fig. 5-2].

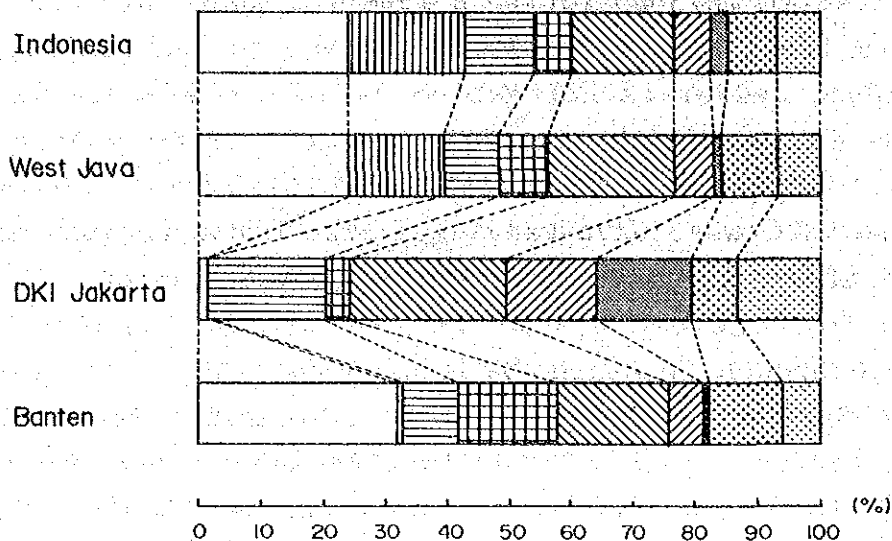
Fig. 5-2 GDP/GRDP GROWTH RATE OF INDONESIA, WEST JAVA, DKI JAKARTA AND BANTEN REGION, 1976 - 84



Source : BPS, Kantor Statistik Propinsi Jawa Barat & DKI Jakarta.

In both West Java Province and Banten region, the shares of the agricultural sector show a decreasing tendency; from 41.2% in 1973 to 23.1% in 1984 for West Java Province and from 58.7% in 1973 to 33.6% in 1984 for Banten region. The mining sector is not active because there are little oil/LNG in Banten region. The manufacturing sector had share of 10.2% of GRDP in 1984. This figure was larger than that for West Java Province. The construction sector is the third largest industry in Banten region. It is realistic, therefore, to attribute the recent high economic growth in Banten region to the industrialization around the Cilegon area. Public administration had the fourth largest share of GRDP in 1984 and as such seems to provide important employment opportunities for the local people.

Fig. 5-3 DISTRIBUTION OF GDP/GRDP BY INDUSTRIAL ORIGIN IN INDONESIA, WEST JAVA, DKI JAKARTA AND BANTEN REGION IN 1980



- Remark :
- Agriculture
 - Mining & Quarrying
 - Manufacturing
 - Construction
 - Trade
 - Utility, Transport & Communication
 - Banking & Finance
 - Public Administration
 - Other Services

Source: BPS, Kantor Statistik Propinsi Jawa Barat & DKI Jakarta

There is no data on GRDP expenditures in Banten region and even for West Java Province only for the years of 1973-79. There is a decreasing tendency for private consumption and an increasing tendency for domestic investment in the distribution of GRDP expenditures; from 69.7% in 1973 to 57.6% in 1979 for the former and from 15.9% in 1973 to 23.3% in 1979 for the latter. There is also a remarkable average annual growth rate in domestic investment of 19.5% during the years of 1973-79. It is reasonable to assume that to some extent the high economic growth in Banten

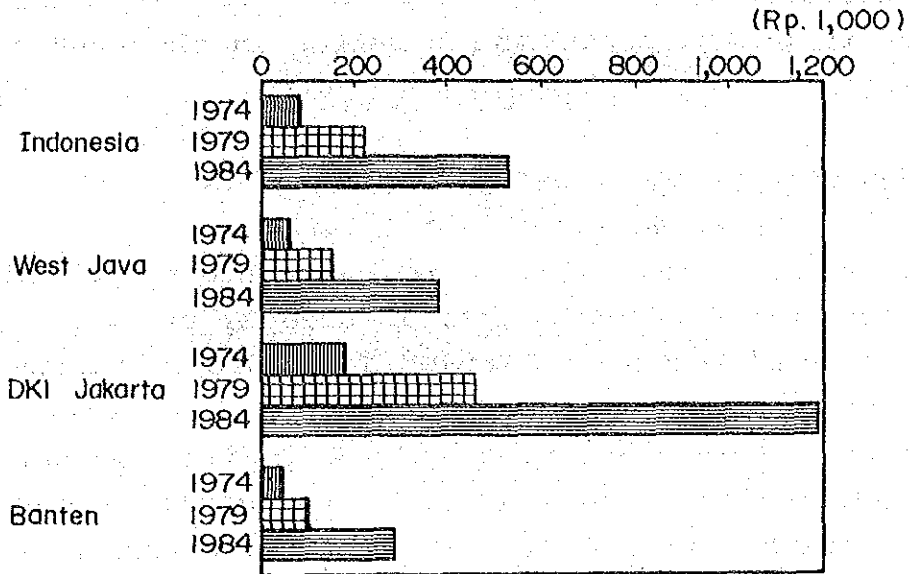
region was brought by the high investment in the manufacturing sector, which is reflected in the large share of the construction sector in the GRDP of Banten region.

2) Regional income in Banten region

There is reliable data on regional income. In this study, therefore GRDP per capita is used as proxy for regional income per capita. However, it should be emphasized that GRDP per capita is not actually the received money nor received income of the people in the region, because undistributed profit and the capital consumption allowances will be retained in the establishments, and income per capita will be lower than GRDP per capita.

The assumed regional income per capita, i.e. means GRDP per capita, of Indonesia, West Java Province, DKI Jakarta and Banten region were respectively Rp. 531,756, Rp. 380,238, Rp. 1,190,565 and Rp. 300,953 in 1984 at current prices. Thus the income per capita of Banten region was at the level of 56.6% of the national average, 79.1% of West Java Province average and only 25.3% of DKI Jakarta average.

Fig. 5-4 GDP/GRDP PER CAPITA OF INDONESIA, WEST JAVA, DKI JAKARTA AND BANTEN REGION IN 1974, 1979 AND 1984



Source: BPS, Kantor Statistik Propinsi Jawa Barat & DKI Jakarta

The average growth rates of income per capita for Banten region was 22.7% per annum during the years of 1978-84 at current prices. This was relatively high compared with 21.9% of the national average, 21.8% for West Java Province and 23.8% for DKI Jakarta. Such a high growth of income in Banten region was of course due to the rapid industrialization in the northwestern part of study region.

3) GRDP and regional income in the study region

Data concerning GRDP and regional income in the study region are available in the documents prepared by the Agrarian Offices. Although there are no time-series data, they are of great importance to this study. According to the economic division of BAPPEDA in West Java Province, the data on GRDP and regional income from the Agrarian Offices are, to a great extent, consistent with those from the Statistical Offices.

Table 5-7 shows GRDP in the study region based on data from both the Agrarian Offices and the Statistical Offices. GRDP in the study region is estimated at some Rp. 385 billion in 1982 at current prices. GRDPs in the three Kabupatens of Banten region, Serar Pandeglang and Lebak, are respectively estimated at some 151 billion, 99 billion and 68 billion in 1980 at current prices. Therefore, GRDP in Banten region was represented by Kab. Serang of 47.5%, Kab. Pandeglang of 31.1% and Kab. Lebak of 21.4%.

Table 5-7 GRDP IN THE STUDY REGION, BANTEN REGION AND WEST JAVA, 1975-82.

	1975	1976	1977	1978	1979	1980	1981	1982
<At Current Prices (Rp. 1,000)>								
(1) Study Region	na	na	na	139,395,982 /a	192,238,806 /a	250,594,772 /a	349,004,289 /a	384,618,339 /a
(2) Serang	32,902,645	40,879,632	40,101,032	76,114,651 /b	123,987,459 /b	151,308,796 /b	na	na
(3) Pandeglang	na	na	na	63,281,331	68,341,347	99,285,976	na	na
(4) Lebak	na	na	na	55,841,278	59,033,634	68,214,008	83,356,001	118,058,591
(5) Banten	114,293,530	142,293,830	159,353,340	195,237,260	251,272,440	318,808,780	432,360,290	502,676,930
(6) West Java	1,720,786,610	2,127,109,555	2,412,475,640	2,994,091,790	4,003,612,220	5,651,547,020	6,938,505,640	7,757,757,010
<Proportion (%)>								
(2)/(1)	-	-	-	54.60	64.50	60.38	-	-
(3)/(1)	-	-	-	45.40	35.55	39.62	-	-
(2)/(5)	28.79	28.73	25.16	38.99	49.34	47.46	-	-
(3)/(5)	-	-	-	32.41	27.20	31.14	-	-
(1)/(5)	-	-	-	71.40	76.51	78.60	80.72	76.51
(1)/(6)	-	-	-	4.66	4.80	4.43	5.03	4.96
(5)/(6)	6.64	6.69	6.61	6.52	6.28	5.64	6.23	6.48
<Ag Constant Price (Rp. 1,000)>								
Serang (1977)	33,973,143	46,752,004	40,101,032	na	na	na	na	na
Pandeglang (1980)	na	na	na	91,748,377	98,172,240	99,285,976	na	na
Lebak (1982)	na	na	na	67,502,705	69,455,460	75,276,358	90,397,166	118,058,591
Banten (1975)	114,293,530	135,287,820	140,136,490	162,761,360	164,652,090	181,972,210	217,133,610	238,594,300
West Java (1975)	1,720,786,610	1,905,814,020	2,005,226,140	2,245,391,380	2,364,548,160	2,633,934,750	2,933,717,730	3,109,124,890
<Growth Rate (%)>								
Serang	-	37.61	-14.23	-	-	-	-	-
Pandeglang	-	-	-	-	7.00	1.13	-	-
Lebak	-	-	-	-	2.89	8.38	20.09	30.60
Banten	4.02	18.37	3.58	16.14	1.16	10.52	19.32	9.88
West Java	6.85	10.75	5.22	11.98	5.31	11.39	11.38	5.98

Remark: /a = (5) - (4)
/b = (5) - (4) - (3)

Sources: Direktorat Jenderal Agraria Departemen Dalam Negeri, Direktorat Tata Guan Tabah,
- Kabupaten Serang Fakta dan Penjelasan (Publikasi No. 137) 1979,
- Kabupaten Pandeglang Fakta dan Penjelasan (Publikasi No. 225) 1982,
- Kabupaten Lebak Fakta dan Penjelasan (Publikasi No. 357) 1984,
Kantor Statistik Propinsi Jawa Barat and Bappeda Propinsi Jawa Barat,
- PDRB Tiap Wilayah Pembangunan Propinsi Jawa Barat 1973-1979,
- PDRB menurut Wilayah Pembangunan Propinsi Jawa Barat 1979-1983.

During the period of 1978-1980, the agricultural sector had the largest shares of GRDPs in both Kabupatens of Serang and Pandeglang and fluctuated considerably according to agricultural production. The primary sector, including agriculture, estate crops, forestry, livestock and fishery, had a share of 40.9% of GRDP in Kab. Serang in 1977, and of 58.0% in Kab. Pandeglang in 1980. The primary sector, especially food crop production is the mainstay of the study region. The share of the manufacturing/handicraft sector in Kab. Serang however rose suddenly. This may simply reflect industrialization in the northwestern part of the Kabupaten.

Incomes per capita in Kab. Serang and Pandeglang are based on household surveys carried out by the Agrarian Offices in the study region. Samples for the surveys were selected out of three Desas per Kecamatan and five households per Desa, that is, 15 samples per Kecamatan. According to the surveys, the average income per capita in Kab. Serang was Rp. 36,136 in 1977. The average income per capita in Kab. Pandeglang was Rp. 79,693 in 1980. The figures in this survey are lower than the GRDP per capita. This may be due to the fact that the profits/values generated by the large industries and establishments would not necessarily be redistributed in the study region.

There is severe disparity between Kecamatans. In Kab. Serang, the income per capita was Rp. 72,734, while that of Kec. Kopo was only 21,352 or 29.4% of that of Kec. Serang. In Kab. Pandeglang, the income per capita of Kec. Labuan was Rp. 161,090, while that of Kec. Cibaliung was Rp. 45,034 or 28.0% of that of Kec. Labuan. Further, there are large differentials among Kecamatans in the study region. It is difficult to compare the data of Kab. Serang with that of Kab. Pandeglang because the years when the surveys were carried out are different.

So this study makes a relative comparison of income per capita among Kecamatan in the study region based on the four classifications of income per capita; "Very Poor" for under 75% of poverty line, "Poor" for 75-125% of poverty line, "Almost Poor" for 125-200% of poverty line and "Not Poor" for over 200% of poverty line. Fig. 5-5 shows the different levels of income per capita by Kecamatan in the study region. The apparent disparity between the northern part and southern part in income per capita can be seen in this figure.

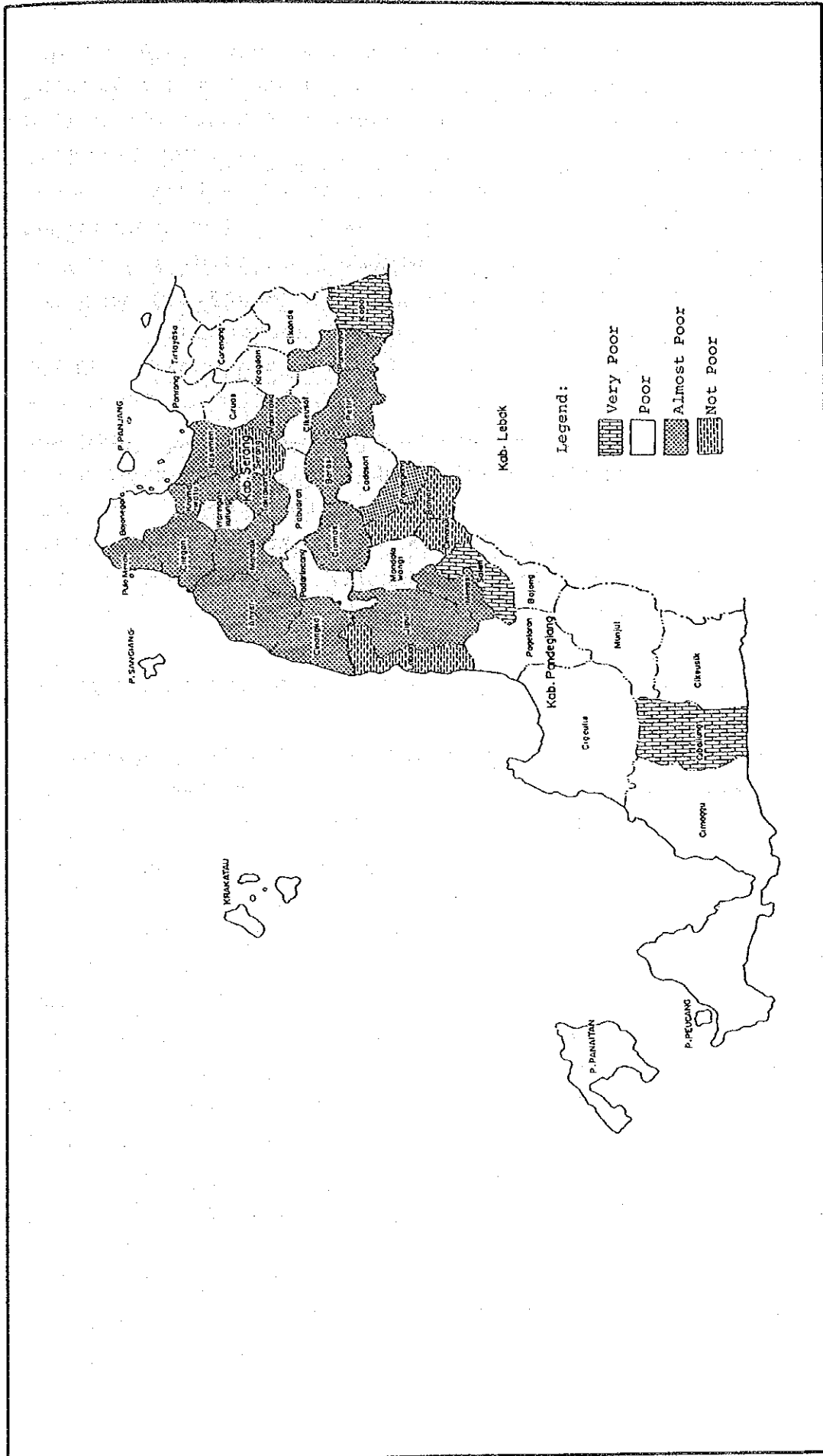


Fig. 5-5
LEVELS OF INCOME PER CAPITA
IN THE STUDY REGION

DEPARTMENT OF TOURISM, POST AND TELECOMMUNICATION
DIRECTORATE GENERAL OF TOURISM
JAPAN INTERNATIONAL COOPERATION AGENCY
THE STUDY ON THE REGIONAL DEVELOPMENT PROJECT
IN THE WESTERN PART OF JAVA



Sources : Kab. Serang Fakta dan Penjelasan (Publikasi No. 137) 1979;
Kab. Pandeglang Fakta dan Penjelasan (Publikasi No. 225)
1982, Direktorat Tata Cuna, Direktorat Jenderal Agraria
Departemen Dalam Negeri.

Non-scale

The disparities become even more apparent if income per capita can be compared at the Desa level. The following figure shows the ratios of the number of Desas classified as "Very Poor", "Poor", "Almost Poor" and "Not Poor" in the study region. In Kab. Serang, nearly a half of Desas were classified as "Almost Poor", while in Kab. Pandeglang almost a half of Desas belonged to the classification of "Very Poor". The low income in Kab. Pandeglang seems to reflect its heavy dependence on the agricultural sector. In Kab. Pandeglang, 87.1% of farm households, which represented 75.5% of the total households in 1983, get their income just from the agricultural sector. From the viewpoint of regional development, it is very important to provide other sources of income for them. In this respect, correction of the disparity between the northern and southern parts or "the North-South Problem" in the study region is one of the main objectives in this study.

4) GRDP and regional income projection in the study region

In projections of regional income, GRDP per capita has been used in this study because of the lack of data concerning regional income in the concept of national income.

In the medium term up to the year 1995, moderate growth is assumed due to the recession in the world petroleum market and low growth in the national economy. In this study, the average annual growth rates of the national economy are assumed to be 3.9% during the period of 1985-90 and 3.3% during the period of 1990-95, and the average annual (non-oil/LNG) growth rates to be 4.0% during the period of 1985-90 and 4.4% during the period of 1990-1995. These figures are applied following the projections of the World Bank in 1985. They are used in the low case projections, but in the low case projections oil prices are estimated at US\$31.9 per barrel by 1990 and US\$46.3 per barrel by

1995, which are higher than the average price of US\$28.7 per barrel in 1985, and still more that in 1986.

In the medium term for the year of 1995, the GDP/GRDP are projected on the basis of average annual growth rates during the period of 1978-84; 6.1% for Indonesia, 8.5% for West Java Province, 10.8% for DKI Jakarta, 10.0% for Banten region and 10.8% for the study region. The average annual growth rates for the year of 1995 were set with the following hypotheses:

- (1) The GRDP of West Java Province will grow in accordance with GDP of Indonesia.
- (2) The GRDP of DKI Jakarta will grow in accordance with non-oil/LNG GDP of Indonesia.
- (3) The GRDP of Banten region will grow in accordance with non-oil/LNG GRDP of West Java Province.
- (4) The GRDP of study region will grow in accordance with GRDP of Banten Region.

Table 5-8 shows the projections of GDP/GRDP per capita at constant 1984 prices in 1990 and 1995, and the assumed average annual growth rates during the years of 1985-90 and 1990-1995 for Indonesia, West Java Province, DKI Jakarta, Banten region and the study region. The GRDP per capita in the study region are estimated at some Rp. 398,000 in 1990 and Rp. 526,000 in 1995 at constant 1984 prices.

The GRDP per capita in the study region is expected to reach at the level of West Java Province in 1995. The GRDP per capita in Kab. Serang is expected to reach the level of West Java Province in the first half of 1990s and reach the level of the national average by 2000, while that in Kab. Pandeglang is to reach the level of West Java

Table 5-8 MEDIUM TERM PROSPECTS: GDP/GRDP AND GDP/GRDP PER CAPITA PROJECTIONS IN INDONESIA, WEST JAVA, DKI JAKARTA, BANTEN AND THE STUDY REGION IN 1990 AND 1995

	Average Annual Growth Rate (%)		Assumed Average Annual Growth Rate (%)		GDP/GRDP Per Capita at Constant 1984 Prices (Rp.)	
	1978-84	1985-90	1990-95	1984	1990	1995
(1) Indonesia <u>a</u>	6.1 <u>b</u>	3.9	3.3	531,756 <u>b</u>	589,148	627,056
Non-Oil/LNG GDP		4.0	4.4			
(2) West Java	8.5 <u>b</u>	5.4	4.6	380,238 <u>b</u>	463,531	528,474
Non-Oil/LNG GRDP		5.9	6.5			
(3) DKI Jakarta	10.8 <u>b</u>	7.1	7.8	1,190,565 <u>b</u>	1,454,805	1,803,424
(4) Banten Region	10.0 <u>b</u>	6.5	7.2	289,245 <u>b</u>	367,118	468,746
(5) Study Region	10.8 <u>c</u>	7.0	7.8	300,953 <u>c</u>	397,564	525,905
Serang				313,827 <u>c</u>	411,425	541,442
Pandeglang				280,087 <u>c</u>	374,640	499,853

Remarks: a World Bank projections; Indonesia: Policies for Growth and Employment, April 1985.

b Actual.

c JICA Study Team estimate based on 1978-82 (see Table 6-21).

