

**APPENDIX 12. RELATED INFORMATIONS  
OF TARGET UNIVERSITIES**



APPENDIX-12 List of Information on 11 Target Universities

1. UNSYIAH

- 1) Summary Table of Actual Budget for Last Four Years
- 2) Guide Book for S-1 Program
- 3) Available Equipment List of Faculty of Engineering
- 4) Lecturers List of Faculty of Engineering

2. USU

- 1) Brochure for Faculty of Engineering, 1989-1990
- 2) Laboratory Work Manual for Process Lab, Department of Chemical Engineering
- 3) Laboratory Work manual for Physical Chemistry
- 4) Chemical Analysis (I)
- 5) Chemical Analysis (III)
- 6) List of Laboratory Work in Department of Chemical Engineering
- 7) List of Laboratory and Experimental Theme
- 8) List of Laboratories in Industrial Engineering
- 9) Lecturer List for Semester
- 10) Instruction of Laboratory Work
- 11) Instruction of Laboratory Work for Structure and Concrete
- 12) Sample of Laboratory Work Report for Survey Lab.
- 13) Sample of Laboratory Study Report for Soil Mechanics
- 14) Sample of Laboratory Study Report for Hydraulics
- 15) Instruction of Laboratory Work for Highway Lab.

3. NOMMENSEN

- 1) University Brochure

4. UMA

- 1) University Brochure, 1990/91
- 2) University Brochure, 1989/90
- 3) Laboratory Instruction Manual for Concrete Lab.
- 4) Instruction Manual for Soil Mechanics Lab.
- 5) List of Credit for Department of Electrical Engineering

5. UDA

- 1) Semester Information, 1990/91
- 2) University Brochure, 1989/90
- 3) Instruction Manual for Concrete Lab Work
- 4) Instruction Manual for Soil Mechanics Lab.
- 5) List of Credit for Department of Electrical Engineering

6. UISU

- 1) Brochure for Faculty of Engineering, 1990/92
- 2) University Brochure
- 3) Table of Actual Budget for UISU
- 4) List of Curriculum for Department of Mechanical Engineering
- 5) List of Curriculum for Department of Industrial Engineering
- 6) General Layout Plan

7. UNAND

- 1) List of Laboratory Work Theme for Mechanical Engineering
- 2) General Layout Plan of University
- 3) Map Around University
- 4) List of Curriculum for Department of Civil Engineering

8. UNSRI

- 1) Room Arrangement Drawing for Each Department of New Campus
- 2) List of Speciality for S2/S3 Students
- 3) List of Lecturer for Department of Engineering
- 4) UNSRI Catalogue, (Palembang, 1990)
- 5) Brochure of Department of Engineering, UNSRI
- 6) Instruction Manual for Laboratory Study for Microscopic of Rocks
- 7) Instruction Manual for Laboratory Study for Mineral Analysis
- 8) Final Report for Equipment, ADB-737
- 9) Table of Actual Budget for Department of Engineering
- 10) Instruction Manual for Laboratory Study for Microbiology

- 11) Instruction Manual for Report Making
- 12) Guidance for Soil Mechanics Lab. (I)
- 13) Guidance for Soil Mechanics Lab. (II)
- 14) Guidance Book for Survey Lab.
- 15) Table of Actual Budget for Last Two Years and Budget for 1990
- 16) Guidance for Material Testing Lab.
- 17) Instruction Manual for Energy Conversion Lab. for Department of Mechanical Engineering
- 18) List of Inventory for Department of Mechanical Engineering
- 19) Instruction Manual for Mechanical Engineering
- 20) Instruction Manual of Laboratory Work for Electrical Engineering
- 21) Instruction Manual of Laboratory Work for Transmission
- 22) Instruction Manual of Laboratory Work for DC Electrical Machine
- 23) Instruction Manual of Laboratory Work for Rotating Machine
- 24) Instruction Manual of Laboratory Study for AC Electrical Machine
- 25) Instruction Manual of Laboratory Work for Electrical Motors
- 26) Instruction Manual of Laboratory Work for AC Machine
- 27) Instruction Manual of Laboratory Work for Electrical Circuit