Source: JICA Study Team projections

Province in the second half of 1990s. The economy in the study region is expected to grow rapidly, but the disparity between two Kabupatens of Serang and Pandeglang may be widening in future.

The GRDP per capita is expected to exceed the level of West Java Province and reach the level of the national average around 2000. In the long term development scenario in the study region for the target year of 2010, the following three cases are presumed on the assumption that after 1995 the national economy will continue to grow at the rate assumed for the first half of 1990s.

Case I : The GRDP per capita of the study region will maintain the level of 30% of DKI Jakarta.

Case II : The GRDP per capita of study region will reach the level of 40% of DKI Jakarta.

Case III : The GRDP per capita of study region will reach the level of 50% of DKI Jakarta.

At present, the GRDP per capita of West Java Province is about 30% of DKI Jakarta average and the national average is about 50% of DKI Jakarta average. The GRDP per capita of the study region is estimated at the level of 29.2% of DKI Jakarta average in 1995, and some Rp. 1,292,000 at constant 1984 prices in 2010, if the economy grows at the rate of 7.8% per annum, to bring it up to the level of 35.1% of DKI Jakarta average.

The average annual growth rates required to accomplish the targets for the year of 2010 are 6.6% for Case I, 8.7% for Case II and 10.3% for Case III. The economic background for Case I assumes that investments in the leading manufacturing industries are gradually reduced, or that big projects such as the Jakarta-Merak highway are not

continued and that the public investments are gradually reduced.

The annual growth rate of 10.3% for Case III is very close to that of the study region during the year of 1978-84, when investments in heavy industries in Cilegon were very active. It will be difficult to achieve the target of Case III unless active investments are continued. Therefore, a growth rate of 6.6-8.7% for Case I and Case II is more probable in the long term development scenario for the target year of 2010, when the GRDP per capita in the study region is to be at least some Rp. 1,104,000, or some 1,473,000 at constant 1984 prices if investments are actively continued.

5.2 Tourism Demand

As seen in Annex I(E), Chapter 1, there are several methodologies for the projection of tourism demand. The Study Team adopted the three-step approach comprising generation model, distribution model and assignment model, as shown in Fig. 5-6.

It is difficult, however, to carry out a complete logical study due to lack of data. Therefore, the Study Team made a rather practical projection.

Fig. 5-6 APPROACH TO TOURISM DEMAND PROJECTION

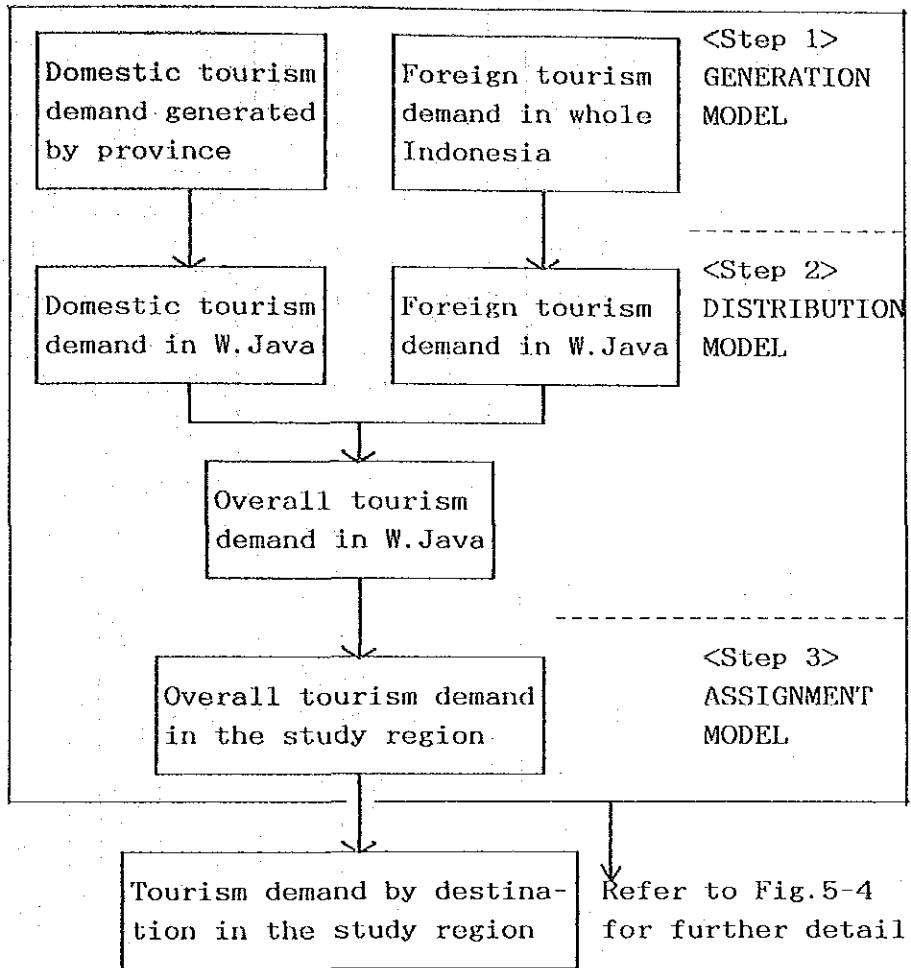
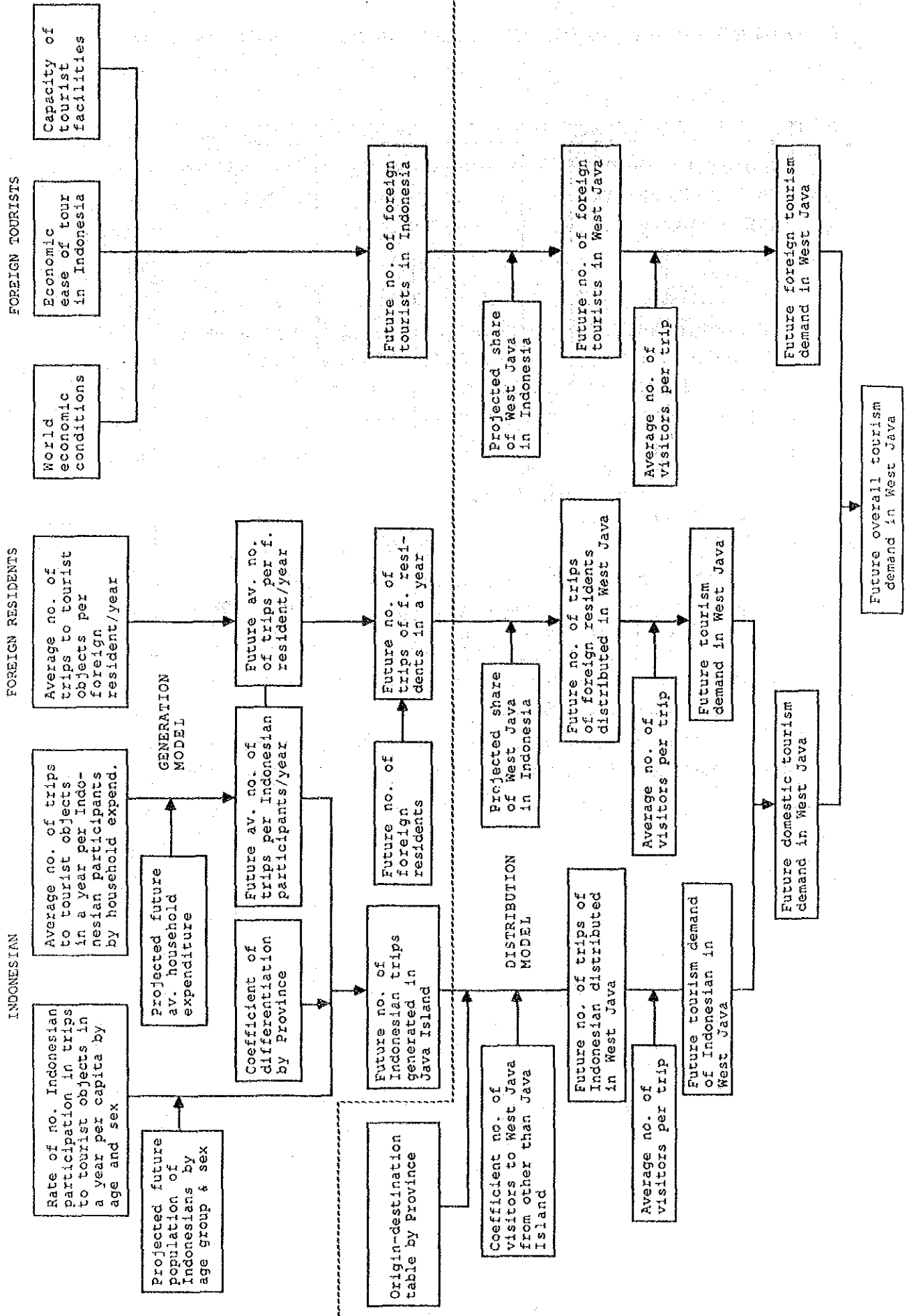


Fig. 5-7 DETAILED FLOW CHART OF TOURISM DEMAND PROJECTION



5.2.1 Tourism demand generated by Province

1) Tourism of Indonesian

(1) Forecast model

The factors considered to be related with the numbers of trips of domestic people are as follows:

- Population by sex and age group
- Average number of trips by sex and age group
- Income level

According to the above assumption, the following formula was prepared for generation model for domestic tourism projection;

$$NDTP(t) = 2 \times \sum_{i=1}^5 \sum_{j=1}^2 (p_{ij}(t) PTR_{ij}() \times NT(t) \times DP)$$

where,

- NDT: Number of trips of Indonesian per annum
- P_{ij}: Population by age group and sex
- PTR: Percentage of participants in trips to tourist objects in a year
- NT: Average number of trips per participant per annum
- D: Coefficient of differentiation in number of trips per participant by province
- i: Age group (5 groups)
- j: Sex
- t: Year
- p: Province

(2) Estimation of future explanatory variables

a. Population by sex and age group

Future population was prepared according to both BSD and JICA Study Team projection as follows [refer to Annex I(E)]:

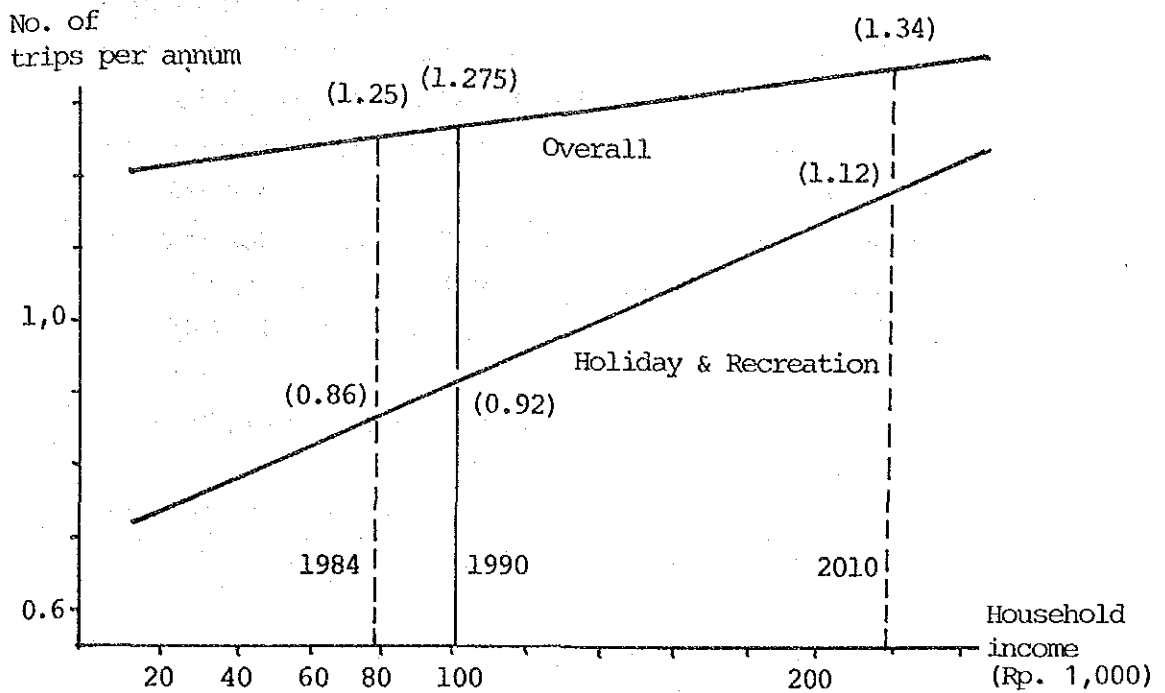
Up to 2000 BSD Projection
2001 - 2010 JICA Study Team Projection ^{/*}

b. Average number of trips

The average number of trips is considered to be related with the growth of household income. Based on the result of the domestic tourism survey by BPS and assuming that average household income will grow at the rate of 4% per annum, the average number of trips per participant is expected to increase as shown in Fig. 5-8.

Note: ^{/*} To project in the same method as that of BSD assuming that the mortality rate will decline on the basis of the tendency between 1985 and 2000.

Fig. 5-8 NUMBER OF DOMESTIC TRIPS PER PARTICIPANT AND HOUSEHOLD EXPENDITURE



c. Tourism demand generated by Province

Based on the aforementioned formula and data, the generation of tourism demand is projected by Province. Although the projection shall be basically made for whole Provinces in Indonesia, it can be said that there is no need to project demand in other than 5 Provinces in Java Island because of the scarcity of visitor arrivals to West Java as pointed out in Section 3.3.1.

Table 5-9 shows the result of the projection of tourism demand. The figures in this Table are adjusted by the coefficient for the inclusion of trips to tourist objects for other purpose than vacation and recreation.

Table 5-9 PROJECTED NUMBER OF DOMESTIC TRIPS TO TOURIST OBJECTS GENERATED BY PROVINCE

(1,000 trips)

Area	1984*	2010
Whole Indonesia	28,607	57,925
Whole Java Island	10,027	36,060
DKI Jakarta	2,309	5,938
West Java	6,913	12,709
Central Java	2,631	4,084
DI Yogyakarta	1,853	3,264
East Java	6,350	10,065

* Source: Survey on Domestic Tourism, 1984, BPS

2) Tourism of foreign residents

According to the foregoing study in 3.2.1-2)-(2) [see pages 3-28 ~ 29], the average number of trips to tourist objects is figured out to be 0.35 times per annum in 1984. Furthermore, number of foreign residents in whole Indonesia is estimated to be 920 thousand in 1981 [Source: BPS].

The generation of tourism demand of foreign residents can be projected as follows, assuming that the growth rate of both the average number of trips per annum and the number of foreign residents in Indonesia during 1984-2010 will be 1.5 time.

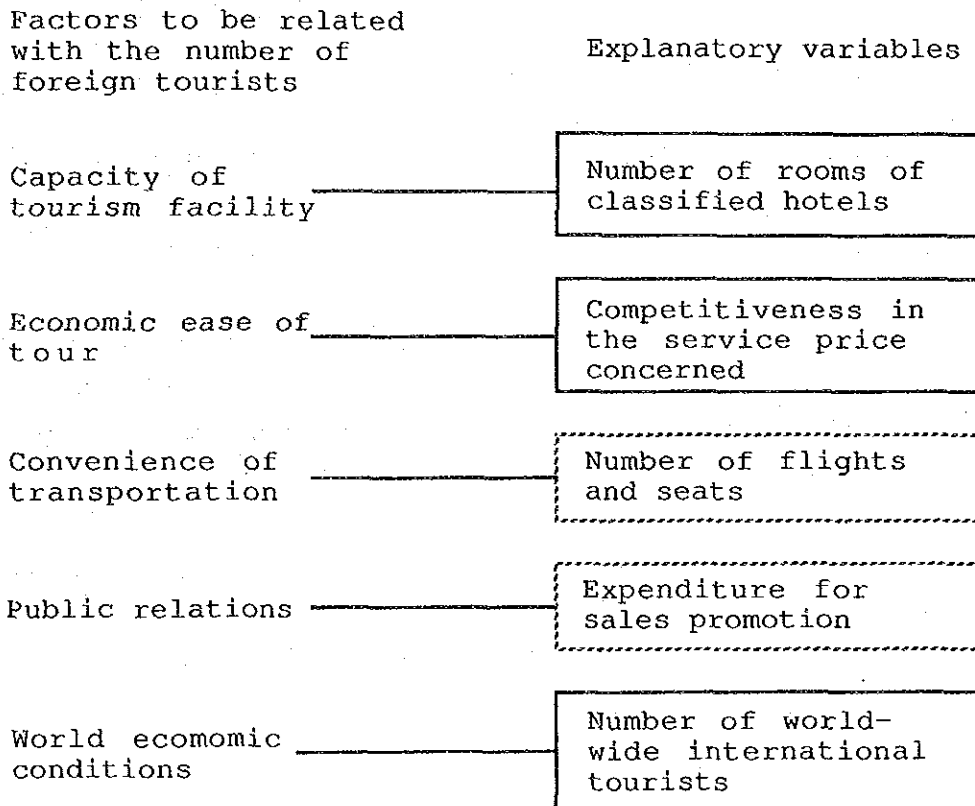
$$\begin{array}{l} \text{No. of foreign} \\ \text{residents in 2010} \\ 920 \times 1.5 \end{array} \quad \times \quad \begin{array}{l} \text{Average No. of} \\ \text{trips per annum} \\ 0.35 \times 1.5 \end{array} = 724 \text{ thousand-trips}$$

3) Tourism of incoming foreign tourists

(1) Forecast model

It is obvious that the number of incoming foreign tourists in Indonesia is closely related with not only domestic conditions but also international ones. Although five factors were conceived to be taken into consideration, two of them were eliminated due to the lack of data as presented in Fig. 5-9.

Fig. 5-9 EXPLANATORY VARIABLES FOR FOREIGN TOURIST PROJECTION



Notes: to be adopted
 not to be adopted
because of the lack of effective data

Though regression analysis on data during 1979-1985, the following formula was obtained;

$$NFV = -418.7 + 1.9334 \times INT + 0.1258 \text{ EXPT} + 0.02075 \text{ NOR}$$

Where:

NFV: Number of foreign visitors in Indonesia

INT: Number of worldwide international tourists

EXPT: Competitiveness of the service prices concerned

NOR: Number of rooms of the classified hotels in 10 Province

$$R^2 \text{ (Adjusted degree of freedom)} = 0.957$$

(2) Estimation of future explanatory variables

a. Competitiveness in the service prices concerned

Most of the service charges concerned with international tourism are determined on a US dollar basis. Therefore, the exchange rate of the Rupiah to US dollar must be considered.

From the study of past trends the following formula was obtained through regression analysis from which competitiveness in 2010 was estimated to be 3.68 times as much as that in 1984.

$$\text{EXPT} = 151.3454 \times (t - 1975) + 104.3363$$

where:

EXPT: Competitiveness of service prices concerned

t: Year

b. Number of rooms of classified hotels in 10 Provinces

Based on the past trends, the future number of hotel rooms is estimated to reach the levels shown by the given years, in Table 5-10.

Table 5-10 PROJECTED NUMBER OF ROOMS IN THE CLASSIFIED HOTELS OF 10 PROVINCES

Year	Number of Rooms	Remarks
1985	20,249	} increase at annual growth rate of 3% (1979-1985: 3.2%)
1990	29,000	
2000	35,000	} increase at annual growth rate of 2%
2010	39,000	

Source: DGT (No. of rooms in 1985)

c. Number of worldwide international tourists

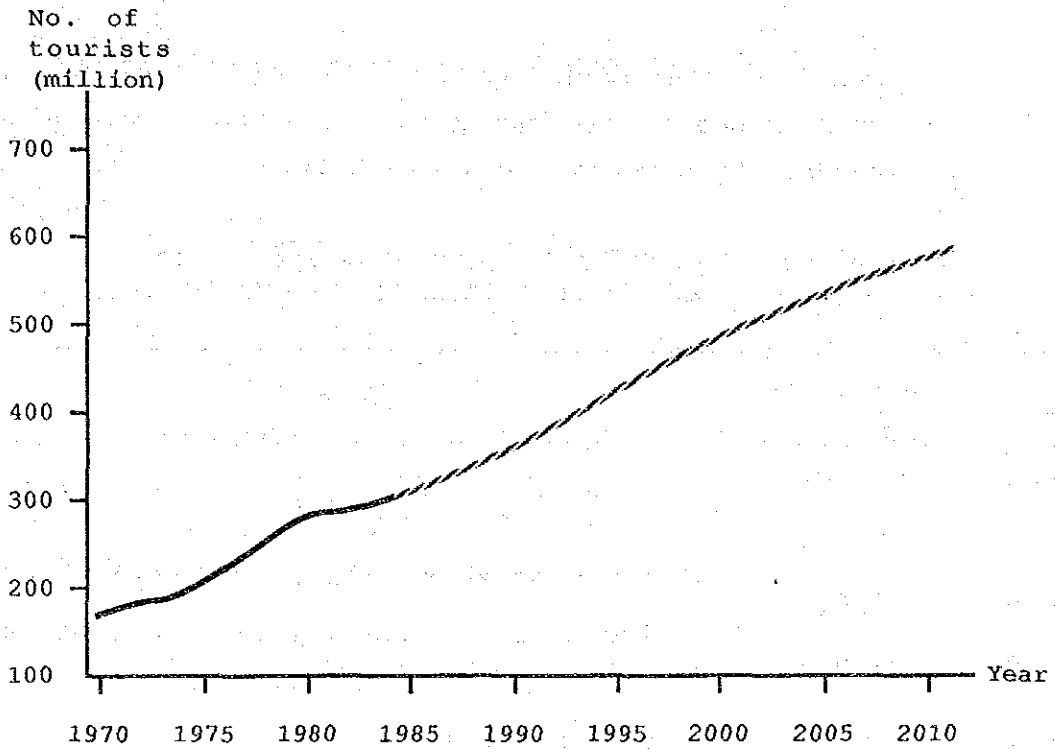
Number of those tourists was forecasted according to the logistic curve based on time series analysis.

$$Y = \frac{798.278}{1 + 3.660 \exp(-0.05903t)}$$

Y = Number of worldwide international tourists

t = Year (1970 = 1)

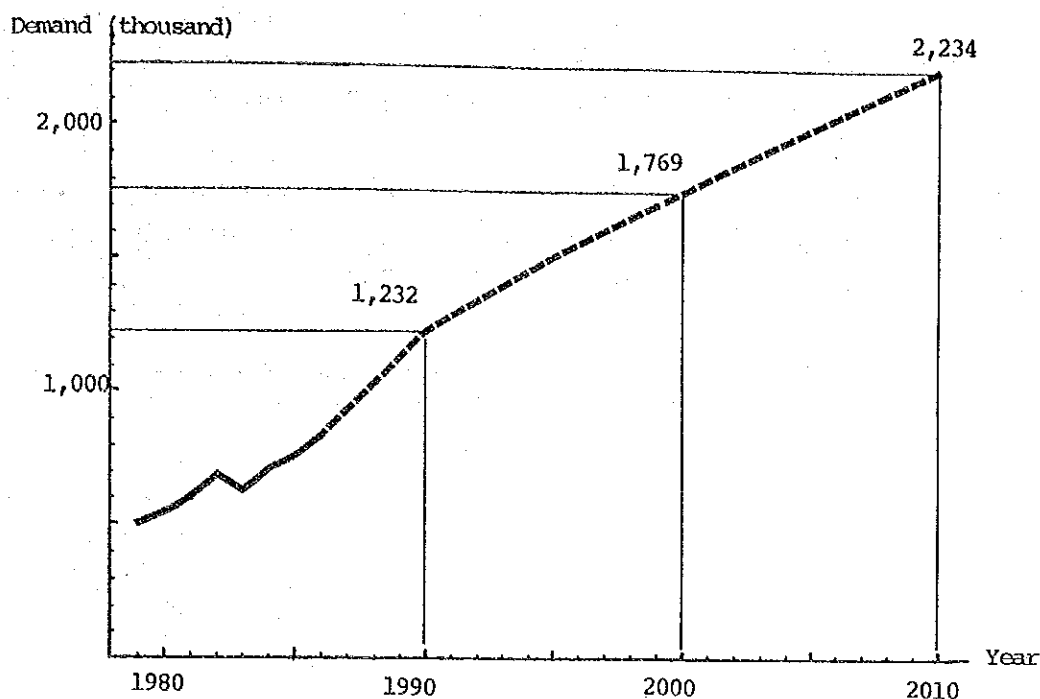
Fig. 5-10 TREND OF WORLDWIDE INTERNATIONAL TOURISM



(3) Number of foreign tourists

Based on the aforementioned formula and data, the future number of foreign tourists in the whole of Indonesia is anticipated to reach 1.8 million in 2000 and 2.2 million in 2010 as shown in Fig. 5-11.

Fig. 5-11 PROJECTED DEMAND OF FOREIGN TOURISTS



5.2.2 Tourism demand in West Java

1) Tourism demand of Indonesian

The distribution pattern of tourism demand generated by Province is much affected by conditions of accessibility. According to information obtained, some intra-Province highways such as Jakarta-Merak Highway and Jakarta-Cikampek Highway are expected to be constructed by 2000. On the other hand, no inter-Province highways are planned before 2010.

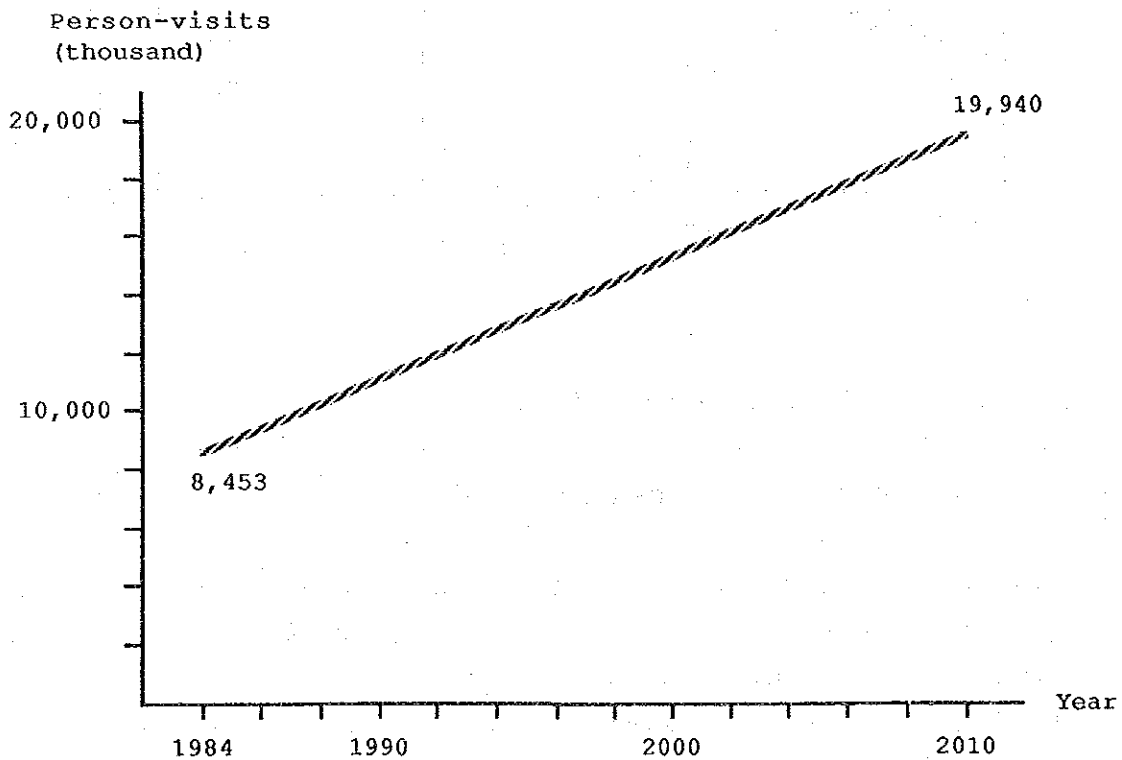
Therefore, the existing origin and destination pattern will not be much changed. The Study Team projected the distribution of the tourism demand by Province based on the existing pattern (refer to Table 3-17).

In this projection, the following were taken into consideration in the form of coefficients:

- Multiple visits in one trip
- Visitor arrivals from other than Java Island

The future Indonesian tourism demand distributed in West Java is expected to increase to 19,940 thousand person-visits in 2010 as presented in Fig. 5-12.

Fig. 5-12 PROJECTED INDONESIAN TOURISM DEMAND DISTRIBUTED IN WEST JAVA



2) Tourism demand of foreign residents

Since there are no available data concerning the distribution pattern of tourism demand of foreign residents, the Study Team adopted the share of West Java in the whole of Indonesia in the number of person-visits of incoming foreign tourists.

Assuming that the above share will increase from 19.6% in 1984 to 25.0% in 2010 and taking into consideration the multiple visits in one trip, the tourism demand distributed in West Java in 2010 was forecast to amount to 288 thousand person-visits as follows:

Tourism demand in whole Indonesia (see Page 5-32)	Average No. of visits per trip	Share	
724 x 1.3	x (1.2 ~ 1.25)	x 0.25	= 288 thousand person-visits

3) Tourism demand of incoming foreign tourists

The distribution projection of incoming foreign tourists in West Java was made by the same method as that for foreign residents. According to the result of the projection it will reach 889 thousand person-visits in 2010.

Tourism demand in whole Indonesia /1	Average No. of visits per trip	Share	
2,234 x 1.3	x (1.2 ~ 1.25)	x 0.25	= 889 thousand person-visits

Consequently, the overall tourism demand distributed in West Java is expected to reach 21,117 thousand person-visits in 2010 comprising 20,228 thousand person-visits of domestic tourists and 889 thousand person-visits of foreign tourists.

- Indonesian	19,940	} 20,228 thousand person visits
- Foreign residents	288	
- Foreign tourists	889	} 1,177

Note: /1 See Page 5-37.

5.2.3 Tourism demand in the study region

1) Overall tourism demand in the whole region

According to the assumed existing tourism demand in West Java and the modified existing tourism demand in the study region, it is pointed out that the number of visitors in the study region accounted for 20.6% of that in West Java in 1984.

This share of the study region is easily conceived to grow in future owing to the implementation of tourism projects and the improvement of accessibility.

In this context, the Study Team assumed the future share of visitors in West Java by activity referring to the existing figures.

Based on the result of the projection presented in Table 5-11, the number of visitors in whole region is forecast to amount to 5,420 thousand person-visits in 2010, which will occupy 25.7% of those of West Java.

Indonesian	Foreigner
(5,030 + 390)	(19,940 + 1,177)
Study region	W. Java

$$= 0.256$$

Table 5-11 TOTAL PERSON-VISITS BY ACTIVITY IN THE STUDY REGION IN 2010

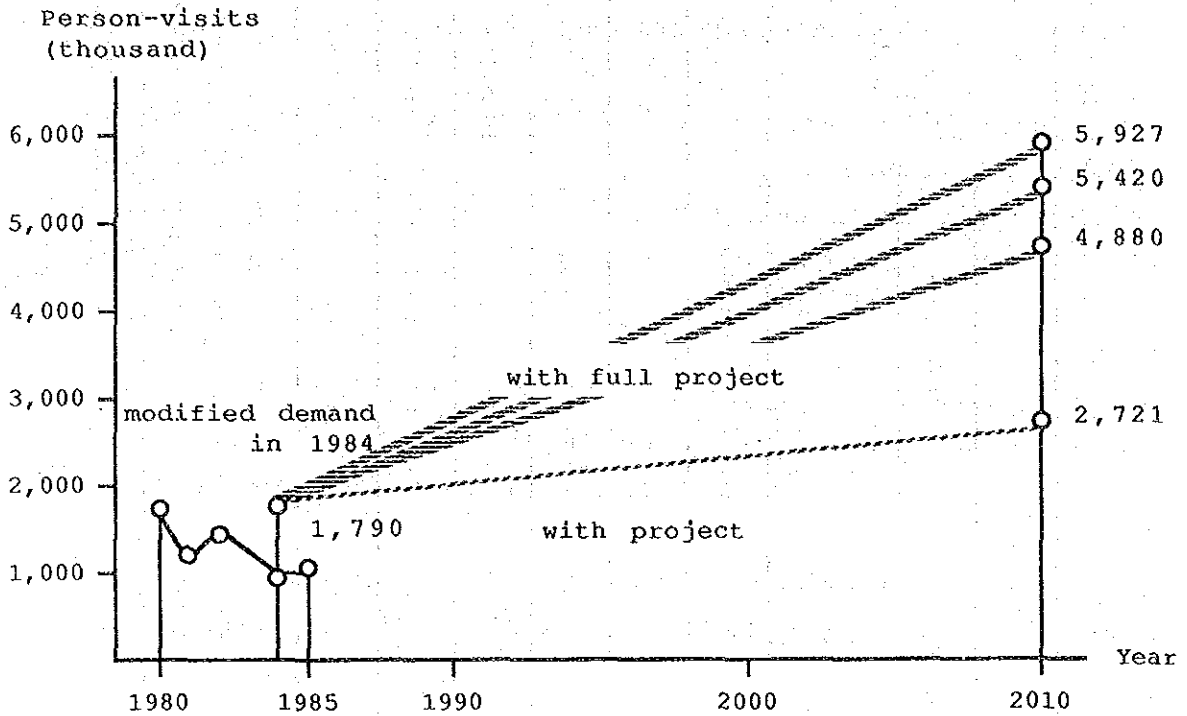
(1,000 Person-visits, if not specified)

		Indonesian Visitors				Foreign Visitors				Total Demand in Study Region
		West Java		Study Region		West Java		Study Region		
Distribution by Activity (1984-2010)	/2 %	No of Person Visits by Activity (1984-2010)	/2 Share within West Java (1984-2010) %	/1 No. of Person Visits by Activity (1984-2010)	Distribution by Activity (1984-2010)	/2 %	No. of Person Visits by Activity (1984-2010)	/1 No. of Person Visits by Activity (1984-2010)	/2 Share within West Java (1984-2010) %	Total Demand in Study Region
Beach	17~ 20	3,988	13-15-25	598- 998 (800)	55-60		705	247-317 (280)	14-35-45	845-1315 (1080)
Marine	4~ 10	1,994	1-30-36	598- 718 (660)	5- 5		59	27- 32 (30)	15-45-55	625- 750 (690)
Nature	4~ 5	997	1- 1- 3	10- 30 (20)	5~ 5		59	15- 21 (20)	15-25-35	25- 51 (40)
Pilgrimage	31-28	5,583	52-48-50	2680-2792 (2740)	-		-		-	2680-2792 (2740)
Culture	9~ 10	1,994	10-12-18	239- 359 (300)	15-15		177	14- 21 (20)	3~ 8-12	253- 380 (320)
Outdoor Recreation	15	2,991	8-10-14	299- 420 (360)	15-10		118	18- 30 (20)	6~15-25	317- 450 (380)
Others	20~ 12	2,393	2- 5- 7	120- 168 (150)	5~ 5		59	15- 21 (20)	0-25-35	135- 189 (170)
Total	10	19,940		4544-5485 (5030)	100		1,177	336-442 (390)		4880-5927 (5420)

Remarks: /1 Figures in parenthesis shows rounded mean values.

/2 Refer to Annex I, Table I(E)-2.

Fig. 5-13 FUTURE TOURISM TREND IN THE STUDY REGION



2) Tourism demand by destination

The tourism demand is considered to expand with not only the improvement of market conditions such as household income, vacations, and accessibility, but also tourism development and improved facilities.

In this connection, the Study Team took into consideration the establishment of additional stop-over places and the construction of new tourist attractions in the demand projection by destination.

The demand by destination and by activity in the study region has been forecast by allocating the total demand by various activities at each destination. It was assumed that the demand will grow by 194% in year 2010 according to the following formula:

Natural growth ^{/1}	Increase of average No. of stop-over places per trip	Growth ^{/4} induced by new projects
$(1 + 0.02 \times 26) \times 1.50^{/2}/1.41^{/3} \times 1.2 \times 100 = 193.8\%$		

Notes:

^{/1}: 60% of average growth rate during 1984 to 2010 in West Java

$$\frac{2010}{((19,940+1,177)/(8,412+261)) \times 0.6 - 1} / 26 \div 0.02$$

^{/2}: Average No. of stop-over places per trip in the study region in 2010 (Projection of JICA Study Team)

$$\frac{\text{Average in Indonesia (BPS)}}{1.3} \times \frac{\text{coefficient due to major pilgrimage}}{1.07 \sim 1.10} \div 1.41$$

^{/3}: Average No. of stop-over places per trip in the study region in 1984 (Projection of JICA Study Team)

^{/4}: Projection of JICA Study Team

In expectation of increasing in the number of "Beach Holiday" vacationers in the future, it is expected that the existing beaches will expand their facilities to accommodate a greater intake of tourists. It is estimated that such demand will increase to some extent.

The rest of the total demand is allocated to new projects according to their characteristics after deducting the number of visitors to existing destinations.

Based on the manner as presented in Annex I(E), the tourism demand by destination was projected as shown in Table 5-12.

Table 5-12 TOURISM DEMAND BY DESTINATION AND ACTIVITY IN 2010

(1,000 Person-visits)

	Beach Holiday	Marine Tourism	Nature Observ.	Pilgri- mage	Cultu- re	Outdo- or Rec.	Others	Total
S e r a n g	Tropical Marine Park	682						682
	Kur Park					19	114	133
	Old Banten Site			8	2,280	302		2,590
	Other Existing Destination	463	6	2		164		635
	Sub Total	463	688	10	2,280	302	183	114
P a n d e g l a n g	Beach Resort	415				18	74	507
	Ujung Kulon & Krakatau			30				30
	Country Park					92	56	148
	Other Existing Destination	202	2		460	31		695
	Sub Total	617	2	30	460	18	197	56
Grand Total	1,080	690	40	2,740	320	380	170	5,420

Furthermore, according to the estimation by the study team, the existing tourism demand can be classified into the followings (refer to Table I(E)-2 and Table 3-34):

Type of nationality

- Kab. Serang: Indonesian 99.2%
Foreigners 0.8%
- Kab. Pandeglang Indonesian 94.5%
Foreigners 5.5%

Type of stay

- Kab. Serang	Overnight use	2.8%
	Day use	97.2%
- Kab. Pandeglang	Overnight use	6.6%
	Day use	93.4%

Considering the implementation of the proposed projects, the above-mentioned proportion of visitors by category is anticipated to be changed as shown in Table 5-13.

Table 5-13 TOURISM DEMAND BY CATEGORY IN 2010

(1,000 Person-visits)

		Demand by Nationality		Demand by Type of Stay	
		Domestic	Foreign	Day-use	Overnight
S e r a n g	Tropical Marine Park	652	30	682	-
	Kur Park	114	19	89	44
	Old Banten Site	2,580	10	2,590	-
	Other Existing Destination	609	26	572	63
	Sub Total	3,955	85	3,933	107
P a n d e g l a n g	Beach Resort	254	253	338	169
	Ujung Kulon & Krakatau	14	16	25	5
	Country Park	143	5	137	11
	Other Existing Destination	664	31	640	55
	Sub Total	1,075	305	1,140	240
Grand Total		5,030	390	5,073	347

CHAPTER 6

MASTER PLAN FOR
LONG-RANGE DEVELOPMENT

CHAPTER 6 MASTER PLAN FOR LONG-RANGE DEVELOPMENT

6.1 Development Concept

In formulating tourism projects, it will be of the foremost importance to take into account the aforementioned objectives as well as technical possibility with regard to tourism development.

Furthermore, the basic policy of the Indonesian Government in tourism and opinions of members of the Steering Committee are reflected in the formulation of the proposed tourism projects.