#### 9. UNILA

- 1) Table of Annual Budget
- 2) Layout Drawing of Workshop
- 3) Arrangement Drawing of Laboratory Room
- 4) General Layout Plan of University
- 5) Annual Report for 1989/90
- 6) Request of Upgrading Plan of Equipment for Non-degree Program
- 7) Request of Upgrading of Equipment for S-1 Grade Laboratory
- 8) Instruction Manual of Laboratory Study for Survey and Drafting
- 9) Instruction Manual for Soil Mechanics Lab.
- 10) Instruction Manual of Laboratory Study for Hydraulics
- 11) Instruction Manual of Laboratory Work for Material Testing/Structure (I)

- 12) Instruction Manual of Laboratory Work for Material Testing/Structure (II)

#### 10. UNTAN

- 1) University Information
- 2) List of Lecturer
- 3) Annual Report for 1989/90
- 4) Annual Report for Faculty of Engineering
- 5) Instruction of PANCASILA for Faculty of Engineering
- 6) List of Lecturer for Department of Electrical Engineering
- 7) List of Lecturer for Department of Civil Engineering
- 8) Table of Student Enrollment (1985-1990)
- 9) Organization Chart for University
- 10) General Layout Plan
- 11) Educational Equipment List for Microprocessor, Computer

#### 11. UNLAM

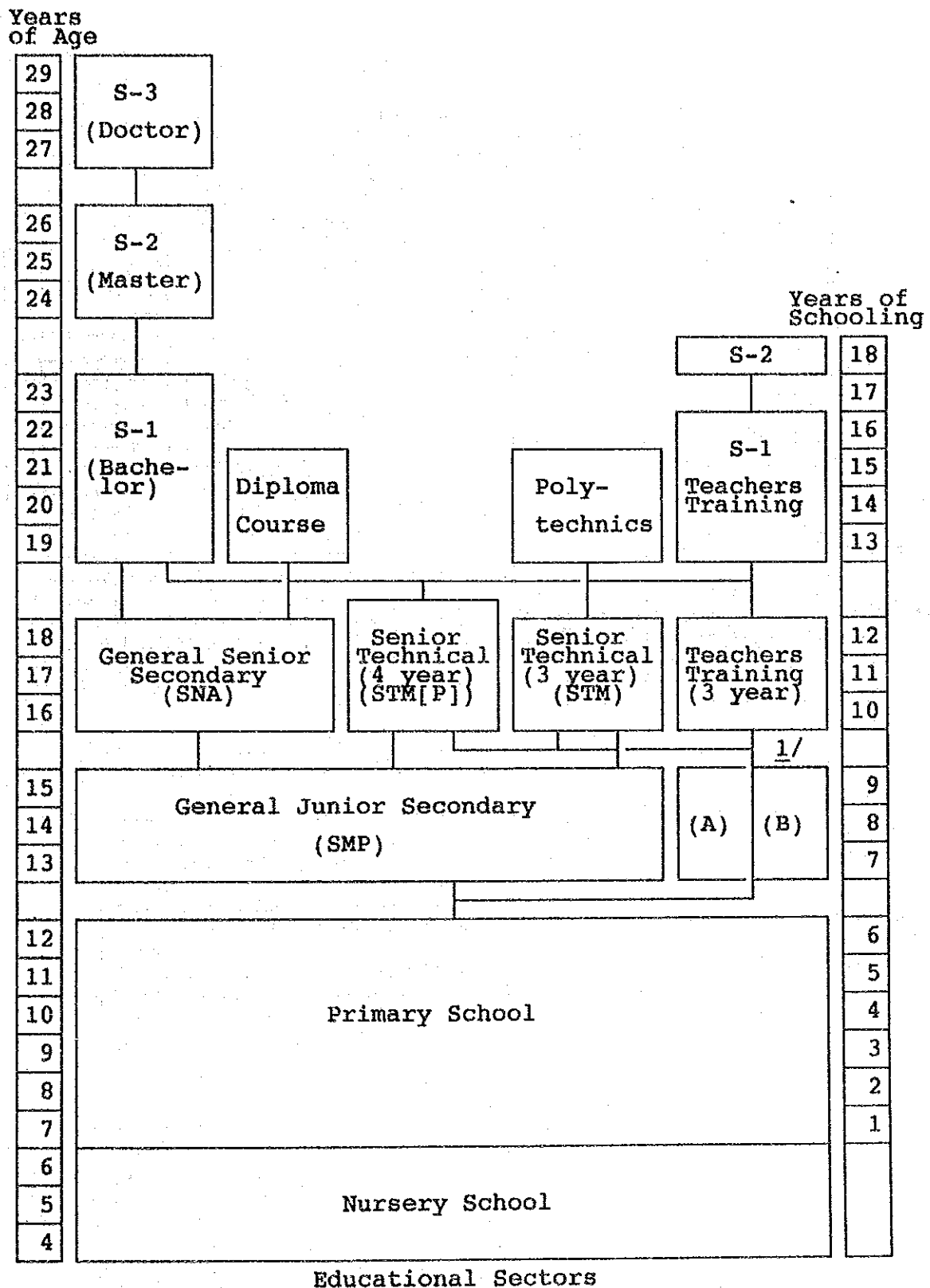
- 1) Annual Report of UNLAM
- 2) University Information
- 3) Interim Annual Report