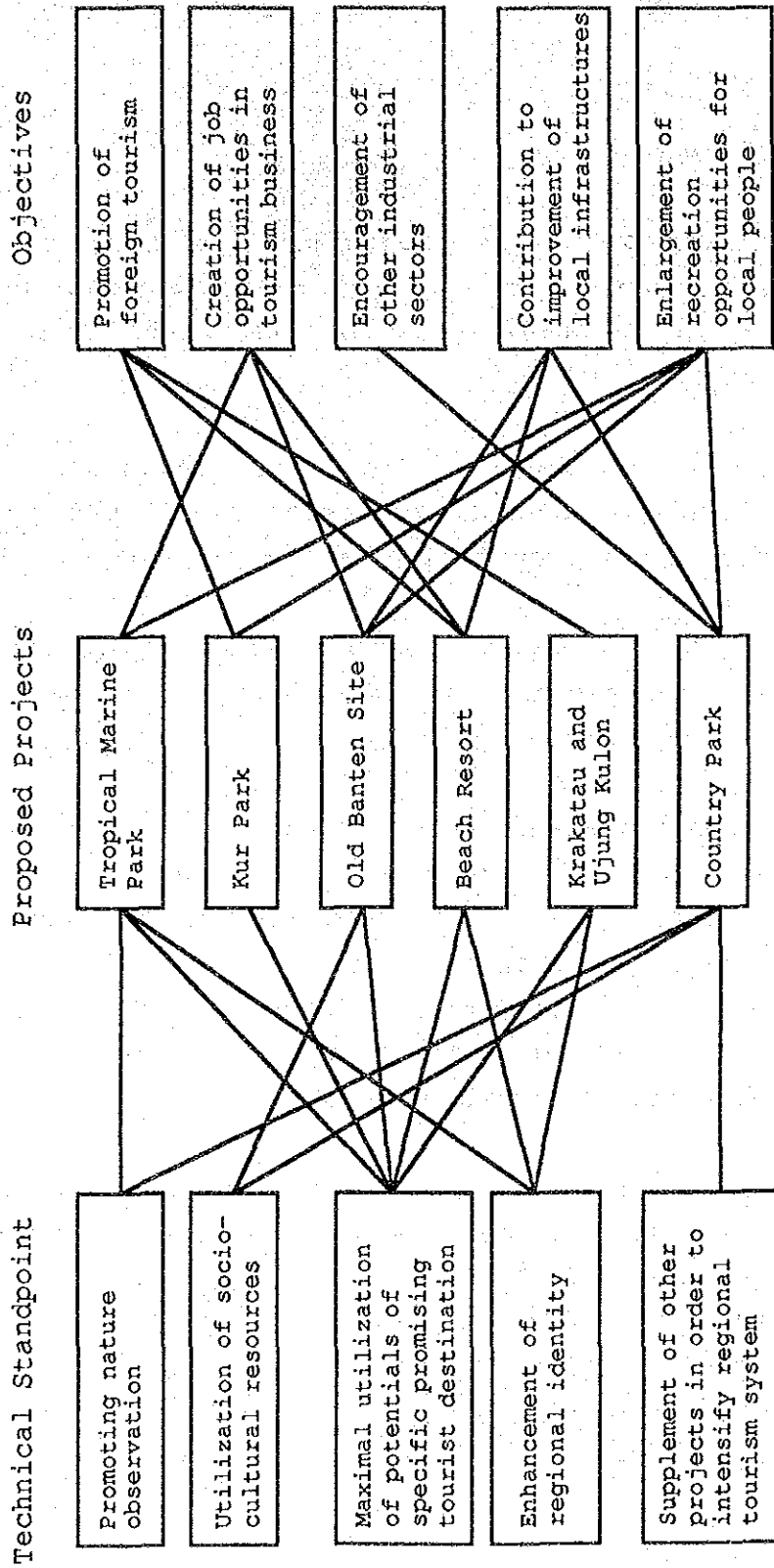
As for technical aspect, based on the nature and conditions of tourist resources in the study region, the following aspects should be pursued:

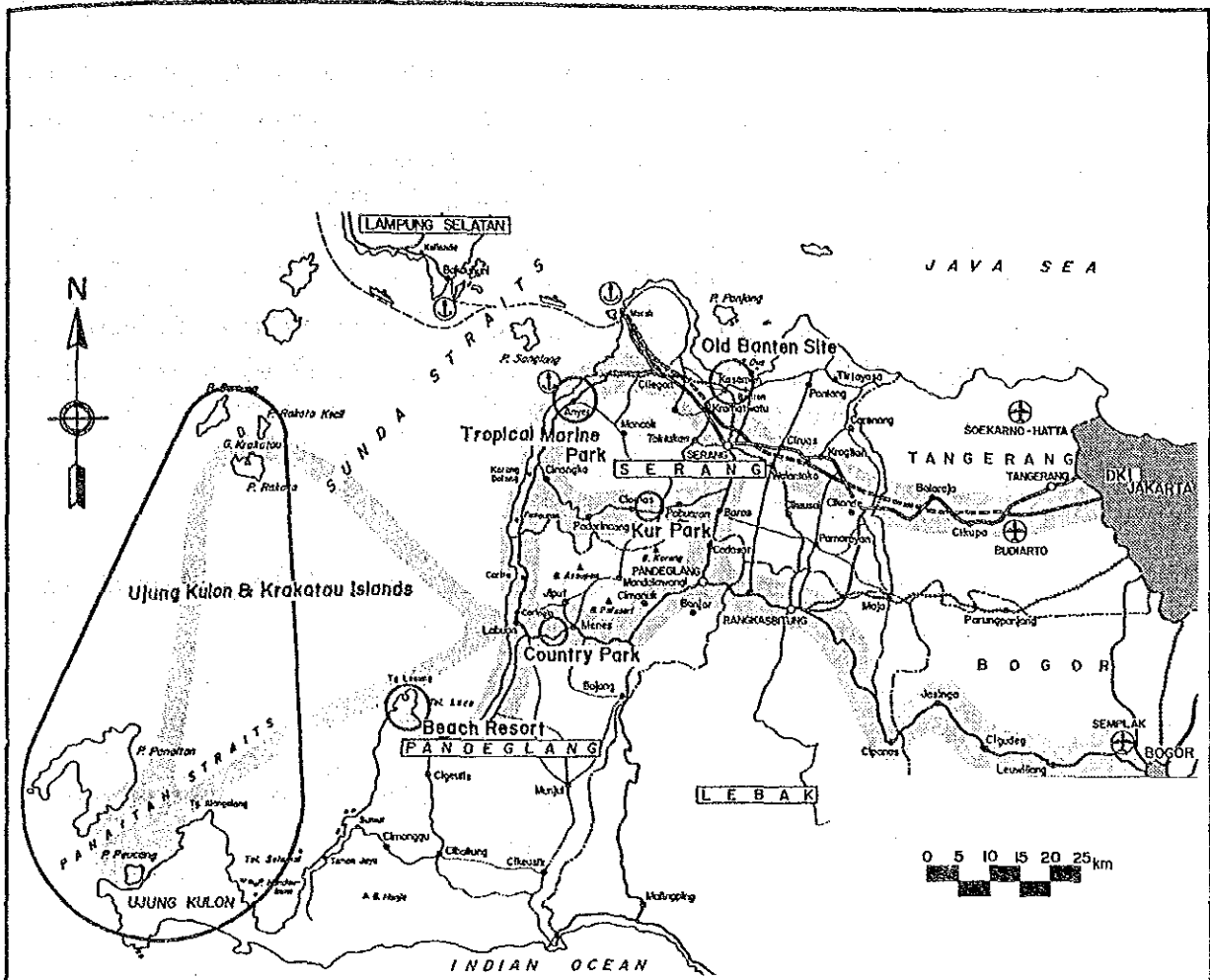
- Promoting nature observation,
- Utilization of socio-cultural resources,
- Maximal utilization of potentials of specific promising tourist destination,
- Enhancement of regional identity, and
- Supplement of other projects in order to strengthen regional tourism system.

From the elaboration as presented in Fig. 6-1, the following six (6) projects are proposed as prospective tourism projects for the year of 2010 and their locations are shown in Fig. 6-2.

- Tropical Marine Park
- Kur Park
- Old Banten Site
- Beach Resort
- Ujung Kulon and Krakatau Islands
- Country Park

Fig. 6-1 FORMULATION OF PROPOSED PROJECTS





LEGEND

- | | | | |
|--|------------------------------|--|-----------------------|
| | Coast Line | | Proposed Project Site |
| | Kabupaten Boundary | | Access Route |
| | Kabupaten Capital | | Ferry |
| | Kecamatan Capital | | Toll Road |
| | Other Place | | Airport |
| | Mountain | | Port |
| | National Road | | |
| | National Road (construction) | | |
| | Provincial Road | | |
| | Rural Road (reliable) | | |
| | Rural Road (unreliable) | | |
| | Railway | | |



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IN THE WESTERN PART OF JAVA

Fig. 6-2

LOCATION OF THE PROPOSED
DEVELOPMENT PROJECTS

These projects were approved by the Indonesian government in the Steering Committee Meeting. Their uses and characteristics are briefly explained below.

(1) Tropical Marine Park

- To enhance the maritime interest of Indonesian people by offering interesting facilities concerned with sea, fish and ships.

(2) Kur Park

- To promote the multiple use of the existing hotspring and develop a new aspect of tourism.

(3) Old Banten Site

- To improve the historical sites so as to promote general tourism as well as pilgrimage.

(4) Beach Resort

- To develop an international standard beach resort with related facilities. This project could be partly implemented with foreign investment.

(5) Ujung Kulon and Krakatau Islands

- To capitalise on the natural, geographic and historical features of these sites; the objective should not be limited to nature observation, but will also be the destination of cruising trips with limited numbers of visitors with an interest in nature preservation, and public education and enlightenment.

(6) Country Park

- To establish a tourist route in the rural area and to encourage local industries.
- To develop outdoor recreation park for both foreign and domestic young generation.

Table 6-1 shows the outline of the proposed development projects in the study region.

Table 6-1 OUTLINE OF THE PROPOSED PROJECTS

Project	Tropical Marine Park	Kur Park	Old Banten Site	Beach Resort	Ujung Kulon & Krakatau	Country Park
Objective	To enhance maritime interest of Indonesian people.	To vitalize the area by promoting the multiple utilization of the existing hot springs.	To establish a tourism magnet in the region, restoring historical town of Old Banten to promote broad tourism.	To offer highgrade opportunities for holiday makers and to earn foreign exchange.	To establish regional identities and to encourage nature oriented activities.	To establish a tourist route and to encourage local industries. To fill the younger generation's needs.
Domestic	⊙	○	⊙	○	○	⊙
Target F. Resident	○	○	○	⊙	○	○
F. Tourist	○	○	○	○	⊙	○
Long Term	-	-	-	○	-	○
Short Term	○	○	○	○	⊙	○
Day Use	⊙	○	⊙	○	○	⊙
Facilities	<ol style="list-style-type: none"> 1 Aquarium 2 Dolphin show pool 3 Maritime museum 4 Model ship harbor center 5 Seaside shopping center 6 Picnic area 7 Amusement park 8 Submarine observation tower 	<ol style="list-style-type: none"> 1 Kur haus (Recuperating system using hot springs) 2 Hotel, restaurant 3 Sports field, courts 4 Gymnasium 5 Swimming pool 6 Open air theater 7 Art gallery 8 Flower garden 9 Rockery 10 Jogging course 11 Hill side terrace 	<ol style="list-style-type: none"> 1 Restoration of the old moats 2 Landing facilities for boats to Pulau Dua 3 Heritage garden 4 Art theater 5 Restaurant, shops 6 Pepper trade museum 7 Rest area 8 Improvement of road 9 Beautification of market place and Karangantu harbor 	<ol style="list-style-type: none"> 1 Marina 2 International standard hotels 3 Condominiums village 4 Second house village 5 Golf course 6 Sports fields, courts 7 Central plaza 8 Picnic area 9 Marine sports base for adventure tourism 	<ol style="list-style-type: none"> 1 Guest house 2 Jetties 3 Observation towers 4 Shelter grounds 5 Camping grounds 6 Natural trails 7 Sailing base (Labuan) and Beach Resort 8 Sea garden 	<ol style="list-style-type: none"> 1 Camping site 2 Sports fields, courts 3 Gymnasium 4 Shops 5 Picnic area 6 Exhibition plantation 7 Model farm 8 Botanical garden 9 Experimental factory
Development System	Private sector or Government-run corporation	Private sector	Public sector: Restoration of historical relics; Dept. of Education & Culture	Public sector: Infrastructure & total management of development Private sector: Individual facilities	Public sector: Infrastructure & total management of development Private sector: - guest house - boats (under the control of DIT. PHPA)	Public sector: DIT. PHPA or Dept. of Agriculture
Operation & Promotion	To be operated by private sector or Government-run corporation.	To be connected with the welfare institution for promotion.	To be operated by public sector.	To be administered by Government-run corporation and private sector.	To control the number of visitors for nature conservation.	To be operated by public sector incorporated with agricultural cooperative.

Remarks: ⊙ Predominant; ○ Secondary

6.2 Target Capacity of the Proposed Projects

It is hardly necessary to say that the capacity of a tourism project must be arranged in accordance with its projected demand. Otherwise, future problems could arise from over-investment or overcrowding.

From a practical point of view, and following standard practice in road capacity planning, capacity should be targeted to accommodate most of the daily or instantaneous demand rather than the daily peak on grounds of efficiency and sound management of a project.

It is recommended that the capacity be determined to meet approximately 80% of the daily peak in Indonesia because of the small daily fluctuation, as compared with around 65% - 70% (two thirds) as used in Japan.

Based on the above and the methodology explained in Annex I(E), Chapter 2, the capacities of the proposed tourism projects in 2010 are figured out as follows:

(1) Tropical Marine Park

[Day-use]

$$\begin{array}{rclcl} A & \times & r/n & = & B \\ 682,000 \text{ persons} & \times & 0.02/1.5 & = & 9,000 \text{ persons} \end{array}$$

A = Number of visitor arrivals per annum

r = Target number of daily visitor arrivals/number of visitor arrivals per annum

n = Turnover rate in a day

B = Capacity of day-use facilities

Since maximum capacity, based on experiential law, is conceived to be around 1.5 (3/2) times as much as the target capacity as far as daily use is concerned, the project can accommodate 13,500 persons at maximum.

However, there will be less than 10 days when the number of visitors exceeds the said Target capacity because of large fluctuation of visitor arrivals among busy days.

(2) Kur Park

[Day-use]

$$89,000 \times 0.02/1.0 = 2,000 \text{ persons}$$

[Overnight-use]

$$\begin{array}{rclcl} C & \times & p/(365 \times q) & = & D \\ 44,000 & \times & 1.5/(365 \times 0.45) & = & 400 \text{ beds} \end{array}$$

C = Number of overnight-use visitors per annum

p = Average length of stay (nights)

q = Bed occupancy rate

D = Capacity of overnight accommodation

$$\text{Maximum capacity: } 2,000 \times 3/2 + 400 = 3,400 \text{ persons}$$

(3) Old Banten Site

[Day-use]

$$2,590,000 \times 0.02/4 = 13,000 \text{ persons}$$

$$\text{Maximum capacity: } 13,000 \times 3/2 = 19,500 \text{ persons}$$

(4) Beach Resort

[Day-use]

$$338,000 \times 0.025/1.125 = 7,500 \text{ persons}$$

[Overnight-use]

- Hotel

$$169,000 \times 0.95 \times 2.5/(365 \times 0.5) = 2,200 \text{ beds}$$

- Second House

$$C \quad x \quad P \quad (l \times a) \quad x \quad b \quad = \quad D$$

$$169,000 \quad x \quad 0.05 / (30 \times 3) \quad x \quad 4 \quad = \quad 400 \text{ beds}$$

Detached house 25 houses (100 beds)

Condominium 75 units (300 beds)

l = Total length of stay in a year

a = Average number of persons per unit

b = Number of rooms per unit

Maximum capacity: $7,500 \times 3/2 + 2,600 = 13,850$ persons

(5) Ujung Kulon and Krakatau Islands

[Day-use]

$$25,000 \times 0.015 / 1 = 400 \text{ persons}$$

[Overnight-use]

- Newly developed accommodation

$$5,000 \times (4/5) \times 1.75 / (365 \times 0.2) = 100 \text{ beds}$$

- Existing accommodation to be improved

$$5,000 \times (1/5) \times 2 \text{ nights} = 36 \text{ beds} \times 365 \times 0.15$$

Maximum capacity: same as above due to limited capacity of vessels

(6) Country Park

[Day-use]

$$137,000 \times 0.025 / 1.5 = 2,000 \text{ persons}$$

[Overnight-use]

$$11,000 \times 1.5 = 17,000 \text{ person-nights}$$

Lodge $17,000 \times 0.6 / (365 \times 0.15) = 186 - 200 \text{ beds}$

Camp Ground $17,000 \times 0.4 / (365 \times 0.05) = 373 - 400 \text{ beds}$

Maximum capacity: $2,000 \times 3/2 + 600 = 3,600$ persons

6.3 Proposed Projects

6.3.1 Tropical Marine Park

1) Purpose of the project

A tropical marine park is proposed as a tourist and educational attraction utilizing the rich marine resources and aquatic fauna of the Sunda Straits. This marine park should be planned to exploit its unique natural characteristics which are different from those elsewhere in Southeast Asia to attract international as well as domestic tourists.

The observation of aquatic species and marine life will not be the only aim. It is also proposed to construct the facilities to serve as an educational center to provide information of aquatic ecology, fishery, marine life, and on the relation between human and sea products.

2) Demand and capacity

(1) Target of market

As mentioned above, this project is aimed at both foreign and domestic tourists. From children to elderly people, both city dwellers and local people, almost any kind of people can be attracted to this project. Groups of students are expected to be the greatest in number.

The type of visit is limited to day use only, because the time spent in this kind of facility would be four to five hours at the most.

(2) Demand and capacity

This Tropical Marine Park will be one of the most popular objectives for sojourn type visitors as well as day trippers in the whole region.

The assumed number of total visitors per annum will be around 680 thousand, based on the demand of this area in the target year of 2010 (refer to 6.2).

(3) Activities and facilities

The primary activity in this park will be to see and experience something unusual in one's daily life.

Marine oriented facilities to meet this activity would be as follows:

- Submarine observation tower
- Maritime museum
- Aquarium
- Show pool of dolphin/sea lion
- Fish barbecue garden
- Lawn fields with scattered shelters
- Seaside shopping stalls
- Seafood restaurant
- Pleasure boat pond (inland sea if possible)
- Ropeway

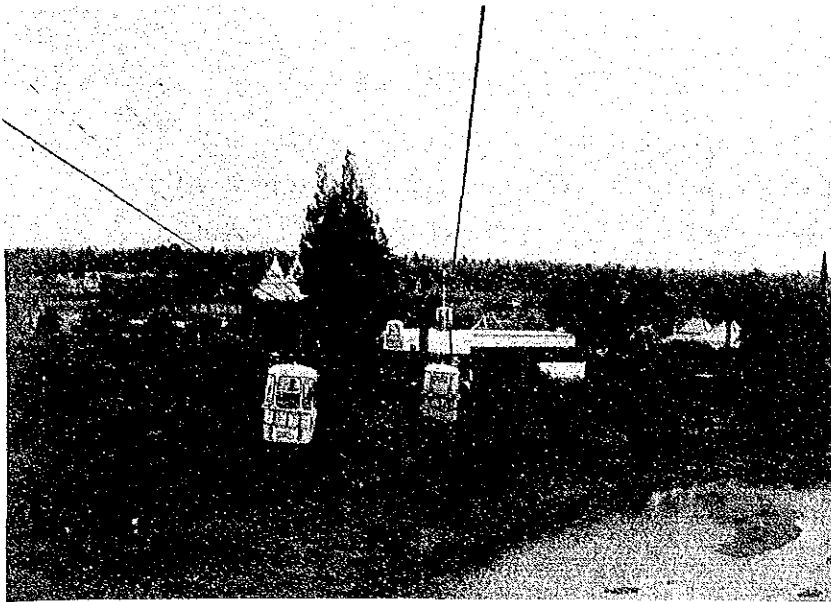
The desirable size of the area is around 50 ha, some of which would consist of water areas (and an inland sea).

(4) Location

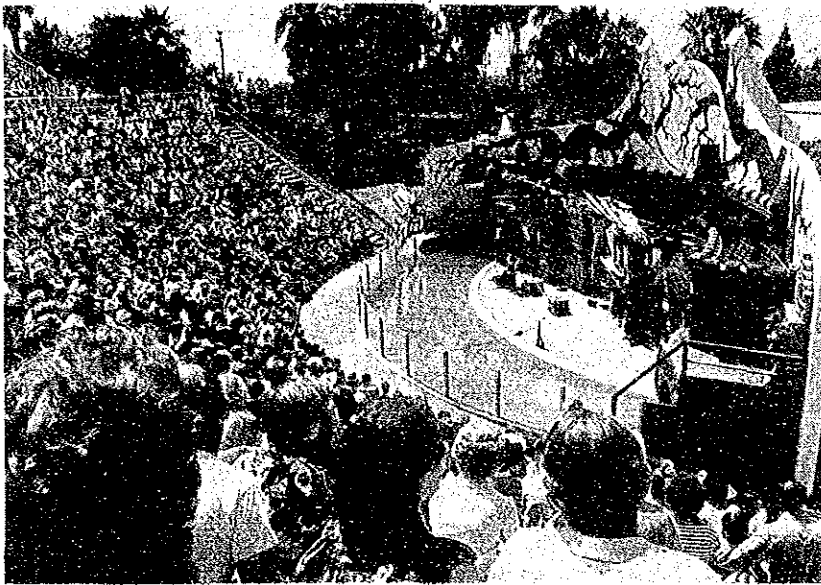
Some requirements for developing Tropical marine park are as follows:

- easy accessibility from Jakarta-Merak Highway
- existence of tropical fish and purity of sea water
- enough space not disturbed by neighboring land use
- safe from strong winds or high waves

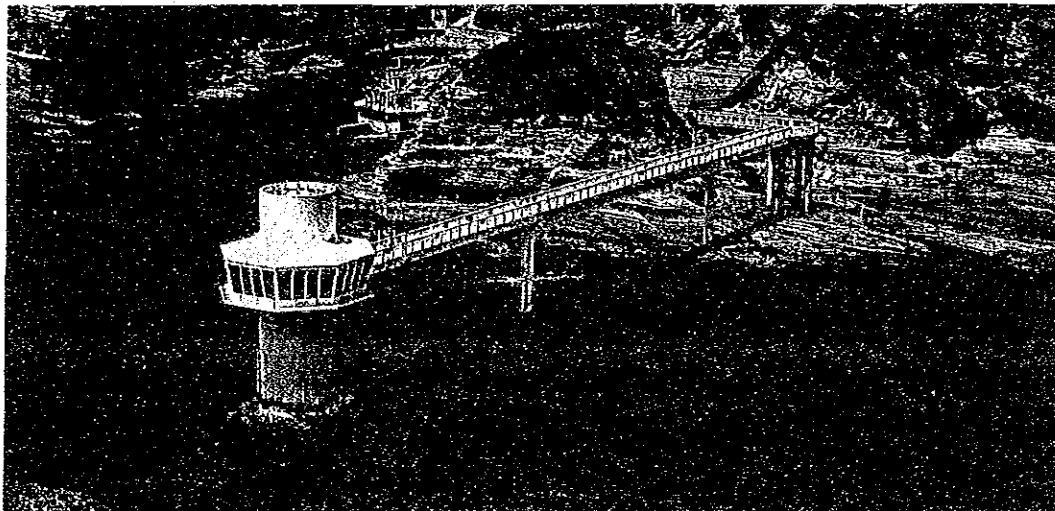
The site of this project is proposed to be near Anyer, because the park is expected to be a magnet to attract many people travelling on the Jakarta Merak Highway into the primary tourist route in the study region.



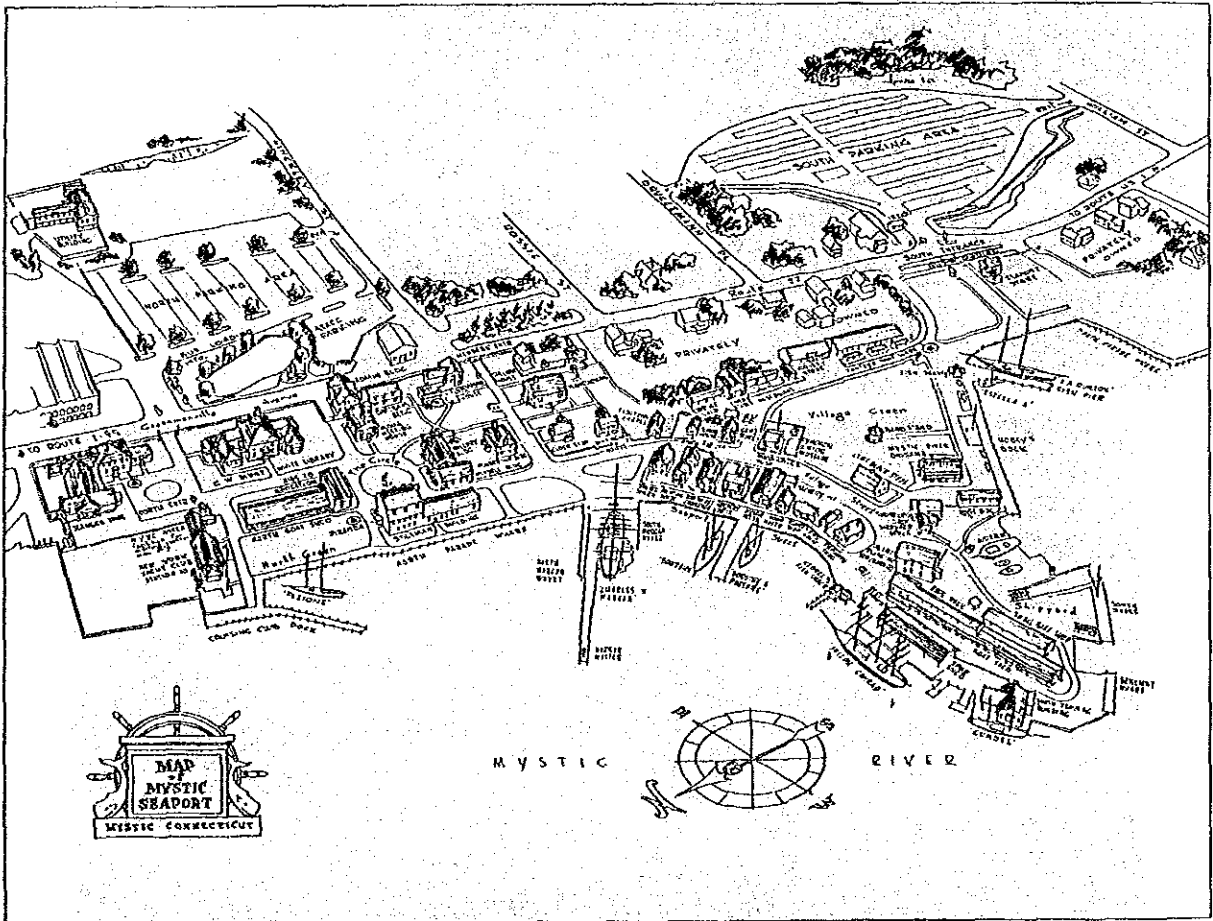
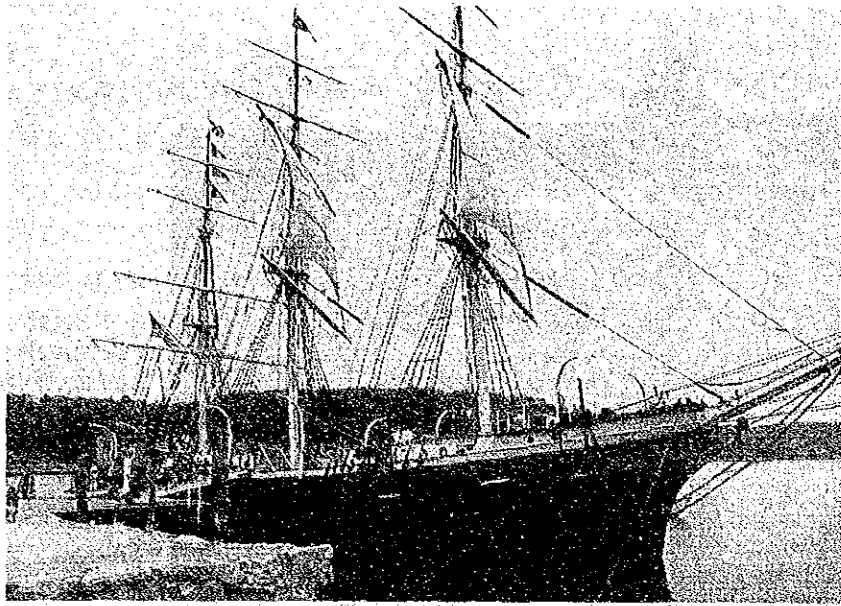
ROPEWAY
COMMANDING A
SPLENDID VIEW OF
THE AREA.
(TAMAN MINI
INDONESIA INDAH,
JAKARTA)



SHOW OF SEA
ANIMALS WILL
ATTRACT A LOT OF
PEOPLE (SEA
WORLD, SAN
DIEGO, U.S.A.)



SUBMARINE OBSERVATION TOWER WILL BE A MAIN FACILITY OF THE
PROJECT
(KATSUURA MARINE PARK, JAPAN)



MARITIME MUSEUM WILL ENHANCE THE INTEREST
 OF PEOPLE TOWARD THE SEA.
 (MYSTIC SEAPORT, CONNECTICUT, U.S.A.)

After due consideration of merits and demerits of three possible sites^{/1}, the southeast site near Desa Bandulu was selected as the best for developing the Tropical marine park.

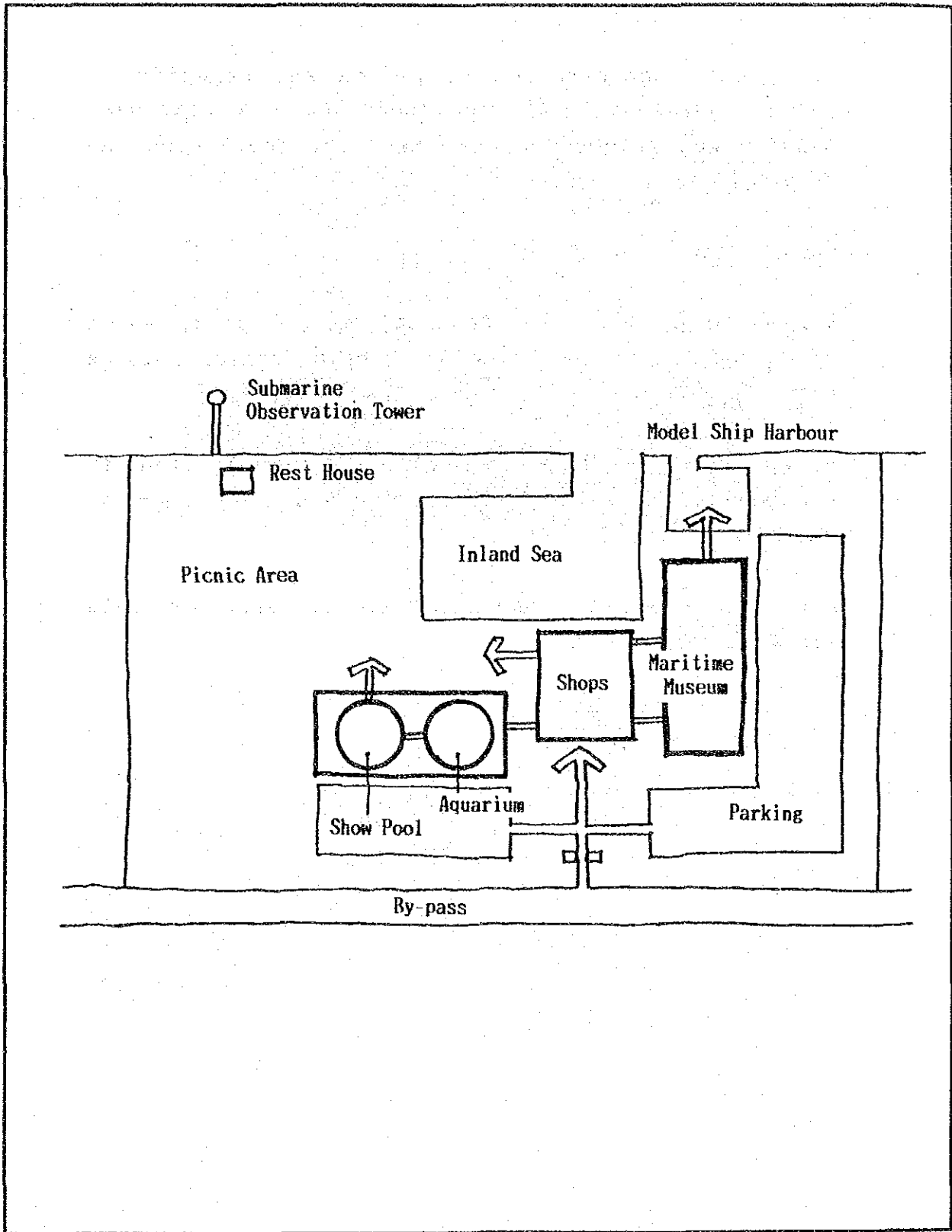
(5) Layout Plan

Schematic plan of the Tropical marine park, which shows the functional relation of each facility, is as shown in Fig. 6-3.

Based on this schematic plan, a model plan in accordance with actual topography has been drawn as shown in Fig. 6-4.

Fig. 6-5 shows a visualisation of part of this Tropical marine park.

Note ^{/1} Details of site selection are shown in Annex I(D), Section 3.2.



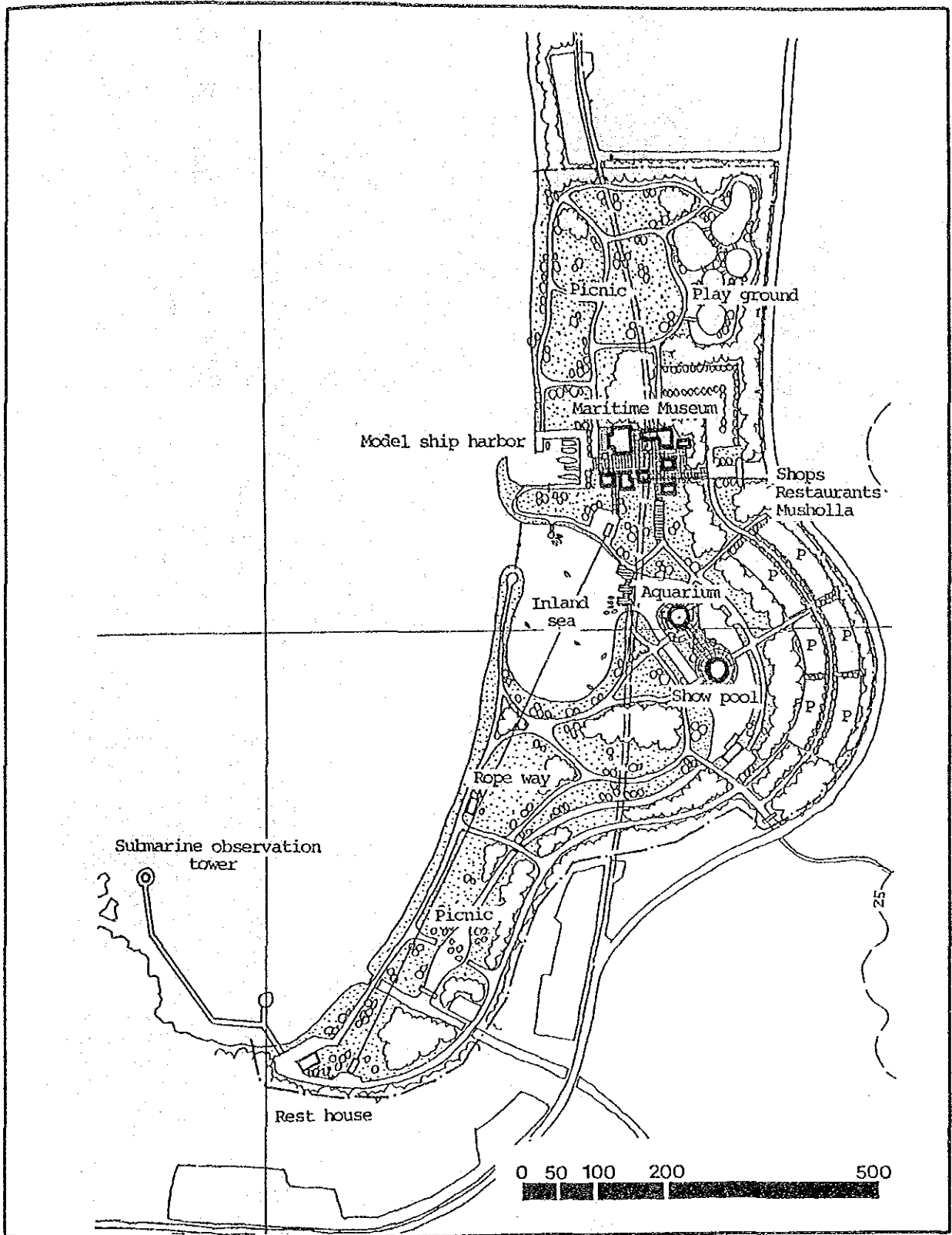
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Fig. 6-3

SCHEMATIC PLAN OF TROPICAL MARINE PARK



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	Fig. 6-4 MODEL PLAN OF TROPICAL MARINE PARK	

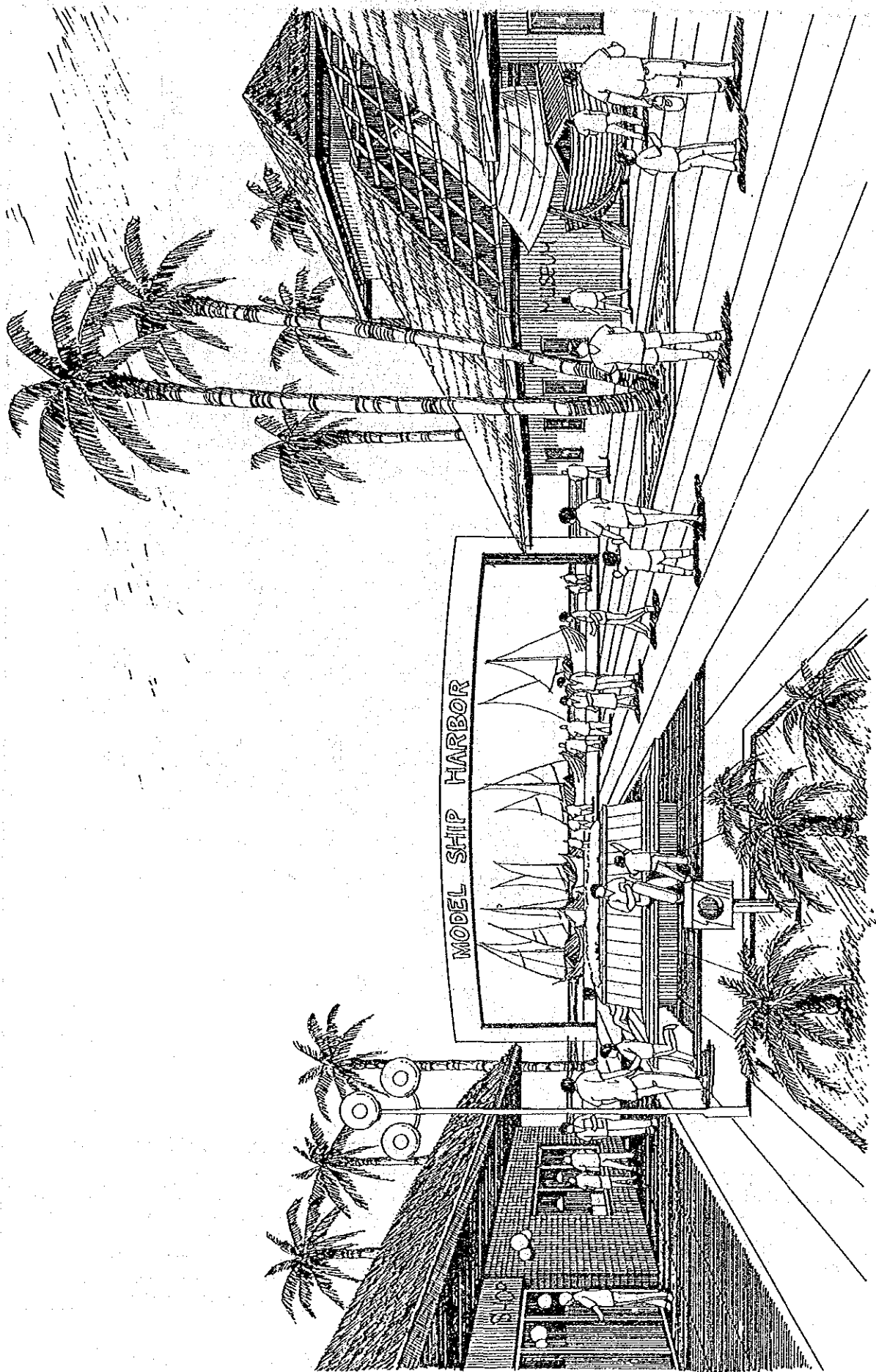


Fig. 6-5 VISUALIZATION OF TROPICAL MARINE PARK

(6) Development system

It is desirable that this park be constructed by the private sector. However, it will function in part as an educational facility comparable to Taman Mini Indonesia Indah. So, it is proposed that some linkage should be retained with DGT in cooperation with the educational sector.

(7) Operation and promotion

Operation and promotion of this park should be controlled by the public sector as mentioned above.

For the planning and execution of many kinds of events, the know-how and energy of the private sector should be fully employed.

6.3.2 Kur Park

1) Purpose of the Project

The purpose of developing Kur Park is to revitalize the area by promoting multiple utilization of the existing hot springs.

Hot springs are well-known to be effective for recuperation, and many forms of using hot/cool water have been developed in recent years. The so-called Kurhaus ("Cure House" in English) is one such facility, consisting of a concentrated system for recuperation by using hot springs.

Though bathing in hot spring is not yet popular in Indonesia, once facilities, like those in Lembang, are introduced, they would attract more visitors, especially

amongst elderly people who desire to remain young and healthy.

2) Demand and capacity

(1) Target of market

In the near future, the main market for visitors will be foreigners. If the facilities are kept in good conditions with comfortable services, they can attract international guests in quest of relaxation.

(2) Demand and capacity

According to the study on "Tourism Demand" (Section 5.2), the demand for this project is assumed to be 133,000 visits in the year of 2010.