**APPENDIX 13 RELATED DATA ON THE PROJECT**





Figure A-13-1 Structure of the Education System in Indonesia



1/ (A) Technical Junior Secondary (ST-SKKP)  
 (B) Home Economics Secondary

Figure A-13-2 ORGANIZATIONAL CHART OF MINISTRY OF EDUCATION AND CULTURE

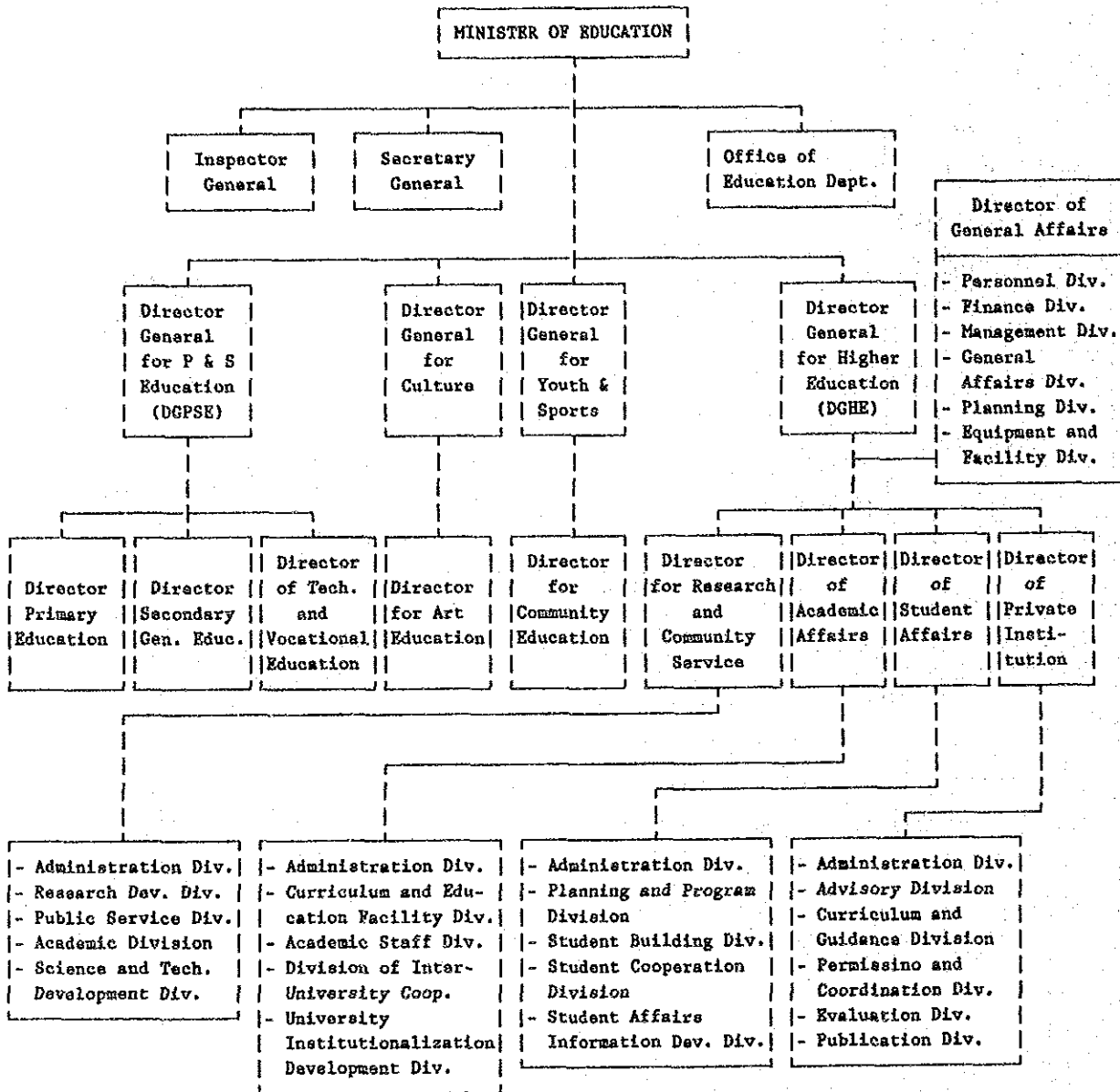


Table A-13-3 SUBSECTORAL BREAKDOWN OF THE MØBC BUDGET FROM REPELITA II TO REPELITA

	REPELITA II (1974-78) (%)	REPELITA III (1979-83) (%)	REPELITA IV (1984-88) (%)	REPELITA V (1989-93) (%)
1. Development Expenditure				
Entire MØBC	3553 ( 100)	18724 ( 100)	32213 ( 100)	56130 ( 100)
a) Higher Education (DGHE)	751 (21.1)	4101 (21.9)	13101 (40.7)	22680 (40.4)
b) Primary, Secondary and Other Education	2802 (78.9)	14623 (78.1)	19112 (59.3)	33450 (49.6)
3. Routine Expenditure				
Entire MØBC	5472 ( 100)	18305 ( 100)	42373 ( 100)	75,670 ( 100)
a) Higher Education	1101 (20.1)	3016 (16.5)	8521 (20.1)	15680 (20.7)
b) Primary, Secondary and Other Educatio	4371 (79.9)	15289 (83.5)	33852 (79.9)	59990 (79.3)
Total Expenditure				
Entire MØBC	9025 ( 100)	37029 ( 100)	74586 ( 100)	131800 ( 100)
a) Higher Education (DGHE)	1852 (20.5)	7117 (19.2)	21622 (29.0)	38360 (29.1)
b) Primary, Secondary and Other Education	7173 (79.5)	29912 (80.8)	52964 (71.0)	93440 (70.9)

Table A-13-4 Projection of Students, Graduates, and Academic Personnel of  
Higher Education During the Period of the Fifth Five Year  
Development Plan 1989/90 - 1993/94