Based on the above figure, the capacity and the area of this park are estimated as follows (refer to 6.2):

Capacity (accommodation)	400 beds
Area	25 ha

3) Activities and facilities

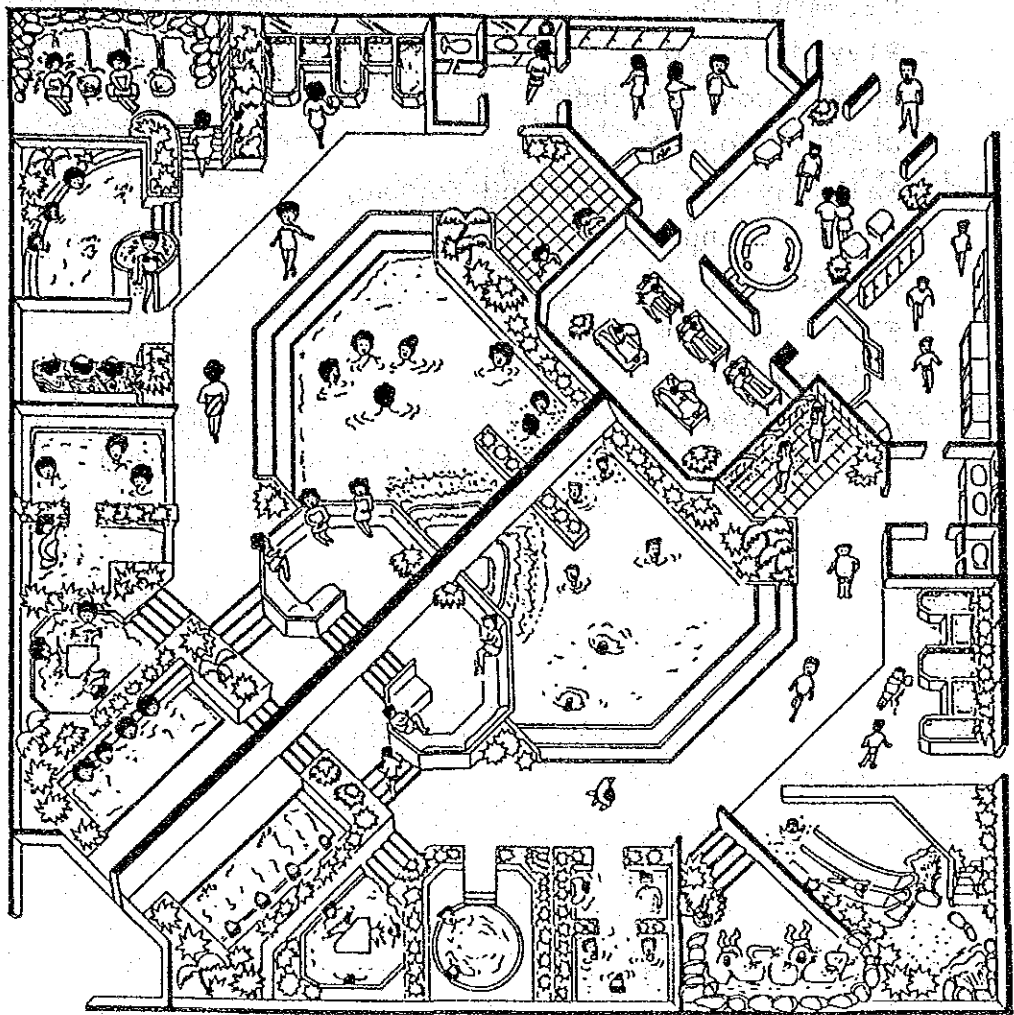
The main purpose of activities in the Kur Park will be to provide both physical and mental relaxation to visitors.

For physical relaxation, the Kurhaus [cure house, refer to Fig. 6-6] will be the core facility, with adjacent outdoor sports spaces.

Furthermore, it is recommended that some cultural facilities, i.e. theater, art gallery, hall, and so on be introduced for mental relaxation.

The proposed facilities are as follows:

- Kurhaus [refer to Fig. 6-6]
- Hotel, Restaurant
- Tennis courts
- Swimming pool
- Playing field
- Sports court/ground
- Jogging course
- Walk way (in and around forest)
- Open air theater
- Art gallery
- Flower garden
- Leisure pond
- Hillside terrace



Non-scale

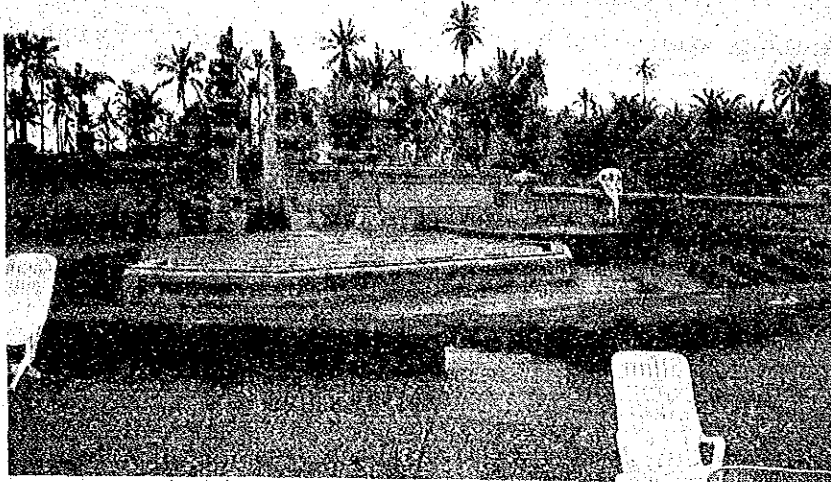


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Fig. 6-6
TYPICAL PATTERN OF KURHAUS (CURE HOUSE)



OPEN-AIR THEATER SHOULD BE ARRANGED SO THAT MANY EVENTS
MAY BE HELD. (CLUB MED., BALI)



ART WOULD BE AN IMPORTANT COMPONENT OF THE PARK.
(OUTDOOR GALLERY OF STATUES, HAKONE, JAPAN)

4) Location

According to the result of rating ^{/1} among four alternative sites, it is recommended that Kur park be developed at Batukuwung where bathing facilities already exist.

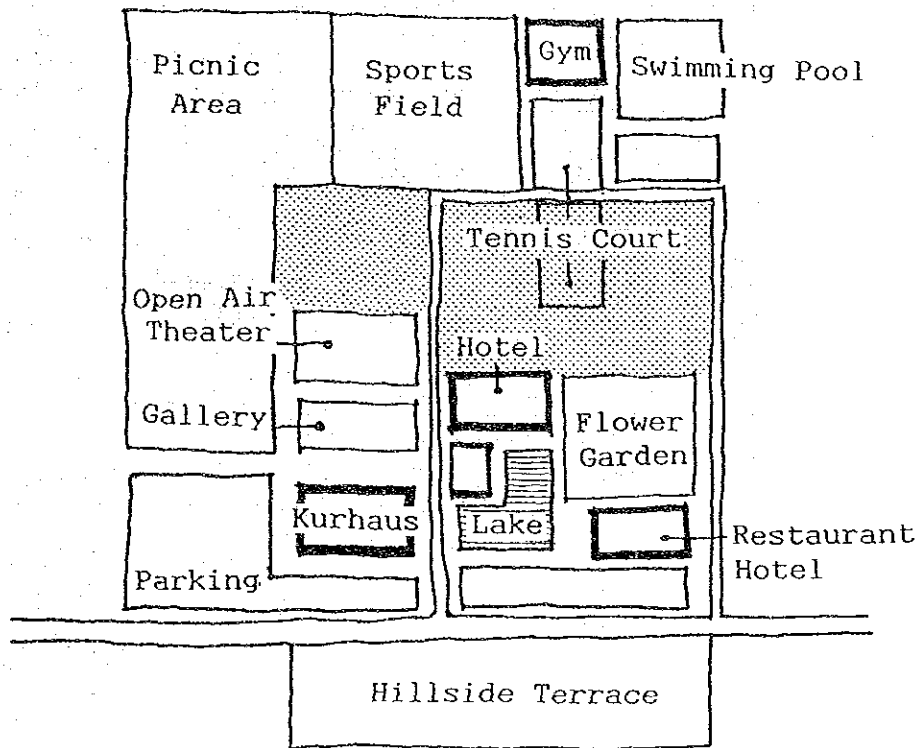
5) Layout Plan

Even though all existing facilities need to be repaired, the basic layout of facilities would follow the existing one.

Based on this, and taking future expansion into consideration, the recommended schematic plan of Kur park is shown in Fig. 6-7.

The model plan drawn in accordance with actual topography is shown in Fig. 6-8.

Note ^{/1} Details of site selection for Kur Park are given in Annex I(D), Section 3.1.



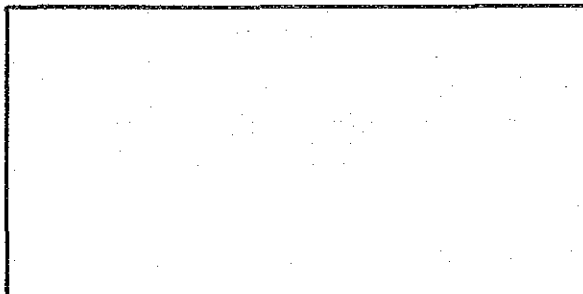
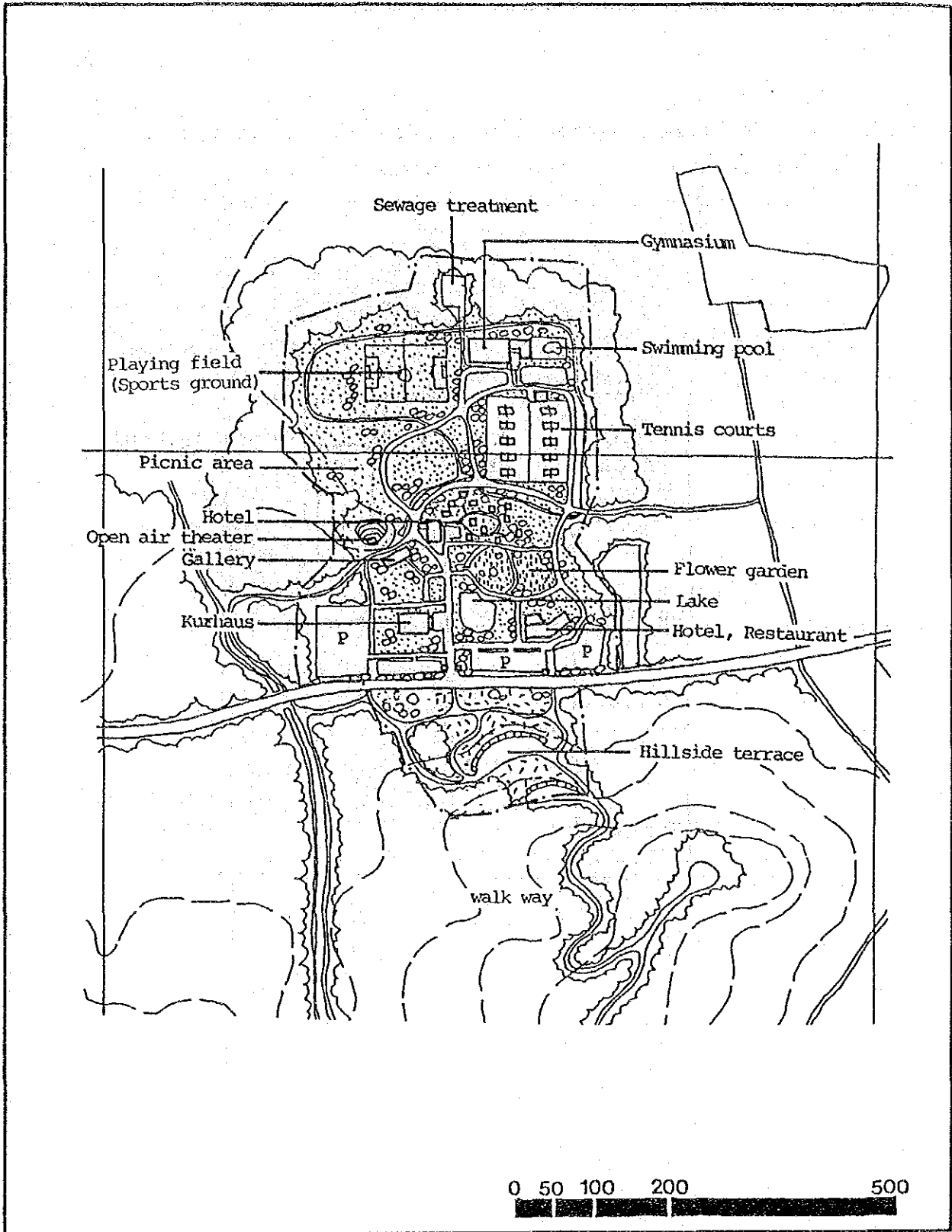
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Fig. 6-7

SCHEMATIC PLAN OF KUR PARK



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	Fig. 6-8 MODEL PLAN OF KUR PARK

6) Development system

This park should be developed by the owner of the existing facilities, with the cooperation of neighboring land owners, under the control of DGT.

7) Operation and promotion

For its successful promotion, it is necessary to take the followings into consideration:

- The facilities, such as the Kurhaus, pool, flower gardens, etc. must be kept clean, tidy, and hygienic.
- Special know-how and skilled personnel for the medical use of hot springs should be introduced from such countries advanced in this field as West Germany or Japan.

Furthermore, it is strongly recommended that an authorized relationship be established with welfare institutions for the sound management of this park.

6.3.3 Old Banten Site

1) Purpose of the project

Old Banten City is recognized as one of the historic, religious and cultural centers of Indonesia. The Old Banten Site project was conceived with a view to utilizing its existing tourist resources as well as its cultural and historic assets.

The tourist attractions include the followings.

- (1) Historic relics and Site Museum (Banten Archaeological Site Museum),
- (2) Religious objectives,

- (3) Bird sanctuary,
- (4) Industrial objectives, and
- (5) Others.

A survey of the above diversified attractions¹ and their surroundings has shown the need for environmental improvements and introduction of new elements which would give a sense of unity to the variety of tourism attractions that could attract more visitors to this area, along with the restoration of existing relics.

2) Demand and capacity

(1) Target of market

The Old Banten Site has already been attracting around one million visitors a year, the largest number of visitors in the region. The number is comparable to other major tourist attractions in Indonesia.

Most visitors to Old Banten are domestic Moslem people visiting the Mesjid Agung Banten. The number of visitors will increase in proportion to the population of the West Java region from which most originate. The number of domestic tourists will also increase with improvement of living standards of people in the region.

However, if Old Banten remains as it is, the number of foreign visitors to the area will not increase appreciably. As one of the purposes of this project is to attract more foreign tourists to the area, it is necessary to improve the environment of the area, as well as to continue the restoration of historic

Note /1 The outline of these attractions are shown in Annex I(D), Chapter 2.

relics. It is also necessary to fully utilize the touristic attractions of Pulau Dua Nature Reserve, and the historic, as well as the industrial and religious objects of the region.

If the project is well implemented, the number of both domestic and foreign visitors would possibly increase.

(2) Tourism demand

This project could continue to be a main tourist destination in the region.

It is forecast that the tourism demand in Old Banten Site will reach 2,590 thousand¹ by the year of 2010 (refer to 6.2).

3) Activities and facilities

(1) Heritage Garden

A heritage garden is proposed in the central area of Old Banten, where there is already a cultural atmosphere with its historic relics, to make full use of these socio-cultural resources.

Note ¹ The forecast of tourism demand will be elaborated in Chapter 5.

The facilities planned for the heritage garden would include:

- A performing arts theater
- An exhibition hall with restaurants and shops
- A heritage memorial hall
- A pepper trade museum and model farm
- A plaza
- A garden with fountain and pond
- A small shops
- An open air theater
- A parking area

Details of the planned facilities are shown in the Implementation Programme, Chapter 3.

(2) Parking and rest areas

Parking areas and rest areas with small shops are planned as convenient facilities to visit existing tourism attractions.

The sites are chosen to be near the following historic assets:

- Chinese Temple and Speelwijk Fortress
- Kaibon Palace
- Tasikardi Lake

(3) Beautification of Karanghantu harbor

It is proposed to beautify the Karanghantu harbor area as a reminder to the old days when this harbor was a prosperous center trading with Europe, the Middle-East and neighboring Asian countries.

(4) Improvement of access roads and construction of by-pass roads

There are two major access roads to the area. One is the road from Serang lined with well-grown trees along the road. The other is the road from the south-west.

It is recommended that both roads be improved and that by-passes be constructed to provide a smoother approach to the area. This will help to avoid disturbance against the historical assets, such as Speelwijk Fortress and Surosowan Palace.

(5) Restoration of old moats

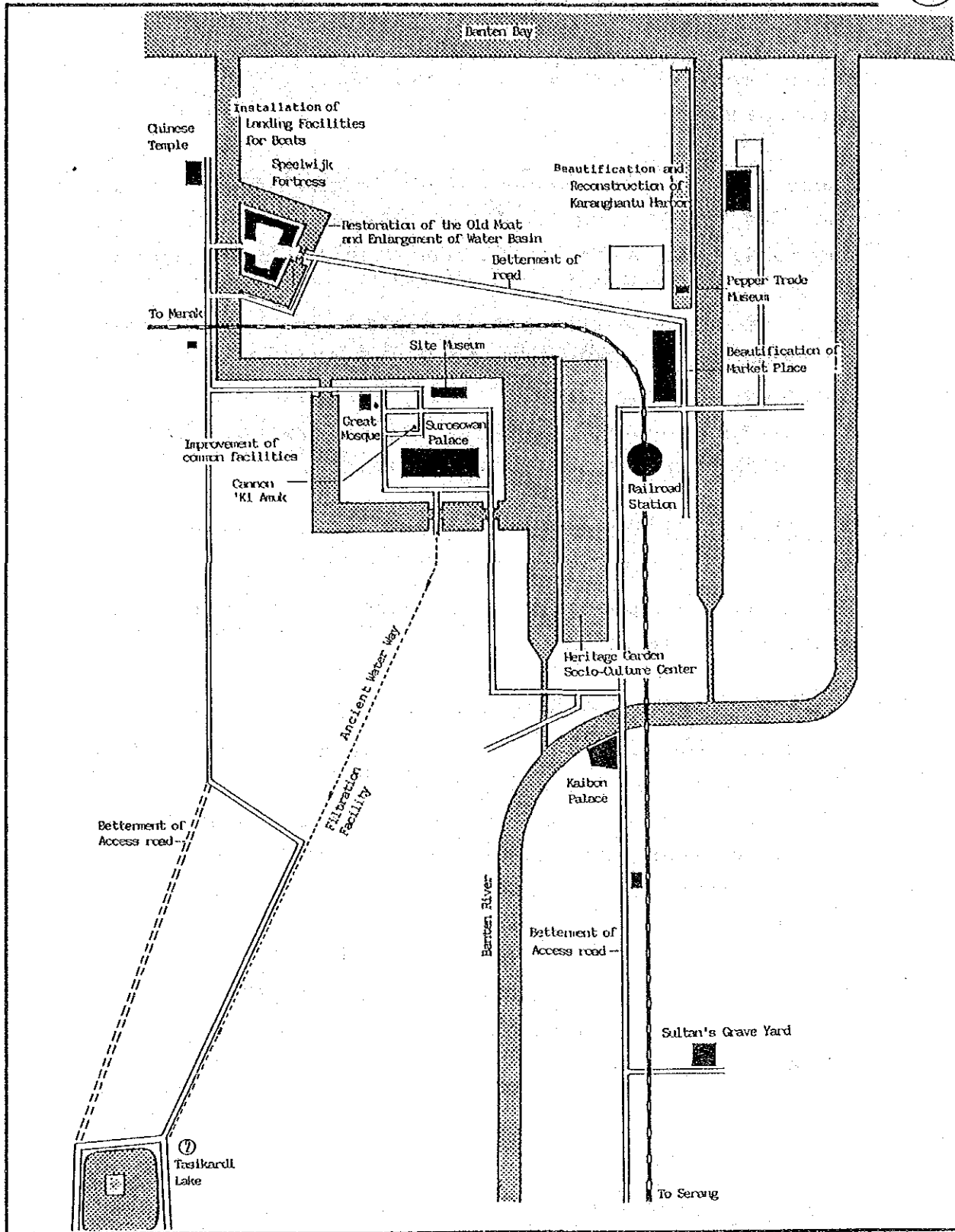
Three main purposes of the restoration of the old moats are as follows:

- Rehabilitation of historic relics along with the restoration of the Surosowan Palace, the Kaibon Palace and the Speelwijk Fortress,
- To link various kinds of tourist attractions in the area by water ways and tree lined paths, and
- To beautify the environment by a water basin and trees.

A comfortable moatside promenade and landing facilities for boats to and from Pulau Dua are planned along the new moat.

4) Location

In this Old Banten Site project, all the newly proposed facilities are located in relation to the existing tourist attractions. The location of each facility is shown in Fig. 6-9.



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Fig. 6-9
LOCATION OF PLANNED FACILITIES
IN OLD BANTEN SITE

5) Development system

To carry out this project, it is first necessary to take the following steps:

- a. Establishment of an organization representing the agencies concerned of the national and local governments to develop this project under the leadership of the Directorate General of Tourism; and
- b. Coordination and strengthening of the agencies concerned for participation in the implementation of the project.

DGT: to rehabilitate the old moats in order to ensure beautification of the environment of the area, to install landing facilities for the pleasure boats along one of the moats, to arrange Kiosks for souvenir shops, etc.

Department of Education and Culture: to restore the historic relics, to carry out the studies on the historic relics, etc.

Department of Transportation: to reconstruct and to beautify the Karanghantu Harbor.

Department of Public Works: to construct by-pass roads and to install a drainage and sewerage system in the area, etc.

Directorate General of Forest Protection and Nature Conservation: to maintain the Pulau Dua Nature Reserve.

Departments of Religious Affairs and Home Affairs: to be involved in affairs concerned.

6) Operation and promotion

(1) Operation

The operations of this project ought to be managed by respective agencies concerned such as:

- overall management of the tourism affairs (Directorate General of Tourism),
- historic relics (Department of Education and Culture),
- Karanghantu Harbor (Department of Transportation and local government),
- Pulau Dua Nature Reserve (Directorate General of the Forest Protection and Nature Conservation).

(2) Promotion

It is very important to attract more foreign tourists by promoting this project. Even without any promotion, however, the number of domestic tourists visiting the Old Banten will increase, because most of the domestic tourists will be religious pilgrims.

There are many and various kinds of tourist attractions in Old Banten and its vicinities, but their sites are not so attractive for foreign visitors. It is, therefore, important to determine the role of the promotion in this project so as to attract foreign tourists.

With the leadership of the Directorate General of Tourism, the promotion of this project ought to be intensified by organizing various activities as tourist attractions such as: Debus performances in the Masjid Agung area and lectures on the historic relics to form a sequence of attractions at the Heritage Garden. Tourist attractions should be held during the seasons of migratory birds at

Pulau Dua. Entry to the island is limited, but many bird-lovers can enjoy watching the mass of birds from boats sailing around the island.

6.3.4 Beach Resort

1) Purpose of the project

One of the main objectives of this project is to earn foreign exchange, by offering high-grade facilities for holiday makers to both foreign tourists and foreign residents in and around Indonesia.

The project, named tentatively "Beach Resort", aims at accomplishing this objective as well as providing new recreation opportunities to domestic people.

The Beach Resort would include various types of facilities for accommodation, recreation, refreshment and resting.

All facilities at the Beach Resort should be up to international standards not only in their physical aspects but also in services.

Visitors should be able to enjoy all kinds of marine sports, field sports, shopping, cuisine, cultural events, and a base for adventure tourism with well-trained guides and interpreters, of the standard being offered at the best international resorts of other countries.

2) Demand and capacity

(1) Target of market

The main target of this project will be foreigners, both tourists and residents.

In addition to foreigners, high-income groups of Indonesian are also expected to be visitors or club members of these resort facilities.

To promote longer stay, a second house village and condominium hotels are proposed in this project.

Condominium hotels are expected to be owned by boat/yacht owners, and to be let for rent to visitors while the rooms are not in use by the owner.

(2) Demand and capacity

As there is no international-grade resort in the study region, it is difficult to forecast the demand by the trend oriented method.

It is proposed to set the total number of tourists as a target, with reference to existing foreign resorts with similar conditions.

Assuming that most over-night foreign tourists in the study region will be accommodated in this Beach Resort, the total number of over-night visitors would be at around 340 thousand (refer to 6.2).

3) Activities and facilities

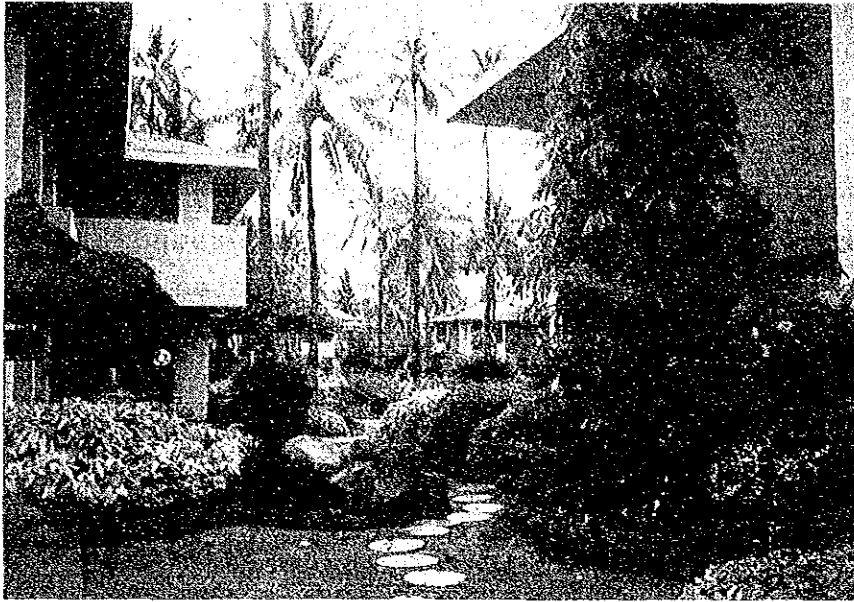
In order to satisfy such a number of incoming visitors, it is needed to introduce the following facilities:

- Marina with terminal and sheltered anchorage for high-speed launch service from Jakarta, tourist launches, and 'Madura' proas for cruising and adventure tourism here or next the fishery harbour
- International standard hotels (with swimming pool, tennis courts, etc.)
- Condominium hotels

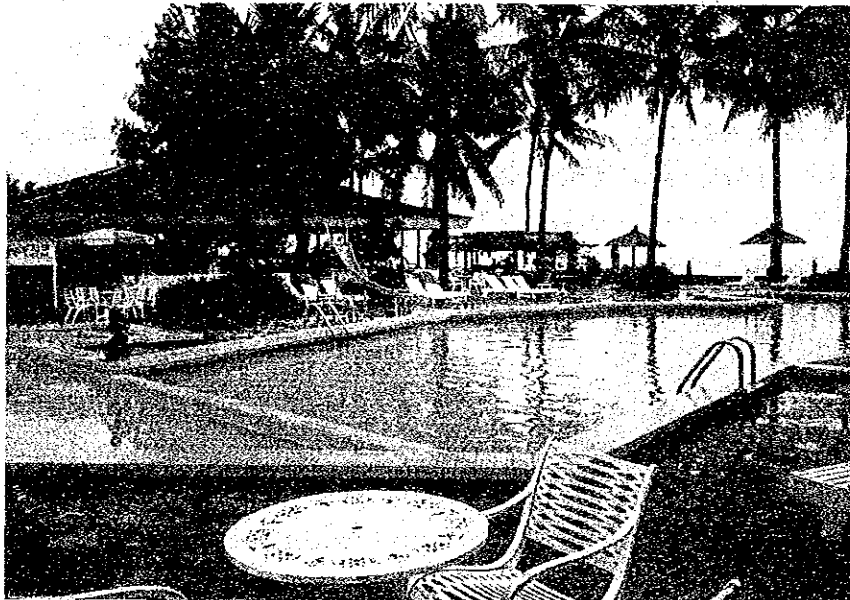
- Second house village (private, company owned, etc.)
- Golf course
- Horseback riding course, field
- Lawn fields
- Sports courts/grounds
- Shopping promenade
- Hall (with meeting room, theater, exhibition hall, etc.)
- Amusement facilities

The total size of the area is assumed to be around 200 - 300 ha, if the facilities are spaciouly allocated.

One of the principal functions of the Beach Resort should be to promote well-managed, well-guided, and safe adventure tourism for foreign visitors wishing to visit Ujung Kulon, the Krakatau Islands, and other objectives. This will need well trained staff and good seaworthy cruisers, both motor and sail ('Madura' proas suitably converted) with radio communications and navigational aids. The hotels in the Beach Resort should also be able to provide briefing lectures and audio-visual presentations to increase the value and enjoyment of these facilities.



COTTAGE TYPE
HOTEL
(PURTAMINA
COTTAGE, BALI)



NEATLY
MAINTAINED
SWIMMING POOL
(IBID)



MEDIUM SIZED
HOTEL FULL OF
FLOWERS
(NUSA DUA BEACH
HOTEL, BALI)

4) Location

As this project requires a large area of land, the feasibility of land acquisition must be taken into prior account as well as the superiority of natural resources.

After careful consideration¹ of four possible sites, the site at Tanjung Lesung is selected as superior to others.

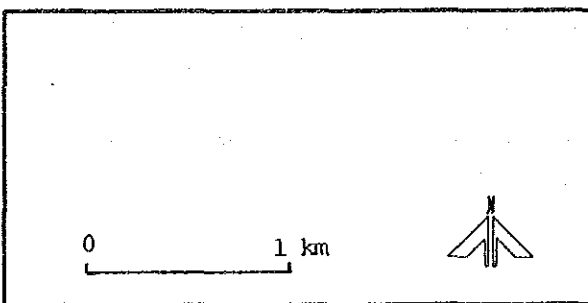
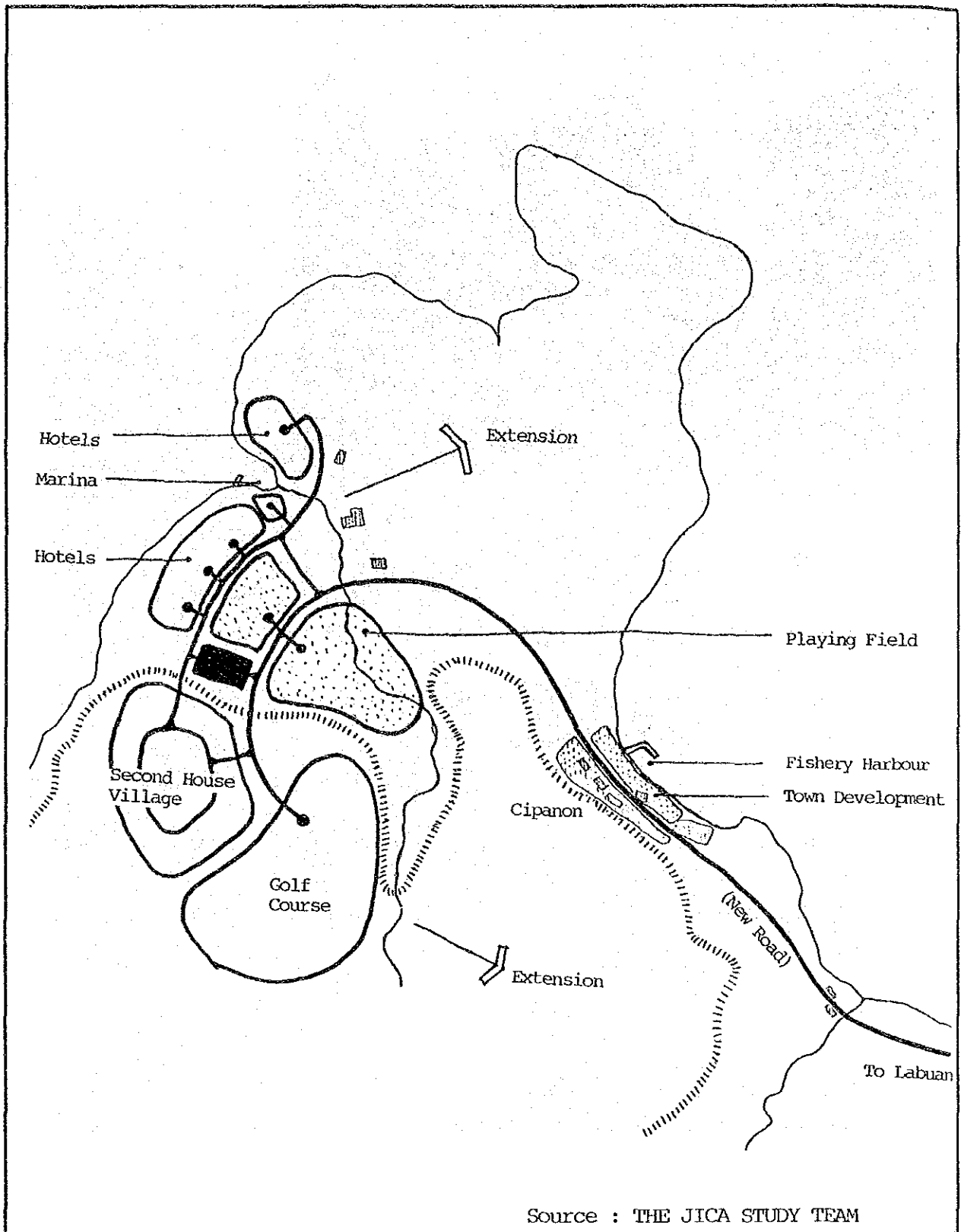
This site is located on the peninsula of Tanjung Lesung, about 30 km from the city of Labuan. The surrounding area is not developed and the possibility of project implementation seems very high, including especially the land acquisition.

5) Layout plan

Conceptual layout plan of facilities at the site of Tanjung Lesung is shown in Fig. 6-10².

Notes ¹ Details of site selection are shown in Annex I(D), Chapter 3.

² Composition and layout of facilities will be revised at the later stage of the study.



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Fig. 6-10
 DEVELOPMENT PLAN OF BEACH RESORT
 AT TANJUNG LESUNG

6) Development system

Considering the scale and character of this project, it is recommended that overall management of the whole development should be controlled by a purposely established government-run corporation. Consequently, land acquisition and development of infrastructures should be done through this body, while commercial facilities, such as hotels, sports courts, club houses, are recommended to be built and managed by the private sector.

7) Operation and promotion

The whole area should be administered by the aforementioned government-run corporation, similar to the Bali Tourism Development Corporation at Nusa Dua Beach Resort.

Promotion activities will be more effective if they are intensively undertaken by the above body.

6.3.5 Ujung Kulon and Krakatau Islands

1) Purpose of the project

Ujung Kulon National Park, located in the south-western part of the study region, is one of the most famous national parks and the most important conservation area not only in Indonesia but also in South East Asia.

With its unique flora and fauna, including the Javan rhinoceros, banteng (wild cow), Javan gibbon (monkey), wild dog, in addition to many other rare wild animals and birds, Ujung Kulon is a natural treasure house of international value. This is recognised by it being both a Biosphere Reserve and a World Heritage Site.

The Krakatau is known to the world for its enormous eruption in 1883, submarine eruption in 1930, and the birth of Anak Krakatau, the new volcano.

The islands have attracted people not only for their academic value, but also for their popular interest and mysteriousness.

However, because of the lack of convenience and comfort, the number of tourists actually going to the islands is limited.

The objectives of this project would be to provide a better way of approaching the island and to secure safe landing or sight-seeing around the islands.

Conservation of the natural environment will be a vital consideration in this project. The facilities to be introduced should be regulated in number and scale, and kept neat enough to attract foreign tourists, while preserving the wildness and natural values of this unique area.

The purpose of this project is thus to encourage well-regulated nature oriented activities focussing on quality rather than quantity. In other words, what is recommended is not to increase the number of visitors, but to satisfy limited visitor's natural interests and the needs of visiting scientists and naturalists.

2) Demand and capacity

(1) Target of market

The main type of visitors to Ujung Kulon is expected to be the foreign tourist rather than the foreign resident and domestic tourist. They will mostly belong to the group of naturalists who will look at

nature itself rather than the luxurious services as offered in city tours. For those who require more luxurious services such facilities should be provided from the Beach Resort at Tanjung Lesung.

Visitors' stay will be short term, that is, 1 - 3 nights, unless they have some special purpose such as research on biological or geological assets.

The Krakatau Islands is one of the world famous natural resources of the study region. So, this project should mainly aim at foreign tourists, not only those who are interested in geology, but also those who seek the unique or rare experience.

Besides foreign tourists, foreign residents and domestic tourists will also be attracted to the Islands because of their history.

It is strongly recommended that camping and any accommodations be prohibited on the Krakatau Islands. All visitors should take one-day trips from the mainland, except for some limited academical researchers and adventure tour cruisers living on board their vessels.

(2) Demand and capacity

According to the previous study ("Tourism Demand"), the demand for this project is estimated to be 30,000 visits in the target year of 2010.

It will be important in this project to plan visitor movements in order to avoid concentrations at one time from the standpoint of nature conservation in the Islands. In this respect, the number of visitors should be controlled by the capacity and the cruising

schedule of the boats controlled from Labuan with due regard to the Management Plans of PHPA.

In view of the potential annual demand and the scale of the project objectives it is recommended that the capacity of the boats should be limited to around 50 passengers.

The whole area of the National Park (Total area approximately 57,500 ha) is considered to have more capacity, if visitors are properly distributed both in time and place.

Consequently, it is recommended to diversify the sites of stay rather than to enlarge the capacity of the existing accommodations.

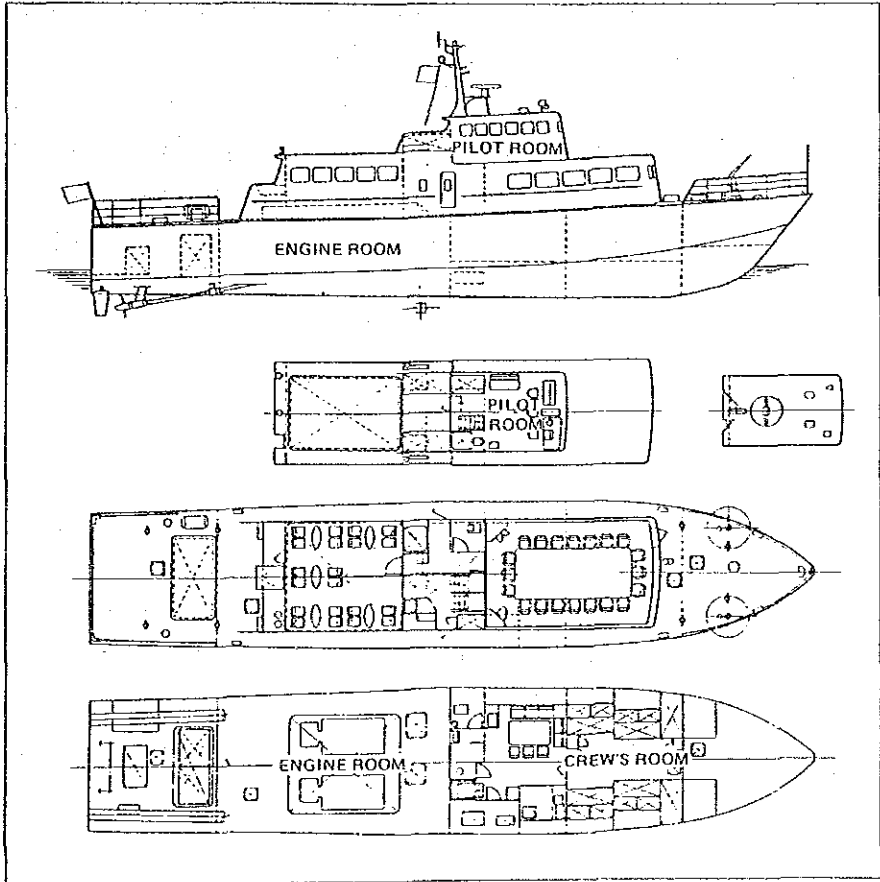
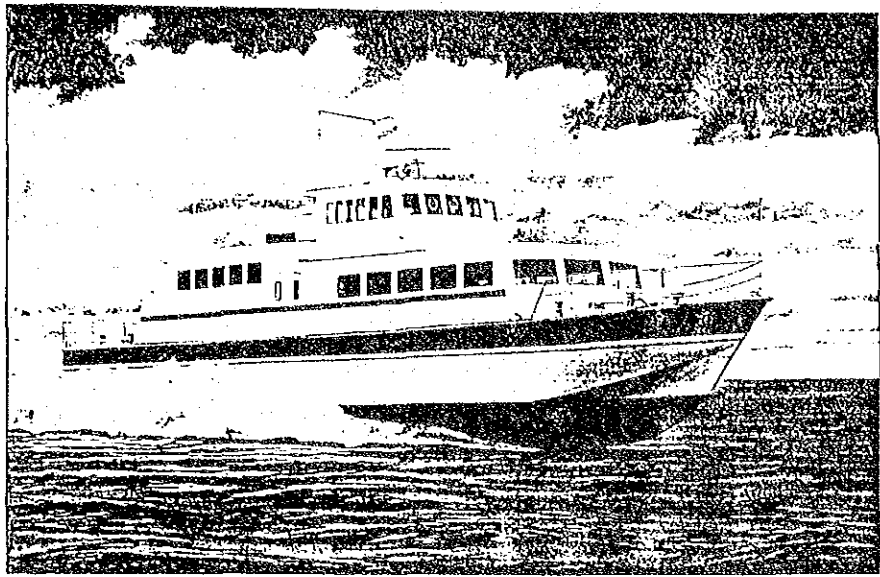
Assuming the numbers and ratios as shown below, the required capacity for newly developed accommodation should be 100 beds (refer to 6.2).