No.	Item	1989/89	1989/90	1990/91	1991/92	1992/93	1993/94
1.	Population of age 19-24	19,465	20,041	20,706	21,278	21,927	22,546
2.	Graduates from Senior High School	646	745	805	922	968	1,025
3.	New Enrollment	336	386	415	465	476	492
3.1	Diploma Course (S0)	101	117	126	142	146	152
	- State	40	45	48	53	54	55
	- Private	57	64	68	76	76	78
	- Polytechnic	5	7	10	14	16	20
3.2	S1 Program	235	269	288	323	329	340
	- State	86	99	105	118	120	124
	- Private	149	171	183	205	209	216
4.	students (total)	1,664	1,828	1,991	2,178	2,342	1,491
4.1	Diploma Course (S0)	324	357	390	431	465	495
	- State	120	135	152	171	188	202
	- Private	196	207	217	231	241	248
	- Polytechnic	10	15	21	29	37	45
4.2	S1 Program	1,235	1,354	1,472	1,604	1,718	1,819
	- State	484	508	530	554	569	578
	- Private	750	846	942	1,050	1,149	1,241
4.3	Special Course	185	116	129	143	159	177
5.	S2 + S3 Program Students	14	20	22	25	30	33
6.	Graduates	164	183	206	230	258	284
6.1	Diploma Course (S0)	68	74	81	89	98	105
	- State	23	25	27	29	32	33
	- Private	44	47	51	54	59	62
	- Polytechnic	1	2	3	5	8	10
6.2	S1 Program	96	110	125	142	160	178
	- State	51	59	68	76	86	95
	- Private	45	52	58	66	75	84
7.	Graduates of S1 + S2 Program	2	3	5	5	7	7
8.	Academic Personnel	60	65	71	78	85	91
8.1	State	36	42	47	51	56	60
8.2	Private	24	22	25	27	29	31
9.	Higher Education Attendance Rate	8.5	9.1	9.6	10.2	10.7	11.0
10.	Entrance Rate into Higher Education (%)	52.0	51.8	51.5	50.5	49.2	48.0

Note: 1. Higher Education Attendance Rate(%) = % of Number of Students of Higher Learning Institutes to the Population of 19 - 24 Years old

2. Index of continuation to Higher learning Institutes = % of number of new students at the first level of the Higher learning Institutes to the graduates of Senior High Schools.

Figure A-13-5 ORGANIZATIONAL CHART

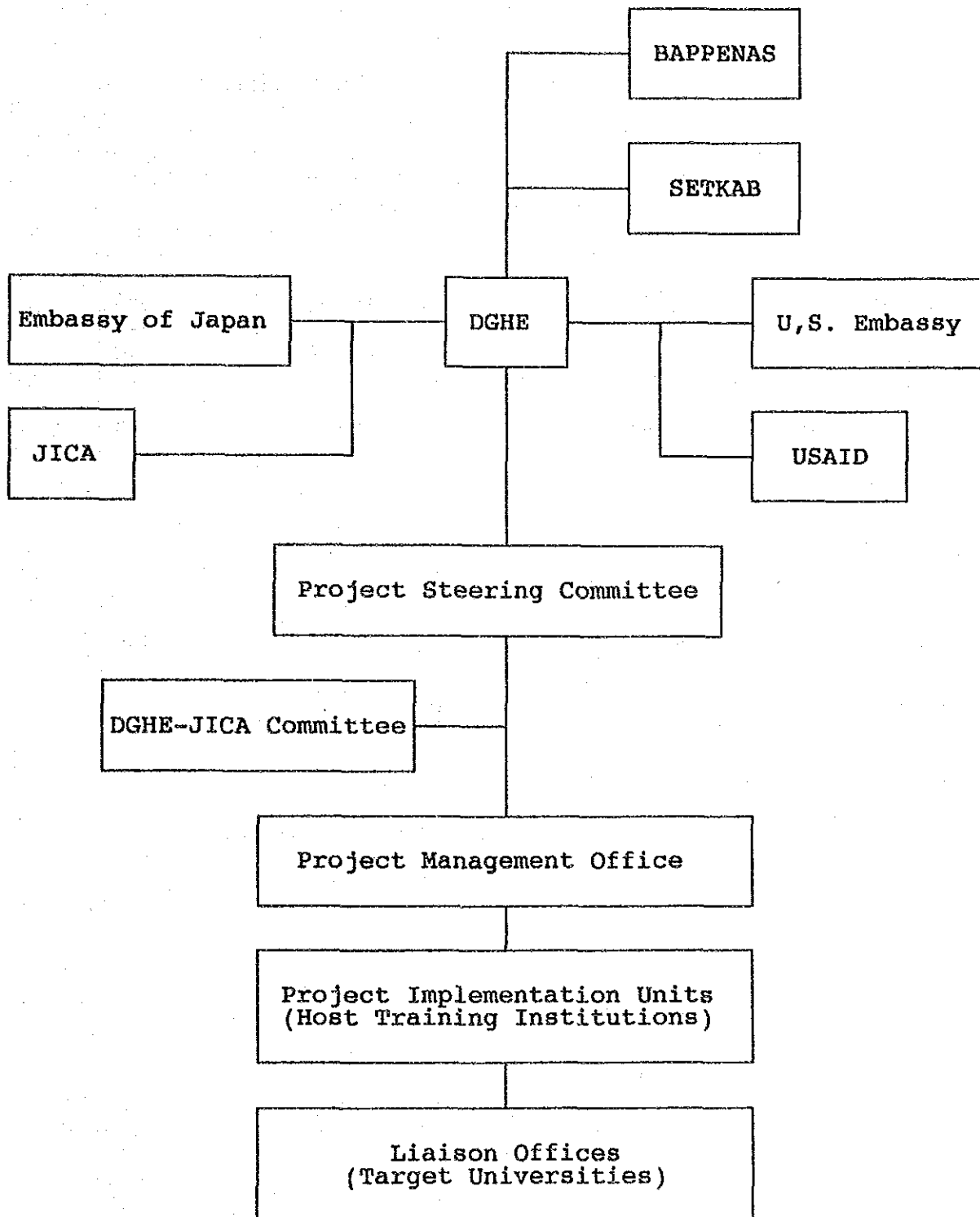


Table A-13-6 Student Inteks by regions for 1988/89

	Diploma(S0)		Bachelor(S1)	
	Number of Freshmon	Percentage (%)	Numvers of Freshmen	Percentage (%)
Jawa	15,746	52	32,293	51
Sumatera	7,590	25	11,487	18
Kalimantanm	1,626	5	4,457	7
Sulawesi	3,624	13	7,858	13
Others		5		
Total	30,369 <u>1/</u>	100	62,784 <u>2/</u>	100
	12,947		25,192	

\*1/ Includes eight percent of students recommended

\*\*2/ Includes 23 percent of students reommended.

Table A-13-7. Educational Index for State University

Universities	Enrollment	Graduate	Lecturers	Lecture Room	Lab Room	Hall	Seminar Room	Lecturer Room	Admi. Room
1. Univ. Indonesia	17,137	2,028	2,275	19,776	26,508	1,543	5,256	5,621	25,739
2. IKIP Jakarta	8,920	2,085	637	5,842	1,668	281	70	430	761
3. Inst. Pertanian Bogor	8,547	1,862	1,012	9,601	17,949	2,560	3,473	7,525	13,157
4. Inst. Teknologi Bandung	9,549	1,891	1,033	11,937	20,132	5,023	3,118	9,589	12,035
5. Univ. Padjadjaran	13,632	2,169	1,696	14,091	16,115	227	4,423	3,208	22,638
6. IKIP Bandung	12,108	2,057	920	23,912	2,350	108	67	1,125	8,067
7. Univ. Jenderal Soedirman	8,452	556	605	8,682	3,752	0	0	1,059	6,042
8. Univ. Diponegoro	16,647	1,613	1,144	11,378	11,393	140	1,455	1,988	2,865
9. IKIP Semarang	2,741	2,577	604	405	0	0	0	76	99
10. Univ. Sebelas Maret	13,500	3,841	1,147	10,227	7,115	496	1,288	3,105	3,743
11. Univ. Gadjah Mada	27,053	4,541	1,906	28,987	32,717	1,559	10,442	12,372	20,166
12. IKIP Jogyakarta	10,425	2,001	674	15,491	8,776	2,300	1,094	3,613	8,100
13. Univ. Ajrlangga	10,162	1,379	1,250	10,147	15,046	0	2,720	4,384	6,237
14. Inst. Teknologi Surabaya	9,101	1,127	578	6,089	10,477	3,972	116	2,679	4,812
15. IKIP Surabaya	14,276	2,364	634	6,494	3,379	510	382	594	911
16. Univ. Brawijaya	9,746	2,259	1,037	17,621	12,990	0	2,121	3,747	4,849