3) Activities and facilities

(1) High-speed cruisers

The existing boats which can be hired occasionally for cruising around the Krakatau Islands and other places in the Sunda Straits are not up to international standards. Moreover, they are sometimes unreliable and slow. Also they do not have adequate navigational and safety equipment.

These boats should be replaced by high-speed cruisers with more carrying capacity and comfortable cabins. The capacity of the desirable cruiser seems to be around 50 passengers, and the number of cruisers at least 3. Of which, 2 would be used for regular cruises, and 1 for optional cruises or charter.



Length Overall: 31.00 m
 Breadth (mld.): 6.30 m
 Depth (mld.): 3.30 m
 Draft (design): 1.20 m
 Gross Tonnage: abt. 200 tons
 Cruising Speed: abt. 29 knots
 Cruising Range: abt. 250 N.M.
 Main Engine: Diesel Engine
 2,420 PS x 2 sets



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Fig. 6-11 HIGH-SPEED BOAT

(2) Guest houses

The existing guest house on Peucang Island, in spite of its agreeable appearance, is poorly furnished. Its interior and fixtures, especially sanitary facilities, are unattractive.

It is proposed both to improve and/or reconstruct guest houses on Peucang and Handeuleum Islands, with new construction on Panaitan Island.

(3) Jetties

Jetties need to be constructed at some places in Ujung Kulon and Krakatau Islands.

Considering the existing distribution of wild animals as well as the existing development plan, the places recommended for the jetties are as follows (cf., Fig. 6-13):

- Tanjung Layer
- Tanjung Alang-alang
- Cigenter
- P. Panaitan
- Anak Krakatau

Existing jetties at P. Peucang, Cikuya, P. Handeuleum and Tamanjaya should be carefully maintained or improved.

(4) Shelter

Besides a landing pier at Anak Krakatau Island, it is proposed to construct a simple shelter to cope with any emergency that may arise during a cruise or on the island.

(5) Improvement of observatory posts

Existing observation towers should be improved so that visitors can stay inside for a few hours comfortably. On Peucang Island, the natural Sea-garden off the northwest corner of the island should be developed with a footway for visitors to protect the coral reefs and enhance enjoyment.

(6) Explanation boards

In order to help visitors to become more familiar with nature, explanation boards, as well as caution boards, need to be prepared along walkways and foot trails.

(7) Sailing base in Labuan

Labuan is, and will remain, the main gateway to both Krakatau Islands and Ujung Kulon. Proper moorings for the cruisers should be established here.

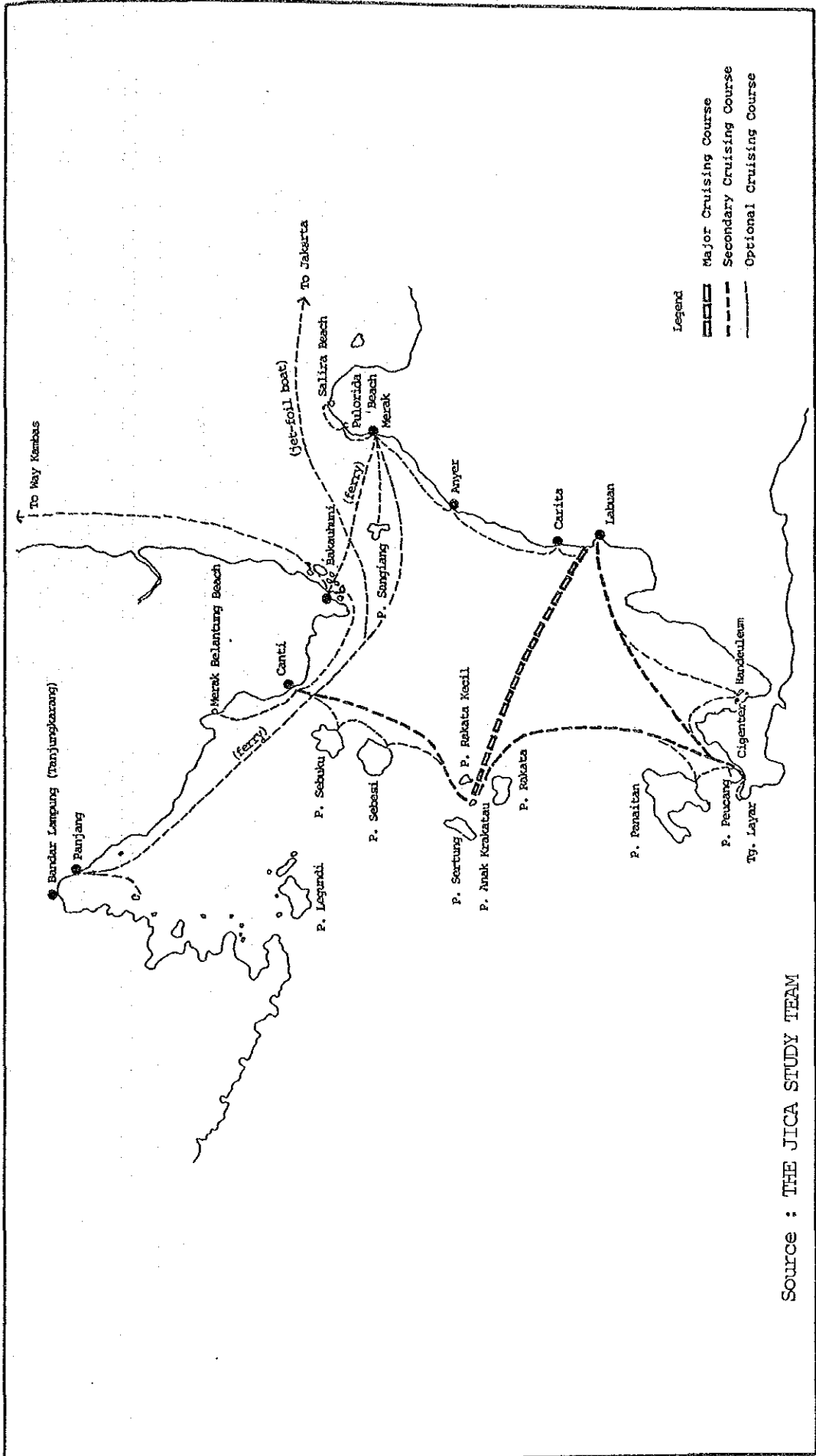
An administrative office should be constructed near the embarking jetty. The role of this office would not only be to control the number of incoming visitors to both areas, but also to give visitors useful information about the Islands and National Park, and provide radio control of all boats/vessels visiting these sites for the safety of visitors.

It is also suggested that an exhibition hall be established for showing the natural history and background of the area at or near the above office. Instruction panels, the scale models of the area and projector screen or video systems will be provided in the hall.

A sub-office of the above should be provided at Tanjung Lesung Beach Resort for use of foreign visitors and tourists.

4) Layout plan

Proposed layout plan and some sketch of facilities are shown in Fig. 6-12 ~ Fig. 6-15.



Source : THE JICA STUDY TEAM



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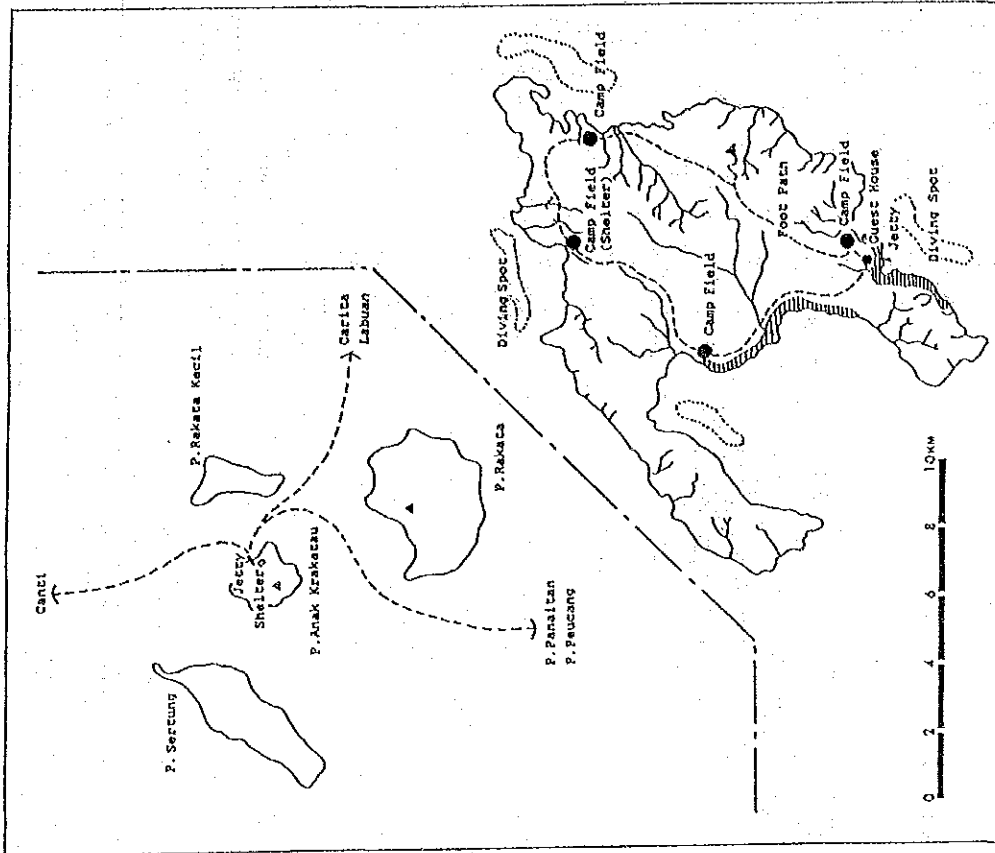
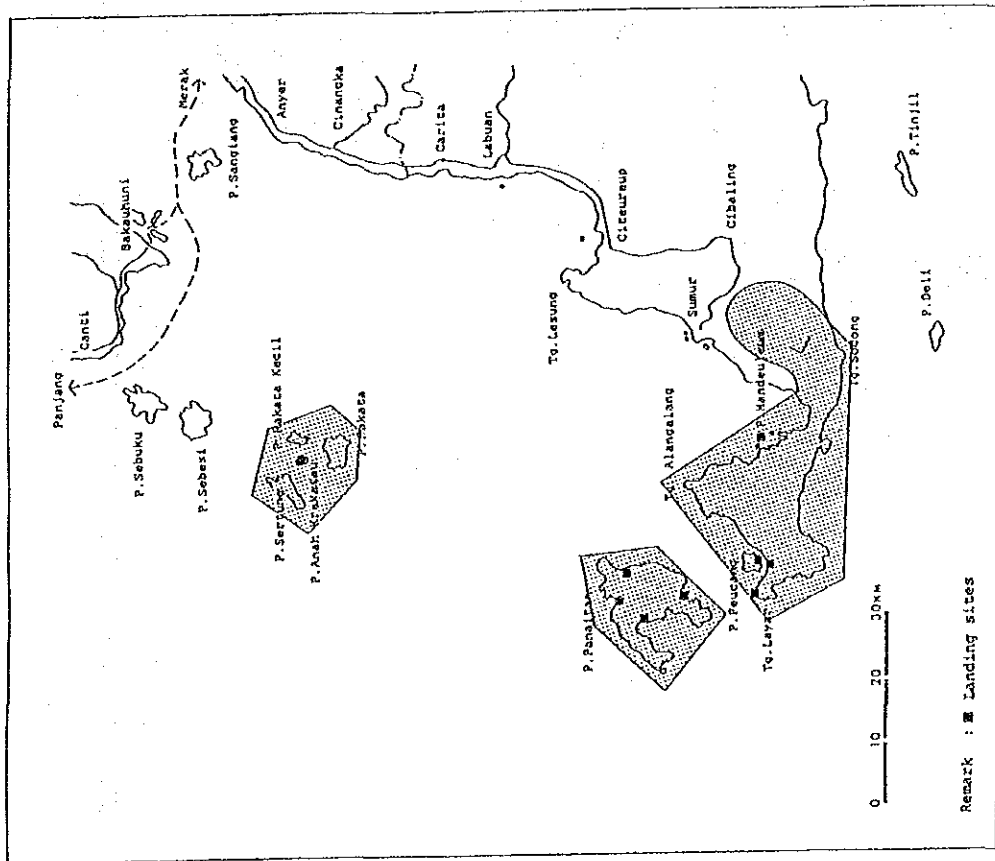
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Fig. 6-12

PROPOSED CRUISING COURSE



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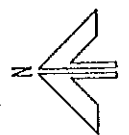
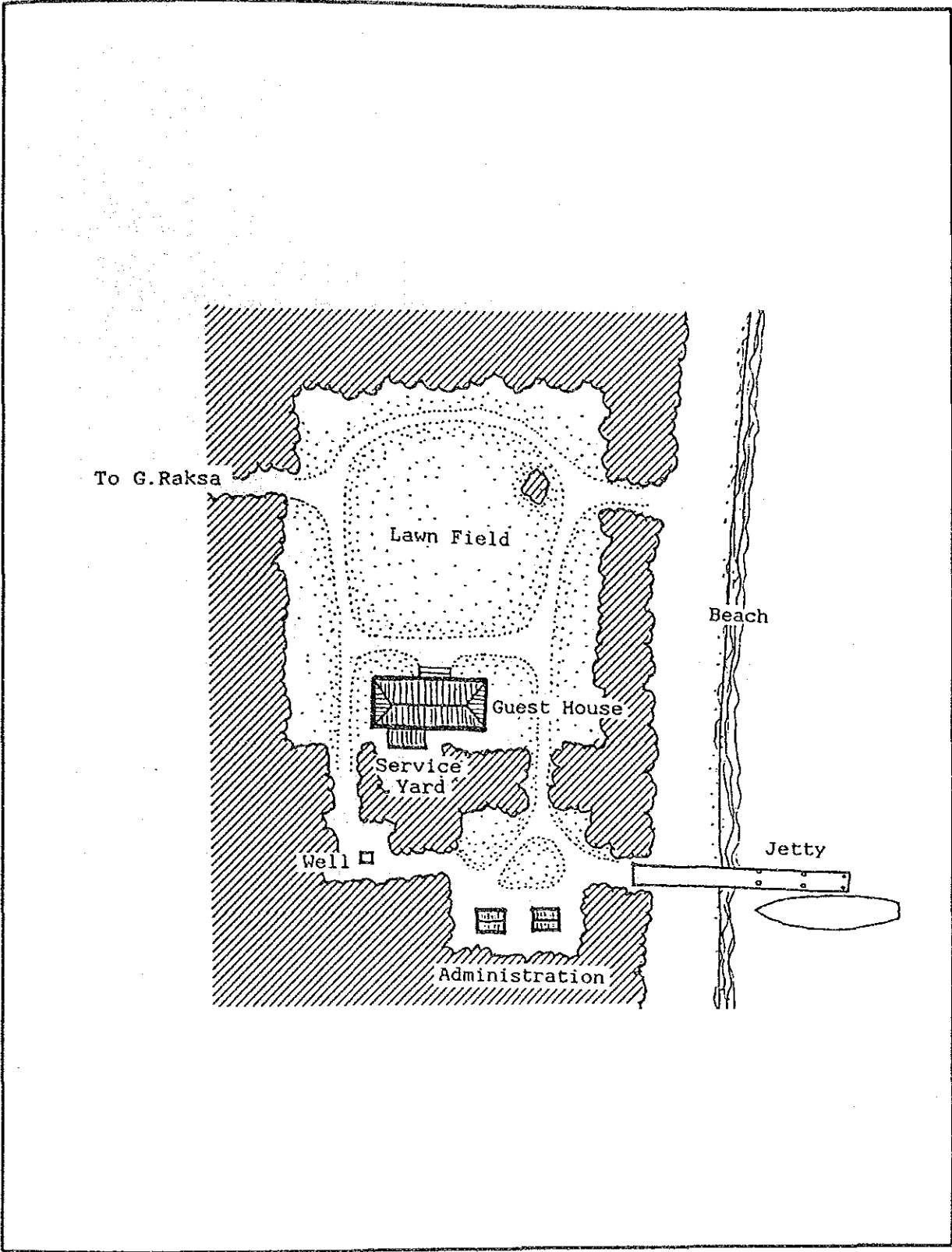


Fig. 6-13
LAYOUT PLAN OF UJUNG KULON NATIONAL
PARK



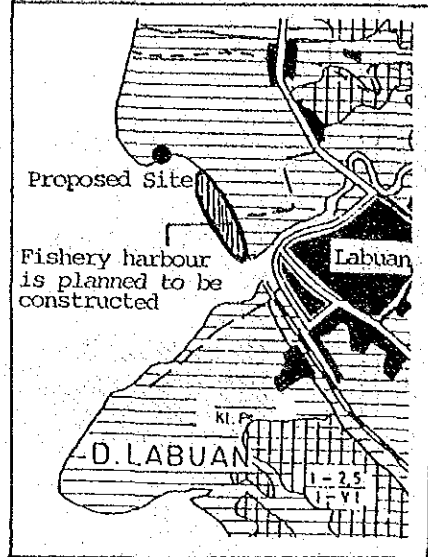
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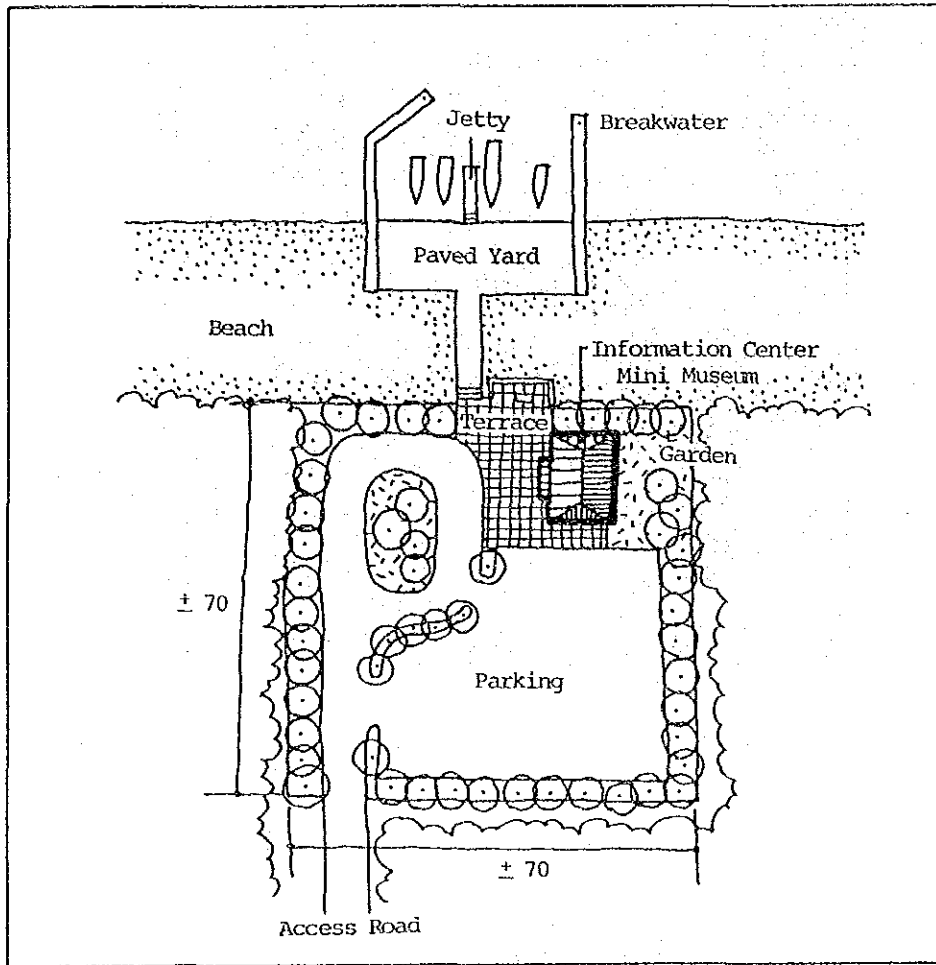
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Fig. 6-14
SKETCH PLAN OF GUEST HOUSE IN
PANAITAN ISLAND

(LOCATION)



(SKETCH PLAN OF CRUISING BASE)



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Fig. 6-15

CRUISING BASE IN LABUAN

5) Development system

The whole area inside of the National Park is controlled by PHPA under the Department of Forestry, which should be responsible for the development and operation of the facilities described above.

However, concerning the guest house and cruising service, it is recommended private enterprise be introduced for construction and operation.

6) Operation and promotion

The number of visitors should be limited to avoid upsetting the environment and eco-system of the Ujung Kulon N.P. and islands. Such control should be provided by the authorities in accordance with their Management Plan.

Other important roles of the public sector will be to promote appreciation of the Islands and to improve the tourist guide system. The cooperation of such sectors as mass-communication and social education in the public education campaign will be required for maximum effectiveness.