17. IKIP Malang	8,657	1,858	699	7,367	7,225	0	3,840	1,821	5,047
18. Univ. Jember	9,488	604	538	3,765	1,526	0	1,725	654	3,206
19. UNSYIAH	15,337	2,210	857	10,310	13,069	16	895	1,985	11,192
20. USU	14,321	1,882	1,463	20,885	16,183	95	1,954	4,297	12,078
21. IKIP Medan	8,690	2,069	893	12,998	4,569	150	1,870	1,025	19,366
22. UNAND	8,990	682	858	10,075	7,058	75	753	793	5,676
23. IKIP Padang	10,058	1,549	743	5,612	2,761	1,057	536	1,354	3,081
24. Univ. Riau	5,504	1,339	523	11,041	3,170	0	118	417	2,317
25. Univ. Jambi	6,558	371	271	9,667	1,338	300	0	600	2,020
26. UNSRI	9,908	2,393	883	5,471	4,205	0	2,647	1,349	15,582
27. UNILA	9,247	1,156	611	14,377	7,230	0	1,107	5,387	2,922
28. UNTAN	7,489	881	448	7,245	1,547	135	360	1,112	2,887
29. Univ. Palangkaraya	4,282	396	345	7,879	1,166	280	0	240	815
30. UNLAN	8,914	1,334	500	21,285	4,352	300	560	642	4,532
31. Univ. Kulawaerman	4,832	659	410	11,305	6,862	240	169	655	5,521
32. Univ. Sam Ratulangi	14,022	802	1,130	12,135	6,191	670	520	0	4,098
33. IKIP Manado	5,056	1,020	834	9,805	619	312	72	518	6,245
34. Univ. Hasanuddin	19,282	2,263	1,230	24,852	35,296	2,658	1,672	4,494	23,606
35. IKIP Ujung Pandang	9,113	3,946	608	6,799	3,338	126	640	273	5,978
36. Univ. Pattimura	7,642	274	478	8,179	2,150	300	908	0	1,350
37. Univ. Udayana	9,666	686	1,431	12,428	4,201	576	587	883	4,652
38. Univ. Mataram	7,275	797	457	4,511	2,188	0	172	703	442
39. Univ. Nusaoendana	6,348	723	490	22,095	4,376	48	3,100	391	4,386
40. Univ. Cenderawasih	3,466	614	255	6,550	2,551	6	1,274	854	4,391
41. Univ. Halu Oleo	2,278	567	224	4,110	700	0	200	0	639
42. Univ. Tadulako	6,595	314	439	7,295	2,012	250	486	59	3,037
43. Univ. Bengkulu	3,435	347	468	3,332	2,350	0	500	0	2,796
44. ISI logyakarta	2,147	211	220	1,839	0	4,572	860	888	2,269
45. ASTI Bandung	954	47	55	3,428	564	0	0	42	256
46. ASKI Surakarta	737	48	193	2,472	0	1,064	0	0	734
47. ASKI Pandang Panjang	550	90	94	1,137	815	0	0	200	105
48. ASTI Denpasar	359	0	57	900	0	200	0	300	120
<b>TOTAL</b>	<b>423,176</b>	<b>66,482</b>	<b>35,656</b>	<b>491,829</b>	<b>339,979</b>	<b>32,149</b>	<b>63,550</b>	<b>93,051</b>	<b>301,567</b>

Table A-13-8 Numbers of Private Universities and departments  
(for Bachelor and Master Programs)

Classifications	Academic Year			
	1986	1987	1988	1989
University	163 (1,522)	184 (1,722)	195 (1,809)	202 (1,965)
Institute	39 (259)	42 (309)	43 (312)	49 (368)
Faculty University	208 (462)	251 (572)	271 (560)	304 (717)
Diploma Institute	255 (397)	267 (415)	260 (387)	271 (424)
Total	665 (2,640)	744 (3,018)	769 (3,068)	826 (3,474)

1/ Figures show numbers of Institutes and figures in parenthesis  
Shows numbers of departments.



Table A-13-9 Field-wise Distribution of SI Graduates  
of Private Universities (in 1988)

Area	Liberal Arts										Science and Engineering					total
	Religion	Literature	Education	Law	Economics	Sociology	Psychology	Health	Agriculture	Science and Mathematics	technology	Art				
I	-	240	1,030	1,032	1,475	674	-	27	282	-	384	-	5,172			
II	-	-	273	218	75	7	-	-	11	-	11	-	705			
III	20	113	666	2,678	3,255	2,148	-	475	-	144	2,480	-	989			
IV	-	98	1,458	1,063	828	586	-	16	176	74	320	-	5,619			
V	31	29	1,163	516	675	6	-	-	-	-	352	-	2,772			
VI	14	-	918	1,481	357	125	-	18	189	35	157	-	294			
VII	63	67	4,155	2,543	3,836	2,131	27	-	651	8	-	-	11,378			
VIII	432	-	1,371	377	521	694	-	-	72	-	24	4	3,486			
IX	55	129	1,012	459	1,733	1,701	10	-	332	15	343	-	5,789			
Total	615 (1%)	676 (1%)	13,045 (25%)	10,367 (20%)	12,765 (24%)	8,182 (16%)	37 (0.07%)	536 (1%)	1,713 (3%)	276 (0.5%)	4,071 (8%)	4	52,288			

Table A-13-10 educational Index for Target Seven State Universities

	UNSYIAH			USU			UNAND			UMSRI			UNILA			UNTAN			UNLAM				
	D2	D3	D1	D3	S1	D1	D2	S1	D1	D2	D3	S1	D2	D3	S1	D2	D3	S1	D2	D3	S1		
Total Numbers of Intake (Total Numbers of Applicants)	3,302 (13,672)	2,616 (-)	2,008 (12,014)	2,544 (12,014)	1,861 (-)	2,148 (-)	1,763 (4,549)																
Diploma	1,535	823	443	1,235	691	334	257																
SI	(6,636)	(-)	(3,620)	(5,053)	(-)	(-)	(519)																
Enrollment	1,767	1,783	1,565	1,309	1,242	1,814	1,506																
Graduates	(7,036)	(-)	(8,394)	(7,449)	(-)	(-)	(4,030)																
Graduates	15,337	14,321	8,990	9,908	9,247	7,489	8,914																
Numbers of Graduate Students	2,210	1,882	682	2,393	1,156	881	1,334																
One Year																							
1 - 2 Year	-	-	-	16	-	-	-	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2 - 3 Year	212	60	-	172	51	-	2	51	-	-	2	-	-	-	-	2	-	-	-	-	-	-	
3 - 4 Year	-	266	3	6,419	-	-	142	-	-	-	2	-	-	-	-	142	-	-	-	-	-	-	
4 - 5 Year	-	178	47	164	-	-	62	14	-	-	62	-	-	-	100	178	-	-	-	-	-	-	
5 - 6 Year	-	137	223	-	272	-	3	86	-	-	149	-	-	-	3	53	1	-	-	-	-	-	
6 - 7 Year	-	49	407	-	306	-	239	-	-	-	269	-	-	-	-	-	-	-	-	-	-	-	
Morethan Year	-	15	613	-	210	-	112	-	-	-	209	-	-	-	-	-	-	-	-	-	-	-	
Sub total	212,705	1293	456	1423	0	66,616	16	178,655	1544	190	217,749	881	245	231,858	448	261	500	225	11	38	422	170	
- Diploma	657/406	6/5	1463/469	858/521	661/161	448/261	500/225																
- Scholor	509/311	1278/412	716/317	716/317	553/136	414/232	422/170																
- SP1	7/22	-	72/5	72/5	1/1	-	-																
- SP2	-	-	2/2	2/2	3/2	-	-																
- Post Graduate	113/55	157/15	71/7	71/7	48/19	31/12	57/9																
- Doctor	22/13	28/15	16/7	16/7	6/5	3/4	10/3																
- Others	-	-	1/1	1/1	-	-	-																
Numbers pf fill time technical staff	45	N.A.	61	40	14	10	62																
Lab Abera.	13,069	16,183	7,058	4,205	7,230	1,547	4,352																
Numbers of Students/ Full time lecturers	23.3	9.8	10.5	11.2	15.1	16.7	17.8																

Table 13-11 Higher Education Master Budget Plan  
Year 1988/1989

(In Million Rupiah)

Function	Routine Budget		Development Budget			DPP/SPP Budget		Total		
	Expense	%	Government	Foreign Aid	Total		Expense	%	Expense	%
					Expense	%				
Education	91,007.3	49.2	103,310.0	191,400.0	294,710.0	93.3	12,216.1	24.0	398,333.4	67.3
Research	19,154.1	10.4	3,750.0	35,200.0	32,950.0	11.0	1,264.9	2.4	59,369.0	10.0
Community Service	12,382.4	9.9	1,230.0	0.0	1,830.0	0.5	1,095.9	2.1	21,228.3	3.6
Personnel Prosperity	0.0	0.0	0.0	0.0	0.0	0.0	19,201.9	37.1	19,201.9	3.4
Student Affairs	10,098.2	5.5	790.0	0.0	790.0	0.2	2,953.4	5.5	13,841.6	2.3
Household Affairs	16,368.0	25.0	17,420.0	0.0	17,420.0	4.9	12,890.9	24.2	76,672.9	13.0
Others	0.0	0.0	0.0	0.0	0.0	0.0	2,511.3	4.7	2,511.3	0.4
Total	184,930.0	100.0	127,100.0	226,600.0	353,700.0	100.0	53,334.4	100.0	591,964.4	100.0





